



AMERICAN SOCIETY OF TROPICAL MEDICINE & HYGIENE  
ADVANCING GLOBAL HEALTH SINCE 1903

# Program Book



# 2024 Annual Meeting

November 13-17  
New Orleans, LA

New Orleans Ernest N. Morial Convention Center

**Advancing Science**  
**Building Community**  
**Together**





**Welcome to the 2024 Annual Meeting program guide!** We invite you to join our vibrant community. Whether making new friends or connecting with familiar colleagues, we are sure you will enjoy five days of stimulating research, clinical advances, special lecture guests and other exciting events. For those unable to attend in person, we hope you can join virtually via the sessions being livestreamed throughout the meeting.

Either way, be sure to attend the opening plenary with Dr. Monique Wasunna, Africa Ambassador for Drugs for Neglected Diseases initiative (DNDi) and, previously, Chief Research Officer and Assistant Director of Research at Kenya Medical Research Institute (KEMRI). Her experiences embody what we do at ASTMH: leverage health and science to tackle some of the world's most neglected health challenges.

Other invited speakers include Dr. Jean William Pape of GHESKIO Centers, Haiti, who will deliver the Commemorative Lecture; Dr. Jean-Jacques Muyembe, of the Institut National de Recherche Biomédicale (INRB), Democratic Republic of the Congo, who will deliver the Craig Lecture; and Dr. Paulin Basinga, who leads the Bill and Melinda Gates Foundation's work across the African continent and will be our closing plenary speaker on Sunday. The annual Alan J. Magill Malaria Eradication Symposium will focus on developing leaders in the continuing fight for malaria eradication, and special sessions have been organized on the current challenges from mpox and avian influenza.

Another session of interest, Expanding Pathways to Global Health: Opportunity, Collaboration and Education, has been organized by our president, who will also give the annual President's Address, "Rendering the Future of Global Health Amidst Reverberations from the Past: A Call to Community." We also will remember three of our past presidents, with special tributes to Joel Breman, Carlos (Kent) Campbel and Karl M. Johnson, who we lost in the last 12 months.

Other meeting highlights include walking tours of New Orleans and its intersection with tropical medicine and public health – including a discussion of the history of the deadliest yellow fever outbreaks in American history. And of course, cutting-edge content on malaria and other parasitic, viral and bacterial infections, clinical tropical medicine, issues in global health, and the other topics you would expect to find at an ASTMH Annual Meeting. Find it all on the meeting app, available for free at the App Store and Google Play.

Finally, be sure to visit our sponsors and exhibitors. They help make all of the above possible and will host the Opening Reception, with complimentary food.

We look forward to seeing you there.

**¡Bienvenidos a la guía del programa de la Reunión Anual de 2024!** Los invitamos a unirse a nuestra vibrante comunidad. Ya sea que hagan nuevos amigos o se conecten con colegas conocidos, estamos seguros de que disfrutarán de cinco días de investigación estimulante, avances clínicos, invitados especiales a conferencias y otros eventos emocionantes. Para aquellos que no puedan asistir en persona, esperamos que puedan unirse virtualmente a través de las sesiones que se transmitirán en vivo durante la reunión.

De cualquier manera, asegúrense de asistir a la sesión plenaria de apertura con la Dra. Monique Wasunna, embajadora de África para la iniciativa Medicamentos para Enfermedades Olvidadas (DNDi) y, anteriormente, directora de Investigación y directora adjunta de Investigación en el Instituto de Investigación Médica de Kenia (KEMRI). Sus experiencias encarnan lo que hacemos en la Sociedad Estadounidense de Medicina Tropical e Higiene (ASTMH): aprovechar la salud y la ciencia para abordar algunos de los desafíos de salud más olvidados del mundo.

Otros oradores invitados incluyen al Dr. Jean William Pape de los Centros GHESKIO, Haití, quien pronunciará la Conferencia Conmemorativa; el Dr. Jean-Jacques Muyembe, del Instituto Nacional de Investigación Biomédica (INRB) de la República Democrática del Congo, que pronunciará la conferencia Craig; y la Dra. Paulin Basinga, que dirige el trabajo de la Fundación Bill y Melinda Gates en todo el continente africano y será la oradora de clausura de la sesión plenaria del domingo. El Simposio Anual sobre la Erradicación de la Malaria Alan J. Magill se centrará en el desarrollo de líderes en la lucha continua por la erradicación de la malaria, y se han organizado sesiones especiales sobre los desafíos actuales que plantean la viruela del mono y la gripe aviar.

Nuestro presidente organizó otra sesión de interés llamada Ampliar los caminos hacia la salud mundial; oportunidad, colaboración y educación, y él también pronunciará el discurso anual del presidente: "Representar el futuro de la salud mundial en medio de las reverberaciones del pasado: Un llamado a la comunidad". También recordaremos a tres de nuestros presidentes anteriores, con homenajes especiales a Joel Breman, Carlos (Kent) Campbel y Karl M. Johnson, a quienes perdimos en los últimos 12 meses.

Otros puntos destacados de la reunión incluyen recorridos a pie por Nueva Orleans y su intersección con la medicina tropical y la salud pública, incluida una discusión sobre la historia de los brotes de fiebre amarilla más letales en la historia de los Estados Unidos. Y, por supuesto, contenido de vanguardia sobre malaria y otras infecciones parasitarias, virales y bacterianas, medicina tropical clínica, problemas de salud global y otros temas que esperaría encontrar en una Reunión Anual de la ASTMH. Encuéntralo todo en la aplicación para reuniones, disponible de forma gratuita en App Store y Google Play.

Por último, asegúrense de visitar a nuestros patrocinadores y expositores. Ellos ayudan a hacer posible todo lo anterior y serán los anfitriones de la recepción de apertura, con comida de cortesía.

Esperamos verlos allí.

**Bienvenue à la réunion annuelle de 2024 !** Nous vous invitons à rejoindre notre communauté dynamique. Que vous souhaitiez vous faire de nouveaux amis ou retrouver des collègues familiers, nous sommes certains que vous apprécierez ces cinq jours de recherche stimulante, d'avancées cliniques, de conférences spéciales et d'autres événements passionnants. Si vous ne pouvez pas participer en personne, nous espérons que vous pourrez vous joindre virtuellement à nous grâce aux sessions retransmises en direct tout au long de la réunion.

Quoi qu'il en soit, ne manquez pas d'assister à la session plénière d'ouverture, inaugurée par le Dr. Monique Wasunna, ambassadrice pour l'Afrique de l'initiative Drugs for Neglected Diseases (DNDi - médicaments pour les maladies négligées) et, auparavant, Directrice de la recherche et Directrice adjointe de la recherche au Kenya Medical Research Institute (KEMRI). Son expérience incarne ce que nous faisons à l'ASTMH : tirer parti de la santé et de la science pour relever certains des défis sanitaires les plus négligés au monde.

Parmi les autres orateurs invités figurent le Dr Jean William Pape, des centres GHESKIO en Haïti, qui prononcera la conférence commémorative, le Dr Jean-Jacques Muyembe, de l'Institut national de recherche biomédicale (INRB) en République démocratique du Congo, qui prononcera la conférence Craig, et le Dr Paulin Basinga, qui dirige les travaux de la Fondation Bill et Melinda Gates sur l'ensemble du continent africain et qui sera notre orateur de clôture en séance plénière le dimanche. Le symposium annuel Alan J. Magill sur l'éradication de la malaria se concentrera sur la formation de leaders dans la lutte continue pour l'éradication de la malaria, et des sessions spéciales ont été organisées sur les défis actuels de la variole et de la grippe aviaire.

Une autre session intéressante, « Élargissement des voies d'accès à la santé mondiale : opportunité, collaboration et éducation », a été organisée par notre président, qui prononcera également le discours annuel du président, intitulé « Rendre l'avenir de la santé mondiale au milieu des réverbérations du passé : un appel à la communauté ». Nous nous souviendrons également de trois de nos anciens présidents, en rendant un hommage particulier à Joel Breman, Carlos (Kent) Campbel et Karl M. Johnson, que nous avons perdus au cours des 12 derniers mois.

Parmi les autres points forts de la réunion figurent des visites à pied de la Nouvelle-Orléans et de ses liens avec la médecine tropicale et la santé publique, ainsi qu'une discussion sur l'histoire des épidémies de fièvre jaune les plus meurtrières de l'histoire des États-Unis. Et bien sûr, un contenu de pointe sur le paludisme et d'autres infections parasitaires, virales et bactériennes, la médecine tropicale clinique, les questions de santé mondiale et les autres sujets que vous vous attendez à trouver lors d'une réunion annuelle de l'ASTMH. Vous trouverez tout cela sur l'application de réunion de l'ASTMH, disponible gratuitement sur l'App Store et Google Play.

Et assurez-vous de visiter nos sponsors et exposants. Ils rendent tout cela possible et organiseront la réception d'ouverture, avec des repas et des boissons gratuits.

Au plaisir de vous y voir.



**David Hamer, MD, FASTMH**  
*Scientific Program Chair*



**Kristy Murray, DVM, PhD, FASTMH**  
*Associate Scientific Program Chair*

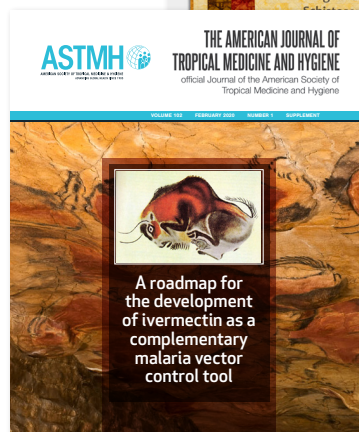
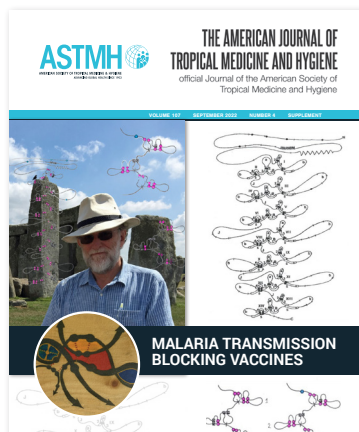
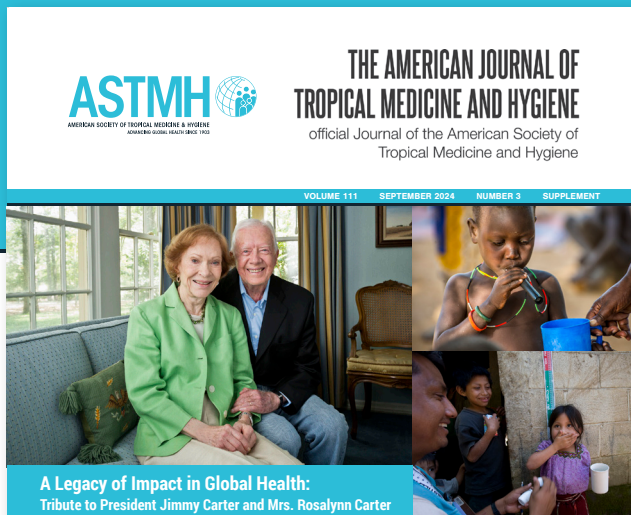
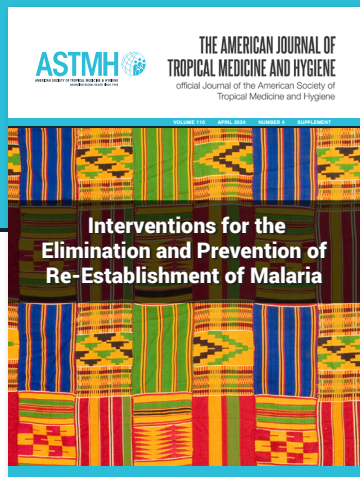


**Linnie Golightly, MD, FASTMH**  
*President*



**Jamie Bay Nishi, MS**  
*CEO*

# Throughout the year, the *American Journal of Tropical Medicine and Hygiene* publishes special supplemental issues devoted to a specific topic in the field.



To view all supplements, visit [ajtmh.org](http://ajtmh.org) and click on "Issues"

Supplements contain an average of 10-15 articles plus a foreword or editorial to introduce the papers and provide some perspective on the topic.

Supplement coordinators are responsible for securing the content of the issue, with approval from the AJTMH Editor-in-Chief.

Interested in a supplement?  
Contact Alison Jaeb,  
Managing Editor and Publisher,  
at [journal@ajtmh.org](mailto:journal@ajtmh.org).



CELIA SCOTT WEATHERHEAD SCHOOL OF  
PUBLIC HEALTH AND TROPICAL MEDICINE

Thomas A. LaVeist, PhD

*Dean and Weatherhead Presidential Chair in Health Equity*

November 13, 2024

Dear Colleagues,

On behalf of Tulane University Celia Scott Weatherhead School of Public Health and Tropical Medicine, welcome to New Orleans and the 73rd annual gathering of ASTMH!

We're delighted to be sharing our unique cultural city with ASTMH members this year. Our rich relationship with ASTMH goes back to 1911, when ASTMH identified New Orleans and Tulane as a prime candidate for a foundational school of tropical medicine, due to our experience treating and managing diseases that were often characterized as tropical. Today these infectious diseases are arising in more diverse places, affecting more and more people, making the work done here by our faculty in the Department of Tropical Medicine and Infectious Diseases all the more important in today's world.

Tulane continues to work on the front lines when hot spots arise, contributing to understanding and working with local health authorities through outbreaks such as dengue and zika in South America, mpox in the DRC and especially the West African Ebola outbreak. The work done in these areas alongside our strong partners embedded within ASTMH is making a difference in the lives of many, to reduce the global burden of infectious diseases.

We greatly value our longstanding partnership with ASTMH and look forward to an enriching and insightful meeting. Don't forget to enjoy all that New Orleans has to offer!

Laissez les bons temps rouler,

A handwritten signature in black ink, appearing to read "T. A. LaVeist".

Thomas A. LaVeist, PhD

Dean & Weatherhead Presidential Chair

Tulane University Celia Scott Weatherhead School of  
Public Health & Tropical Medicine

BILL CASSIDY  
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WASHINGTON, DC OFFICE:  
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## United States Senate

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RESOURCES  
VETERANS' AFFAIRS

November 13, 2024

Dear American Society of Tropical Medicine and Hygiene (ASTMH):

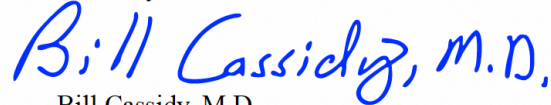
I am honored to welcome you to New Orleans for your 2024 Annual Meeting. As you gather in the Big Easy, steeped in rich history and culture, it is fitting that you bring your expertise in tropical medicine and global health to a place that has long been a crossroads for such crucial work.

As a port city with international roots, New Orleans has a deep connection to tropical medicine and a long familiarity with some of the world's oldest diseases. In 1834, likely just a few miles from where you are sitting, seven young physicians founded the Medical College of Louisiana – now Tulane University – to combat yellow fever, smallpox, malaria, and other infectious diseases. Their vision and foresight paid great dividends to the evolution of public health in America, including the formation of the first-ever state board of health and, eventually, the creation of the first school of public health. Tulane's School of Public Health and Tropical Medicine has been at the forefront of public health research and education for over a century. I encourage you to draw upon this unique history as you address today's global health challenges.

As a physician, I have seen first-hand that the interaction of breakthrough science and collaboration is one of the best tools we have to save and improve lives. The COVID-19 pandemic demonstrated that global health security is inextricably linked to U.S. economic and national security. As a Senator and Ranking Member of the Health, Education, Labor, and Pensions (HELP) Committee, I have been a vocal champion of legislation and policies that bolster U.S. leadership and ingenuity in public health. This Congress, I worked across the aisle to reauthorize the Pandemic and All-Hazards Preparedness Act (PAHPA) in the HELP Committee to strengthen our nation's public health readiness and response to the next health crisis or emergency. Additionally, I support the purpose of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), a program that has saved more than 25 million lives and continues to be a beacon of hope in the fight against HIV/AIDS. Beyond these efforts, I appreciate ASTMH's partnership in supporting our nation's leading public health agencies and biomedical institutions to better serve Americans.

I commend each of you for your commitment to improving health outcomes for vulnerable populations around the world – and I am proud to carry the torch, alongside you, in pursuit of a healthier and safer world for all. Again, thank you for choosing New Orleans as home for your annual meeting. I wish you a productive and inspiring convening, and I look forward to the insights and partnerships that will emerge from your time here.

Sincerely,



Bill Cassidy, M.D.  
United States Senator

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## CONGRESSMAN TROY A. CARTER, SR. PROUDLY SERVING LOUISIANA'S SECOND CONGRESSIONAL DISTRICT

November 13, 2024

Dear American Society of Tropical Medicine and Hygiene (ASTMH):

Welcome to New Orleans!

As the representative of Louisiana's 2nd Congressional District, I am honored you've chosen New Orleans for this significant gathering. Your discussions come at a critical time as our nation navigates a post-pandemic world, faces ongoing public health challenges, and prepares for emerging disease threats. The insights shared here will be crucial to strengthening our collective response, and I am grateful for your leadership.

Our city has a rich history in tropical medicine, shaped by past battles against cholera, yellow fever, malaria, and smallpox. This legacy is carried on by Tulane University, a global leader in tropical medicine research, and supported by top medical schools, hospitals, and the growing Biosciences Economic Development District (BioDistrict). Your presence continues our long-standing tradition of scientific excellence.

I am proud to be able to say, I've worked hard to secure funding for combating vector-borne diseases, ensuring access to lifesaving treatments, and advancing health technologies. I co-sponsored the bipartisan PASTEUR Act of 2023 to address antimicrobial resistance, which claims five million lives annually. These efforts reflect my deep commitment to scientific progress and public health.

Thank you for choosing New Orleans for the ASTMH's 2024 Annual Meeting and for your dedication to protecting millions worldwide, including those in the 2nd Congressional District. Your work is vital to advancing public health, and I greatly value your partnership. I hope for an enriching and productive discussion and for a joyful experience for all visitors in our wonderful city!

Sincerely,

Troy A. Carter, Sr.

Member of Congress

442 Cannon House Office Building  
Washington, District of Columbia 20515





JOIN US FOR AN  
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# THE RISING TIDE: DENGUE FEVER AND CLIMATE CHANGE

**Thursday, November 14, 2024**

**7:30pm – 9:15pm**

Convention Center Rooms 354-355

Abbott is the sponsor of this sponsored symposium. This sponsored symposium is being held in conjunction with the ASTMH 2024 Annual Meeting.

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Available to full-time undergraduate and graduate students in the fields of global health, public health, tropical medicine or a related discipline.

Visit [astmh.org](https://astmh.org) to learn more about ASTMH membership.



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ASTMH membership means access to research on the latest diseases and treatments, a standing within your global community, learning about clinical cases and field work, and finding collaborators.

## BUILD YOUR PROFESSIONAL NETWORK

Connect with respected leaders in the field. Whether in person at the Annual Meeting, or through the Society's five subgroups or social media, members stay in touch to share the latest data, engage in scientific discourse and collaborate on Society activities.

#IamTropMed  
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## ASTMH THANKS THE FOLLOWING SPONSORS

### **Bill & Melinda Gates Foundation**

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## ASTMH THANKS THE FOLLOWING SUPPORTERS

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## ASTMH THANKS THE FOLLOWING FRIENDS OF THE YOUNG INVESTIGATORS

**William A. Petri, Jr. in memory of William A. Petri, Sr.**

**All individuals who made a donation during registration and throughout the year.**

## ASTMH THANKS THE FOLLOWING PARTNERS

**15 White Coats**

**Chan Zuckerberg  
Biohub San Francisco**

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The American Society of Tropical Medicine and Hygiene, founded in 1903, is the largest international scientific organization of experts dedicated to reducing the worldwide burden of tropical infectious diseases and improving global health. We accomplish this through generating and sharing scientific evidence, informing health policies and practices, fostering career development, recognizing excellence, and advocating for investment in tropical medicine/global health research.

**On-demand content of Livestream Sessions will be available to ASTMH member registrants following the Annual Meeting.**



Schedule-at-a-Glance

Exhibitors/Sponsors

Pre-Meeting Course

Wednesday November 13

Thursday November 14

Friday November 15

Saturday November 16

Sunday November 17

Presenter Index I

Presenter Index II / Abstract Authors

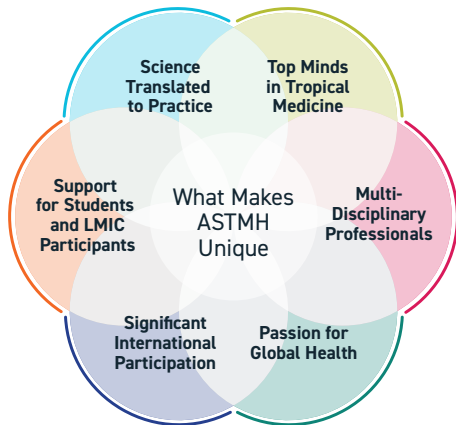
**JOIN TODAY!**

# Membership

## Join ASTMH or Renew Your Membership

Become part of the global health community dedicated to reducing the worldwide burden of tropical infectious diseases and improving global health.

Join online [here](#) or visit the TropMed Hub in the Exhibit Hall for more information.



## Advantages of Membership

- ▶ Active specialty subgroups in the areas of clinical tropical medicine, medical entomology, virology, global health and molecular, cellular and immunoparasitology
- ▶ Online access to the *American Journal of Tropical Medicine and Hygiene*, the foremost peer-reviewed publication for communicating new findings in tropical medicine
- ▶ Reduced publishing fees in the *American Journal of Tropical Medicine and Hygiene*

## Affiliate Membership

Affiliate Membership offers universities with programs in clinical and basic tropical medicine, infectious diseases and global public health the opportunity to join and lend their voice to a Society that is a leader in its field. Affiliate membership is particularly focused on bringing together undergraduate and graduate students, postdocs, medical residents and fellows in these programs so that they can take full advantage of all that ASTMH offers. [Click here](#) for more information.

## Educational Opportunities

- ▶ Reduced registration rates for the Annual Meeting, the premier gathering of tropical medicine professionals, featuring the latest cutting-edge research and program developments via symposia, plenary and interactive sessions, contributed and invited abstracts, and impromptu networking opportunities
- ▶ Reduced rates for the Update Course in Clinical Tropical Medicine and Travelers' Health
- ▶ Examination Leading to a CTropMed® – Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health
- ▶ Unlimited access to GOTropMed, the ASTMH Global Online Tropical Medicine Education website

## Professional Development Opportunities

- ▶ Funding, fellowship and sponsorship opportunities tailored to members' specific research and clinical needs
- ▶ Annual Meeting: the premier gathering of tropical medicine professionals
- ▶ Access to leading minds working and studying in tropical medicine today; educational webinars; a professional network
- ▶ Annual awards and scholarships for excellence across disciplines
- ▶ Members recognized as leaders in the tropical medicine and hygiene field
- ▶ Opportunities for leadership and skills-building through Board, subgroup and committee participation



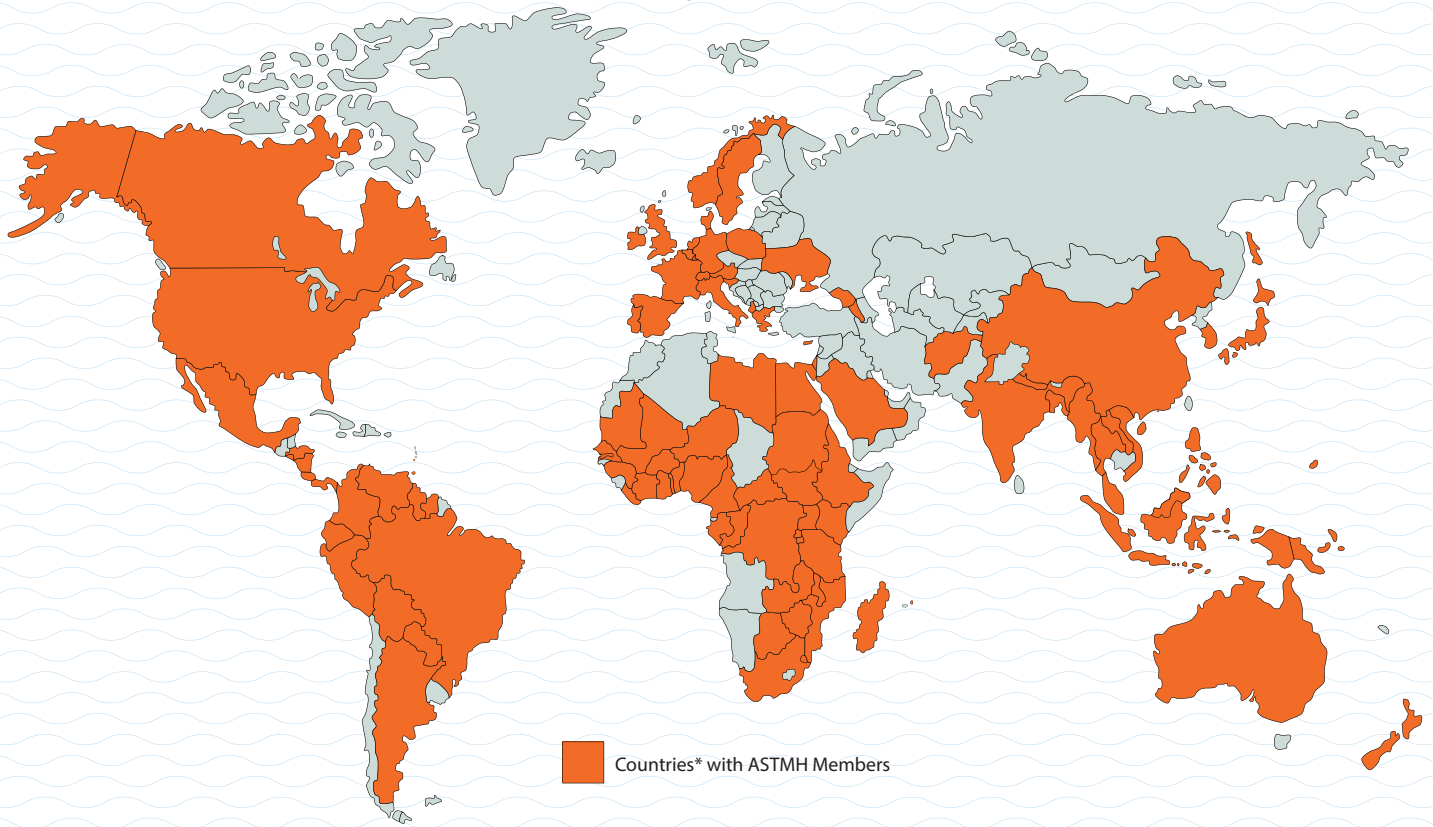
## We Welcome Members from Low and Lower-Middle Income Countries!

### Reduced Regular Membership Dues for Low and Lower-Middle Income Countries (\$25)

This special rate is open to all citizens and legal residents of World Bank Low and Lower-Middle Income Countries and WHO/HINARI classification countries of A & B. Members must be permanent residents in their country of citizenship. Visiting researchers or others on short-term assignments do not qualify.

# Members Across Six Continents

(as of August 2024)



- |                          |                                  |             |                       |                     |
|--------------------------|----------------------------------|-------------|-----------------------|---------------------|
| Argentina                | Cyprus                           | Ireland     | Nigeria               | Sudan               |
| Armenia                  | Democratic Republic of the Congo | Israel      | Norway                | Suriname            |
| Australia                | Denmark                          | Italy       | Pakistan              | Sweden              |
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| Bangladesh               | Egypt                            | Japan       | Paraguay              | Taiwan              |
| Belgium                  | El Salvador                      | Kenya       | Peru                  | Tanzania            |
| Benin                    | Equatorial Guinea                | Lao PDR     | Philippines           | Thailand            |
| Bhutan                   | Ethiopia                         | Laos        | Poland                | Togo                |
| Bolivia                  | France                           | Liberia     | Portugal              | Trinidad and Tobago |
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| Burkina Faso             | Gambia                           | Malawi      | Rwanda                | United States       |
| Burundi                  | Germany                          | Malaysia    | Saint Kitts and Nevis | Vietnam             |
| Cabo Verde               | Ghana                            | Mali        | Saudi Arabia          | Zambia              |
| Cambodia                 | Greece                           | Mauritius   | Senegal               | Zimbabwe            |
| Cameroon                 | Guinea                           | Mexico      | Singapore             |                     |
| Canada                   | Guyana                           | Mozambique  | Slovenia              |                     |
| Central African Republic | Honduras                         | Myanmar     | South Africa          |                     |
| China                    | Hong Kong                        | Nepal       | South Korea           |                     |
| Colombia                 | India                            | Netherlands | South Sudan           |                     |
| Costa Rica               | Indonesia                        | New Zealand | Spain                 |                     |
| Cote d'Ivoire            | Iraq                             | Nicaragua   | Sri Lanka             |                     |

Wednesday, November 13, 2024

	Convention Center – Hall J (1st Floor)	Convention Center – Hall I-2 (1st Floor)	Convention Center – Room 343/344 (3rd Floor)	Convention Center – Room 345 (3rd Floor)	Convention Center – Room 349 (3rd Floor)	Convention Center – Room 350 (3rd Floor)	Convention Center – Room 351 (3rd Floor)	Convention Center – Room 352 (3rd Floor)	Convention Center – Room 353 (3rd Floor)	Convention Center – Room 354/355 (3rd Floor)
8 – 8:30 a.m.										
8:30 – 9 a.m.										
9 – 9:30 a.m.			Young Investigator Award Session A P. 84	Young Investigator Award Session B P. 85				Young Investigator Award Session C P. 86	Young Investigator Award Session D P. 88	Young Investigator Award Session E P. 89
9:30 – 10 a.m.										
10 – 10:30 a.m.										
10:30 – 11 a.m.										
11 – 11:30 a.m.										
11:30 a.m. – Noon										
Noon – 12:30 p.m.										
12:30 – 1 p.m.										
1 – 1:30 p.m.										
1:30 – 2 p.m.										
2 – 2:30 p.m.					Workshop: Climate FRESK P. 93					
2:30 – 3 p.m.										
3 – 3:30 p.m.										
3:30 – 4 p.m.										
4 – 4:30 p.m.										
4:30 – 5 p.m.					ACMCIP Council Meeting					
5 – 5:30 p.m.										
5:30 – 6 p.m.										
6 – 6:30 p.m.		Opening Keynote and Awards Program P. 95								
6:30 – 7 p.m.										
7 – 7:30 p.m.										
7:30 – 8 p.m.	Opening Reception									
8 – 8:30 p.m.										
8:30 – 9:30 p.m.										

Wednesday, November 13, 2024

Schedule-at-a-Glance

	Convention Center – Room 356 (3rd Floor)	Convention Center – Room 383/384/385 (3rd Floor)	Convention Center – Room 390 (3rd Floor)	Convention Center – Room 391/392 (3rd Floor)	Convention Center – Room 397 (3rd Floor)	Convention Center – Room 398 (3rd Floor)	Convention Center – Room 399 (3rd Floor)	Hilton – River (Riverside Building)	
8 – 8:30 a.m.									
8:30 – 9 a.m.									
9 – 9:30 a.m.	Young Investigator Award Session F P. 91								
9:30 – 10 a.m.									
10 – 10:30 a.m.									
10:30 – 11 a.m.									
11 – 11:30 a.m.			ACAV SIE Subcommittee						
11:30 a.m. – Noon									
Noon – 12:30 p.m.			ACAV SIRACA Subcommittee						
12:30 – 1 p.m.									
1 – 1:30 p.m.			First-Time Attendee Orientation P. 93		Workshop: Meet the Editors and Writing Workshop P. 94				
1:30 – 2 p.m.									
2 – 2:30 p.m.		ACAV SALS Subcommittee							
2:30 – 3 p.m.								Student Reception	
3 – 3:30 p.m.									
3:30 – 4 p.m.		ACAV Council Meeting							
4 – 4:30 p.m.									
4:30 – 5 p.m.						ACME Council Meeting	Clinical Group Council Meeting	ACGH Council Meeting	
5 – 5:30 p.m.									
5:30 – 6 p.m.									
6 – 6:30 p.m.									
6:30 – 7 p.m.									
7 – 7:30 p.m.									
7:30 – 8 p.m.									
8 – 8:30 p.m.									
8:30 – 9:30 p.m.									

### Use the Meeting App to search the Annual Meeting program

- ▶ Search the full session schedule, including Poster Sessions and presenters
- ▶ Search by speaker, abstract or topic
- ▶ Learn about sponsors and exhibitors participating in the Annual Meeting
- ▶ Network with peers

### Program Changes

The session schedule is subject to change. Check the Meeting App for program changes.

Thursday, November 14, 2024

	Convention Center – Hall J (1st Floor)	Convention Center – Hall I-1 (1st Floor)	Convention Center – Hall I-2 (1st Floor)	Convention Center – Room 343/344 (3rd Floor)	Convention Center – Room 345 (3rd Floor)	Convention Center – Room 352 (3rd Floor)	Convention Center – Room 353 (3rd Floor)	Convention Center – Room 354/355 (3rd Floor)
8 – 8:30 a.m.			2 Symposium Can We Expect Triple/Multiple Artemisinin-Based Combination Therapies for Malaria P. 97	3 Symposium What's New in Clinical Tropical Medicine Literature? P. 98	4 Scientific Session Kinetoplastida and Other Protozoa: Diagnosis and New Detection Tools P. 98	5 Symposium ACME Symposium I: Animal-Targeted One Health Interventions P. 99	6 Symposium The Essential Role of Basic Sciences in Clinical Tropical Medicine and Public Health P. 100	7 Symposium The Enterics for Global Health (EFGH) Shigella Surveillance Study P. 100
8:30 – 9 a.m.								
9 – 9:30 a.m.								
9:30 – 10 a.m.	Exhibit Hall Open							
10 – 10:30 a.m.	9:45 a.m. – 10:15 a.m. Coffee Break	Poster Session A Set-Up						
10:30 – 10:45 a.m.			15 Symposium Alan Magill Symposium on Malaria Eradication P. 109	16 Scientific Session Clinical Tropical Medicine: HIV and Mpox P. 109	17 Scientific Session Kinetoplastida and Other Protozoa: Epidemiology P. 110	18 Symposium ACME Symposium II: Annual Business Meeting P. 111	19 Symposium Rocky Mountain Spotted Fever in Mexico: Raging On P. 111	20 Scientific Session Bacteriology: Shigella and Salmonella P. 112
10:45 – 11 a.m.		Poster Session A Viewing						
11 – 11:30 a.m.								
11:30 a.m. – Noon								
Noon – 12:30 p.m.								
12:30 – 1 p.m.	Exhibit Hall Open	28 Poster Session A Presentations P. 119	29 Symposium The Power of Partnerships: U.S. Government P. 178					
1 – 1:30 p.m.								
1:30 – 2 p.m.			32 Plenary Session II Craig Lecture P. 179					
2 – 2:30 p.m.	Exhibit Hall Open	Poster Session A Viewing						
2:30 – 3 p.m.	2:30 p.m. – 3:00 p.m. Coffee Break							
3 – 3:30 p.m.			33 Symposium Malaria Vector Genomics Surveillance in Africa P. 180	34 Scientific Session Filariasis: Epidemiology and Control P. 181	35 Scientific Session WaSH-E: Interventions P. 182	36 Symposium Clinical Group - ACCTMTH Symposium I: Vincenzo Marcolongo Lecture: Schistosomiasis P. 183	37 Scientific Session ACMCIP: Molecular Approaches to Parasite Infection, Growth and Development P. 184	38 Symposium ACAV Symposium I: Historical and Future Perspectives on Yellow Fever Virus P. 184
3:30 – 4 p.m.		Poster Session A Dismantle						
4 – 4:30 p.m.								
4:30 – 5 p.m.								
5 – 5:30 p.m.								
5:30 – 6 p.m.			46 Symposium Infectious Diseases Surveillance and Modeling in LMICs P. 192	47 Symposium A Tribute to Carlos (Kent) Campbell: Global Leader in Malaria P. 193	48 Scientific Session WaSH-E: Outcomes P. 194	49 Symposium Clinical Group - ACCTMTH Symposium II: What's New with Vaccines for Tropical and Travel Medicine? P. 194	50 Scientific Session ACMCIP: Parasite - Host Microenvironments P. 195	51 Symposium ACAV Symposium II: Annual Business Meeting P. 196
6 – 6:30 p.m.								
6:30 – 7 p.m.								
7 – 7:30 p.m.								
7:30 – 8 p.m.								
8 – 8:30 p.m.								Sponsored Symposium: The Rising Tide: Dengue Fever and Climate Change P. 51
8:30 – 9 p.m.								
9 – 9:15 p.m.								



Thursday, November 14, 2024

Schedule-at-a-Glance

	Convention Center – Room 356 (3rd Floor)	Convention Center – Room 357 (3rd Floor)	Convention Center – Room 383/384/385 (3rd Floor)	Convention Center – Room 388/389 (3rd Floor)	Convention Center – Room 391/392 (3rd Floor)	Convention Center – Room 393/394 (3rd Floor)	Convention Center – Room 395/396 (3rd Floor)
8 – 8:30 a.m.	8 Symposium ACGH Symposium I: Strengthening Health System Resilience for Pandemic Preparedness and Response P. 101	9 Symposium Interrupting the Transmission of Soil Transmitted Helminths: DeWorm3 Trial P. 102	10 Scientific Session Viruses: Immunology P. 103	11 Scientific Session Viruses: Field and Ecological Studies of Viruses P. 104	12 Scientific Session Malaria: Transmission Biology P. 105	13 Scientific Session Malaria: Surveillance and Data Use P. 106	14 Scientific Session Pneumonia, Respiratory Infections and Tuberculosis I P. 107
8:30 – 9 a.m.							
9 – 9:30 a.m.							
9:30 – 10 a.m.							
10 – 10:30 a.m.							
10:30 – 10:45 a.m.	21 Symposium ACGH Symposium II: Building a Diverse Workforce in Global Health Research P. 113	22 Symposium Neglected Tropical Diseases: Getting the Dose Right P. 114	23 Symposium Human Flavivirus Challenge Models: Advances and Lessons Learned P. 114	24 Scientific Session Viruses - Evolution and Genomic Epidemiology P. 115	25 Scientific Session Malaria Pathogenesis: Parasite, Host and 'Omics Studies I P. 116	26 Scientific Session Malaria: Diagnosis – Challenges and Innovations P. 117	27 Scientific Session Pneumonia, Respiratory Infections and Tuberculosis II P. 1218
10:45 – 11 a.m.							
11 – 11:30 a.m.							
11:30 a.m. – Noon							
Noon – 12:30 p.m.							
12:30 – 1 p.m.			30 Late-Breakers in Basic Science P. 178	31 Meet the Professors: Trainee Cases P. 178			
1 – 1:30 p.m.							
1:30 – 2 p.m.							
2 – 2:30 p.m.							
2:30 – 3 p.m.							
3 – 3:30 p.m.	39 Symposium One Health Action for All: Assessment and Evaluation P. 185	40 Symposium Hansen's Disease (Leprosy) in the United States P. 185	41 Scientific Session Global Health: Community Health, NTDs and NCDs P. 186	42 Scientific Session Global Health: Global Health Security, Emerging Infectious Diseases and Pandemic Preparedness P. 187	43 Scientific Session Malaria: Antimalarial Resistance and Chemotherapy P. 188	44 Scientific Session Malaria: Genetics, Genomics and Evolution P. 190	45 Scientific Session Malaria: Elimination P. 191
3:30 – 4 p.m.							
4 – 4:30 p.m.							
4:30 – 5 p.m.							
5 – 5:30 p.m.							
5:30 – 6 p.m.	52 Symposium Setting the Research Agenda for Integrating One Health and Hygiene P. 196	53 Symposium End-to-End Development of a Lassa Fever Vaccine Program P. 197	54 Scientific Session Global Health: Research, Training, Policy and Decolonization P. 197	55 Scientific Session Global Health: Maternal, Newborn and Child Health P. 198	56 Scientific Session Malaria: Drug Development and Clinical Trials P. 199	57 Symposium Building Out Malaria: Housing Modification for Malaria Prevention P. 200	58 Scientific Session Cestodes P. 201
6 – 6:30 p.m.							
6:30 – 7 p.m.							
7 – 7:30 p.m.							
7:30 – 8 p.m.			Sponsored Symposium: One Health: From Plagues and Pestilence to Pesticides, Pharmaceuticals and Public Health P. 51				
8 – 8:30 p.m.							
8:30 – 9 p.m.							
9 – 9:15 p.m.							

Friday, November 15, 2024

	Convention Center – Hall J (1st Floor)	Convention Center – Hall I-1 (1st Floor)	Convention Center – Hall I-2 (1st Floor)	Convention Center – Room 343/344 (3rd Floor)	Convention Center – Room 345 (3rd Floor)	Convention Center – Room 350/351 (3rd Floor)	Convention Center – Room 352 (3rd Floor)	Convention Center – Room 353 (3rd Floor)
7 – 7:30 a.m.				Sponsored Symposium Results from Large-Scale Trials of the Sarabi Attractive Targeted Sugar Bait to Reduce Malaria Burden in Kenya, Mali and Zambia P. 52			Sponsored Symposium Tropical Fever Syndromic Diagnostics to Enhance Patient Management: A Clinical and Microbiologist Point of View P. 54	
7:30 – 8 a.m.								
8 – 8:30 a.m.								
8:30 – 9 a.m.								
9 – 9:30 a.m.			61 Plenary Session III Commemorative Lecture P. 204					
9:30 – 10 a.m.	Exhibit Hall Open 9:45 a.m. – 10:15 a.m. Coffee Break	Poster Session B Set-Up						
10 – 10:30 a.m.								
10:30 – 10:45 a.m.		Poster Session B Viewing	62 Symposium Antimalarial Resistance Proliferation in East and Central Africa P. 204	63 Symposium A Life Well Lived: Remembering ASTMH President Dr. Joel Bremam P. 205	64 Scientific Session Filariasis – Clinical, Immunology, and Diagnosis P. 206	64A Symposium Early Lessons from the 2024 Rwanda Marburg Outbreak P. 207	65 Scientific Session Arthropods: Arthropods/ Entomology - Other P. 207	66 Symposium Clinical Tropical Medicine Debates: COVID and Cholera Vaccines P. 208
10:45 – 11 a.m.								
11 – 11:30 a.m.								
11:30 a.m. – Noon								
Noon – 12:30 p.m.	Exhibit Hall Open	75 Poster Session B P. 215	76 Symposium The Power of Partnerships: Spotlight on Philanthropy P. 277					
12:30 – 1 p.m.								
1 – 1:45 p.m.								
1:45 – 2 p.m.		Poster Session B Viewing	79 Symposium President's Symposium: Expanding Pathways to Global Health P. 278	80 Scientific Session Ectoparasite-Borne Diseases I P. 279	81 Scientific Session Bacteriology: Cholera P. 280		82 Scientific Session Mosquitoes – Biology and Genetics of Insecticide Resistance P. 281	83 Symposium ACMCIP Symposium I: Single-Cell Approaches in Parasitology P. 281
2 – 2:30 p.m.								
2:30 – 3 p.m.								
3 – 3:30 p.m.								
3:30 – 4 p.m.	Exhibit Hall Open 3:30 p.m. – 4:00 p.m. Coffee Break							
4 – 4:30 p.m.		Poster Session B Dismantle	92 Symposium From Birds to Cows to Humans: Avian Influenza P. 289	93 Scientific Session Ectoparasite-Borne Diseases II P. 289	94 Symposium Present and Future Prospects for Cholera Vaccines P. 290		95 Scientific Session Mosquitoes- Molecular Biology, Population Genetics and Genomics P. 291	96 Symposium ACMCIP Symposium II: Trager, Trainees and Take-off! P. 292
4:30 – 5 p.m.								
5 – 5:30 p.m.								
5:30 – 6 p.m.								
6 – 6:30 p.m.								
6:30 – 7 p.m.								
7 – 7:30 p.m.								
7:30 – 8 p.m.								

Friday, November 15, 2024

Schedule-  
at-a-Glance

	Convention Center – Room 354/355 (3rd Floor)	Convention Center – Room 356 (3rd Floor)	Convention Center – Room 357 (3rd Floor)	Convention Center – Room 383/384/385 (3rd Floor)	Convention Center – Room 388/389 (3rd Floor)	Convention Center – Room 391/392 (3rd Floor)	Convention Center – Room 393/394 (3rd Floor)	Convention Center – Room 395/396 (3rd Floor)
7 – 7:30 a.m.	Sponsored Symposium Asymptomatic Malaria in Pregnancy: An Urgent Problem to Resolve P. 53			Sponsored Symposium When Neglected Tropical Diseases Go Global: Focus on Chikungunya and Mpox P. 53	Sponsored Symposium The Next Chapter of Progress: Integrating New Tools, Strategies and Partnerships to Beat Malaria			Sponsored Symposium Malaria Prevention: A Trilogy of Tools to Accelerate to Zero Deaths P. 54
7:30 – 8 a.m.								
8 – 8:30 a.m.								
8:30 – 9 a.m.								
9 – 9:30 a.m.								
9:30 – 10 a.m.								
10 – 10:30 a.m.								
10:30 – 10:45 a.m.	67 Symposium Schistosomiasis and Pre-School Age Children P. 209	68 Symposium Health Inequities of Migrants Crossing the Darien Gap P. 209	69 Symposium Diagnostic Tool Development and Deployment - Trachoma, Guinea Worm and Polio P. 210	70 Symposium Earth Observation for Health P. 211	71 Symposium How NTD Elimination and Maternal Health Programs Can Learn and Collaborate P. 211	72 Scientific Session Malaria: Immunology P. 212	73 Scientific Session Malaria: Prevention P. 213	74 Symposium The Path towards a Treatment for Dengue P. 214
10:45 – 11 a.m.								
11 – 11:30 a.m.								
11:30 a.m. – Noon								
Noon – 12:30 p.m.								
12:30 – 1 p.m.				77 Late-Breakers in Clinical and Applied Sciences P. 278	78 Meet the Professors: Tropical Dermatology P. 278			
1 – 1:45 p.m.								
1:45 – 2 p.m.								
2 – 2:30 p.m.	84 Scientific Session Viruses - Emerging Viral Diseases P. 282	85 Symposium Acute Kidney Injury in Severe Malaria P. 283	86 Scientific Session Measures for Control and Elimination of NTDs I P. 283	87 Scientific Session Global Health: Special Populations P. 284	88 Symposium Advancing Research to Improve Treatment of NTDs in Children P. 285	89 Symposium Ganaplacide (KAF156) for the Treatment of P. falciparum Malaria P. 286	90 Scientific Session Malaria Epidemiology I P. 286	91 Symposium Results from the PAASIM Study - A Matched Cohort Study in Mozambique P. 287
2:30 – 3 p.m.								
3 – 3:30 p.m.								
3:30 – 4 p.m.								
4 – 4:30 p.m.	97 Symposium Understanding Bat Virus Spillovers to Inform Pandemic Prevention P. 296	98 Meet the Professors: Challenges in Diagnosis and Management P. 293	99 Scientific Session Measures for Control and Elimination of NTDs II P. 293		100 Symposium Innovative Local Solutions and Novel Data Use in Eliminating NTDs P. 294	101 Scientific Session Malaria: Vaccines and Immunotherapeutics P. 295	102 Scientific Session Malaria Epidemiology II P. 296	103 Symposium Building Sustainable and Resilient Health System - Public Health Crisis and Insecurity P. 297
4:30 – 5 p.m.								
5 – 5:30 p.m.								
5:30 – 6 p.m.								
6 – 6:30 p.m.				105 Speed-Networking with the Experts P. 298	Sponsored Symposium Professor Dominic Kwiatkowski - Science and Legacy P. 55			
6:30 – 7 p.m.								
7 – 7:30 p.m.								
7:30 – 8 p.m.								

Saturday, November 16, 2024

	Convention Center – Hall J (1st Floor)	Convention Center – Hall I-1 (1st Floor)	Convention Center – Hall I-2 (1st Floor)	Convention Center – Room 343/344 (3rd Floor)	Convention Center – Room 345 (3rd Floor)	Convention Center – Room 352 (3rd Floor)	Convention Center – Room 353 (3rd Floor)	Convention Center – Room 354/355 (3rd Floor)
7 – 7:30 a.m.								
7:30 – 8 a.m.								
8 – 8:30 a.m.			106 Symposium Unprecedented Dengue Outbreaks in the Americas P. 300	107 Symposium CDC Yellow Book Travel Medicine Update P. 300	108 Scientific Session Global Health: Improved Health Care Service Delivery P. 301	109 Symposium Mitigating Risk for Tick-Borne Diseases P. 302	110 Symposium Public Health under Threat - Crisis in Haiti P. 302	111 Scientific Session Bacteriology: Other Enteric Infections P. 303
8:30 – 9 a.m.								
9 – 9:30 a.m.								
9:30 – 10 a.m.	Exhibit Hall Open 9:45 a.m. – 10:15 a.m. Coffee Break							
		Poster Session C Set-Up						
10 – 10:30 a.m.								
10:30 – 10:45 a.m.		Poster Session C Viewing	119 Plenary Session IV: President's Address P. 309					
10:45 – 11 a.m.								
11 – 11:30 a.m.	Exhibit Hall Open	120 Poster Session C Presentations P. 310						
11:30 a.m. – Noon								
Noon – 12:30 p.m.								
12:30 – 1 p.m.								
1 – 1:30 p.m.		Poster Session C Viewing	125 Symposium Smallpox to a Global Mpox Outbreak P. 367	126 Symposium Mosquito Larval Biology and Control P. 368	127 ASTMH Annual Business Meeting P. 369	128 Scientific Session Clinical Tropical Medicine: NTDs P. 369	129 Scientific Session Mosquitoes- Bionomics, Behavior and Surveillance P. 370	130 Cooperation in Caring for Patients with Cystic Echinococcosis P.371
1:30 – 2 p.m.								
2 – 2:30 p.m.								
2:30 – 3 p.m.								
3 – 3:30 p.m.		Poster Session C Dismantle	138 Symposium Systems Immunology of Tropical Diseases: Harnessing Omics and AI P. 377	139 Remembering Karl M. Johnson - A Leader in Tropical Virology P. 377	140 Scientific Session One Health I P. 378	141 Symposium Malaria in Children and Adolescents with Sickle Cell Anemia P. 379	142 Scientific Session Mosquitoes- Epidemiology and Vector Control I P. 379	143 Scientific Session Schistosomiasis I P. 380
3:30 – 4 p.m.								
4 – 4:30 p.m.								
4:30 – 5 p.m.								
5 – 5:30 p.m.								
5:30 – 6 p.m.			151 Symposium Evaluation and Management of Suspect Viral Hemorrhagic Fever (VHF) Cases P. 387	152 Special Event Film Screening: "Accidental Host - The Story of Rat Lungworm Disease" P. 387	153 Scientific Session One Health II P. 388	154 Scientific Session ACMCIP: Antiparasitic Drugs P. 389	155 Scientific Session Mosquitoes- Epidemiology and Vector Control II P. 390	156 Scientific Session Clinical Tropical Medicine: Malaria and Fevers P. 391
6 – 6:30 p.m.								
6:30 – 6:45 p.m.								
6:45 – 7 p.m.								
7:00 – 8 p.m.								

## Saturday, November 16, 2024

Schedule-  
at-a-Glance

	Convention Center – Room 356 (3rd Floor)	Convention Center – Room 357 (3rd Floor)	Convention Center – Room 383/384/385 (3rd Floor)	Convention Center – Room 388/389 (3rd Floor)	Convention Center – Room 391/392 (3rd Floor)	Convention Center – Room 393/394 (3rd Floor)	Convention Center – Room 395/396 (3rd Floor)
7 – 7:30 a.m.							
7:30 – 8 a.m.							
8 – 8:30 a.m.	112 Scientific Session ACMCIP: Parasite Cellular Immunology P. 304	113 Symposium Innovative Tools for the Control of NTDs: Access Beyond Drug Donations P. 305	114 Scientific Session Nematodes P. 305	115 Symposium Evaluating the Case for Loiasis as NTD P. 306	116 Symposium Implementing Perennial Malaria Chemoprevention across Africa P. 307	117 Symposium Improving the Diagnosis and Management of Severe Malaria P. 308	118 Symposium Subarachnoid and Intraventricular Neurocysticercosis P. 308
8:30 – 9 a.m.							
9 – 9:30 a.m.							
9:30 – 10 a.m.							
10 – 10:30 a.m.							
10:30 – 10:45 a.m.							
10:45 – 11 a.m.							
11 – 11:30 a.m.							
11:30 a.m. – Noon			124 Late-Breakers in Virology P. 367	123 Meet the Professors: Dilemmas in CTM P. 367	122 Late-Breakers in Malaria P. 367		
Noon – 12:30 p.m.							
12:30 – 1 p.m.							
1 – 1:30 p.m.	131 Symposium Post-Viral Sequelae in Ebola Virus Infections P. 371	132 Symposium Mass Drug Administration of Ivermectin for Onchocerciasis Elimination P. 372	133 Scientific Session Viruses – Epidemiology P. 373	134 Scientific Session Global Health: Use of Modeling, AI and other Advanced Methods to Study Disease Epi and Climate Change P. 374	135 Symposium Critical Challenges in Targeting Transmission in Malaria-Endemic Settings P. 374	136 Symposium Vaccines for Malaria Elimination in Asia and Africa P. 375	137 Symposium Advances in Chagas Disease Diagnostic Assays and Testing Strategies P. 375
1:30 – 2 p.m.							
2 – 2:30 p.m.							
2:30 – 3 p.m.							
3 – 3:30 p.m.	144 Symposium Transmission of NTDs: Trachoma, Lymphatic Filariasis and Guinea Worm Disease P. 381	145 Symposium Engaging Scientists as Advocates P. 382	146 Symposium Minimally Invasive Tissue Sampling P. 382	147 Symposium Building Health System Resilience: A Case Study of Madagascar P. 383	148 Symposium Spatial Repellents to Prevent Dengue and Malaria P. 384	149 Symposium Innovations and Implementation Approaches to Ensure Community-Based Malaria Care P. 385	150 Symposium New Perspectives on Human Autochthonous Chagas Disease in the U.S. and Mexico P. 385
3:30 – 4 p.m.							
4 – 4:30 p.m.							
4:30 – 5 p.m.							
5 – 5:30 p.m.							
5:30 – 6 p.m.	157 Scientific Session Viruses - Transmission Biology, Pathogenesis and Animal Models P. 392	158 Symposium Strategies for the Integrated Delivery of NTD Services P. 392	159 Symposium The Impact of Artificial Intelligence on Neglected Tropical Diseases P. 393	160 Symposium The Economics of Global Health R&D P. 394	161 Symposium Generating Durable Protective Immunity with Malaria Vaccines P. 394	162 Symposium Artemisinin Resistance Response in Africa: Integrating Molecular Surveillance and Mathematical Modeling P. 395	163 Symposium Outlook for Vaccination and Global Elimination of Leishmaniasis P. 396
6 – 6:30 p.m.							
6:30 – 6:45 p.m.							
6:45 – 7 p.m.							
7:00 – 8 p.m.							

## Sunday, November 17, 2024

	Convention Center – Hall I-2 (1st Floor)	Convention Center – Room 343/344 (3rd Floor)	Convention Center – Room 345 (3rd Floor)	Convention Center – Room 352 (3rd Floor)	Convention Center – Room 353 (3rd Floor)	Convention Center – Room 354/355 (3rd Floor)	Convention Center – Room 356 (3rd Floor)	Convention Center – Room 357 (3rd Floor)
7 – 7:30 a.m.								
7:30 – 8 a.m.								
8 – 8:30 a.m.	165 Symposium Malaria Elimination and the Prevention of Re-establishment (PoR) P. 398	166 Scientific Session Bacteriology: Other Bacterial Infections P. 399	167 Symposium Ethical Issues in Trop Med: Content for Research Training from Peru and Mozambique P. 400	168 Scientific Session Kinetoplastida and Other Protozoa: Genomics, Proteomics and Metabolomics P. 400	169 Symposium Novel Approaches for the Radical Cure of vivax Malaria: Primaquine and Tafenoquine P. 401	170 Scientific Session ACMCIP: Parasite Vaccine Development P. 402	171 Scientific Session Mosquitoes-Biology, Physiology and Immunity P. 403	172 Symposium Emerging Technologies and Innovative Strategies in Advancing Skin NTD Integration P. 404
8:30 – 9 a.m.								
9 – 9:30 a.m.								
9:30 – 10 a.m.								
10 – 10:30 a.m.								
10:30 – 10:45 a.m.	178 Plenary Session V: Breaking Down Silos to Tackle Infectious Diseases in Africa P. 408							
10:45 – 11 a.m.								
11 – 11:30 a.m.								
11:30 a.m. – Noon	179 Symposium Understanding Cross- Border Migration on Malaria Elimination Strategies P. 409	180 Scientific Session Clinical Tropical Medicine: Disease and Vaccine Safety Surveillance P. 410	181 Symposium Molecular Xenomonitoring in Assessment and Surveillance after MDA for Lymphatic Filariasis P. 411	182 Scientific Session Kinetoplastida and Other Protozoa: Immunology, Invasion, Cellular and Molecular Biology P. 411	183 Symposium Closing the Typhoid Surveillance Gap P. 412	184 Scientific Session ACMCIP: Parasite Immunology P. 413	185 Symposium Schistosomiasis Diagnosis and Treatment – The Example of freeBILy P. 414	186 Symposium Will HAT be the Next NTD to Achieve Global Elimination? P. 415
Noon – 12:30 p.m.								
12:30 – 1 p.m.								
1 – 1:30 p.m.								
1:30 – 2 p.m.								
2 – 2:30 p.m.								

### Use the Meeting App to search the Annual Meeting program

- ▶ Search the full session schedule, including Poster Sessions and presenters
- ▶ Search by speaker, abstract or topic
- ▶ Learn about sponsors and exhibitors participating in the Annual Meeting
- ▶ Network with peers

### Program Changes

The session schedule is subject to change. Check the Meeting App for program changes.

Sunday, November 17, 2024

Schedule-at-a-Glance

	Convention Center – Room 383/384/385 (3rd Floor)	Convention Center – Room 388/389 (3rd Floor)	Convention Center – Room 391/392 (3rd Floor)	Convention Center – Room 393/394 (3rd Floor)	Convention Center – Room 395/396 (3rd Floor)	Convention Center – Lobby of Hall I (1st Floor)	
7 – 7:30 a.m.							
7:30 – 8 a.m.							
8 – 8:30 a.m.	173 Scientific Session Viruses - Therapeutic, Antiviral Drugs and Vaccine Clinical Trials P. 405	174 Symposium Malaria and Dengue Early Warning Systems - Health System Adaptation and Response to Climate Change P. 405	175 Symposium Zoonotic Disease Risk in Indigenous Communities P. 406	176 Symposium Bartonellosis: A (Re) emerging Ectoparasite- Borne Disease of People and Animals P. 407	177 Scientific Session Schistosomiasis II P. 407		
8:30 – 9 a.m.							
9 – 9:30 a.m.							
9:30 – 10 a.m.							
10 – 10:30 a.m.						9:45 a.m. – 10:15 a.m. Coffee Break	
10:30 – 10:45 a.m.							
10:45 – 11 a.m.							
11 – 11:30 a.m.							
11:30 a.m. – Noon	187 Symposium Interdisciplinary Approaches to Rift Valley Fever Virus Research P. 416	188 Symposium Integrating Anthropology/Social Science Approaches into Epidemic Outbreak Response P. 416	189 Symposium Scaling the Optimal Use of Multiple ACT's to Prevent Antimalarials Drug Resistance P. 417	190 Symposium Clinical Development of Monoclonal Antibodies that Target Malaria Sporozoites P. 418	191 Challenges and Innovations after Long- Term Implementation of Helminth Control Programs P. 419		
Noon – 12:30 p.m.							
12:30 – 1 p.m.							
1 – 1:30 p.m.							
1:30 – 2 p.m.							
2 – 2:30 p.m.							

# Become an Affiliate Member of ASTMH

Affiliate Membership offers a cost-effective way for universities, university programs, NGOs, research groups and professional societies throughout the world that have an interest in clinical and basic tropical medicine, infectious diseases and global public health to join and lend their voice to a Society that is a leader in its field.

Visit [astmh.org](http://astmh.org) to learn more about ASTMH membership.



Affiliate membership within these organizations and institutions is particularly focused on bringing together students, trainees and early-career professionals, and enabling them to take advantage of ASTMH benefits. For universities and other programs with few resources to devote to advocacy, this category offers the opportunity to join in the messaging of a trusted and respected scientific society.

**It is expected that Affiliates around the world will develop a sense of community around shared goals of global health equity.**

### BENEFITS OF AFFILIATE MEMBERSHIP

- ▶ Membership for the designated university faculty member, program director or NGO representative
- ▶ Membership for up to 15 pre- or post-doctoral students
- ▶ Read more [here](#) for benefits and access

### THANK YOU TO OUR CURRENT AFFILIATE CONTRIBUTOR MEMBERS:

- Box 4
- Clemson
- Columbia University Irving Medical Center
- Groupe De Rescherche Action En Sante
- Johns Hopkins University
- London School of Hygiene & Tropical Medicine
- Massachusetts Institute of Technology
- Medical College of Georgia
- New Mexico State University
- Pilgrim Africa
- Security Forces Hospital, Saudi Arabia
- University of Maine
- University of Texas Medical Branch
- University of Vermont College of Medicine

# Bavarian Nordic Medical Affairs Breakfast Symposium

Held in conjunction with the ASTMH 2024 Annual Meeting



## When Neglected Tropical Diseases Go Global: Focus on Chikungunya and Mpox

Friday, 15th November 2024  
7:00–8:45 am CST

Room 383/384/385 (3rd floor)  
New Orleans Ernest N. Morial  
Convention Center, New Orleans,  
Louisiana, USA

## We welcome you to join our symposium

### Dr. David Hamer, MD, FACP, FIDSA, FASTMH, FISTM

*Professor of Global Health and Medicine, Boston University School of Public Health*

#### Symposium Chair

### Dr. Aileen Chang, MD, MSPH, FACP

*Associate Professor of Medicine, The George Washington University School of Medicine and Health Sciences*

#### Chikungunya revealed: epidemiology, climate change impact, and critical diagnostic insights for optimal patient care

Chikungunya is a debilitating, mosquito-transmitted disease that has emerged as a global public threat. It is associated with high morbidity and continues to expand globally due to climate change, viral adaptations and globalisation.

In this session, we will review the epidemiology, clinical presentation, diagnostics, and management of chikungunya.

### Dr. Placide Mbala, MD, MSPH, PhD

*Head of Epidemiology and Global Health, INRB Associate Professor, Medical School, University of Kinshasa, Democratic Republic of Congo*

#### Emergence of mpox in the post-smallpox era

The rapid spread of mpox clade IIb to non-endemic regions of the world led to the first global mpox epidemic in 2022–2023 and the declaration of a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO). In August 2024, the WHO declared the mpox clade Ib outbreak in the Democratic Republic of the Congo a PHEIC.

In this session, we will review the epidemiology and disease burden of mpox and provide an update on the current situation, with a specific focus on endemic countries in Africa.

## EXHIBITION STAND

VISIT THE BAVARIAN NORDIC MEDICAL AFFAIRS CORNER AT BOOTH 501 IN THE EXHIBIT HALL

Intended for healthcare professionals only.

The speakers listed received honoraria from Bavarian Nordic to present this symposium.

The symposium content is intended as scientific exchange and is not promotional.

The symposium is not CME accredited.

Bavarian Nordic A/S, Philip Heymans, Alle 3 2900 Hellerup, Denmark.

GL-DS-2400004 | October 2024





# ASTMH Values and Promotes Diversity



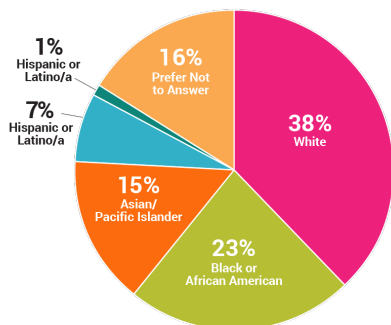
## ASTMH Inclusion/Respect Statement

Our diverse membership comes from more than 115 countries and engages with an enormous array of infectious diseases, cultures, ethnicities, and countries. We come from academia, research institutes, implementation programs, industry, multilateral organizations, foundations, and governments, gathering annually to exchange data, share learning, and honor contributions from the field and the lab. As a Society, we are committed to the open exchange of ideas, freedom of thought and expression, and productive scientific debate that are central to our mission. These require an open and diverse environment that is built on dignity and mutual respect for all members, participants, and staff, free of discrimination based on personal attributes including but not limited to ethnicity, color, national origin, age, religion, socioeconomic status, disability, sexual orientation, gender, and gender identity or expression.

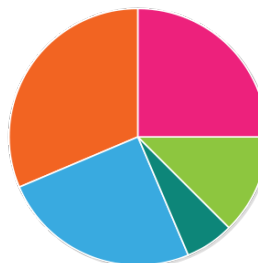
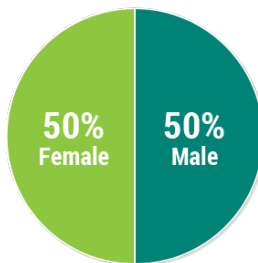
We affirm the key principles of inclusion, diversity, and respect for all people. In a world of rich diversity, the advancement of science depends on the intellectual breadth and depth of a diverse ASTMH, one that informs and enriches the shape and content of scientific discourse. These principles guide the actions of ASTMH's leaders, members, and staff in advancing the goals of the Society.

You can see ASTMH's diversity in its membership, leadership and in its Annual Meeting presenters and attendees. Symposium Organizers were encouraged to consider diversity with respect to gender, institutional background and country of origin when developing symposium submissions. All symposia were required to have at least one male and one female participant.

### 2023 Annual Meeting Attendees



### 2024 Board of Directors/Executive Committee



- 4 Female Black/African American
- 2 Male Black/African American
- 1 Male Asian/Pacific Islander
- 4 Female White
- 5 Male White

# ASTMH Board, Subgroup Leadership and Fellows of ASTMH

## ASTMH Board, Subgroup Leadership and Fellows of ASTMH (FASTMH)

ASTMH extends a special thank you to its Board members for their outstanding contributions throughout the year and their dedication to advancing the Society's mission.

### Executive Committee

#### President

Linnie Golightly  
Weill Cornell Medical College, United States

#### President-Elect

David Fidock  
Columbia University Medical Center, United States

#### Past President

Daniel G. Bausch  
London School of Hygiene & Tropical Medicine, United Kingdom

#### Secretary-Treasurer

Kent Kester  
CEPI, United States

#### Chair, Scientific Program Committee

David Hamer  
Boston University, United States

#### Editor-in-Chief, American Journal of Tropical Medicine and Hygiene

Philip Rosenthal  
University of California San Francisco, United States

#### CEO

Jamie Bay Nishi  
ASTMH, United States

### Directors-at-Large

John H. Amuasi (2023-2026)  
Kwame Nkrumah University of Science and Technology  
School of Public Health, Ghana

Johanna Daily (2022-2025)  
Albert Einstein College of Medicine, United States

Keke Fairfax (2022-2025)  
University of Utah, United States

Abiola Fasina (2024-2027)  
R Jolad Hospital/Emergency Healthcare Consultants, Nigeria

Emily S. Gurley (2023-2026)  
Johns Hopkins Bloomberg School of Public Health, United States

Beth Kirkpatrick (2024-2027)  
University of Vermont College of Medicine, United States

Winter Okoth (2024-2025)  
Rutgers, State University of New Jersey, United States

Hannah Steinberg (2023-2024)  
Washington University, United States

Jonathan K. Stiles (2022-2024)  
Morehouse School of Medicine, United States

Bhupendra Tripathi (2022-2024)  
Bill & Melinda Gates Foundation, India

### Subgroup Leadership

#### American Committee of Medical Entomology (ACME)

Chair: Adriana Troyo  
Universidad de Costa Rica, Costa Rica

#### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)

Interim President: Amanda Lukens  
Harvard T.H. Chan School of Public Health, United States

#### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV)

Chair: Mauricio Nogueira  
Faculdade de Medicina de Sao Jose Do Rio Preto, Brazil

#### American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH – Clinical Group)

President: Kyle Petersen  
Uniformed Services University of the Health Sciences, United States

#### ASTMH Committee on Global Health (ACGH)

President: Yazoumé Yé  
CESMEL Health, United States

## Organizational Chart



# Board, Subgroup Leadership and Fellows of ASTMH

## Fellows of ASTMH (FASTMH)

Fellow member status in the Society is an honor recognizing sustained professional excellence in any phase of tropical medicine, hygiene, global health and related disciplines. 2024 Fellows will be announced and recognized during the Awards Program on Wednesday, November 13.

### 2024 Fellows

- Hoseah Akala  
*Kenya Medical Research Institute, Kenya*
- Matthew Aliota  
*University of Minnesota, United States*
- Lyric Bartholomay  
*University of Wisconsin-Madison, United States*
- May Chu  
*Colorado School of Public Health, United States*
- Maria Diuk-Wasser  
*Columbia University, United States*
- Linnie Golightly  
*Weill Cornell Medical College, United States*
- Karen Goraleski  
*ASTMH CEO Emerita, United States*
- Kasturi Haldar  
*University of Notre Dame, United States*
- Eric Halsey  
*Centers for Disease Control and Prevention, United States*
- Manuel Llinás  
*The Pennsylvania State University, United States*
- Kristy Murray  
*Emory University, United States*
- Kyle Petersen  
*Uniformed Services University of the Health Sciences, United States*
- Dylan Pillai  
*University of Calgary, Canada*
- Bobbi Pritt  
*Mayo Clinic, United States*
- David Saunders  
*Uniformed Services University School of Medicine, United States*
- Maggy Sikulu-Lord  
*The University of Queensland, Australia*
- Sharon Tennant  
*University of Maryland School of Medicine, United States*

## ASTMH Staff

- Jamie Bay Nishi, *CEO*
- Shaima Abdul-Aziz, *Project Manager, Scientific Program*
- Annie Calacci, *Editorial Production Manager, AJTMH*
- Stephen M. Croll, *Chief Operating Officer*
- Judy DeAcetis, *Administrative Manager, Scientific Program*
- Doug Dusik, *Senior Manager, Communications*
- Buffy Finn, *Manager, Membership*
- Natalia Gutierrez, *Scientific Program Coordinator*
- Rebecca Hamel, *Manager, Partnerships*
- Brenda Howe, *Manager of Data Systems and Conference Services*
- Alison Jaeb, *Managing Editor and Publisher, AJTMH*
- Lyn Maddox, *Vice-President, Meetings*
- Rhonda Schultz, *Manager, Board and Fellowships*
- Chelsea Taylor, *Operations Coordinator*
- Lori Young, *Peer Review Coordinator, AJTMH*

### Additional Annual Meeting Support

- Matthew Davis, *Burness*
- Danielle Dieterich, *Burness*
- Gideon Hertz, *Burness*
- Katy Lenard, *Burness*
- Brian McGowan, *Brian McGowan Designs*
- Nancy Moss, *Burness*
- Carol Schadelbauer, *Burness*
- Preeti Singh, *Burness*

# ASTMH Subgroups and Committees

ASTMH membership reflects a wide range of expertise in tropical medicine. For this reason, Society subgroups provide unique forums for members to engage in core scientific, educational, advocacy and policy issues related to a specific expertise with fellow stakeholders of similar interests. Benefits of becoming a subgroup member include receiving information on networking, pre-meeting courses and symposia activities planned for Annual Meetings to enhance career development. Each subgroup is governed by leaders who are elected annually by its members. This ensures ownership of Subgroup initiatives by those interested and invested in current topics of the field.

## Subgroups

### **American Committee of Medical Entomology (ACME)**

ACME promotes medical entomology within ASTMH and in organizations with scopes of activities that include the area of human diseases transmitted by arthropods.

Adriana Troyo, *Chair and Councilor*

Sarah Hamer, *Chair-Elect and Councilor*; Catherine Hill, *Past Chair and Councilor*; Berlin Londono, *Secretary-Treasurer and Councilor*; Nsa Dada, *Secretary-Treasurer-Elect, Councilor and Travel Awards Coordinator*; Lauren Cator, *Councilor*; Pamela Pennington, *Councilor*; Zach Adelman, *Councilor*; Jewelna Akorli, *Councilor*; Serap Aksoy, *Councilor*; Kingsley Badu, *Councilor*; Maria Luisa Simoes, *Councilor*; Akilah Stewart, *Student Representative*; Teresia Njoroje, *Student Representative*

### **American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)**

ACMCIP facilitates interactions among scientists within ASTMH who work in the varied disciplines of parasitology, especially in basic laboratory, pre-clinical and translational research, clinician sciences and population-based sciences.

Amanda Lukens, *Interim President and President-Elect*

Michael Hsieh, *Past President*; Usheer Kanjee, *Secretary/Treasurer*; Regina Joice Cordy, *Councilor (Annual Meeting Symposia)*; Scott Lindner, *Councilor (Annual Meeting Symposia)*; Jeffrey Dvorin, *Councilor (Awards and Pre-Meeting Course)*; Omar Harb, *Councilor for Communications*; Ayman El-Badry, *International Councilor*; Selina Bopp, *Councilor-at-Large*; Sebastian Lourido, *Councilor-at-Large*; Pedro Gazzinelli Guimaraes, *Councilor-at-Large*; Jonathan Marchant, *Councilor-at-Large*; Claudia Rohr, *Councilor for Trainees*; Daniel Sprague, *Councilor for Trainees*

### **American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV)**

ACAV provides a forum for exchange of information among people interested in arbovirus research.

Mauricio Nogueira, *Chair and Councilor*

Shannan Rossi, *Chair-Elect and Councilor*; Saravanan Thangamani, *Past Chair and Councilor*; Matthew Aliota, *Secretary and Councilor*; Meghan Hermance, *Treasurer and Councilor*; Maria Onyango, *Councilor*; Amy Krystosik, *Councilor*; Sasha Azar, *Councilor*; Sandra Lopez-Verges, *Councilor*; Gillian Eastwood, *Councilor*; Rachel Lange, *Councilor for Trainees*

### **American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH)**

The Clinical Group (ACCTMTH) is the clinicians' group within ASTMH and includes civilian, military and governmental experts in travelers' health, tropical infection and tropical disease.

Kyle Petersen, *President*

Daniel Leung, *President-Elect*; Natasha Hochberg, *Past President*; Shaymaa Abdalal, *Secretary-Treasurer*; Iván González, *Councilor*; Jill Weatherhead, *Councilor*; Ralph Huits, *Councilor*; Hendrik Sy, *Student Representative*

### **ASTMH Committee on Global Health (ACGH)**

ACGH promotes the development of the field of global health within ASTMH and addresses multidisciplinary transnational approaches to health issues that unfavorably affect underserved and under-resourced populations.

Yazoumé Yé, *President*

Jennifer Downs, *President-Elect*; James Colborn, *Past President*; Muhammad Noon, *Secretary-Treasurer*; Arielle Dolegui, *Councilor*; Katherine Wolf, *Councilor*; Andrea Buchwald, *Councilor*; Alexander Kwarteng, *Councilor*; Camila Tompkins, *Councilor for Trainees*

## Administration

### **Audit/Finance**

Kent Kester, *Secretary-Treasurer, Chair*

Linnie Golightly, *President*; Daniel Bausch, *Immediate Past President*; Jamie Bay Nishi, *CEO*; Stephen Croll, *COO*

### **American Journal of Tropical Medicine and Hygiene (AJTMH)**

**Editorial Board:** Jonathan Berman; Dwight Bowman; Brett Forshey; Hector Garcia; Steven Graves; Eric Halsey; A. Desiree LaBeaud; Patrick Lammie; Thomas Nutman; Tyler Sharp; Terrie Taylor; David Walker; A. Clinton White

## ASTMH Subgroups and Committees (cont.)

### **AJTMH Editorial Staff:** Philip Rosenthal, *Chair (Editor-in-Chief)*

Joe Vinetz (Associate Editor); Daniel Tisch (Biostatistical Editor); Baijayanta Mukhopadhyay (Art Curator); Alison Jaeb (Managing Editor and Publisher); Annie Calacci (Editorial Production Manager); Lori Young (Peer Review Coordinator)

**AJTMH Section Editors:** Bradley Blitvich; Aaron Brault; Claudia Ida Brodskyn; Andrew DiNardo; J. Stephen Dumler; David Hamer; Duane Hospenthal; James Kazura; Kristina Krohn; Audrey Lenhart; John Sanders; Christina Stauber; Maxine Whittaker

### **Inclusion/Respect Task Force**

Julie Jacobson, *Co-Chair*

Johanna Daily, *Co-Chair*

Pedro C. P. Aide; Koya C. Allen; Daniel G. Bausch; Regina Rabinovich; Amanda Ruiz; Micaela Sandoval; Jonathan K. Stiles; Anna Uehara

### **Nominating Committee**

Chandy John, *Chair*

Patricia Aguilar; Gordon Awandare; Daniel G. Bausch; Ronald Blanton; Jessica Fairley; Matthew Kasper; Albert Ko; A. Desiree LaBeaud; Miriam Laufer; Bartholomew Ondigo; Simon Pollett; Amanda Elyssa Ruiz

## Annual Meeting

### **Commemorative Lecture**

Linnie Golightly, *Chair*

### **Continuing Medical Education (CME) Committee**

John Sanders, *Chair*

David Brett-Major; Matthew Cappiello

### **Lecture (Fred L. Soper and Charles Franklin Craig)**

Albert Icksang Ko, *Chair*

Anna Durbin; Beth Kirkpatrick; James McCarthy; Monica Parise; Frank Richards

### **Scientific Program**

David Hamer, *Chair*

Kristy Murray, *Associate Chair*

See full committee list on page 30.

### **Travel Awards**

Tracey Lamb, *Chair*

Manfred Accrobessi; Hoseah Akala; Subash Babu; Raquel Binder; Fabrice Boyom; Jorge Cervantes; Robert Commons; Edgard Dabira; Dibyadyuti Datta; Gillian Eastwood; S. Patrick Kachur; Claire Kamaliddin; Nadira Karunaweera; Maryam Keshtkar Jahromi; Hamma Maiga; Robert McCann; Wilbur Kearsse Milhous; Momar Ndao; Francis Ndungu; Shrikant Nema; Caroline Ng; Winter Okoth; Abuchi Loveday Okpara; Kolapo Oyebola; Jakrapun Pupailool; Ingrid Rabe; Binod Rayamajhe; Elizabeth Rogawski McQuade; Alexandra Rowe; Sharon Tennant; Gemechu Tiruneh

### **Young Investigator Award**

Sasisekhar Bennuru, *Chair*

Solomon Birhanie; Katia Bruxvoort; Lauren Cohee; Silvia Di Santi; Aissatou Diawara; Zannatul Ferdous; Rebecca Fischer; Dionicia Gamboa; Pedro Gazzinelli Guimares; Susanta Ghosh; Karen Hamre; Kristen Lyke; Carla Mavian; Peter Melby; Adelaide Miarinjara; Janelisa Musaya; Ruth Namazzi; Hugues Clotaire Nana Djeunga; Caroline Ng; Chukwuanugo Ogbuagu; Juliana Otieno; Isaac Oyewole; Amit Prasad; Joana Silva; Katherine Torres

## Awards and Professional Recognition

### **Medals**

Stephen Higgs, *Chair*

Daniel G. Bausch; James Kazura

### **Communications Award**

Jamie Bay Nishi, *Co-Chair*

Laila Woc-Colburn, *Co-Chair*

Marissa Chmiola; Ilan Moss; Tulika Singh

# Subgroups and Committees (cont.)

## Certificate Exam

### Certificate Examination

Latha Rajan, *Chair*

Matthew Cappiello; Gregory Deye; Kevin Dieckhaus; Shauna Gunaratne; Godwin Igodo; Rajat Madan; David McCormick; Bayan Missaghi; Tara Ness; Monica Pachar Flores; Gregory Racznick; Robert Rolfe Jr.; Lilita Sanchez-Gonzalez; Megan Shaughnessy; Melinda Tanabe

### Diploma Course Certification Committee

Anne McCarthy, *Chair*

Eva Clark; Melanie Fisher; Brett Hendel-Paterson; German Henostroza; Benno Kreuels; Christopher Smith

## Education/Fellowships/Grant Awards

### Alan J. Magill Fellowship

Sarah Volkman, *Chair*

Janiine Babcock; Mame Niang; Nicanor Obaldia; Douglas Postels; Larry Slutsker; Joseph Wagman; Norman Waters; Bruno Moonen (Ex-Officio)

### Benjamin H. Kean Travel Fellowship in Tropical Medicine

Arlene Dent, *Chair*

Musa Ali; Ross Boyce; Katherine Dobbs; Jennifer Downs; Dominique Earland; Seth Hoffman; Farzana Islam; Nathan Lo; Juan Marcelo Perez Velazquez; Thomas Richie; Paul Robben; Katherine Sabourin; Michele Spring; Tania Thomas; Indi Trehan; Paige Waterman

### Burroughs Wellcome Fund-ASTMH Fellowship

Subash Babu, *Chair*

Peter Billingsley; Arlene Dent; Thomas Eisele; Michael Kron; Matthew B. Laurens; Jessica T. Lin; Victoria McGovern (Ex-Officio)

### Centennial Travel Award

Melissa Conrad, *Chair*

Matthew Ippolito; Giselle Lima-Cooper; Douglas Perkins

### Digital Education Committee

Stephen Popper, *Chair*

Nicole Achee; Patricia Aguilar; Oluwapelumi Akomolafe; Gabriel Hamer; Kristina Krohn; Amanda Lukens; Teresia Njoroge; Mauricio Nogueira; Kyle Petersen; Ryan Smith; Adriana Troyo; Jill Weatherhead; Yazoume Ye

### Donald Krogstad Award for Early-Career Malian Scientists

Khadidia Ouattara, *Chair*

Yaya Coulibaly; Djeneba Dabita; Seydou Doumbia; Ousman Koita; Dinkorma Ouologuem

### Robert E. Shope International Fellowship

Eric C. Mossel, *Chair*

Gamou Fall; Ann Powers; Richard Shope; Saravanan Thangamani; Albert To; Thomas Yuill

## Membership

### Fellows

Kent Kester, *Chair*

Bruce Christensen; Mahamadou Diakite; Duane Hospenthal; Sanjai Kumar; Dennis Kyle; Jean Lang; Shirley Luckhart; Alan Spira; Nikos Vasilakis; Joe Vinetz

### ASTMH Distinguished International Fellow

Dyann Wirth, *Chair*

Daniel G. Bausch; Pedro Vasconcelos; Ousmane Koita; Jetsumon Prachumsri

### International Membership Committee

Bhupendra Tripathi, *Co-Chair*

Abiola Fasina, *Co-Chair*

Hosea Akala; Ronald Blanton; Silva Maria Fatima DiSanti; Bernard Kanoi; Nadira Karunaweera; Helena Lamptey; Jean Lang; Yaye Ndiaye; Jorge Oggun Cano Torres; Olayinka Olajiga; Bisola Olubiyi; Bartholomew Ondigo; Jocelyn Razafindrakoto; Carola Salas; Joana Silva; Paul Wangai

### Membership

Kent Kester, *Co-Chair*

Aileen Marty, *Co-Chair*

David Adetula; Kholis Audah; Priyanka Barua; Adilson DePina; Moussa Djimde; Franck Dumetz; David Forero-Peña; Deus Ishengoma; Kofi Issa; Sarah Labuda; Gwenyth Lee; Julie Pavlin; Mark Polhemus; Ann Stewart; Zoumana Traore; Alison Jaeb; Doug Dusik

# ASTMH Subgroups and Committees (cont.)

## Trainee Membership Committee

Bartholomew Ondigo, *Co-Chair*

Hannah Steinberg, *Co-Chair*

Koya Allen; Philip Budge; Brennan Cebula; Hannah Ehrlich; Uwem Ekpo; Edmund Ekuadzi; Emma Louise Fairbanks; Sarah Gallalee; Ghassan Ilaiwy; Catherine Mitran; Steve Odette; Winter Okoth; Hendrik Sy; Camila Tompkins; Teresia Njoroge; Akilah Stewart; Claudia Rohr; Daniel Sprague; Rachel Lange

## Ad Hoc

### Green Task Force

Desiree LaBeaud, *Chair*

Michele Barry; James Colborn; Hanna Ehrlich; Shyam Prakash Dumre; Bartholomew Ondigo; Sapna Sadarangani; Laia Vazquez; Njeri Wamae

### Education Innovation Task Force

Christina Coyle, *Chair*

Lin Chen; Jennifer Downs; Jessica Fairley; Melanie Fisher; Deus Ishengoma; Mark Kortepeter; Anne McCarthy; Winter Okoth; Bartholomew Ondigo



VISIT US AT **BOOTH 407**  
IN THE EXHIBIT HALL

JOIN US FOR AN  
ABBOTT-SPONSORED SYMPOSIUM

# ASYMPTOMATIC MALARIA IN PREGNANCY: AN URGENT PROBLEM TO RESOLVE

**Friday, November 15, 2024**

**7:00am – 8:45am**

Convention Center Rooms 354-355



# Scientific Program Committee

The Society and the Annual Meeting attendees offer special thanks to the Scientific Program Committee for their work in determining the robust agenda offered at this year's meeting.



*Chair*  
**David Hamer, MD, FASTMH**  
*Boston University*



*Associate Chair*  
**Kristy Murray, DVM, PhD, FASTMH**  
*Emory University*

## Clinical Tropical Medicine

*Chair:* Henry Wu, Emory University  
Samuel Akech, U.S. Centers for Disease and Control Kenya  
Workagegnehu Bilchut, University of Gondar  
Johanna Daily, Albert Einstein College of Medicine  
Maya Gopalakrishnan, All India Institute of Medical Sciences  
Elizabeth Gulleen, Fred Hutchinson Cancer Research Center  
Rapeephan Maude, Mahidol-Oxford Tropical Medicine Research Unit  
Kyle Petersen, Uniformed Services University of the Health Sciences  
Melinda Tanabe, University of Texas Medical Branch  
Issaka Zongo, Institut de recherche en sciences de la santé

## Diarrhea and Bacterial Illness

*Chair:* Richelle Charles, Massachusetts General Hospital  
Jessica Fairley, Emory University  
Farah Qamar, Aga Khan University  
Mami Taniuchi, University of Virginia  
Ana Weil, University of Washington

## Ectoparasite-Borne Diseases

*Chair:* Heidi Goethert, Tufts University  
Rong Fang, University of Texas Medical Branch  
Gabriel Hamer, Texas A&M University  
Kevin Macaluso, University of South Alabama  
Michael Von Fricken, University of Florida

## Educational Content Review

*Chair:* James Colborn, Clinton Health Access Initiative  
Carlton Evans, IFHAD: Innovation for Health and Development  
Patrick Hickey, Uniformed Services University of the Health Sciences  
Susan McLellan, University of Texas Medical Branch  
Elise O'Connell, National Institute of Allergy and Infectious Diseases  
Latha Rajan, Tulane University

## Entomology

*Chair:* Audrey Lenhart, Centers for Disease Control and Prevention  
Kingsley Badu, Kwame Nkrumah University of Science and Technology  
Kelli Barr, University of South Florida  
Solomon Kibret Birhanie, West Valley Mosquito and Vector Control District  
Louis Lambrechts, Institut Pasteur  
Joel Lutomiah, Kenya Medical Research Institute (KEMRI)  
Kristan Schneider, University of New Mexico  
Maggy Sikulu-Lord, The University of Queensland  
Maria Luisa Simoes, Institute of Tropical Medicine Antwerp  
Sarah Zohdy, Centers for Disease Control and Prevention

## Filariasis

*Chair:* Sasisekhar Bennuru, National Institute of Allergy and Infectious Diseases  
Brenda Beerntsen, University of Missouri-Columbia  
Philip Budge, Washington University St. Louis  
Katherine Gass, Task Force for Global Health  
Jessica Herrick, University of Illinois at Chicago  
Achille Kabore, FHI360

## Global Health

*Chair:* Miguel Reina Ortiz, Indiana University  
Edwin Asturias, University of Colorado  
Clive Brown, Centers for Disease Control and Prevention  
Mamadou Diallo, Centers for Disease Control and Prevention  
Caterina Fanello, University of Oxford  
Mariam Fofana, Yale School of Public Health  
Susan Hills, Centers for Disease Control and Prevention  
Andres Lescano, Universidad Peruana Cayetano Heredia  
Grace Murilla, Yale University  
Catherine Oldenburg, University of California San Francisco  
Sajid Soofi, Aga Khan University  
Claire Standley, Georgetown University  
Laura Steinhardt, Centers for Disease Control and Prevention



# Scientific Program Committee

## Intestinal and Tissue Helminths, Cestodes

*Chair:* Jose Serpa-Alvarez, *Baylor College of Medicine*

Ayman Elbadry, *Cairo University*

Faham Khamesipour, *Kerman University of Medical Sciences*

Makedonka Mitreva, *Washington University*

## Kinetoplastida and Other Protozoa

*Chair:* Abhay Satoskar, *Ohio State University*

Frederick Buckner, *University of Washington*

Camila De Oliveira, *FIOCRUZ*

Omar Hamarsheh, *Al-Quds University*

Louisa Messenger, *University of Nevada Las Vegas*

Mary Wilson, *University of Iowa*

## Late-Breakers in Basic Sciences

*Co-Chair:* Wei-Kung Wang, *University of Hawaii Manoa*

*Co-Chair:* Yai Justin Doritchamou, *National Institutes of Health*

Komi Gbedande, *Rutgers New Jersey Medical School*

Charles Narh, *Deakin University*

## Late-Breakers in Clinical and Applied Sciences

*Co-Chair:* Miguel Cabada, *University of Texas Medical Branch*

*Co-Chair:* Sharon Tennant, *University of Maryland*

Devy Emperador, *FIND*

Paige Waterman, *Walter Reed Army Institute of Research*

## Late-Breakers in Malaria

*Chair:* Shannon Takala Harrison, *University of Maryland School of Medicine*

Angela Early, *Broad Institute*

Giselle Lima-Cooper, *Indiana University*

Alphonse Ouedrigo, *GRAS*

Steve Taylor, *Duke University*

## Late-Breakers in Virology

*Chair:* Patricia Aguilar, *University of Texas Medical Branch*

Edith Chepkorir, *Kenya Medical Research Institute (KEMRI)*

Carla Mavian, *University of Florida*

Amelia Pinto, *University of Kentucky*

Izabela Mauricio de Rezende, *Stanford University*

## Malaria

*Chair:* Shannon Takala Harrison, *University of Maryland*

Ruth Ashton, *Tulane University*

Andrea Berry, *University of Maryland*

Adilson DePina, *Ministry of Health, Cabo Verde*

Aissatou Diawara, *Global Institute for Disease Elimination (GLIDE)*

Katherine Dobbs, *Case Western Reserve University*

Angela Early, *Broad Institute*

Thom Eisele, *Tulane University*

Matthew Laurens, *University of Maryland*

Giselle Lima-Cooper, *Indiana University*

Jailos Lubinda, *Telethon Kids Institute, Malaria Atlas Project*

Richard Maude, *Mahidol University*

Wilfred Mbacham, *University of Yaounde I*

Peter McElroy, *Centers for Disease Control and Prevention*

Chukwudi Nnaji, *Malaria Consortium*

Christian Nsanzabana, *Swiss Tropical and Public Health Institute*

Alphonse Ouedrigo, *GRAS*

Ivan Alejandro Pulido Tarquino, *Malaria Consortium*

Shavanthi Rajatileka, *Wellcome Sanger Institute*

Carola Salas

David Saunders, *U.S. Army*

Nathan Schmidt, *Indiana University*

Larry Slutsker, *Consultant*

Steve Taylor, *Duke University*

Tuan Tran, *Indiana University*

## Measures for Control and Integration of Neglected Tropical Diseases

*Chair:* Darin Evans, *United States Agency for International Development*

Christine Bachman, *Global Health Labs*

Priyamadhaba Behera, *AIIMS*

Paul Cantey, *Centers for Disease Control and Prevention*

Michael French, *RTI International*

Teshome Gebre Kanno, *The Task Force for Global Health*

Vasantha Kumari Neela, *Universiti Putra Malaysia*

## Scientific Program Committee (cont.)

### **Molecular Parasitology**

*Chair:* Michael Ferdig, *University of Notre Dame*  
Regina Cordy, *Wake Forest University*  
Kasturi Haldar, *University of Notre Dame*  
Ruwandi Kariyawasam, *University of Alberta*  
Alexis Kaushansky, *Seattle Children's Research Institute*  
Laura Kirkman, *Weill Cornell Medical College*  
Cristian Koepfli, *University of Notre Dame*  
Tracey Lamb, *University of Utah*  
Julian Rayner, *University of Cambridge*  
Issiaka Soulama, *Institut de Recherche en Sciences de la Santé*  
Imran Ullah, *Harvard School of Public Health*  
Ashley Vaughan, *Seattle Children's Research Institute*

### **One Health: The Interconnection between People, Animals, Plants and Their Shared Environment**

*Chair:* Kelly Baker, *State University of New York at Buffalo*  
Ahmed Abd El Wahed, *Leipzig University*  
Koya Allen, *Booz Allen Hamilton*  
Christina Bergey, *Rutgers University*  
Bertin Guede, *Institut Pasteur cote d'Ivoire*  
Rose Jalang'o, *Ministry of Health, Kenya*  
Daniel Olson, *University of Colorado*

### **Pneumonia, Respiratory Infections and Tuberculosis**

*Chair:* Jorge Cervantes, *Nova Southeastern University*  
Kevin Baker, *Malaria Consortium*  
Jasper Chan, *The University of Hong Kong*  
Steev Loyola, *Universidad de Cartagena*  
Geofrey Makenga, *National Institute for Medical Research*  
Muhammad Imran Nisar, *Aga Khan University*  
S. M. Mazidur Rahman, *International Centre for Diarrhoeal Disease Research, Bangladesh*

### **Schistosomiasis-Helminths**

*Chair:* Michael Hsieh, *Children's National Hospital*  
Stephen Davies, *Uniformed Services University of the Health Sciences*  
Charles Delahun, *Global Health Labs*  
Keke Fairfax, *University of Utah*  
Janet Masaku, *Kenya Medical Research Institute (KEMRI)*

### **Virology**

*Chair:* Patricia Aguilar, *University of Texas Medical Branch*  
Edith Chepkorir, *Kenya Medical Research Institute (KEMRI)*  
Maria Guzman, *"Pedro Kouri" Tropical Medicine Institute*  
Ralph Huits, *IRCCS Ospedale Sacro Cuore Don Calabria*  
Karen Jacobson, *Stanford University*  
Carla Mavian, *University of Florida*  
Amelia Pinto, *University of Kentucky*  
Izabela Mauricio de Rezende, *Stanford University*  
Pedro Vasconcelos, *Pará State University*

### **Water, Sanitation, Hygiene and Environmental Health**

*Chair:* Robert Dreibelbis, *London School of Hygiene & Tropical Medicine*  
Emily Bailey, *Campbell University*  
Kondwani Chidziwisano, *Malawi University of Business and Applied Sciences*  
Isaac Chun Hai Fung, *Georgia Southern University*

# Fellowships, Travel Awards, and Grants



## Alan J. Magill Fellowship

*Chair: Sarah Volkman, Harvard School of Public Health, United States*

This fellowship, created in honor of Alan Magill, supports career-broadening experiences to enhance professional development and leadership opportunities beyond those traditionally available from within an applicant's home organization and, in doing so, equips awardees to later assume leadership and mentoring roles in various aspects of tropical medicine.

**ASTMH is grateful for the support and partnership with the Bill & Melinda Gates Foundation.**

**BILL & MELINDA GATES foundation**

### 2024 Recipient



Punam Amratia  
*Ifakara Health Institute, Tanzania*

## Annual Meeting Travel Awards

*Chair: Tracey Lamb, University of Utah, United States*

ASTMH offers travel awards to qualified students, early-career investigators and scientists actively working in the tropical medicine field to attend the Annual Meeting. These awards facilitate participation for those who might not otherwise be able to attend.



**BILL & MELINDA GATES foundation**



**PARASITES WITHOUT BORDERS**



Seth Offei Addo, *Noguchi Memorial Institute for Medical Research, Ghana*



Athanase Badolo, *Université Joseph Ki-Zerbo, Burkina Faso*



Chrispus Musabe Bakunda, *Makerere University Walter Reed Project, Uganda*



Anne-Lise, Beaumont, *Institut Pasteur, France*



David Bermejo-Pelaez, *Spotlab, Spain*



## Fellowships, Travel Awards, and Grants (cont.)



Djelili Biaou, *IRD, Benin*



Kisakye Diana Kabbale, *Infectious Disease Research Collaboration, Uganda*



Bokretision Gidey Brhane, *Ethiopian Public Health Institute (EPHI), Ethiopia*



Abdul Khaleque Md. Dawlat Khan, *Institute of Epidemiology, Disease Control and Research (IEDCR), Bangladesh*



Fátima Burgos, *Instituto de Investigación de Enfermedades Tropicales, Uganda*



Ayda Khorramnejad, *University of Pavia, Italy*



Paloma Carcamo, *Universidad Peruana Cayetano Heredia, Peru*



Photo not available

Francis Kimani, *Kenya Medical Research Institute - KEMRI, Kenya*



Joshua Chevalier, *Amsterdam Institute for Global Health and Development, Amsterdam UMC, University of Amsterdam, The Netherlands*



Robert Koch, *Yale University, United States*



Ndey Fatou Drammeh, *Medical Research Council Unit The Gambia at London School of Hygiene & Tropical Medicine, Gambia*



Adriana Luchs, *Adolfo Lutz Institute, Brazil*



Rolayo Emmanuel, *Nigerian Institute for Trypanosomiasis and Onchocerciasis Research, Nigeria*

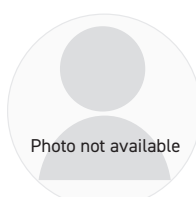


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Gabriela Matamoros, *Universidad Nacional Autónoma de Honduras, Honduras*



Cristina Meehan, *National Institutes of Health/ National Institute of Allergy and Infectious Diseases, University of Alabama Medical Scientist Training Program (MSTP), United States*



## Fellowships, Travel Awards, and Grants (cont.)



Catherine Bakari Mvaa, *National Institute for Medical Research, NIMR Tanzania, Tanzania*



Maria Saeed, *The Peter Doherty Institute for Infection and Immunity, The University of Melbourne, Australia*



Kioko Mwikali, *Open University, United Kingdom*



Fatoumata Seck, *University Cheikh Anta Diop of Dakar, Senegal*



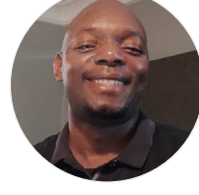
Ijeoma Okoye, *Drexel University College of Medicine, United States*



Dynang Seng, *Institut Pasteur du Cambodge, Cambodia*



Rafah Oualha, *Institut Pasteur of Tunis, Tunisia*



Christopher Chikhosi, *Stanley Malaria Alert Centre, Kamuzu University of Health Sciences, Malawi*



Photo not available

Miguel Angel Pelaez, *Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina*



Fatalmoudou Tandina, *Malaria Research and Training Center at University of Sciences, Techniques and Technologies from Bamako (USTTB), Mali*



Pastor E. Pérez Estigarribia, *Facultad Politécnica, Universidad Nacional de Asunción, Paraguay*



Nelly Manuela Tchatchoua Tatchou, *University of Buea, Cameroon*



Satchee Bhanu Piyasiri, *University of Colombo, Sri Lanka*



Naomi Waithira, *University of Hertfordshire, United Kingdom*



Suraj Singh Rawat, *Indian Institute of Technology Mandi, India*



Audrey Walker, *Colorado State University, United States*



## Fellowships, Travel Awards, and Grants (cont.)



Kalani Williams, *Colorado State University, United States*



Farzana Zaman, *National TB Control Program, Directorate General of Health Services (DGHS), Bangladesh*



Jose Zambrana Madriz, *University of Michigan, United States*



### 2023 Young Investigator Awards

#### SUPPORTED WITH FUNDING FROM

##### Anonymous Donor

**William A. Petri, Jr. in memory of William A. Petri, Sr.**

**All individuals who made a donation during registration**

*Chair: Ann Moormann, University of Massachusetts Medical School*

Young Investigator Awards are given to young scientists who have completed the majority of work described in their accepted abstracts as undergraduates, graduate students or during the first two years of postdoctoral research. The early-career investigators hold a primary role in the reported experimental work, as evidenced by first-author status on their abstracts. 2024 recipients will be determined at the competitive judging event held on Wednesday, November 13 during the Annual Meeting. Winners will be announced during the Awards Program at the opening session.

#### Congratulations to the 2023 Winners

Sarah Ali, *Georgia Institute of Technology, United States*

Rachel Fay, *State University of New York at Albany, United States*

Kaylee Herzog, *University of Nebraska Medical Center, United States*

Caroline Osoro, *Stellenbosch University, South Africa*

Anthony Torres-Ruesta, *A \*STAR Infectious Diseases Labs, Singapore*

Daniel Sprague, *Medical College of Wisconsin, United States*

#### First-tier Mention

Wael Abdrabou, *New York University Abu Dhabi, United Arab Emirates*  
Gloria Kakoba Ayebazibwe, *MRC/UVRI and LSHTM Uganda Research Unit, Uganda*

Gina Cuomo-Dannenburg, *Imperial College London, United Kingdom*

Jenna Dick, *University of Minnesota, United States*

Olimpia Lamberti, *London School of Hygiene & Tropical Medicine, United Kingdom*

Jiaodi Zhang, *Imperial College London, United Kingdom*

#### Honorable Mention

Majidah Hamid-Adiamoh, *Indiana University School of Medicine; University of Notre Dame Eck Institute for Global Health, United States*

Akua Mensah, *Albert Einstein College of Medicine, United States*

Sophie Moss, *London School of Hygiene & Tropical Medicine, United Kingdom*

Issa Mshani, *Ifakara Health Institute, Tanzania*

Ranier Tan, *Centre for Primary Care and Public Health (Unisanté), Switzerland*

Mitchell Waldran, *SUNY Upstate Medical University, United States*

## Fellowships, Travel Awards, and Grants (cont.)

### Burroughs Wellcome Fund – ASTMH Postdoctoral Fellowship in Tropical Infectious Diseases (\$65,000)

ASTMH is grateful for the continuing commitment from the Burroughs Wellcome Fund.



*Chair: Subash Babu, NIH-NIRT-ICER, India*

This fellowship encourages long-term career development in tropical infectious diseases by providing support to individuals who will pursue careers focused on clinical research in tropical or developing areas of the world.

#### 2024 Recipients



Emily Evans, Emory University, United States



Jesse Ross, Columbia University Medical Center, United States



Sahal Thahir, University of North Carolina at Chapel Hill, United States

### Benjamin H. Kean Travel Fellowship in Tropical Medicine



*Chair: Arlene Dent, Case Western Reserve University, United States*

Named after renowned educator, physician and researcher Benjamin H. Kean (1912-1993), this fellowship provides travel support to medical students who arrange clinical tropical medicine or tropical medicine research electives overseas.

#### 2024 Recipients



Hanson Cowan, University of Tennessee Health Science Center, United States



Bryan Cummings, University of Maryland School of Medicine, United States



Kevin Gianaris, Indiana University, United States



Ashton Hall, University of Cincinnati College of Medicine, United States



Eesha Irfanullah, University of Minnesota Medical School, United States



Madison Jones, University of Massachusetts Chan Medical School, United States

## Fellowships, Travel Awards, and Grants (cont.)



Christopher Jowdy, *University of Virginia, United States*



Omar Sajjad, *Geisel School of Medicine at Dartmouth, United States*



Emily Kaplan, *University of Virginia, United States*



Abigail Schulz, *University of Illinois College of Medicine, Peoria, United States*



Isaac Kim, *The Warren Alpert Medical School of Brown University, United States*



Palak Shah, *Boston University School of Medicine, Boston Medical Center, United States*



Victoria Lam, *University of North Carolina at Chapel Hill, United States*



Stanley Tsou, *Renaissance School of Medicine at Stony Brook University, United States*



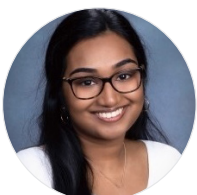
Caitlin Lawrence, *University of Connecticut Medical School, United States*



Zoha Mian, *University of Louisville, United States*



Grayson Privette, *University of North Carolina at Chapel Hill, United States*



Niharika Putta, *University of Massachusetts Chan Medical School, United States*

### Centennial Travel Award in Basic Science Tropical Disease Research (\$25,000)

*Chair:* Melissa Conrad, *University of California, San Francisco, United States*

This award provides support to individuals with doctoral-level degrees who travel to laboratories in the tropics to perform molecular, cellular or immunological studies of tropical infectious diseases.

#### 2024 Recipient



Laura Willen, *NIH, United States*



## Fellowships, Travel Awards, and Grants (cont.)

### Donald Krogstad Award for Early-Career Malian Scientists (\$25,000)



*Chair: Khadidia Ouattara, University of Sciences, Techniques, and Technologies of Bamako, Mali*

As a result of the generosity of the Krogstad family, the Donald Krogstad Award for Early-Career Malian Scientists will provide funding for up to two years for scientists from Mali to pursue research in tropical medicine and/or public health with the goal of

improving the lives of Malians. This annual award will support an early-career Malian scientist in pursuing research that aims to blend laboratory and field epidemiological approaches broadly related to solving priority health issues in Mali.

#### 2024 Recipient



Nouhoum Diallo, *MRTC/USTTB, Mali*

### Robert E. Shope International Fellowship in Infectious Diseases (\$25,000)



*Chair: Eric Mossel, Centers for Disease Control and Prevention, United States*

Named for ASTMH past president Robert E. Shope (1929-2004), one of the world's foremost authorities on insect-borne viruses, this fellowship provides support for travel, living expenses and research for doctoral level scientists working in laboratories overseas on studies pertaining to arbovirology and/or emerging tropical infectious.

#### 2024 Recipient



Kara Fikrig, *Cornell University, United States*

### American Committee of Medical Entomology (ACME) Student Travel Awards

*Chair: Nsa Dada, Arizona State University, United States*

The ACME travel awards support travel to the Annual Meeting for doctoral and post-doctoral students whose work involves arthropods of medical importance.

#### 2024 Recipients

##### ACME Young Investigator Award - Graduate



Juliana Hoyos, *University of Georgia, United States*



Stephen Opoku Afriyie, *Texas Tech University, United States*

##### ACME Young Investigator Award – International



Millicent Opoku, *LaTrobe University, Australia*



Mercy Tuwei, *KEMRI-Wellcome Trust Research Programme, Kenya*

##### ACME Young Investigator Award – Postdoc



Rose-Margarita Gelvez Ramirez, *Centro de Atención y Diagnóstico de Enfermedades Infecciosas, Colombia*

# ASTMH Subgroup Awards

## American Committee of Medical Entomology (ACME) Future Leaders in International Medical Entomology Award

*Chair: Adriana Troyo, Universidad de Costa Rica, Costa Rica*

The Future Leaders fellowship is a competitive award that will be offered to an outstanding junior medical entomology researcher (must be at the undergraduate to post-doctoral level) to showcase individuals that have matched interests to ACME's objectives of promoting medical entomology and reducing the burden of human diseases transmitted by arthropods globally. Applicants must be a non-US citizen from an LMIC.

### 2024 Recipient



Roland Bamou, *National Institutes of Health, United States*

## American Committee of Medical Entomology (ACME) Breakthrough in Medical Entomology Award

*Chair: Adriana Troyo, Universidad de Costa Rica, Costa Rica*

This award is for outstanding recent contributions (within the past five years) to the study and/or practice of Medical Entomology that ultimately will contribute to reducing the burden of human diseases transmitted by arthropods. This award is designed to encourage and acknowledge significant advances in the field by investigators at any career stage. Examples of such advances include breakthrough research findings in vector biochemistry, molecular biology, genetics, genomics or insecticide resistance, or significant advances in technologies for vector surveillance or control.

### 2024 Recipient



Ryan Smith, *Iowa State University, United States*

## American Committee of Medical Entomology (ACME) Award of Distinction

*Chair: Adriana Troyo, Universidad de Costa Rica, Costa Rica*

This new ACME award was established to help recognize individuals that have made outstanding contributions to the field of medical entomology.

### 2024 Recipient



Dawn Wesson, *Tulane University, United States*

## American Committee of Medical Entomology (ACME) Hoogstraal Medal

*Chair: Adriana Troyo, Universidad de Costa Rica, Costa Rica*

The Harry Hoogstraal Medal for Outstanding Achievement in Medical Entomology was established in 1987 to recognize the most influential medical entomologists for their contributions to their field. This award is named in honor of Dr. Harry Hoogstraal whose contributions to systematics of medically important arthropods and the diseases they carry are vast.

### 2024 Recipient



Marcelo Jacobs-Lorena, *Johns Hopkins University, United States*

## American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Travel Award for Low and Low-Middle Income (LMIC) Trainees

*Chair: Amanda Lukens, Harvard T.H. Chan School of Public Health, United States*

The ACMCIP student travel award recognizes a student or trainee conducting basic parasitology research who is primarily based in a low or low-middle income country.

### 2024 Recipient



Lionel Brice Feufack Donfack, *Institut Pasteur of Cambodia, Cambodia*

## ASTMH Subgroup Awards (cont.)

### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Award for Advanced Training

Chair: Amanda Lukens, Harvard T.H. Chan School of Public Health, United States

This ACMCIP-sponsored award is designed to defray travel expenses for trainees to attend practical training courses in the fields of molecular, cellular or immunoparasitology. The trainee must be or become an ASTMH and ACMCIP member.

#### 2024 Recipient



Linda Djune Yemeli, *Higher Institute for Scientific and Medical Research, Cameroon*

### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) William Trager Award for Basic Parasitology

Chair: Amanda Lukens, Harvard T.H. Chan School of Public Health, United States

The William Trager Award, established by the ACMCIP in 2015, recognizes a fundamental breakthrough in molecular, cellular or immunoparasitology. This annual award is named in honor of Prof. William Trager, PhD, a past president of ASTMH, who established *in vitro* culture conditions for *Plasmodium* parasites and thereby directly enabled almost all of the current fields of basic and applied malaria research.

#### 2024 Recipient



Sebastian Lourido, *MIT and the Whitehead Institute for Biomedical Research, United States*

### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Take-Off Award

Chair: Amanda Lukens, Harvard T.H. Chan School of Public Health, United States

The Take-Off Award recognizes an early-career stage scientist who has made significant contributions in the field of cellular, molecular and immunoparasitology.

#### 2024 Recipient



Fernanda Novais, *The Ohio State University, United States*

### American Committee on Arthropod-Borne Viruses and Zoonotic Viruses (ACAV) Scherer Hardy Award

Chair: Mauricio Nogueira, *Faculdade de Medicina de Sao Jose Do Rio Preto, Brazil*

The Scherer/Hardy Award is given to an outstanding doctoral graduate either before graduation or up to three years post-graduation.

#### 2024 Recipients



Jean-Paul Carrera, *Gorgas Memorial Institute of Health Studies, Panama*

## ASTMH Subgroup Awards (cont.)

### American Committee on Arthropod-Borne Viruses and Zoonotic Viruses (ACAV) Student Travel Awards

Chair: Mauricio Nogueira, *Faculdade de Medicina de Sao Jose Do Rio Preto, Brazil*

Up to seven individuals are presented the ACAV student/post-doc travel awards by the ASTMH's American Committee on Arthropod-Borne Viruses and Zoonotic Viruses (ACAV).

#### 2024 Recipient



Reem Alatrash, *Rutgers University, United States*



Shelby Cagle, *Colorado State University, United States*



Felicity Coulter, *Oregon Health and Science University, United States*



Jeffrey Marano, *Colorado State University, United States*



Chasity Trammell, *Colorado State University, United States*



Whitney Weber, *Oregon Health and Science University, United States*



Emily Mantlo, *Department of Microbiology and Immunology, State University of New York Upstate Medical University, United States*

### ASTMH Committee on Global Health (ACGH) Student/Post-Doc Travel Awards

Chair: Achama Eluwa, *University of Oxford, United Kingdom*

The ACGH travel award program supports travel to the Annual Meeting for a student or postdoctoral fellow whose research directly promotes the practice of global health.

#### 2024 Recipient



Grace Mzumara, *Training Research Unit of Excellence, Malawi*



Ogechukwu Aribodor, *Department of Zoology, Nnamdi Azikiwe University, Nigeria*

### ASTMH Committee on Global Health (ACGH) Award for Research Support

Chair: Achama Eluwa, *University of Oxford, United Kingdom*

This ACGH-sponsored award is designed to support research expenses for trainees who have approved research projects that are currently active or will start during 2023. Trainees can use the award to support travel to field sites, purchase equipment, software, reagents or supplies, or cover other expenses that will enhance the project.

#### 2024 Recipients



Alvaro Martinez Valencia, *CIDEIM, Centro Internacional de Entrenamiento e Investigaciones Médicas, Colombia*



Robert Adamu Shey, *University of Buea, Cameroon*



Sofia Chapela-Lara, *Oregon Health and Science University - Portland State University, School of Public Health, United States*

## ASTMH Subgroup Awards (cont.)

### American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH) Martin S. Wolfe Mentoring Award

*Chair: German Henostroza, University of Alabama-Birmingham, United States*

The Clinical Group has established an award to honor the life of inspiring mentorship by our friend, teacher and colleague, Martin S. Wolfe, MD, FACP, FASTMH. This award recognizes individuals who have served as exemplary and inspiring mentors. It will be presented to a member of the American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH, the Clinical Group) who has been exceptional in guiding the professional growth of careers in tropical and travel medicine.

#### 2024 Recipients



Thomas Nutman, *National Institutes of Health, United States*

### ACCTMTH (Clinical Group) LMIC Clinician Travel Award

*Chair: Kyle Petersen, Uniformed Services University, United States*

This travel award, introduced in 2023, recognizes a tropical medicine physician practicing in a low and low-middle income country who has demonstrated excellent clinical and teaching skills.

#### 2024 Recipients



Sanjib Kumar Sharma, *B P Koirala Institute of Health Sciences, Nepal*

### ACCTMTH Clinical Research Award

*Chair: Obinna Nnedu, Ochsner Medical Center, United States*

This award recognizes excellence in clinically-oriented research presented by students (within six months of completing undergraduate or Master's level training, including medical undergraduate degrees) or those in graduate medical training of work submitted and presented at the Annual Meeting. 2024 recipients will be determined at the competitive judging event held on Wednesday, November 13, during the Annual Meeting.

#### 2023 Recipients

Angela McBride, *Brighton and Sussex Medical School, United Kingdom*

Kofi Agyapong Addo, *Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, Ghana*

Nadia Cattaneo, *Center for Primary Care and Public Health (Unisanté), Switzerland*

Akpedyedje Yannelle Dossou, *Clinical Research Institut of Benin (IRCB), Benin*



## Program Information

All schedules are U.S. Central Time Zone

### ACCTMTH Clinical Research Award Competition

**Wednesday, November 13, Noon – 2:30 p.m.**

This award recognizes excellence in clinically oriented research presented by students (within six months of completing undergraduate or Master's-level training, including medical undergraduate degrees, or those in graduate medical training) for work submitted and presented at the Annual Meeting. Support these young scientists by attending their presentations during this session. View the session schedule on page 92.

### Young Investigator Award Competition

**Wednesday, November 13, 9 a.m. – 2 p.m.**

The Young Investigator Award is presented to outstanding young researchers during the Annual Meeting. This award encourages developing young scientists to pursue careers in various aspects of tropical disease research. Support these young scientists by attending their presentations during this session. View the session schedule on page 84.

### Late-Breaker Abstracts

These sessions feature presentations of important new data obtained after the closing date for abstract submission. Late-Breaker oral and poster presentations will take place during sessions on Thursday, Friday and Saturday. A schedule of Late-Breaker Abstract presentations can be found in the Meeting App and the Late-Breaker Abstract Presentation Schedule.

### Symposium 17:

#### Alan J. Magill Malaria Eradication Symposium: Developing Leaders in the Continuing Fight for Malaria Eradication: Perspectives from Past Alan J. Magill Fellows

*Supported with funding  
from the Bill & Melinda  
Gates Foundation*

**BILL & MELINDA  
GATES foundation**

This annual symposium honors the life and work of ASTMH Past President Alan Magill, who at the time of his untimely death in 2015 was promoting the bold goal of global malaria eradication in his role as the Malaria Director at the Bill & Melinda Gates Foundation. The symposium will bring leaders in the malaria field together to summarize the challenges and advances in areas of relevance to the malaria elimination and eradication effort.

Dr. Alan Magill worked tirelessly for not only malaria eradication but to foster the next generation of leaders in tropical medicine and global health. In line with this vision, the Alan J. Magill Fellowship was created to fund early-to-middle career scientists to pursue leadership and professional development opportunities. We have invited five previous Magill Fellows, with projects focusing

on malaria, to speak about their project objectives and progress as well as their leadership journey and impact of the fellowship. A final speaker will talk about the influence of Dr. Magill on malaria programs in Peru, where as head of Parasitology at the U.S. Navy's Medical Research Center, he inspired many malaria researchers in the same spirit of the fellowship that bears his name today.

### ACMCIP Abstracts

Throughout this book, you will notice that some abstracts are followed by the notation "(ACMCIP Abstract)." This notation means the abstract content pertains to molecular, cellular or immunoparasitology. ACMCIP refers to the American Committee of Molecular, Cellular and Immunoparasitology, an ASTMH subgroup. For more information, go to [astmh.org/subgroups/acmcip](http://astmh.org/subgroups/acmcip).

### Calling All Early- and Mid-Career Attendees Events for Students, Trainees, Fellows, Residents and Junior Faculty

Are you a trainee or otherwise fairly new to research, global public health or clinical tropical medicine? The following sessions are designed to help build fundamental skills and perspectives for a successful start to your career. Mark your planner on the ASTMH Annual Meeting App and learn from experienced members of the various ASTMH professional communities.

### Young Investigator Award Competition

**Wednesday, November 13, 9 a.m. – 2 p.m.**

*Convention Center – Rooms 343/344, 345, 352, 353, 354/355, 356  
(3rd Floor)*

### ACCTMTH Clinical Research Award Competition

**Wednesday, November 13, Noon – 2:30 p.m.**

*Convention Center – Room 351 (3rd Floor)*

### Point of Entry: First-Time Attendee Orientation

**Wednesday, November 13, 1 p.m. – 2 p.m.**

*Convention Center – Room 383/384/385 (3rd Floor)*

Are you new to the ASTMH Annual Meeting and want to get the lay of the land? Don't miss our Point of Entry session on Wednesday afternoon. New attendees will be oriented to the schedule, session structure and highlights of the Annual Meeting. Meet others attending the meeting for the first time and expand your professional network while learning the ins and outs of where to go and what to attend.

# Program Information

All schedules are U.S. Central Time Zone

## Student Reception

**Wednesday, November 13, 2:30 p.m. – 3:30 p.m.**

*Hilton - River (Riverside Building)*

The ASTMH Board of Directors invites all students, postdoctoral fellows and residents to the student reception. This reception is an opportunity to meet fellow trainees, network with colleagues and mentors and engage in conversation with Society leaders.

## The TropStop – Student/Trainee Lounge

*Convention Center – Room 346/347 (3rd Floor)*

This casual setting, designed with students, trainees and residents in mind (e.g., free coffee and free internet), is your place for a break from the fast pace of the meeting and to relax with colleagues and friends. Be sure to check out Career Chats held in the TropStop.

This is your opportunity to meet professionals in the fields of tropical medicine and global health who will share their career stories and discuss topics and strategies to help you along your career path.

## TropStop Career Chats

*Convention Center – Room 346/347 (3rd Floor)*

**Career Chats (via Zoom; limited to registrants who signed up for this event)**

**Thursday, November 14, 9:15 a.m. – 10:15 a.m.**

**Career Chats: Grants 101**

**Career Chats (In-Person)**

**Friday, November 15, 3 p.m. – 4 p.m.**

**Career Chats: Navigating Career Paths in Global Health - Session 1**

**Career Chats (In-Person)**

**Saturday, November 16, 2 p.m. – 3 p.m.**

**Career Chats: Navigating Career Paths in Global Health - Session 2**

## Lunch with the American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Councilors

**Thursday, November 14, 12:15 p.m. – 1:30 p.m.**

*Convention Center - Room 397 (3rd Floor)*

## American Committee of Medical Entomology (ACME) Trainee Networking Lunch Event

**Thursday, November 14, 12:15 p.m. - 1:30 p.m.**

*Convention Center - Room 398 (3rd Floor)*

## Ponder to Probe: A Climate-Health Networking Event

**Thursday, November 14, 5:15 p.m. – 7 p.m.**

*Convention Center - Room 398 (3rd Floor)*

The ASTMH Committee on Global Health (ACGH) invites you to join us for an informal discussion on how climate change affects global health. Chat with experts who are working in the field and ask them how climate change affects their work, what we can do to better incorporate climate change into our work, and what we can do to help mitigate the problem.

## Speed-Networking with the Experts Session

**Friday, November 15, 6:15 p.m. – 8 p.m.**

*Convention Center - Room 383/384/385 (3rd Floor)*

The annual Speed-Networking session is organized by the five ASTMH subgroups: ASTMH Committee on Global Health (ACGH), the American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH/Clinical Group), the American Committee of Medical Entomology (ACME), the American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) and the American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP). The session is designed to facilitate interactions between senior scientists, physicians and trainees in an informal setting in order to provide an array of important information on possible career paths in tropical medicine. During this session, students and young career scientists will have an opportunity to briefly meet experts who represent each of the subgroup fields, including scientists in global health, clinicians, epidemiologists, entomologists and basic research scientists. Experts will have a broad range of career experiences working in international posts, policy, federal government and the military, among others. Experts will share information with students about their career choices, trajectories and challenges along the way, and how they see their work fitting into the larger tropical medicine arena. Students in this session will be designated to a subgroup to match their interests and current educational paths. Please note that this meeting is limited to those who pre-registered for the event.

## Establishing Careers Internationally

**Friday, November 15, 4 p.m. - 5:45 p.m.**

*Convention Center - Room 398 (3rd Floor)*

## ACGH Networking and Lightning Presentations

**Friday, November 15, 5 p.m. - 6:30 p.m.**

*Convention Center - Room 398 (3rd Floor)*

Light snacks provided with one free drink to the first 50 ACGH members to arrive.



# Program Information

All schedules are U.S. Central Time Zone

## Clinical Pub Trivia Night

Thursday, November 14, 7:30 – 9:15 p.m.

*Hilton - Churchill A1 (2nd Floor)*

Come join us for a fun-filled collegial competition, sponsored by the ASTMH Clinical Group. This is a chance to meet others interested in clinical tropical medicine, show your knowledge, learn some new fun facts and enjoy free snacks. Don't worry if you are new to TropMed. Teams will be a mix of people with different levels of experience, and you won't be asked to answer any question alone. The winning team takes home prizes and bragging rights.

## Tributes to ASTMH Past Presidents

Please join us to celebrate the legacies of three past presidents whom ASTMH lost over the past year.

### Symposium 47: A Tribute to Carlos (Kent) Campbell: Global Leader in the Fight Against Malaria

*Convention Center - Room 343/344 (3rd Floor)*

Thursday, November 14, 5:15 p.m. - 7 p.m.

### Symposium 63: A Life Well Lived in Global Disease Control and Eradication: Remembering ASTMH President Dr. Joel Breman

*Convention Center - Room 343/344 (3rd Floor)*

Friday, November 15, 10:15 a.m. - Noon

### Symposium 139: Remembering Karl M. Johnson - A Leader in Tropical Virology

*Convention Center - Room 343/344 (3rd Floor)*

Saturday, November 16, 3 p.m. - 4:45 p.m.

## Join us for a film screening of "Accidental Host - The Story of Rat Lungworm Disease"

Special Session 152

Film Screening and Discussion: "Accidental Host - The Story of Rat Lungworm Disease"

*Convention Center - Room 343/344 (3rd Floor)*

Saturday, November 16, 5:15 p.m. - 6:30 p.m.

"Accidental Host - The Story of Rat Lungworm Disease" is a 53-minute medical documentary about *Angiostrongylus cantonensis*, a neuro-invasive foodborne parasite that now thrives in tropical areas of six continents. Shot in Hawaii, Florida, and California and currently airing and streaming on PBS, the film features multiple patient stories and interviews with experts while depicting a disease that is often unknown to physicians as

well as travelers and residents at risk. Additional themes include the fascinating history, life cycle, and ecology of the globalizing nematode and its unique impact on Hawaii. "Accidental Host" was produced by Claire Panosian Dunavan, a past president of the American Society of Tropical Medicine and Hygiene, along with a team of veteran, award-winning filmmakers. For more about the film, or to watch a 3-minute trailer, please visit [www.ratlungwormfilm.com](http://www.ratlungwormfilm.com)

## Burroughs Wellcome Fund-ASTMH Postdoctoral Fellowship in Tropical Infectious Diseases

BURROUGHS  
WELLCOME  
FUND

Following are abstract presentations to be made by recipients of the Burroughs Wellcome Fund-ASTMH Postdoctoral Fellowship in Tropical Infectious Diseases.

### Mariam Fofana

Using a variant-specific, electrochemiluminescence multiplex seroneutralization assay to delineate transmission dynamics of SARS-CoV-2 as the pandemic transitioned to endemicity

**Abstract 8302**

### Mariam Fofana

Association of pre-existing antibody responses and the risk of SARS-CoV-2 infection in a highly exposed Brazilian cohort during the Omicron BQ.1 epidemic wave

**Abstract 8251**

## Livestream Portal

To access the livestream sessions, visit [www.astmh.org](http://www.astmh.org). For assistance with the Livestream Portal, contact ASTMH staff at [info@astmh.org](mailto:info@astmh.org).

### How can I search the Annual Meeting program?

#### Meeting App

- Search the full session schedule, including Poster Sessions and presenters
- Search by speaker, abstract or topic
- Search names and institutions using keywords
- Learn about sponsors and exhibitors participating in the Annual Meeting

# Program Information

All schedules are U.S. Central Time Zone

## New this year!

### Mentorship Pop-Up Sessions

*Convention Center – Lobby of Hall J (1st Floor)*

ASTMH is piloting a Mentorship Pop Up area designed to foster meaningful interactions among emerging innovators, early career professionals and seasoned experts across various fields. This space will provide a unique opportunity for networking, knowledge exchange, and collaboration, contributing to the advancement of innovative solutions in global health.

These sessions will be held in the Mentorship Pop Up area located in the foyer area of Hall J in the New Orleans Convention Center.

#### SESSION SCHEDULE

##### MENTORSHIP POP UP: BRINGING HEALTHCARE CLOSER TO THE COMMUNITY

Thursday, November 14, 8:30 a.m. - 9:30 a.m.

###### HOST

Sarah Bush and Praise Phiri  
*Healthy Learners, Lusaka, Zambia*

##### MENTORSHIP POP UP: GREENING LABS Q&A

Thursday, November 14, 11 a.m. - Noon

###### HOST

Desiree LaBeaud  
*Stanford University, Stanford, CA, United States*

##### MENTORSHIP POP UP: PROFESSIONAL DEVELOPMENT NEEDS OF MID-CAREER PROFESSIONALS IN TROPICAL MEDICINE AND GLOBAL HEALTH

Thursday, November 14, 4 p.m. – 5 p.m.

###### HOST

Koya Allen  
*Booz Allen Hamilton, Baden-Wuerttemberg, Germany*

##### MENTORSHIP POP UP: EARLY-CAREER SCIENTISTS-THINGS I WISH I KNEW WHEN I STARTED MY FACULTY POSITION

Friday, November 15, 10:30 a.m. - 11:30 a.m.

###### HOST

Kristy Murray  
*Emory University, Atlanta, GA, United States*

##### MENTORSHIP POP UP: INNOVATIVE FINANCE AND IMPACT INVESTING IN GLOBAL HEALTH

Friday, November 15, 3:30 p.m. - 4:30 p.m.

###### HOST

Rehana Nathoo  
*Spectrum Impact, New Orleans, LA, United States*

##### MENTORSHIP POP UP: JOURNAL AUTHORSHIP Q&A

Saturday, November 16, 8:30 a.m. - 9:30 a.m.

###### HOST

Alison Jaeb  
*American Journal of Tropical Medicine and Hygiene, Arlington, VA, United States*

##### MENTORSHIP POP UP: USING SOCIAL MEDIA STRATEGICALLY FOR RESEARCHERS

Saturday, November 16, 1 p.m. – 2 p.m.

###### HOST

Gideon Hertz  
*Burness, Bethesda, MD, United States*

##### MENTORSHIP POP UP: AI FOR GLOBAL HEALTH: INSIDE THE ENGINE ROOM

Saturday, November 16, 3 p.m. – 4 p.m.

###### HOST

Charles B. Delahunt  
*Global Health Labs, Bellevue, WA, United States*

##### MENTORSHIP POP UP: US GLOBAL HEALTH POLICY & ADVOCACY Q&A

Saturday, November 16, 5 p.m. – 6 p.m.

###### HOST

Jodie Curtis  
*Venable LLP, Washington, DC, United States*

# Program Information

All schedules are U.S. Central Time Zone



## NEW THIS YEAR! Sessions Designated for Educational Content

Educational content is increasingly relevant to all disciplines within ASTMH, as well as to those at all career stages. In the schedule section of the Program Book, you will find sessions labeled as “Educational Content” that feature an instructive/didactic format on specialized topics by field experts, reviews of novel therapeutics and diseases and public policy content. In addition, you can search sessions in the Meeting App using the Educational Content filter.

## New this year! Content Tags for Symposium Sessions and Scientific Sessions

In order to assist attendees in searching for specific content, the following content tags appear in session descriptions for Symposium Sessions and Scientific Sessions. You will find these content tags at the end of the session descriptions in the Program Book. We encourage you to search content in the meeting app by typing them into the search boxes; be sure to include the hashtag (#).

#CellBiology	#InfectiousDisease
#ChildHealth	#MNCH
#ClimateChange	#Modeling
#ClinicalResearch	#MolecularBiology
#Diagnostics	#Nutrition
#EarlyCareer	#Pathogenesis
#EcologicalStudies	#Pediatrics
#Elimination	#PopulationSurveillance
#EmergingDiseaseThreats	#Prevention
#Epidemiology	#Resistance
#Evolution	#SocialScience
#FieldStudies	#Therapeutics
#Genetics	#Trainee
#Genomics	#TranslationalScience
#HostResponse	#Vaccinology
#Immunology	

## Poster Sessions

### Convention Center – Hall I-1 (1st Floor)

Three poster sessions will be held in Hall I-1 on the first floor of the Convention Center. During these sessions, presenters will be available at their posters for discussion. There are additional times for poster viewing (presenters need not be in attendance during these time periods). We encourage attendees to visit the Poster Hall throughout the day.

## POSTER SESSION SCHEDULE

All times in United States Central Time Zone

### POSTER SESSION A

#### Thursday, November 14

**Setup** | 9:45 a.m. – 10:15 a.m.

**Viewing** | 10:15 a.m. – 3 p.m.

**Presentations** | Noon – 1:45 p.m.

**Dismantle** | 3 p.m. – 5:15 p.m.

### POSTER SESSION B

#### Friday, November 15

**Setup** | 9:45 a.m. – 10:15 a.m.

**Viewing** | 10:15 a.m. – 4 p.m.

**Presentations** | Noon – 1:45 p.m.

**Dismantle** | 4 p.m. – 6:15 p.m.

### POSTER SESSION C

#### Saturday, November 16

**Setup** | 9:45 a.m. – 10:15 a.m.

**Viewing** | 10:15 a.m. – 3 p.m.

**Presentations** | 11 a.m. – 12:45 p.m.

**Dismantle** | 3 p.m. – 5:15 p.m.

# Program Information

All schedules are U.S. Central Time Zone

## POSTER SESSION A

### Late-Breaker Abstracts

Bacteriology	Kinetoplastida and Other Protozoa	Pneumonia, Respiratory Infections and Tuberculosis
Clinical Tropical Medicine	Measures for Control and Elimination of Neglected Tropical Diseases (NTDs)	Schistosomiasis and Other Trematodes
Helminths – Nematodes – Filariasis	One Health: The Interconnection between People, Animals, Plants and Their Shared Environment	Water, Sanitation, Hygiene and Environmental Health
Helminths – Nematodes – Intestinal Nematodes		
HIV and Tropical Co-Infections		

### Malaria

### Virology

### Entomology

### Global Health

ENTRANCE

## POSTER SESSION B

### Late-Breaker Abstracts

Bacteriology	Measures for Control and Elimination of Neglected Tropical Diseases (NTDs)	Schistosomiasis and Other Trematodes
Cestodes	One Health: The Interconnection between People, Animals, Plants and Their Shared Environment	Water, Sanitation, Hygiene and Environmental Health
Clinical Tropical Medicine	Pneumonia, Respiratory Infections and Tuberculosis	
Helminths – Nematodes – Filariasis		
Kinetoplastida and Other Protozoa		

### Malaria

### Virology

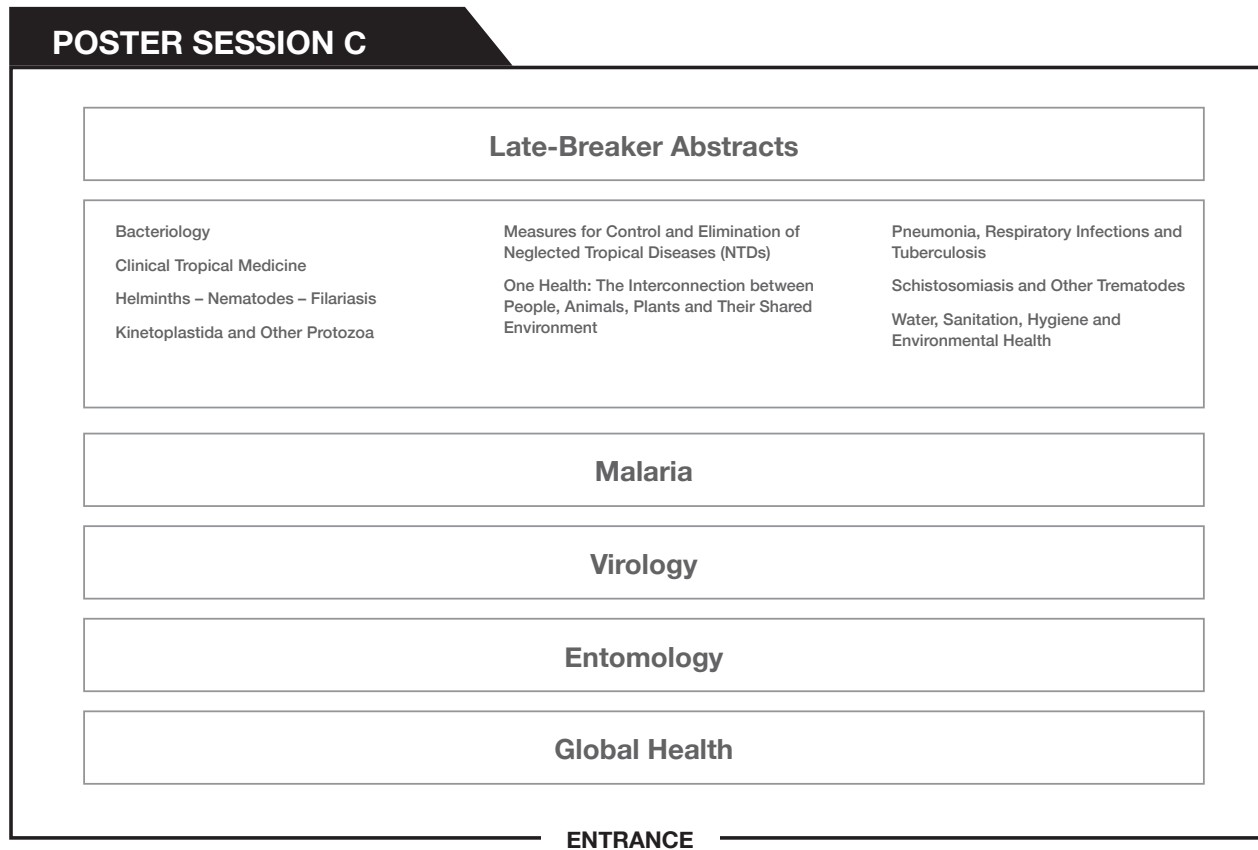
### Entomology

### Global Health

ENTRANCE

# Program Information

All schedules are U.S. Central Time Zone



## Meet us in the TropMed Hub

*Convention Center - Hall J (1st Floor)*

Visit the TropMed Hub and visit with ASTMH member volunteers from:

- ▶ American Society of Tropical Medicine and Hygiene (ASTMH)
- ▶ *American Journal of Tropical Medicine and Hygiene (AJTMH)*
- ▶ ASTMH Subgroups
  - American Committee of Medical Entomology (ACME)
  - American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)
  - American Committee on Arthropod-Borne Viruses and Zoonotic Viruses (ACAV)
  - American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH – Clinical Group)
  - ASTMH Committee on Global Health (ACGH)

Our subgroups provide unique forums for members to engage in core scientific, educational, advocacy and policy issues related to a specific expertise with fellow stakeholders of similar interests. Benefits include networking, Pre-Meeting Courses and symposia activities planned for Annual Meetings to enhance career development.

### Learn more about:

- ▶ ASTMH membership
- ▶ How to submit a manuscript to *AJTMH*
- ▶ ASTMH subgroups and how to get involved
- ▶ Explore GOTropMed – the ASTMH Global Online Tropical Medicine Education website

## Sponsored Symposia

### One Health: From Plagues and Pestilence to Pesticides, Pharmaceuticals and Public Health

Convention Center - Room 383/384/385 (3rd Floor)

Thursday, November 14, 7:30 p.m. - 9:15 p.m.

#### Sponsored by Bayer U.S. Crop Science

Join this session for a timely and dynamic conversation with an interactive discussion period about One Health as it relates to tropical medicine, hygiene and global health. Using the 10 plagues of Egypt and the science-based understanding of their origins as a conversational guide, attendees will hear how science-based chemistries were harnessed to develop medicines, drugs of abuse, and pesticides that revolutionized quality of life and added 35 years of life-expectancy in the 21st century. The session will then focus on challenges of today regarding zoonoses in Africa and the logistics of getting vaccines and diagnostics to patients in low resource settings.

#### ONE HEALTH: FROM PLAGUES AND PESTILENCE TO PESTICIDES, PHARMACEUTICALS AND PUBLIC HEALTH

Kelly Bristow, MS, RDN, LD

Bayer Crop Science, Chesterfield, MO, United States

#### ONE HEALTH AND TOXICOLOGY

Sasha K. Kaiser, MD

Washington Poison Center, Seattle, WA, United States

#### ONE HEALTH AND TROPICAL DISEASES

Vivi Maketa, MD

University of Kinshasa, Department of Tropical Medicine, Kinshasa, Democratic Republic of the Congo

### The Rising Tide: Dengue Fever and Climate Change

Convention Center - Room 354/355 (3rd Floor)

Thursday, November 14, 7:30 p.m. - 9:15 p.m.

#### Sponsored by Abbott

Dengue fever, a mosquito-borne viral infection, has seen a dramatic increase in cases globally over the past few decades, closely linked to climate change, which has created favorable conditions for the proliferation of the *Aedes* mosquitoes that transmit the disease. The World Health Organization (WHO) reports a ten-fold increase in dengue cases from 500,000 in 2000 to over 5.2 million in 2019, with nearly 5 million cases and over 5,000 dengue-related deaths reported across more than 80 countries in 2023. Dengue is now endemic in 129 countries, with Asia bearing approximately 70% of the global disease burden. Climate change factors such as rising global temperatures, increased rainfall and humidity, and extreme weather events like floods and droughts enhance mosquito survival, virus replication, and transmission rates. The Americas reported 4.1 million cases in 2023, making it the most affected region globally, while the *Aedes* mosquito has established itself in 22 European countries, leading to sporadic outbreaks. Africa and Asia continue to experience high transmission rates, presenting significant public health challenges. The interplay between climate change and the spread of dengue fever underscores the urgent need for integrated public health strategies, including addressing climate change, improving vector control, and enhancing surveillance systems to mitigate the impact of dengue worldwide. The objective of this symposium is to hear from experts on this important topic and gaining insights into their battle against this growing and expanding epidemic.

## Sponsored Symposia

### Results from Large-Scale Trials of the Sarabi Attractive Targeted Sugar Bait to Reduce Malaria Burden in Kenya, Mali and Zambia

Convention Center - Room 343/344 (3rd Floor)

Friday, November 15, 7 a.m. - 8:45 a.m.

#### Sponsored by IVCC

The Westham Sarabi attractive targeted sugar bait (ATSB) is designed to attract sugar-foraging mosquitoes and kill them with an ingestion toxicant. When deployed as part of a community-wide attract and kill vector control strategy, ATSBs may shorten the lifespan of female *Anopheles* malaria vectors and reduce malaria burden. Three independent 2-arm community-randomized controlled trials were conducted in Zambia (November 2021-June 2023), Kenya (March 2022-March 2024), and Mali (May 2022-January 2024). In the control arm, standard-of-care vector control was reinforced consisting of ensuring high coverage of including insecticide-treated nets (ITN), with indoor residual spray in areas that did not receive ITN also deployed in Zambia (mosaic approach). Arm 2 received reinforced standard-of-care vector control plus ATSB stations installed on exterior walls of all eligible household structures. ATSBs were monitored and replaced as needed for 6- to 7-month deployment periods. Deployment was seasonal in Zambia (November-June) and Mali (May-January) and year-round in Kenya. The primary outcome was clinical malaria incidence among cohorts of children aged 12 months to 14 years in Zambia and Kenya and 5 to 14 years in Mali. Secondary outcomes included *Plasmodium falciparum* infection prevalence among people ages 6 months and older, and entomological outcomes including density, parity, and entomological inoculation rate. Results from all 3 trials will be examined together providing opportunity to discuss ATSB impact across 3 very different study contexts with important variations that may influence ATSB efficacy. These important study site variations include differences in primary malaria vectors, patterns and intensity of malaria transmission, current malaria control strategies, population and housing density, climate, vegetation, and sugar availability for malaria vectors. Implications for malaria vector control policy and programs, as well as the evolving ATSB learning agenda will be discussed.

#### CHAIR

Angela F. Harris, PhD  
IVCC, Liverpool, United Kingdom

#### CO-CHAIR

Busiku Hamainza, PhD  
Zambia Ministry of Health, Lusaka, Zambia

#### THE IMPACT OF ATSB DEPLOYMENT IN WESTERN KENYA

Sarah Staedke, PhD  
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

#### ATSB DEPLOYMENT IN WESTERN KENYA

Daniel McDermott, PhD  
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

#### THE IMPACT OF ATSB DEPLOYMENT IN WESTERN KENYA

Caroline A. Ogwang, MSc  
Kenya Medical Research Institute, Kisumu, Kenya

#### THE ENTOMOLOGIC IMPACT OF ATSB DEPLOYMENT IN WESTERN KENYA

Eric Ochomo, PhD  
Kenya Medical Research Institute, Centre for Global Health Research, Kisumu, Kenya

#### THE IMPACT OF ATSB DEPLOYMENT IN MALI

Seydou Doumbia, PhD  
University of Sciences, Techniques, and Technology of Bamako, Bamako, Mali

#### THE EPIDEMIOLOGIC IMPACT OF ATSB DEPLOYMENT IN MALI

Sophie Sarrassat, PhD  
London School of Tropical Medicine & Hygiene, London, United Kingdom

#### THE EPIDEMIOLOGIC IMPACT OF ATSB DEPLOYMENT IN MALI

Immo Kleinschmidt, PhD  
London School of Hygiene & Tropical Medicine, London, United Kingdom

#### THE ENTOMOLOGIC IMPACT OF ATSB DEPLOYMENT IN MALI

Mohamed Traore, PhD  
University of Sciences, Techniques, and Technology of Bamako, Bamako, Mali

#### THE ENTOMOLOGIC IMPACT OF ATSB DEPLOYMENT IN MALI

Gunter Muller, PhD  
University of Sciences, Techniques, & Technology of Bamako, Bamako, Mali

#### THE IMPACT OF ATSB DEPLOYMENT IN ZAMBIA

Megan Littrell, PhD  
PATH, Washington, DC, United States

#### ATSB DEPLOYMENT IN ZAMBIA

Erica Orange, MPH  
Malaria and Neglected Tropical Diseases, PATH, Seattle, WA, United States

#### THE EPIDEMIOLOGIC IMPACT OF ATSB DEPLOYMENT IN ZAMBIA

Ruth Ashton, PhD  
Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States

#### THE ENTOMOLOGIC IMPACT OF ATSB DEPLOYMENT IN ZAMBIA

Javan Chanda, MPH  
PATH, Lusaka, Zambia

## Sponsored Symposia

### Asymptomatic Malaria in Pregnancy: An Urgent Problem to Resolve

Convention Center - Room 354/355 (3rd Floor)

Friday, November 15, 7 a.m. - 8:45 a.m.

**Sponsored by Abbott**

Asymptomatic malaria poses a significant yet often overlooked threat to maternal and fetal health, particularly in endemic regions. Despite the absence of overt clinical symptoms, asymptomatic malaria can lead to severe complications such as maternal anemia, low birth weight, and increased perinatal mortality. Pregnant women are especially vulnerable due to immunological changes and the sequestration of malaria parasites in the placenta. Studies indicate that the prevalence of asymptomatic malaria in pregnant women can be as high as 20.09% in some regions. This condition significantly increases the risk of maternal anemia, with infected women being 2.28 times more likely to be anemic. Furthermore, malaria during pregnancy is responsible for 5-12% of all low-birth-weight cases and contributes to 35% of preventable low birth weight, leading to 75,000 to 200,000 infant deaths annually. Pregnant women with malaria also face higher odds of adverse outcomes, including low birth weight (1.99 times more likely), preterm birth (1.65 times more likely), and stillbirths (1.40 times more likely). This symposium aims to shed light on the epidemiology, pathophysiology, and potential interventions for asymptomatic malaria in pregnancy, emphasizing the need for enhanced screening and treatment protocols to safeguard maternal and neonatal health.

### When Neglected Tropical Diseases Go Global: Focus on Chikungunya and Mpox

Convention Center - Room 383/384/385 (3rd Floor)

Friday, November 15, 7 a.m. - 8:45 a.m.

**Sponsored by Bavarian Nordic**

Chikungunya is a debilitating mosquito-transmitted disease that has emerged as a global public health threat. The disease, which is associated with high morbidity, continues to expand globally due to climate change, viral adaptations and globalisation. In this session, we will review the epidemiology, clinical presentation, diagnostics, and management of chikungunya.

The rapid spread of mpox clade IIb to non-endemic regions of the world led to the first global mpox epidemic in 2022-2023 and the declaration of a Public Health Emergency of International Concern (PHEIC) by the WHO. In August 2024, the WHO declared the mpox clade Ib outbreak in the Democratic Republic of the Congo a PHEIC. In this session we will review the epidemiology and disease burden of mpox and provide an update about the current situation with a focus on endemic countries in Africa.

#### CHAIR

David H. Hamer, MD, FACP, FIDSA, FASTMH, FISTM  
*Boston University, School of Public Health, Boston, MA, United States*

#### **CHIKUNGUNYA REVEALED: EPIDEMIOLOGY, CLIMATE CHANGE IMPACT, AND CRITICAL DIAGNOSTIC INSIGHTS FOR OPTIMAL PATIENT CARE**

Aileen Y. Chang, MD, MSPH, FACP  
*The George Washington University, School of Medicine and Health Sciences, Washington, DC, United States*

#### **EMERGENCE OF MPOX IN THE POST-SMALLPOX ERA**

Placide Mbala, MD, MSPH, PhD  
*University of Kinshasa, Kinshasa, Democratic Republic of the Congo*



## Sponsored Symposia

### Malaria Prevention: A Trilogy of Tools to Accelerate to Zero Deaths

Convention Center - Room 395/396 (3rd Floor)

Friday, November 15, 7 a.m. - 8:45 a.m.

**Sponsored by Medicines for Malaria Venture and TDR**

Malaria prevention is a key pillar of efforts to drive to elimination. The toolbox is expanding, with new medical innovations such as vaccines, medicines in development and novel insecticides. Each tool plays a unique role in addressing the specific needs of at-risk and underserved populations. An integrated and complimentary approach is the only way to meet the needs of all.

#### INTRODUCTORY REMARKS

John Reeder, PhD

Special Programme for Research and Training in Tropical Diseases (TDR), Geneva, Switzerland

#### INTRODUCTORY REMARKS

Martin Fitchet, MD

Medicines for Malaria Venture, Geneva, Switzerland

#### GENDER-SENSITIVE APPROACHES TO MALARIA PREVENTION

Margaret Gyapong

Institute of Health Research at the University of Health and Allied Sciences, HO, Volta Region, Ghana

#### THE ROLE OF INSECTICIDE-TREATED NETS AND INDOOR RESIDUAL SPRAYING

Justin McBeath

Innovative Vector Control Consortium, Liverpool, United Kingdom

#### THE ROLE OF MEDICINES IN MALARIA PREVENTION

Cristina Donini, PhD

Medicines for Malaria Venture, Geneva, Switzerland

#### THE SCIENCE BEHIND THE CURRENT MALARIA VACCINES

Ashley Birkett

PATH, Seattle, WA, United States

#### THE DEVELOPMENT AND ROLLOUT OF R21 AND PIPELINE VACCINES

Adrian Hill

Oxford University, Oxford, United Kingdom

#### IMPLEMENTATION RESEARCH FOR ACCESS TO MALARIA PREVENTION TOOLS

Seydou Doumbia

University of Sciences, Techniques, and Technology of Bamako, Bamako, Mali

#### FIELD PERSPECTIVES ON THE INTEGRATION OF MALARIA PREVENTION TOOLS

Keziah Malm, PhD

National Malaria Control Programme of Ghana, Accra, Ghana

### Tropical Fever Syndromic Diagnostics to Enhance Patient Management: A Clinical and Microbiologist Point of View

Convention Center - Room 352 (3rd Floor)

Friday, November 15, 7 a.m. - 8:45 a.m.

**Sponsored by bioMérieux SA**

bioMérieux SA, in collaboration with BIOFIRE Defense, is developing a syndromic molecular panel for tropical fever testing. Syndromic molecular testing has consistently shown improved patient outcomes, offering the potential to accelerate and enhance patient management. The Global Fever Panel is accurate, easy to use, and with its rapid turnaround time could provide valuable results to clinicians and patients in various clinical settings. This Global Fever Syndromic Molecular Panel would play a crucial role in detecting infectious disease outbreaks and enhancing public health, significantly impacting patient care. This symposium will explore the impact of the Global Fever Panel implementation and the benefits of tropical fever syndromic testing for detecting critical pathogens in endemic regions and among travelers. In this bioMérieux Symposium, two specialists on tropical diseases will deliver presentations.

#### INTRODUCTION

Glaucia Paranhos-Baccalà, PhD

bioMérieux SA, Marcy l'Etoile, Rhone-Alpes, France

#### INTRODUCTION

Marrero-Vasquez, PharmD

bioMérieux SA, Denver, CO, United States

#### THE ROLE OF THE GLOBAL FEVER PANEL IN THE TRAVEL CLINIC

Bradley A. Connor, MD

Weill Cornell Medical College/The New York Center for Travel and Tropical Medicine, New York, NY, United States

#### CAN WE FINALLY BRING TROPICAL DISEASE TESTING CLOSER TO PATIENTS? EVALUATING THE BIOFIRE DEFENSE GLOBAL FEVER PANEL IN A NATIONAL REFERENCE LAB

Marc R. Couturier, PhD, D(ABMM)

ARUP Laboratories and University of Utah, Salt Lake City, UT, United States

# Sponsored Symposia

## Professor Dominic Kwiatkowski - Science and Legacy

Convention Center - Room 388/389 (3rd Floor)  
Friday, November 15, 6:15 p.m. – 8 p.m.

Sponsored by the Bill & Melinda Gates Foundation

A pioneer and global leader in malaria genomics, Professor Dominic Kwiatkowski's career fostered new insights into malaria biology, new tools for malaria control, and a new generation of malaria genomics researchers. He founded and led the Malaria Genomic Epidemiology Network (MalariaGEN), a global data sharing and capacity building community, from its inception until his untimely passing in April 2023. His vision and efforts to unite a community to share data in order to build knowledge and resources more powerful than would be possible alone was once considered revolutionary. Since the COVID-19 pandemic, during which he provided valuable leadership, his data sharing ideals have become the established norm. Here we consider his influence and legacy on the field of genomic epidemiology of malaria through contributions from current leaders across the broad range of his impact.

### INTRODUCTION

Abdoulaye Djimdé, PhD  
Pathogens Genomic Diversity Network Africa, Bamako, Mali

### INTRODUCTION

Estee Torok, MA, MBBS, PhD, FRCP, FRCPath  
Bill & Melinda Gates Foundation, London, United Kingdom

### BEFORE MALARIAGEN

Terrie Taylor, DO  
Michigan State University, East Lansing, MI, United States

### DATA SHARING IN LARGE RESEARCH CONSORTIA IN AFRICA - WHAT WORKS AND WHAT FAILS

Lucas Amenga-Etego, PhD  
West African Centre for Cell Biology of Infectious Pathogens (WACCBIP), Accra, Ghana

### BUILDING AFRICAN GENOMICS CAPACITY

Sofonias Tessema, PhD  
Africa CDC, Addis Ababa, Ethiopia

### RANGE-WIDE POPULATION GENOMICS OF ANOPHELES DARLINGI

Daniel E. Neafsey, PhD  
Harvard T.H. Chan School of Public Health, Boston, MA, United States

### GENOMIC EPIDEMIOLOGY OF PLASMODIUM FALCIPARUM IN THE AGE OF ARTEMISININ RESISTANCE

Olivo Miotto, PhD  
Mahidol-Oxford Tropical Medicine Research Unit, Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand

BIOMÉRIEUX

## JOIN OUR SPONSORED SYMPOSIUM

### TROPICAL FEVER SYNDROMIC DIAGNOSTICS TO ENHANCE PATIENT MANAGEMENT: A CLINICAL AND MICROBIOLOGIST POINT OF VIEW

#### SPEAKERS

**Bradley A. Connor**  
M.D., AGA-F, FIDSA, FACP, FRCPS (Glas)  
Weill Cornell Medical College and The New York Center for Travel and Tropical Medicine

**Marc Roger Couturier**  
Ph.D., D(ABMM)  
ARUP Laboratories and University of Utah

 JOIN US

FRIDAY, NOV 15<sup>TH</sup> - 7:00AM - 8:45AM  
ROOM 352 (3<sup>RD</sup> FLOOR)

VISIT US  
BOOTH  
207



SCAN FOR ALL INFO >>

This Sponsored Symposium is sponsored by bioMérieux and held alongside the 2024 Annual Meeting



## Sponsored symposium

# Malaria prevention: A trilogy of tools to accelerate to zero deaths

New insecticides, expanded chemoprevention and the first generation of vaccines offer a golden opportunity to bolster the fight against malaria.

Date: Friday, 15 November 2024

Time: 7:00 – 8:45am

**\*Breakfast will be served from 7:00am\***

Location: Convention Center, Room  
395/396 (3rd floor)

Moderator: **Dr Daniel Ngamije, Global  
Malaria Programme, WHO**

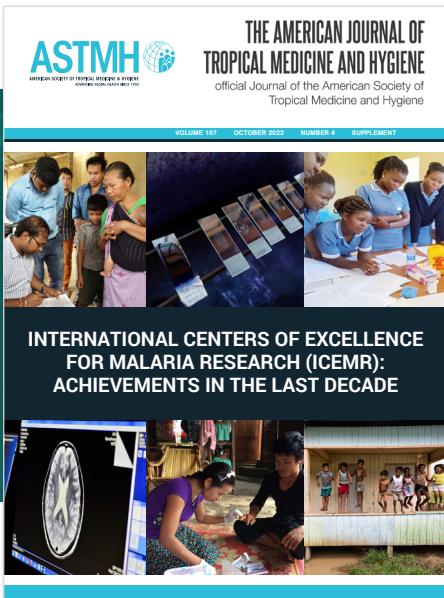


### Speakers:

- **Margaret Gyapong**, University of Health and Allied Sciences, *Ghana*
- **Justin McBeath**, Innovative Vector Control Consortium, *UK*
- **Cristina Donini**, Medicines for Malaria Venture, *Switzerland*
- **Fatimata Bintou Sall**, University of Thiès, *Senegal*
- **Ashley Birkett**, PATH, *USA*
- **Adrian Hill**, Jenner Institute, *UK*
- **Seydou Dombia**, University of Sciences, Techniques, and Technology of Bamako, *Mali*
- **Keziah Malm**, National Malaria Elimination Programme, *Ghana*

# Why Publish with the *American Journal of Tropical Medicine and Hygiene*?

- ▶ No submission fees
- ▶ Open Access publishing options
- ▶ Support for publishing research from low- and middle-income countries
- ▶ Have your research read by over 1 million readers every year from all over the world
- ▶ Average time to first decision is less than four weeks
- ▶ Advance online publication
- ▶ Low publication costs
- ▶ Publish supplemental data online at no charge



## THANK YOU

to all of you who have published papers in the *Journal* and we look forward to your continued submissions. Remember, ASTMH members receive a discount on publishing fees. So, if you are not already a member, consider joining today.

astmh.org | ajtmh.org  
@astmh | @ajtmh

#TropMed24

#IamTropMed #ASTMHinclusion







# Onsite: What, When, Where

## Social Media at the 2024 Annual Meeting

Follow the Annual Meeting on ASTMH social media channels.

Visit [astmh.org](https://astmh.org) to access all social media outlets as follows:

-  Subscribe to the ASTMH Facebook page for updates from the Annual Meeting and for relevant content year-round.
-  Follow **@ASTMH**. During the conference, you can follow what your colleagues are tweeting by using the **#TropMed24** and **#IamTropMed** hashtags. Also follow **@AJTMH** for *Journal* updates.
-  Enjoy archived video from past Annual Meetings, Alan Magill Symposia, webinars and interviews with pioneers in the field.
-  Follow ASTMH on LinkedIn. Raise your professional profile when you promote your Annual Meeting presentation, attendance, award or ASTMH membership.

## The following food functions are included in the registration fee:

- ▶ Opening reception (Wednesday)
- ▶ Student reception (Wednesday)
- ▶ Poster session lunches (Thursday, Friday, Saturday)
- ▶ Coffee breaks

## Badges/Meeting Access

Participation in the Annual Meeting is limited to registered attendees. An official badge is required for admission to all sessions, social activities and exhibit area. If there is an error on a badge, please have it corrected at the registration desk.

## Americans with Disabilities Act (ADA)

ASTMH fully complies with the legal requirements of the ADA and the rules and regulations thereof.

## New Orleans Ernest N. Morial Convention Center Annual Meeting sessions and events will be held at the New Orleans Convention Center.

900 Convention Center Boulevard  
(at the corner of Julia Street and Convention Center Boulevard)  
New Orleans, LA 70130

## Registration

### Convention Center - I1 Foyer (First Floor)

#### Annual Meeting Registration Hours

Wednesday, November 13	8 a.m. - 7:30 p.m.
Thursday, November 14	7 a.m. - 5 p.m.
Friday, November 15	7 a.m. - 5 p.m.
Saturday, November 16	7 a.m. - 5 p.m.
Sunday, November 17	7 a.m. - 10:30 a.m.



# Onsite: What, When, Where

## Camera/Recording Restrictions and Unauthorized Photography

Only registered members of the media and attendees who receive prior approval from ASTMH staff may take cameras into the exhibit hall or use recording devices during sessions. Still and video photography, including photography by mobile phones, is strictly prohibited in educational sessions. Attendees found to be using cameras in educational sessions without permission may be asked to leave the conference and will not be issued a refund.

## Solicitations

Sales and promotional activities are restricted to exhibitors and must take place in their assigned exhibit area. Solicitations by unauthorized persons are strictly prohibited.

## Press Room

*Convention Center – Room 340 (3rd Floor)*

The press room is available for professional journalists reporting on the conference. ASTMH media kits are available. Media announcements and other details can be found in the press room.

### Press room hours of operation are:

<b>Wednesday, November 13</b>	<b>Noon – 5 p.m.</b>
<b>Thursday, November 14</b>	<b>7:45 a.m. – 5 p.m.</b>
<b>Friday, November 15</b>	<b>7:45 a.m. – 5 p.m.</b>
<b>Saturday, November 16</b>	<b>7:45 a.m. – 5 p.m.</b>

## Impromptu Meeting Rooms for Attendees

*Hilton - Norwich Room and Windsor Room (3rd Floor)*

The Norwich Room and Windsor Room on the third floor of the Hilton are designated for impromptu gatherings and other group meetings. Meeting room reservations are available on a first-come, first-served basis. Use the sign-up sheet located outside the rooms to reserve a meeting time for your group.

## Disclaimer

ASTMH is not responsible for the opinions expressed by speakers or the content of speaker slides and handout materials.

## Media/Press

The Annual Meeting is open to credentialed members of the press. To register for a press pass, please contact: Katy Lenard: +1-202-494-2584 [klenard@burness.com](mailto:klenard@burness.com)

## Special Event: Walking Tour of New Orleans:

### A Walk Through the History of New Orleans and Intersections with Tropical Medicine and Public Health

**Sign up at the Tulane University Booth #315 in the Exhibit Hall. Space is limited! Sign up now!**

The city of New Orleans is a landscape imprinted with the waves of epidemics that, in response, produced the first school of public health and first school of tropical medicine in the United States. New Orleans' culture and its geography shaped these epidemics and the epidemics in turn shaped the city's culture and economy.

Visit the Tulane booth in the Exhibit Hall to sign up for a walk to see some key sites of the city, the yellow fever mortuary chapel, the birth places of American music, the slave market, the front door of the French Quarter and the Mississippi River's edge, which evokes the physical and social contexts that brought yellow fever, cholera and malaria to the city.

**Friday, November 15**  
**2:30 p.m. – 4:30 p.m.**

**Saturday, November 16**  
**8 a.m. – 10 a.m.**  
**2:30 p.m. – 4:30 p.m.**

# Onsite: What, When, Where

## Information for Speakers: Speaker Ready Room

Convention Center – Room 387 (3rd Floor)

### Hours

Wednesday, November 13	Noon – 6 p.m.
Thursday, November 14	7 a.m. – 6p.m. (Closed 11 a.m. – Noon)
Friday, November 15	7 a.m. – 5 p.m. (Closed 11 a.m. – Noon)
Saturday, November 16	7 a.m. – 5 p.m. (Closed 1 p.m. – 2 p.m.)
Sunday, November 17	7 a.m. – Noon

## Speaker Ready Rooms DOs and DON'Ts

- ▶ **DO** plan to submit your slides to the Speaker Ready Room at least one (1) day in advance of your scheduled session. Early presentation submittal is vital to a successful ASTMH Annual Meeting.
- ▶ If your presentation takes place during the first session of the day, it is **IMPERATIVE** that you submit your slides to the Speaker Ready Room one day in advance.
- ▶ **DO** arrive more than 30 minutes prior to your session time – late submissions are not guaranteed to arrive in your meeting room before your presentation!
- ▶ **DO NOT** bring your presentation directly to your meeting room! Presentation slides must be submitted to the Speaker Ready Room prior to your session. Please give yourself ample time to visit the Speaker Ready Room to submit your presentation slides.
- ▶ **DO** bring your presentation slides to the Speaker Ready Room on a USB storage device (flash drive, hard drive, etc.) if possible. Alternate submission options will be provided if necessary.
- ▶ **DO** bring all content/media associated with your presentation on the same USB storage device as your presentation. Media content includes pictures, audio files, videos, fonts, etc.
- ▶ **DO** let the Speaker Ready Room staff know if your presentation includes any mediacontent (pictures, audio files, videos, fonts, etc.).
- ▶ **DO** create a backup copy of your presentation and media content using a secondary USB storage device, cloud storage (Dropbox, Google Drive, Microsoft OneDrive, etc.), or simply email the presentation to yourself – your inbox is a quick and simple way to store small files such as a PowerPoint presentation! Quicktime .mov, will not be compatible. Embedded audio should be saved in mp3 or .wav format.

## Presentation Formatting

### Aspect ratios

- ▶ All presentation slides should be created with a Widescreen 16:9 aspect ratio. All PowerPoint versions 2013 or later will automatically create slides with a 16:9 aspect ratio.
- ▶ Slide presentations using a 4:3 aspect ratio will display correctly, but black frames will appear on the sides of the screen. Please note 4:3 aspect ratios are largely outdated and should be avoided whenever possible.

### Microsoft Powerpoint Formatting

- ▶ Powerpoint presentation slides should be saved in either ".ppt" or ".pptx" formats. Both are acceptable.

### Macintosh/Apple Keynote Formatting

- ▶ Apple Keynote presentations will not be accepted and must be converted to ".pptx" format.
- ▶ Keynote presentations converted to Powerpoint presentations do not always convert properly. Converted Powerpoint presentations should be reviewed for accuracy and formatting prior to submission to the AV team in SRR.

### Embedded Content and Hyperlinks

- ▶ All media content such as video or audio files must be embedded into the Powerpoint presentation. Hyperlinks within a presentation that lead to internet websites such as YouTube will not be accepted.
- ▶ Embedded videos should be saved as ".mp4," ".wmv," or ".mov" formats.
- ▶ Embedded audio files should be saved as ".mp3" or ".wav" formats.
  - ".aiff" audio files are not acceptable

### Meeting Rooms

- ▶ All meeting rooms will be supplied with Windows computers (Windows 10 and the latest version of Microsoft PowerPoint), projectors, projection screens, microphones, a laser pointer, a slide advancer, and a confidence monitor (55" TV in front of the stage mirroring projector screens).
- ▶ All presentations will be operated from a Windows computer located at the tech table. **Note that the AV team will not be able to connect any presenters' computers to the video system.**

# Continuing Education at TropMed24

## Continuing Education Credit Continuing Medical Education (CME) Accreditation

ASTMH is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. ASTMH designates this live activity for a maximum of 28 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## Register for CME Credit

The CME documentation fee is \$200 US.

- ▶ Claim CME credit for one session during a period of concurrent sessions.
- ▶ Attendees with Livestream Registration can claim CME credit.
- ▶ CME certificates will be sent by e-mail in January.
- ▶ Complete the CME Survey and CME Claim Form by Monday, November 25 [here](#).

## American Board of Internal Medicine (ABIM) Maintenance of Certification (MOC) Credit

**Submit CME Survey and CME Claim Form by Monday, November 25 in order to receive ABIM MOC credit.**

If you wish to receive ABIM MOC credit, you must register for CME credit for \$200 US. We cannot issue ABIM MOC credit unless the registration includes payment for CME credit. Successful completion of this Annual Meeting CME activity, which includes a minimum participation threshold and participation in the evaluation component, enables the participant to earn up to 28 Medical Knowledge MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Your participation information, as well as your ABIM member ID and date of birth will be shared with the American Board of Internal Medicine via the Accreditation Council for CME PARS system for the purpose of reporting MOC completion.

### PLEASE NOTE:

- ▶ The CME fee of \$200 US must be paid in order to receive ABIM MOC credit.
- ▶ CME registrants seeking ABIM MOC credit must complete the CME Survey and CME Claim Form by Monday, November 25 in order to receive ABIM MOC credit.
- ▶ Pre-meeting courses are not eligible for ABIM MOC credit.
- ▶ Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity.
- ▶ Attendees seeking ABIM MOC credit must provide their ABIM MOC ID number and date of birth during the registration process.

## Full-Disclosure Policy Affecting CME Activities

As a sponsor accredited by the Accreditation Council for Continuing Medical Education (ACCME), ASTMH must ensure balance, independence, objectivity and scientific rigor in all its individually sponsored or jointly sponsored educational activities. The Accreditation Council for Continuing Medical Education (ACCME) requires ASTMH to document that anyone in a position to control the content of an educational activity has disclosed all financial relationships with an ACCME-defined ineligible company. ASTMH must then mitigate relevant financial relationships so as not to affect the content of the presentation. This disclosure is intended to allow attendees to form their own judgments about such content.

## Veterinarian Continuing Education Credit

To better serve the continuing education needs of the full range of disciplines participating in the Annual Meeting, ASTMH offers accredited CE sessions for veterinarians. The Society's application is reviewed by the American Association of Veterinary State Boards RACE Committee. Anticipating approval, ASTMH is typically notified just prior to the start of the Annual Meeting. On Wednesday, November 13, registrants for veterinarian continuing education will be sent an evaluation form by email. This form will indicate the sessions that qualify for veterinary CE credits. The fee to claim veterinarian continuing education credit is \$200 US, payable upon registration.



## ASTMH is at Work All Year Round!

### Diploma Courses in Clinical Tropical Medicine and Travelers' Health

The Society advocates and facilitates the development of new training programs in clinical tropical medicine and travelers' health and has established a mechanism for accrediting them. These courses, known as Diploma Courses, may vary considerably in format and even in broad objectives, but to be accredited by the Society they must cover the topic matter included on the Certificate Exam and have an expectation of conferring on the examinee a certain degree of competence in the key subjects. Most confer a Diploma in Clinical Tropical Medicine and Travelers' Health; some confer a different diploma or degree in which the same expectations are included.

### Virtual Update Course in Clinical Tropical Medicine and Travelers' Health

This two-day condensed course provides a broad overview of core topics in clinical tropical medicine and travelers' health. It is designed for all healthcare providers working in tropical medicine or travelers' health and for those planning to take the ASTMH Certificate Examination (CTropMed®).

### CTropMed® – Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health

The next exam will be offered online in 2025. Fostering professional development in the fields of clinical tropical medicine and travelers' health is one of the Society's highest priorities. To that end, ASTMH developed the Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health (CTropMed® Program) as a means to distinguish individuals who have demonstrated advanced knowledge and experience in clinical tropical medicine and travelers' health. The CTropMed® Certificate is conferred on 1) licensed healthcare professionals applying via Practice Pathway or those healthcare professionals (regardless of licensure) who have passed an ASTMH accredited Diploma Course; 2) have direct experience in the fields of tropical medicine and/or travelers' health, and 3) have passed the ASTMH Examination in Clinical Tropical Medicine and Travelers' Health.

### Fellow of ASTMH (FASTMH)

Fellow member status (also known as Fellowship) in the Society is an honor recognizing sustained professional excellence in any phase of tropical medicine, hygiene, global health and related disciplines.

### Membership Directory

This resource, available exclusively to ASTMH members, puts thousands of experts in tropical medicine and global health at your fingertips. The directory provides member listings in alphabetical order and by geographic location to ease the search for colleagues around the world.



### American Journal of Tropical Medicine and Hygiene

The *American Journal of Tropical Medicine and Hygiene*, the leading international journal in tropical medicine, is a peer-reviewed journal published monthly. Content includes original scientific articles and cutting-edge science covering new research with an emphasis on laboratory science and the application of technology in the fields of tropical medicine, parasitology, immunology, infectious diseases, epidemiology, basic and molecular biology, virology and international medicine. The *Journal* publishes unsolicited peer-reviewed manuscripts, invited review articles, short reports, case studies, reports on the efficacy of new drugs and methods of treatment, prevention and control methodologies, new testing methods and equipment, book reports and letters to the editor. Topics range from applied epidemiology in such relevant areas as AIDS to the molecular biology of vaccine development.

### Why publish with the American Journal of Tropical Medicine and Hygiene?

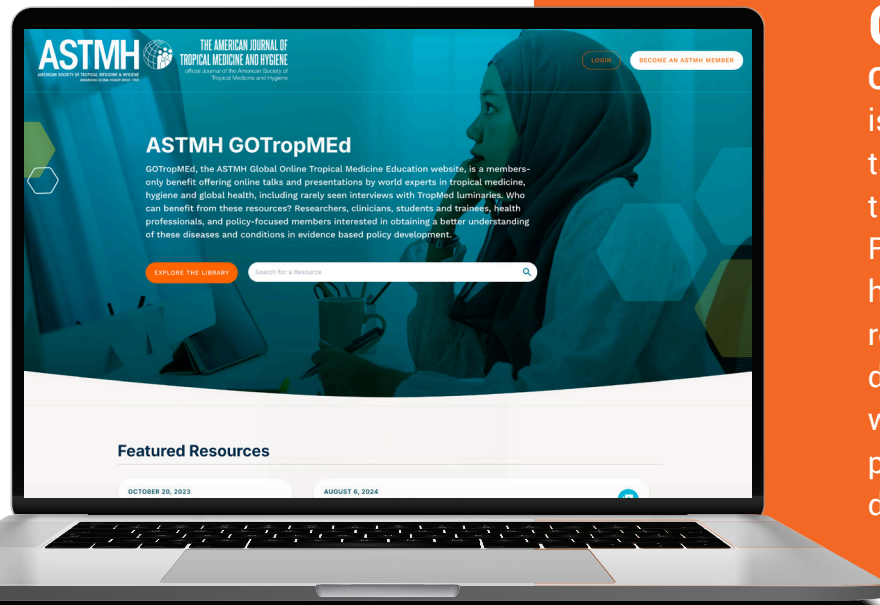
- ▶ The leading journal focused on all aspects of tropical medicine
- ▶ Have your research read by 500,000 readers from all over the world
- ▶ No submission fees
- ▶ Low publication costs compared to many other journals
- ▶ Discounted publication costs for ASTMH members
- ▶ No charge to publish supplementary data online
- ▶ Support for publishing research from low- and middle-income countries
- ▶ Open Access publishing options
- ▶ A panel of Section Editors with expertise in all aspects of tropical medicine
- ▶ Average time to first review decision of less than four weeks
- ▶ Advance online publication

We would like to take the opportunity to thank all of you who have published papers in *AJTMH* and we hope you will continue to submit your research to us. Remember, ASTMH members receive a discount on publishing fees in the *Journal*, so, if you are not already a member, please consider joining today.

## MARK YOUR CALENDAR

### Mark Your Calendar for World Malaria Day 2025 April 25, 2025

World Malaria Day is observed each year on April 25 to give countries in affected regions a chance to learn from each other's experiences and support one another's efforts in the fight against malaria; to enable new donors to join in a global partnership against malaria and for research and development; to enable institutions to reveal scientific advances to the public; and to give international partners, countries, and foundations a chance to showcase their efforts and reflect on how to scale-up what has worked.



**GOTropMED**, the ASTMH Global Online Tropical Medicine Education website is a members-only benefit offering online talks and presentations by world experts in tropical medicine, hygiene and global health. Researchers, clinicians, students, trainees and health professionals can access nearly 300 resources curated especially for the Society's digital education efforts. Watch interviews with TropMed luminaries, brush up on science presented at Annual Meetings, learn professional development skills and more.

[GOTropMED.astmh.org](https://GOTropMED.astmh.org)

Free and unlimited access to GOTropMED is a benefit of membership to ASTMH. Non-members will need to **join ASTMH** to access **GOTropMED**.

## Check Out Our Online Page for Students, Trainees, Post-Docs, Medical Residents and Fellows

Your one-stop-shop to help build fundamental skills and perspectives for a successful start to Tropical Medicine/Global Health Careers:

- ▶ Membership Benefits
- ▶ Subgroup Information
- ▶ Career Center
- ▶ Fellowships and Awards
- ▶ Clinical Research Award Competition
- ▶ Annual Meeting
- ▶ Young Investigator Awards
- ▶ Advocacy
- ▶ Trainee Chats

Look for the Pre-/Post-Docs page under the Membership tab on the ASTMH website.

**ASTMH**  
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ADVANCING GLOBAL HEALTH SINCE 1903

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Annual Meeting Membership Awards, Fellowships & Medals Education & Resources Subgroups & Committees News & Events

Home >> Education & Resources >> Pre-/Post-Docs Page

f t in youtu

**Resources for Students, Trainees, Post-Docs, Medical Residents and Fellows**

Are you a trainee or otherwise new to research, global public health or clinical tropical medicine? Are you looking to get more involved? This page is for you, to help you build fundamental skills and perspectives for a successful start to your career.

**"If there was ever a professional medical society that has embraced the equity agenda, embraced inclusiveness at scientific meetings, embraced trainees and students – I understand a third of us gathered here are either trainees or students – I can't think of any other and it is an honor, as ever, to be a member of this Society." – Paul Farmer, MD, PhD Co-Founder and Chief Strategist of Partners In Health, 2017 Annual Meeting Keynote**

**What ASTMH Offers You**  
(click on a link below to explore the benefits)

- [Discounted Membership Dues](#)
- [ASTMH Subgroups](#)
- [Annual Meeting](#)
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Pre-Doc/Post-Doc Members

# ASTMH Board, Subgroup and Committee Meetings

## Wednesday, November 13

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### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) SIE Subcommittee Meeting

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Convention Center - Room 390 (3rd Floor)

Wednesday, November 13, 11 a.m. - Noon

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### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) SIRACA Subcommittee Meeting

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Convention Center - Room 390 (3rd Floor)

Wednesday, November 13, Noon - 2 p.m.

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### Young Investigator Award Committee Meeting

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Convention Center - Room 343/344 (3rd Floor)

Wednesday, November 13, 2 p.m. - 3:30 p.m.

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### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) SALS Subcommittee Meeting

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Convention Center - Room 390 (3rd Floor)

Wednesday, November 13, 2 p.m. - 3:30 p.m.

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### ACCTMTH Clinical Research Award Committee Meeting

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Convention Center - Room 351 (3rd Floor)

Wednesday, November 13, 3 p.m. - 4 p.m.

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### American Committee of Medical Entomology (ACME) Council Meeting

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Convention Center - Room 397 (3rd Floor)

Wednesday, November 13, 3:30 p.m. - 5:30 p.m.

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### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Council Meeting

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Convention Center - Room 349 (3rd Floor)

Wednesday, November 13, 3:30 p.m. - 5:30 p.m.

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### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) Council Meeting

---

Convention Center - Room 390 (3rd Floor)

Wednesday, November 13, 3:30 p.m. - 5:30 p.m.

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### ASTMH Committee on Global Health (ACGH) Council Meeting

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Convention Center - Room 399 (3rd Floor)

Wednesday, November 13, 3:30 p.m. - 5:30 p.m.

---

### Clinical Group (American Committee on Clinical Tropical Medicine and Travelers' Health - ACCTMTH) Council Meeting

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Convention Center - Room 398 (3rd Floor)

Wednesday, November 13, 3:30 p.m. - 5:30 p.m.

## Thursday, November 14

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### AJTMH Editorial Board Meeting

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Hilton - Marlborough B (2nd Floor)

Thursday, November 14, 7 a.m. - 8 a.m.

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### Centennial Travel Award Committee Meeting

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Hilton - Marlborough A (2nd Floor)

Thursday, November 14, 7 a.m. - 8 a.m.

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### Diploma Course Directors Meeting

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Hilton - Ascot (3rd Floor)

Thursday, November 14, 7 a.m. - 8 a.m.

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### International Membership Committee Meeting

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Hilton - Churchill A1 (2nd Floor)

Thursday, November 14, 7 a.m. - 8 a.m.

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### Annual Meeting Lecture Committee

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Hilton - Norwich (3rd Floor)

Thursday, November 14, 7 a.m. - 8 a.m.

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### Digital Education Committee Meeting

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Hilton - Ascot (3rd Floor)

Thursday, November 14, 12:15 p.m. - 1:30 p.m.

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### Membership Committee Meeting

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Hilton - Norwich (3rd Floor)

Thursday, November 14, 12:15 p.m. - 1:30 p.m.

---

### Ben Kean Fellowship Committee Meeting

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Hilton - Marlborough A (2nd Floor)

Thursday, November 14, 12:15 p.m. - 1:30 p.m.

# ASTMH Board, Subgroup and Committee Meetings

## Friday, November 15

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### **Burroughs Wellcome Fund - ASTMH Fellowship Committee Meeting**

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*Convention Center - Room 349 (3rd Floor)*  
Friday, November 15, 7 a.m. - 8 a.m.

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### **Trainee Membership Committee**

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*Hilton - Ascot (3rd Floor)*  
Friday, November 15, 7 a.m. - 8 a.m.

---

### **CTropMed Exam Committee Meeting**

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*Hilton - Ascot (3rd Floor)*  
Friday, November 15, 12:15 p.m. - 1:30 p.m.

## Saturday, November 16

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### **ASTMH Presidents Meeting**

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*Convention Center - Room 399 (3rd Floor)*  
Saturday, November 16, 7 a.m. - 8 a.m.

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### **Diploma Course Certification Committee Meeting**

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*Hilton - Marlborough B (2nd Floor)*  
Saturday, November 16, 7 a.m. - 8 a.m.

---

### **Scientific Program Committee Meeting**

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*Convention Center - Room 349/350/351 (3rd Floor)*  
Saturday, November 16, 7 a.m. - 8 a.m.

---

### **Clinical Group (ACCTMTH) Past Presidents Meeting**

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*Hilton - Marlborough A (2nd Floor)*  
Saturday, November 16, 11:15 a.m. - 12:30 p.m.

# VISIT THE EXHIBIT HALL

Convention Center – Hall J

## Exhibitors

Visit the Exhibit Hall to connect with organizations sharing the latest products, services, and programs in tropical medicine/global health.

## STOP BY THE EXHIBIT HALL

- ▶ Opening Reception following the Opening Plenary and Awards Ceremony on Wednesday, November 13
- ▶ Morning and afternoon hours include coffee breaks
- ▶ Mid-day hours include lunch locations

## DON'T MISS THE TROPMED HUB. LEARN ABOUT

- ▶ ASTMH membership and year-round activities
- ▶ *American Journal of Tropical Medicine and Hygiene (AJTMH)* and how to submit material to the *Journal*
- ▶ GOTropMED, the member-only digital education platform
- ▶ The Society's five subgroups and how to get involved
- ▶ American Committee on Arthropod-Borne Viruses and Zoonotic Viruses (ACAV)
- ▶ American Committee of Medical Entomology (ACME)
- ▶ American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH)
- ▶ American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)
- ▶ ASTMH Committee on Global Health (ACGH)



**2024 Annual Meeting**

## Exhibit Hall Hours

**Wednesday, November 13**  
7 p.m. – 9:30 p.m. Opening Reception

**Thursday, November 14**  
9:30 a.m. – 10:30 a.m.  
Noon – 1:30 p.m.  
2:15 p.m. – 3:15 p.m.

**Friday, November 15**  
9:30 a.m. – 10:30 a.m.  
Noon – 1:30 p.m.  
3:15 p.m. – 4:15 p.m.

**Saturday, November 16**  
9:30 a.m. – 10:30 a.m.  
11 a.m. – 12:30 p.m.

Advancing Science | Building Community | Together



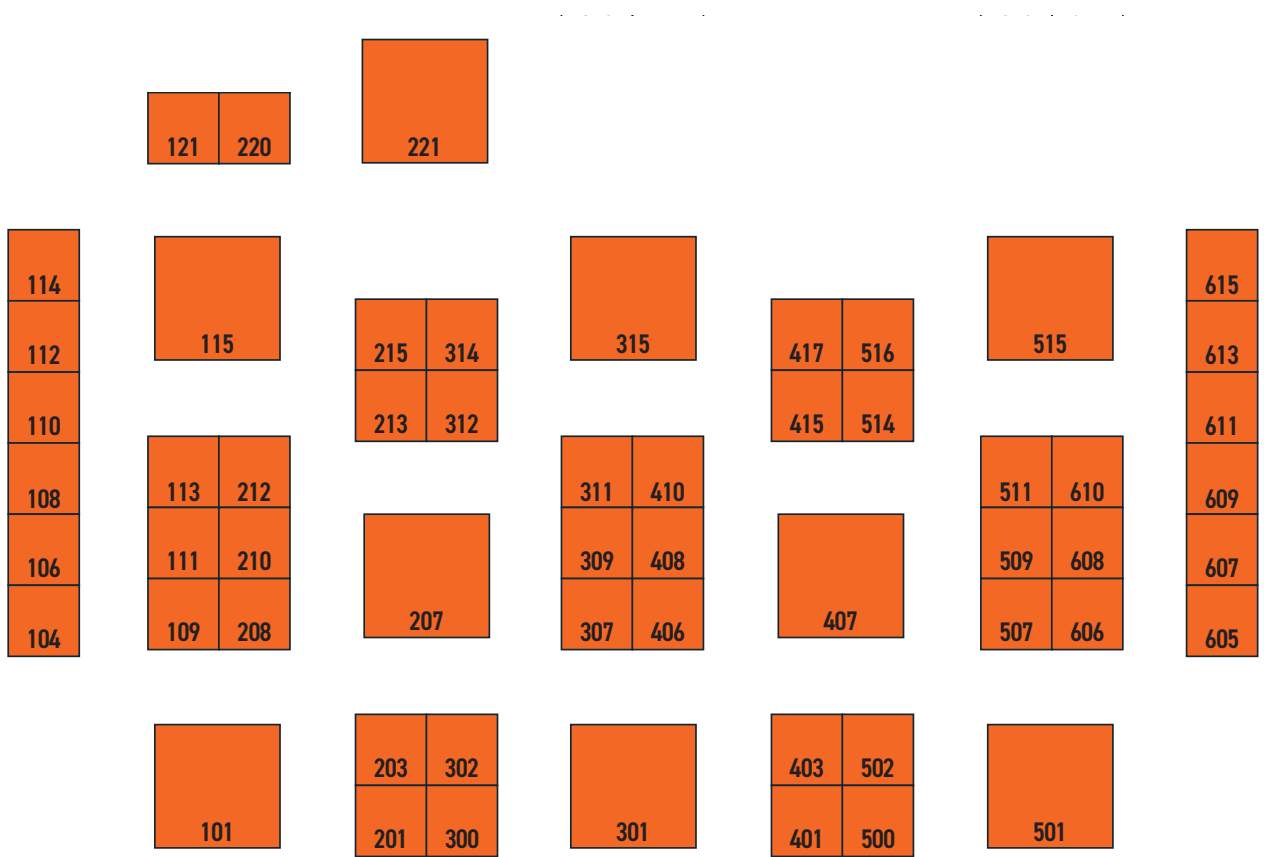
**Thank you to all the 2024 Exhibitors.**  
**See you in the Exhibit Hall!**  
*Convention Center - Hall J (1st Floor)*

## Exhibitor List

BOOTH NUMBER	INSTITUTION
101	GSK plc
104	University of Oxford
106	Global Health Innovative Technology Fund (GHIT Fund)
108	Valneva USA Inc.
109	altona Diagnostics GmbH
110	Royal Society of Tropical Medicine and Hygiene
111	VecTech
112	Harvard School of Public Health
113	Xpedite Diagnostics
114	Johns Hopkins Bloomberg Sch of Public Hlth
115	DNDi and Médecins Sans Frontières (MSF)
121	National Academies Sciences Engineering Medicine
201	The MITRE Corp
203	Panadea Diagnostics GmbH
207	bioMérieux
208	CTK Biotech
210	Rapigen
212	Kephera Diagnostics
213	University of Minnesota, Medical School
215	Medicines Development for Global Health
220	United to Beat Malaria/RBM/Vestergaard
221	GPEI
300	Gideon Informatics Inc
301	Novartis International AG
302	London School of Hygiene and Tropical Medicine
307	TDR (UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases)
309	MMV
311	Croissance Clinical Research Africa
312	HUMAN Gesellschaft Fuer Biochemica Und Diagnostica MbH

BOOTH NUMBER	INSTITUTION
314	Chemonics International
315	Tulane University - Department of Tropical Medicine and Infectious Disease
401	Cephla
403	Chan Zuckerberg Biohub San Francisco
406	WRAIR
407	Abbott
408	BEI Resources
410	The Henry M. Jackson Foundation for the Advancement of Military Medicine
415	University of Texas Medical Branch
417	Rotarians Against Malaria-Global Rotary Action Group
500	Takeda
501	Bavarian Nordic
502	InBios
507	RTI International
509	Biomedical Research Institute
511	Centers for Disease Control and Prevention
514	Eck Institute for Global Health
516	IVCC
605	International Society of Travel Medicine
606	Carramore International Ltd
607	Noul Co. Ltd.
608	Abt
609	Global Institute for Disease Elimination
610	Science of Defeating Malaria: A Leadership Course
611	Medigen, Inc
613	Sysmex
515	ACAV-ACCTMTH-ACGH-ACMCIP Subgroups
615	ACME Subgroup

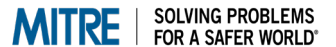
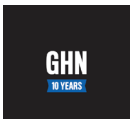
# Exhibit Hall Floor Plan



**ENTRANCE**



# 2024 Exhibitors



# 2024 Contributor, Exhibitor, Partner, Sponsor and Supporter Directory

## Abbott

SPONSORED SYMPOSIUM SPONSOR

### Booth Number 407

100 Abbott Park Rd  
North Chicago, IL 60064  
Jenna Mazzurco  
[jenna.mazzurco@abbott.com](mailto:jenna.mazzurco@abbott.com)

## Abt

### Booth Number 608

<https://www.abtglobal.com/>  
6130 Executive Blvd  
Rockville, Maryland 20852  
Lauren Speer  
[lauren.speer@abtglobal.com](mailto:lauren.speer@abtglobal.com)

Abt Global is a consulting and research firm that combines data and bold thinking to improve the quality of people's lives. For nearly 60 years, we have partnered with clients and communities to advance equity and innovation—creating scalable digital solutions to combat infectious diseases, help mitigate climate change and evaluate programs for measurable social impact. Abt has partnered with the U.S. President's Malaria Initiative on vector control programs for 12 years, and currently leads the PMI Evolve Project.

## altona Diagnostics GmbH

### Booth Number 109

[www.altona-diagnostics.com](http://www.altona-diagnostics.com)  
Mörkenstr. 12  
altona Diagnostics GmbH  
Hamburg 22767  
405480676988  
Sabine Dreher  
[exhibition@altona-diagnostics.com](mailto:exhibition@altona-diagnostics.com)

altona Diagnostics is a medical diagnostic company that develops and manufactures in vitro diagnostic tests for the PCR based detection of pathogens such as viruses, bacteria, or parasites. Headquartered in Hamburg, Germany, the company is ISO 13485 certified and has been in the molecular diagnostics business for over 20 years. altona Diagnostics is privately owned, employs more than 350 people worldwide, and sells its registered products to private and clinical laboratories globally through subsidiaries and over 40 distribution partners.

Molecular diagnostic tests from altona Diagnostics are based on real-time PCR technology and are packaged as ready-to-use kits. The company's product catalog contains over 50 CE marked kits that are compatible with open real-time PCR platforms. In addition,

altona offers an automated workflow solution that is complete with instrumentation, nucleic acid extraction chemistry and a dedicated software.

## Bavarian Nordic

SPONSORED SYMPOSIUM SPONSOR

### Booth Number 501

<https://www.bavarian-nordic.com/>  
Oberriedstrasse 68  
Thorishaus, Bern 3174  
Switzerland  
Caroline Dekeuleneer  
[CADE@bavarian-nordic.com](mailto:CADE@bavarian-nordic.com)

Bavarian Nordic is a global vaccines company on a mission to help improve and protect lives through innovative vaccines. Our purpose is driven by the people we serve and helping prepare them to take on their every day and their next adventure.

## Bayer U.S. Crop Science – Agriculture Division

SPONSORED SYMPOSIUM SPONSOR

Sarah Eliza Dunn Lockwood  
700 Chesterfield Parkway North  
Chesterfield, Missouri 63017 USA  
[saraheliza.dunnhalcomb@bayer.com](mailto:saraheliza.dunnhalcomb@bayer.com)  
[www.cropscience.bayer.com](http://www.cropscience.bayer.com)  
Twitter: @DrLizaMD, @Bayer4Crops, @Bayer4CropsEU  
Health for All, Hunger for None

At Bayer, we believe it's possible to create a better world where health and nutrition are accessible to all, embodying our mission "Health for all, Hunger for none". As a global company with core competencies in health care and agriculture, we design our products and services to address the world's greatest challenges and the most fundamental human needs.

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## BEI Resources

**Booth Number 408**

<https://www.beiresources.org/>

10801 University Blvd  
Manassas Virginia 20110-2204  
Deon Steele  
[dsteele@atcc.org](mailto:dsteele@atcc.org)

BEI Resources, funded by NIAID, is the leading source for high-quality cultures and reagents for studying antibiotic resistance, vector borne, emerging and opportunistic microbial diseases, AIDS, epidemiology and public health. BEI Resources supplies authenticated bacterial, viral, fungal and parasitic disease pathogens, including HIV, Mycobacterium, malaria parasites, select agents, arboviruses, human microbiome species and arthropod vectors. Available materials include antibodies, nucleic acids and other reagents for research and development of diagnostics, vaccines, and therapeutics. Explore the catalog and benefits we offer by registering at [www.beiresources.org](http://www.beiresources.org), and let us serve as a catalyst for your research efforts. We'll take care of the details while you focus on your research.

## Bill & Melinda Gates Foundation

**SPONSOR**

P.O. Box 23350  
Seattle, WA 98102 USA  
Phone: +1-206-709-3100  
[info@gatesfoundation.org](mailto:info@gatesfoundation.org)  
[www.gatesfoundation.org](http://www.gatesfoundation.org)

Guided by the belief that every life has equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people's health and giving them the chance to lift themselves out of hunger and extreme poverty. In the United States, it seeks to ensure that all people—especially those with the fewest resources—have access to the opportunities they need to succeed in school and life. Based in Seattle, Washington, the foundation is led by CEO Mark Suzman, under the direction of chair Bill Gates and the board of trustees.

## Biomedical Research Institute

**Booth Number 509**

<https://www.afbr-bri.org/schistosomiasis/>

9410 Key West Ave  
Rockville, Maryland 20850-3345  
Margaret Mentink-Kane  
[mmentinkkane@afbr-bri.org](mailto:mmentinkkane@afbr-bri.org)

The Schistosomiasis Resource Center at the Biomedical Research Institute is a unique schistosomiasis research supply laboratory funded by the NIAID (NIAID-NIH). The SRC provides Schistosoma life cycle reagents free of charge to scientists, students, biotech and independent investigators in the U.S. and around the world.

## bioMérieux

**SPONSORED SYMPOSIUM SPONSOR**

**Booth Number 207**

<https://www.biomerieux.fr/fr>

376 Chemin de l'Orme  
69280 Marcy-l'Etoile  
France  
Elisabeth Delcourt  
[elisabeth.delcourt@biomerieux.com](mailto:elisabeth.delcourt@biomerieux.com)

A world leader in in vitro diagnostics, bioMérieux provides solutions that determine the origin of a disease. World leader in microbiology, specialized in immunoassays and leading pioneer in the syndromic molecular approach, the Company is committed on major public health issues, such as antimicrobial resistance, sepsis and respiratory infections.

## Burroughs Wellcome Fund

**SUPPORTER**

P.O. Box 13901  
Research Triangle Park, NC 27709 USA  
+1-919-991-5100  
[www.bwfund.org](http://www.bwfund.org) @BWFUND @BWFPATH

The Burroughs Wellcome Fund is an independent private foundation dedicated to advancing the biomedical sciences by supporting research and other scientific and educational activities. Within this broad mission, BWF has two primary goals: To help scientists early in their careers develop as independent investigators and to advance fields in the basic biomedical sciences that are undervalued or in need of particular encouragement. BWF's financial support is channeled primarily through competitive peer-reviewed award programs.

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## CorDx

PARTNER

<https://cordx.com/>

CorDx is transforming the global diagnostics industry with innovative R&D solutions, a vertically integrated supply chain, and manufacturing footprints in the United States and around the world.

With nearly two decades of IVD experience, CorDx is a leader in IVD research and development, manufacturing, and supply chain. Our proprietary line of rapid diagnostic products is recognized by families and medical professionals for reliability, affordability, and rapid results.

## Carramore International Ltd

**Booth Number 606**

[www.carramore.com](http://www.carramore.com)

Thongsbridge Mills

Miry Lane Holmfirth HD9 7RW

Alasdair Grant

[a.grant@carramore.com](mailto:a.grant@carramore.com)

Carramore is a supplier of customized services to medical and life science research in LMICs: product sourcing and supply, including the associated logistics Product - as an independent buying company we are not restricted in the range of products we can source. Supply - all products, with a few exceptions, will be consolidated at our UK warehouse prior to shipping Control - all products are checked on receipt for damage, errors, shelf life, storage temperature and hazardous properties prior to being stored under the appropriate conditions. Export Packing – products are packed to optimise space, reduce freight costs and protect against potential damage. Thermal packaging is used for all cold cargo. Dangerous Goods are packed to meet IATA and other regulatory requirements. Logistics - as an IATA cargo agent we are also our own freight forwarder. This gives us complete control over issues such as routing, capacity constraints, cold chain continuity and hazardous cargo. Paperwork - complex freight, customs and licensing paperwork organised on your behalf. Clearance & delivery - helping you obtain duty/tax exemptions, effecting airport and port clearance, and delivering to your location. Advice - we can offer advice on a range of issues including product alternatives, shipping regulations/restrictions and duty/tax implications. Our reputation is founded on our ability to anticipate, overcome and manage the challenges that arise. Our experience in meeting such challenges is unsurpassed.

## Centers for Disease Control and Prevention

**Booth Number 511**

<https://www.cdc.gov/vector-borne-diseases/php/arbovirus-reference-collection/index.html>

3156 Rampart Rd

Fort Collins, Colorado 80521

Brandy Russell

[bm8@cdc.gov](mailto:bm8@cdc.gov)

As a World Health Organization Collaborating Centre for Arthropod-Borne Viruses Reference and Research, CDC's Arbovirus Reference Collection (ARC) provides reagents to public health laboratories for arbovirus diagnostics for which no commercial assays are available and serves as an arbovirus repository for reference strains. The ARC provides reference quantities of reagents and reference viruses to research and commercial laboratories.

## Center for Malaria Therapeutics and Antimicrobial Resistance, Columbia University Irving Medical Center

NETWORKING CONTRIBUTOR SPONSOR

The Programs in Global Health

622 West 168th Street

PH-17, Room 101

New York, NY 10032

United States

## Cephla

**Booth Number 401**

705 N Shoreline Blvd

Mountain View, California 94043

Hongquan Li

[operations@cephla.com](mailto:operations@cephla.com)

Cephla is a spinout from Prakash lab at Stanford University that build open and scalable bespoke microscope to accelerate discoveries and solutions. The Squid product line aims at eliminating barriers of access to high-end/bespoke systems, increasing data generation throughput, and making it easier to develop/adopt new capabilities/technologies. The Octopi product line aims at helping accelerate the paradigm shift in AI-empowered microscopy-based diagnostics, starting with malaria.

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## Chan Zuckerberg Biohub San Francisco

SPONSOR

### Booth Number 403

[czbiohub.org](https://czbiohub.org)

499 Illinois St Fl 4

San Francisco, California 94158

Pete Farley

[pete.farley@czbiohub.org](mailto:pete.farley@czbiohub.org)

The Chan Zuckerberg Biohub San Francisco is part of the CZ Biohub Network, a group of nonprofit research institutes created and supported by the Chan Zuckerberg Initiative. We bring together skilled and creative scientists and engineers to develop new technologies and tackle ambitious research projects, with the aim of understanding dynamic cell systems across scales in both healthy and diseased states. Our Research Groups explore cell systems at various scales. At the grandest scale – in human populations – our Rapid Response Group enables pathogen surveillance and rapid response to disease outbreaks. In collaboration with experts at our partner institutions, both domestically and in low- and middle-income countries, we work to understand infectious disease and advance public health. We map dynamic changes in cell behavior in response to disease and infection to define underlying mechanisms and to identify potential targets for therapeutic intervention and diagnostic tools. And our Technology Platforms disseminate the technologies we develop – and the knowledge gained – worldwide, through open-access publication and data portals.

## Chemonics International

### Booth Number 314

<https://chemonics.com>

1275 Jersey Avenue SE

Suite 200

Washington, DC 20003

Edua Eboigbe

[eeboigbe@chemonics.com](mailto:eeboigbe@chemonics.com)

Founded in 1975, Chemonics is one of the world's leading sustainable development consulting firms. Working in 95 countries, our network of 6,000 specialists pursues a higher standard in development, collaborating with clients, partners, and communities to deliver innovative solutions to the world's most pressing problems.

## Croissance Clinical Research Africa

### Booth Number 311

<https://www.croissanceafrica.com>

Riverside Business Park ,

KISUMU BYPASS HIGHWAY

Opp. Nyanza Golf Club

Kisumu Nairobi 40100

Kenya

Satish Marukurthi

[ceo@croissancecr.com](mailto:ceo@croissancecr.com)

Croissance Clinical Research – Africa (CCR-A) is an African based Full Service Clinical Research Organization, having operational reach into Africa (Kenya, Tanzania, Rwanda, Mozambique, Madagascar) with fully functional offices in Kenya and Tanzania with full time Resources with local Regulatory understanding and Asia (India, Nepal, Malaysia).

CCR-A has been successfully offering services like Capacity building, Project Management, Clinical & Medical Monitoring, Medical writing, Quality Assurance, Regulatory Support, Data Management, Biostatistical Services to all mid-size and large-size Biotech and Pharma companies across the globe over a decade.

Croissance and its capable team is experienced in handling Phase I to IV, PMS, PMOS, IIS and Epidemiology studies with a large network of investigators in both public & private hospitals across India, Nepal, Africa, and Asia-Pacific region.

This development brings together a unique mix of scientists and researchers from Asia and Africa with deep multiple therapeutic areas and expertise, including Infectious diseases like Cholera, Dengue, Typhoid, Schistosomiasis, Chikungunya, MERS, etc., in Africa, while offering access to a diverse population for conducting large scale multi-geography trials efficiently and ethically safe that offers the highest possible quality with clean and accurate data, meeting international standards in efficient-cost effective manner, on time, every time.

## CTK Biotech

### Booth Number 208

<https://ctkbiotech.com>

13855 Stowe Dr

Poway, California 92064-6800

Shauna Parker-Clevenger

[info@ctkbiotech.com](mailto:info@ctkbiotech.com)

Based in San Diego County, California, CTK Biotech has been dedicated to developing and manufacturing high-quality diagnostic tools for the global market since 1999. Our user-friendly test kits are designed for diverse settings covering a range of diseases impacting markets from Latin America to Europe, Africa, and Asia.

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Since 2020, CTK has proudly become part of the SSI Diagnostica Group, enhancing our commitment to advancing innovative solutions for disease surveillance, diagnosis, and quality control in gastric, respiratory, and bloodborne diseases.

## DNDi and Médecins Sans Frontières (MSF)

### Booth Number 115

[dndi.org](https://dndi.org)

40 Rector St Fl 16  
New York, NY  
10006-1751  
(646) 215-7075  
Alondra Ruiz  
[aruiz@dndi.org](mailto:aruiz@dndi.org)

Doctors Without Borders/Médecins Sans Frontières (MSF) is a humanitarian aid organization that provides emergency medical care in over 70 countries around the world.

The Drugs for Neglected Diseases initiative (DNDi) is an international, not-for-profit research and development organization. We discover, develop, and deliver treatments for neglected patients around the world.

## Eck Institute for Global Health

### Booth Number 514

[globalhealth.nd.edu](https://globalhealth.nd.edu)

4147 Jenkins Nanovic Hall  
Notre Dame, Indiana 46556  
Katharyn Hutson  
[kathutson@nd.edu](mailto:kathutson@nd.edu)

The University of Notre Dame's Eck Institute for Global Health (EIGH) serves as a university-wide enterprise that recognizes health as a fundamental human right and works to promote research, training, and service to advance health standards and reduce health disparities for all. The EIGH brings together multidisciplinary teams to understand and address health challenges that disproportionately affect the poor and to train the next generation of global health leaders.

## Gideon Informatics Inc

### Booth Number 300

<https://www.gideononline.com>

8721 Santa Monica Blvd, Suite 234  
Los Angeles, CA 90069  
Kristina Symes  
[kristina@gideononline.com](mailto:kristina@gideononline.com)

GIDEON® (Global Infectious Diseases and Epidemiology Online Network) is your ultimate platform for all infectious diseases and epidemiology information. Known for its exhaustive content, GIDEON® is updated daily by a global team of medical scientists. The platform includes 300K+ expert-reviewed references, 100K+ surveys, 29K+ outbreaks, and much more. GIDEON® data, interactive tools, and dynamic analytics support top organizations like WHO, CDC, ECDC, and elite universities in 217 countries."

## Global Health Innovative Technology Fund (GHIT Fund)

### Booth Number 106

<https://www.ghitfund.org/en>

Ark Hills Sengokuyama, Mori Tower, 25F  
1-9-10 Roppongi  
Tokyo 1060032  
364412032  
Mina Ohata  
[mina.ohata@ghitfund.org](mailto:mina.ohata@ghitfund.org)

The Global Health Innovative Technology Fund (GHIT Fund) is a Japan-based international public-private partnership (PPP) fund that was formed between the Government of Japan, multiple pharmaceutical companies, the Bill & Melinda Gates Foundation, Wellcome, and the United Nations Development Programme (UNDP). The GHIT Fund invests in and manages an R&D portfolio of development partnerships aimed at addressing neglected diseases, such as malaria, tuberculosis, and neglected tropical diseases, which afflict the world's vulnerable and underserved populations. In collaboration with global partners, the GHIT Fund mobilizes Japanese industry, academia, and research institutes to create new drugs, vaccines, and diagnostics for malaria, tuberculosis, and neglected tropical diseases.

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## Global Health Labs, Inc (GH Labs)

**NETWORKING CONTRIBUTOR SPONSOR**

GH Labs innovates to reduce health disparities, especially in low- and middle-income countries. As a nonprofit corporation fully funded by Gates Ventures (the private office of Bill Gates), we partner with the Gates Foundation and other cross-sector leaders to develop health technology solutions for the people who need them most.

## Global Institute for Disease Elimination

**Booth Number 609**

<https://glideae.org>

Abu Dhabi Global Market, Maqam Tower  
PO box 76461  
United Arab Emirates  
Khadija Swaleh  
[kswaleh@glideae.org](mailto:kswaleh@glideae.org)

GLIDE is a global health institute based in Abu Dhabi that is focused on accelerating the elimination of eliminable infectious diseases such as malaria, polio, lymphatic filariasis, and river blindness by 2030 and beyond. It was founded in 2019 through a collaboration between His Highness Sheikh Mohamed bin Zayed Al Nahyan, President of the UAE, and the Bill & Melinda Gates Foundation. GLIDE works to increase awareness and engagement, strengthen capacity, and support operational research in the fight to consign these ancient diseases to the history books.

## GPEI

**Booth Number 221**

<https://hi5governance.ch/>

Michaela Told  
[michaela@hi5governance.ch](mailto:michaela@hi5governance.ch)

The Global Polio Eradication Initiative is a public-private partnership, spearheaded by national governments, WHO, Rotary International, the US Centers for Disease Control and Prevention, UNICEF, the Bill & Melinda Gates Foundation and Gavi, the Vaccine Alliance. Since its launch in 1988, this partnership has helped prevent more than 20 million cases of paralysis, prevented more than 1.5 million childhood deaths and reduced the incidence of polio by 99.9%. Its ultimate goal is to ensure no child is paralyzed by polio again.

## GSK plc

**Booth Number 101**

<https://www.gsk.com/en-gb>

GSK HQ, 79 New Oxford Street, London, WC1A 1DG,  
United Kingdom  
Mohammad Mahmudul Kabir  
[mohammad.m.kabir@gsk.com](mailto:mohammad.m.kabir@gsk.com)

GSK is a global biopharma company with a purpose to unite science, technology, and talent to get ahead of disease together. Our Global Health team is changing the trajectory of high burden diseases in lower-income countries with a focus on prevention and treatment of infectious diseases.

## Harvard School of Public Health

**Booth Number 112**

<https://www.hsph.harvard.edu/admissions/>

158 Longwood Ave  
Massachusetts, 02115-5810  
6174321041  
Charlie Dill  
[cdill@hsph.harvard.edu](mailto:cdill@hsph.harvard.edu)

### Our vision

Health, dignity, and justice for every human.

### Our mission

The Harvard T.H. Chan School of Public Health works to improve health and promote equity so all people can thrive.

Together, we:

DISCOVER | Research drivers of health, disease, and inequity and develop powerful solutions.

TEACH | Train creative leaders to identify, analyze, and tackle challenges to population health.

ENGAGE | Collaborate with policy makers, practitioners, and the public to drive meaningful change.

## HUMAN Gesellschaft Fuer Biochemica Und Diagnostica MbH

**Booth Number 312**

<https://www.human.de>

Max-Planck- Ring 21  
Wiesbaden Hessen 65205  
Juanita Schnaedelbach  
[j.schnaedelbach@human.de](mailto:j.schnaedelbach@human.de)

HUMAN has been a key player in the IVD industry for over 50 years. Our extensive and growing portfolio includes classical clinical chemistry, innovative molecular diagnostics, and specialized assays for autoimmunity testing. With global service capabilities,

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robust logistics, and a network of long-standing distributors, HUMAN supports medical laboratories worldwide and is a trusted partner for numerous governmental and non-governmental organizations.

We have local representatives in over 160 countries. Our products, developed in Germany to high-quality standards, are tailored to meet the needs of laboratories in developing regions. Committed to sustainability, HUMAN places a strong emphasis on environmental management to ensure a responsible and future-oriented approach in all our operations.

## IAMAT – International Association for Medical Assistance to Travellers

SUPPORTER

FSIMT/IAMAT  
202 – 10 Morrow Avenue  
Toronto, Ontario M6R 2J1 Canada  
[info@iamat.org](mailto:info@iamat.org)  
[www.iamat.org](http://www.iamat.org)  
@IAMAT\_Travel

IAMAT (International Association for Medical Assistance to Travellers), a division of the Foundation for the Support of International Medical Training, awards scholarships to doctors and nurses from countries where travel medicine is an emerging specialty. Our scholars introduce travel health services and improve health standards in their community, benefiting local patients and travellers. Since 1990, IAMAT/FSIMT has sponsored the annual Vincenzo Marcolongo Memorial Lecture in honor of its founder, a specialist in tropical medicine who dedicated his life to the health needs of travelers.

## InBios

**Booth Number 502**

<https://inbios.com>  
307 Westlake Ave N Ste 300  
Seattle, Washington 98109  
Meghan Flexner  
[meghanf@inbios.com](mailto:meghanf@inbios.com)

Since 1996, InBios has been a leader in the development of diagnostic tests for emerging infectious diseases and biothreats. Products are designed for superior performance, efficiency and value. These include many FDA market authorized and CE marked assays for arboviruses, parasitic infections, biothreats, and more. InBios continues to anticipate and serve the growing global public health demand. Products in the pipeline include next generation platforms for tick-borne and respiratory diseases.

## International Society of Travel Medicine

**Booth Number 605**

11720 Amber Park Dr  
Alpharetta, Georgia 30009-2275  
LaVelle Johnson  
[ljohnson@istm.org](mailto:ljohnson@istm.org)

The International Society of Travel Medicine (ISTM) is the leading global organization of clinically trained travel medicine specialists dedicating to promoting the healthy, safe, and responsible travel and movement of all people crossing borders.

## IVCC

SPONSORED SYMPOSIUM SPONSOR

**Booth Number 516**

<https://www.ivcc.com>  
Pembroke Place  
Liverpool L3 5QA  
United Kingdom  
Laura Roberts  
[laura.roberts@ivcc.com](mailto:laura.roberts@ivcc.com)

IVCC is a not-for-profit product development partnership dedicated to improving global health. We work to reduce the burden of vector-borne diseases by developing innovative vector control tools and strategies. We collaborate with industry, academia, and global health partners to deliver effective interventions, focusing on malaria elimination. Through investment in innovation, IVCC provides accessible, sustainable solutions to protect communities most affected by vector-borne diseases. For more information, visit [www.ivcc.com](http://www.ivcc.com).

## Johns Hopkins Bloomberg Sch of Public Health

**Booth Number 114**

750 E Pratt St Fl 14  
Baltimore, MD  
21202-3330  
(202) 669-2921  
Dayna Myers  
[dkerecm1@jhu.edu](mailto:dkerecm1@jhu.edu)

Global Health NOW, from the Johns Hopkins Bloomberg School of Public Health, is a smartly curated, easy-to-scan weekday newsletter that delivers essential news, exclusive commentaries, and original reporting on US and global public health to 50,000+ subscribers across 170 countries.



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## Kephera Diagnostics

**Booth Number 212**

<https://kephera.com>

1 Grant St Ste 300  
Farmington, Massachusetts  
01702-6767  
Andrew Levin

[alevin@kephera.com](mailto:alevin@kephera.com)

Kephera Diagnostics is a CLIA and CAP-certified laboratory specializing in diagnostic testing for emerging and neglected infectious diseases, including Chagas disease, neurocysticercosis, human liver fluke, and Lyme disease. Kephera's unique diagnostic offerings include the only comprehensive 3-test algorithm for Chagas disease diagnosis available in the U.S. outside CDC, in accordance with established guidelines that recommend parallel testing of samples on two or more tests, followed by a third test to resolve discrepancies. Kephera also offers the highly specific and sensitive triplex ELISA for neurocysticercosis, originally developed by NIAID's Laboratory of Parasitology. In addition, Kephera offers the first validated, commercial ELISA for *Clonorchis sinensis*, a human liver fluke associated with bile duct cancer. In the area of tick-borne diseases, Kephera offers the C6 ELISA either as a standalone test or as part of a Modified Two-Tier Testing protocol for Lyme disease. Our cutting-edge diagnostic tests ensure accuracy and reliability, supporting clinicians and researchers in patient care and the advancement of public health.

## London School of Hygiene and Tropical Medicine

**Booth Number 302**

[lshtm.ac.uk](http://lshtm.ac.uk)

London School of Hygiene & Tropical Medicine  
Keppel Street  
London, City of London WC1E 7HT  
Bex Davis

[Bex.Davis@lshtm.ac.uk](mailto:Bex.Davis@lshtm.ac.uk)

The London School of Hygiene & Tropical Medicine (LSHTM) is one of the world's leading public health universities. Its 3,500 staff and 4,700 students are working together to help create a more healthy, sustainable and equitable world for everyone. With main sites in London, The Gambia and Uganda, and an annual research income of £190 million, it is uniquely placed to make a tangible impact on people's lives through highly-rated research, postgraduate education and global networks. LSHTM's mission is to improve health and health equity in the UK and worldwide; working in partnership to achieve excellence in public and global health research, education and translation of knowledge into policy and practice.

We are committed to training future health leaders, managers and researchers across the world to take on the challenges of our time. Our research-led educational programmes in public and global health offer a stimulating and truly global outlook. We offer around 20 intensive master's programmes, 6 programmes by distance learning up to a master's qualification, 40 short courses and continuous professional development, and research degree programmes. Full of passion and curiosity, our students are a key part of our global network and mission to improve health worldwide.

## Medicines Development for Global Health

**Booth Number 215**

[www.medicinesdevelopment.com](http://www.medicinesdevelopment.com)

Lv1 18 Kavanagh St  
Southbank, Victoria 3006  
Australia  
Ben Wills

[ben.wills@medicinesdevelopment.com](mailto:ben.wills@medicinesdevelopment.com)

Medicines Development for Global Health is a not-for-profit pharmaceutical company focused on the development and manufacture of new medicines for neglected tropical diseases. Its portfolio includes moxidectin, FDA approved in 2018 for the treatment of river blindness in people aged 12 and older, and which is being investigated in several additional NTDs; and doxramilast, an investigational agent for leprosy type 2 reaction, and tuberculosis. It is a 501(c)(3) organisation in the United States.

## Medigen, Inc

**Booth Number 611**

[www.medigen-usa.com](http://www.medigen-usa.com)

8420 Gas House Pike Ste S  
Frederick, Maryland 21701  
Peter Pushko

[ppushko@medigen-usa.com](mailto:ppushko@medigen-usa.com)

Medigen, Inc. is a vaccine developer and Contract Manufacturing Organization (CMO) in Frederick, Maryland, USA. We specialize on GMP manufacturing of vaccines, viruses, and cell banks for Phase 1-2 clinical trials.

# 2024 Contributor, Exhibitor, Partner, Sponsor and Supporter Directory

## MMV Medicines for Malaria Venture

SPONSORED SYMPOSIUM SPONSOR

### Booth Number 309

[mmv.org](http://mmv.org)

[info@mmv.org](mailto:info@mmv.org)

MMV is a Swiss-based not-for-profit organization working to deliver a portfolio of accessible medicines with the power to treat, prevent and eliminate malaria. Born in 1999, out of a need for greater health equity, we close critical gaps in research, development and access – working “end-to-end” to expand the use of existing antimalarials and innovate new compounds to protect public health. This starts with women and children.

## Noul Co. Ltd.

### Booth Number 607

B-6F/10F, 338, Gwanggyojungang-ro

Republic of Korea

Taehwan Yoon

[deric@noul.com](mailto:deric@noul.com)

Noul addresses healthcare challenges with miLab™, a platform for diagnosing malaria, blood disorders, and cervical cancer. Using AI, miLab™ offers fast, accurate, and accessible diagnostics, even in resource-limited settings.

## The National Academies of Sciences, Engineering, and Medicine

### Booth 121

<https://www.nationalacademies.org/home>

2101 Constitution Ave., N.W.

Washington, DC 20418

Blain Bekele

[BBekele@nas.edu](mailto:BBekele@nas.edu)

The National Academies of Sciences, Engineering, and Medicine are private, nonprofit institutions that provide expert advice on some of the most pressing challenges facing the nation and world. Our work helps shape sound policies, inform public opinion, and advance the pursuit of science, engineering, and medicine.

Fellowships Office

The Fellowships Office administers predoctoral, postdoctoral, and senior fellowship awards on behalf of government and private/foundation sponsors. These fellowship awards play an important role in the career development of doctoral and postdoctoral researchers and scholars for the academic, federal, industrial, and international workforce.

## Novartis International AG

### Booth Number 301

[www.novartis.com](http://www.novartis.com)

Forum 1

Novartis Campus

Basel CH-4056 Switzerland

+41 613241111

Jenni Gray

[jenni.gray\\_ext@novartis.com](mailto:jenni.gray_ext@novartis.com)

Novartis is an innovative medicines company. Every day, we work to reimagine medicine to improve and extend people's lives so that patients, healthcare professionals and societies are empowered in the face of serious disease. Our medicines reach more than 250 million people worldwide.

## Panadea Diagnostics GmbH

### Booth Number 203

[www.panadea-diagnostics.com](http://www.panadea-diagnostics.com)

Bernhard-Nocht- Str. 74

Hamburg

Ben Rushton

[b.rushton@panadea-diagnostics.com](mailto:b.rushton@panadea-diagnostics.com)

A specialist provider of ELISA serology test kits for challenging pathogens, including hemorrhagic fever viruses and flaviviruses, notorious for cross-reactivity.

Panadea Diagnostics employs patented assay technology from the Bernhard-Nocht Institute for Tropical Medicine, which allows detection of IgG or IgM in a broad range of mammalian species, with the same kit, while retaining antibody class specificity. A further proprietary ‘Specificity Enhancer’ reagent is employed to suppress cross-reactivities and achieve highly specific IgG results in the most challenging populations.

## Rapigen

### Booth Number 210

<https://www.rapigen-inc.com>

161, Saneop-ro 155beon-gil

Gwonseon-Gu, Suwon-Si

Jimin Yu

[irenehan@rapigen.com](mailto:irenehan@rapigen.com)

Rapigen Inc. is dedicated to developing rapid diagnostics and delivering user-friendly products to over 54 countries worldwide. Since 2021, we have supplied rapid tests for COVID-19 and malaria across African, Asian, and Latin American markets through international organization's procurement and local distribution channels.

# 2024 Contributor, Exhibitor, Partner, Sponsor and Supporter Directory

## RTI International

### Booth Number 507

<https://www.rti.org/>

701 13th St NW Ste 750  
Washington, DC 20005  
Adria Kinney  
[akinney@rti.org](mailto:akinney@rti.org)

RTI International is both a global research institute and a leading international development organization. We combine these powerful capabilities with those of our partners to co-create smart, shared solutions for a more prosperous, equitable, and resilient world.

## Rotarians Against Malaria-Global Rotary Action Group

### Booth Number 417

[RAM-Global.org](http://RAM-Global.org)

357 Crystal Ln  
Carbondale, Colorado 81623-9416  
(303)601-6013  
Daniel Perlman  
[dperlman1@mac.com](mailto:dperlman1@mac.com)

RAM-Global, (Rotarians Against Malaria), Rotary Action Group, has chosen to take on the huge efforts of malaria elimination work world-wide. RAM-Global and our partner projects have proven that we can take down malaria in places where our assistance is desperately needed. Rotary International and The Rotary Foundation awarded the first ever Program of Scale to strengthen efforts to fight malaria in Zambia. We have partners around the world and have worked with RAM-Australia whose efforts have proven that malaria can be eliminated.

Our global grants continue to provide the tools and techniques Rotarians and Community Health Promoters (CHP) utilize in the battle against this deadly disease.

We encourage you to explore our website, listen to our videos, share in our successes, and allow your interests in malaria to expand and work with us to knock out this terrible disease.

## Royal Society of Tropical Medicine and Hygiene

### Booth Number 110

21 John Street  
Ground Floor, Office Suite 1  
WC1N 2BF  
Tamar Ghosh  
[tamar.ghosh@rstmh.org](mailto:tamar.ghosh@rstmh.org)

The Royal Society of Tropical Medicine and Hygiene (RSTMH) is a charity and membership society dedicated to improving tropical medicine and global health since 1907

Our ambition is to save lives and improve health around the world, through furthering our members careers and calling for change in policy, funding and research. We publish two scientific journals, provide early career grants, deliver in-person and virtual meetings, and provide guidance to our members, based in 100 countries.

## Science of Defeating Malaria: A Leadership Course

### Booth Number 610

[www.defeatingmalaria.harvard.edu](http://www.defeatingmalaria.harvard.edu)

665 Huntington Ave  
Boston, Massachusetts 02115  
Carmen Mejia  
[cmejia@hsph.harvard.edu](mailto:cmejia@hsph.harvard.edu)

"Science of Defeating Malaria" is an annual leadership development course organized by the Cheikh Anta Diop University of Dakar (UCAD) in Senegal, Harvard University in the USA, and the University of Health and Allied Sciences (UHAS) in Ghana.

## Sysmex

### Booth Number 613

577 Aptakisic Rd  
Lincolnshire, IL 60069  
Tammy Kutz  
[sysmexevents@sysmex.com](mailto:sysmexevents@sysmex.com)

Sysmex America, Inc. is a global leader in hematology diagnostics, offering a diverse portfolio of best-in-class clinical and research laboratory products in the U.S., Canada and Latin America. Sysmex offers innovative, automated solutions for hematology, hemostasis, urinalysis, flow cytometry, and informatics. Visit [www.sysmex.com/us](http://www.sysmex.com/us) for more information

## Takeda Singapore

SPONSOR

### Booth Number 500

Hyun Jin Kim  
[hyun-jin.kim@takeda.com](mailto:hyun-jin.kim@takeda.com)

Takeda is focused on creating better health for people and a brighter future for the world. We aim to discover and deliver life-transforming treatments in our core therapeutic and business areas, including gastrointestinal and inflammation, rare diseases, plasma-derived therapies, oncology, neuroscience and vaccines. [www.takeda.com](http://www.takeda.com)

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## TDR

SPONSORED SYMPOSIUM SPONSOR

### Booth Number 307

<https://tdr.who.int/>

Avenue Appia 20  
Geneva 27 1211  
Switzerland  
Makiko Kitamura

[kitamura@who.int](mailto:kitamura@who.int)

TDR, the Special Programme for Research and Training in Tropical Diseases, is a global programme of scientific collaboration that helps facilitate, support and influence efforts to combat diseases of poverty. It is co-sponsored by the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the World Bank and the World Health Organization (WHO).

## Tulane University - Department of Tropical Medicine and Infectious Disease

### Booth Number 315

<https://sph.tulane.edu/trmd/home>

1440 Canal St  
New Orleans, Louisiana 70112  
Daniella Fontana

[dfontanabermudez@tulane.edu](mailto:dfontanabermudez@tulane.edu)

The Department of Tropical Medicine and Infectious Disease at Tulane University's Celia Scott Weatherhead School of Public Health & Tropical Medicine, conducts basic and applied research in the fields of tropical medicine, parasitology, and applied population-based malaria evaluation research and educates students to address the clinical, laboratory, and evidence-based approaches to prevent and control tropical diseases.

## The Henry M. Jackson Foundation for the Advancement of Military Medicine

### Booth Number 410

[www.hjf.org](http://www.hjf.org)

6720A Rockledge Dr Ste 100  
Bethesda, Maryland 20817  
Dyneisha Herbert-Felder  
[dherbert-felder@hjff.org](mailto:dherbert-felder@hjff.org)

We are a global nonprofit organization serving as a vital link to develop partnerships, infrastructure, and expertise around the world to assist researchers solve complex challenges in global health.

## The MITRE Corp

### Booth Number 201

<https://www.mitre.org>

7525 Colshire Dr  
McLean, Virginia 22102-7539  
Victoria Gammino  
[Vgammino@mitre.org](mailto:Vgammino@mitre.org)

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through public-private industry partnerships and six federally funded research and development centers (FFRDCs) that we operate, we work across government to tackle challenges to the safety, stability, and well-being of our nation.

## United to Beat Malaria/RBM/Vestergaard

SPONSORED SYMPOSIUM SPONSOR

### Booth Number 220

top by the advocacy and communications hub with United to Beat Malaria, in partnership with Vestergaard, and utilize your voice to shape the Next Chapter of Progress in the malaria fight. Explore an interactive StoryMap to check out stories about community-driven malaria innovations and partnerships; take U.S. based and global advocacy actions; and spread the word across social media through interactive activities. Join us in the fight against malaria today.

## University of Minnesota, Medical School

### Booth Number 213

<https://med.umn.edu/dom/education/global-medicine>

401 E River Pkwy  
Minneapolis, Minnesota  
55455-0368  
(612) 220-6264  
Sarah Sponsler  
[radic011@umn.edu](mailto:radic011@umn.edu)

University of Minnesota Department of Medicine Global Medical Education is committed to improving the health of individuals and communities globally. We are engaged in global health teaching, research, and clinical care which is values based and which improves the health of individuals and communities. We offer a wide range of courses, in-person and online, to meet your educational needs including: CTropMed and DTM&H Certification training/preparation, our Global Health Course, Asian Clinical Tropical Medicine Course, and Interactive Case learning.

# 2024 Contributor, Exhibitor, Partner, Sponsor and Supporter Directory

## University of Texas Medical Branch

### Booth Number 415

<https://www.utmb.edu/ctd/home>

301 University Blvd  
Mailroute 0435  
Galveston, Texas 77555-5302  
Peter Melby  
[pcmelby@utmb.edu](mailto:pcmelby@utmb.edu)

## University of Oxford

### Booth Number 104

<https://www.tropicalmedicine.ox.ac.uk>

140 Sheerstock  
Buckinghamshire  
HP17 8EX  
Claire-Lise Kessler  
[claire.escherkessler@ndm.ox.ac.uk](mailto:claire.escherkessler@ndm.ox.ac.uk)

The Centre for Tropical Medicine and Global Health, University of Oxford, is a network of research centres based in Oxford UK, Africa and Southeast Asia. Aiming to tackle infectious diseases, our research ranges from basic research and diagnostics development to drug discovery, clinical trials and implementation, with capacity building integral to all our activities.

## Valneva USA Inc.

### Booth Number 108

2300 Sycamore Rd  
Pennsylvania 17408-4132  
Jason Stover  
[jason.stover@valneva.com](mailto:jason.stover@valneva.com)

We are a specialty vaccine company that develops, manufactures, and commercializes prophylactic vaccines for infectious diseases addressing unmet medical needs. Our vision is to contribute to a world where no one dies or suffers from a vaccine-preventable disease.

## VecTech

### Booth Number 111

<https://www.vectech.io/>

3600 Clipper Mill Rd Ste 205  
Maryland  
21211-1955  
4102206146  
Tristan Ford  
[tristan@vectech.io](mailto:tristan@vectech.io)

VecTech is a Public Benefit Corporation based in Baltimore, Maryland, specializing in AI solutions for pest identification and monitoring. The company was founded in response to the Zika

epidemic to improve the availability of entomological data for mosquito control and other vector-borne disease management. Vectech's products are designed to help pest control organizations and public health agencies achieve better outcomes through AI-driven identification of mosquito and tick species, helping to reduce the spread of diseases like malaria and dengue.

## WRAIR

### Booth Number 406

[wrair.health.mil](http://wrair.health.mil)

503 Robert Grant Ave  
Silver Springs, Maryland 20910  
Shemeeka Rice  
[shemeeka.m.rice.ctr@health.mil](mailto:shemeeka.m.rice.ctr@health.mil)

The Walter Reed Army Institute of Research is the largest biomedical research facility administered by the DOD and the oldest research institution in the Army. Across the globe, WRAIR works with civilian researchers, medical professionals, and military members to develop and test products to reduce the impact of infectious diseases. Additionally, WRAIR conducts basic and applied research that promotes psychological resilience, enhances neurological functioning, and improve Warfighter readiness.

## Xpedite Diagnostics

### Booth Number 113

[www.xpedite-dx.com](http://www.xpedite-dx.com)

Lilienthalstr. 2a  
85399  
491738659307  
Stephen HENNART  
[Stephen.Hennart@xpedite-dx.com](mailto:Stephen.Hennart@xpedite-dx.com)

When you can't perform a PCR point of care, its usually because the DNA from the sample needs to be extracted using heavy machinery and multi steps protocols in a laboratory. Xpedite Diagnostics GmbH revolutionizes disease diagnostics by bringing molecular diagnostics at the point-of-care. We are closing the gap with a new DNA/RNA extraction technology called "Reverse Purification". Our protocols are 1 or 2 step, and take 5 to 15 minutes, without any dangerous goods.

## Wednesday, November 13

### Nursing Mothers Room

Convention Center – Office I120 and Office J121 (1st Floor)  
Wednesday, November 13, 7 a.m. - 7 p.m.

### Prayer Room

Convention Center - Room 342 (3rd Floor)  
Wednesday, November 13, 8 a.m. - 7 p.m.

### Medical Entomology (ACME) Pre-Meeting Course: Medical Entomology for the Public Health Practitioner and Clinician

Offsite at Tulane University  
Wednesday, November 13, 7:30 a.m. - 4 p.m.

#### COURSE ORGANIZERS

Berlin L. Londono  
Tulane University, New Orleans, LA, United States

Sarah R. Michaels  
Tulane University, New Orleans, LA, United States

Maria Luisa Simoes  
Institute of Tropical Medicine Antwerp, Antwerp, Belgium

**7:30 a.m.**  
COFFEE AND LIGHT REFRESHMENTS

**8 a.m.**  
WELCOME AND OVERVIEW OF THE COURSE - INTRODUCTION  
TO ARTHROPOD-BORNE DISEASES

Ronald E. Blanton  
Tulane University, School of Public Health and Tropical Medicine, New Orleans, LA, United States

Sarah R. Michaels  
Tulane University, New Orleans, LA, United States

Adriana Troyo  
University of Costa Rica, San Pedro, San José, Costa Rica

**8:30 a.m.**  
CLINICAL AND DIAGNOSTIC TOOLS FOR FLEA- AND TICK-BORNE  
DISEASES

Adriana Troyo  
University of Costa Rica, San Pedro, San José, Costa Rica

**9 a.m.**  
MALARIA: EMERGING TECHNOLOGY AND MOSQUITO VECTORS

Maria Luisa Simoes  
Institute of Tropical Medicine Antwerp, Antwerp, Belgium

**9:30 a.m.**  
ARBOVIRAL DISEASE: IMMUNOLOGY, CLINICAL DIAGNOSTICS  
AND MOSQUITO VECTORS

Berlin L. Londono  
Tulane University, New Orleans, LA, United States

**10 a.m.**  
CHAGAS DISEASE: PHYSICIAN OUTREACH AND KISSING BUGS

Claudia Herrera Bernal  
Tulane University, School of Public Health and Tropical Medicine, New Orleans, LA, United States

**10:30 a.m.**  
COFFEE BREAK

**10:45 a.m.**  
LABORATORY IDENTIFICATION OF INSECTS AND ARTHROPODS  
OF MEDICAL IMPORTANCE

Brian Byrd  
Western Carolina University, Cullowhee, NC, United States

Megan E. Saunders  
California Department of Public Health, Richmond, CA, United States

**Noon**  
LUNCH (LUNCH PROVIDED)

**12:45 p.m.**  
FIELD SITE VISIT IN HISTORIC NEW ORLEANS CEMETERY

Emily A. Ford  
Oak & Laurel Cemetery Preservation, LLC, New Orleans, LA, United States

Catherine A. Pruszyński  
Florida Keys Mosquito Control, Key West, FL, United States

Katie Westby  
Tyson Research Center, Washington University in St. Louis, Eureka, MO, United States

**2:30 p.m.**  
CLINICAL CASE STUDIES: DIAGNOSIS, PROPHYLAXIS AND  
PREVENTION OF VECTOR-BORNE DISEASE

John Carlson  
Tulane School of Medicine, New Orleans, LA, United States

**3:30 p.m.**  
QUESTION AND ANSWER SESSION AND COURSE WRAP-UP

### Registration

Convention Center - Lobby I (1st Floor)  
Wednesday, November 13, 8 a.m. - 7:30 p.m.

### Young Investigator Award Sessions

**Supported with funding from William A. Petri, Jr. in memory  
of William A. Petri Sr.**

**All individuals who made a donation during registration and  
throughout the year.**

The Young Investigator Award is presented to outstanding young researchers during the Annual Meeting. This award encourages developing young scientists to pursue careers in various aspects of tropical disease research. Support these young scientists by attending their presentations during these sessions.

## Young Investigator Award Session A

Convention Center - Room 343/344 (3rd Floor)  
Wednesday, November 13, 9 a.m. - 2 p.m.

### JUDGE

Lauren Cohee

University of Maryland, Baltimore, MD, United States

Rebecca SB Fischer

Texas A&M University, College Station, TX, United States

Peter Melby

University of Texas Medical Branch, Galveston, TX, United States

Katherine Torres

Universidad Peruana Cayetano Heredia, Lima, Peru

6062

### GENOMIC EPIDEMIOLOGY OF ARBOVIRUSES REVEALS NEW VIRUS INTRODUCTIONS AND SIMULTANEOUS VIRUS CIRCULATION DURING DENGUE AND CHIKUNGUNYA OUTBREAKS IN BRAZIL

Livia Sacchetto<sup>1</sup>, Beatriz Marques<sup>1</sup>, Victoria Bernardi<sup>1</sup>, Victor Hernandez<sup>1</sup>, Igor Teixeira<sup>1</sup>, Andreia Negri<sup>2</sup>, Nikos Vasilakis<sup>3</sup>, Mauricio Nogueira<sup>1</sup>

<sup>1</sup>Faculdade de Medicina de Sao Jose do Rio Preto, Sao Jose do Rio Preto, Brazil, <sup>2</sup>Departamento de Vigilância Epidemiológica, Sao Jose do Rio Preto, Brazil, <sup>3</sup>The University of Texas Medical Branch, Galveston, TX, United States

6312

### NEUTROPHIL MEDIATORS LINKED TO TIGHT JUNCTION DISRUPTION AND INCREASED INTESTINAL PERMEABILITY IN SEVERE DENGUE

Andrew Teo<sup>1</sup>, Po Ying Chia<sup>2</sup>, Tsin Wen Yeo<sup>1</sup>

<sup>1</sup>Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore, Singapore, <sup>2</sup>National Centre for Infectious Diseases, Singapore, Singapore

6328

### FIRST EVALUATION OF MOLECULAR AND PATHOGEN GENOMIC IMPACT ON *P. FALCIPARUM* POPULATION FOLLOWING SEASONAL MASS DRUG ADMINISTRATION WITH DIHYDROARTEMISININ-PIPERAQUINE IN A HIGH TRANSMISSION HIGHLY SEASONAL SETTING IN WEST AFRICA

David McGregor

London School of Hygiene and Tropical Medicine, London, United Kingdom

6366

### DIHYDROARTEMISININ-PIPERAQUINE AS AN ALTERNATIVE TO SULFADOXINE-PYRIMETHAMINE FOR INTERMITTENT PREVENTIVE TREATMENT IN PREGNANCY: A META-ANALYSIS OF MATERNAL, BIRTH, AND INFANT OUTCOMES

Michelle E. Roh<sup>1</sup>, Julie Gutman<sup>2</sup>, Mywayiwawo Madanitsa<sup>3</sup>, Abel Kakuru<sup>4</sup>, Hellen C. Barsosio<sup>5</sup>, Simon Kariuki<sup>5</sup>, John Lusingu<sup>6</sup>, Frank Mosha<sup>7</sup>, Richard Kajubi<sup>4</sup>, Moses R. Kanya<sup>8</sup>, Don Mathanga<sup>9</sup>, Jobiba Chinkhumba<sup>10</sup>, Miriam K. Laufer<sup>11</sup>, Eulambius Mlugu<sup>12</sup>, Appollinary A.R. Kamuhabwa<sup>13</sup>, Eleni Akillu<sup>14</sup>, Omary Minzi<sup>15</sup>, Roland Nnaemeka Okoro<sup>15</sup>, Ado Danazumi Geidam<sup>16</sup>, John David Ohieku<sup>15</sup>, Jenny Hill<sup>17</sup>, Meghna Desai<sup>2</sup>, Prasanna Jagannathan<sup>18</sup>, Grant Dorsey<sup>19</sup>, Feiko O. ter Kuile<sup>17</sup>

<sup>1</sup>Institute for Global Health Sciences, University of California, San Francisco, San Francisco, CA, United States, <sup>2</sup>Malaria Branch, Division of Parasitic Diseases and Malaria, Centers for Disease Control and Prevention (CDC), Atlanta, GA, United States, <sup>3</sup>School of Global and Public Health, Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>4</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>5</sup>Kenya Medical Research Institute, Centre for Global Health Research, Kisumu, Kenya, <sup>6</sup>National Institute for Medical Research (NIMR), Tanga Medical Research Centre, Tanga, United Republic of Tanzania, <sup>7</sup>Kilimanjaro Christian Medical Centre, Moshi, United Republic of Tanzania, <sup>8</sup>School of Medicine, Makerere University College of Health Sciences, Kampala, Uganda, <sup>9</sup>Malaria Alert Center, College of Medicine, University of Malawi, Blantyre, Malawi, <sup>10</sup>Department of Health Systems and Policy, School of Global and Public Health, Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>11</sup>Center for Vaccine Development and Global Health, University of Maryland

School of Medicine, Baltimore, MD, United States, <sup>12</sup>Department of Pharmaceutics, School of Pharmacy, Muhimbili University of Health and Allied Sciences, Dar es Salaam, United Republic of Tanzania, <sup>13</sup>Department of Clinical Pharmacy and Pharmacology, School of Pharmacy, Muhimbili University of Health and Allied Sciences, Dar es Salaam, United Republic of Tanzania, <sup>14</sup>Department of Global Public Health, Karolinska Institute, Karolinska University Hospital, Stockholm, Sweden, <sup>15</sup>Department of Clinical Pharmacy and Pharmacy Administration, Faculty of Pharmacy, University of Maiduguri, Maiduguri, Nigeria, <sup>16</sup>Department of Obstetrics and Gynaecology, University of Maiduguri Teaching Hospital, Maiduguri, Nigeria, <sup>17</sup>Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>18</sup>Department of Medicine, Stanford University, Stanford, CA, United States, <sup>19</sup>Department of Medicine, University of California, San Francisco, San Francisco, CA, United States

6523

### ASSOCIATION OF GUT REDOX POTENTIAL WITH SEVERE ACUTE MALNUTRITION AND STUNTING IN HOSPITALIZED CHILDREN

Md. Shabab Hossain

International Centre for Diarrhoeal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh

6615

### HIV MORTALITY TRENDS AMONG THE UNITED STATES POPULATION, FROM 1999-2023: A CDC WONDER DATABASE STUDY

Muhammad Sohaib Asghar<sup>1</sup>, Abuoma Cherry Ekpendu<sup>1</sup>, Nisar Ahmed<sup>2</sup>, Zain Khalid<sup>3</sup>, Luis Angel Duharte-Vidaurre<sup>1</sup>, Chad Kelly Brands<sup>1</sup>

<sup>1</sup>AdventHealth Sebring, Sebring, FL, United States, <sup>2</sup>Rapido Clinica Familiar, Chicago, IL, United States, <sup>3</sup>University of Kentucky, Lexington, KY, United States

6617

### THE PREVALENCE OF CRYPTOCOCCAL ANTIGENEMIA AMONG PATIENTS WITH ADVANCED HIV DISEASES IN SOUTHWEST AND NORTHCENTRAL NIGERIA

Justin Onyebuchi Nwofe, Mary Onyenike, Adeola Awolola, Olabamiji Osho, Patrick Okonkwo, Daniel Offie, Emmanuel Ojo, Femi Emmanuel Owolagba, Eke Ofuche, Jay Samuels

APIN Public Health Initiatives, Abuja, Nigeria

6624

### EXPLORING HISTOPLASMOSIS IN NON-ENDEMIC AREAS: COMPARATIVE ANALYSIS OF CLINICAL FEATURES, RISK FACTORS, AND OUTCOME OF HISTOPLASMOSIS IN HIV-POSITIVE AND HIV-NEGATIVE COHORTS IN WESTERN INDIA

Akshatha Ravindra<sup>1</sup>, Deepak Kumar<sup>1</sup>, Santhanam Naguthevar<sup>1</sup>, Abhishek G P<sup>2</sup>, Gopal Krishana Bohra<sup>1</sup>

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7275

### PLASMODIUM KNOWLESII INFECTION IS ASSOCIATED WITH ELEVATED CIRCULATING BIOMARKERS OF BRAIN INJURY AND ENDOTHELIAL ACTIVATION

Cesc Bertran Cobo<sup>1</sup>, Elin Dumont<sup>1</sup>, Naqib Rafieqin Noordin<sup>2</sup>, Meng-Yee Lai<sup>2</sup>, William Stone<sup>1</sup>, Kevin Tetteh<sup>1</sup>, Chris Drakeley<sup>1</sup>, Sanjeev Krishna<sup>3</sup>, Yee-Ling Lau<sup>2</sup>, Samuel C. Wassmer<sup>1</sup>

<sup>1</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom, <sup>2</sup>Universiti Malaya, Kuala Lumpur, Malaysia, <sup>3</sup>St George's University of London, London, United Kingdom

7398

### SARS-COV-2 EXPOSURE BEFORE OR AFTER PLASMODIUM VIVAX INFECTION EXACERBATES THE HUMORAL RESPONSE AGAINST THE LATTER

Alonso Cruz-Echevarria<sup>1</sup>, Katherine Garro<sup>1</sup>, Françoise Donnadieu<sup>2</sup>, Joseph Vinetz<sup>3</sup>, Stéphane Pelleau<sup>2</sup>, Dionicia Gamboa<sup>4</sup>, Michael White<sup>2</sup>, Katherine Torres<sup>1</sup>

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7408

### PREVALENCE OF PLASMODIUM FALCIPARUM INFECTION AMONG CHILDREN HOSPITALIZED WITH ACUTE RESPIRATORY ILLNESS IN WESTERN UGANDA

Elise R. King<sup>1</sup>, Ronnie Ndizeye<sup>2</sup>, Emmanuel Baguma<sup>2</sup>, Georget Kibaba<sup>2</sup>, Ross Boyce<sup>1</sup>, Edgar M. Mulogo<sup>2</sup>, Emily Ciccone<sup>1</sup>  
<sup>1</sup>UNC Chapel Hill, Chapel Hill, NC, United States, <sup>2</sup>Mbarara University of Science & Technology, Mbarara, Uganda

7579

### DENGUE VIREMIA KINETICS AND THE EFFECTS ON PLATELET COUNT AND CLINICAL OUTCOMES

Nguyen L. Vuong<sup>1</sup>, Nguyen T. H. Quyen<sup>1</sup>, Nguyen T. H. Tien<sup>1</sup>, Duong T. H. Kien<sup>1</sup>, Huynh T. L. Duyen<sup>1</sup>, Phung K. Lam<sup>1</sup>, Dong T. H. Tam<sup>1</sup>, Tran V. Ngoc<sup>2</sup>, Thomas Jaenisch<sup>3</sup>, Cameron P. Simmons<sup>4</sup>, Sophie Yacoub<sup>1</sup>, Bridget A. Wills<sup>1</sup>, Ronald B. Geskus<sup>1</sup>  
<sup>1</sup>Oxford University Clinical Research Unit, Ho Chi Minh City, Vietnam, <sup>2</sup>Hospital for Tropical Diseases, Ho Chi Minh City, Vietnam, <sup>3</sup>Center for Global Health, Colorado School of Public Health, Aurora, CO, United States, <sup>4</sup>World Mosquito Program, Monash University, Monash, Australia

7659

### ASCARIASIS, TRICHURIASIS AND INTESTINAL HOOKWORM INFECTIONS - CLINICAL PRESENTATION AND ASSOCIATION WITH INTERNATIONAL TRAVEL

Elena Marie Crecelius<sup>1</sup>, Patrick Hickey<sup>2</sup>, Alison Helfrich<sup>2</sup>  
<sup>1</sup>Walter Reed National Military Medical Center, Bethesda, MD, United States, <sup>2</sup>Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8083

### APPLICATION OF THE RAPID DIAGNOSTIC TEST BASED ON LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (RLDT) FOR SHIGELLA AND ENTEROTOXIGENIC ESCHERICHIA COLI (ETEC) DETECTION IN CHILDHOOD DIARRHEA IN BURKINA FASO

Alimatou Héma<sup>1</sup>, Samuel S. Sermé<sup>1</sup>, Jean W. Sawadogo<sup>1</sup>, Amidou Diarra<sup>1</sup>, Amidou Z. Ouédraogo<sup>1</sup>, Issa Nébié<sup>1</sup>, Alfred B. Tiono<sup>1</sup>, Sophie Houard<sup>2</sup>, Subhra Chakraborty<sup>3</sup>, Alphonse Ouédraogo<sup>1</sup>, Sodiomon B. Sirima<sup>1</sup>  
<sup>1</sup>Groupe de Recherche Action en Santé (GRAS), Ouagadougou, Burkina Faso, <sup>2</sup>European Vaccine Initiative (EVI), Heidelberg, Germany, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, Baltimore, WA, United States

## Young Investigator Award Session B

Convention Center - Room 345 (3rd Floor)  
Wednesday, November 13, 9 a.m. – 2 p.m.

### JUDGE

Silvia Di Santi  
USP, Sao Paulo, Brazil

Pedro Gazzinelli-Guimaraes  
The George Washington University, Washington, DC, United States

Kirsten E. Lyke  
Center for Vaccine Development, University of Maryland, Baltimore, MD, United States

Hugues Clotaire Nana Djeunga  
University of Yaounde I, Yaounde, Cameroon

6295

### CROSS-NEUTRALIZING ANTIBODY RESPONSES ELICITED BY THE CHIKUNGUNYA VACCINE VLA1553

Whitney C. Weber<sup>1</sup>, Zachary J. Streblow<sup>1</sup>, Craig N. Kreklywich<sup>1</sup>, Michael Denton<sup>1</sup>, Gauthami Sulgey<sup>1</sup>, Magdalene M. Streblow<sup>1</sup>, Dorca Marcano<sup>2</sup>, Paola N. Flores<sup>2</sup>, Rachel M. Rodriguez-Santiago<sup>2</sup>, Luisa Alvarado<sup>2</sup>, Vanessa Rivera-Amill<sup>2</sup>, William B. Messer<sup>3</sup>, Romana Hochreiter<sup>4</sup>, Karin Kosulin<sup>4</sup>, Katrin Dubischar<sup>4</sup>, Vera Bürger<sup>4</sup>, Daniel N. Streblow<sup>1</sup>  
<sup>1</sup>Oregon Health and Science University, Beaverton, OR, United States, <sup>2</sup>Ponce Health Sciences University, Ponce, Puerto Rico, <sup>3</sup>Oregon Health and Science University, Portland, OR, United States, <sup>4</sup>Valneva Austria GmbH, Vienna, Austria

6442

### BONE VOYAGE: HOW PLASMODIUM INFECTION DISRUPTS THE PLASMA CELL MICROENVIRONMENT IN THE BONE MARROW

Elizabeth Fusco, Alexander R. Maldeney, Layne Bower, Wei Luo, Nathan W. Schmidt  
Indiana University School of Medicine, Indianapolis, IN, United States

6504

### SINGLE IMMUNIZATION WITH GENETICALLY ATTENUATED PLASMODIUM FALCIPARUM ΔMEI2 (GA2) SPOROZOITES INDUCES HIGH LEVEL PROTECTION AGAINST A CONTROLLED HUMAN MALARIA INFECTION

Geert V.T. Roosen, Roos van Schuijlenburg, Annefleer D.O. Hensen, Jan Pieter R. Koopman, Olivia A.C. Lamers, Fiona J.A. Geurten, Jeroen C. Sijtsma, Els Baalbergen, Jacqueline J. Janse, Séverine C. Chevalley-Maurel, Chanel M. Naar, Sascha Bezemer, Hans Kroeze, Huybert J.F. van de Stadt, Abraham de Visser, Pauline Meij, Mara S. Tihaya, Emil D. Colstrup, Eva Iliopoulou, Helena M. de Bes-Roeleveld, Els Wessels, M.Y. Eileen C. van der Stoep, Chris J. Janse, Rajagopal A. Murugan, Blandine Franke-Fayard, Meta Roestenberg  
Leiden University Medical Center, Leiden, Netherlands

6857

### TRANSPLACENTAL TRANSFER OF FUNCTIONAL ANTIBODIES DIRECTED AGAINST PLASMODIUM FALCIPARUM BLOOD STAGE ANTIGENS

Djellili Biaou<sup>1</sup>, Aziz Bouraïma<sup>2</sup>, Ibrahim Sadissou<sup>2</sup>, David Courtin<sup>1</sup>, Andre Garcia<sup>1</sup>, Florence Migot-Nabias<sup>1</sup>, Achille Massougboji<sup>3</sup>, Michael Theisen<sup>4</sup>, Sébastien Dechavanne<sup>1</sup>, Celia Dechavanne<sup>1</sup>  
<sup>1</sup>Affiliation 1: Université de Paris, Institut de Recherche pour le Développement (IRD), UMR 261 MERIT, Paris France. Affiliation 2: CERPAGE (Centre d'Etude et de Recherche sur les Pathologies Associées à la Grossesse et à l'Enfance), Cotonou, Benin, <sup>2</sup>CERPAGE (Centre d'Etude et de Recherche sur les Pathologies Associées à la Grossesse et à l'Enfance), Cotonou, Benin, <sup>3</sup>Institut de Recherche Clinique du Bénin (IRCB), Cotonou, Benin, <sup>4</sup>Centre for Medical Parasitology at Department of International Health, Immunology and Microbiology, University of Copenhagen and Department for Congenital Disorders, Statens Serum Institut, Copenhagen, Denmark

6858

### ANTIBODY FC GLYCOSYLATION MODULATES NATURAL KILLER CELL-MEDIATED ADCC IN MALARIA-EXPOSED PREGNANT WOMEN

Savannah N. Lewis<sup>1</sup>, Adam S. Kiro Singh<sup>1</sup>, Kattria van der Ploeg<sup>1</sup>, Kathleen D. Press<sup>1</sup>, Felistas Namirimu Nankya<sup>2</sup>, Kenneth Musinguzi<sup>2</sup>, Evelyn Nansubuga<sup>2</sup>, Stephen Tukwasibwe<sup>2</sup>, Mary Lopez-Perez<sup>3</sup>, Moses R. Kanya<sup>2</sup>, Philip Rosenthal<sup>4</sup>, Grant Dorsey<sup>4</sup>, Lars Hviid<sup>3</sup>, Prasanna Jagannathan<sup>1</sup>  
<sup>1</sup>Stanford University School of Medicine, Stanford, CA, United States, <sup>2</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>3</sup>University of Copenhagen, Copenhagen, Denmark, <sup>4</sup>University of California, San Francisco, San Francisco, CA, United States



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### CHRONIC *PLASMODIUM* INFECTIONS CAUSE PERSISTENT CHANGES IN THE HOST IMMUNOLOGICAL LANDSCAPE

Saniya S. Sabnis<sup>1</sup>, Celia L. Saney<sup>1</sup>, Monica Cabrera-Mora<sup>2</sup>, The MaHPIC Consortium –, Ignacio Sanz<sup>2</sup>, F. Eun-Hyung Lee<sup>2</sup>, Jessica C. Kissinger<sup>1</sup>, Regina Joice-Cordy<sup>3</sup>, Alberto Moreno<sup>2</sup>, Tracey J. Lamb<sup>4</sup>, Mary R. Galinski<sup>2</sup>, Chester J. Joyner<sup>1</sup>

<sup>1</sup>University of Georgia, Athens, GA, United States, <sup>2</sup>Emory University, Atlanta, GA, United States, <sup>3</sup>Wake Forest University, Winston-Salem, NC, United States, <sup>4</sup>University of Utah, Salt Lake City, UT, United States

6862

### IMMUNO-INFORMATIC APPROACH TO IDENTIFYING VARIANT-TRANSCENDENT NATURALLY-ACQUIRED PROTECTION AGAINST *PLASMODIUM FALCIPARUM*

Katherine Chew, Steve Taylor, Wendy O'Meara, Christine Markwalter  
Duke University, Durham, NC, United States

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### HUMAN *IN VITRO* MODELING CHARACTERIZES MECHANISM OF ACTION OF ADJUVANTATION SYSTEMS DEFINING SCALABLE AND AFFORDABLE PRECISION VACCINE FORMULATIONS FOR EARLY CHILDHOOD

Sanya Thomas, Caitlin Syphurs, Kevin Ryff, Simon Doss-Gollin, Kayla Lesch, Ofer Levy, Joann Arce, Simon van Haren  
Boston Children's Hospital, Boston, MA, United States

7334

### DEVELOPMENT OF VACCINE CANDIDATES AGAINST PLACENTAL MALARIA USING PEPTIDE-DECORATED ANTIGENIC LIPOSOMES

Payton LeBlanc  
University of Alberta, Edmonton, AB, Canada

7347

### AMA1-SPECIFIC HUMAN MONOCLONAL ANTIBODIES INHIBIT *PLASMODIUM VIVAX* PRE-ERYTHROCYTIC AND BLOOD STAGE INFECTION

Anna C. Winnicki<sup>1</sup>, Melanie H. Dietrich<sup>2</sup>, Lee M. Yeoh<sup>3</sup>, Lenore L. Carias<sup>1</sup>, Wanlapa Roobsoong<sup>4</sup>, Chiara L. Drago<sup>3</sup>, Alyssa N. Malachin<sup>1</sup>, Karli R. Redinger<sup>1</sup>, Lionel Brice Feufack-Donfack<sup>5</sup>, Payton Kirtley<sup>6</sup>, Maya Aleshnick<sup>6</sup>, Lea Baldor<sup>5</sup>, Nicolai C. Jung<sup>5</sup>, Olivia S. McLaine<sup>1</sup>, Yelenna Skomorovska-Prokvolit<sup>1</sup>, Agnes Orban<sup>5</sup>, D. Herbert Opi<sup>3</sup>, Jetsumon Sattabongkat<sup>4</sup>, Wai-Hong Tham<sup>2</sup>, Jean Popovici<sup>2</sup>, Ashley M. Vaughan<sup>7</sup>, Brandon K. Wilder<sup>6</sup>, James G. Beeson<sup>3</sup>, Jurgen Bosch<sup>1</sup>, Christopher L. King<sup>1</sup>

<sup>1</sup>Case Western Reserve University, Cleveland, OH, United States, <sup>2</sup>Walter and Eliza Hall Institute, Melbourne, Australia, <sup>3</sup>Burnet Institute, Melbourne, Australia, <sup>4</sup>Mahidol University, Bangkok, Thailand, <sup>5</sup>Institut Pasteur du Cambodge, Phnom Penh, Cambodia, <sup>6</sup>Vaccine & Gene Therapy Institute, Oregon Health & Science University, Hillsboro, OR, United States, <sup>7</sup>Center for Global Infectious Disease Research, Seattle Children's Research Institute, Seattle, OH, United States

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### TRANSMIGRATION OF MATERNAL MONOCYTES AND FETAL MACROPHAGES IN RESPONSE TO ACTIVE VERSUS PAST PLACENTAL MALARIA AND ASSOCIATIONS WITH BIRTH WEIGHT

Nida Ozarslan<sup>1</sup>, Johnie Ategeka<sup>2</sup>, Corina Mong<sup>1</sup>, Christine Blauvelt<sup>1</sup>, Jimmy Kizza<sup>2</sup>, Abel Kakuru<sup>2</sup>, Moses R. Kanya<sup>2</sup>, Philip J. Rosenthal<sup>1</sup>, Prasanna Jagannathan<sup>3</sup>, Grant Dorsey<sup>1</sup>, Stephanie L. Gaw<sup>1</sup>

<sup>1</sup>University of California, San Francisco, San Francisco, CA, United States, <sup>2</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>3</sup>Stanford University, Stanford, CA, United States

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### STRUCTURE GUIDED DESIGN OF A MRNA VACCINE TARGETING APICAL MEMBRANE ANTIGEN 1 IN *P. FALCIPARUM*

Sean Yanik<sup>1</sup>, Varsha Venkatesh<sup>1</sup>, Deepti Sarkar<sup>1</sup>, Kazutoyo Miura<sup>2</sup>, Carole Long<sup>2</sup>, Martin Boulanger<sup>3</sup>, Prakash Srinivasan<sup>1</sup>

<sup>1</sup>Johns Hopkins, Baltimore, MD, United States, <sup>2</sup>NIH, Bethesda, MD, United States, <sup>3</sup>University of Victoria, Victoria, BC, Canada

8430

### DIFFERENT MICRORNA PROFILES IN THE CIRCULATING CD4+T CELLS ARE ASSOCIATED WITH DIFFERENT CLINICAL PRESENTATIONS OF *LEISHMANIA DONOVANI* INFECTION

RITIRUPA ROY<sup>1</sup>, Cinthia Hudachek<sup>2</sup>, Shashi Bhushan Chauhan<sup>1</sup>, Sundaram Pandey<sup>1</sup>, Rajiv Kumar<sup>3</sup>, Madhukar Rai<sup>1</sup>, Mary E. Wilson<sup>2</sup>, Shyam Sundar<sup>1</sup>

<sup>1</sup>INSTITUTE OF MEDICAL SCIENCES, BANARAS HINDU UNIVERSITY, VARANASI, India, <sup>2</sup>University of Iowa and the Iowa City VA Medical Center, Iowa, IA, United States, <sup>3</sup>Centre of Experimental Medicine and Surgery, Banaras Hindu University, Varanasi, India, VARANASI, India

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### EXTRACELLULAR VESICLES FROM *TAENIA SOLIUM* DAMPENS PI3K-AKT-MTORC1 SIGNALING AND AMELIORATES DSS-COLITIS IN MICE

Suraj Singh Rawat, Amit Prasad  
Indian Institute of Technology Mandi, Mandi, Himachal Pradesh, India

## Young Investigator Award Session C

Convention Center - Room 352 (3rd Floor)  
Wednesday, November 13, 9 a.m. – 2 p.m.

### JUDGE

Sasisekhar Bennuru  
National Institutes of Health, Bethesda, MD, United States

Dionicia Gamboa  
Universidad Peruana Cayetano Heredia, Lima, Peru

Juliana Otieno  
Uzima University, Kisumu, Kenya

Joana Carneiro da Silva  
University of Maryland School of Medicine, Baltimore, MD, United States

6308

### IDENTIFICATION OF THE FLAVIVIRUS CONSERVED E-L295 RESIDUE AS A TARGET FOR THE RATIONAL DESIGN OF CANDIDATE WEST NILE LIVE-ATTENUATED VACCINES

Emily K. Mantlo<sup>1</sup>, Bailey E. Maloney<sup>2</sup>, So Lee Park<sup>3</sup>, Adrienne E. Pohl<sup>3</sup>, Natalia Costa-Ball<sup>3</sup>, Claire Y.-H. Huang<sup>2</sup>, Alan D.T. Barrett<sup>4</sup>, Yan-Jang S. Huang<sup>1</sup>

<sup>1</sup>Department of Microbiology and Immunology, State University of New York Upstate Medical University, Syracuse, NY, United States, <sup>2</sup>Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, Ft. Collins, CO, United States, <sup>3</sup>Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS, United States, <sup>4</sup>Sealy Institute for Vaccine Sciences, University of Texas Medical Branch, Galveston, TX, United States

6336

### ASSESSING ANTIMALARIAL *EX-VIVO* DRUG EFFICACY IN WEST AND CENTRAL AFRICA FROM IMPORTED *PLASMODIUM FALCIPARUM* MALARIA CASES IN FRANCE BETWEEN 2016 AND 2023: A GENOTYPE-PHENOTYPE ASSOCIATION STUDY

Jason Rosado<sup>1</sup>, Abebe A. Fola<sup>2</sup>, Sandrine Cojean<sup>3</sup>, Veronique Sarrasin<sup>3</sup>, Bruno Pradines<sup>4</sup>, Romain Coppée<sup>5</sup>, Justine Bailly<sup>1</sup>, Rebecca Crudale<sup>2</sup>, French National Reference Center for Imported Malaria group<sup>6</sup>, Sandrine Houzé<sup>7</sup>, Jeffrey A. Bailey<sup>2</sup>, Jérôme Clain<sup>1</sup>

<sup>1</sup>Université Paris Cité, Institut de Recherche pour le Développement, Paris,

France, <sup>2</sup>Department of Pathology and Laboratory Medicine, Center for Computational Molecular Biology, Brown University, Providence, RI, United States, <sup>3</sup>Centre National de Référence du Paludisme, Assistance Publique-Hôpitaux de Paris, Hôpital Bichat-Claude-Bernard, Paris, France, <sup>4</sup>Centre national de référence du Paludisme, Institut hospitalo-universitaire Méditerranée Infection, Marseille, France, <sup>5</sup>Université Rouen Normandie, Rouen, France, <sup>6</sup>-, France, <sup>7</sup>Université Paris Cité, Institut de Recherche pour le Développement, Centre National de Référence du Paludisme, Assistance Publique-Hôpitaux de Paris, Hôpital Bichat-Claude-Bernard, Paris, France

6416

### GENE EXPRESSION NETWORKS IN STAGE-CONTROLLED *PLASMODIUM VIVAX* INFECTIONS FROM NORTHERN THAILAND: A WEIGHTED GENE CO-EXPRESSION NETWORK ANALYSIS (WGCNA)

Graham Ellis<sup>1</sup>, Francis C. Motta<sup>2</sup>, Suwanna Chaorattanakawee<sup>3</sup>, Nichaphat Uthaimongkol<sup>3</sup>, Worachet Kuntawunginn<sup>3</sup>, Chadin Thongpam<sup>3</sup>, Chatchadaporn Thamnurak<sup>3</sup>, Montri Arsanok<sup>3</sup>, Mariusz Wojnarski<sup>1</sup>, Pattaraporn Vanchayangkul<sup>3</sup>, Nonlawat Boonyalai<sup>3</sup>, Philip L. Smith<sup>4</sup>, Michele D. Spring<sup>5</sup>, Krisada Jongsakul<sup>3</sup>, Ilin Chuang<sup>6</sup>, Sidhartha Chaudhury<sup>3</sup>, Jeffrey Livezey<sup>3</sup>, Steven B. Haase<sup>7</sup>  
<sup>1</sup>Walter Reed National Military Medical Center, Bethesda, MD, United States, <sup>2</sup>Florida Atlantic University, Boca Raton, FL, United States, <sup>3</sup>US-Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, <sup>4</sup>U.S. Military HIV Research Program Walter Reed Army Institute of Research, Bethesda, MD, United States, <sup>5</sup>SUNY Upstate Medical University, Syracuse, NY, United States, <sup>6</sup>US Naval Medical Research Center-Asia, Singapore, Singapore, <sup>7</sup>Duke University, Durham, NC, United States

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### GENOME-WIDE ASSOCIATION STUDY OF GLOBAL *PLASMODIUM VIVAX* POPULATIONS PROVIDES INSIGHTS INTO THE EVOLUTION OF DRUG RESISTANCE

Gabrielle C. Ngwana-Joseph<sup>1</sup>, Jody E. Phelan<sup>1</sup>, Emilia Manko<sup>1</sup>, Jamille G. Dombrowski<sup>1</sup>, Simone da Silva Santos<sup>2</sup>, Martha Suarez-Mutis<sup>2</sup>, Ricardo L. Dantas Machado<sup>3</sup>, Claudio R. F. Marinho<sup>4</sup>, Debbie Nolder<sup>1</sup>, Francois Nosten<sup>5</sup>, Colin J. Sutherland<sup>1</sup>, Susana Campino<sup>1</sup>, Taane G. Clark<sup>1</sup>  
<sup>1</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom, <sup>2</sup>Instituto Oswaldo Cruz, Sao Paulo, Brazil, <sup>3</sup>Universidade Federal Fluminense, Rio de Janeiro, Brazil, <sup>4</sup>University of Sao Paulo, Sao Paulo, Brazil, <sup>5</sup>University of Oxford, Oxford, United Kingdom

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### GENOMIC EPIDEMIOLOGY OF MALARIA IN ZANZIBAR: DEFINING THE ROLE OF IMPORTATION AND LOCAL TRANSMISSION

Sean Connelly<sup>1</sup>, Mohamed Ali<sup>2</sup>, Billy E. Ngasala<sup>3</sup>, Wahida Hassan<sup>2</sup>, Bakari Mohamed<sup>2</sup>, Safia Mohammed<sup>2</sup>, Shija J. Shija<sup>2</sup>, Abdallah Zacharia<sup>2</sup>, Msolo C. Dominick<sup>3</sup>, Rebecca Crudale<sup>4</sup>, Varun Goel<sup>5</sup>, Barbara B. Cholo<sup>6</sup>, Anders Björkman<sup>7</sup>, Jeffrey A. Bailey<sup>4</sup>, Jessica T. Lin<sup>5</sup>, Jonathan J. Juliano<sup>6</sup>  
<sup>1</sup>MD-PhD Program, University of North Carolina, Chapel Hill, NC, United States, <sup>2</sup>Zanzibar Malaria Elimination Program (ZAMEP), Zanzibar, United Republic of Tanzania, <sup>3</sup>Department of Parasitology and Medical Entomology, Muhimbili University of Health and Allied Sciences, Dar es Salaam, United Republic of Tanzania, <sup>4</sup>Department of Pathology and Laboratory Medicine, Brown University, Providence, RI, United States, <sup>5</sup>Carolina Population Center, University of North Carolina, Chapel Hill, NC, United States, <sup>6</sup>Division of Infectious Diseases, Department of Medicine, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>7</sup>Department of Global Public Health, Karolinska Institutet, Stockholm, Sweden

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### GENERATING THE GENERATOR: A GIANT COMPLEX ESSENTIAL FOR MITOCHONDRIAL BIOGENESIS IN *PLASMODIUM FALCIPARUM*

Ijeoma Okoye, Ian Lamb, Swati Dass, Joanne M. Morrissey, Michael W. Mather, Akhil B. Vaidya  
Drexel University College of Medicine, Philadelphia, PA, United States

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### A DRUGGABLE AGC KINASE CLRK MEDIATES TEMPORAL REGULATION OF CYCLIC NUCLEOTIDE SIGNALING AND CONTROLS PARASITE EGRESS AND INVASION

Deepti Sarkar, Ravi Kumar Narayanasamy, Luciana Ribeiro Dinis, Abhai Tripathi, Isabelle Coppens, Prakash Srinivasan  
Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, United States

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### INCREASED DUFFY BINDING PROTEIN 1 EXPRESSION CORRELATES WITH *PLASMODIUM CYNOMOLGI* GROWTH IN CONTINUOUS CULTURE

Wayne Cheng<sup>1</sup>, Magdalena Argomaniz<sup>1</sup>, Caitlin C. Cooper<sup>1</sup>, Amadis Vivas<sup>1</sup>, Saniya Sabnis<sup>1</sup>, Sarah G. Roberson<sup>1</sup>, Celia L. Saney<sup>1</sup>, Mary R. Galinski<sup>2</sup>, Steven P. Maher<sup>1</sup>, Dennis E. Kyle<sup>1</sup>, Chester J. Joyner<sup>1</sup>  
<sup>1</sup>University of Georgia, Athens, GA, United States, <sup>2</sup>Emory University, Atlanta, GA, United States

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### HOST-SPECIFIC ADAPTATION OF POWASSAN VIRUS TO *AMBLIYOMMA AMERICANUM*: ROLE OF PRM IN TICK-SPECIFIC VIRAL FITNESS

Rachel E. Lange<sup>1</sup>, Alan P. Dupuis<sup>2</sup>, Melissa A. Prusinski<sup>3</sup>, Alexander T. Ciota<sup>2</sup>  
<sup>1</sup>University at Albany School of Public Health, Albany, NY, United States, <sup>2</sup>The Arbovirus Laboratory, Wadsworth Center, New York State Department of Health, Slingerlands, NY, United States, <sup>3</sup>New York State Department of Health, Bureau of Communicable Disease Control, Vector Ecology Laboratory, Albany, NY, United States

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### POPULATION GENOMICS OF AN INVASIVE MOSQUITO VECTOR, *Aedes aegypti*, IN SOUTHERN NEVADA

Karen L. Figueroa Chilito<sup>1</sup>, Vivek Raman<sup>2</sup>, Will Bendik<sup>2</sup>, Chad L. Cross<sup>1</sup>, Louisa A. Messenger<sup>1</sup>  
<sup>1</sup>University of Nevada, Las Vegas, Las Vegas, NV, United States, <sup>2</sup>Southern Nevada Health District, Las Vegas, NV, United States

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### A *PLASMODIUM VIVAX* STRAIN THAT EXPRESSES FLUORESCENT PROTEINS THROUGHOUT THE LIFE-CYCLE

Magdalena Alba Argomaniz, Wayne Cheng, Amadis Vivas, Grace Hawkins, Sarah Gayle Roberson, Henry Davie, Diego Huet, Steven P. Maher, Chester J. Joyner  
University of Georgia, Athens, GA, United States

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### EFFECT OF *SCHISTOSOMA MANSONI* INFECTION ON GUT MICROBIOTA IN PRE-SCHOOL AGED CHILDREN IN ALBERTINE REGION, UGANDA.

Andrew Edielu<sup>1</sup>, John Kelvin Mugerwa<sup>1</sup>, Gloria Oduru<sup>1</sup>, Jacent Nassuuna<sup>1</sup>, Hannah W. Wu<sup>2</sup>, Susannah Colt<sup>2</sup>, Emily L. Webb<sup>3</sup>, Jennifer F. Friedman<sup>2</sup>, Patrice Akusa Mawa<sup>1</sup>, Amaya L. Bustinduy<sup>3</sup>, Martin Holland<sup>3</sup>  
<sup>1</sup>MRC/UVRI & LSHTM Uganda Research Unit, Entebbe, Uganda, <sup>2</sup>Rhode Island Hospital, Center for International Health Research, Providence, RI, United States, <sup>3</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

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### USING ANCESTRAL SEQUENCE RECONSTRUCTION FOR GENERATION OF BROAD-SPECTRUM VACCINE PLATFORMS AGAINST TICK-BORNE FLAVIVIRUSES

Chasity E. Trammell, Brian J. Geiss, Gregory D. Ebel  
Colorado State University, Fort Collins, CO, United States

Wednesday  
November 13

8423

### UNIQUE IMMUNE AND TISSUE REPAIR MARKERS IN CONGENITAL CHAGAS

**Sneider Alexander Gutierrez Guarnizo**<sup>1</sup>, Carolina Duque<sup>1</sup>, Jill Hakim<sup>1</sup>, Martín Obregón<sup>2</sup>, Jessi Condiri<sup>2</sup>, Paloma Samame<sup>3</sup>, Emily Arteaga<sup>3</sup>, Clariza Roxana<sup>3</sup>, Jean Karla Velarde<sup>3</sup>, Edith Malaga<sup>2</sup>, Andrea Diestra<sup>2</sup>, Alejandra Pando<sup>2</sup>, Manuela Verastegui<sup>2</sup>, Monica Pajuelo<sup>2</sup>, Maritza Calderon<sup>2</sup>, Freddy Tinajeros<sup>3</sup>, Natalie Bowman<sup>4</sup>, Robert Gilman<sup>1</sup>, Monica Mugnier<sup>1</sup>

<sup>1</sup>Johns Hopkins University, Baltimore, MD, United States, <sup>2</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>3</sup>Hospital de La Mujer Dr. Percy Boland Rodriguez, Santa Cruz, Plurinational State of Bolivia, <sup>4</sup>University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, NC, United States

8431

### ISOLATION AND CHARACTERIZATION OF A-GAL-CONTAINING EXTRACELLULAR VESICLES FROM *TRYPANOSOMA CRUZI*: UNVEILING NEW BIOMARKERS FOR CHAGAS DISEASE

**Priscila Silva Grijó Farani**, Nasim Karimi Hosseini, Susana Portillo, Maria Tays Mendes, Brian Grajeda, Colin Knight, Cameron Ellis, Igor Almeida  
The University of Texas at El Paso, El Paso, TX, United States

## Young Investigator Award Session D

Convention Center - Room 353 (3rd Floor)

Wednesday, November 13, 9 a.m. – 2 p.m.

### JUDGE

Aissatou Diawara  
Global Institute for Disease Elimination (GLIDE), Abu Dhabi, United Arab Emirates

Susanta K. Ghosh  
National Institute of Malaria Research, Bangalore, India

Ruth Namazzi  
Makerere University, Kampala, Uganda

Isaac Olayinka Oyewole  
Babcock University, Ilisan Remo, Nigeria

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### DEVELOPMENT OF AMPLICON-BASED WHOLE-GENOME SEQUENCING OF MYCOBACTERIUM TUBERCULOSIS

**Chaney C. Kalinich**<sup>1</sup>, Freddy Gonzalez<sup>2</sup>, Mallory I. Breban<sup>3</sup>, Isabel Distefano<sup>3</sup>, Ted Cohen<sup>3</sup>, Nathan D. Grubaugh<sup>3</sup>, Seth Redmond<sup>3</sup>

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6741

### INTERACTIONS BETWEEN WATER, SANITATION, AND HYGIENE (WASH) AND MOSQUITO DYNAMICS IN WESTERN KENYA: IMPLICATIONS FOR DIARRHEAL AND MALARIA DISEASES

**Noriko Tamari**<sup>1</sup>, Maurice Agawo<sup>2</sup>, Heidi E. Brown<sup>1</sup>, Luigi Sedda<sup>3</sup>, Gary L. Christopherson<sup>1</sup>, Katherine D. Ellingson<sup>1</sup>, Stephen Munga<sup>4</sup>, Kacey C. Ernst<sup>1</sup>

<sup>1</sup>University of Arizona, Tucson, AZ, United States, <sup>2</sup>Maseno University, Kisumu, Kenya, <sup>3</sup>Lancaster University, Lancaster, United Kingdom, <sup>4</sup>Kenya Medical Research Institute (KEMRI), Kisumu, Kenya

6780

### SPATIAL VARIATION IN ENVIRONMENTAL AND SOCIODEMOGRAPHIC DRIVERS OF LEPTOSPIROSIS IN THE DOMINICAN REPUBLIC USING A GEOGRAPHICALLY WEIGHTED REGRESSION

**Beatris M. Martin**<sup>1</sup>, Benn Sartorius<sup>1</sup>, Helen Mayfield<sup>1</sup>, Angela Cadavid Restrepo<sup>2</sup>, Cecilia J. Then Paulino<sup>3</sup>, Marie C. Etienne<sup>3</sup>, Ronald Skewes-Ramm<sup>3</sup>, Eric J. Nilles<sup>4</sup>, Colleen L. Lau<sup>1</sup>

<sup>1</sup>Centre for Clinical Research, Faculty of Medicine, The University of Queensland, Brisbane, Australia, <sup>2</sup>School of Public Health, Faculty of Medicine, The University of Queensland, Brisbane, Australia, <sup>3</sup>Ministerio de Salud, Republica Dominicana, Santo Domingo, Dominican Republic, <sup>4</sup>Brigham and Womens Hospital, Harvard Medical School, Boston, MA, United States

6804

### FECAL EXPOSURE PATHWAYS FOR CHILDREN IN LOW-INCOME, UNPLANNED COMMUNITIES OF URBAN MAPUTO, MOZAMBIQUE USING A QUANTITATIVE MICROBIAL RISK ASSESSMENT FRAMEWORK (QMRA)

**Julia Silva Sobolik**<sup>1</sup>, Elly Mataveia<sup>2</sup>, Mahira Amade<sup>2</sup>, Cynthia Silva<sup>2</sup>, Liliana Dengo-Baloi<sup>1</sup>, Laura Braun<sup>1</sup>, Oliver Cumming<sup>1</sup>, Edna Viegas<sup>2</sup>, Jackie Knee<sup>1</sup>

<sup>1</sup>LSHTM, London, United Kingdom, <sup>2</sup>Centro de Investigação e Treino em Saúde da Polana Caniço (CISPCC), Maputo, Mozambique

6897

### DETECTION OF RECURRENT MALARIA BY IMPROVING THE ACCURACY OF UNIQUE PATIENT IDENTIFICATION WITH BIOMETRICS IN PAPUA, INDONESIA

**Liony Fransisca**<sup>1</sup>, Reynold Rizal Ubra<sup>2</sup>, Enny Kenangalem<sup>1</sup>, Benedikt Ley<sup>3</sup>, Ric N. Price<sup>3</sup>, Nicholas M. Douglas<sup>3</sup>, Jeanne Rini Poespoprodjo<sup>1</sup>

<sup>1</sup>Papuan Community Health and Development Foundation, Timika, Indonesia, <sup>2</sup>Mimika Regency Health Office, Timika, Indonesia, <sup>3</sup>Menzies School of Health Research, Charles Darwin University, Darwin, Australia

7271

### ASYMPTOMATIC *P. FALCIPARUM* INFECTION IS NOT ASSOCIATED WITH EXPOSURE TO SOIL TRANSMITTED HELMINTHS IN CHILDREN FROM A MULTI SCHOOL-BASED STUDY IN ESSE, CAMEROON

**Lauren Lajos**<sup>1</sup>, Balotin Fogang<sup>2</sup>, Anne Jensen<sup>3</sup>, Derrick Atchombat<sup>2</sup>, Douglas H. Cornwall<sup>2</sup>, Christiane Donkeu<sup>2</sup>, Chris-Marco Nana-Mbianda<sup>2</sup>, Celine Slam<sup>3</sup>, Hugues Clotaire Nana Djeunga<sup>4</sup>, Bin Zhan<sup>5</sup>, Anne J. Blaschke<sup>1</sup>, Krow Ampofo<sup>1</sup>, Paul Olivier Koki Ndombo<sup>6</sup>, Lawrence Ayong<sup>2</sup>, Tracey Lamb<sup>3</sup>

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### CAUSES OF MATERNAL MORTALITY IN RURAL BANGLADESH: ANALYSIS OF VERBAL AUTOPSY DATA OF CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE (CHAMPS) BANGLADESH

**Afsana Afrin**<sup>1</sup>, Afruna Rahman<sup>1</sup>, Mohammad Zahid Hossain<sup>1</sup>, Md. Abu Bakkar Siddique<sup>1</sup>, Tazrin Rahman Lopa<sup>1</sup>, Md. Alinoor Islam Khan<sup>1</sup>, Md. Atique Iqbal Chowdhury<sup>1</sup>, Qazi Sadeq-ur Rahman<sup>1</sup>, Md. Mamunur Rashid<sup>1</sup>, Shams El Arifeen<sup>1</sup>, Emily S. Gurley<sup>2</sup>

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### NAVIGATING MATERNAL HEALTH CHALLENGES IN BANGLADESH: AN ANALYSIS OF PREGNANCY COMPLICATIONS AND CARE-SEEKING BEHAVIORS USING NATIONALLY REPRESENTATIVE SURVEYS

**MD ABUBAKKAR SIDDIQUE**, Ashiquzzaman ., Aniq Tasnim Hossain, Ema Akter, Abu Sayeed, Shams El Arifeen, Ahmed Ehsanur Rahman  
icddr,b, Dhaka, Bangladesh

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## IMPACT OF HEAT AND HUMIDITY EXPOSURE ON EFFICACY OF SELECTED ANTIBIOTICS

Justin T. Vasquez<sup>1</sup>, Amos Onditi<sup>2</sup>, Doris Njoroge<sup>2</sup>, Dan Krauth<sup>3</sup>, Trevor Wellington<sup>1</sup>, Kirti Tiwari<sup>4</sup>, Ashleigh Roberts<sup>5</sup>

<sup>1</sup>Clinical Trials Center, Center for Enabling Capabilities, Walter Reed Army Institute of Research, Silver Spring, MD, United States, <sup>2</sup>Department of Microbiology, Kombewa Clinical Research Center, Kenya Medical Research Institute, Walter Reed Army Institute of Research, Kombewa, Kenya, <sup>3</sup>Division of Infectious Diseases, Navy Medicine Readiness and Training Command, San Diego, CA, United States, <sup>4</sup>Walter Reed Institute of Research-Africa, Kisumu, Kenya, <sup>5</sup>Bacterial Diseases Branch, Center for Infectious Disease Research, Walter Reed Army Institute of Research, Silver Spring, MD, United States

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## THE GLOBAL BURDEN OF CHIKUNGUNYA VIRUS AND THE POTENTIAL BENEFIT OF VACCINES

Gabriel Ribeiro dos Santos<sup>1</sup>, Fariha Jawed<sup>2</sup>, Christinah Mukandavire<sup>3</sup>, Arminder Deol<sup>3</sup>, Danny Scarponi<sup>3</sup>, Eric Rogier<sup>4</sup>, Eric Seruyange<sup>5</sup>, Mathieu J. P. Poirier<sup>6</sup>, Samuel Bosompah<sup>7</sup>, Augustine O. Udeze<sup>8</sup>, Koussay Dellagi<sup>9</sup>, Nathanaël Hozé<sup>10</sup>, Jaffu Chilongola<sup>11</sup>, Leonard E. G. Mboera<sup>12</sup>, Gheyath Nasrallah<sup>13</sup>, Elmar Saathof<sup>14</sup>, Simon Cauchemez<sup>15</sup>, Henrik Salje<sup>2</sup>

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8141

## SAFETY, IMMUNOGENICITY AND EFFICACY OF THE SHIGELLA VACCINE - A SYSTEMATIC REVIEW

Salman Haq

Aga Khan university, Karachi, Pakistan

8246

## OUT-OF-SEASON RESPIRATORY VIRUS INFECTIONS DURING THE PANDEMIC PERIOD OF SARS-COV-2 TRANSMISSION IN BRAZIL

Juan Pablo A. Ticona<sup>1</sup>, Luciane Santos Amorim Santos<sup>2</sup>, Meng Xiao<sup>3</sup>, Nivison Nery Jr<sup>2</sup>, Emilia M. M. Andrade Belitardo<sup>2</sup>, Mariam O. Fofana<sup>4</sup>, Renato Victoriano<sup>2</sup>, Jaqueline Cruz<sup>2</sup>, Laise Eduarda Paixão de Moraes<sup>2</sup>, Mitermayer G. Reis<sup>2</sup>, Frederico Costa<sup>1</sup>, Ricardo Khouri<sup>2</sup>, Derek A. Cummings<sup>5</sup>, Albert I. Ko<sup>4</sup>

<sup>1</sup>Instituto de Saúde Coletiva, Universidade Federal da Bahia, Salvador, Brazil, <sup>2</sup>Instituto Gonçalo Moniz, Fundação Oswaldo Cruz, Ministério da Saúde, Salvador, Brazil, <sup>3</sup>Department of Laboratory Medicine, State Key Laboratory of Complex Severe and Rare Diseases, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China, <sup>4</sup>Department of Epidemiology of Microbial Diseases, Yale School of Public Health, New Haven, CT, United States, <sup>5</sup>Department of Biology, University of Florida, Gainesville, FL, United States

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## ASSOCIATIONS BETWEEN MICRONUTRIENT STATUS, HORMONES, AND IMMUNE STATUS DURING PREGNANCY AND CHILD GROWTH IN RURAL BANGLADESH

Belinda Chen<sup>1</sup>, Chih-Hsien Lin<sup>1</sup>, Andrew Mertens<sup>1</sup>, Sophia T. Tan<sup>2</sup>, Farheen Jamshed<sup>1</sup>, Diego Figueroa<sup>1</sup>, Caitlin Hemlock<sup>3</sup>, Zachary Butzin-Dozier<sup>1</sup>, Lia C. H. Fernald<sup>1</sup>, Christine P. Stewart<sup>4</sup>, Alan E. Hubbard<sup>1</sup>, Md. Ziaur Rahman<sup>5</sup>, Shahjahan Ali<sup>6</sup>, Benjamin F. Arnold<sup>7</sup>, Firdaus S. Dhabhar<sup>8</sup>, Douglas Granger<sup>9</sup>, Mahbubur Rahman<sup>10</sup>, Stephen P. Luby<sup>2</sup>, Jack Colford<sup>1</sup>, Audrie Lin<sup>11</sup>

<sup>1</sup>UC Berkeley School of Public Health, Berkeley, CA, United States, <sup>2</sup>Division of Infectious Diseases and Geographic Medicine, Stanford University, Stanford, CA, United States, <sup>3</sup>Department of Environmental and Occupational Health Sciences, University of Washington, Seattle, WA, United States, <sup>4</sup>University of California Davis, Institute for Global Nutrition, Davis, CA, United States, <sup>5</sup>University of California, Santa Cruz, Department of

Microbiology and Environmental Toxicology, Santa Cruz, CA, United States, <sup>6</sup>Department of Epidemiology, Colorado School of Public Health, University of Colorado, Denver, CO, United States, <sup>7</sup>Francis I. Proctor Foundation, University of California San Francisco, San Francisco, CA, United States, <sup>8</sup>Department of Psychiatry & Behavioral Sciences, Department of Microbiology and Immunology, Sylvester Comprehensive Cancer Center, Miller School of Medicine, University of Miami, Miami, FL, United States, <sup>9</sup>Institute for Interdisciplinary Salivary Bioscience Research, University of California, Irvine, Irvine, CA, United States, <sup>10</sup>Environmental Health and WASH, Health System and Population Studies Division, International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, <sup>11</sup>Department of Environmental and Occupational Health Sciences, University of Washington, Santa Cruz, CA, United States

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## INFLUENCE OF MATERNAL AND CHILD FUT2 SECRETOR STATUS ON GROWTH AND ON THE EFFICACY OF WATER, SANITATION, HANDWASHING, AND NUTRITION INTERVENTIONS ON ENVIRONMENTAL ENTERIC DYSFUNCTION IN RURAL BANGLADESH

Ronit Gupta<sup>1</sup>, Andrew N. Mertens<sup>2</sup>, Akram Ullah<sup>3</sup>, Tahmeed Ahmed<sup>4</sup>, Rashidul Haque<sup>5</sup>, Mamun Kabir<sup>3</sup>, Mondar M. M. Ahmed<sup>3</sup>, Mustafa Mahfuz<sup>4</sup>, Shahjahan Ali<sup>5</sup>, Mohammad Alauddin<sup>6</sup>, Md. Ziaur Rahman<sup>7</sup>, Jessica Grembi<sup>8</sup>, Abul K. Shoaib<sup>9</sup>, Mahbubur Rahman<sup>9</sup>, Leanne Unicomb<sup>9</sup>, Benjamin F. Arnold<sup>10</sup>, Syeda L. Famida<sup>3</sup>, Salma Akther<sup>3</sup>, Md. Saheen Hossen<sup>3</sup>, Palash Mutsuddi<sup>3</sup>, Alan E. Hubbard<sup>11</sup>, Christine P. Stewart<sup>12</sup>, John M. Colford Jr.<sup>11</sup>, Stephen P. Luby<sup>8</sup>, Audrie Lin<sup>7</sup>

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## MAPPING THE GLOBAL ENVIRONMENTAL SUITABILITY FOR SCRUB TYPHUS

Qian Wang<sup>1</sup>, Tian Ma<sup>2</sup>, Fangyu Ding<sup>2</sup>, Nicholas Day<sup>1</sup>, Benn Sartorius<sup>3</sup>, Richard Maude<sup>1</sup>

<sup>1</sup>MORU, Bangkok, Thailand, <sup>2</sup>Chinese Academy of Sciences, Beijing, China, <sup>3</sup>University of Oxford, Oxford, United Kingdom

## Young Investigator Award Session E

Convention Center - Room 354/355 (3rd Floor)

Wednesday, November 13, 9 a.m. – 2 p.m.

### JUDGE

Solomon Kibret Birhanie

West Valley Mosquito and Vector Control District, Ontario, CA, United States

Katia Bruxvoort

University of Alabama at Birmingham, Birmingham, AL, United States

Adélaïde Miarinjara

Emory University, Atlanta, GA, United States

Chukwuanugo Ogbuagu

Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria

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### TRACKING THE SOURCE POPULATION OF *SIMULIUM* BLACKFLY INVASION IN URBAN SETTINGS IN GHANA: A GENOMICS APPROACH

**Millicent Opoku**<sup>1</sup>, Neha Sirwani<sup>1</sup>, Emily N. Hendrickson<sup>1</sup>, Himal Shrestha<sup>1</sup>, Kwadwo K. Frempong<sup>2</sup>, Sampson Otoo<sup>2</sup>, Franklin Ayisi Ayisi<sup>3</sup>, Millicent S. Afatodzie<sup>2</sup>, Abena A. Nyarko<sup>2</sup>, Sarah M. Dogbe<sup>2</sup>, Joseph H.N. Osei<sup>2</sup>, Sellase Pi-Bansa<sup>2</sup>, Sindew M. Feleke<sup>1</sup>, Warwick Grant<sup>1</sup>, Daniel Boakye<sup>2</sup>, Shannon Hedtke<sup>1</sup>

<sup>1</sup>La Trobe University, Melbourne, Australia, <sup>2</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana, <sup>3</sup>University of Ghana, Accra, Ghana

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### THE IMPACTS OF COVID-19 ON THE TREND OF MEASLES OUTBREAK IN NIGERIA

**Promise Ayooluwa Ajala**, Ayooluwa Oluwaseun Ajayi, Funmilayo Grace Adelokun, Favour Mofiyinfoluwa Abiona, Oluwatomisin Oluwadamilola Olawoye  
College of Medicine, University of Ibadan, Ibadan, Nigeria

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### INCREASING CERTAINTY AROUND IMPACT OF SEASONAL MALARIA CHEMOPREVENTION: A MODELING FRAMEWORK USING ROUTINE DATA SOURCES IN BURKINA FASO

**Monica Anna de Cola**<sup>1</sup>, Benoit Sawadogo<sup>2</sup>, Cheick Campaore<sup>2</sup>, Chuks Nnaji<sup>3</sup>, Sidzabda Kompaore<sup>4</sup>, Arantxa Roca-Feltre<sup>5</sup>, Sol Richardson<sup>6</sup>, Christian Rassi<sup>3</sup>, Patrick Walker<sup>1</sup>, Lucy C. Okell<sup>1</sup>

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6385

### MOLECULAR INVESTIGATION OF RECURRENT *PLASMODIUM MALARIAE* INFECTION IN THE DEMOCRATIC REPUBLIC OF THE CONGO

**Wenqiao He**<sup>1</sup>, Rachel Sendor<sup>2</sup>, Melchior Kashamuka<sup>3</sup>, Kristin Banek<sup>3</sup>, Joseph Losoma Atibu<sup>3</sup>, Zachary R. Popkin-Hall<sup>1</sup>, Jonathan J. Juliano<sup>1</sup>, Antoinette Tshetu<sup>3</sup>, Jonathan B. Parr<sup>1</sup>

<sup>1</sup>Division of Infectious Diseases and Institute for Global Health and Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>2</sup>Department of Epidemiology, Gillings School of Global Public Health, Chapel Hill, NC, United States, <sup>3</sup>Kinshasa School of Public Health, Kinshasa, Democratic Republic of the Congo

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### LEVERAGING COMMUNITY HEALTH WORKERS TO SUSTAIN UNIVERSAL BED NET COVERAGE IN RURAL UGANDA: A PILOT FEASIBILITY STUDY

**Annika K. Gunderson**<sup>1</sup>, Rapheal Mbusa<sup>2</sup>, Emmanuel Baguma<sup>2</sup>, Emmanuel Ayebare<sup>2</sup>, John Barber<sup>1</sup>, Moses Ntaro<sup>2</sup>, Edgar M. Mulogo<sup>2</sup>, Ross M. Boyce<sup>1</sup>

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6490

### QUANTIFYING THE SUITABILITY OF WATERSHED-BASED AREAL UNITS FOR MALARIA MODELING IN THE PERUVIAN AMAZON REGION

**Edson J. Ascencio**, Antony Barja, Jazmin Quellon, Gabriel Carrasco-Escobar  
Health Innovation Laboratory - Institute of Tropical Medicine 'Alexander von Humboldt', Universidad Peruana Cayetano Heredia, Lima, Peru

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### INVESTIGATING THE PREVALENCE, INTENSITY, AND CONTRIBUTING FACTORS OF *SCHISTOSOMA MANSONI* INFECTION IN ALMATA DISTRICT, TIGRAY, NORTHERN ETHIOPIA

**Gessesew Bugssa Hailu**<sup>1</sup>, Nega Berhe Belay<sup>2</sup>, Prof. Tilahun Tekelehaymanot<sup>2</sup>

<sup>1</sup>Department of Medical Parasitology and Entomology, Biomedical Sciences Division, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, <sup>2</sup>Aklilu Lemma Institute of Pathobiology, Addis Ababa University, Addis Ababa, Ethiopia

7084

### A MULTICENTER STUDY TO ASSESS THE EFFECTIVENESS OF AN INACTIVATED COVID-19 VACCINE AGAINST HOSPITALIZED COVID-19 IN THE PHILIPPINES

**Kristal An Agrupis**<sup>1</sup>, Maria Vinna Crisostomo<sup>1</sup>, Jedas Veronica Daag<sup>1</sup>, March Helena Jane Lopez<sup>1</sup>, Kiarah Louise Florendo<sup>1</sup>, Jude Raphael Lo<sup>1</sup>, Yang-Yang Qi<sup>2</sup>, Gianne Lariz Magsakay<sup>1</sup>, Gretchen Velasco-Ranada<sup>3</sup>, Mitzi Marie Chua<sup>4</sup>, Mitzie Lou Osabel<sup>5</sup>, Lorenz von Seidlein<sup>6</sup>, Xuan-Yi Wang<sup>2</sup>, Michelle Ylade<sup>1</sup>, Jacqueline Deen<sup>1</sup>

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7215

### QUANTIFYING THE RELATIONSHIP BETWEEN MALARIA IN PREGNANCY AND MATERNAL ANEMIA USING ROUTINE ANTENATAL CARE-BASED SURVEILLANCE DATA IN TANZANIA

**Abigail R. Goodship**<sup>1</sup>, Sequoia I. Leuba<sup>1</sup>, Joseph T. Hicks<sup>1</sup>, Abdallah Lusasii<sup>2</sup>, Sijununu Aaron<sup>2</sup>, Samwel L. Nhiga<sup>2</sup>, Mzee M. Nassoro<sup>3</sup>, Frank Chacky<sup>2</sup>, Patrick G.T. Walker<sup>1</sup>

<sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>Ministry of Health, National Malaria Control Programme, Dodoma, United Republic of Tanzania, <sup>3</sup>Ministry of Health, Division of Reproductive and Child Health, Dodoma, United Republic of Tanzania

7433

### HIGH MORTALITY AMONG PERSONS WITH SUSPECTED EPILEPSY: A FOCUS ON ONCHOCERCIASIS-ENDEMIC COUNTIES OF SOUTH SUDAN

**Luís-Jorge Amaral**<sup>1</sup>, Stephen Raimon Jada<sup>2</sup>, Jane Y. Carter<sup>3</sup>, Yak Yak Bol<sup>4</sup>, Joseph N Siewe Fodjo<sup>1</sup>, Robert Colebunders<sup>1</sup>

<sup>1</sup>University of Antwerp, Antwerpen, Belgium, <sup>2</sup>Amref Health Africa, Juba, South Sudan, <sup>3</sup>Amref Health Africa Headquarters, Nairobi, Kenya, <sup>4</sup>Neglected Tropical Diseases Unit, Ministry of Health, Juba, South Sudan

7633

### DIFFERENTIAL IMPACT OF INSECTICIDE TREATED NETS AGAINST MALARIA: A META-ANALYSIS AND MODELLING STUDY OF CLUSTER-RANDOMIZED CONTROLLED TRIALS IN AFRICA

**Dominic P. Dee**<sup>1</sup>, Joseph Biggs<sup>2</sup>, Joseph D. Challenger<sup>1</sup>, Isaac J. Stopard<sup>1</sup>, Ellie Sherrard-Smith<sup>1</sup>, Jackie Cook<sup>2</sup>, Thomas S. Churcher<sup>1</sup>

<sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom

7711

### CO-PRODUCING AN EARLY WARNING PLATFORM TO FORECAST OUTBREAKS OF CLIMATE-SENSITIVE INFECTIOUS DISEASES

**Chloe Fletcher**<sup>1</sup>, Martín Lotto Batista<sup>1</sup>, Alba Llabrés-Brustenga<sup>1</sup>, Daniela Lührsen<sup>1</sup>, Bruno M. Carvalho<sup>1</sup>, Gabriela Müller<sup>2</sup>, Andrea Gómez<sup>2</sup>, Soledad López<sup>2</sup>, Paloma M. Carcamo<sup>3</sup>, Gabriel Carrasco-Escobar<sup>2</sup>, Juan D. Umaña<sup>4</sup>, Mauricio Santos-Vega<sup>4</sup>, Renata Gracie<sup>5</sup>, Diego Ricardo Xavier<sup>5</sup>, Christovam Barcellos<sup>5</sup>, Leslie Rollock<sup>6</sup>, Avriel R. Diaz<sup>7</sup>, Sadie J. Ryan<sup>8</sup>, Anna M. Stewart-Ibarra<sup>9</sup>, Mercy Borbor-Cordova<sup>10</sup>, Rachel Lowe<sup>11</sup>

<sup>1</sup>Barcelona Supercomputing Center, Barcelona, Spain, <sup>2</sup>National Council for Scientific &

Technical Research, Sante Fe, Argentina, <sup>3</sup>Health Innovation Laboratory, Institute of Tropical Medicine "Alexander von Humboldt", Universidad Peruana Cayetano Heredia, San Martin de Porres, Peru, <sup>4</sup>Research Group in Mathematical & Computational Biology, Universidad de los Andes, Bogotá, Colombia, <sup>5</sup>Institute of Scientific & Technological Communication & Information in Health, Fundação Oswaldo Cruz, Rio de Janeiro, Brazil, <sup>6</sup>Ministry of Health & Wellness, Saint Michael, Barbados, <sup>7</sup>International Research Institute for Climate & Society, Palisades, NY, United States, <sup>8</sup>Department of Geography, University of Florida, Gainesville, FL, United States, <sup>9</sup>Inter-American Institute For Global Change Research, Montevideo, Uruguay, <sup>10</sup>Faculty of Maritime Engineering & Marine Sciences, Escuela Superior Politécnica del Litoral, Guayaquil, Ecuador, <sup>11</sup>Catalan Institution for Research & Advanced Studies, Barcelona, Spain

8304

### INAPPARENT PRIMARY DENGUE VIRUS INFECTIONS REVEAL HIDDEN SEROTYPE-SPECIFIC EPIDEMIOLOGICAL PATTERNS AND SPECTRUM OF INFECTION OUTCOME: A COHORT STUDY IN NICARAGUA

Jose V. Zambrana<sup>1</sup>, Sandra Bos<sup>2</sup>, Elias Duarte<sup>2</sup>, Aaron L. Graber<sup>2</sup>, Julia Huffaker<sup>2</sup>, Carlos Montenegro<sup>3</sup>, Lakshmanane Premkumar<sup>4</sup>, Aubree Gordon<sup>1</sup>, Angel Balmaseda<sup>5</sup>, Eva Harris<sup>2</sup>

<sup>1</sup>Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, MI, United States, <sup>2</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>3</sup>Sustainable Sciences Institute, Managua, Nicaragua, <sup>4</sup>Department of Microbiology and Immunology, University of North Carolina School of Medicine, Chapel Hill, NC, United States, <sup>5</sup>Laboratorio Nacional de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

8412

### ASSOCIATION OF S. HAEMATOBIIUM INFECTION WITH PREGNANCY IN TANZANIA

Sheridan Bowers<sup>1</sup>, Jane K. Maganga<sup>2</sup>, Loyce Mhango<sup>2</sup>, Peter Shigella<sup>2</sup>, Crispin Mukerebe<sup>2</sup>, Humphrey D. Mazigo<sup>3</sup>, Govert J. van Dam<sup>4</sup>, Danielle de Jong<sup>5</sup>, Paul L. Corstjens<sup>5</sup>, Saidi H. Kapiga<sup>2</sup>, W. Evan Secor<sup>6</sup>, Myung Hee Lee<sup>7</sup>, Jennifer A. Downs<sup>7</sup>, John M. Changalucha<sup>2</sup>

<sup>1</sup>Weill Cornell Medicine, New York, NY, United States, <sup>2</sup>Mwanza Intervention Trials Unit/ National Institute for Medical Research, Mwanza, United Republic of Tanzania, <sup>3</sup>Department of Parasitology, Catholic University of Health and Allied Sciences, Mwanza, United Republic of Tanzania, <sup>4</sup>Department of Parasitology, Leiden University Medical Center, Leiden, Netherlands, <sup>5</sup>Department of Cell and Chemical Biology, Leiden University Medical Center, Leiden, Netherlands, <sup>6</sup>Division of Parasitic Diseases for Malaria, Center for Global Health, Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>7</sup>Center for Global Health, Weill Cornell Medicine, New York, NY, United States

### Young Investigator Award Session F

Convention Center - Room 356 (3rd Floor)  
Wednesday, November 13, 9 a.m. – 2 p.m.

#### JUDGE

Karen E.S. Hamre  
The Carter Center, Atlanta, GA, United States

Carla N. Mavian  
University of Florida, Gainesville, FL, United States

Caroline Ng  
University of Nebraska Medical Center, Omaha, NE, United States

Amit Prasad  
Indian Institute of Technology Mandi, Mandi, India

6068

### THE DYNAMICS OF PARASITE GROWTH IN P. FALCIPARUM AND P. KNOWLESII CO-CULTURES

Jeremy S. Goodwin-Gower, Jenny M. Peters, Hayley E. Mitchell, Stacey Llewellyn, Fiona H. Amante, Bridget E. Barber  
QIMR Berghofer Medical Research Institute, Herston, Australia

6317

### GENETIC ANCESTRY-ASSOCIATED DIFFERENCES IN DENGUE VIRUS INFECTION OF PRIMARY HUMAN SKIN CELLS

Michelle M. Martí, Priscila M. S. Castanha, Jocelyn M. Taddonio, Jeremy J. Martinson, Simon M. Barratt-Boyes  
University of Pittsburgh, Pittsburgh, PA, United States

6318

### ARBOVIRUS DISEASE PATHOGENESIS IN OBESE AND TYPE-II DIABETIC-LIKE MICE

Natalia Ingrid O. Silva<sup>1</sup>, Sasha R. Azar<sup>2</sup>, Vidyleison N. Camargos<sup>1</sup>, Rafael K. Campos<sup>3</sup>, Rumei Yun<sup>3</sup>, Jiehua Zhou<sup>1</sup>, Alice F. Versiani<sup>1</sup>, Shannan L. Rossi<sup>3</sup>, Nikos Vasilakis<sup>1</sup>  
<sup>1</sup>University of Texas Medical Branch, Department of Pathology, Galveston, TX, United States, <sup>2</sup>Center for Tissue Engineering, Department of Surgery, Houston Methodist Research Institute, Houston, TX, United States, <sup>3</sup>University of Texas Medical Branch, Department of Microbiology and Immunology, Galveston, TX, United States

6324

### LOW LEVEL OF ANTIMALARIAL DRUG RESISTANCE IN 2014-15: INTEGRATION OF PRIMAQUINE INTO INDIA'S ANTIMALARIAL DRUG POLICY 2013

Shrikant Nema<sup>1</sup>, Nazia Ali<sup>2</sup>, Kristan A. Schneider<sup>3</sup>, Sri Krishna<sup>2</sup>, Anil Kumar Verma<sup>2</sup>, Aparup Das<sup>2</sup>, Praveen Kumar Bharti<sup>1</sup>

<sup>1</sup>ICMR-National Institute of Malaria Research, New Delhi, India, <sup>2</sup>ICMR-National Institute of Research in Tribal Health, Jabalpur, India, <sup>3</sup>University of Applied Sciences Mittweida, Germany, Germany

6721

### ASSESSMENT OF ALBENDAZOLE SUSCEPTIBILITY IN FASCIOLA HEPATICA EGGS FROM ENDEMIC REGIONS OF THE PERUVIAN HIGHLANDS

César A. Murga-Moreno<sup>1</sup>, Dayana M. Terrones-Cerna<sup>1</sup>, David Ruiz-Pérez<sup>1</sup>, Luis I. Alvarez<sup>2</sup>, Laura Ceballos<sup>2</sup>, Miguel M. Cabada<sup>3</sup>, Martha V. Fernandez-Baca<sup>4</sup>, César E. Vila-Anticona<sup>5</sup>, Ana M. Fernández-Sánchez<sup>1</sup>, Rodrigo A. Ore<sup>4</sup>, Cristian Hobán<sup>1</sup>, Pedro Ortiz<sup>1</sup>  
<sup>1</sup>Universidad Nacional de Cajamarca, Cajamarca, Peru, <sup>2</sup>Universidad Nacional del Centro de la Provincia de Buenos Aires, Tandil, Argentina, <sup>3</sup>University of Texas Medical Branch, Galveston, TX, United States, <sup>4</sup>Universidad Peruana Cayetano Heredia, Cusco, Peru, <sup>5</sup>Servicio Nacional de Sanidad Agraria, Junin, Peru

6814

### DIETARY EFFECTS ON THE COURSE OF VISCERAL LEISHMANIASIS IN A MOUSE MODEL

Natalie Jarvis, Grace Gutzman, Yani Chen, Bayan Zhanbolat, Patrick Nuro-Gyina, Jacilara Conceicao, Mary Wilson  
University of Iowa, Iowa City, IA, United States

6852

### LEISHMANIA TRANSMISSION IS DISRUPTED IN SANDFLIES COLONIZED BY DELFTIA TSURUHATENSIS TC1 BACTERIA

Pedro Cecilio<sup>1</sup>, Luana A. Rogerio<sup>2</sup>, Tiago D. Serafim<sup>2</sup>, Kristina Tang<sup>2</sup>, Laura Willen<sup>2</sup>, Eva Iniguez<sup>2</sup>, Claudio Meneses<sup>2</sup>, Luis F. Chaves<sup>3</sup>, Yue Zhang<sup>4</sup>, Wei Huang<sup>5</sup>, Pablo Castaneda-Casado<sup>6</sup>, Marcelo Jacobs-Lorena<sup>5</sup>, Jesus G. Valenzuela<sup>2</sup>, Janneth Rodrigues<sup>6</sup>, Fabiano Oliveira<sup>2</sup>

<sup>1</sup>Vector Biology Section, LMVR, NIAID, NIH, Rockville, MD, United States, <sup>2</sup>Vector Molecular Biology Section, LMVR, NIAID, NIH, Rockville, MD, United States, <sup>3</sup>Department of Environmental and Occupational Health, School of Public Health-Bloomington, Indiana University, Bloomington, IN, United States, <sup>4</sup>Integrated Data Sciences Section (IDSS), Research Technologies Branch, NIAID, NIH, Bethesda, MD, United States, <sup>5</sup>Department of Molecular Microbiology and Immunology, Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>6</sup>Global Health Medicines R&D, GSK, Tres Cantos, Madrid, Spain

6980

**HIGH SURVIVORSHIP OF ANOPHELES GAMBIAE LARVAE TO LETHAL CONCENTRATIONS OF CLOTHIANIDIN, ACETAMIPRID OR IMIDACLOPRID IS CONSISTENT WITH CROSS-RESISTANCE TO NEONICOTINOIDS**Marilene M Ambadiang Mae<sup>1</sup>, Caroline Fouet<sup>2</sup>, Fred Ashu<sup>1</sup>, Calmes Bouaka<sup>1</sup>, Véronique Penlap-Beng<sup>3</sup>, Colince Kamdem<sup>2</sup><sup>1</sup>Centre for Research in Infectious Diseases, Yaoundé, Cameroon, <sup>2</sup>Department of Biological Sciences, University of Texas, El Paso, TX, United States, <sup>3</sup>Department of Biochemistry, Faculty of Science, University of Yaoundé 1, Yaoundé, Cameroon

7156

**UNDERSTANDING THE BIPHASIC DOSE-RESPONSE CURVE ASSOCIATED WITH PIPERAQUINE RESISTANCE IN PLASMODIUM FALCIPARUM**John Kane<sup>1</sup>, Xue Li<sup>2</sup>, Sudhir Kumar<sup>3</sup>, Katrina A. Button-Simons<sup>1</sup>, Llsa A. Checkley<sup>1</sup>, Douglas A. Shoue<sup>1</sup>, Shalini Nair<sup>2</sup>, Ann Reyes<sup>2</sup>, Rupam Tripura<sup>4</sup>, Thomas J. Peto<sup>4</sup>, Dysoley Lek<sup>5</sup>, Stefan H. I. Kappe<sup>6</sup>, Mehul Dhorda<sup>4</sup>, Standwell C. Nkhoma<sup>7</sup>, Ian H. Cheeseman<sup>2</sup>, Ashley M. Vaughan<sup>8</sup>, Timothy J. C. Anderson<sup>2</sup>, Michael T. Ferdig<sup>1</sup><sup>1</sup>University of Notre Dame, South Bend, IN, United States, <sup>2</sup>Texas Biomedical Research Institute, San Antonio, TX, United States, <sup>3</sup>Iowa State University, Ames, IA, United States, <sup>4</sup>Mahidol-Oxford Tropical Medicine Research Unit, Mahidol University, Bangkok, Thailand, <sup>5</sup>National Center for Parasitology, Entomology and Malaria Control, Phnom Penh, Cambodia, <sup>6</sup>Seattle Children's Research Institute, Seattle, WA, United States, <sup>7</sup>BEI Resources, Manassas, VA, United States

7486

**OUTCOME OF SNAKEBITE VICTIMS MANAGED BY TRAINED HEALTH ASSISTANTS AT A SNAKEBITE TREATMENT CENTER IN NEPAL**Aarjav Sharma<sup>1</sup>, Arun Gautam<sup>1</sup>, Urza Bhattarai<sup>1</sup>, Srista Manandhar<sup>1</sup>, Sunit Chhetri<sup>1</sup>, Rohan Basnet<sup>1</sup>, Aakriti Sapkota<sup>2</sup>, Khem Adhikari<sup>3</sup>, Sanjib K. Sharma<sup>1</sup><sup>1</sup>BP Koirala Institute of Health Sciences, Dharan, Nepal, <sup>2</sup>Damauli Hospital, Vyas, Nepal, <sup>3</sup>Snakebite Treatment Center, Damak, Damak, Nepal

7644

**REPRODUCIBILITY OF A SMARTPHONE-BASED VISUAL ACUITY TEST (PEEK ACUITY) IN PERUVIAN SCHOOLCHILDREN**Evelyn del Rosario Munayco Pantoja<sup>1</sup>, Jeremy Keenan<sup>2</sup>, Andres Lescano<sup>1</sup><sup>1</sup>Emerge, Emerging Diseases and Climate Change Research Unit, School of Public Health and Administration, Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>University of California, San Francisco, CA, United States

8166

**EVALUATION OF THE BIOLOGICAL ACTIVITY OF CHEMICAL CONSTITUENTS FROM THE STEMBARK OF KIGELIA AFRICANA, A CAMEROONIAN MEDICINAL PLANT, AGAINST ONCHOCERCA OCHENGI PARASITES**Ghansenyuy Salome Yuwong<sup>1</sup>, Yemback Piere<sup>1</sup>, Eyong Kenneth Oben<sup>1</sup>, Gabriel Ngosong Folefoc<sup>1</sup>, Fidelis Cho Ngwa<sup>2</sup><sup>1</sup>University of Yaounde 1, Yaounde, Cameroon, <sup>2</sup>University of Buea, Buea, Cameroon

8318

**MORPHOLOGICAL AND MOLECULAR IDENTIFICATION OF B. MALAYI AND OTHER FILARIAL SPECIES IN ANIMALS FROM BELITUNG, INDONESIA: IMPLICATIONS FOR LYMPHATIC FILARIASIS ELIMINATION**Irina Diekmann<sup>1</sup>, Kerstin Fischer<sup>1</sup>, Taniawati Supali<sup>2</sup>, Peter Fischer<sup>1</sup><sup>1</sup>Infectious Diseases Division, Department of Medicine, Washington University School of Medicine, St. Louis, MO, United States, <sup>2</sup>Department of Parasitology, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia

8366

**PATHOGENESIS AND TRANSMISSION OF SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME VIRUS IN EXPERIMENTALLY INFECTED ANIMALS**Jeffrey M. Marano<sup>1</sup>, Angela Bosco-Lauth<sup>1</sup>, Airn E. Hartwig<sup>1</sup>, Stephanie M. Porter<sup>1</sup>, Nicole M. Nemeth<sup>3</sup>, Marissa Quilici<sup>1</sup><sup>1</sup>Colorado State, Fort Collins, CO, United States, <sup>2</sup>United States Department of Agriculture - Animal & Plant Health Inspection Service, Fort Collins, CO, United States, <sup>3</sup>University of Georgia, Athens, GA, United States**American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) SIE Subcommittee Meeting**

Convention Center - Room 390 (3rd Floor)

Wednesday, November 13, 11 a.m. - Noon

**ACCTMTH Clinical Research Award Session**

Convention Center - Room 351 (3rd Floor)

Wednesday, November 13, Noon - 2:30 p.m.

The ACCTMTH Clinical Research Award recognizes excellence in clinically-oriented research presented by a student (within six months of completing undergraduate or master's level training, including medical undergraduate degrees) or person in graduate medical training at the Annual Meeting.

**CHAIR**

Obinna Nnaemeka Nnedu

Ochsner Clinic Foundation, New Orleans, LA, United States

**JUDGE**

Miguel Cabada

University of Texas Medical Branch, Galveston, TX, United States

Kristina Krohn

University of Minnesota, Minneapolis, MN, United States

Latha Rajan

Tulane University, New Orleans, LA, United States

Bryan N. Tegomoh

University of Yaounde I Medical School, Cameroon, Yaounde, Cameroon

Noon

6045

**THE CLINICO-EPIDEMIOLOGICAL EXPERIENCE OF AN MPOX OUTBREAK AT A LARGE HEALTHCARE SYSTEM IN LOUISIANA, USA.**Mary Ellen Owings<sup>1</sup>, Latha Rajan<sup>1</sup>, Obinna Nnedu<sup>2</sup><sup>1</sup>Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States, <sup>2</sup>Ochsner Medical Center, Infectious Diseases Department, New Orleans, LA, United States

12:15 p.m.

6289

**ENHANCED IFN- $\gamma$ , BUT NOT IL-2, RESPONSE TO MYCOBACTERIUM TUBERCULOSIS ANTIGENS IN HIV/LATENT TB CO-INFECTED PATIENTS ON LONG-TERM HAART**

Dawit Gebreegziabihier Hagos

Mekelle University, college of health Sciences, Mekelle, Ethiopia

12:30 p.m.

6436

### MATURATION AND DIVERSIFICATION OF THE B AND T CELL RECEPTOR REPERTOIRES OVER 9 YEARS OF REPEATED MALARIA INFECTIONS

Helen George<sup>1</sup>, Heike Baum<sup>2</sup>, Stephan Lorenzen<sup>3</sup>, Aissata Ongoiba<sup>4</sup>, Safiatou Doumbo<sup>4</sup>, Didier Doumtabe<sup>4</sup>, Shanning Li<sup>5</sup>, Maren Sandkuhl<sup>6</sup>, Thomas Jacobs<sup>1</sup>, Kassoum Kayentao<sup>4</sup>, Boubacar Traore<sup>4</sup>, Peter D. Crompton<sup>7</sup>, Martin Davey<sup>8</sup>, Dániel Cadar<sup>2</sup>, Maria Mackroth<sup>5</sup>, Christine S. Hopp<sup>1</sup>

<sup>1</sup>Protozoa Immunology, Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>2</sup>Bernhard Nocht Institute for Tropical Medicine, National Reference Centre for Tropical Infectious Diseases, Hamburg, Germany, <sup>3</sup>Bioinformatics, Bernhard Nocht Institute, Hamburg, Germany, <sup>4</sup>Malaria Research and Training Centre, Department of Epidemiology of Parasitic Diseases, International Center of Excellence in Research, University of Sciences, Technique and Technology of Bamako, Bamako, Mali, <sup>5</sup>Malaria Infection Biology and Immunity Section, Laboratory of Immunogenetics, NIAID, NIH, Rockville, MD, United States, <sup>6</sup>First Medical Department, Division of Infectious Diseases, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, <sup>7</sup>Malaria Infection Biology and Immunity Section, Laboratory of Immunogenetics, NIAID, NIH, Rockville, MD, United States, <sup>8</sup>Division of Biomedical Sciences, Warwick Medical School, University of Warwick, Coventry, United Kingdom

12:45 p.m.

6621

### RESPIRATORY VIRUSES AND BACTERIA CARRIAGE AMONG PEOPLE LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS IN ACCRA, GHANA

Lawrencia Ami Emeffa Ativi<sup>1</sup>, Mildred Adusei-Poku<sup>1</sup>, Beverly Egyir<sup>2</sup>

<sup>1</sup>University of Ghana, ACCRA, Ghana, <sup>2</sup>Noguchi Memorial Institute for Medical Research, ACCRA, Ghana

1 p.m.

7082

### TRENDS IN MORTALITY CAUSED BY VIRAL HEPATITIS IN THE UNITED STATES POPULATION: A RETROSPECTIVE CROSS-SECTIONAL STUDY USING THE CDC WONDER DATABASE.

Muhammad Sohaib Asghar<sup>1</sup>, Abuoma C. Ekpendu<sup>1</sup>, Mohammed Akram<sup>2</sup>, Rumael Jawed<sup>3</sup>, Pankajkumar Patel<sup>1</sup>, Chad K. Brands<sup>1</sup>

<sup>1</sup>Advent Health, Sebring, FL, United States, <sup>2</sup>HCA Aventura, Aventura, FL, United States, <sup>3</sup>Nazareth Hospital, Philadelphia, PA, United States

1:15 p.m.

7399

### EVALUATION OF NEUROCYSTICERCOSIS PRESENTATION AND MANAGEMENT IN HOUSTON, TEXAS

Theresa Sepulveda, Fernando H. Centeno, Jose A. Serpa-Alvarez, Jill Weatherhead, Eva H. Clark

Baylor College of Medicine, Houston, TX, United States

1:30 p.m.

7556

### COINFECTION OF POWASSAN VIRUS AND BORRELLIA BURGDORFERI IN A C3H MOUSE MODEL

Jessica Crooker, Dakota Paine, Saravanan Thangamani  
SUNY Upstate Medical University, Syracuse, NY, United States

1:45 p.m.

8093

### APPLICATION OF THE RAPID DIAGNOSTIC TEST BASED ON LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (RLDT) FOR SHIGELLA AND ENTEROTOXIGENIC ESCHERICHIA COLI (ETEC) DETECTION IN CHILDHOOD DIARRHEA IN BURKINA FASO

Alimatou Héma<sup>1</sup>, Samuel S. Sermé<sup>1</sup>, Jean W. Sawadogo<sup>1</sup>, Amidou Diarra<sup>1</sup>, Amidou Z. Ouédraogo<sup>1</sup>, Issa Nébié<sup>1</sup>, Alfred B. Tiono<sup>1</sup>, Sophie Houard<sup>2</sup>, Subhra Chakraborty<sup>3</sup>, Alphonse Ouédraogo<sup>1</sup>, Sodiomon B. Sirima<sup>1</sup>

<sup>1</sup>Groupe de Recherche Action en Santé (GRAS), Ouagadougou, Burkina Faso, <sup>2</sup>European Vaccine Initiative (EVI), Heidelberg, Germany, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, WA, United States

### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) SIRACA Subcommittee Meeting

Convention Center - Room 390 (3rd Floor)

Wednesday, November 13, Noon - 2 p.m.

### Press Room

Convention Center - Room 340 (3rd Floor)

Wednesday, November 13, Noon - 5 p.m.

### Speaker Ready Room

Convention Center - Room 387 (3rd Floor)

Wednesday, November 13, Noon - 6 p.m.

### Point-of-Entry: First-Time Attendee Orientation

Convention Center - Room 383/384/385 (3rd Floor)

Wednesday, November 13, 1 p.m. - 2 p.m.

Are you new to the ASTMH Annual Meeting and want to get the lay of the land? Don't miss our Point of Entry session. This session will orient new attendees to the schedule, session structure and highlights of the Annual Meeting. Meet others attending the conference for the first time and expand your professional network while learning the ins and outs of the meeting.

1 p.m.

### POINT-OF-ENTRY: FIRST-TIME ATTENDEE ORIENTATION

Koya Allen

Booz Allen Hamilton, Baden-Wurtemberg, Germany

### Workshop

### Climate Fresk: Understanding the Physics, Causes and Consequences of Climate Change to Empower Action

Convention Center - Room 350 (3rd Floor)

Wednesday, November 13, 2024, 1:00 pm - 4:00 pm

The ASTMH Committee on Global Health and Forecasting Healthy Futures present the second annual Climate Fresk workshop to encourage climate-informed practices and tools in global health work. The workshop will consist of a collaborative card game to learn the mechanisms of climate change and gain a holistic view of climate change, including the impacts on health. Participants will reflect on the lessons from the card game and collectively brainstorm solutions to address climate change's impacts on health. The objectives of this workshop are:

- 1) Offer a collaborative learning experience for the ASTMH community to understand the science, causes, and consequences of climate change, based on the IPCC reports
- 2) Encourage participants to engage with climate change by identifying strategic linkages to their existing body of work

Wednesday  
November 13



- 3) Increase awareness of potential climate-health solutions that participants can incorporate into their specific work in infectious/tropical disease or health in general

## Workshop

### Meet the Editors and Writing Workshop

*Convention Center - Room 391/392 (3rd Floor)*  
**Wednesday, November 13, 1 p.m. - 5 p.m.**

The *American Journal of Tropical Medicine and Hygiene (AJTMH)* presents a writing workshop for early-career researchers and researchers from disease-endemic regions. The goal is to guide attendees through the scholarly publication process and provide best practices for manuscript writing. The session will address how to frame research, choose a journal, map out your paper, write an abstract, the mechanics of writing, how to properly respond to reviewer comments, and best practices for data sharing and Open Science. The panel includes Editors-in-Chief from top global-health journals who will participate in a Q&A at the end of the first part of the session. The second part of the session will include one-on-one analysis of pre-chosen abstracts with feedback and edits being shared with the group at-large.

#### CHAIR

Alison Jaeb, Managing Editor and Publisher  
*American Journal of Tropical Medicine and Hygiene, Arlington, VA, United States*

Kasturi Haldar, Professor  
*University of Notre Dame, Notre Dame, IN, United States*

#### 1 p.m.

#### MEET THE EDITORS

Phillip J. Rosenthal, *AJTMH* Editor-in-Chief  
*University of California San Francisco, San Francisco, CA, United States*

Shaden Kamhawi, Editor-in-Chief, *PLOS Neglected Tropical Diseases*  
*PLOS Neglected Tropical Diseases, Bethesda, MD, United States*

Stephen Higgs, Editor-in-Chief, *Vector-Borne & Zoonotic Diseases*  
*Kansas State University, Manhattan, KS, United States*

Marco De Ambrogi, Deputy Editor  
*The Lancet Infectious Diseases, London, United Kingdom*

#### 2:30 p.m.

#### BREAK

#### 3 p.m.

#### ROUNDTABLES: ABSTRACT REVIEWS AND FEEDBACK

### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) SALS Subcommittee Meeting

*Convention Center - Room 390 (3rd Floor)*  
**Wednesday, November 13, 2 p.m. - 3:30 p.m.**

### Young Investigator Award Committee Meeting

*Convention Center - Room 343/344 (3rd Floor)*  
**Wednesday, November 13, 2 p.m. - 3:30 p.m.**

### Student Reception

*Hilton - River (Riverside Building)*  
**Wednesday, November 13, 2:30 p.m. - 3:30 p.m.**

The ASTMH Board of Directors invites students, postdoctoral fellows and residents to the student reception. This reception is an opportunity to meet fellow trainees, network with colleagues and mentors and engage in conversation with Society leaders.

### ACCTMTH Clinical Research Award Committee Meeting

*Convention Center - Room 351 (3rd Floor)*  
**Wednesday, November 13, 3 p.m. - 4 p.m.**

### American Committee of Medical Entomology (ACME) Council Meeting

*Convention Center - Room 397 (3rd Floor)*  
**Wednesday, November 13, 3:30 p.m. - 5:30 p.m.**

### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Council Meeting

*Convention Center - Room 349 (3rd Floor)*  
**Wednesday, November 13, 3:30 p.m. - 5:30 p.m.**

### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) Council Meeting

*Convention Center - Room 390 (3rd Floor)*  
**Wednesday, November 13, 3:30 p.m. - 5:30 p.m.**

### ASTMH Committee on Global Health (ACGH) Council Meeting

*Convention Center - Room 399 (3rd Floor)*  
**Wednesday, November 13, 3:30 p.m. - 5:30 p.m.**

### Clinical Group (American Committee on Clinical Tropical Medicine and Travelers' Health - ACCTMTH) Council Meeting

*Convention Center - Room 398 (3rd Floor)*  
**Wednesday, November 13, 3:30 p.m. - 5:30 p.m.**

### Young Investigator Award Reception

*Convention Center - Room 346/347 (3rd Floor)*  
**Wednesday, November 13, 3:45 p.m. - 4:30 p.m.**

*Supported with funding from Pfizer*



## Plenary Session 1

### Plenary Session I: Opening Session and Awards Program

Convention Center - Hall I-2 (1st Floor)

Wednesday, November 13, 5:30 p.m. - 7 p.m.

**THIS SESSION DOES NOT CARRY CME CREDIT.**

#### CHAIR

Linnie Golightly

Weill Cornell Medical College, New York, NY, United States

#### 5:30 p.m.

##### SCIENTIFIC PROGRAM CHAIR WELCOMING REMARKS

David Hamer

Boston University, Boston, MA, United States

#### 5:45 p.m.

##### KEYNOTE ADDRESS



#### Monique Wasunna, MD, PhD

Africa Ambassador

Drugs for Neglected Diseases *initiative*

Nairobi, Kenya

Dr. Monique Wasunna is the Drugs for Neglected Diseases *initiative's* (DNDi) Africa Ambassador. In this role, she engages African policy leaders and other stakeholders to support their ambitions of advancing universal health coverage, treatment access and eliminating neglected diseases through R&D collaborations that deliver new treatments for the most vulnerable patients. Previously, she served as the Regional Director of DNDi Eastern Africa. She is a founding chair and member of the Leishmaniasis East Africa Platform, which promotes clinical research and strengthens research capacity for leishmaniasis in the region.

Dr. Wasunna was the Chief Research Officer and Assistant Director of Research at the Kenya Medical Research Institute (KEMRI). She has served as the Director, Centre for Clinical Research, KEMRI, and subsequently served as the Acting Director KEMRI. She was a member of the International Bioethics Committee of UNESCO, Kenya National Bioethics Committee, the Kenyatta National Hospital and University of Nairobi Scientific and Research Ethics committee, and currently a member of the Expert Committee of Clinical Trials of the Pharmacy and Poisons Board, Kenya.

Dr. Wasunna is a physician and an infectious disease and tropical medicine specialist. She holds a Bachelor of Medicine and Bachelor of Surgery degree from the University of Nairobi as well as an MSc and PhD from the London School of Hygiene & Tropical Medicine. She also holds a diploma in Tropical Medicine and Hygiene from the Royal College of Physicians of London. Dr. Wasunna is a Fellow of both the Royal Society of Tropical Medicine and the Eastern, Central, and Southern Africa College of Physicians.

Dr. Wasunna has been recognized for her contributions to neglected disease research. She is the recipient of the Distinguished Neglected Tropical Diseases Researcher award from the Kenyan Ministry of Health and the National Order of Merit (Officier de l'ordre national du mérite) from the French government. Additionally, she has been honored with a Collaboration and Partnership award from the Kenya Medical Research Institute and was named a Mycetoma Ambassador. Dr. Wasunna has been a researcher and a principal investigator in visceral leishmaniasis, malaria, and HIV studies. Her contributions are well-documented in peer-reviewed journals.

#### 6:05 p.m.

##### AWARDS PROGRAM

Presiding Officer: Linnie Golightly

Weill Cornell Medical College, New York, NY, United States

##### Mwele Malecela Mentorship Programme for Women in Neglected Tropical Diseases

##### Recognition of ASTMH/BMGF Annual Meeting Travel Awards

##### Recognition of Young Investigator Awards

##### Recognition of ACCTMTH (Clinical Group) Clinical Research Award

##### Burroughs Wellcome Fund - ASTMH Postdoctoral Fellowship in Tropical Infectious Diseases

Emily Evans

Emory University, United States

Jesse Ross

Columbia University Medical Center, United States

Sahal Thahir

University of North Carolina at Chapel Hill, United States

##### Donald Krogstad Award for Early-Career Malian Scientists

Nouhoum Diallo

MRTC/USTTB

##### Recognition of 2024 Fellows of ASTMH (FASTMH)

Hoseah Miima Akala

Kenya Medical Research Institute/ Walter Reed Army Institute of Research – Africa, Kenya

Matthew Aliota

University of Minnesota-Twin Cities, United States

Lyric Bartholomay

University of Wisconsin-Madison, United States

May Chu

Colorado School of Public Health, United States

Maria Diuk-Wasser

Columbia University, United States

Linnie Golightly  
*Weill Cornell Medical Center, United States*

Karen A. Goraleski  
*ASTMH CEO Emeritus, United States*

Kasturi Haldar  
*University of Notre Dame, United States*

Eric Halsey  
*Centers for Disease Control and Prevention, United States*

Manuel Llinás  
*The Pennsylvania State University, United States*

Kristy Murray  
*Emory University, United States*

Kyle Petersen  
*Uniformed Services University of the Health Sciences, United States*

Dylan Pillai  
*University of Calgary, Canada*

Bobbi Pritt  
*Mayo Clinic, United States*

David Saunders  
*Uniformed Services University of the Health Sciences, United States*

Maggy Sikulu-Lord  
*The University of Queensland, Australia*

Sharon Tennant  
*University of Maryland School of Medicine, United States*

### Recognition of ASTMH Distinguished International Fellows (FASTMH)

Kwaku Poku Asante  
*Kintampo Health Research Institute, Ghana*

Mauricio Barreto  
*FIOCRUZ/Federal University of Bahia, Brazil*

Christopher Drakeley  
*London School of Hygiene and Tropical Medicine, United Kingdom*

Fyezah Jehan  
*Aga Khan University, Pakistan*

Claudio Lanata  
*Instituto Investigacion Nutricional, Peru*

Joel Tarning  
*Mahidol Oxford Tropical Medicine Research Institute, Thailand*

Antoinette Tshetu Kitoto  
*Kinshasa School of Public Health, Democratic Republic of Congo*

Monique Wasunna  
*Drugs for Neglected Diseases Initiative (DNDi), Kenya*

### Alan J. Magill Fellow

Punam Amratia  
*Ifakara Health Institute*

## Subgroup Medals and Awards

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### Harry Hoogstraal Medal (ACME)

Marcelo Jacobs-Lorena  
*Johns Hopkins University, United States*

### William Trager Award for Basic Parasitology (ACMCIP)

Sebastian Lourido  
*MIT and the Whitehead Institute for Biomedical Research, United States*

### Martin Wolfe Mentoring Award (ACCTMTH)

Thomas Nutman  
*National Institutes of Health, United States*

### Scherer Hardy (ACAV)

Jean-Paul Carrera  
*Gorgas Memorial Institute of Health Studies, Panama*

## Society-Level Medals and Awards

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Presented by Laila Woc-Colburn and Jamie Bay Nishi, *ASTMH Communications Award Co-Chairs*

### Communications Award

**A spiking fever: Long neglected, Lassa fever is surging in West Africa. Researchers want to know why**

By Leslie Roberts  
February 22, 2024  
*Science*

### Bailey K. Ashford Medal

Andrew S. Azman  
*Johns Hopkins Bloomberg School of Public Health, United States*

Jonathan Juliano  
*University of North Carolina at Chapel Hill, United States*

### Clara Southmayd Ludlow Medal

Firdausi Qadri  
*icddr, Bangladesh*

### Joseph Augustin LePrince Medal

Didier Menard  
*Institut Pasteur, France*

### Walter Reed Medal

Stephen L. Hoffman  
*Sanaria Inc., United States*

## Opening Reception

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*Convention Center - Hall J (1st Floor)*  
**Wednesday, November 13, 7 p.m. - 9:30 p.m.**

## Exhibit Hall Open

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*Convention Center - Hall J (1st Floor)*  
**Wednesday, November 13, 7 p.m. - 9:30 p.m.**

## Thursday, November 14

### Registration

Convention Center - Lobby I (1st Floor)  
Thursday, November 14, 7 a.m. - 5 p.m.

### Speaker Ready Room (Closed 11 a.m. - Noon)

Convention Center - Room 387 (3rd Floor)  
Thursday, November 14, 7 a.m. - 6 p.m.

### TropStop -Student/Trainee Lounge

Convention Center - Room 346/347 (3rd Floor)  
Thursday, November 14, 7 a.m. - 5 p.m.

This casual setting, designed with students, trainees and residents in mind (coffee, internet), is your place for a break from the fast pace of the meeting and relax with colleagues and friends. Check out the Career Chats sessions, held in the TropStop. This will be your opportunity to meet professionals in the fields of tropical medicine and global health who will share their personal career paths and answer your questions about the various bumps and forks in the road.

### Meeting Sign-Up Room

Hilton – Norwich Room and Windsor Room (3rd Floor)  
Thursday, November 14, 7 a.m. - 7 p.m.

### Nursing Mothers Room

Convention Center – Office I120 and Office J121 (1st Floor)  
Thursday, November 14, 7 a.m. - 7 p.m.

### Prayer Room

Convention Center - Room 342 (3rd Floor)  
Thursday, November 14, 7 a.m. - 7 p.m.

### AJTMH Editorial Board Meeting

Hilton - Marlborough B (2nd Floor)  
Thursday, November 14, 7 a.m. - 8 a.m.

### Centennial Travel Award Committee Meeting

Hilton - Marlborough A (2nd Floor)  
Thursday, November 14, 7 a.m. - 8 a.m.

### Diploma Course Directors Meeting

Hilton - Ascot (3rd Floor)  
Thursday, November 14, 7 a.m. - 8 a.m.

### International Membership Committee Meeting

Hilton – Churchill A1 (2nd Floor)  
Thursday, November 14, 7 a.m. - 8 a.m.

### Press Room

Convention Center - Room 340 (3rd Floor)  
Thursday, November 14, 7:45 a.m. - 5 p.m.



### Symposium 2

#### Can We Expect Triple/Multiple Artemisinin-Based Combination Therapies for Malaria in the Near Future?

Convention Center - Hall I-2 (1st Floor)  
Thursday, November 14, 8 a.m. - 9:45 a.m.

Recent reports of artemisinin resistance in African countries necessitate urgent action to prevent further emergence and/or spread of artemisinin resistance in Africa. Artemether-lumefantrine (AL) is the most widely used ACT, accounting for >70% of ACT use. Recent reports of decreased in vitro susceptibility to lumefantrine and increased reports of travelers presenting with AL treatment failures is additionally worrisome. New antimalarial drugs may not come to the market within the next 5 years and one of the leading candidates, ganaplacide, is currently combined with lumefantrine. Preventing lumefantrine resistance is crucial. Triple or multidrug ACTs (TACTs or MDACTs), combining artemisinin with two or more currently available drugs, could be one of the last remaining safe and effective treatments for malaria that can be deployed rapidly. The Tracking Resistance to Artemisinin Collaboration II (TRACII) trial enrolled 1100 patients, mainly adults from Southeast Asia, and provided the first clinical proof of concept of TACTs. Mathematical modeling efforts have shown the advantage of deploying TACTs to prevent or delay resistance. The Development of Triple Artemisinin-based Combination Therapies (DeTACT project), the ArteSunate-Amodiaquine-Atovaquone-Proguanil (ASAAP) consortium and the Multi-drug combination therapies to prevent Malaria drug resistance (MULTIMAL) consortium have been working TACTs and MDACTs to be primarily deployed in pediatric populations in African countries. The DeTACT project takes a holistic approach to provide multi-faceted evidence needed for deployment of TACTs. These range from safety, tolerability and efficacy of TACTs, modeling future benefits of TACTs, stakeholder perception on acceptability and market positioning of TACTs. The DeTACT clinical trial is complete and final results on safety, tolerability and efficacy of AL+amodiaquine (AL+AQ) and artesunate-mefloquine+piperavaquine from eight African countries will be presented. The safety, tolerability and efficacy of AL+AQ in Cambodia, where >90% of parasites are artemisinin-resistant will be presented. The development, clinical trial plan, market readiness and deployment plan of the fixed-dose combination (FDC) of a TACT comprising artemether-lumefantrine-amodiaquine (FDC ALAQ) will be presented. The ASAAP consortium's evaluation of clinical efficacy and transmission blocking potential of AL+atovaquone-proguanil in five African countries will be presented. The MULTIMAL consortium's final results on clinical efficacy, safety/tolerability and pharmacokinetics of an age-deescalation trial of artesunate-pyronaridine+atovaquone-proguanil and artesunate-fosmidomycin-clindamycin against

standard artesunate-pyronaridine therapy in two African countries will be presented. #ClinicalResearch #Resistance #Therapeutics #InfectiousDisease

#### CHAIR

Arjen M. Dondorp  
Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand

Quique Bassat  
Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain

**8 a.m.**

#### INTRODUCTION

**8:10 a.m.**

#### THE SAFETY, TOLERABILITY AND EFFICACY OF ARTEMETHER-LUMEFANTRINE+AMODIAQUINE AND ARTESUNATE+MEFLOQUINE+PIPERAQUINE AGAINST UNCOMPLICATED MALARIA IN EIGHT AFRICAN COUNTRIES

Mehul J. Dhorda  
Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand

**8:25 a.m.**

#### ARTEMETHER-LUMEFANTRINE+AMODIAQUINE PROTECTS AGAINST MULTI-DRUG RESISTANT MALARIA IN CAMBODIA

Chanaki Amaratunga  
Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand

**8:40 a.m.**

#### DEVELOPMENT, TESTING AND DEPLOYMENT PLANS OF A FIXED-DOSE COMBINATION OF ARTEMETHER-LUMEFANTRINE-AMODIAQUINE FOR UNCOMPLICATED MALARIA

Michelle Xiong  
Shanghai Fosun Pharmaceutical Industrial Development Co. Ltd., Shanghai, China

**8:55 a.m.**

#### PHASE II EVALUATION OF ARTESUNATE-PYRONARIDINE+ATOVAQUONE-PROGUANIL AND ARTESUNATE+FOSMIDOMYCIN+CLINDAMYCIN FOR THE TREATMENT OF UNCOMPLICATED MALARIA

Michael Ramharter  
Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

**9:15 a.m.**

#### THE SAFETY, EFFICACY AND TRANSMISSION BLOCKING EFFECT OF ARTEMETHER-LUMEFANTRINE +ATOVAQUONE-PROGUANIL FOR UNCOMPLICATED MALARIA

Oumou Maiga Ascofaré  
Kumasi Centre for Collaborative Research in Tropical Medicine, Kumasi, Ghana

**9:35 a.m.**

#### ARTEMISININ PARTIAL RESISTANCE IN UGANDAN CHILDREN WITH COMPLICATED MALARIA

Ruth Namazzi  
Makerere University, Kampala, Uganda

### Symposium 3

#### What's New in Clinical Tropical Medicine Literature?

Convention Center - Room 343/344 (3rd Floor)

Thursday, November 14, 8 a.m. - 9:45 a.m.

Experts in Tropical Medicine and Travelers' Health base their decisions on the knowledge of disease epidemiology, clinical

course, diagnostic tools, resistance patterns, and vaccine data. This symposium will highlight recent studies on these aspects of Tuberculosis, Malaria, Scrub Typhus and Leishmaniasis. #InfectiousDisease #ClinicalResearch #Epidemiology

#### CHAIR

Ivan A. Gonzalez  
University of Miami, Miami, FL, United States

Lin H. Chen  
Mount Auburn Hospital and Harvard Medical School, Cambridge, MA, United States

**8 a.m.**

#### INTRODUCTION

**8:10 a.m.**

#### WHAT'S NEW IN THE LITERATURE: LEISHMANIASIS?

Naomi E. Aronson  
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

**8:35 a.m.**

#### WHAT'S NEW IN THE LITERATURE: SCRUB TYPHUS?

Priscilla Rupali  
Christian Medical College Vellore, Vellore, India

**9 a.m.**

#### WHAT'S NEW IN THE LITERATURE: TUBERCULOSIS?

German Henostroza  
University Of Alabama At Birmingham, Birmingham, AL, United States

**9:25 a.m.**

#### WHAT'S NEW IN THE LITERATURE: MALARIA?

Sapha Barkati  
McGill University Health Centre, Montreal, QC, Canada

### Scientific Session 4

#### Kinetoplastida and Other Opportunistic and Anaerobic Protozoa: Diagnosis and New Detection Tools

Convention Center - Room 345 (3rd Floor)

Thursday, November 14, 8 a.m. - 9:45 a.m.

This session does not carry CME credit.

#Diagnostics #TranslationalScience #InfectiousDisease

#### CHAIR

Thalia Pacheco-Fernandez  
Food and Drug Administration, Silver Spring, MD, United States

Camila I. De Oliveira  
FIOCRUZ, Salvador, Brazil

**8 a.m.**

**6000**

#### HIGHLY SENSITIVE TARGETS FOR DIAGNOSIS AND SPECIATION OF HUMAN LEISHMANIASIS

Nicholas Ray Duncan<sup>1</sup>, Elise O'Connell<sup>1</sup>, Janitzio Guzmán<sup>1</sup>, Joshua R. Lacsina<sup>2</sup>, Thalia Pacheco-Fernandez<sup>3</sup>, Sreenivas Gannavaram<sup>3</sup>, Andrea Paun<sup>1</sup>, Thomas Nutman<sup>1</sup>, Sasisekhar Sasisekhar Bannuru<sup>1</sup>

<sup>1</sup>Laboratory of Parasitic Diseases, NIAID, National Institutes of Health, Bethesda, MD, United States, <sup>2</sup>Laboratory of Malaria & Vector Research, NIAID, National Institutes of Health, Bethesda, MD, United States, <sup>3</sup>Center for Biologics Evaluation and Research, FDA, Silver Spring, MD, United States

8:15 a.m.

6001

### THE ROLE OF LIPIDS AS POTENTIAL BIOMARKERS OF DISEASE PROGRESSION AND THERAPEUTIC RESPONSE IN PATIENTS WITH CHRONIC *T. CRUZI* INFECTION

Juan C. Gabaldón-Figueira<sup>1</sup>, Albert Ros-Lucas<sup>1</sup>, Nieves Martínez-Peinado<sup>1</sup>, Gavin Blackburn<sup>2</sup>, Irene Losada-Galván<sup>1</sup>, Elizabeth Posada<sup>1</sup>, Cristina Ballart<sup>3</sup>, Elisa Escabia<sup>1</sup>, Jordi Capellades<sup>4</sup>, Oscar Yanes<sup>4</sup>, Maria J. Pinazo<sup>5</sup>, Joaquim Gascón<sup>1</sup>, Julio Alonso-Padilla<sup>1</sup>

<sup>1</sup>Barcelona Institute for Global Health, Barcelona, Spain, <sup>2</sup>Glasgow Polyomics, Glasgow, United Kingdom, <sup>3</sup>Universitat de Barcelona, Barcelona, Spain, <sup>4</sup>Universitat Rovira i Virgili, Tarragona, Spain, <sup>5</sup>Drugs for Neglected Diseases Initiative (DNDi), Rio de Janeiro, Brazil

8:30 a.m.

6002

### DEVELOPMENT OF A CRISPR-LAMP BASED BIOSENSOR WITH A LATERAL FLOW READOUT FOR THE DETECTION OF CUTANEOUS LEISHMANIASIS

Laud Anthony Wihibeturo Basing<sup>1</sup>, Belinda O. Antwi<sup>1</sup>, Anthony Y. Dziworshie<sup>1</sup>, Francisca Adomako<sup>2</sup>, Christabel Aning Boateng<sup>3</sup>, Yaw Adu-Sarkodie<sup>4</sup>

<sup>1</sup>Department of Medical Diagnostics, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, <sup>2</sup>R&D Department, Incas Diagnostics, Kumasi, Ghana, <sup>3</sup>School of Medicine and Dentistry, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, <sup>4</sup>Department of Clinical Microbiology, School of Medicine and Dentistry, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

8:45 a.m.

6003

### DEVELOPMENT AND CLINICAL VALIDATION OF LEISHID, A LAMP-BASED SPECIES-SPECIFIC *LEISHMANIA* DETECTION TOOL FOR THE MOLECULAR DIAGNOSIS OF LEISHMANIASIS

Alessandra Mara de Sousa<sup>1</sup>, Raphael França Oliveira<sup>1</sup>, Stephanie Megale Ferreira<sup>1</sup>, Ellen Gonçalves de Oliveira<sup>1</sup>, Ana Caroline de Castro Nascimento Sousa<sup>2</sup>, Rafael Luiz da Silva Neves<sup>1</sup>, Eduardo Martinez<sup>3</sup>, Célia Maria Ferreira Gontijo<sup>1</sup>, Rodrigo Pedro Soares<sup>1</sup>, Vinicius Maracajá Coutinho<sup>3</sup>, Nilmar Silvio Moretti<sup>4</sup>, Rubens Lima do Monte-Neto<sup>1</sup>

<sup>1</sup>Instituto René Rachou - Fundação Oswaldo Cruz - IRR/Fiocruz Minas, Belo Horizonte, Brazil, <sup>2</sup>Laboratório de Biologia Molecular de Patógenos (LBMP) - Departamento de Microbiologia Imunologia e Parasitologia - Universidade Federal de São Paulo - Unifesp, São Paulo, Brazil, <sup>3</sup>Integrative Bioinformatics, Universidad de Chile, Santiago, Chile, Santiago, Chile, <sup>4</sup>Department of Pathology and Microbiology, Faculty of Veterinary Medicine, Université de Montréal, Saint-Hyacinthe, QC, Canada

9 a.m.

6004

### NEW STRATEGY FOR THE OPTIMIZATION OF TAQMAN QPCR FOR *ENTAMOEBA HISTOLYTICA* BY DROPLET DIGITAL PCR

Akira Kawashima<sup>1</sup>, Yanagawa Yasuaki<sup>2</sup>, Rieko Shimogawara<sup>3</sup>, Kenji Yagita<sup>4</sup>, Hiroyuki Gatanaga<sup>1</sup>, Koji Watanabe<sup>5</sup>

<sup>1</sup>AIDS Clinical Center, National Center for Global Health and Medicine, Tokyo, Japan, <sup>2</sup>Department of Microbiology and Immunology, Stanford University School of Medicine, Stanford, CA, United States, <sup>3</sup>Department of Parasitology, National Institute of Infectious Disease, Tokyo, Japan, <sup>4</sup>Department of Parasitology, National Institute of Infectious Diseases, Tokyo, Japan, <sup>5</sup>Division of Host Defense Mechanism, Tokai University School of Medicine, Kanagawa, Japan

9:15 a.m.

6005

### CHARACTERIZATION OF THE LEISHMANIN SKIN TEST ANTIGEN AS A BIOMARKER OF VACCINE EFFICACY AND DISEASE SURVEILLANCE

Laura Klenow<sup>1</sup>, Ranadhir Dey<sup>1</sup>, Hannah Markle<sup>1</sup>, Nazli Azodi<sup>1</sup>, Lais Da Silva Pereira<sup>1</sup>, Thalia Pacheco-Fernandez<sup>1</sup>, Patrick Lypaczewski<sup>2</sup>, Greg Matlashewski<sup>2</sup>, Abhay Satoskar<sup>3</sup>, Sreenivas Gannavaram<sup>1</sup>, Hira Nakhasi<sup>1</sup>

<sup>1</sup>FDA, Silver Spring, MD, United States, <sup>2</sup>McGill University, Montreal, QC, Canada, <sup>3</sup>Ohio State University, Columbus, OH, United States

9:30 a.m.

6006

### VISCERAL LEISHMANIASIS DIAGNOSIS WITH DIGITAL MICROSCOPY AND EDGE-AI MODELS

Lin Lin<sup>1</sup>, Ramón Vallés-López<sup>2</sup>, Daniel Cuadrado<sup>2</sup>, David Bermejo-Peláez<sup>2</sup>, Alexander Vladimirov<sup>2</sup>, María Postigo<sup>2</sup>, Fabiana Alves<sup>3</sup>, Eleni Ayele<sup>4</sup>, Arega Yeshanew<sup>5</sup>, Miguel Luengo-Oroz<sup>2</sup>, Israel Cruz<sup>6</sup>, Elena Dacal<sup>2</sup>

<sup>1</sup>Spotlab, Madrid & Spain Biomedical Image Technologies, ETSI Telecomunicación, Universidad Politécnica de Madrid, Madrid, Spain & CIBER de Bioingeniería, Biomateriales y Nanomedicina, Madrid, Spain, <sup>2</sup>Spotlab, Madrid, Spain, <sup>3</sup>Drugs for Neglected Diseases initiative, Geneva, Switzerland, <sup>4</sup>University of Gondar Department of Internal Medicine, Gondar, Ethiopia, <sup>5</sup>University of Gondar Department of Internal Medicine. Leishmaniasis Research Treatment Center, Gondar, Ethiopia, <sup>6</sup>National School of Public Health, CIBERINFEC, Instituto de Salud Carlos III, Madrid, Spain

## Symposium 5

### American Committee of Medical Entomology (ACME) Symposium I: Animal-Targeted One Health Interventions to Protect Humans from Vector-Borne Diseases

Convention Center - Room 352 (3rd Floor)

Thursday, November 14, 8 a.m. - 9:45 a.m.

Vector-borne diseases continue to emerge worldwide, with new options needed for management of vectors and pathogens in nature. Wild and domestic animals serve as reservoirs for zoonotic pathogens and hosts for blood feeding arthropod vectors. There is increasing attention to various ways in which the animal hosts can be targeted with management approaches to reduce human disease risk. The goals of animal targeted interventions are typically to (i) reduce the number of animal hosts; (ii) reduce the infection prevalence in animal hosts; and/or (iii) reduce vector densities by creating toxic animal blood meals. Approaches include culling of wildlife; treating of domestic or wild animals with insecticides; vaccination of domestic or wild animals and more. This symposium will feature research programs aimed at developing or evaluating animal-targeted interventions to reduce human risk of vector-borne diseases. Speakers will feature diverse vector-borne disease systems for which innovative public health solutions are needed. Presented works will focus on managing dogs, wild birds, livestock and deer in order to reduce risk of sand fly, mosquito, and tick-borne disease. Our speakers include those with backgrounds in human medicine, veterinary medicine, medical entomology and ecology, and together will feature key elements of animal-targeted 'One Health' solutions for vector-borne disease. #EcologicalStudies #Epidemiology #FieldStudies #InfectiousDisease #Prevention

#### CHAIR

Sarah A. Hamer  
Texas A&M University, College Station, TX, United States

Adriana Troyo  
Universidad de Costa Rica, San Jose, Costa Rica

8 a.m.

#### INTRODUCTION

Thursday  
November 14

**8:10 a.m.**

**TREATING WILD BIRDS WITH IVERMECTIN THROUGH BACKYARD BIRD FEEDERS TO REDUCE WEST NILE VIRUS TRANSMISSION RISK IN COLORADO**

Brian Foy  
*Colorado State University, Fort Collins, CO, United States*

**8:25 a.m.**

**DEVELOPING A PROTOCOL TO TREAT DEER TO REDUCE HUMAN EXPOSURE TO INFECTED TICKS**

Jean Tsao  
*Michigan State University, East Lansing, MI, United States*

**8:45 a.m.**

**VETERINARY ENDECTOCIDES FOR MALARIA CONTROL AND ELIMINATION: PROSPECTS AND CHALLENGE**

Carlos Chaccour  
*ISGlobal Barcelona Institute for Global Health, Barcelona, Spain*

**9:05 a.m.**

**ONE HEALTH ARBOVIRUS SURVEILLANCE IN AFRICA CAN INFORM PROSPECTS FOR TARGETED INTERVENTIONS TO PROTECT HUMANS**

Rosemary Sang  
*International Center of Insect Physiology and Ecology (ICIPE) Kenya and Arbovirology/VHF Unit, Medical Research Institute (KEMRI), Kenya, Nairobi, Kenya*

**9:25 a.m.**

**WAYS TO USE IMMUNOLOGY TO COMBAT LEISHMANIA AND CANINE INFECTIONOUSNESS TO SAND FLIES**

Max Waugh  
*Ohio State University, Columbus, OH, United States*

**Symposium 6**

**Back to Basics: The Essential Role of Basic Sciences in Clinical Tropical Medicine and Public Health**

*Convention Center - Room 353 (3rd Floor)*  
**Thursday, November 14, 8 a.m. - 9:45 a.m.**

There is a critical need for better integration between clinical and basic sciences to accomplish de-siloing of science and to better prepare clinicians and scientists to communicate the science behind and impact of both pharmaceutical and non-pharmaceutical interventions. Amidst the pandemic, it became increasingly clear that communication among basic and clinical scientists, as well as with patients, clients, decision-makers, and the public at-large must be improved. We must contextualize the role of basic and clinical science from hypothesis to improved outcomes in order to increase the efficacy and adoption of medical and public health interventions. The “soup-to-nuts” framework describes the scientific pipeline from the clinical problem (“what”) to the basic investigations to understand the significance of the problem (“why”) and to identify the mechanism(s) underlying the problem that lead to translational outcomes (“how”), and finally engagement with the public to increase trust in and adoption of medical and public health interventions (“impact”). While each talk will focus on a particular aspect of this framework, every talk will tell the full story of their scientific problem to cover the what-why-how-impact pipeline. The ultimate goal is to show – across

our stories and perspectives – how basic and clinical science are interdependent and must be integrated to effectively tackle problems in tropical medicine. The panel discussion will include a reverse Q&A to hear ASTMH community perspectives. #CellBiology #Genetics #Genomics #Immunology #InfectiousDisease

**CHAIR**

John H. Adams  
*University of South Florida, Tampa, FL, United States*

Mahalia Desruisseaux  
*Yale University School of Medicine, New Haven, CT, United States*

**8 a.m.**

**INTRODUCTION**

**8:10 a.m.**

**FRAMING THE PIPELINE**

John H. Adams  
*University of South Florida, Tampa, FL, United States*

**8:15 a.m.**

**CYSTICERCOSIS IN PERU**

Hector H. Garcia  
*Universidad Peruana Cayetano Heredia, Lima, Peru*

**8:30 a.m.**

**IMMUNOPATHOGENESIS IN CUTANEOUS LEISHMANIASIS: FROM MICE TO HUMANS**

Fernanda Novais  
*The Ohio State University, Columbus, OH, United States*

**8:45 a.m.**

**MONITORING PATHOGEN GENOMICS TO INFORM PUBLIC HEALTH POLICY**

Shannon Takala Harrison  
*University of Maryland, Baltimore, Baltimore, MD, United States*

**9 a.m.**

**HOW CITIZEN SCIENCE ENGAGES THE PUBLIC - FOLLOWED BY OPEN DISCUSSION OF SPEAKERS AND AUDIENCE PARTICIPANTS**

Saravanan Thangamani  
*SUNY Upstate Medical University, Syracuse, United States*

Mahalia S. Desruisseaux  
*Yale University School of Medicine, New Haven, CT, United States*

**Symposium 7**

**Preliminary Results from The Enterics for Global Health (EFGH) Shigella Surveillance Study- Preparing for Shigella Vaccine Trials in the Target Population of Young Children Living in Low and Middle-Income Countries**

*Convention Center - Room 354/355 (3rd Floor)*  
**Thursday, November 14, 8 a.m. - 9:45 a.m.**

In low- and middle-income countries, nearly one third of children experience at least one episode of *Shigella*-attributable diarrhea during their first 2 years of life. In addition to it being a leading cause of diarrhea, this enteric bacterium is also associated with linear growth faltering, a precursor to stunting. Stunting is a

marker of vulnerability to childhood infection, decreased vaccine efficacy and lifelong morbidity. Currently, several promising *Shigella* vaccines are in development with a Phase 3 licensure trial on the 2-5 year horizon. Eventual *Shigella* vaccine trials will require a consortium of potential vaccine trial sites in settings with a high incidence of *Shigella*-attributed medically-attended diarrhea, high participant retention, and the laboratory capacity to confirm *Shigella* infection. The Enterics for Global Health (EFGH) *Shigella* surveillance study (ClinicalTrials.gov NCT06047821) employs cross-sectional and longitudinal study designs to establish updated incidence rates and document consequences of *Shigella* diarrhea within 7 country sites in Africa, Asia, and Latin America. Over a two-year period from 2022-2024, the EFGH study is enrolling 9,800 children (1,400 per country site) between 6-35 months with medically-attended diarrhea and following them for three months. Detailed clinical information including diarrhea severity indicators combined with microbiologic culture with antibiotic susceptibility testing and quantitative PCR, both with serotyping assays, will enable incidence rate calculations for sample size calculations utilizing various primary clinical and microbiologic endpoint definitions in eventual vaccine trials. Follow-up, including anthropometric measurements and diarrhea duration and recurrence ascertainment as well as costing information will provide critical data to the value proposition of a *Shigella* vaccine. Through this multi-country surveillance network, select EFGH sites will be ready to quickly implement rigorous and efficient vaccine trials and provide critical data to policy makers about the relative importance of this vaccine-preventable disease, accelerating the time to vaccine availability and uptake among children in high *Shigella* burden settings. In this symposium, comprised of short oral presentations and a panel discussion, we will present interim results from the EFGH study. #ChildHealth #InfectiousDisease #MNCH

#### CHAIR

Patricia Pavlinac  
University of Washington, Seattle, WA, United States

Firdausi Qadri  
International Centre for Diarrhoeal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh

#### 8 a.m. INTRODUCTION

#### 8:10 a.m. ENTERICS FOR GLOBAL HEALTH (EFGH)– RATIONALE, STUDY DESIGN, AND GOVERNANCE STRUCTURE

Richard Omere  
Kenya Medical Research Institute, Kisumu, Kenya

#### 8:25 a.m. SEROTYPE-SPECIFIC *SHIGELLA* INCIDENCE RATE BY TRADITIONAL CULTURE AND QUANTITATIVE PCR AND VARIOUS SEVERITY DEFINITIONS-IMPLICATIONS FOR POWERING VACCINE TRIALS

Jen Cornick  
Malawi Liverpool Wellcome Programme, Blantyre, Malawi

#### 8:40 a.m. ANTIMICROBIAL RESISTANCE IN *SHIGELLA* AND IMPLICATIONS FOR THE FUTURE OF DIARRHEAL MANAGEMENT

Jane Juma  
Center for Vaccine Development (CVD) -Mali, Bamako, Mali

#### 8:55 a.m. ADDING TO THE VALUE PROPOSITION OF A *SHIGELLA* VACCINE: *SHIGELLA* CONSEQUENCES BEYOND DIARRHEA

Margaret Kosek  
University of Virginia, Charlottesville, VA, United States

#### 9:10 a.m. COST OF *SHIGELLA* DIARRHEA-IMPLICATIONS FOR GENERATING DEMAND FOR *SHIGELLA* VACCINES AND EVENTUAL COST EFFECTIVENESS CALCULATIONS

Jahangir Hossain  
Medical Research Council Unit The Gambia (MRCG), Fajara, Gambia

#### 9:25 a.m. CLINICAL PRESENTATION OF *SHIGELLA* AND OTHER DIARRHEA ETIOLOGIES AND RELEVANCE TO GLOBAL ETIOLOGY-SPECIFIC DIARRHEA ESTIMATES

Farah Qamar  
Aga Khan University, Karachi, Pakistan



### Symposium 8

#### ASTMH Committee on Global Health (ACGH) Symposium I: Strengthening Health System Resilience for Pandemic Preparedness and Response: A Multifaceted Approach

Convention Center - Room 356 (3rd Floor)  
Thursday, November 14, 8 a.m. - 9:45 a.m.

**This session does not carry CME credit.**

The COVID-19 pandemic has highlighted the urgent need for resilient and equitable health systems that are able to better prepare and effectively respond to future pandemics. The proposed symposium aims to provide a forum for engaging discussions among global health scientists, pharmaceutical scientists, policymakers, and other key stakeholders to discuss the role of health system strengthening on pandemic preparedness, response, and resilience from various perspectives. The symposium will explore innovative strategies for investments in healthcare infrastructure, including therapeutics, diagnostics and vaccines needed for a resilient and adaptable healthcare infrastructure. Furthermore, the symposium will discuss the importance of a skilled and adaptable healthcare workforce and building mental resilience among healthcare professionals in the context of pandemic preparedness and response. In addition, we will discuss mechanisms for implementing robust data, surveillance and disease intelligence systems for data collection, analysis, and information sharing for early detection and monitoring of pandemics, leveraging statistical and mathematical modeling, artificial intelligence, and big data. The symposium will also emphasize research development and innovation, particularly in drug and vaccine development, diagnostics, and treatments. Global policy and governance in pandemic response



will be another critical topic, aiming at discussing existing global health governance models and whether they are fit for purpose in ensuring equitable pandemic preparedness. This will examine power balances and ethical resource allocation, ensuring universal access to health innovations, treatment, and preventive interventions. The symposium is set to be a call to action for global health efforts to strengthen health systems. Through sharing knowledge, the outputs of the symposium will contribute to the discourse on world's resilience and preparedness for future global health threats. The format of the symposium will involve a panel discussion with experts, guided by questions from a moderator and the audience. #Pandemic Preparedness #Health System Resilience #Global Health Governance #Healthcare Innovation

#### CHAIR

Yazoume Ye  
CESMEL Health, Bowie, MD, United States

Miguel Reina Ortiz  
Indiana University, Indianapolis, IN, United States

#### 8 a.m.

##### INTRODUCTION

#### 8:10 a.m.

##### ROLE OF DOCTORAL-LEVEL LEADERSHIP DEVELOPMENT ON GLOBAL HEALTH AND GLOBAL HEALTH DIPLOMACY AS A TOOL FOR STRENGTHENING HEALTH SYSTEMS RESILIENCE FOR PANDEMIC PREPAREDNESS, MITIGATION, AND RESPONSE.

Miguel Reina Ortiz  
Indiana University, Indianapolis, IN, United States

#### 8:25 a.m.

##### DISCUSS RESEARCH AND DEVELOPMENT - DRUG R&D '101' FOR VIRAL THREATS WITH PANDEMIC POTENTIAL

Nadine Jarrousse  
Novartis Institutes for BioMedical Research, San Francisco, CA, United States

#### 8:40 a.m.

##### ENHANCING PANDEMIC PREPAREDNESS WITH ROBUST DATA SYSTEMS: INCORPORATING SURVEILLANCE AND DISEASE INTELLIGENCE WITH STATISTICAL AND MATHEMATICAL MODELING

Bobby Reiner  
Institute for Health Metrics and Evaluation/Schools of Medicine at the University of Washington, Seattle, WA, United States

#### 8:55 a.m.

##### THE ROLE OF RESEARCH INSTITUTIONS IN STRENGTHENING HEALTH SYSTEMS FOR ENHANCED PANDEMIC PREPAREDNESS IN AFRICA

Catherine Kyobutungi  
APHRC, Nairobi, Kenya

#### 9:10 a.m.

##### ACGH ANNUAL BUSINESS MEETING

#### 9:25 a.m.

##### NETWORKING RECEPTION

## Symposium 9

### Interrupting the Transmission of Soil Transmitted Helminths: Results and Implications of the DeWorm3 Trial

Convention Center - Room 357 (3rd Floor)  
Thursday, November 14, 8 a.m. - 9:45 a.m.

**This session does not carry CME credit.**

The DeWorm3 Trial was a large multi-country hybrid community cluster randomized trial designed to evaluate the feasibility of interrupting the transmission of soil-transmitted helminths (STH) using sustained community-wide MDA. The study included approximately 300,000 individuals across population-based sites in Benin, India and Malawi. Each study area was divided into 40 clusters and clusters were randomized to community-wide or standard-of-care targeted MDA for three years. Two years following the final round of MDA, prevalence of STH was compared between arms and transmission interruption assessed in each cluster. To support this study, a high-throughput molecular diagnostics platform was built that included laboratories in Benin, India and the United States. The results of this comprehensive rigorous trial are now available. This symposium will provide an opportunity for the principal investigators of the DeWorm3 trial sites in Benin, India and Malawi to present a summary of the trial results (including implementation science objectives), the potential of programs to reach high coverage of community-wide MDA across multiple consecutive rounds, and to highlight the use of molecular diagnostics at scale to assess STH prevalence. In addition, there will be a panel discussion to discuss the scientific and programmatic implications of these important data. Key learning objectives for this session include; 1) To understand the baseline prevalence of STH across multiple geographies assessed using standardized microscopic and molecular diagnostics, 2) to understand pathways to achieve exceptionally high coverage of MDA within STH programs, 3) to review the results of the trial to determine the feasibility of interrupting STH transmission and to 4) to understand the potential utility of high quality molecular diagnostics to support existing and future STH program goals. #Elimination #Epidemiology #FieldStudies #InfectiousDisease #MNCH

#### CHAIR

Judd L. Walson  
Johns Hopkins University, Baltimore, MD, United States

Sitara S. Ajampur  
Christian Medical College and Hospital, Tamil Nadu, India

#### 8 a.m.

##### INTRODUCTION

#### 8:10 a.m.

##### MOLECULAR TESTING TO ENHANCE STH PROGRAM DELIVERY

Malathi Manuel  
Christian Medical College, Vellore, India

8:20 a.m.

**ACHIEVING AND SUSTAINING HIGH COMMUNITY-WIDE MDA**

Khumbo Kalua

Blantyre Institute for Community Outreach, Blantyre, Malawi

8:30 a.m.

**DEWORM3 TRIAL RESULTS**

Kristjana Ásbjörnsdóttir

University of Iceland, Reykjavik, Iceland

8:45 a.m.

**IMPLEMENTATION SCIENCE METHODS TO ASSESS MDA**

Euripide F. G. A. Avokpaho

Institut de Recherche Clinique du Benin, Abomey-Calavi, Benin

8:55 a.m.

**CORRELATES OF COVERAGE AND IMPACT**

Stefan Witek-McManus

London School of Hygiene & Tropical Medicine, London, United Kingdom

**Scientific Session 10**

**Viruses - Immunology**

Convention Center - Room 383/384/385 (3rd Floor)

Thursday, November 14, 8 a.m. - 9:45 a.m.

#Immunology #InfectiousDisease

**CHAIR**

Rosemary A. Aogo

National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

Laura Rivino

University of Bristol, Bristol, United Kingdom

8 a.m.

6007

**DYNAMICS OF DENGUE VIRUS-REACTIVE B CELLS IN PEDIATRIC CASES FROM A HOSPITAL STUDY IN NICARAGUA**

Tulika Singh<sup>1</sup>, Amir Balakhmet<sup>1</sup>, Rohan Shinkre<sup>1</sup>, Nharae Lee<sup>1</sup>, Aaron Graber<sup>1</sup>, Raul Zapata<sup>2</sup>, Walter Brenes<sup>2</sup>, Angel Balmaseda<sup>3</sup>, Eva Harris<sup>1</sup>

<sup>1</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>Sustainable Sciences Institute, Managua, Nicaragua, <sup>3</sup>Laboratorio Nacional de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

8:15 a.m.

6008

**ORDER MATTERS: DENV2-ZIKV AND ZIKV-DENV2 SEQUENTIAL INFECTIONS DIFFERENTIALLY MODULATE THE MAGNITUDE AND BREADTH OF HOMOTYPIC AND DENV CROSS-REACTIVE ANTIBODY RESPONSES**

Sandra Bos<sup>1</sup>, Elias Duarte<sup>1</sup>, Nharae Lee<sup>1</sup>, Jose Victor Zambrana<sup>2</sup>, Aaron Graber<sup>1</sup>, Angel Balmaseda<sup>3</sup>, Eva Harris<sup>1</sup>

<sup>1</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, MI, United States, <sup>3</sup>Sustainable Sciences Institute, Managua, Nicaragua

8:30 a.m.

6009

**MECHANISTIC MODELING OF HOST-VIRAL INTERACTIONS TO ELUCIDATE IMMUNE MECHANISMS UNDERPINNING DISPARATE RESPONSES TO DENGUE VIRUS INFECTION BY PRIOR EXPOSURE HISTORY**

Rosemary A. Aogo<sup>1</sup>, Kelsey E. Lowman<sup>1</sup>, Chloe M. Hasund<sup>1</sup>, Charlie Voirin<sup>1</sup>, Gitanjali Bhushan<sup>1</sup>, Patrick I. Mpingabo<sup>1</sup>, Saba Firdous<sup>1</sup>, Silvia Blanco-Rivera<sup>1</sup>, Melissa Law<sup>1</sup>, Daniela Weiskopf<sup>2</sup>, Viviane Callier<sup>3</sup>, Sally Hunsberger<sup>4</sup>, Robbie Kattappuram<sup>5</sup>, Jeffrey R. Strich<sup>6</sup>, Heather L. Teague<sup>6</sup>, Lauren Knabe<sup>6</sup>, Jeffery I. Cohen<sup>7</sup>, Anna Durbin<sup>8</sup>, Stephen S. Whitehead<sup>9</sup>, Camila D. Odio<sup>1</sup>, Leah C. Katzelnick<sup>1</sup>

<sup>1</sup>Viral Epidemiology and Immunity Unit, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, <sup>2</sup>Department of Medicine, Division of Infectious Diseases and Global Public Health, University of California San Diego (UCSD), La Jolla, CA, United States, <sup>3</sup>Clinical Monitoring Research Program Directorate, Frederick National Laboratory for Cancer Research, Bethesda, MD, United States, <sup>4</sup>Division of Clinical Research, Biostatistics Research Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, <sup>5</sup>Department of Pharmacy, NIH Clinical Center, National Institutes of Health, Bethesda, MD, United States, <sup>6</sup>Critical Care Medicine Department, National Institutes of Health Clinical Center, Bethesda, MD, United States, <sup>7</sup>Medical Virology Section, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, <sup>8</sup>Johns Hopkins Bloomberg School of Public Health, Department of International Health, Baltimore, MD, United States, <sup>9</sup>Arbovirus Vaccine Research Section, Laboratory of Viral Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

8:45 a.m.

6010

**IMMUNOLOGICAL FEATURES ASSOCIATED WITH SEVERE DENGUE IN CHILDREN AND YOUNG ADULTS WITH OBESITY AND NORMAL WEIGHT**

Michaela Gregorova<sup>1</sup>, Marianna Santopaolo<sup>1</sup>, Divya Diamond<sup>1</sup>, Vi Tran Thuy<sup>2</sup>, Nguyet Nguyen Minh<sup>2</sup>, Vuong Nguyen Lam<sup>2</sup>, Hoa Vo Thi My<sup>2</sup>, Chanh Ho Quang<sup>2</sup>, Chau Nguyen Thi Xuan<sup>2</sup>, Tam Dong Thi Hoai<sup>2</sup>, Duyen Huynh Thi Le<sup>2</sup>, Tam Cao Thi<sup>3</sup>, Sophie Yacoub<sup>2</sup>, Laura Rivino<sup>1</sup>

<sup>1</sup>University of Bristol, Bristol, United Kingdom, <sup>2</sup>OUCRU, HCMC, Vietnam, <sup>3</sup>Hospital of Tropical Diseases, HCMC, Vietnam

9 a.m.

6011

**NEW INSIGHTS INTO AN OLD VACCINE: HETEROLOGOUS FLAVIVIRUS INFECTION ENHANCES THE POTENCY AND BREADTH OF 17D-ELICITED NEUTRALIZING ANTIBODIES AGAINST A PANEL OF WILD-TYPE YELLOW FEVER VIRUSES**

Felicity J. Coulter, Abram E. Estrda, Samantha R. Osman, Shuhua Luo, Courtney A. Micheletti, Peter D. Sullivan, Brian L. Booty, William B. Messer  
Oregon Health & Science University, Portland, OR, United States

9:15 a.m.

6012

**PROTECTIVE VACCINATION OF NONHUMAN PRIMATES AGAINST AEROSOL EXPOSURE TO MARBURG VIRUS USING A VESICULAR STOMATITIS VIRUS-VECTORED VACCINE: IMPLICATIONS FOR MUCOSAL VACCINE STRATEGIES AND UNPREDICTABLE FILOVIRUS TRANSMISSION**

Christopher L. Cooper<sup>1</sup>, Gavin Morrow<sup>1</sup>, Thomas Postler<sup>1</sup>, Yesle Choi<sup>1</sup>, Aaron Wilson<sup>1</sup>, Zhou Liu<sup>1</sup>, Karina Peregrina<sup>1</sup>, Fuxiang Hou<sup>1</sup>, Shui Li<sup>1</sup>, Suzane Ramos da Silva<sup>1</sup>, Denise Wagner<sup>1</sup>, Alexei Carpow<sup>1</sup>, Michal Gazi<sup>2</sup>, Yenny Goez-Gazi<sup>2</sup>, Kendra J. Alfson<sup>2</sup>, Ricardo Carrion<sup>2</sup>, Anne Ercolini<sup>1</sup>, Nina Malkevich<sup>3</sup>, Mark B. Feinberg<sup>3</sup>, Swati B. Gupta<sup>3</sup>, Christopher L. Parks<sup>1</sup>

<sup>1</sup>Vaccine Design and Development Laboratory, The International AIDS Vaccine Initiative, Inc. (IAVI), Brooklyn, NY, United States, <sup>2</sup>Applied Science & Innovation, Texas Biomedical Research Institute, San Antonio, TX, United States, <sup>3</sup>The International AIDS Vaccine Initiative, Inc. (IAVI), New York, NY, United States

Thursday  
November 14

## 9:30 a.m. Lightning Talks

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

### 6253

#### ACCURACY OF PHYSICIANS' CLINICAL DIAGNOSIS OF DENGUE AMONG PATIENTS PRESENTING TO EMERGENCY ROOMS – PUERTO RICO, 2012-2022

Joshua M. Wong<sup>1</sup>, Zachary J. Madewell<sup>1</sup>, Alfonso Hernandez-Romieu<sup>2</sup>, Janice Perez-Padilla<sup>1</sup>, Liliana Sánchez-González<sup>1</sup>, Diego Sainz<sup>3</sup>, Jorge Bertran<sup>3</sup>, Jorge Munoz<sup>1</sup>, Vanessa Rivera-Amill<sup>4</sup>, Gabriela Paz-Bailey<sup>1</sup>, Laura E. Adams<sup>1</sup>

<sup>1</sup>Centers for Disease Control, San Juan, PR, United States, <sup>2</sup>Centers for Disease Control, Atlanta, GA, United States, <sup>3</sup>Auxilio Mutuo Hospital, San Juan, PR, United States, <sup>4</sup>Ponce Health Science University, Ponce, PR, United States

### 7866

#### PLASMA IGM ANTIBODIES CONTRIBUTE TO VIRUS NEUTRALIZATION IN EARLY IMMUNE RESPONSES TO SECONDARY DENGUE VIRUS INFECTIONS

Nharae Lee<sup>1</sup>, Tulika Singh<sup>1</sup>, Rohan Shinkre<sup>1</sup>, Nethra Koushik<sup>1</sup>, Aaron Graber<sup>1</sup>, Elias Duarte<sup>1</sup>, Sandra Bos<sup>1</sup>, José Victor Zambrana<sup>2</sup>, Cesar Narvaez<sup>3</sup>, Sonia Arguello<sup>4</sup>, Federico Narvaez<sup>3</sup>, Angel Balmaseda<sup>5</sup>, Eva Harris<sup>1</sup>

<sup>1</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, MI, United States, <sup>3</sup>Hospital Infantil Manuel de Jesus Rivera, Managua, Nicaragua, <sup>4</sup>Sustainable Sciences Institute, Managua, Nicaragua, <sup>5</sup>Laboratorio Nacional de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

### 7869

#### FLAVIVIRUS ANTIGENIC CARTOGRAPHY OF PREEXISTING NEUTRALIZING ANTIBODIES IN A PEDIATRIC COHORT IN MERIDA, MEXICO, A HYPERENDEMIC AREA FOR ARBOVIRUSES

Henry Nelson Puerta Guardo<sup>1</sup>, Manuel Alejandro Parra Cardaña<sup>1</sup>, Gloria Barrera Fuentes<sup>1</sup>, Oscar D. Kirstein<sup>2</sup>, Azael David Che Mendoza<sup>1</sup>, K. Jacqueline Ciau<sup>1</sup>, J. Kevin Yam<sup>1</sup>, Mathew Collins<sup>3</sup>, Daniel Espinoza<sup>3</sup>, Pablo Manrique Saide<sup>1</sup>, Norma Pavia Ruz<sup>1</sup>, Guadalupe Ayora Talavera<sup>1</sup>, Gonzalo Vazquez Prokopec<sup>4</sup>, James Earnest<sup>4</sup>

<sup>1</sup>Universidad Autónoma de Yucatán, Mérida, Mexico, <sup>2</sup>Dep. of Environmental Sciences, Emory University, Atlanta, GA, United States, <sup>3</sup>Division of Infectious Diseases, Department of Medicine, Emory University, Atlanta, GA, United States, <sup>4</sup>Department of Environmental Sciences, Emory University, Atlanta, GA, United States

### 6294

#### DELETIONS IN THE 3' UNTRANSLATED REGION COMPROMISED TRANSLATION INITIATION TO ATTENUATE A DENGUE VIRUS 3 VACCINE STRAIN

Kiven Kumar, Esteban Finol, Hwee Cheng Tan, Wy Ching Ng, Eng Eong Ooi  
DUKE-NUS Medical School, Singapore, Singapore

### 6295

#### CROSS-NEUTRALIZING ANTIBODY RESPONSES ELICITED BY THE CHIKUNGUNYA VACCINE VLA1553

Whitney C. Weber<sup>1</sup>, Zachary J. Strebblow<sup>1</sup>, Craig N. Kreklywich<sup>1</sup>, Michael Denton<sup>1</sup>, Gauthami Sulgey<sup>1</sup>, Magdalene M. Strebblow<sup>1</sup>, Dorca Marciano<sup>2</sup>, Paola N. Flores<sup>2</sup>, Rachel M. Rodriguez-Santiago<sup>2</sup>, Luisa Alvarado<sup>2</sup>, Vanessa Rivera-Amill<sup>2</sup>, William B. Messer<sup>3</sup>, Romana Hochreiter<sup>4</sup>, Karin Kosulin<sup>4</sup>, Katrin Dubischar<sup>4</sup>, Vera Bürger<sup>4</sup>, Daniel N. Strebblow<sup>1</sup>

<sup>1</sup>Oregon Health and Science University, Beaverton, OR, United States, <sup>2</sup>Ponce Health Sciences University, Ponce, Puerto Rico, <sup>3</sup>Oregon Health and Science University, Portland, OR, United States, <sup>4</sup>Valneva Austria GmbH, Vienna, Austria

## Scientific Session 11

### Viruses - Field and Ecological Studies of Viruses Including Surveillance and Spillover Risk and Emergence

Convention Center - Room 388/389 (3rd Floor)

Thursday, November 14, 8 a.m. - 9:45 a.m.

This session does not carry CME credit.

#FieldStudies #PopulationSurveillance

#### CHAIR

Heidi Goethert

Tufts University School of Veterinary Medicine, North Grafton, MA, United States

Nikos Vasilakis

University of Texas Medical Branch, Galveston, TX, United States

### 8 a.m.

### 6013

#### FIRST, DO NO HARM: FIELD EVALUATION OF AN INDEPENDENT RIFT VALLEY FEVER VACCINATION CAMPAIGN AND THE IMPACT ON PREGNANT LIVESTOCK IN A SEMI-PASTORAL AREA IN KENYA

Keli N. Gerken<sup>1</sup>, Abraham Rereu<sup>2</sup>, Fredrick Sururu<sup>3</sup>, Alice Kiyong'a<sup>4</sup>, Cynthia M. McMillen<sup>5</sup>, Amy L. Hartman<sup>6</sup>, Bernard Bett<sup>4</sup>, Andrew P. Stringer<sup>7</sup>, Matthew Baylis<sup>7</sup>, Eric M. Fèvre<sup>1</sup>

<sup>1</sup>International Livestock Research Institute, Nairobi, Kenya and Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool, Liverpool, United Kingdom, <sup>2</sup>Liverpool, United Kingdom, <sup>3</sup>Loitokitok Sub-County Department of Veterinary Services, Kajiado County, Kenya, Loitokitok, Kenya, <sup>4</sup>Loitokitok Sub-County Department of Veterinary Services, Kajiado County, Kenya, Liverpool, United Kingdom, <sup>5</sup>International Livestock Research Institute, Nairobi, Kenya, <sup>6</sup>Department of Microbiology and Molecular Genetics, Center for Vaccine Research, University of Pittsburgh, Pittsburgh, PA, United States, <sup>7</sup>Department of Microbiology and Molecular Genetics, Center for Vaccine Research, University of Pittsburgh, Pittsburgh, PA, United States, <sup>8</sup>Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool, Liverpool, United Kingdom, Liverpool, United Kingdom

### 8:15 a.m.

### 6014

#### USING A ONE HEALTH APPROACH IN INVESTIGATING A LYMEAN-CONGO HEMORRHAGIC FEVER OUTBREAK IN LYANTONDE DISTRICT, UGANDA 2024

Luke Nyakararuka<sup>1</sup>, Sophia Mulei<sup>1</sup>, Joanita Mutesi<sup>1</sup>, Jimmy Baluku<sup>1</sup>, Alex Tumusiime<sup>1</sup>, Jackson Kyondo<sup>1</sup>, Calvin R. Torach<sup>1</sup>, Dianah Namanya<sup>1</sup>, Stephen K. Balinandi<sup>1</sup>, Trevor Shoemaker<sup>2</sup>, John Klena<sup>2</sup>, Joel Montgomery<sup>2</sup>, Julius Lutwama<sup>1</sup>

<sup>1</sup>Uganda Virus Research Institute, Kampala, Uganda, <sup>2</sup>United States Centers for Disease Control and Prevention, Atlanta, GA, United States

### 8:30 a.m.

### 6015

#### AN EPIZOOTIC OF DEER TICK VIRUS ON MARTHA'S VINEYARD DUE TO AMPLIFICATION OF A SINGLE VIRAL GENOTYPE

Heidi Goethert<sup>1</sup>, Alanna O'Callahan<sup>1</sup>, Richard Johnson<sup>2</sup>, Sam Telford<sup>1</sup>

<sup>1</sup>Tufts Cummings School of Veterinary Medicine, Grafton, MA, United States, <sup>2</sup>Martha's Vineyard Tick Initiative, Edgartown, MA, United States

### 8:45 a.m.

### 6016

#### GENOMIC SURVEILLANCE OF TICK AND MOSQUITO POOLS FROM GEORGIA (SOUTH CAUCASUS), SCREENED FOR VIRUSES ASSOCIATED WITH ACUTE FEBRILE ILLNESSES

Chanel A. Mosby-Tourtellot<sup>1</sup>, Quinn K. Thomas<sup>2</sup>, Adrian C. Paskey<sup>2</sup>, J. Alex Chitty<sup>2</sup>,

Andrea E. Luquette<sup>2</sup>, Maren C. Fitzpatrick<sup>2</sup>, Jennetta Green<sup>3</sup>, Maggie Bartlett<sup>4</sup>, Danielle Ali<sup>4</sup>, Malik Kadir<sup>4</sup>, Drew D. Reinbold-Wasson<sup>5</sup>, Tamar Chunashvili<sup>5</sup>, Giorgi Kirkitadze<sup>5</sup>, Anano Shubashishvili<sup>5</sup>, Gregory K. Rice<sup>2</sup>, Regina Z. Cer<sup>3</sup>, Francisco Malagon<sup>2</sup>, Darci R. Smith<sup>3</sup>, Kimberly A. Bishop-Lilly<sup>3</sup>

<sup>1</sup>Defense Threat Reduction Agency, Fort Belvoir, VA, United States, <sup>2</sup>Leidos, Reston, VA, United States, <sup>3</sup>Naval Medical Research Command, Fort Detrick, MD, United States, <sup>4</sup>Parsons Corporation, Centreville, VA, United States, <sup>5</sup>Walter Reed Army Institute of Research Europe – Middle East, Tbilisi, Georgia

9 a.m.

6017

### THE BAT BUSHMEAT TRADE AS AN INTERFACE FOR FILOVIRUS AND HENIPAVIRUS SPILLOVER IN THE REPUBLIC OF CONGO

McKenna Roe<sup>1</sup>, Eeva Kuisma<sup>2</sup>, Evrard Missamou<sup>2</sup>, Alain Ondzie<sup>2</sup>, Chastel Mapanguy<sup>3</sup>, Providence Sita<sup>3</sup>, Robert J Fischer<sup>4</sup>, Claude Kwe Yinda<sup>4</sup>, Morgane Courmarie<sup>2</sup>, Diane Detoouf<sup>2</sup>, Francine Ntoumi<sup>3</sup>, Eric Laing<sup>1</sup>, Vincent J. Munster<sup>5</sup>, Sarah H. Olson<sup>2</sup>

<sup>1</sup>Department of Microbiology and Immunology, Uniformed Services University, Bethesda, MD, United States, <sup>2</sup>Wildlife Conservation Society, New York, NY, United States, <sup>3</sup>Fondation Congolaise pour la Recherche Médicale (FCRM), Brazzaville, Republic of the Congo, <sup>4</sup>Laboratory of Virology, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Hamilton, MT, United States, <sup>5</sup>Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Hamilton, MT, United States

9:15 a.m.

6018

### NEXT-GENERATION SEQUENCING SURVEY OF ACUTE FEBRILE ILLNESS IN SENEGAL (2020-2022)

Gregory S. Orf<sup>1</sup>, Ambroise D. Ahoudi<sup>2</sup>, Maximillian Mata<sup>1</sup>, Cyrille Diedhiou<sup>2</sup>, Aminata Mboup<sup>2</sup>, Abdou Padane<sup>2</sup>, Noel Magloire Manga<sup>3</sup>, Agbogbenkou Tevi Dela-del Lawson<sup>4</sup>, Francisco Averhoff<sup>1</sup>, Michael G. Berg<sup>1</sup>, Gavin A. Cloherty<sup>1</sup>, Souleymane Mboup<sup>2</sup>

<sup>1</sup>Abbott Laboratories, Abbott Park, IL, United States, <sup>2</sup>Institut de Recherche en Santé, de Surveillance Épidémiologique et de Formation, Dakar, Senegal, <sup>3</sup>Hôpital de la Paix, Ziguinchor, Senegal, <sup>4</sup>Hôpital Mame Abdou Aziz Sy Dabakh, Tivaouane, Senegal

9:30 a.m.

6019

### INVESTIGATION OF YELLOW FEVER VIRUS, VECTOR AND HOST NETWORK IN THE METROPOLITAN REGION OF MINAS GERAIS, BRAZIL IN 2023, INDICATES THE CONTINUED CIRCULATION OF YELLOW FEVER VIRUS

Matheus Soares Arruda<sup>1</sup>, Daniel C. Jacob<sup>1</sup>, Mikaelly F. Testa<sup>1</sup>, Marcelle Alves de Oliveira<sup>1</sup>, Ana Maria Paschoal<sup>1</sup>, Gabriel Dias Moreira<sup>1</sup>, Anna Catarina D.S. Guimarães<sup>1</sup>, Natália Lima Pessoa<sup>1</sup>, Gabriela Fernanda Garcia Oliveira<sup>1</sup>, Thais Alkifeles Costa<sup>1</sup>, Samantha S F M Viegas<sup>1</sup>, Daniel A. Rocha Vilela<sup>2</sup>, Marina do Vale Beirão<sup>1</sup>, Kathy A. Hankey<sup>3</sup>, Nikos Vasilakis<sup>4</sup>, Betânia Paiva Drumond<sup>1</sup>

<sup>1</sup>Federal University of Minas Gerais, Belo Horizonte, Brazil, <sup>2</sup>IBAMA, Belo Horizonte, Brazil, <sup>3</sup>New Mexico State University, Las Cruces, NM, United States, <sup>4</sup>University of Texas - Medical Branch, Galveston, TX, United States

## Scientific Session 12

### Malaria: Transmission Biology

Convention Center - Room 391/392 (3rd Floor)

Thursday, November 14, 8 a.m. - 9:45 a.m.

#Therapeutics #CellBiology #MolecularBiology  
#HostResponse #Genomics

#### CHAIR

Matthias Marti  
University of Zurich, Zurich, Switzerland

Priscilla Adjei-Kusi  
Centre for Collaborative Research in Tropical Medicine (KCCR), Kumasi, Ghana

8 a.m.

6020

### DYNAMICS AND REGULATION OF SEXUAL COMMITMENT IN *PLASMODIUM FALCIPARUM*

Surendra K. Prajapati<sup>1</sup>, Jeffrey X. Dong<sup>1</sup>, Kim C. Williamson<sup>2</sup>

<sup>1</sup>Uniformed Services University of the Health Sciences and Henry M Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD, United States, <sup>2</sup>Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8:15 a.m.

6021

### SPECIALIZED SPOROZOITE-TYPE RIBOSOMES IN *PLASMODIUM YOELII* DRIVE INITIAL RAPID ASEXUAL BLOOD STAGE GROWTH AND SEXUAL DEVELOPMENT

James P. McGee<sup>1</sup>, Sylvie Briquet<sup>2</sup>, Olivier Silvie<sup>2</sup>, Scott E. Lindner<sup>1</sup>

<sup>1</sup>Pennsylvania State University, University Park, PA, United States, <sup>2</sup>Centre d'Immunologie et des Maladies Infectieuses, INSERM, CNRS, CIMI-Paris, Sorbonne Université, Paris, France

8:30 a.m.

6022

### IDENTIFICATION OF NOVEL ANTI GAMETOCYTE TRANSMISSION BLOCKING VACCINE TARGETS

Fiona Angrisano<sup>1</sup>, Hayley Bullen<sup>1</sup>, Amelia Ford<sup>2</sup>, Katarzyna Sala<sup>3</sup>, Andrew Blagborough<sup>2</sup>

<sup>1</sup>Burnet Institute, Melbourne, Australia, <sup>2</sup>Cambridge University, Cambridge, United Kingdom, <sup>3</sup>Imperial College, London, United Kingdom

8:45 a.m.

6023

### LOSS OF FUNCTION OF THE *PLASMODIUM FALCIPARUM* PROLINE TRANSPORTER *PFAP1AT2* MEDIATES HALOFUGINONE RESISTANCE BUT RESULTS IN OOCYST DEVELOPMENTAL DYSFUNCTION

Malhar Khushu<sup>1</sup>, Lola Fagbami<sup>2</sup>, Alexandra Probst<sup>1</sup>, Tasneem Rinvee<sup>1</sup>, Robert Summers<sup>1</sup>, Amanda K. Lukens<sup>3</sup>, Flaminia Catteruccia<sup>4</sup>, Dyann Wirth<sup>3</sup>, Selina Bopp<sup>1</sup>

<sup>1</sup>Harvard T. H. Chan School of Public Health, Boston, MA, United States, <sup>2</sup>Harvard T. H. Chan School of Public Health/Metabolomics Platform, Broad Institute, Boston/Cambridge, MA, United States, <sup>3</sup>Harvard T. H. Chan School of Public Health/Infectious Disease and Microbiome Program, Broad Institute, Boston, MA, United States, <sup>4</sup>Harvard T. H. Chan School of Public Health/Howard Hughes Medical Institute, Boston, MA, United States

9 a.m.

6024

### PARTIAL CLEARANCE OF PRE-ESTABLISHED *PLASMODIUM FALCIPARUM* INFECTION IN MOSQUITOES BY MIMICKING A BLOODMEAL ON TREATED PATIENTS WITH ARTEMETHER+LUMEFANTRINE + ATOVAQUONE-PROGUANIL

Priscilla Adjei-Kusi<sup>1</sup>, Serge Rakiswendé Yerbanga<sup>2</sup>, Thierry Lefèvre<sup>3</sup>, Esi Bart-Plange<sup>1</sup>, Esther Naadu Placca<sup>1</sup>, Melvin Agbogbately<sup>1</sup>, John Asiedu Larbi<sup>4</sup>, John Amuasi<sup>1</sup>, Jerome Clain<sup>5</sup>, Oumou Maiga Ascofaré<sup>6</sup>, Anna Cohuet<sup>3</sup>, ASAAP Consortium –<sup>7</sup>

<sup>1</sup>Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR), Kumasi, Ghana, <sup>2</sup>Institut des Sciences et Techniques (INSTech - BOBO), Bobo-Dioulasso, Burkina Faso, <sup>3</sup>MIVEGEC, Université de Montpellier, IRD, CNRS, Montpellier, France, <sup>4</sup>Department of Theoretical and Applied Biology, College of Science, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana, <sup>5</sup>Université de Paris Cité, UMR 261 MERIT, Paris, France, <sup>6</sup>Department of Infectious Disease Epidemiology, Bernhard Nocht Institute for Tropical Medicine (BNITM), Hamburg, Germany, <sup>7</sup>–, VA, United States

9:15 a.m.

6025

### UNRAVELING THE JOURNEY OF *PLASMODIUM FALCIPARUM* PARASITES INSIDE THEIR MOSQUITO VECTOR AT THE SINGLE CELL RESOLUTION

Yan Yan<sup>1</sup>, Elaine Cheung<sup>1</sup>, Lisa H. Verzier<sup>1</sup>, Duo Peng<sup>2</sup>, Federico Appetecchia<sup>1</sup>, Tasneem A. Rinvee<sup>1</sup>, Esrah Du<sup>1</sup>, Alexandra S. Probst<sup>1</sup>, Naresh Singh<sup>1</sup>, W. Robert Shaw<sup>3</sup>, Flaminia Catteruccia<sup>3</sup>

<sup>1</sup>Harvard TH Chan School of Public Health, Boston, MA, United States, <sup>2</sup>The Chan Zuckerberg Biohub, San Francisco, CA, United States, <sup>3</sup>Harvard TH Chan School of Public Health & Howard Hughes Medical Institute, Boston, MA, United States

9:30 a.m.

6026

### DEFINING TRANSCRIPTIONAL SIGNATURES OF *PLASMODIUM FALCIPARUM* HEMATOPOIETIC INFECTION AT THE SINGLE CELL LEVEL

Barbara Stokes<sup>1</sup>, Fiona Achcar<sup>1</sup>, Charles Ndovi<sup>2</sup>, James Nyirenda<sup>2</sup>, Priscilla Ngotho<sup>1</sup>, Edward Agboraw<sup>1</sup>, Thomas Otto<sup>1</sup>, Christopher Moxon<sup>2</sup>, Matthias Marti<sup>1</sup>

<sup>1</sup>University of Glasgow, Glasgow, United Kingdom, <sup>2</sup>Malawi Liverpool Wellcome Clinical Research Programme, Blantyre, Malawi

## Scientific Session 13

### Malaria: Surveillance and Data Use

Convention Center - Room 393/394 (3rd Floor)

Thursday, November 14, 8 a.m. - 9:45 a.m.

#Elimination #Genomics #PopulationSurveillance  
#TranslationalScience

#### CHAIR

Ruth Ashton

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Julien Aissan

Benin National Malaria Control Program, Cotonou, Benin

8 a.m.

6027

### ENHANCING MALARIA DATA QUALITY IN BENIN: IMPACT OF MONTHLY DATA VALIDATION AND DEATH DATA AUDIT

Julien Aissan<sup>1</sup>, Cyriaque Affoukou<sup>1</sup>, Achille Batonon<sup>1</sup>, Raoul Oloukoi<sup>2</sup>, Virgile Gnanguenon<sup>2</sup>, Pascal Zinzindohoue<sup>2</sup>, Achille Couao-Zotti<sup>1</sup>, Christian Godjo<sup>1</sup>, Koffi Emmanuel Yovo<sup>3</sup>, Michael Humes<sup>4</sup>, Ashley Garley<sup>4</sup>, John Bernon<sup>4</sup>

<sup>1</sup>Benin National Malaria Control Program, Cotonou, Benin, <sup>2</sup>U.S. President's Malaria Initiative, USAID, Cotonou, Benin, <sup>3</sup>Clinton Health Access Initiative (CHAI), Cotonou, Benin, <sup>4</sup>U.S. President's Malaria Initiative, USAID, Washington, DC, United States

8:15 a.m.

6028

### ICCM COMMUNITY HEALTH WORKERS AND THEIR IMPACT ON SEVERE MALARIA AND MALARIA MORTALITY IN LUAPULA PROVINCE, ZAMBIA'S HIGHEST MALARIA BURDEN PROVINCE, 2016-2023

Melody N. Simataa<sup>1</sup>, Webby Phiri<sup>1</sup>, Ellen Ferris<sup>2</sup>, Sarah Shankwaya<sup>1</sup>, Mulakwa Kamuliwo<sup>3</sup>, Chabu Kangale<sup>1</sup>, Bupe M. Kabamba<sup>1</sup>, Marie-Reine I. Rutagwera<sup>1</sup>, Caroline Phiri-Chibawe<sup>1</sup>, Jennifer Somtore<sup>4</sup>, Busiku Hamainza<sup>5</sup>

<sup>1</sup>PATH PAMO Plus, Lusaka, Zambia, <sup>2</sup>PATH, Seattle, WA, United States, <sup>3</sup>Jhpiego, Lusaka, Zambia, <sup>4</sup>U.S. President's Malaria Initiative, Lusaka, Zambia, <sup>5</sup>Zambia Ministry of Health National Malaria Elimination Centre, Lusaka, Zambia

8:30 a.m.

6029

### ANTENATAL CARE SURVEILLANCE FOR MONITORING PREVALENCE AND COVERAGE OF INSECTICIDE-TREATED NETS—A MULTI-COUNTRY ANALYSIS

Anna Munsey<sup>1</sup>, Patrick G. T. Walker<sup>2</sup>, Peder Digre<sup>3</sup>, Joseph Wagman<sup>4</sup>, Molly Robertson<sup>5</sup>, Joseph Hicks<sup>2</sup>, Manzidatou Alao<sup>6</sup>, Aurore Hounto<sup>7</sup>, Adama Gansane<sup>8</sup>, Siaka Debe<sup>9</sup>, Baltazar Candrinho<sup>9</sup>, Perpetua Uhomoihi<sup>10</sup>, Okefu Oyale Okoko<sup>10</sup>, Ruth Lemwayi<sup>11</sup>, Sijenuu Aaron<sup>12</sup>, Chabu Kangale<sup>13</sup>, Bupe Kabamba<sup>13</sup>, Julie R. Gutman<sup>1</sup>, ANC Surveillance Working Group<sup>1</sup>

<sup>1</sup>CDC, Atlanta, GA, United States, <sup>2</sup>MRC Centre for Global Infectious Disease Analysis, School of Public Health, Imperial College, London, United Kingdom, <sup>3</sup>PATH, Seattle, WA, United States, <sup>4</sup>PATH, Washington, DC, United States, <sup>5</sup>The Global Fund to Fight AIDS, Tuberculosis, and Malaria, Geneva, Switzerland, <sup>6</sup>U.S. Presidents' Malaria Initiative Impact Malaria Project, Medical Care Development Global Health, Cotonou, Benin, <sup>7</sup>Unité de Parasitologie/Faculté des Sciences de la Santé, Université d'Abomey, Calavi, Cotonou, Benin, <sup>8</sup>Centre National de Recherche et Formation sur le Paludisme, Ouagadougou, Burkina Faso, <sup>9</sup>National Malaria Control Program, Ministry of Health, Maputo, Mozambique, <sup>10</sup>National Malaria Elimination Programme, Abuja, Nigeria, <sup>11</sup>Jhpiego, Dar es Salaam, United Republic of Tanzania, <sup>12</sup>National Malaria Control Program, Dodoma, United Republic of Tanzania, <sup>13</sup>PATH, Lusaka, Zambia

8:45 a.m.

6030

### MALARIA SURVEILLANCE TO PREVENT THE RE-ESTABLISHMENT OF MALARIA IN MOBILITY DYNAMIC SETTING OF RAMREE TOWNSHIP IN MYANMAR

Khin Mon Mon<sup>1</sup>, Wah Wah Thaw<sup>1</sup>, Hnin Su Su Khin<sup>1</sup>, Sway Min Htet<sup>1</sup>, Nu Nu Khin<sup>2</sup>, Gunawardena Dissanayake<sup>3</sup>, Ersin Topcuoglu<sup>4</sup>, Kyaw Myint Tun<sup>1</sup>, Danielle Awabdeh<sup>4</sup>

<sup>1</sup>PMI Eliminate Malaria, University Research Co., LLC, Yangon, Myanmar, <sup>2</sup>U.S. President's Malaria Initiative, USAID, Yangon, Myanmar, <sup>3</sup>U.S. President's Malaria Initiative, USAID, Bangkok, Thailand, <sup>4</sup>PMI Eliminate Malaria, University Research Co., LLC, Chevy Chase, MD, United States

9 a.m.

6031

### DATA INTEGRATION FOR DECISION-MAKING: A MALARIA DATA DASHBOARD THAT MERGES ROUTINE SURVEILLANCE AND GENOMIC RESEARCH DATA WITH MODELED OUTPUTS FOR PROGRAMMATIC ACTION IN SENEGAL

Katherine E. Battle<sup>1</sup>, Médoune NDiop<sup>2</sup>, David Kong<sup>1</sup>, Joshua L. Proctor<sup>1</sup>, Emily K. Driano<sup>1</sup>, Caitlin A. Bever<sup>1</sup>, Punam Amratia<sup>3</sup>, Mouhamad Sy<sup>4</sup>, Bassirou Ngom<sup>4</sup>, Ibrahima Diallo<sup>2</sup>, Doudou Sene<sup>2</sup>, Dyann F. Wirth<sup>5</sup>, Sarah K. Volkman<sup>5</sup>, Daouda Ndiaye<sup>4</sup>

<sup>1</sup>Bill & Melinda Gates Foundation, Seattle, WA, United States, <sup>2</sup>Programme National de Lutte contre le Paludisme, Dakar, Senegal, <sup>3</sup>Malaria Atlas Project, Dar es Salaam, United Republic of Tanzania, <sup>4</sup>Centre International de recherche, de formation en Genomique Appliquée et de Surveillance Sanitaire, Dakar, Senegal, <sup>5</sup>Harvard T. H. Chan School of Public Health, Boston, MA, United States

9:15 a.m.

6032

### FORECASTING GLOBAL NEED AND DEMAND FOR CRITICAL MALARIA COMMODITIES TO ANTICIPATE POTENTIAL MARKET DISRUPTIONS

Jessica Floyd<sup>1</sup>, Monica Golumbeanu<sup>2</sup>, Tasmin Symons<sup>3</sup>, Anna Trett<sup>1</sup>, Punam Amratia<sup>3</sup>, Graziella Scudu<sup>1</sup>, Ioana Ursu<sup>4</sup>, Salome Muchiri<sup>1</sup>, Oliver J. Watson<sup>5</sup>, Abigail Ward<sup>1</sup>, Tara Seethaler<sup>1</sup>, Peter W. Gething<sup>3</sup>, Emilie Pothin<sup>2</sup>, Aaron Woolsey<sup>1</sup>

<sup>1</sup>Clinton Health Access Initiative, Boston, MA, United States, <sup>2</sup>Swiss Tropical and Public Health Institute, Allschwil, Switzerland, <sup>3</sup>Telethon Kids Institute, Perth, Australia, <sup>4</sup>Innovative Vector Control Consortium, Liverpool, United Kingdom, <sup>5</sup>Imperial College, London, United Kingdom

9:30 a.m.

### Lightning Talks

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

8052

**QUANTIFY THE TREND IN MALARIA INCIDENCE AT HEALTH DISTRICT LEVEL AND IDENTIFY THE FACTORS ASSOCIATED WITH THIS INCIDENCE IN BURKINA FASO FROM 2016-2022 USING ROUTINE CASES DATA**

Ousmane Oumou DIALLO<sup>1</sup>, Ambroise Ouédraogo<sup>2</sup>, Sebastian Rodriguez<sup>1</sup>, Oumar Billa<sup>1</sup>, Jean Pascal Sandwid<sup>2</sup>, Jean Baptiste Ouedraougou<sup>2</sup>, **Aissata Barry<sup>2</sup>**, Beatriz Galatas<sup>3</sup>, Noelle Samia<sup>1</sup>, Jaline Gerardin<sup>4</sup>, Sidzabda C. B. Kompaoré<sup>2</sup>  
<sup>1</sup>Northwestern University, Evanston, IL, United States, <sup>2</sup>Secrétariat Permanent pour l'élimination du Paludisme, Ouagadougou, Burkina Faso, <sup>3</sup>Global Malaria Programme, World Health Organization, Geneva, Switzerland, <sup>4</sup>Northwestern University, Chicago, IL, United States

6487

**IMPROVING THE APPROACH TO MONITOR AND REPORT ON COVERAGE OF MALARIA INTERMITTENT PREVENTIVE TREATMENT IN PREGNANCY: TIME FOR A RETHINK**

Donal Bisanzio<sup>1</sup>, Raquel González<sup>2</sup>, Cristina Enguita<sup>2</sup>, Clara Menedez<sup>2</sup>, **Richard Reithinger<sup>1</sup>**  
<sup>1</sup>RTI International, Washington, DC, United States, <sup>2</sup>ISGlobal, Hospital Clínic - Universitat de Barcelona, Barcelona, Spain

7326

**IMPACT OF ROUTINE DATA QUALITY AUDITS (RDQA) IN IMPROVING DATA QUALITY AND MALARIA MANAGEMENT STANDARDS IN HEALTH FACILITIES IN THE DEMOCRATIC REPUBLIC OF CONGO (DRC)**

**Jicko Bondole<sup>1</sup>**, Aline Nkulu<sup>1</sup>, Jimmy Anzolo<sup>1</sup>, Rova Ratsimandisa<sup>1</sup>, Michael Hainsworth<sup>2</sup>, Arantxa Roca Feltrer<sup>3</sup>, Hyacinthe Kaseya<sup>4</sup>, Alain Bokota<sup>4</sup>, Ghislain Kikunda<sup>4</sup>, Andre Kaseba<sup>4</sup>, Eric Mukomena<sup>4</sup>  
<sup>1</sup>PATH, Kinshasa, Democratic Republic of the Congo, <sup>2</sup>PATH, Seattle, WA, United States, <sup>3</sup>PATH, Maputo, Mozambique, <sup>4</sup>National Malaria Control Program, Kinshasa, Democratic Republic of the Congo

8063

**STREAMLINING THE MEDICINE REGISTRATION SYSTEM TO IMPROVE ACCESS TO QUALITY MALARIA COMMODITIES IN MADAGASCAR, 2018 - 2024**

**Jean René Randriasamimanana<sup>1</sup>**, Fanja Rakotomanana<sup>2</sup>, Hoby Sitraka Ravelomampianina<sup>2</sup>, Soafara Andrianome<sup>3</sup>, Antonia Stéphanie Rakotoniaina<sup>1</sup>, Aline Mukerabirori<sup>1</sup>, Aishling Thurow<sup>4</sup>, Jane Briggs<sup>4</sup>, Thomas Hall<sup>4</sup>, Luz Razafimbelo<sup>1</sup>, Laurent Kapesa<sup>5</sup>  
<sup>1</sup>IMPACT Program, Management Sciences for Health, Antananarivo, Madagascar, <sup>2</sup>Madagascar Medicines Regulatory Authority, Antananarivo, Madagascar, <sup>3</sup>Madagascar Central Medical Store (SALAMA), Antananarivo, Madagascar, <sup>4</sup>Management Sciences for Health, United States of America, Arlington, VA, United States, <sup>5</sup>U.S. President's Malaria Initiative, United States Agency for International Development, Antananarivo, Madagascar

7320

**MALARIA OUTBREAK INVESTIGATION IN THE ARID NORTHERN WAJIR COUNTY, KENYA, DEC 2023-FEB 2024**

**Diana Rose Wangari Mwaura<sup>1</sup>**, Megumi Itoh<sup>2</sup>, Brian Sigu<sup>1</sup>, Elizabeth N. Kileku<sup>1</sup>, Rose Ajambo<sup>3</sup>, Ahmed Abade<sup>1</sup>, Beatrice Machini<sup>4</sup>, James Kiarie<sup>4</sup>, James Sang<sup>4</sup>, Jane Githuku<sup>5</sup>, Maurice Owiny<sup>1</sup>  
<sup>1</sup>Kenya Field Epidemiology and Laboratory Training Program (FELTP), Nairobi, Kenya, <sup>2</sup>United States President's Malaria Initiative, United States Centers for Disease Control and Prevention, Nairobi, Kenya, <sup>3</sup>Wajir County Health Department, Ministry of Health, Kenya, Wajir, Kenya, <sup>4</sup>National Malaria Control Program, Ministry of Health, Nairobi, Kenya, <sup>5</sup>Country Health Information Systems and Data Use, Nairobi, Kenya

**Scientific Session 14**

**Pneumonia, Respiratory Infections and Tuberculosis I**

Convention Center - Room 395/396 (3rd Floor)  
Thursday, November 14, 8 a.m. - 9:45 a.m.

**#Epidemiology #InfectiousDisease #Child Health #Vaccinology**

**CHAIR**

Muhammad Imran Nisar  
Aga Khan University, Karachi, Pakistan

Kevin Baker  
Malaria Consortium, London, United Kingdom

8 a.m.

6033

**TEMPORAL TRANSCRIPTOMICS UNRAVEL MOLECULAR SIGNATURES OF SEVERE COVID-19**

**Clinton Onyango<sup>1</sup>**, Ivy Hurwitz<sup>2</sup>, Qiuying Cheng<sup>2</sup>, Kristan Schneider<sup>2</sup>, Douglas J. Perkins<sup>3</sup>  
<sup>1</sup>Maseno University, Maseno, Kenya, <sup>2</sup>University of New Mexico Health Sciences Center, Albuquerque, NM, United States, <sup>3</sup>University of New Mexico Health Sciences Center, Albuquerque, NM, United States

8:15 a.m.

6034

**EVALUATING THE BURDEN OF RESPIRATORY TRACT INFECTIONS IN DECEASED IN KARACHI, PAKISTAN: A POST-PANDEMIC MORTALITY SURVEILLANCE ANALYSIS**

**Furqan Kabir<sup>1</sup>**, Raheel Allana<sup>1</sup>, Sameer Belgaumi<sup>2</sup>, Christina Arif<sup>1</sup>, Saima Jamal<sup>1</sup>, Sehrish Amir Ali<sup>1</sup>, Saad B Omer<sup>2</sup>, Abdul Momin Kazi<sup>1</sup>  
<sup>1</sup>Aga Khan University, Hospital, Karachi, Pakistan, <sup>2</sup>UT Southwestern Medical Center, Dallas, TX, United States

8:30 a.m.

6035

**BIOMARKERS FOR PROGNOSTIC PREDICTION OF CHILDHOOD CLINICAL PNEUMONIA IN SUB-SAHARAN AFRICA**

**Isabelle Silber<sup>1</sup>**, Yasir Shitu Isa<sup>2</sup>, Yekini Ajauoi Olatunji<sup>2</sup>, Rasheed Salaudeen<sup>2</sup>, Sarwar Golam<sup>2</sup>, Galega Lobga<sup>2</sup>, Megan Carelus<sup>1</sup>, Patricia Hibberd<sup>1</sup>, Edward F. Knol<sup>3</sup>, Grant Mackenzie<sup>4</sup>, Clarissa Valim<sup>1</sup>  
<sup>1</sup>Boston University School of Public Health, Boston, MA, United States, <sup>2</sup>MRC Unit, The Gambia at the London School of Hygiene & Tropical Medicine, Fajara, Gambia, <sup>3</sup>Center of Translational Immunology and Department of Dermatology/Allergology, University Medical Center Utrecht, Utrecht, Netherlands, <sup>4</sup>Department of Disease Control, Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, London, United Kingdom

8:45 a.m.

6036

**THE EFFECT OF AZITHROMYCIN ON STREPTOCOCCUS PNEUMONIAE CARRIAGE AMONG KENYAN CHILDREN DISCHARGED FROM THE HOSPITAL**

**Tanya E. Libby<sup>1</sup>**, Angela Karani<sup>2</sup>, J. Anthony G. Scott<sup>2</sup>, Donald Akech<sup>2</sup>, Benson Singa<sup>3</sup>, Kirkby Tickell<sup>1</sup>, Doreen Rwigy<sup>3</sup>, Kevin Kariuki<sup>3</sup>, Nancy Onamu<sup>3</sup>, Derrick Ounga<sup>3</sup>, James A. Berkley<sup>2</sup>, Judd L. Walson<sup>4</sup>, Patricia B. Pavlinac<sup>1</sup>  
<sup>1</sup>University of Washington, Seattle, WA, United States, <sup>2</sup>Kenya Medical Research Institute-Wellcome Trust Research Programme, Kilifi, Kenya, <sup>3</sup>Kenya Medical Research Institute, Nairobi, Kenya, <sup>4</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

Thursday  
November 14

9 a.m.

6037

### COMPARISON OF ANTIBIOTIC RESISTANCE PATTERNS OF *S. PNEUMONIAE* IN CASES OF INVASIVE PNEUMOCOCCAL DISEASE AND PAIRED NASOPHARYNGEAL COLONIZATION ISOLATES

**Morr cham**, Grant Mackenzie, Isaac Osei, Rasheed Salaudeen, Hendry Badji, Baleng-Mahama Wutor, Molfa Minteh, Ousman Barjo, Yusuf Abdulsalam Olawale, Golam Sarwar, Abdoullah Nyassi

*Medical Research Council The Gambia at London School of Hygiene & Tropical Medicine (MRC@LSHTM), Basse Santa Su, Gambia*

9:15 a.m.

6038

### HIGH RESIDUAL NASOPHARYNGEAL CARRIAGE OF VACCINE SEROTYPE PNEUMOCOCCI AFTER 12 YEARS OF INTRODUCTION OF PNEUMOCOCCAL CONJUGATE VACCINE IN THE GAMBIA

**Isaac Osei**<sup>1</sup>, Emmanuel Mendy<sup>1</sup>, Effua Usuf<sup>2</sup>, Christian Bottomley<sup>3</sup>, Rasheed Salaudeen<sup>1</sup>, Henry Badji<sup>1</sup>, Ikumapayi U. Nurudeen<sup>1</sup>, Phillip Hill<sup>4</sup>, Brian Greenwood<sup>5</sup>, Grant Mackenzie<sup>6</sup>

<sup>1</sup>Medical Research Council The Gambia at the London School of Hygiene & Tropical Medicine, Banjul, Gambia, <sup>2</sup>Medical Research Council The Gambia at the London School of Hygiene & Tropical Medicine, Fajara, Gambia, <sup>3</sup>Department of Infectious Disease Epidemiology, London School of Hygiene & Tropical Medicine, London, UK, London, United Kingdom, <sup>4</sup>Centre for International Health, University of Otago, Otago, New Zealand, <sup>5</sup>Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>6</sup>Medical Research Council The Gambia at the London School of Hygiene & Tropical Medicine, Basse, Gambia

9:30 a.m.

6039

### EVALUATION OF THE USABILITY, ACCEPTABILITY, AND FEASIBILITY OF TWO DEVICES FOR THE DELIVERY OF INTRANASAL VACCINES IN LOW-AND-MIDDLE INCOME COUNTRIES

**Jennifer Foster**<sup>1</sup>, Erin Rowand<sup>1</sup>, Willkister Musau<sup>2</sup>, Edith Jepleting<sup>2</sup>, Sandeep Kumar<sup>3</sup>, Priyanka Bajaj<sup>3</sup>

<sup>1</sup>PATH, Seattle, WA, United States, <sup>2</sup>PATH, Nairobi, Kenya, <sup>3</sup>PATH, New Delhi, India

### Career Chats (via Zoom): Grants 101

(via Zoom)

This session is limited to Livestream attendees who pre-registered for the event.

**Thursday, November 14, 9:15 a.m. - 10:15 a.m.**

The aim of this session is to empower and provide trainees with tips for successful grant writing. This session is tailored for early-career researchers, mid-career professionals, and trainees eager to refine their grant writing skills. In this interactive and informative workshop, experienced grant writers and successful researchers will share their personal journeys through the grant writing process. Participants will gain valuable insights into crafting compelling proposals, understanding funding agency expectations, and avoiding common pitfalls. Special emphasis will be placed on the essential skills required for grant writing in the biomedical and global health fields, including how to articulate clear research aims, demonstrate the significance and innovation of your work, and develop a feasible, well-structured research plan. Whether you're applying for your first grant or seeking to enhance your grant writing proficiency, this session will equip you with practical tips and strategies to increase your chances of securing funding. Join us for an engaging discussion that will empower you to navigate the complexities of grant applications with confidence.

### CHAIR

Winter Okoth

*Rutgers, State University of New Jersey, New Brunswick, NJ, United States*

Ghassan Ilaawy

*Burroughs Wellcome Fund/University of Virginia, Charlottesville, VA, United States*

### PANELISTS

David A. Fidock

*Columbia University, New York, NY, United States*

Daniel Kiboi

*Jomo Kenyatta University of Agriculture & Technology, Nairobi, Kenya*

Peter H. Kilmarx

*Fogarty International Center, National Institutes of Health, Bethesda, MD, United States*

Charles Narh

*Deakin University, Geelong, Australia*

Christine Ngaruiya

*Stanford University School of Medicine, Stanford, CA, United States*

Maria Luisa Simoes

*Institute of Tropical Medicine, Antwerp, Antwerp, Belgium*

### Exhibit Hall Open

*Convention Center - Hall J (1st Floor)*

**Thursday, November 14, 9:30 a.m. - 10:30 a.m.**

### Coffee Break

*Convention Center - Hall J (1st Floor)*

**Thursday, November 14, 9:45 a.m. - 10:15 a.m.**

### Poster Session A Set-Up

*Convention Center - Hall I-1 (1st Floor)*

**Thursday, November 14, 9:45 a.m. - 10:15 a.m.**

### Poster Session A Viewing

*Convention Center - Hall I-1 (1st Floor)*

**Thursday, November 14, 10:15 a.m. - Noon**

**Alan J. Magill Malaria Eradication Symposium: Developing Leaders in the Continuing Fight for Malaria Eradication: Perspectives from Past Alan J. Magill Fellows**

Convention Center - Hall I-2 (1st Floor)  
Thursday, November 14, 10:15 a.m. – Noon

**Supported with funding from the Bill & Melinda Gates Foundation**



This annual symposium honors the life and work of ASTMH Past President Alan Magill, who at the time of his untimely death in 2015 was promoting the bold goal of global malaria eradication in his role as the Malaria Director at the Bill & Melinda Gates Foundation. The symposium will bring leaders in the malaria field together to summarize the challenges and

advances in areas of relevance to the malaria elimination and eradication effort.

Dr. Alan Magill worked tirelessly for not only malaria eradication but to foster the next generation of leaders in tropical medicine and global health. In line with this vision, the Alan J. Magill Fellowship was created to fund early-to-middle career scientists to pursue leadership and professional development opportunities. We have invited five previous Magill Fellows, with projects focusing on malaria, to speak about their project objectives and progress as well as their leadership journey and impact of the fellowship. A final speaker will talk about the influence of Dr. Magill on malaria programs in Peru, where as head of Parasitology at the U.S. Navy's Medical Research Center, he inspired many malaria researchers in the same spirit of the fellowship that bears his name today.

**CHAIR**

Michelle D. Spring  
State University of New York, Upstate Medical University, Syracuse, NY, United States

**10:15 a.m.**  
**INTRODUCTION**

**10:20 a.m.**  
**LEADING THE WAY: MOZAMBIQUE'S QUEST FOR A MALARIA-FREE FUTURE**

Pedro C. Aide  
Manhica Health Research Center (CISM), Maputo, Mozambique

**10:35 a.m.**  
**LEADERSHIP DEVELOPMENT AND TRAINING FOR TRANSLATING RESEARCH FINDINGS INTO POLICY FOR MALARIA CONTROL AND ELIMINATION IN AFRICA: EXPERIENCE FROM THE ALAN J. MAGILL FELLOWSHIP**

Deus Ishengoma  
National Institute for Medical Research, Dar es Salaam, United Republic of Tanzania

**10:50 a.m.**  
**LEADERSHIP DEVELOPMENT THROUGH THE ALAN J. MAGILL FELLOWSHIP IN USING GLOBAL INFECTION SURVEILLANCE TO REDUCE THE HEALTH BURDEN OF DISEASES OF POVERTY**

Awa Bineta Deme  
International Research Training Center on Genomics, Dakar, Senegal

**11:05 a.m.**  
**ALAN J. MAGILL FELLOWSHIP: AT THE TIME OF EXPANSION AND CONVERGENCE OF MALARIA BIOLOGICAL THREATS IN THE HORN OF AFRICA**

Fitsum Girma G. Tadesse  
Armauer Hansen Research Institute, Addis Ababa, Ethiopia

**11:20 a.m.**  
**ALAN J. MAGILL FELLOWSHIP: BROADENED CAREER OPPORTUNITY TO CONTRIBUTE TO MALARIA ELIMINATION IN BURKINA FASO**

Issiaka Soulama  
Institut de Recherche en Sciences de la Santé (IRSS), Ouagadougou, Burkina Faso

**11:35 a.m.**  
**ALAN J. MAGILL'S JOURNEY IN PERU: SHAPING AND INSPIRING CURRENT AND FUTURE LEADERS IN INFECTIOUS DISEASES**

Dionicia Gamboa  
Universidad Peruana Cayetano Heredia, Lima, Peru

**11:50 a.m.**  
**QUESTIONS AND ANSWERS**

**Scientific Session 16**

**Clinical Tropical Medicine: HIV and Mpox**

Convention Center - Room 343/344 (3rd Floor)  
Thursday, November 14, 10:15 a.m. - Noon

#InfectiousDisease #EmergingDiseaseThreats  
#Prevention #Diagnostics

**CHAIR**

Michael Hawkes  
University of British Columbia, Vancouver, BC, Canada

Aisha Khatib  
University of Toronto, Toronto, ON, Canada

**10:15 a.m.** **6040**

**THE LIVED EXPERIENCES OF UGANDAN COMMUNITY HEALTH WORKERS ENGAGED IN PREVENTION OF VERTICAL TRANSMISSION OF HIV AND A CAPACITY-BUILDING INTERVENTION**

Victor Mocanu<sup>1</sup>, Hannah M. Brooks<sup>1</sup>, Sophie Namasopo<sup>2</sup>, Robert O. Opoka<sup>3</sup>, Michael T. Hawkes<sup>4</sup>

<sup>1</sup>University of Alberta, Edmonton, AB, Canada, <sup>2</sup>Kabale District Hospital, Kabale, Uganda, <sup>3</sup>Medical College East Africa, Aga Khan University, Nairobi, Kenya, <sup>4</sup>University of British Columbia, Vancouver, BC, Canada

Thursday  
November 14



10:30 a.m.

6041

### FACTORS CONTRIBUTING TO LOW LINKAGE TO HIV TREATMENT IN GHANA, 2023

Jennifer Nai-Dowetin<sup>1</sup>, Vincent Ganu<sup>2</sup>, Grace Ocansey<sup>1</sup>, Anthony Ashinyo<sup>3</sup>, Stephen Ayisi-Addo<sup>3</sup>, Ernest Kenu<sup>4</sup>

<sup>1</sup>Ghana Field Epidemiology and Laboratory Training Programme, Accra, Ghana, <sup>2</sup>Infectious Disease Unit, Department of Medicine and Therapeutics, Korle-Bu Teaching Hospital, Accra, Ghana, <sup>3</sup>National HIV/AIDS/STI Control Programme, Ghana Health Service, Accra, Ghana, <sup>4</sup>Department of Epidemiology and Disease Control, School of Public Health, University of Ghana. Ghana Field Epidemiology and Laboratory Training Programme, Accra, Ghana

10:45 a.m.

6042

### ASSESSING THE RISK OF ADVERSE PREGNANCY OUTCOME AMONG HIV-POSITIVE AND HIV-NEGATIVE PREGNANT WOMEN: ANALYSIS FROM A COHORT OF WOMEN PARTICIPATING IN TWO INDIVIDUALLY RANDOMIZED CONTROLLED TRIALS IN WESTERN KENYA

EVERLINE DELYLAH ONDIEKI, Eric Donald, George O. Ollilo, Hellen C. Barsosio  
Kenya Medical Research Institute, Kisumu, Kenya

11 a.m.

6043

### AFRICAN BRAIN POWERED GAMES APPS AVAILABLE ON COMPUTER TABLETS CAN BE USED TO DYNAMICALLY ASSESS BRAIN/BEHAVIOR INTEGRITY AND NEUROCOGNITIVE PERFORMANCE IN UGANDAN AND MALAWIAN SCHOOL-AGE CHILDREN AFFECTED BY HIV

Michael J. Boivin<sup>1</sup>, Itziar M. Familiar-Lopez<sup>1</sup>, Lillian Wambuzi Ogwang<sup>2</sup>, Sufia Dadabhai<sup>3</sup>, Brian Winn<sup>1</sup>, Alla Sikorskii<sup>1</sup>, Bruno Giordani<sup>4</sup>

<sup>1</sup>Michigan State University, East Lansing, MI, United States, <sup>2</sup>Makerere University - Johns Hopkins University, Kampala, Uganda, <sup>3</sup>Malawi College of Medicine - Johns Hopkins University, Blantyre, Malawi, <sup>4</sup>University of Michigan, Ann Arbor, MI, United States

11:15 a.m.

6044

### ONE AND TWO DOSE TYPHOID CONJUGATE VACCINE SAFETY AND IMMUNOGENICITY IN HIV-EXPOSED UNINFECTED AND HIV-UNEXPOSED UNINFECTED MALAWIAN CHILDREN

Nginache Nampota-Nkomba<sup>1</sup>, Oswald M. Nyirenda<sup>2</sup>, Divya Hosangadi<sup>1</sup>, Victoria Mapemba<sup>2</sup>, Priyanka D. Patel<sup>3</sup>, Happy C. Banda<sup>3</sup>, Felistas Mwakiseghile<sup>3</sup>, Theresa Misiri<sup>3</sup>, Richard Wachepa<sup>3</sup>, John Ndaferankhande<sup>3</sup>, Bright Lipenga<sup>3</sup>, Robert S. Heyderman<sup>4</sup>, Marcela Pasetti<sup>1</sup>, Leslie P. Jamka<sup>1</sup>, Shrimati Datta<sup>1</sup>, Melita A. Gordon<sup>3</sup>, Kathleen M. Neuzil<sup>1</sup>, Matthew B. Laurens<sup>1</sup>

<sup>1</sup>University of Maryland School of Medicine, Baltimore, MD, United States, <sup>2</sup>Blantyre Malaria Project, Blantyre, Malawi, <sup>3</sup>Malawi Liverpool Wellcome Programme, Blantyre, Malawi, <sup>4</sup>University College London, London, United Kingdom

11:30 a.m.

6045

### THE CLINICO-EPIDEMIOLOGICAL EXPERIENCE OF AN MPOX OUTBREAK AT A LARGE HEALTHCARE SYSTEM IN LOUISIANA, USA

Mary Ellen Owings<sup>1</sup>, Latha Rajan<sup>1</sup>, Obinna Nnedu<sup>2</sup>

<sup>1</sup>Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States, <sup>2</sup>Ochsner Medical Center, Infectious Diseases Department, New Orleans, LA, United States

11:45 a.m.

6046

### PERFORMANCE EVALUATION OF FIVE POINT-OF-CARE TESTS FOR MPOX DETECTION

Devy M. Emperador<sup>1</sup>, Elie Ishara<sup>2</sup>, Jacob Parkes<sup>3</sup>, Juvenal Nkeramahame<sup>4</sup>, Mikaela Watson<sup>5</sup>, Anushri Somasundaran<sup>3</sup>, Yusra Hussain<sup>3</sup>, Nadia Kontogianni<sup>3</sup>, Daniel Mukadi<sup>2</sup>, Marithé Mukoka<sup>2</sup>, Hugues Mirimo<sup>2</sup>, Emile Milonde<sup>2</sup>, Susan Logoose<sup>4</sup>, Audrey Albertini<sup>6</sup>, Berra Erkosar<sup>5</sup>, Emmanuel Agogo<sup>1</sup>, Jake Dunning<sup>7</sup>, Ana Cubas Atienzar<sup>3</sup>, Hugo Kavunga-Membo<sup>2</sup>

<sup>1</sup>Pandemic Threats Program, FIND, Geneva, Switzerland, <sup>2</sup>Laboratoire Rodolphe Mérieux - Institut National de Recherche Biomédicale, Goma, Democratic Republic of the Congo, <sup>3</sup>Center for Drugs and Diagnostics, Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>4</sup>Clinical Trial Unit, FIND, Geneva, Switzerland, <sup>5</sup>Data Science Unit, FIND, Geneva, Switzerland, <sup>6</sup>Program Management Unit, FIND, Geneva, Switzerland, <sup>7</sup>Pandemic Sciences Institute, University of Oxford, Oxford, United Kingdom

## Scientific Session 17

### Kinetoplastida and Other Opportunistic and Anaerobic Protozoa: Epidemiology

Convention Center - Room 345 (3rd Floor)

Thursday, November 14, 10:15 a.m. - Noon

#InfectiousDisease #Epidemiology #FieldStudies

#### CHAIR

Malla Rao  
NIAD, Rockville, MD, United States

Kawsar Talaat  
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

10:15 a.m.

6047

### BURDEN OF CHAGAS DISEASE RELATED TO CARDIOMYOPATHY IN THE UNITED STATES

Steffany Vucetich, Kelly DeToy, Yeonsoo Baik, Robert H. Gilman, Bryan Patenaude  
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

10:30 a.m.

6048

### WHAT IS THE EFFECT OF DEFORESTATION OF THE ATLANTIC FOREST ON THE OCCURRENCE OF PANSTRONGYLUS TIBIAMACULATUS IN URBAN AREAS?

Gilmar Ribeiro-Jr<sup>1</sup>, Fernanda C. Lanza<sup>1</sup>, Diego L P Miranda<sup>1</sup>, Renato B. Reis<sup>2</sup>, Cristiane W. Cardoso<sup>3</sup>, Fabiano Simões<sup>3</sup>, Eliaci C L Costa<sup>3</sup>, Márcia Castro<sup>4</sup>, Rodrigo Gurgel-Gonçalves<sup>5</sup>, Mitermayer G. Reis<sup>1</sup>

<sup>1</sup>Oswaldo Cruz Foundation, Salvador, Brazil, <sup>2</sup>Faculdade Salvador, Salvador, Brazil, <sup>3</sup>Secretaria de Saúde de Salvador, Salvador, Brazil, <sup>4</sup>Harvard School of Public Health, Boston, MA, United States, <sup>5</sup>Universidade de Brasília, Brasília, Brazil

10:45 a.m.

6049

### SYSTEMIC CLINICAL PARAMETERS AND INFECTIVITY IN CANINE LEISHMANIOSIS (CANL)

Max Waugh<sup>1</sup>, Karen Cyndari<sup>2</sup>, Tom Lynch<sup>3</sup>, Soomin Koh<sup>2</sup>, Ferney Henao-Ceballos<sup>2</sup>, Jacob J. Oleson<sup>2</sup>, Paul Kaye<sup>2</sup>, Christine A. Petersen<sup>2</sup>

<sup>1</sup>The University of Iowa, Coralville, IA, United States, <sup>2</sup>The University of Iowa, Iowa City, IA, United States, <sup>3</sup>The Ohio State University, Columbus, OH, United States

11 a.m.

6050

### EPIDEMIOLOGY OF VISCERAL LEISHMANIASIS AND OTHER PARASITIC INFECTIONS IN REFUGEE CAMPS OF ETHIOPIA

**Bortola A. Ayana**<sup>1</sup>, Adugna Abera<sup>1</sup>, Aman Yesuf<sup>2</sup>, Habtamu Belay<sup>1</sup>, Mahlet Belachew<sup>1</sup>, Tesfahun Bishaw<sup>3</sup>, Fransisco Averhoff<sup>4</sup>, Alan Landay<sup>5</sup>, Paulina A. Rebollo<sup>6</sup>, Geremew Tasew<sup>1</sup>

<sup>1</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia, <sup>2</sup>St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia, <sup>3</sup>Ministry of Health of Ethiopia, Addis Ababa, Ethiopia, <sup>4</sup>Abbott Diagnostics, Abbott Park, IL, IL, United States, <sup>5</sup>University of Texas, Austin, TX, United States, <sup>6</sup>Emory University, Atlanta GA, GA, United States

11:15 a.m.

6051

### SPECIFIC PATHOGEN TESTING FOR OPPORTUNISTIC INFECTIONS IN PERSONS WITH HIV IN PERU AND BOLIVIA

**Hannah E. Steinberg**<sup>1</sup>, Andrea Diestra<sup>2</sup>, Beth J. Condori<sup>2</sup>, Edith Malaga<sup>2</sup>, Christian Guerra<sup>3</sup>, Margot Ramirez Jaldin<sup>4</sup>, Lynn Pinchi<sup>5</sup>, Ricardo Medrano Colmenares<sup>2</sup>, Maria J. Pessoa<sup>4</sup>, Sergio Burgoa<sup>4</sup>, Cusi Ferradas<sup>6</sup>, Daniela E. Kirwan<sup>7</sup>, Monica M. Diaz<sup>8</sup>, Michael Sciaudone<sup>9</sup>, Maritza Calderón<sup>2</sup>, Manuela Verastegui<sup>2</sup>, Lilia Cabrera<sup>5</sup>, Viviana Pinedo Cancino<sup>3</sup>, Frine Samalvides<sup>2</sup>, Freddy Tinajeros<sup>4</sup>, Cesar Ramal Asayag<sup>10</sup>, Robert H. Gilman<sup>11</sup>, Natalie M. Bowman<sup>8</sup>

<sup>1</sup>University of Washington, Seattle, WA, United States, <sup>2</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>3</sup>Universidad Nacional de la Amazonía Peruana, Iquitos, Peru, <sup>4</sup>AB Prisma, Santa Cruz, Plurinational State of Bolivia, <sup>5</sup>AB Prisma, Lima, Peru, <sup>6</sup>University of California Davis, Davis, CA, United States, <sup>7</sup>St George's, University of London, London, United Kingdom, <sup>8</sup>University of North Carolina, Chapel Hill, NC, United States, <sup>9</sup>Tulane University, New Orleans, LA, United States, <sup>10</sup>Hospital Regional de Loreto, Iquitos, Peru, <sup>11</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

11:30 a.m.

6052

### COHORT ESTIMATION ANALYSIS OF CUTANEOUS AND MUCOCUTANEOUS LEISHMANIASIS, 1990-2021

**Cathleen Keller**, Michael Celone, Ewerton Cousin, Taren Gorman, Quince Hara, Olivia Nesbit, Lydia Plante, Joanna Whisnant, Steph Zimsen, Jon Mosser  
*Institute for Health Metrics and Evaluation, Seattle, WA, United States*

11:45 a.m.

6053

### LOW RISK FOR LOCALLY ACQUIRED CHAGAS DISEASE IN CALIFORNIA: A REVIEW OF HUMAN CASES AND TRIATOMINE SUBMISSIONS, 2013-2023

**Andrea Lund**<sup>1</sup>, Marco E. Metzger<sup>2</sup>, Vicki L. Kramer<sup>1</sup>, Anne M. Kjemtrup<sup>1</sup>  
<sup>1</sup>California Department of Public Health, Sacramento, CA, United States, <sup>2</sup>California Department of Public Health, Ontario, CA, United States

## Symposium 18

### American Committee of Medical Entomology (ACME) Symposium II: Annual Business Meeting, Awards Ceremony, Hoogstraal Medal Presentation, and Networking Reception

*Convention Center - Room 352 (3rd Floor)*  
**Thursday, November 14, 10:15 a.m. - Noon**

This symposium provides a forum for exchange of information among people interested in research on arthropods that cause disease or transmit disease-causing agents. The session begins with a short ACME business meeting followed by presentation of the 2024 ACME awards. The awards ceremony features the ACME Young Investigator Travel Awards, Breakthrough in Medical Entomology Award, Future Leaders Fellowship in

International Medical Entomology, Award of Distinction, and the Hoogstraal Medal, the highest distinction conferred by ACME. The awards ceremony will highlight the next generation of medical entomologists and recognize the early, mid- and late career achievements of individuals in the field on medical entomology. After the awards ceremony, a lecture will be delivered by the Hoogstraal Medal recipient, which will feature contributions of the awardee to advancing the field of medical entomology. The symposium will continue with the passing of the gavel (transfer of office), and conclude with the ACME professional networking and socializing session. #EarlyCareer #Trainee #InfectiousDisease

#### CHAIR

Adriana Troyo  
*Universidad de Costa Rica, San Jose, Costa Rica*

Sarah A. Hamer  
*Texas A&M University, College Station, TX, United States*

10:15 a.m.

#### INTRODUCTION

10:25 a.m.

#### ACME ANNUAL BUSINESS MEETING

Adriana Troyo  
*Universidad de Costa Rica, San Jose, Costa Rica*

10:45 a.m.

#### ACME AWARDS CEREMONY I: YOUNG INVESTIGATOR TRAVEL AWARDS

Nsa Dada  
*Arizona State University, Tempe, AZ, United States*

11:10 a.m.

#### ACME AWARDS CEREMONY II: BREAKTHROUGH IN MEDICAL ENTOMOLOGY, FUTURE LEADERS IN INTERNATIONAL MEDICAL ENTOMOLOGY, AWARD OF DISTINCTION, AND HOOGSTRAAL MEDAL

Adriana Troyo  
*Universidad de Costa Rica, San Jose, Costa Rica*

11:30 a.m.

#### HARRY HOOGSTRAAL MEDAL PRESENTATION

Marcelo Jacobs-Lorena  
*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*

11:45 a.m.

#### ACME NETWORKING AND SOCIALIZING SESSION

## Symposium 19

### Rocky Mountain Spotted Fever in Mexico: Raging On

*Convention Center - Room 353 (3rd Floor)*  
**Thursday, November 14, 10:15 a.m. - Noon**

The ASTMH 2006 meeting celebrated the 100th anniversary of Howard Taylor Ricketts' seminal 1906 discoveries and publications about Rocky Mountain spotted fever (RMSF). At that time, RMSF incidence was barely edging upward from its 1998 U.S. nadir and declining case fatality; it was largely forgotten in other Western Hemisphere countries, including Mexico. However, between 2009

and 2023, over 4,250 cases of RMSF were recorded in the Mexican states of Baja California Sonora, Chihuahua, Coahuila, and Nuevo León. With 1,240 deaths and an overall case fatality rate of 29% to as high as 63% - Mexico is now ground-zero for RMSF resurgence with incidence and case fatality not observed since Ricketts' time. The ensuing epidemic involves multiple foci across vast ranges of Mexico, including those that border on the U.S. In Mexico, it affects predominantly vulnerable populations such as children, the elderly, ethnic minorities and those living in poverty. Lessons from the past may not inform approaches to control these catastrophic outbreaks as distinct vectors and reservoir hosts are implicated, and the health care basis of identifying and managing affected patients is wanting. This symposium will gather the expertise of key medical, epidemiological, and ecological scientists involved in the ongoing investigations of RMSF in Mexico, presenting data on similarities and differences in epidemiology, clinical presentations and complications, and the underlying ecology and vector biology as compared to historical expectations. These data will then be used to advance discussions on better and more rapid recognition, implementation of health care resources, and data-driven solutions that address the ecology and epizootiology of RMSF in Mexico. #EmergingDiseaseThreats #Prevention #EcologicalStudies #Epidemiology

#### CHAIR

J. Stephen Dumler  
*Uniformed Services University, Bethesda, MD, United States*

David H. Walker  
*University of Texas Medical Branch, Galveston, TX, United States*

#### 10:15 a.m. INTRODUCTION

#### 10:25 a.m. CLINICAL AND LABORATORY ASPECTS OF SEVERE DISEASE IN PEDIATRIC PATIENTS WITH RMSF IN MEXICO

Oscar Tamez-Rivera  
*Instituto de Pediatría Hospital Zambrano Hellion; Tecnológico de Monterrey, Monterrey, Mexico*

#### 10:45 a.m. THE EPIDEMIOLOGICAL IMPACT OF ROCKY MOUNTAIN SPOTTED FEVER IN NORTHERN MEXICO

Gerardo Álvarez-Hernández  
*Departamento de Medicina y Ciencias de la Salud, Universidad de Sonora, Hermosillo, Mexico*

#### 11:05 a.m. RICKETTSIA RICKETTSII AND THE TRIAD OF HOST-VECTOR-PATHOGEN IN DISEASE PATHOGENESIS OF RMSF

Christopher D. Paddock  
*Rickettsial Zoonoses Branch, CDC, Atlanta, GA, United States*

#### 11:25 a.m. CANINE ECOLOGY IS KEY TO ROCKY MOUNTAIN SPOTTED FEVER EPIDEMIC CRISIS

Janet E. Foley  
*University of California, Davis, Davis, CA, United States*

## Scientific Session 20

### Bacteriology: Shigella and Salmonella

Convention Center - Room 354/355 (3rd Floor)  
Thursday, November 14, 10:15 a.m. - Noon

*This session does not carry CME credit.*

#Immunology #Epidemiology #PopulationSurveillance  
#Vaccinology #Genetics

#### CHAIR

Charlotte Chong  
*University of Cambridge, Cambridge, United Kingdom*

Farhana Khanam  
*International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh*

10:15 a.m.

6054

#### SECONDARY SHIGELLA TRANSMISSION AND PREDISPOSING FACTORS FOR DEVELOPING SHIGELLOSIS AMONG HOUSEHOLD CONTACTS IN THE EFGH CATCHMENT AREA, DHAKA, BANGLADESH

Md. Taufiqul Islam, Farhana Khanam, Ismail Hossen, Nazmul Hasan Rajib, Mahzabeen Ireen, Syed Qudrat-E- Khuda, Md Golam Firoj, Prasanta Kumar Biswas, Amirul Islam Bhuiyan, Faisal Ahmmmed, Firdausi Qadri  
*International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh*

10:30 a.m.

6055

#### GENETIC FACTORS CONTRIBUTING TO DISEASE IN SHIGELLA

Charlotte E. Chong<sup>1</sup>, Xiaoliang Ba<sup>1</sup>, Rebecca Ji Bengtsson<sup>2</sup>, P. Malaka De Silva<sup>1</sup>, Mark A. Holmes<sup>1</sup>, Karen Kotloff<sup>3</sup>, Sharon M. Tennant<sup>3</sup>, Kate S. Baker<sup>1</sup>  
<sup>1</sup>University of Cambridge, Cambridge, United Kingdom, <sup>2</sup>University of Liverpool, Liverpool, United Kingdom, <sup>3</sup>University of Maryland, Baltimore, MD, United States

10:45 a.m.

6056

#### ANTIBODY-MEDIATED PROTECTION AGAINST SHIGELLOSIS

Biana Bemshtein<sup>1</sup>, Julia Zhiteneva<sup>1</sup>, Galit Alter<sup>2</sup>, Edward T. Ryan<sup>3</sup>  
<sup>1</sup>Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States, <sup>2</sup>Ragon Institute of MGH, MIT and Harvard, CAMBRIDGE, MA, United States, <sup>3</sup>MGH, Boston, MA, United States

11 a.m.

6057

#### DEVELOPMENT OF A SEROEPIDEMIOLOGY TOOL FOR SHIGELLA

Claire E. Munroe<sup>1</sup>, Ashraf I. Khan<sup>2</sup>, Fahima Chowdhury<sup>2</sup>, Paul Kovac<sup>3</sup>, Peng Xu<sup>3</sup>, Polina Kamenskaya<sup>1</sup>, Meagan Kelly<sup>1</sup>, Jeshina Janardhana<sup>1</sup>, Chanchal Wagh<sup>1</sup>, Jessica C. Seidman<sup>4</sup>, Kristen Aiemjoy<sup>5</sup>, Firdausi Qadri<sup>2</sup>, Edward T. Ryan<sup>1</sup>, Richelle C. Charles<sup>1</sup>  
<sup>1</sup>Division of Infectious Diseases, Massachusetts General Hospital, Boston, MA, United States, <sup>2</sup>Infectious Diseases Division, International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, <sup>3</sup>National Institutes of Health, Bethesda, MD, United States, <sup>4</sup>Sabin Vaccine Institute, Washington, DC, United States, <sup>5</sup>Department of Public Health Sciences, University of California Davis School of Medicine, Davis, CA, United States

11:15 a.m.

6058

**PROTECTION CONFERRED BY A SINGLE DOSE OF TYPHOID CONJUGATE VACCINE AMONG BANGLADESHI CHILDREN AFTER FIVE YEARS OF VACCINATION: ANALYSIS OF A CLUSTER RANDOMIZED CONTROLLED TRIAL**

**Farhana Khanam**<sup>1</sup>, Firdausi Qadri<sup>1</sup>, Yiyuan Zhang<sup>2</sup>, Prasanta Kumar Biswas<sup>1</sup>, Meryn Voysey<sup>3</sup>, Yama F Mujadidi<sup>2</sup>, Sarah Kelly<sup>2</sup>, Amirul Islam Bhuiyan<sup>1</sup>, Nazmul Hasan Rajib<sup>1</sup>, Ismail Hossen<sup>1</sup>, Nazia Rahman<sup>1</sup>, Sadia Islam<sup>1</sup>, Virginia E. Pitzer<sup>4</sup>, John D. Clemens<sup>5</sup>, Andrew J. Pollard<sup>2</sup>, Xinxue Liu<sup>2</sup>

<sup>1</sup>International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>2</sup>Oxford Vaccine Group, Department of Paediatrics, University of Oxford, Oxford, UK, UK, United Kingdom, <sup>3</sup>UKNIHR Oxford Biomedical Research Centre and Oxford University Hospitals NHS Foundation Trust, Oxford, UK, UK, United Kingdom, <sup>4</sup>Department of Epidemiology of Microbial Diseases and Public Health Modelling Unit, Yale School of Public Health, New Haven, Connecticut, United States of America, Connecticut, CT, United States, <sup>5</sup>International Vaccine Institute, Seoul, Republic of Korea

11:30 a.m.

6059

**SAFETY AND IMMUNOGENICITY OF A BIVALENT VACCINE AGAINST SALMONELLA TYPHI AND SALMONELLA PARATYPHI A: INTERIM DATA FROM A PHASE 1 RANDOMIZED CONTROLLED OBSERVER-BLIND, TRIAL AMONG HEALTHY ADULTS IN EUROPE**

Usman N. Nakakana<sup>1</sup>, Ilse de Coster<sup>2</sup>, Marie-Annick Götze<sup>2</sup>, Pierre Van Damme<sup>2</sup>, Eleanna Sarakinou<sup>1</sup>, Chiara Fineschi<sup>1</sup>, Elisa Marchetti<sup>1</sup>, **Mohammad A. AbdelGhany**<sup>1</sup>, Kanchanamala Withanage<sup>2</sup>, Francesco Berlandascorza<sup>1</sup>, Giulia Luna Cilio<sup>3</sup>, Alimamy Serry-Bangura<sup>3</sup>, Iris Sarah De Ryck<sup>3</sup>, Martina Carducci<sup>1</sup>, Luisa Massai<sup>1</sup>, Simona Rondini<sup>1</sup>, Valentino Conti<sup>1</sup>, Omar Rossi<sup>1</sup>, Ashwani Arora<sup>1</sup>

<sup>1</sup>GSK Vaccines Institute for Global Health, Siena, Italy, <sup>2</sup>Centre for the Evaluation of Vaccination, University of Antwerp, Antwerp, Belgium, <sup>3</sup>GSK Vaccines Srl, Siena, Italy

11:45 a.m.

6060

**EFFECT OF BIENNIAL AZITHROMYCIN MASS DRUG ADMINISTRATION ON ENTERIC FEVER TRANSMISSION INTENSITY IN NIGER**

**Kristen Aiemjoy**<sup>1</sup>, Jessica C. Seidman<sup>2</sup>, Ahmed M. Arzika<sup>3</sup>, Kristina Wen-Jeh Lai<sup>1</sup>, Ramatou Maliki<sup>3</sup>, Amza Abdou<sup>4</sup>, Denise Garrett<sup>2</sup>, Claire Munroe<sup>5</sup>, Abel Gonzalez<sup>5</sup>, Leah Sukri<sup>6</sup>, Elodie Lebas<sup>7</sup>, Catherine Cook<sup>7</sup>, Benjamin F. Arnold<sup>7</sup>, Thomas M. Lietman<sup>7</sup>, Kathleen M. Neuzil<sup>6</sup>, Jason R. Andrews<sup>8</sup>, Jeremy D. Keenan<sup>9</sup>, Richelle C. Charles<sup>5</sup>  
<sup>1</sup>University of California Davis, Davis, CA, United States, <sup>2</sup>Sabin Vaccine Institute, Washington, DC, United States, <sup>3</sup>Centre de Recherche et Interventions en Santé Publique, Niamey, Niger, <sup>4</sup>Nationale de Santé Oculaire, Niamey, Niger, <sup>5</sup>Massachusetts General Hospital, Boston, MA, United States, <sup>6</sup>Center for Vaccine Development and Global Health, Baltimore, MD, United States, <sup>7</sup>UCSF Francis I. Proctor Foundation, San Francisco, CA, United States, <sup>8</sup>Stanford University School of Medicine, Palo Alto, CA, United States, <sup>9</sup>UCSF-Francis I. Proctor Foundation, San Francisco, CA, United States



**Symposium 21**

**ASTMH Committee on Global Health (ACGH) Symposium II: Building a Diverse Workforce in Global Health Research**

Convention Center - Room 356 (3rd Floor)  
Thursday, November 14, 10:15 a.m. - Noon

Despite the growing recognition that diversity in leadership leads to better health outcomes, leadership in global health research remains largely undiversified. The Global Health 50/50 organization has documented that, among almost 400 global organizations surveyed in 2023, 66% of CEOs and Board Chairs are men and 73% are nationals of high-income countries (globalhealth5050.org). In this symposium, we will hear from

experts who have dedicated their careers to working towards greater diversity in global health leadership, including building leadership of women and leadership from countries that have historically been underrepresented in global decision-making. Speakers will include leaders of academic and non-governmental institutions, policy-makers, and funders. Speakers will discuss strategies that they have implemented, challenges faced, and lessons learned, with a focus on how session attendees at all levels of training can work towards cultivating greater diversity in global health research. As a result of the symposium, it is expected that attendees will gain new ideas for how they can incorporate training and can promote diverse researchers in their ongoing work. #EarlyCareer #Trainee

**CHAIR**

Jennifer A. Downs  
Weill Cornell Medicine, New York, NY, United States

Maria E. Bottazzi  
Baylor College of Medicine, Houston, TX, United States

**10:15 a.m. INTRODUCTION**

**10:25 a.m. ACCOUNTABILITY FOR EQUALITY IN GLOBAL HEALTH CAREERS**

Sarah J. Hawkes  
Global Health 50/50, Cambridge, United Kingdom

**10:40 a.m. MOBILIZING OUR LEADERS: GENDER-BASED BARRIERS AND EVIDENCE-BASED SOLUTIONS IN FOUR COUNTRIES**

Adolfine A.K. Hokororo  
Catholic University of Health and Allied Sciences, Mwanza, United Republic of Tanzania

**10:55 a.m. STRENGTHENING RESEARCH CAPACITY IN A RESOURCE-CONSTRAINED ENVIRONMENT: CONNECTING AND SHARING WITH STRATEGIC PARTNERS**

Jackeline Alger  
University Hospital, Tegucigalpa, Honduras

**11:10 a.m. HEALTH EQUITY: A GLOBAL PERSPECTIVE FROM THE NIH FOGARTY INTERNATIONAL CENTER**

Barbara J. Sina  
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

**11:25 a.m. TRAINING JUNIOR SCIENTISTS FROM SITES WORLDWIDE TO CONDUCT CUTTING-EDGE TRANSLATIONAL RESEARCH**

Maria Elena Botazzi  
Baylor College of Medicine, Houston, TX, United States

**11:40 a.m. DOCTORAL-LEVEL LEADERSHIP TRAINING IN GLOBAL HEALTH: CREATING AGENTS OF CHANGE TO BUILD A DIVERSE WORKFORCE IN GLOBAL HEALTH RESEARCH AND PRACTICE**

Miguel Reina Ortiz  
Indiana University, Indianapolis, IN, United States

Thursday  
November 14

## Symposium 22

### Neglected Tropical Diseases: Getting the Dose Right

Convention Center - Room 357 (3rd Floor)

Thursday, November 14, 10:15 a.m. - Noon

Neglected Tropical Diseases (NTDs) affects predominantly marginalized and impoverished communities, and receive insufficient attention and funding for research, prevention, and treatment compared to other diseases. NTDs pose significant public health challenges, affecting over a billion people worldwide, primarily in low-resource settings. They cause substantial morbidity and mortality, leading to long-term disabilities, economic losses, and hindering of socioeconomic development in affected regions. Efforts to control and eliminate NTDs have gained momentum in recent years, with initiatives such as the World Health Organization's (WHO) NTD Roadmap 2030 aiming to accelerate progress towards eliminating these diseases as public health threats. Key strategies include improved treatment of acute infections, prevention, mass drug administration, improved access to healthcare services, vector control, and community engagement. Addressing these challenges requires a multifaceted approach involving governments, non-governmental organizations, researchers, and communities. Many of these diseases have a limited number of effective and safe drugs available, and they are often not used at optimal doses. Sub-optimal dosing could result in treatment failures and the development and spread of drug resistance. It is absolutely crucial to use available drugs at optimal doses, to reach treatment and elimination targets. The only way to truly determine the optimal dose in a particular population of patients, is to characterize and quantify the relationship between dosing – drug exposure – therapeutic efficacy in this group of patients. This can be achieved through well-planned and executed pre-clinical and clinical studies in combination with pharmacokinetic and pharmacodynamic modelling. This is particularly important in vulnerable population, such as pregnant women and small children. This symposium will provide an overview of the importance, impact and use of pharmacokinetic and pharmacodynamic tools in optimizing treatments of NTDs. Speakers will cover the use of pharmacokinetic-pharmacodynamic modelling of pre-clinical and clinical data to inform dosing, as well as the use of human challenge models in the development of novel therapies. The topics covered are not specific to a particular disease but generic for all NTDs, with presented case-studies and examples anchored in certain diseases to attract a wider audience. The novel methodologies presented will hopefully inspire future collaborations between clinical pharmacologists, trialists, laboratory scientists, and physicians. #ClinicalResearch #InfectiousDisease #Modeling #Therapeutics #TranslationalScience

#### CHAIR

Joel Tarning

Mahidol Oxford Tropical Research Unit, Bangkok, Thailand

Radojka Savic

University of California San Francisco, San Francisco, CA, United States

10:15 a.m.  
INTRODUCTION

10:25 a.m.  
SCALING FROM PRE-CLINICAL TO CLINICAL TRIALS IN  
NEGLECTED TROPICAL DISEASES

Richard Hoglund

Mahidol Oxford Tropical Research Unit, Bangkok, Thailand

10:45 a.m.  
PHARMACOMETRIC MODELLING TO OPTIMIZE HUMAN DOSE  
PREDICTIONS FOR MALARIA TREATMENT

Devasha Redhi

University of Cape Town, Cape Town, South Africa

11:05 a.m.  
THE USE OF HUMAN CHALLENGE MODELS IN OPTIMIZING  
TREATMENT OF INFECTIOUS DISEASES

James McCarthy

The University of Melbourne, Melbourne, Australia

11:25 a.m.  
PHARMACOKINETIC CONSIDERATIONS WHEN TREATING  
PREGNANT AND BREASTFEEDING MOTHERS

Catriona Waitt

Makerere University, Kampala, Uganda

11:45 a.m.  
THE ROLE OF PHARMACOMETRICS IN GLOBAL HEALTH  
RESEARCH

Savic Rada

University of California San Francisco, San Francisco, CA, United States

## Symposium 23

### Human Flavivirus Challenge Models: Advances and Lessons Learned

Convention Center - Room 383/384/385 (3rd Floor)

Thursday, November 14, 10:15 a.m. - Noon

**This session does not carry CME credit.**

Development of effective dengue virus (DENV) and Zika virus (ZIKV) countermeasures has been hindered by fundamental gaps in our understanding of flavivirus transmission, pathogenesis, and immunity. These knowledge gaps include understanding who is at risk of exposure, why do some infected people become ill and others do not, and what environmental and/or genetic factors increases a person's infection risk. Studying wild type infections to answer these questions has been challenging for a number of reasons including; 1) it is extremely difficult to capture people in the first few days after infection and before symptoms develop; 2) many people living in DENV/ZIKV endemic regions have pre-existing flavivirus immunity from past infections or vaccinations; and 3) it is difficult to collect blood samples with a frequency which allows for detailed kinetic analyses. Furthermore, the seasonal and highly episodic nature of DENV and ZIKV transmission makes testing of candidate countermeasures extremely challenging. For these reasons, human flavivirus challenge models present a unique and powerful opportunity to study human host responses

to DENV or ZIKV infection and to test the efficacy of candidate countermeasures in a safe, ethical, and reproducible setting. The objectives of this symposium are to provide a comprehensive overview and update on current human flavivirus challenge efforts and to highlight advances and lessons learned from these unique models. The symposium will start with an introduction and historical overview of the development and use of flavivirus human challenge studies, with specific focus on the DENV-1, -3, and -4 human challenge strains developed by the US Army, SUNY Upstate Medical University, and the University of Maryland School of Medicine as part of the Dengue Human Infection Model (DHIM) consortium. Next will be a presentation on the development and characteristics of the DENV challenge models established by the National Institutes of Health in collaboration with the Johns Hopkins University School of Medicine, followed by a presentation on immunologic and virologic lessons learned from the DHIM consortium DENV challenge models. The symposium will end with a presentation on recent efforts to develop a human Zika virus challenge model. #InfectiousDisease #TranslationalScience #ClinicalResearch

#### CHAIR

Adam Waickman  
*SUNY Upstate Medical University, Syracuse, NY, United States*

Heather Friberg  
*Walter Reed Army Institute of Research, Silver Spring, MD, United States*

#### 10:15 a.m. INTRODUCTION

#### 10:25 a.m. DENGUE HUMAN INFECTION MODELS - HISTORIC, BIOETHICAL, AND USE CASE PERSPECTIVES

Stephen J. Thomas  
*SUNY Upstate Medical University, Syracuse, NY, United States*

#### 10:50 a.m. DENGUE HUMAN INFECTION MODELS DEVELOPED AT THE NIH

Stephen S. Whitehead  
*Laboratory of Viral Diseases NIAID, NIH, DHHS, Bethesda, MD, United States*

#### 11:15 a.m. IMMUNOLOGIC, VIROLOGIC, AND CLINICAL LESSONS LEARNED FROM DENGUE HUMAN INFECTION STUDIES

Kirsten E. Lyke  
*University of Maryland, Baltimore, MD, United States*

#### 11:35 a.m. ZIKA VIRUS HUMAN INFECTION MODELS

Anna P. Durbin  
*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*

## Scientific Session 24

### Viruses - Evolution and Genomic Epidemiology

Convention Center - Room 388/389 (3rd Floor)  
Thursday, November 14, 10:15 a.m. - Noon

## #MolecularBiology #Evolution #Epidemiology

#### CHAIR

Livia Sacchetto  
*Faculdade de Medicina de Sao Jose do Rio Preto, Sao Jose do Rio Preto, Brazil*

Henry Puerta-Guardo  
*Universidad Autonoma de Yucatan, Merida, Mexico*

#### 10:15 a.m. 6061

#### MACHINE LEARNING CAN REVEAL GENOMIC SIGNALS ASSOCIATED WITH ANTIGENIC DISTANCE IN DENGUE VIRUSES

Ozan Kiratli<sup>1</sup>, Lin Wang<sup>2</sup>, Angkana T. Huang<sup>2</sup>, Derek A. Cummings<sup>3</sup>, Henrik Salje<sup>2</sup>, Matthew A. Conte<sup>1</sup>  
<sup>1</sup>Walter Reed Army Institute of Research, Silver Spring, MD, United States, <sup>2</sup>University of Cambridge, Cambridge, United Kingdom, <sup>3</sup>University of Florida, Gainesville, FL, United States

#### 10:30 a.m. 6062

#### GENOMIC EPIDEMIOLOGY OF ARBOVIRUSES REVEALS NEW VIRUS INTRODUCTIONS AND SIMULTANEOUS VIRUS CIRCULATION DURING DENGUE AND CHIKUNGUNYA OUTBREAKS IN BRAZIL

Livia Sacchetto<sup>1</sup>, Beatriz Marques<sup>1</sup>, Victoria Bernardi<sup>1</sup>, Victor Hernandez<sup>1</sup>, Igor Teixeira<sup>1</sup>, Andreia Negri<sup>2</sup>, Nikos Vasilakis<sup>3</sup>, Mauricio Nogueira<sup>1</sup>  
<sup>1</sup>Faculdade de Medicina de Sao Jose do Rio Preto, Sao Jose do Rio Preto, Brazil, <sup>2</sup>Departamento de Vigilância Epidemiológica, Sao Jose do Rio Preto, Brazil, <sup>3</sup>The University of Texas Medical Branch, Galveston, TX, United States

#### 10:45 a.m. 6063

#### SEROLOGICAL AND GENETIC CHARACTERIZATION OF THE DENGUE VIRUS SEROTYPE 3 (DENV-3) INFECTING CHILDREN'S POPULATIONS DURING A DENGUE OUTBREAK IN MERIDA, MEXICO

Henry Nelson Puerta Guardo<sup>1</sup>, Hannah C. Dakanay<sup>2</sup>, K. Jacqueline Ciau<sup>1</sup>, Manuel Alejandro Parra Cardeña<sup>1</sup>, James Earnest<sup>3</sup>, Gloria Barrera Fuentes<sup>1</sup>, Oscar D. Kirstein<sup>4</sup>, Azael D. Che Mendoza<sup>1</sup>, J. Kevin Yam<sup>1</sup>, Mathew Collins<sup>5</sup>, Daniel Espinoza<sup>5</sup>, Pablo Manrique Saide<sup>1</sup>, Norma Pavia Ruz<sup>1</sup>, Guadalupe Ayora Talavera<sup>1</sup>, Anne L. Piantadosi<sup>6</sup>, Gonzalo Vazquez Prokopec<sup>3</sup>  
<sup>1</sup>Universidad Autonoma de Yucatan, Merida, Mexico, <sup>2</sup>Department of Pathology and Laboratory Medicine, Emory University, Atlanta, GA, United States, <sup>3</sup>Department of Environmental Sciences, Emory University, Atlanta, GA, United States, <sup>4</sup>Dept. of Environmental Sciences, Emory University, Atlanta, GA, United States, <sup>5</sup>Division of Infectious Diseases, Department of Medicine, Emory University, Atlanta, GA, United States, <sup>6</sup>Department of Pathology and Laboratory Medicine, Emory University School of Medicine, Atlanta, GA, United States

#### 11 a.m. 6064

#### GENOMIC SURVEILLANCE OF DENGUE VIRUS FROM AN ACUTE FEBRILE ILLNESS STUDY IN EL SALVADOR, 2022-2023

Alexander R. Kneubehl<sup>1</sup>, Avery A. Kaye<sup>1</sup>, Elias Aguilar<sup>2</sup>, Kenni Campos<sup>1</sup>, Delmy Lisseth Recinos<sup>2</sup>, Sarah M. Gunter<sup>1</sup>, Gilberto A. Santiago<sup>3</sup>, Jorge L. Muñoz-Jordán<sup>3</sup>, Rafael Chacon<sup>4</sup>, Beatriz Lopez<sup>4</sup>, Emily Zielinski-Gutierrez<sup>4</sup>, Rhina Dominguez<sup>2</sup>, Xochitl Sandova<sup>2</sup>, Kristy O. Murray<sup>1</sup>, Shannon E. Ronca<sup>1</sup>  
<sup>1</sup>Baylor College of Medicine, Houston, TX, United States, <sup>2</sup>National Institute of Health of El Salvador, San Salvador, El Salvador, <sup>3</sup>Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, San Juan, PR, United States, <sup>4</sup>Centers for Disease Control and Prevention, Central America Region, Guatemala City, Guatemala

11:15 a.m.

6065

### ECOLOGICAL AND GENETIC DETERMINANTS OF WEST NILE VIRUS PERSISTENCE IN FORT COLLINS, COLORADO

Robert Tobias Koch, Gregory Ebel  
Colorado State University, Fort Collins, CO, United States

11:30 a.m.

6066

### GENOMIC EPIDEMIOLOGY OF RIFT VALLEY FEVER VIRUS INVOLVED IN THE 2018 & 2022 OUTBREAKS IN LIVESTOCK IN RWANDA

Isidore Nsengimana<sup>1</sup>, John Juma<sup>2</sup>, Method N. Gasana<sup>3</sup>, Emmanuel Hakizimana<sup>4</sup>, Claude M. Muvunyi<sup>4</sup>, Jean N. Hakizimana<sup>5</sup>, Gillian Eastwood<sup>6</sup>, Augustino Chengula<sup>1</sup>, Bernard Bett<sup>2</sup>, Samuel O. Oyola<sup>2</sup>, Christopher J. Kasanga<sup>1</sup>  
<sup>1</sup>Sokoine University of Agriculture, Morogoro, United Republic of Tanzania, <sup>2</sup>International Livestock Research Institute, Nairobi, Kenya, <sup>3</sup>Rwanda Agriculture and Animal Resources Development Board, Huye, Rwanda, <sup>4</sup>Rwanda Biomedical Center, Kigali, Rwanda, <sup>5</sup>SACIDS Foundation for One Health, Morogoro, United Republic of Tanzania, <sup>6</sup>Virginia Polytechnic Institute and State University, Blacksburg, VA, United States

11:45 a.m.

### Lightning Talks

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

7821

### EVALUATING THE EFFICACY AND CORRELATES OF PROTECTION OF AN INSECT-SPECIFIC FLAVIVIRUS VECTORED ZIKA VACCINE

Albert Jonathan Auguste<sup>1</sup>, Danielle Poirier<sup>1</sup>, Manette Tanelus<sup>1</sup>, Dawn I. Auguste<sup>1</sup>, Awadalkareem Adam<sup>2</sup>, Irving C. Allen<sup>3</sup>, Tian Wang<sup>2</sup>  
<sup>1</sup>Virginia Polytechnic Institute and State University, Blacksburg, VA, United States, <sup>2</sup>University of Texas Medical Branch, Galveston, TX, United States, <sup>3</sup>Virginia-Maryland College of Veterinary Medicine, Blacksburg, VA, United States

7073

### SURVEILLANCE OF CORONAVIRUS IN WILD MAMMALS SEIZED AND RESCUED BY THE NATIONAL FOREST AND WILDLIFE SERVICE OF LIMA, PERU

Carol A. Sanchez Chicana<sup>1</sup>, Lisseth M. Leiva Herrera<sup>2</sup>, M. Teresa Lopez-Urbina<sup>2</sup>, Victor L. Izaguirre Pasquel<sup>3</sup>, Walter Silva<sup>4</sup>, Luis A. Gomez-Puerta<sup>2</sup>, Armando E. Gonzalez<sup>2</sup>, Juan A. Jimenez Chunga<sup>1</sup>  
<sup>1</sup>School of Biological Sciences, Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>2</sup>Department of Animal and Public Health, School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>3</sup>School of Pharmacy and Biochemistry, Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>4</sup>Servicio Nacional Forestal y de Fauna Silvestre – SERFOR, Lima, Peru

6269

### SPATIO-TEMPORAL DISTRIBUTION OF CRIMEAN CONGO HEMORRHAGIC FEVER AND ITS RELATIONSHIP WITH CLIMATE FACTORS IN PAKISTAN: A DECADE-LONG EXPERIENCE FROM TERTIARY CARE LABORATORY NETWORK

Muhammad Abbas Abid, Joveria Farooqi, Rabiya Owais, Ayesha Sadiqa, Najia Ghanchi, Humaira Shafaq, Erum Khan  
Aga Khan University, Karachi, Pakistan

6317

### GENETIC ANCESTRY-ASSOCIATED DIFFERENCES IN DENGUE VIRUS INFECTION OF PRIMARY HUMAN SKIN CELLS

Michelle M. Martí, Priscila M. S. Castanha, Jocelyn M. Taddonio, Jeremy J. Martinson, Simon M. Barratt-Boyes  
University of Pittsburgh, Pittsburgh, PA, United States

6315

### EXPLORING THE ROLE OF HOST GLYCOSAMINOGLYCANS ON FLAVIVIRUS NS1-MEDIATED ENDOTHELIAL DYSFUNCTION

E. Vanessa Jimenez Posada<sup>1</sup>, Julianna L. Follmar<sup>2</sup>, Francielle T. Gomes de Sousa<sup>1</sup>, Scott Espich<sup>1</sup>, Nicholas Lo<sup>1</sup>, Robert Beatty<sup>1</sup>, Scott B. Biering<sup>1</sup>, Kamil Godula<sup>2</sup>, Eva Harris<sup>1</sup>  
<sup>1</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>Department of Chemistry and Biochemistry and Glycobiology Research and Training Center, University of California, San Diego, CA, United States

## Scientific Session 25

### Malaria Pathogenesis: Parasite, Host and 'Omics Studies

Convention Center - Room 391/392 (3rd Floor)

Thursday, November 14, 10:15 a.m. - Noon

#TranslationalScience #Pathogenesis  
#MolecularBiology #InfectiousDisease

#### CHAIR

Giselle Lima-Cooper  
Indiana University, Indianapolis, IN, United States

Miranda Oakley  
Food and Drug Administration, Silver Spring, MD, United States

10:15 a.m.

6067

### SINGLE CELL TRANSCRIPTIONAL PROFILING OF DRY AND WET SEASON *PLASMODIUM FALCIPARUM*

Lasse Votborg-Novél<sup>1</sup>, Votborg-Novél<sup>1</sup>, Martin Kampmann<sup>1</sup>, Manuela Carrasquilla<sup>1</sup>, Georgia Angeli<sup>1</sup>, Hamidou Cisse<sup>2</sup>, Safiatou Duombo<sup>2</sup>, Didier Doumtabe<sup>2</sup>, Gabriela M. Guerra<sup>3</sup>, Kassoum Kayentao<sup>2</sup>, Aissata Ongoiba<sup>2</sup>, Mir-Farzin Mashreghi<sup>3</sup>, Thomas D. Otto<sup>4</sup>, Peter D. Crompton<sup>5</sup>, Boubacar Traore<sup>2</sup>, Silvia Portugal<sup>1</sup>  
<sup>1</sup>Max Planck Institute for Infection Biology, Berlin, Germany, <sup>2</sup>Malaria Research and Training Center, Bamako, Mali, <sup>3</sup>DRFZ, Berlin, Germany, <sup>4</sup>University of Glasgow, Glasgow, United Kingdom, <sup>5</sup>NIH, Rockville, MD, United States

(ACMCIP Abstract)

10:30 a.m.

6068

### THE DYNAMICS OF PARASITE GROWTH IN *P. FALCIPARUM* AND *P. KNOWLESI* CO-CULTURES

Jeremy S. Goodwin-Gower, Jenny M. Peters, Hayley E. Mitchell, Stacey Llewellyn, Fiona H. Amante, Bridget E. Barber  
QIMR Berghofer Medical Research Institute, Herston, Australia

(ACMCIP Abstract)

10:45 a.m.

6069

### DEFINING THE ROLE OF PIPECOLIC ACID IN THE ENCEPHALOPATHY OF CEREBRAL MALARIA

Cheryl Sachdeva<sup>1</sup>, Akua Mensah<sup>1</sup>, Maxwell Rubin<sup>2</sup>, Kyu Rhee<sup>3</sup>, Anas Saleh<sup>3</sup>, Terrie Taylor<sup>4</sup>, Karina Garcia<sup>1</sup>, Stephen Ray<sup>5</sup>, Nicole O'Brien<sup>6</sup>, Karl Seydel<sup>7</sup>, **Johanna Daily**<sup>1</sup>  
<sup>1</sup>Albert Einstein College of Medicine, Bronx, NY, United States, <sup>2</sup>Tulane University, New Orleans, LA, United States, <sup>3</sup>Weill Cornell College of Medicine, New York, NY, United States, <sup>4</sup>Michigan State University, Lansing, NY, United States, <sup>5</sup>University of Oxford, Oxford, United Kingdom, <sup>6</sup>Ohio State University, Columbus, OH, United States, <sup>7</sup>Michigan State University, Lansing, MI, United States

(ACMCIP Abstract)

11 a.m.

6070

### CEREBRAL MALARIA, THE BLOOD-BRAIN BARRIER AND BEYOND. THE IMPACT OF ICAM-1/EPCR DUAL BINDING PARASITES ON BARRIER DYSFUNCTION

**Yvonne Adams**, Katrine Zeeberg, Nanna Dalgaard, Anja R. Jensen  
University of Copenhagen, Copenhagen, Denmark

(ACMCIP Abstract)

11:15 a.m.

6071

### HETEROGENEITY IN PATHOGENIC BRAIN SEQUESTERED CD8<sup>+</sup> T CELLS DURING EXPERIMENTAL CEREBRAL MALARIA REVEALED BY SINGLE CELL SEQUENCING

**Miranda Oakley**<sup>1</sup>, Micah P. Fletcher<sup>2</sup>, Victoria Majam<sup>1</sup>, Hong Zheng<sup>1</sup>, Gregory K. Tharp<sup>2</sup>, Mark KuKuruga<sup>1</sup>, Sanjai Kumar<sup>1</sup>  
<sup>1</sup>FDA, Silver Spring, MD, United States, <sup>2</sup>Emory, Atlanta, GA, United States

(ACMCIP Abstract)

11:30 a.m.

6072

### METABOLITES ASSOCIATED WITH CEREBRAL MALARIA PATHOGENESIS AND PROTRACTED PRO-THROMBOTIC PROPENSITY IN CHILD SURVIVORS OF CEREBRAL MALARIA

**Katherine Dobbs**<sup>1</sup>, Kenzie Birse<sup>1</sup>, Sausan Azzam<sup>1</sup>, Laura Noel-Romas<sup>1</sup>, David Midem<sup>2</sup>, Paula Embury<sup>1</sup>, Yelenna Skomorovska-Prokvolit<sup>1</sup>, Arlene Dent<sup>1</sup>, Adam Burgener<sup>1</sup>, Sidney Ogolla<sup>2</sup>, James Kazura<sup>1</sup>  
<sup>1</sup>Case Western Reserve University, Cleveland, OH, United States, <sup>2</sup>Kenya Medical Research Institute, Kisumu, Kenya

(ACMCIP Abstract)

11:45 a.m.

6073

### TRANSCRIPTOMIC DATA ANALYSIS IDENTIFIES ACTIVE HOST UBIQUITIN-PROTEASOME PATHWAY IN KENYAN CHILDREN WITH SEVERE MALARIAL ANEMIA

**Samuel B. Anyona**<sup>1</sup>, Qiuying Cheng<sup>2</sup>, Sharley A. Wasena<sup>3</sup>, Shamim W. Osata<sup>4</sup>, Evans Raballah<sup>5</sup>, Ivy Hurwitz<sup>2</sup>, Clinton O. Onyango<sup>3</sup>, Phillip D. Seidenber<sup>6</sup>, Benjamin H. McMahon<sup>7</sup>, Christophe G. Lambert<sup>8</sup>, Kristan A. Schneider<sup>9</sup>, Collins Ouma<sup>3</sup>, Douglas J. Perkins<sup>2</sup>

<sup>1</sup>Department of Medical Biochemistry, School of Medicine, Maseno University, Maseno, Kenya, <sup>2</sup>Department of Internal Medicine, Center for Global Health, University of New Mexico, Albuquerque, NM, United States, <sup>3</sup>Department of Biomedical Sciences and Technology, School of Public Health and Community Development, Maseno University, Maseno, Kenya, <sup>4</sup>University of New Mexico-Kenya Global Health Programs, Kisumu and Siaya, Kenya, <sup>5</sup>Department of Medical Laboratory Sciences, School of Public Health, Biomedical Sciences and Technology, Masinde Muliro University of Science and Technology, Kakamega, Kenya, <sup>6</sup>Department of Emergency Medicine, School of Medicine, University of New Mexico, Albuquerque, NM, United States, <sup>7</sup>Theoretical Biology and Biophysics Group, Theoretical Division, Los Alamos National Laboratory, Los Alamos, NM, United States, <sup>8</sup>Department of Internal Medicine, Division of Translational Informatics, University of New Mexico, Albuquerque, NM, United States, <sup>9</sup>Department Applied Computer and Bio-Sciences, University of Applied Sciences Mittweida, Mittweida, Germany

(ACMCIP Abstract)

## Scientific Session 26

### Malaria: Diagnosis – Challenges and Innovations

Convention Center - Room 393/394 (3rd Floor)

Thursday, November 14, 10:15 a.m. - Noon

#### CHAIR

Christian Nsanzabana  
Swiss Tropical and Public Health Institute, Allschwil, Switzerland

Steve Taylor  
Duke University, Durham, NC, United States

10:15 a.m.

6074

### TO TEST OR NOT TO TEST: WHAT DETERMINES WHETHER CLIENTS TEST FOR MALARIA IN THE PRIVATE SECTOR IN KENYA AND NIGERIA?

**Meley Woldegebrielle**<sup>1</sup>, Indrani Saran<sup>2</sup>, David Arthur<sup>3</sup>, Nwamaka Eze<sup>4</sup>, Theodor Visser<sup>5</sup>, Jeremiah Laktabai<sup>6</sup>

<sup>1</sup>CHAI, Kampala, Uganda, <sup>2</sup>Boston College School of Social Work, Boston, MA, United States, <sup>3</sup>Duke University Department of Biostatistics & Bioinformatics, Durham, NC, United States, <sup>4</sup>CHAI, Lagos, Nigeria, <sup>5</sup>CHAI, Boston, MA, United States, <sup>6</sup>Academic Model Providing Access to Healthcare, Eldoret, Kenya

10:30 a.m.

6075

### PERFORMANCE AND UTILITY OF HIGHLY SENSITIVE MALARIA RAPID DIAGNOSTIC TEST FOR DETECTING INFECTIONS THAT AFFECT HEALTH AND TRANSMISSION IN SCHOOL-AGED CHILDREN IN SOUTHERN MALAWI

**Meredith G. Sherman**<sup>1</sup>, Godfrey Mvula<sup>2</sup>, Karl B. Seydel<sup>3</sup>, Lauren M. Cohee<sup>4</sup>

<sup>1</sup>Global Health Initiative, Children's National Hospital, Washington, DC, United States, <sup>2</sup>Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>3</sup>Department of Internal Medicine, College of Osteopathic Medicine, Michigan State University, East Lansing, MI, United States, <sup>4</sup>Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:45 a.m.

6076

### WIDESPREAD PFHRP2/3 DELETIONS AND FALSE NEGATIVE RESULTS ASSOCIATED TO HRP2-BASED RDTs IN SOUTHERN ETHIOPIA

**Lemu Golassa**<sup>1</sup>, Bacha Mekonen<sup>1</sup>, Sisay Dugassa<sup>1</sup>, Sindew M. Feleke<sup>1</sup>, Boja Dufera<sup>2</sup>, Bedasa Gidisa<sup>3</sup>, Aderaw Adamu<sup>4</sup>, Aynalem Mandefro<sup>1</sup>, Geremew Tassew<sup>5</sup>

<sup>1</sup>Addis Ababa University, Addis Ababa, Ethiopia, <sup>2</sup>alaria and NTDs research team, Bacterial, Parasitic, and Zoonotic Diseases Research, Addis Ababa, Ethiopia, <sup>3</sup>rmur Hansen Research Institute, Malaria and NTDs Research Team, Addis Ababa, Ethiopia, Addis Ababa, Ethiopia, <sup>4</sup>Wollo University College of Medicine and Health Science, Department of Medical Laboratory Science, Wollo, Ethiopia, <sup>5</sup>Malaria and NTDs research team, Bacterial, Parasitic, and Zoonotic Diseases Research, Addis Ababa, Ethiopia

11 a.m.

6077

### PREVALENCE OF PFHRP2/3 DELETIONS IN SOUTH SUDAN: RESULTS OF A 10-SITE NATIONAL SURVEY

Désiré Ndisabiye<sup>1</sup>, Constantino Doggale<sup>2</sup>, Olivier Denis<sup>3</sup>, Pascale Chaillet<sup>3</sup>, Letizia Di Stefano<sup>3</sup>, Erwan Piriou<sup>4</sup>, Valérie Briand<sup>5</sup>, Jane Cunningham<sup>6</sup>, Qin Cheng<sup>7</sup>, **Matthew Coldiron**<sup>5</sup>

<sup>1</sup>Médecins Sans Frontières, Juba, South Sudan, <sup>2</sup>National Malaria Control Programme, Juba, South Sudan, <sup>3</sup>Médecins Sans Frontières, Brussels, Belgium, <sup>4</sup>Médecins Sans Frontières, Amsterdam, Netherlands, <sup>5</sup>Epicentre, Paris, France, <sup>6</sup>WHO, Geneva, Switzerland, <sup>7</sup>Australian Defence Force Malaria and Infectious Disease Institute, Brisbane, Australia



11:15 a.m.

6078

**COUNTRYWIDE PFHRP2 GENE DELETION SURVEILLANCE IN MALI**

Hinda DOUCOURE<sup>1</sup>, Mahamadou S. Sissoko<sup>1</sup>, Mamadou M. Tekete<sup>1</sup>, Antoine Dara<sup>1</sup>, Maimouna Dembele<sup>1</sup>, Bintou Diarra<sup>1</sup>, Boi Koné<sup>1</sup>, Aïssata Koné<sup>2</sup>, Mady Cissoko<sup>2</sup>, Vincent Sanogo<sup>2</sup>, Abdoulaye Djimde<sup>1</sup>

<sup>1</sup>Pathogens genomics Diversity Network Africa, Bamako, Mali, <sup>2</sup>National Malaria Control Program of Mali, Bamako, Mali

11:30 a.m.

6079

**ANALYTICAL PERFORMANCE ASSESSMENT OF THE AUTOMATED AND ARTIFICIAL INTELLIGENCE-ENABLED MILAB™ MAL MALARIA SYSTEM FOR THE DETECTION OF *PLASMODIUM FALCIPARUM* IN SUSPECTED MALARIA PATIENTS IN LAGOS, NIGERIA**

Wellington A. Oyibo<sup>1</sup>, Chinonye Anabike<sup>1</sup>, Oladipo O. Oladosu<sup>1</sup>, Michael O. Kusimo<sup>1</sup>, Rita O. Urude<sup>2</sup>, Chinyere Okoro<sup>1</sup>

<sup>1</sup>Centre for Transdisciplinary Research for Malaria and Neglected Tropical Diseases (CENTRAL-NTDS)/ANDI Centre of Excellence for Malaria Diagnosis, College of Medicine of the University of Lagos, Nigeria, Idi-Araba, Nigeria, <sup>2</sup>NTD Division, Federal Ministry of health, Abuja, Nigeria

11:45 a.m.

6080

**END-USERS PERCEPTIONS ON THEORETICAL NON-INVASIVE MALARIA TESTING TOOLS**

Serafina Calarco<sup>1</sup>, Vanessa Fagnoli<sup>1</sup>, Catherine Thomas<sup>2</sup>, Caroline Thomas<sup>2</sup>, Claudius Mone Iye<sup>2</sup>, Valerie Paz Soldan<sup>3</sup>, Amy Aegypti<sup>3</sup>, Janvier Serumondo<sup>4</sup>, Ladislas Nshimiyimana<sup>4</sup>, Yvonne Delphine Nsaba Uwera<sup>4</sup>, Sonjelle Shilton<sup>1</sup>, Kevin KA Tetteh<sup>1</sup>

<sup>1</sup>Foundation for innovative New Diagnostics (FIND), Geneva, Switzerland, <sup>2</sup>Yayasan Peduli Hati Bangsa, Jakarta, Indonesia, <sup>3</sup>Asociación Benéfica PRISMA, Lima, Peru, <sup>4</sup>Rwanda Biomedical Center, Kingali, Rwanda

**Scientific Session 27****Pneumonia, Respiratory Infections and Tuberculosis II**

Convention Center - Room 395/396 (3rd Floor)

Thursday, November 14, 10:15 a.m. - Noon

#InfectiousDisease #Genomics #Epidemiology  
#PopulationSurveillance #Resistance

**CHAIR**

Muhammad Imran Nisar

Pediatrics and Child Health, Aga Khan University, Karachi, Pakistan

Jasper Chan

The University of Hong Kong, Hong Kong, Hong Kong

10:15 a.m.

6081

**ANTIBODY-OMICS REVEALS DISTINCT HUMORAL PROFILES AND BIOMARKERS IN HIV/TB COINFECTION**

Sarah M. Ali<sup>1</sup>, Abhipsa Panigrahi<sup>1</sup>, Marwou de Kock<sup>2</sup>, Willem A. Hanekom<sup>3</sup>, Cheryl L. Day<sup>4</sup>, Aniruddh Sarkar<sup>1</sup>

<sup>1</sup>Georgia Institute of Technology, Atlanta, GA, United States, <sup>2</sup>South African Tuberculosis Vaccine Initiative, University of Cape Town, Cape Town, South Africa, <sup>3</sup>Africa Health Research Institute, Durban, South Africa, <sup>4</sup>Emory University School of Medicine, Atlanta, GA, United States

10:30 a.m.

6082

**DEVELOPMENT OF AMPLICON-BASED WHOLE-GENOME SEQUENCING OF MYCOBACTERIUM TUBERCULOSIS**

Chaney C. Kalinich<sup>1</sup>, Freddy Gonzalez<sup>2</sup>, Mallery I. Breban<sup>3</sup>, Isabel Distefano<sup>3</sup>, Ted Cohen<sup>3</sup>, Nathan D. Grubaugh<sup>3</sup>, Seth Redmond<sup>3</sup>

<sup>1</sup>Yale School of Medicine, New Haven, CT, United States, <sup>2</sup>Department of Ecology and Evolutionary Biology, Yale University, New Haven, CT, United States, <sup>3</sup>Department of Epidemiology of Microbial Diseases, Yale School of Public Health, New Haven, CT, United States

10:45 a.m.

6083

**TWO DECADES OF MOLECULAR SURVEILLANCE OF MULTIDRUG-RESISTANT TUBERCULOSIS IN ARGENTINA: LATEST TRENDS AT THE DAWN OF THE GENOMIC ERA**

Roxana Paul, Federico Lorenzo, Francisco Delvento, Eduardo Mazzeo, Ingrid Wainmayer, Beatriz López, Norberto Simboli, Noemi Kaoru Yokobori INEI, ANLIS "Dr. C. G. Malbrán", Ciudad Autónoma de Buenos Aires, Argentina

11 a.m.

6084

**PRELIMINARY OUTCOMES FROM A PROSPECTIVE OBSERVATIONAL COHORT OF ADULTS WITH DRUG-SUSCEPTIBLE CAVITARY TUBERCULOSIS IN HAITI**

Nancy Dorvil<sup>1</sup>, Marc A. Jean-Juste<sup>1</sup>, Nao Haba<sup>2</sup>, Joissaint Guy<sup>1</sup>, Kathleen Walsh<sup>2</sup>, Jean W. Pape<sup>1</sup>, Daniel Fitzgerald<sup>2</sup>

<sup>1</sup>GHEKIO, Port-au-Prince, Haiti, <sup>2</sup>Weill Cornell Medicine, New York, NY, United States

11:15 a.m.

6085

**TUBERCULOSIS DRUG SUSCEPTIBILITY TEST WITH SNP-RESOLUTION USING SINGLE SAMPLE MELT ANALYSIS**

Nicole A. Malofsky, Dalton J. Nelson, Megan E. Pask, Frederick R. Haselton Vanderbilt University, Nashville, TN, United States

11:30 a.m.

6086

**RISK FACTORS ASSOCIATED WITH POST-TUBERCULOSIS SEQUELAE: A SYSTEMATIC REVIEW AND META-ANALYSIS**

Temesgen Yihunie Akalu<sup>1</sup>, Archie C.A Clements<sup>2</sup>, Alemneh Mekuriaw Liyew<sup>1</sup>, Beth Gilmour<sup>3</sup>, Megan B. Murray<sup>4</sup>, Keyfalew Addis Alene<sup>1</sup>

<sup>1</sup>Curtin University, Perth, Australia, <sup>2</sup>Queens University Belfast, Belfast, United Kingdom, <sup>3</sup>Teleth, Perth, Australia, <sup>4</sup>Harvard University, Boston, MA, United States

11:45 a.m.

6087

**TUBERCULOSIS TRENDS AMONG INDIGENOUS PEOPLE IN BRAZIL BEFORE, DURING, AND AFTER THE SARS-COV-2 PANDEMIC**

Ida Kolte<sup>1</sup>, Eunice Atsuko Totumi Cunha<sup>2</sup>, Paulo Cesar Basta<sup>1</sup>

<sup>1</sup>Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil, <sup>2</sup>Laboratório Central de Saúde Pública do Estado de Mato Grosso do Sul, Campo Grande, Brazil

**Exhibit Hall Open**

Convention Center - Hall J (1st Floor)

Thursday, November 14, Noon - 1:30 p.m.

## Poster Session 28

### Poster Session A

Convention Center - Hall I-1 (1st Floor)

Thursday, November 14, Noon - 1:45 p.m.

### Poster Session A Directory

Global Health - Information/Communication/Technologies Solutions in

Global Health including Modeling: 6088-6100

Global Health – Other: 6101-6131

Global Health - Security/Emerging Infection Preparedness,  
Surveillance and Response(s): 6132-6149

Arthropods/Entomology – Other: 6150-6167

Mosquitoes - Biology, Physiology and Immunity: 6168-6177

Mosquitoes - Bionomics, Behavior and Surveillance: 6178-6191

Mosquitoes - Epidemiology and Vector Control: 6192-6223

Mosquitoes - Molecular Biology, Population Genetics and Genomics:  
6224-6235

Viruses - Emerging Viral Diseases: 6236-6251

Viruses – Epidemiology: 6252-6272

Viruses - Evolution and Genomic Epidemiology: 6273- 6288

Viruses – Immunology: 6289-6306

Viruses - Pathogenesis and Animal Models: 6307-6322

Malaria - Antimalarial Resistance and Chemotherapy: 6323-6343

Malaria - Diagnosis - Challenges and Innovations: 6344-6355

Malaria - Drug Development and Clinical Trials: 6356-6366

Malaria – Elimination: 6367-6382

Malaria – Epidemiology: 6383-6413

Malaria - Genetics, Genomics and Evolution: 6414-6429

Malaria – Immunology: 6430-6443

Malaria - Parasite Transmission Biology: 6444-6451

Malaria – Prevention: 6452- 6477

Malaria – Surveillance and Data Utilization: 6478-6501

Malaria - Vaccines and Immunotherapeutics: 6502-6520

Bacteriology - Enteric Infections: 6521-6534

Bacteriology - Other Bacterial Infections: 6535-6548

Clinical Tropical Medicine: 6549-6575

Helminths – Nematodes – Filariasis (Diagnostics and Therapeutics):  
6576-6592

Helminths – Nematodes – Intestinal Nematodes: 6593-6614

HIV and Tropical Co-Infections: 6615-6635

Kinetoplastida and Other Protozoa - Diagnosis and New Detection Tools  
(Including Leishmania and Trypanosomes): 6636-6659

Measures for Control and Elimination of Neglected Tropical Diseases  
(NTDs): 6660-6686

One Health: The Interconnection between People, Animals, Plants and  
Their Shared Environment: 6687-6699

Pneumonia, Respiratory Infections and Tuberculosis: 6700-6716

Schistosomiasis and Other Trematodes – Diagnostics and Treatment:  
6717-6727

Schistosomiasis and Other Trematodes – Epidemiology and Control:  
6728-6737

Water, Sanitation, Hygiene and Environmental Health: 6738-6751

## Global Health - Information/ Communication/Technologies Solutions in Global Health Including Modeling

6088

**COVID-19 COMMUNITY 'BANTABA': RAISING AWARENESS  
AND REDUCING MISINFORMATION ON COVID-19 WITHIN TWO  
URBAN LOCALITIES IN THE GAMBIA**

Omar Ceesay

Medical Research Council@Ishtm, Banjul, Gambia

6089

**THE EFFECT OF PANDEMICS ON DECENT WORK AND TASK  
PERFORMANCE AND ITS INFLUENCE ON LEADERS' EMOTIONAL  
INTELLIGENCE**

EMMANUEL BOATENG FOSU

UNIVERSITY OF GHANA, ACCRA, Ghana

6090

**QUANTIFYING THE IMPACT OF MODIFIABLE RISK AND  
PROTECTIVE FACTORS ON MORTALITY AMONG CHILDREN AND  
YOUNG ADOLESCENTS RECEIVING ANTIRETROVIRAL THERAPY**

Jiawei He, Hmwe Kyu, Amanda Novotney, Edmond Brewer, Austin Carter, Kemal Oumer

Institute for Health Metrics and Evaluation, Seattle, WA, United States

6091

**CHALLENGES AND LESSONS LEARNED WHILE COMPLETING/  
INITIATING VACCINE CLINICAL TRIALS DURING THE COVID-19  
PANDEMIC IN A DEVELOPING COUNTRY: EXPERIENCE FROM  
NEPAL**

Pragya Thapa<sup>1</sup>, Tarun Saluja<sup>2</sup>, Pranodan Poudel<sup>3</sup>, Shanti Bogati<sup>3</sup>, Naveena Aloysia D'Cor<sup>2</sup>, Birendra Prasad Gupta<sup>1</sup>

<sup>1</sup>International Vaccine Institute, Kathmandu, Nepal, <sup>2</sup>International Vaccine Institute, Seoul, Korea, Democratic People's Republic of, <sup>3</sup>Dhulikhel Hospital-Kathmandu University Hospital, Dhulikhel, Nepal

6092

**ADVANCING GEOSTATISTICAL METHODS FOR FUTURE  
STRATEGIES IN NEGLECTED TROPICAL DISEASE PROJECTS**

Luke EW Klein

FHI 360, Washington, DC, DC, United States

6093

**FROM RESEARCH TO POLICY - LEVERAGING SCIENCE  
AND STRATEGIC COMMUNICATION TO TACKLE DENGUE IN  
BANGLADESH**

A K M Tariful Islam Khan, Mohammad Shafiul Alam, Tahmeed Ahmed

International Centre for Diarrheal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh

6094

### DOCUMENTATION AND ANALYSIS OF THE SOCIAL CONTACT PATTERNS USING STANDARDIZED DIARIES ACROSS DIFFERENT AGES IN LOW-INCOME SETTINGS IN VELLORE DISTRICT, TAMIL NADU, SOUTHERN INDIA

**RAJAN SRINIVASAN<sup>1</sup>**, Ayyappan V R<sup>1</sup>, Janani Rathi<sup>1</sup>, Agil Somasundaram<sup>1</sup>, Meenakshi N<sup>1</sup>, Moses Chapa Kiti<sup>2</sup>, Noureen Ahmed<sup>3</sup>, Ben Lopman<sup>2</sup>, Saad Omer<sup>3</sup>, Venkat Raghava Mohan<sup>1</sup>

<sup>1</sup>Christian Medical College Vellore, Vellore, India, <sup>2</sup>Rollins School of Public Health, Emory University, Atlanta, GA, United States, <sup>3</sup>O'Donnell School of Public Health, UT Southwestern, Dallas, TX, United States

6095

### ENHANCING COMMUNITY HEALTH DIGITIZATION IN BURKINA FASO WITH ENTERPRISE ARCHITECTURE: ACHIEVEMENTS AND LESSONS.

**Alain Kabore<sup>1</sup>**, Fatou Fall<sup>2</sup>, Salif Traore<sup>3</sup>, Jean Serge Dimitri Ouattara<sup>3</sup>

<sup>1</sup>PATH, Ouagadougou, Burkina Faso, <sup>2</sup>PATH, Dakar, Senegal, <sup>3</sup>Ministry of health and public hygiene, Ouagadougou, Burkina Faso

6096

### CHIKUNGUNYA VIRUS RISK OF ACQUISITION, DIFFERENTIAL DIAGNOSIS AND VACCINE DEVELOPMENT: IMPACT OF INDEPENDENT ONLINE MEDICAL EDUCATION ON PHYSICIAN KNOWLEDGE AND CONFIDENCE

**Julia C. Duffey<sup>1</sup>**, Iwona Misiuta<sup>2</sup>, Lin H. Chen<sup>3</sup>

<sup>1</sup>Manifold Medical, Matlock, United Kingdom, <sup>2</sup>Medscape Education Global, New York, NY, United States, <sup>3</sup>Division of Infectious Diseases and Travel Medicine, Mount Auburn Hospital and Harvard Medical School, Cambridge and Boston, MA, United States

6097

### AN EXPLAINABLE MACHINE LEARNING APPROACH FOR PREDICTING LINEAR GROWTH FALTERING FOLLOWING A DIARRHEAL ILLNESS AMONG CHILDREN AGED 6-35 MONTHS IN WESTERN KENYA

**Billy Ogwel<sup>1</sup>**, Vincent H. Mzazi<sup>2</sup>, Alex O. Awuor<sup>1</sup>, John B. Ochieng<sup>1</sup>, Stephen Munga<sup>1</sup>, Kirkby D. Tickell<sup>3</sup>, Patricia B. Pavlinac<sup>3</sup>, Karen L. Kotloff<sup>4</sup>, Richard Omoro<sup>1</sup>

<sup>1</sup>Kenya Medical Research Institute, Kisumu, Kenya, <sup>2</sup>University of South Africa, Pretoria, South Africa, <sup>3</sup>University of Washington, Seattle, WA, United States, <sup>4</sup>University of Maryland, Baltimore, MD, United States

6098

### ANALYSIS OF CARE-SEEKING PATHWAY AND FACTORS INFLUENCING EARLY AND APPROPRIATE CARE-SEEKING FOR MALARIA PATIENTS IN THE REPUBLIC OF GUINEA, 2022-2023

**Elhadj Marouf DIALLO<sup>1</sup>**, Mateusz M Plucinski<sup>2</sup>, Fatoumata Bintou TRAORE<sup>1</sup>, Biennu Salim CAMARA<sup>3</sup>, Alice LANGLET<sup>4</sup>, Alexandre DELAMOU<sup>1</sup>, Ousmane Oumou DIALLO<sup>5</sup>, Laurent GERBAUD<sup>4</sup>, Alioune CAMARA<sup>5</sup>

<sup>1</sup>African Center of Excellence for the Prevention and Control of Communicable Diseases, Faculty of Health Sciences and Techniques, University of Conakry, Dixinn, Conakry, Guinea, <sup>2</sup>Malaria Branch, Centers for Disease Control and Prevention, Atlanta, GA, USA; President's Malaria Initiative, Atlanta, GA, United States, <sup>3</sup>Centre National de Recherche et de Formation en Santé Rurale de Maferinyah Guinée (CNRFSR), Maferinya, Forecariah, Guinea, <sup>4</sup>CHU Clermont-Ferrand, UFR Médecine & Paramédicales Professions, University Clermont Auvergne, CNRS, Sigma Clermont Institute Pascal, Clermont-Ferrand, France, <sup>5</sup>Department of Preventive Medicine and Institute for Global Health, Northwestern University, Chicago, IL, United States, <sup>6</sup>National Malaria Control Program, Dixinn, Conakry, Guinea

6099

### SCREENING, VACCINATION, AND AWARENESS CREATION FOR HEPATITIS B VIRUS INFECTION IN ACCRA, GHANA

**Rawdat Baba-Adam**, Kwadwo Asamoah Kusi Lab -, Linda Eva Amoah, Kwadwo Asamoah Kusi, Joseph Humphrey Kofi Bonney  
Noguchi Memorial Institute for Medical Research, University of Ghana, Accra, Ghana

6100

### SUSTAINING MALARIA CONTROL THROUGH WARD DEVELOPMENT COMMITTEES IN NIGERIA

**Ekpo Edet<sup>1</sup>**, Olusola Adeoye<sup>1</sup>, Oluseyi Akintola<sup>1</sup>, Oluyemi Abodunrin<sup>1</sup>, Aderonke Popoola<sup>1</sup>, Foyeke Oyedokun-Adebagbo<sup>2</sup>, Veronica Momoh<sup>2</sup>, Jules Mihigo<sup>2</sup>, Samuel Owoya<sup>3</sup>, Angela Acosta<sup>4</sup>, Bolatito Aiyenigba<sup>1</sup>

<sup>1</sup>Breakthrough ACTION Project, John Hopkins University Center for Communication Programs, Abuja, Nigeria, <sup>2</sup>U.S. President's Malaria Initiative, USAID, Abuja, Nigeria, <sup>3</sup>National Malaria Elimination Programme, Federal Ministry of Health, Abuja, Nigeria, <sup>4</sup>Breakthrough ACTION Project, John Hopkins University Center for Communication Programs, Baltimore, MD, United States

## Global Health - Other

6101

### CALL FOR A FAIRER APPROACH TO AUTHORSHIP PRACTICE IN THE REPORTING OF BIOMEDICAL RESEARCH

**Phaik Yeong Cheah<sup>1</sup>**, Michael Parker<sup>2</sup>

<sup>1</sup>Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand, <sup>2</sup>The Ethox Centre, University of Oxford, Oxford, United Kingdom

6102

### UNDERSTANDING THE VIEWS OF PREGNANT AND LACTATING WOMEN ON CHILD BREASTFEEDING. A QUALITATIVE STUDY IN EASTERN ETHIOPIA.

**Ketema Begna**

Haramaya University, Harar, Ethiopia

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### LESSONS FROM THE FIELD: MINIMUM SERVICE STANDARDS ASSESSMENT TOOL AND THE HOSPITAL STRENGTHENING PROGRAM: A NOVEL FIRST STEP TOWARDS THE QUALITY IMPROVEMENT OF NEPAL'S GOVERNMENT HOSPITALS

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Jeanine D. Musau<sup>1</sup>, Yibayiri Osee Sanogo<sup>2</sup>, Clara Harb<sup>1</sup>, Ferdinand Ntoya<sup>3</sup>, Eric Mukomena<sup>4</sup>, Mulamuli Mpopu<sup>1</sup>

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Farah Jabeen<sup>1</sup>, Sameer Belgaumi<sup>2</sup>, Asefa Shariq<sup>1</sup>, Saima Jamal<sup>1</sup>, Tehreem Maqsood<sup>1</sup>, Saad B. Omer<sup>2</sup>, Zeeshan Uddin<sup>1</sup>, Momin Kazi<sup>1</sup>

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**Global Health - Security/Emerging Infection Preparedness, Surveillance and Response(s)**

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Ashley Simon<sup>1</sup>, Zachary M. Reynolds<sup>2</sup>, Sarah Gwyn<sup>1</sup>, Diana Martin<sup>1</sup>, John Kaldor<sup>3</sup>, Sue Chen Apadinuwe<sup>4</sup>, Susana Vaz Nery<sup>3</sup>

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**COMPARATIVE ANALYSIS OF STATE-LEVEL POLICY RESPONSES IN GLOBAL HEALTH GOVERNANCE: COVID-19 AS A CASE**

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**SEARCH FOR ACTIVE CASES OF YAWS IN PARTS OF IMO STATE, SOUTHEAST NIGERIA**

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**IDENTIFICATION OF ANTHRAX AS THE CAUSE OF A CLUSTER OF UNEXPLAINED DEATHS, UGANDA, 2023: THE ROLE OF METAGENOMIC NEXT GENERATION SEQUENCING AND POSTMORTEM SPECIMENS**

Sonja Weiss<sup>1</sup>, Nicholas Bbosa<sup>2</sup>, Deogratus Ssemwanga<sup>2</sup>, Sam Kalungi<sup>3</sup>, Anatoli Mawanda<sup>3</sup>, Richard Ssentudde<sup>3</sup>, Emmanuel Ssekyeru<sup>4</sup>, Alfred Ssekagiri<sup>2</sup>, Ronald Kiiza<sup>2</sup>, Cleophous Rwankindo<sup>2</sup>, Joshua Buule<sup>2</sup>, Hamidah Suubi Namagembe<sup>2</sup>, Stella Esther Nabiry<sup>2</sup>, Justine Priscilla Nassolo<sup>2</sup>, Robert Downing<sup>2</sup>, Julius Lutwama<sup>2</sup>, Tom Lutalo<sup>2</sup>, Henry Kyobe Bosa<sup>5</sup>, Michael Berg<sup>1</sup>, Mary Rodgers<sup>1</sup>, Francisco Averhoff<sup>1</sup>, Gavin Cloherty<sup>1</sup>, Pontiano Kaleebu<sup>2</sup>

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**SARS-COV-2 TRANSMISSION POTENTIAL AND CONTROL MEASURES IN ZIMBABWE: AN ECOLOGICAL ANALYSIS**

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**ONE-YEAR PATTERN OF ANTIMICROBIAL RESISTANCE IN ESCHERICHIA COLI, KLEBSIELLA PNEUMONIAE AND PSEUDOMONAS AERUGINOSA ISOLATES IN OSOGBO, NIGERIA**

Oluwabunmi Bola Olajide<sup>1</sup>, Olubunmi O. Alaka<sup>2</sup>, Joshua S. Olajide<sup>3</sup>, Isaac O. Oni<sup>4</sup>, Idara E. Inyang<sup>1</sup>, Titilayo Olaoye<sup>1</sup>

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Thursday  
November 14

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### COMMUNITY PERCEPTIONS OF HEALTH-RELATED RISK FACTORS, HEALTH STATUS, AND HEALTHCARE SERVICE IN RURAL SOUTHEAST ASIA: INSIGHTS FROM A CROSS-SECTIONAL HOUSEHOLD SURVEY IN BANGLADESH, CAMBODIA, AND THAILAND

Meiwen Zhang<sup>1</sup>, Shayla Islam<sup>2</sup>, Aninda Sen<sup>2</sup>, Md Akramul Islam<sup>2</sup>, Amit Kumer Neogi<sup>2</sup>, Rupam Tripura<sup>1</sup>, Lek Dysoley<sup>3</sup>, Carlo Perrone<sup>1</sup>, Nan Shwe Nwe Htun<sup>1</sup>, Marco Liverani<sup>4</sup>, Richard J. Maude<sup>1</sup>, Nicholas P.J. Day<sup>1</sup>, Sue J. Lee<sup>1</sup>, Yoel Lubell<sup>1</sup>, Thomas J. Peto<sup>1</sup>  
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### DEVELOPING THE CONCEPT AND PRACTICE OF ANTICIPATORY ACTION FOR EPIDEMICS WITHIN THE HUMANITARIAN SECTOR

Tilly Alcayna<sup>1</sup>, Franziska Kellerhaus<sup>2</sup>, Léo Tremblay<sup>3</sup>, Juan Chaves<sup>4</sup>, Rachel Goodermote<sup>5</sup>, Mauricio Santos-Vega<sup>6</sup>, Bhargavi Rao<sup>1</sup>, Rachel Lowe<sup>7</sup>  
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### ASSESSMENT OF COMMUNITY AWARENESS, CONDUCT AND HABITS ON YELLOW FEVER IN THE UPPER EAST REGION OF GHANA

Millicent Captain-Esoah<sup>1</sup>, Kwadwo K. Frempong<sup>2</sup>, Abdul Malik Hussein<sup>1</sup>, Francis Balungnaa D. Veriegh<sup>3</sup>, Martin N. Donkor<sup>4</sup>, Abigail Asiedu<sup>1</sup>, Vanessa N. Kayan<sup>1</sup>, Emmanuel Frimpong<sup>1</sup>, Daniel K. Aluu<sup>1</sup>, Iddrisu Fuseini<sup>5</sup>, Elijah D. Angyireyiri<sup>1</sup>, Dorothy Obuobi<sup>6</sup>, Bernice Olivia A. Baako<sup>7</sup>, Chrysantus Kubio<sup>8</sup>, Victor Asoala<sup>7</sup>, Daniel A. Boakye<sup>2</sup>, Samuel K. Dadzie<sup>2</sup>  
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### ECOLOGICAL STUDY OF TERRESTRIAL SMALL MAMMALS IN AN ENDEMIC PLAGUE FOCUS IN THE CENTRAL HIGHLANDS OF MADAGASCAR, IMPACT ON SURVEILLANCE STRATEGIES

Mamionah Noro Jully Parany<sup>1</sup>, Nils Christian Stenseth<sup>2</sup>, Fanohinjanaharinirina Rasoamalala<sup>1</sup>, Soanandrasana Rahelinirina<sup>1</sup>, Soloandry Rahajandraibe<sup>1</sup>, Gauthier Dobigny<sup>3</sup>, Eric Valade<sup>4</sup>, Olivier Gorgé<sup>5</sup>, Beza Ramasindrazana<sup>1</sup>, Minoarisoa Rajerison<sup>1</sup>  
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### RETROSPECTIVE EVALUATION OF THE DIAGNOSTIC ACCURACY OF THE RELASVPAN LASSA ANTIGEN RAPID DIAGNOSTIC TEST FOR THE DETECTION OF ACUTE LASSA VIRUS INFECTION IN NIGERIA USING REAL TIME POLYMERASE CHAIN REACTION AS REFERENCE STANDARD

Hanesh Fru chi<sup>1</sup>, Johnson Etafo<sup>2</sup>, Frtiz Fonkeng<sup>1</sup>, Olufunke Ibitokun<sup>2</sup>, Ronke Ireneh<sup>2</sup>, Chuckwuyem Abejegah<sup>2</sup>, Sampson Owhin<sup>2</sup>, Aurelia Vessiere<sup>1</sup>, Adedosu. Nelson<sup>2</sup>, Emmanuel Agogo<sup>1</sup>, Devy Emperador<sup>1</sup>  
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Mireille Amba Ngale, Samuel Mampunza Ma Miezi, Thérèse Mpiempie Ngamasata, Tarcisse Kilara Kapene, Joel Kiniati Fumwankau, Nsengi Ntamabyaliro, Gauthier Mesia Kahunu, Gaston Tona Lutete  
 University of Kinshasa, Kinshasa, Democratic Republic of the Congo

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### A MIXED-METHOD STUDY TO DETERMINE CAUSES OF DEATH USING MINIMAL INVASIVE TISSUE SAMPLING AND VERBAL AUTOPSY IN THE BONO EAST REGION, GHANA.

Grace Manu<sup>1</sup>, Samuel Bernard Ekow Harrison<sup>1</sup>, Dennis Adu-Gyasi<sup>1</sup>, Mahama Abukari<sup>1</sup>, Jones Opoku-Mensah<sup>1</sup>, Farrid Boadu<sup>1</sup>, Charles Zandoh<sup>1</sup>, Abubakari Sulemana<sup>1</sup>, Norman Goco<sup>2</sup>, Kaali Seyram<sup>1</sup>, Ernest Akwasi Adjei<sup>3</sup>, Christiana Paganelli<sup>3</sup>, Kwaku Poku Asante<sup>1</sup>  
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Mahama Abukari<sup>1</sup>, Grace Manu<sup>1</sup>, Samuel Bernard Ekow Harrison<sup>1</sup>, Dennis Adu-Gyasi<sup>1</sup>, Jones Opoku-Mensah<sup>1</sup>, Farid Boadu<sup>1</sup>, Sulemana Abubakari<sup>1</sup>, Kaali Seyram<sup>1</sup>, Ernest Akwasi Adjei<sup>2</sup>, Norman Goco<sup>3</sup>, Christina Paganelli<sup>3</sup>, Kwaku Poku Asante<sup>1</sup>  
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### COLLABORATING WITH KEY COMMUNITY ACTORS TO PREPARE FOR FUTURE OUTBREAK RESPONSES: LESSONS FROM LIBERIA

Hannah Berrian<sup>1</sup>, Stephen B. Kennedy<sup>1</sup>, Bartholomew Wilson<sup>2</sup>, Mark Kieh<sup>2</sup>, Tamba Fayiah<sup>2</sup>, Ophelia Bongole<sup>2</sup>  
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### SEROLOGICAL SURVEY OF A COMMUNITY IN GHANA INVADED BY BLACKFLIES

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### DEMONSTRATION OF RNA ACTIVATION IN TICKS

Kofi D. Kwofie<sup>1</sup>, Emmanuel P. Hernandez<sup>2</sup>, Anisuzzaman<sup>3</sup>, Hayato Kawada<sup>1</sup>, Yuki Koike<sup>1</sup>, Sana Sasaki<sup>1</sup>, Takahiro Inoue<sup>1</sup>, Fusako Mikami<sup>1</sup>, Danielle Ladzekpo<sup>1</sup>, Rika Shirafuji-Umemiya<sup>4</sup>, Makoto Matsubayashi<sup>5</sup>, Md Abdul Alim<sup>3</sup>, Samuel K. Dadzie<sup>6</sup>, Naotoshi Tsuji<sup>1</sup>, Takeshi Hatta<sup>1</sup>

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### TICKS ON DROMEDARY CAMELS (CAMELUS DROMEDARIUS, LINNAEUS, 1758) FROM SOMALIA

Aamir M. Osman<sup>1</sup>, Flávia CM Collere<sup>1</sup>, Vanessa S. Coradi<sup>1</sup>, Abdalla M. Ibrahim<sup>2</sup>, Ahmed A. Hassan-Kadle<sup>2</sup>, Mohamed A. Shair<sup>2</sup>, Marcos R. André<sup>3</sup>, Thiago F. Martins<sup>4</sup>, Thállitha SWJ Vieira<sup>5</sup>, Rosângela Z. Machado<sup>3</sup>, Rafael FC Vieira<sup>5</sup>

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### UNDERSTANDING BARRIERS IN TRIATOMINE SURVEILLANCE: CHALLENGES AND COMMUNITY-DRIVING SOLUTIONS IN AREQUIPA-PERU

Laura D. Tamayo<sup>1</sup>, Carlos E. Condori-Pino<sup>1</sup>, Raquel Gonçalves<sup>1</sup>, Ricardo Castillo-Neyra<sup>2</sup>, Michael Z. Levy<sup>2</sup>, Valerie A. Paz-Soldan<sup>3</sup>

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### AE. AEGYPTI AND OTHER MOSQUITO SPECIES COHABITATING IN THE CHEKWOPUTOI CAVE, UGANDA

Austin Jose Mejia<sup>1</sup>, Teddy Nakayiki<sup>2</sup>, Julius J. Lutwama<sup>2</sup>, Fred Ssenfuka<sup>2</sup>, George Ongodia<sup>2</sup>, Kivumbi Brian<sup>2</sup>, Rebekah C. Kading<sup>1</sup>

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### MULTIDIMENSIONAL EVALUATION OF FACTORS ASSOCIATED WITH TICK INFESTATION AMONG DOGS LIVING IN ECOTONES OF MADRE DE DIOS, PERU

Cusi Ferradas<sup>1</sup>, Oliver A. Bocanegra<sup>1</sup>, Veronica K. Castro<sup>1</sup>, Carla M. Yauris<sup>1</sup>, Winnie M. Contreras<sup>1</sup>, Raúl Flores-Mara<sup>1</sup>, Caroline Glidden<sup>2</sup>, Andrés G. Lescano<sup>1</sup>, Maureen Laroche<sup>3</sup>

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### TRACKING THE SOURCE POPULATION OF SIMULIUM BLACKFLY INVASION IN URBAN SETTINGS IN GHANA: A GENOMICS APPROACH

Millicent Opoku<sup>1</sup>, Neha Sirwani<sup>1</sup>, Emily N. Hendrickson<sup>1</sup>, Himal Shrestha<sup>1</sup>, Kwadwo K. Frempong<sup>2</sup>, Sampson Otoo<sup>2</sup>, Franklin Ayisi Ayisi<sup>3</sup>, Millicent S. Afatodzie<sup>2</sup>, Abena A. Nyarko<sup>2</sup>, Sarah M. Dogbe<sup>2</sup>, Joseph H.N. Osei<sup>2</sup>, Sellase Pi-Bansa<sup>2</sup>, Sindew M. Feleke<sup>1</sup>, Warwick Grant<sup>1</sup>, Daniel Boakye<sup>2</sup>, Shannon Hedtke<sup>1</sup>

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Juliana Hoyos<sup>1</sup>, Vanessa Pineda<sup>2</sup>, Kadir Gonzalez<sup>2</sup>, Daniel Mendieta<sup>2</sup>, Azael Saldaña<sup>2</sup>, Jose Calzada<sup>2</sup>, Bryna Wilson<sup>3</sup>, Chystrie Rigg<sup>2</sup>, Vanessa Vasquez<sup>2</sup>, Luis F. Chaves<sup>4</sup>, Sonia Altizer<sup>1</sup>, Nicole Gottdenker<sup>1</sup>

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### INSECT CELL LINES DERIVED FROM OLD AND NEW WORLD VECTORS OF TRYPANOSOMES

Lesley Bell-Sakyi, Catherine S. Hartley, Jing Jing Khoo, Alistair C. Darby, Ben Makepeace

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### DETERMINING TRYPANOSOMA CRUZI INFECTION PREVALENCE, BLOOD-MEAL PREFERENCE AND MICROBIOME COMPOSITION IN TRIATOMA RUBIDA, TRIATOMA RECURVA, TRIATOMA PROTRACTA AND PARATRIATOMA HIRSUTA COLLECTED BY I-NATURALIST CITIZEN SCIENTISTS IN THE AMERICAN SOUTHWEST

Richard M. Oxborough<sup>1</sup>, Zoë Sanchez<sup>1</sup>, Chad L. Cross<sup>1</sup>, Evan Teal<sup>2</sup>, Susan D. Carnahan<sup>3</sup>, Michael Z. Levy<sup>4</sup>, Jeff Hill<sup>5</sup>, Michael M. Webber<sup>6</sup>, Caryn Bern<sup>7</sup>, Jeffrey Whitman<sup>8</sup>, Louisa A. Messenger<sup>1</sup>

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### RHIPICEPHALUS MICROPLUS SERPINS RMS-3 AND RMS-17 AND IXODES RICINUS SERPIN IRIPIN-3 EMPLOY DISTINCT MECHANISMS TO INHIBIT PROLIFERATION OF MOUSE T CELLS

Adela Chlastakova<sup>1</sup>, Jindrich Chmelar<sup>2</sup>, Anderson Sa-Nunes<sup>3</sup>, Itabajara da Silva Vaz Jr<sup>4</sup>, Lucas Tirloni<sup>1</sup>

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### EXPLORING THE TRANSCRIPTOME OF IMMATURE STAGES OF *ORNITHODOROS HERMSI*, THE SOFT-TICK VECTOR OF TICK-BORNE RELAPSING FEVER

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### ECTOPARASITE BURDEN OF SMALL MAMMALS LINKED TO LAND USE AND LAND COVER IN THE SOUTHEASTERN PERUVIAN AMAZON

Winnie Contreras<sup>1</sup>, Cusi Ferradas<sup>1</sup>, Oliver A. Bocanegra<sup>1</sup>, Raúl Flores-Mara<sup>1</sup>, Caroline Glidden<sup>2</sup>, Andrés G. Lescano<sup>1</sup>, Maureen Laroche<sup>3</sup>

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### CHARACTERIZATION OF TICK-BORNE ENCEPHALITIS VIRUS SAMPLES FROM *IXODES* TICKS COLLECTED IN MONGOLIA

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### GENOMIC INSIGHTS INTO THE *SPIROPLASMA* SYMBIONT OF *GLOSSINA FUSCIPES FUSCIPES*: IMPLICATIONS FOR TRYPANOSOME TRANSMISSION CONTROL

Daniel J. Bruzese<sup>1</sup>, Fabian Gstöttenmayer<sup>2</sup>, Brian L. Weiss<sup>1</sup>, Adly M.M Abd-Alla<sup>3</sup>, Serap Aksoy<sup>1</sup>

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### MICROBIAL DIVERSITY OF *CULICOIDES REEVESI* FROM CHIHUAHUA, MEXICO: A METAGENOMIC ANALYSIS OF RRNA 16S

Rodolfo Gonzalez Peña<sup>1</sup>, David Orlando Hidalgo Martínez<sup>2</sup>, Herón Huerta<sup>3</sup>, Erick de Jesús De Luna Santillana<sup>4</sup>, Jaime Raúl Adame Gallegos<sup>5</sup>, Carlos Arturo Rodríguez Alarcón<sup>2</sup>, Stephanie Viridiana Laredo Tiscareño<sup>2</sup>, Ezequiel Rubio Tabarez<sup>2</sup>, Julián Everardo García Rejón<sup>1</sup>, Luis M. Hernández Triana<sup>6</sup>, Javier Alfonso Garza Hernandez<sup>2</sup>

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### ASSESSING FINE-SCALE ENVIRONMENTAL INFLUENCE ON COMMUNITIES OF CUTANEOUS LEISHMANIASIS VECTORS IN SOUTHERN IN PERU

Sergio Méndez-Cardona<sup>1</sup>, Alejandro Lopera-Toro<sup>2</sup>, Juliana A. Morales-Monje<sup>2</sup>, Adrian Adrian Forsyth<sup>2</sup>, Amely Bauer<sup>1</sup>, Alexandra Bauer<sup>1</sup>, Olivia Magaletta<sup>1</sup>, Panpim Thongsripong<sup>1</sup>, Olga L. Cabrera-Quintero<sup>3</sup>

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Nellie Chikondi Kaunde<sup>1</sup>, Leonard Dandalo<sup>1</sup>, Yemane Yihdego<sup>2</sup>, Abdoulaye Bangoura<sup>1</sup>, Miriam Williams<sup>2</sup>, Austin Gumbo<sup>3</sup>, Lumbani Munthali<sup>3</sup>, Lillah Gerberg<sup>4</sup>, Pius Masache<sup>5</sup>, Themba Mzilahowa<sup>5</sup>

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### ALARMINGLY EXPANDING GEOGRAPHIC DISTRIBUTION OF *ANOPHELES STEPHENSI* IN ETHIOPIA

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Brady Page<sup>1</sup>, Matthias Pauthner<sup>2</sup>, Raphaëlle Klitting<sup>3</sup>, Foday Alhasan<sup>4</sup>, Donald Grant<sup>4</sup>, Kristian Andersen<sup>2</sup>  
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Abigail Akua Abankwa  
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### MAPPING THE GLOBAL BURDEN OF CHIKUNGUNYA

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### PERFORMANCE OF THE NG-TEST® IGG/IGM COVID-19 RAPID TEST FOR THE DIAGNOSIS OF SARSCOV2 INFECTION AMONGST HEALTHCARE WORKERS IN BAMAKO, MALI

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Thais Alkifeles Costa<sup>1</sup>, Matheus Soares Arruda<sup>1</sup>, Gabriela Fernanda Garcia Oliveira<sup>1</sup>, Erik V. Reis<sup>1</sup>, Anna Catarina D.S. Guimarães<sup>1</sup>, Gabriel Dias Moreira<sup>1</sup>, Nidia E.C. Arias<sup>1</sup>, Marina do Vale Beirão<sup>1</sup>, Nikos Vasilakis<sup>2</sup>, Kathy A. Hankey<sup>3</sup>, Betania P. Drumond<sup>1</sup>  
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### A HIGH-THROUGHPUT LIVE-IMAGE REPORTER FLAVIVIRUS NEUTRALIZATION ASSAY PLATFORM FOR SEROSURVEILLANCE AND VACCINE EVALUATION

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### PREDICTING THE IMPACT OF A POTENTIAL CHIKUNGUNYA OUTBREAK IN MIAMI AND THE IMPACT OF A CHIKUNGUNYA VACCINE

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### CHIKUNGUNYA INFECTION IN PERUVIAN PATIENTS WITH ACUTE FEBRILE ILLNESS: PREVALENCE AND CLINICAL CHARACTERISTICS

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### A COMPARISON OF THREE DIAGNOSTIC TESTS TO DETECT HUMAN PAPILLOMAVIRUS (HPV) IN ASYMPTOMATIC WOMEN'S ENDOCERVICAL SAMPLES FROM 2022 TO 2023 IN A NORTHERN PERUVIAN REGION

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### PREVALENCE OF HEPATITIS D VIRUS INFECTION AND ASSOCIATED FACTORS AMONG HEPATITIS B VIRUS PATIENTS FROM SELECTED HOSPITALS IN ACCRA

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### ACCURACY OF PHYSICIANS' CLINICAL DIAGNOSIS OF DENGUE AMONG PATIENTS PRESENTING TO EMERGENCY ROOMS – PUERTO RICO, 2012-2022

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### EXPANSION FACTOR ESTIMATES OF DENGUE UNDERREPORTING IN ENDEMIC COUNTRIES: A SYSTEMATIC REVIEW

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### INFORMING AN INVESTMENT CASE FOR JAPANESE ENCEPHALITIS VACCINE INTRODUCTION IN BANGLADESH

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### DENGUE IN AMAZONAS: UNDERSTANDING SPATIOTEMPORAL DYNAMICS AND SEROTYPE CIRCULATION

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### NEURODEVELOPMENTAL OUTCOMES IN CHILDREN WITH AND WITHOUT ZIKA, DENGUE, AND OTHER FLAVIVIRUS EXPOSURE, ZIKA EN EMBARAZADAS Y NIÑOS (ZEN) COHORT, COLOMBIA

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### CHARACTERIZING DENGUE SEROPREVALENCE AND HETEROGENEITIES IN TRANSMISSION INTENSITY IN GHANA

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Promise Ayooluwa Ajala, Ayooluwa Oluwaseun Ajayi, Funmilayo Grace Adelokun, Favour Mofiyinfoluwa Abiona, Oluwatomisin Oluwadamilola Olawoye College of Medicine, University of Ibadan, Ibadan, Nigeria

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### PREVALENCE OF PREVIOUS DENGUE INFECTION AMONG SCHOOL CHILDREN IN GRADES 3-10— AMERICAN SAMOA, SEPTEMBER-OCTOBER 2023

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Christopher S. Semancik<sup>1</sup>, Christopher Cooper<sup>2</sup>, Thomas S. Postler<sup>2</sup>, Matt Price<sup>1</sup>, Heejin Yun<sup>3</sup>, Marija Zarić<sup>3</sup>, Monica Kuteesa<sup>1</sup>, Nina Malkevich<sup>1</sup>, Andrew Kilianski<sup>1</sup>, Swati B. Gupta<sup>1</sup>, Suzanna C. Francis<sup>1</sup>

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Muhammad Abbas Abid, Joveria Farooqi, Rabiya Owais, Ayesha Sadiqa, Najia Ghanchi, Humaira Shafaq, Erum Khan

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### THE BURDEN OF DENGUE IN LATIN AMERICA AND ASIA: EPIDEMIOLOGICAL DATA OVER 57 MONTHS OF FOLLOW-UP IN A PHASE 3 TRIAL

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## CHARACTERIZING THE INTRA-HOST PLAQUE VARIANTS AND GROWTH KINETICS OF GLOBAL ZIKA VIRUS STRAINS

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## ANALYSIS OF SARS COV2 VARIANTS IN WASTEWATER OF THE METROPOLITAN DISTRICT OF QUITO USING A PASSIVE SAMPLING 3D PRINTED DEVICE

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## DENGUE VIRUS SEROTYPE 3 ORIGINS AND GENETIC DYNAMICS, JAMAICA

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## RECOVERY OF COMPLETE GENOME SEQUENCES OF CRIMEAN-CONGO HAEMORRHAGIC FEVER VIRUS THROUGH TARGETED NEXT-GENERATION SEQUENCING APPROACHES: A COMPARATIVE STUDY BETWEEN MULTIPLEX TILING PCR AND PROBE HYBRIDIZATION CAPTURE

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## MULTIPLE GENOTYPES AND CLADES OF DENGUE VIRUS IDENTIFIED DURING 2022 AND 2023 IN CENTRAL NEPAL

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## WEST NILE VIRUS INFECTIOUS UNITS CONTAIN MULTIPLE VIRUS PARTICLES

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## GENOMIC CHARACTERIZATION OF DENGUE VIRUS CIRCULATION IN ETHIOPIA

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## MOLECULAR CHARACTERIZATION OF SARS-COV-2 VARIANTS IN PATIENTS LIVING IN DIFFERENT PROVINCES OF BURKINA FASO

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## ELUCIDATING THE MOLECULAR EPIDEMIOLOGY OF WEST NILE VIRUS (WNV) IN SOUTHERN NEVADA

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## ROTAVIRUS AND STRAIN DIVERSITY: DISENTANGLING THE REASSORTMENT RATES OF PAIRWISE SEGMENT COMBINATIONS

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## CLINICAL AND GENOMIC CHARACTERIZATION OF DENGUE VIRUS OUTBREAK IN MALI

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## DENV DETECTION AND GENOMIC ANALYSIS IN A HIGH JUNGLE REGION OF NORTHERN PERU IN 2020 AND 2023

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### DETECTION AND WHOLE GENOMIC CHARACTERIZATION OF TWO UNUSUAL REASSORTANT DS-1-LIKE ROTAVIRUS A STRAINS CO-CIRCULATING IN BOLIVIA IN 2023

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### ASSESSMENT OF SARS-COV-2 GENOMIC SURVEILLANCE IN THE DEMOCRATIC REPUBLIC OF CONGO, CHALLENGES AND PERSPECTIVES

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### ENHANCED IFN- $\gamma$ , BUT NOT IL-2, RESPONSE TO MYCOBACTERIUM TUBERCULOSIS ANTIGENS IN HIV/LATENT TB CO-INFECTED PATIENTS ON LONG-TERM HAART

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### COMPUTATIONAL STRUCTURE-BASED DESIGN OF THE SPIKE RBD IMPROVES SARS-COV-2 VACCINES

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### CORRELATION BETWEEN CLINICAL BIOMARKERS AND LUNG PATHOLOGY OVER THE COURSE OF ACUTE COVID-19

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### DISENTANGLING DIFFERENCES IN DENGUE VIRUS INFECTION RISK ACROSS SEX IN A LONGITUDINAL COHORT IN KAMPHAENG PHET, THAILAND

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### VACCINE-INDUCED T CELL RESPONSES CONTROL FLAVIVIRAL CHALLENGE INFECTION WITHOUT NEUTRALIZING ANTIBODIES

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### DELETIONS IN THE 3' UNTRANSLATED REGION COMPROMISED TRANSLATION INITIATION TO ATTENUATE A DENGUE VIRUS 3 VACCINE STRAIN

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### CROSS-NEUTRALIZING ANTIBODY RESPONSES ELICITED BY THE CHIKUNGUNYA VACCINE VLA1553

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### CHARTING THE IMPACT OF MATERNAL ANTIBODIES AND EXPOSURES ON SAPOVIRUS IMMUNITY IN EARLY CHILDHOOD FROM A NICARAGUAN BIRTH COHORT

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### SIGNALING CIRCUITS INVOLVED IN THE SELECTION OF HIGH-AFFINITY ANTIGEN-SPECIFIC B CELLS IN THE GERMINAL CENTER

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### PRIMARY ZIKA VIRUS INFECTION INCREASES HETEROTYPIC DENGUE VIRUS SERUM NEUTRALIZATION UPON SECONDARY DENV-3 INFECTION IN RHESUS MACAQUES

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### LIFESTYLE SCORES ARE ASSOCIATED WITH CELLULAR IMMUNE PROFILES IN HEALTHY TANZANIAN ADULTS

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### APPLYING A ELECTROCHEMILUMINESCENCE MULTIPLEX SEROLOGIC ASSAY TO DETECT AND DIFFERENTIATE ZIKA AND DENGUE VIRUS EXPOSURES DURING LONG-TERM FOLLOW UP OF A COMMUNITY COHORT IN BRAZIL

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### UNDERSTANDING IMMUNITY TO MPOX AND SMALLPOX VACCINATION TO INFORM ON SEROSURVEILLANCE, DIAGNOSTIC DEVELOPMENT, AND NEXT-GENERATION VACCINES

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### ROBUST T CELL RESPONSES IN ADULT MICE PROVIDE INSIGHTS INTO PROTECTION AGAINST LA CROSSE VIRUS ENCEPHALITIS

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### ZIKA VIRUS DNA VACCINES INCORPORATING DISULFIDE-BOND STABILIZATION OF ENVELOPE PROTEIN DIMERS

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### INVESTIGATING THE ROLE OF VACCINE INDUCED HUMORAL IMMUNE RESPONSES IN PROTECTION AGAINST MARBURG VIRUS AND SUDAN VIRUS DISEASES

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### FLAVIVIRUS TOOLS FOR VACCINE RESEARCH

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## Viruses - Pathogenesis and Animal Models

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### THE ANGIOPOIETIN-TIE-2 AXIS IN CHILDREN AND YOUNG ADULTS WITH DENGUE VIRUS INFECTION IN THE PHILIPPINES

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### IDENTIFICATION OF THE FLAVIVIRUS CONSERVED E-L295 RESIDUE AS A TARGET FOR THE RATIONAL DESIGN OF CANDIDATE WEST NILE LIVE-ATTENUATED VACCINES

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### IL-1B MEDIATES POWASSAN VIRUS INFECTION AND ESTABLISHMENT AT THE SKIN INTERFACE

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### SUSCEPTIBILITY AND TRANSMISSION POTENTIAL OF ECTOTHERMS AND HOUSE SPARROWS TO JAPANESE ENCEPHALITIS VIRUS (JEV)

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### EVALUATION OF 41 BIOMARKERS FOR PREDICTION OF MORE SEVERE DENGUE OUTCOMES

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### NEUTROPHIL MEDIATORS LINKED TO TIGHT JUNCTION DISRUPTION AND INCREASED INTESTINAL PERMEABILITY IN SEVERE DENGUE

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### DIFFERENTIAL EFFECT OF MOSQUITO SALIVA FROM DISTINCT SPECIES ON HUMAN DERMAL ENDOTHELIAL CELL FUNCTION *IN VITRO* AND WEST NILE VIRUS PATHOGENESIS *IN VIVO*

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### DETECTION OF WEST NILE VIRUS IN FORMALIN-FIXED, PARAFFIN-EMBEDDED TISSUES FROM FATAL CASES BY USING RT-PCR AND *IN SITU* HYBRIDIZATION: INSIGHTS INTO PATHOGENESIS

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### EXPLORING THE ROLE OF HOST GLYCOSAMINOGLYCANS ON FLAVIVIRUS NS1-MEDIATED ENDOTHELIAL DYSFUNCTION

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### HETEROLOGOUS PROTECTION OF RECENT O'NYONG-NYONG VIRUS STRAIN UVRI0804 BY AN INACTIVATED CHIKUNGUNYA VIRUS VACCINE

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### GENETIC ANCESTRY-ASSOCIATED DIFFERENCES IN DENGUE VIRUS INFECTION OF PRIMARY HUMAN SKIN CELLS

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### ARBOVIRUS DISEASE PATHOGENESIS IN OBESE AND TYPE-II DIABETIC-LIKE MICE

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### PRM AND E SEQUENCE VARIATION ALTERS THE STRUCTURE ENSEMBLE OF ZIKV TO INFLUENCE ANTIBODY EPITOPE ACCESSIBILITY

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### BEYOND THE ROOST: EXPLORING THE IMPACTS OF A MODIFIED DIET ON MERS-COV INFECTION IN THE JAMAICAN FRUIT BAT (*ARTIBEUS JAMAICENSIS*)

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### INVESTIGATION OF VIRUS-HOST INTERACTIONS IN SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME VIRUS INFECTION USING A TRANSCRIPTOMICS APPROACH

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### MYELOID CELL REPLICATION PHENOTYPES UNDERLIE EPIZOOTIC POTENTIAL OF ALPHAVIRUSES

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## Malaria - Antimalarial Resistance and Chemotherapy

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### THERAPEUTIC EFFICACY OF ARTEMETHER LUMEFANTRINE PLUS SINGLE DOSE PRIMAQUINE FOR THE TREATMENT OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN IRRIGATED AGRO INDUSTRIAL METAHARA SUGAR FACTORY, CENTRAL ETHIOPIA

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### LOW LEVEL OF ANTIMALARIAL DRUG RESISTANCE IN 2014-15: INTEGRATION OF PRIMAQUINE INTO INDIA'S ANTIMALARIAL DRUG POLICY 2013

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### MOLECULAR SURVEILLANCE OF *PLASMODIUM FALCIPARUM* DRUG RESISTANCE MARKERS IN GHANA

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### INVESTIGATING THE PRESENCE OF FALSIFIED AND POOR QUALITY FIXED-DOSE COMBINATION ARTEMETHER-LUMEFANTRINE PHARMACEUTICAL DOSAGE FORMS IN KUMASI, GHANA

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### RECRUESCENCE OF *PLASMODIUM FALCIPARUM* AFTER QUININE THERAPY: A CASE REPORT

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### EFFICACY AND SAFETY OF ARTEMETHER-LUMEFANTRINE FOR THE TREATMENT OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA AMONG CHILDREN UNDER FIVE IN BENIN, 2022

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Jacqueline de Aguiar-Barros<sup>1</sup>, Fabiana Granja<sup>2</sup>, Rebecca de Abreu-Fernandes<sup>3</sup>, Lucas Tavares de Queiroz<sup>3</sup>, Daniel da Silva e Silva<sup>2</sup>, Arthur Camurça Citó<sup>4</sup>, Natália Ketrin Almeida-de-Oliveira Mocelin<sup>3</sup>, Cláudio Tadeu Daniel-Ribeiro<sup>3</sup>, Maria de Fatima FERREIRA-DA-CRUZ<sup>2</sup>

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**QUALITY OF MALARIA TREATMENT AND COUNSELING FOR CHILDREN YOUNGER THAN FIVE YEARS IN OUTPATIENT DEPARTMENTS IN TANZANIA, 2020-2023**

Patrick Gulinja<sup>1</sup>, Francis Levira<sup>1</sup>, Abdon Rwabilimbo<sup>1</sup>, Bintu Manyama<sup>1</sup>, Frank Chacky<sup>1</sup>, Sarah-Blythe Ballard<sup>2</sup>, Albert Ikonje<sup>1</sup>, Lulu Msangi<sup>1</sup>, Naomi Serbantez<sup>1</sup>, Chonge Kitojo<sup>1</sup>, Kanuth Dimoso<sup>1</sup>, Mwaka Kakolwa<sup>1</sup>, Happiness Nyanda<sup>1</sup>, Samwel Lazaro<sup>1</sup>, Dunstan Bishanga<sup>1</sup>

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Jason Rosado<sup>1</sup>, Abebe A. Fola<sup>2</sup>, Sandrine Cojean<sup>3</sup>, Veronique Sarrasin<sup>3</sup>, Bruno Pradines<sup>4</sup>, Romain Coppée<sup>5</sup>, Justine Bailly<sup>1</sup>, Rebecca Crudel<sup>2</sup>, French National Reference Center for Imported Malaria group<sup>6</sup>, Sandrine Houzé<sup>7</sup>, Jeffrey A. Bailey<sup>2</sup>, Jérôme Clain<sup>1</sup>

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**IRRESISTIBLE B-CARBOLINE DERIVATIVE ACTIVE AGAINST PROLIFERATING AND QUIESCENT RING STAGES OF ARTEMISININ-RESISTANT *PLASMODIUM FALCIPARUM***

Reagan S. Haney<sup>1</sup>, Leticia S. Do Amaral<sup>1</sup>, Emilio F. Merino<sup>1</sup>, Emily K. Bremers<sup>1</sup>, Joshua H. Butler<sup>1</sup>, Victoria Mendiola<sup>1</sup>, Jopaul Mathew<sup>2</sup>, Dennis Kyle<sup>1</sup>, Maxim Totrov<sup>3</sup>, Paul R. Carlier<sup>4</sup>, Belen Cassera<sup>1</sup>

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Kyawt Mon Win<sup>1</sup>, Pyae Linn Aung<sup>1</sup>, Wang Nguitraagool<sup>1</sup>, Liwang Cui<sup>2</sup>, Jetsumon Sattabongkot<sup>1</sup>, Saranath Lawpoolsri<sup>1</sup>

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**PREVALENCE OF DRUG RESISTANCE MOLECULAR MARKERS IN *P. VIVAX* CLINICAL ISOLATES FROM SOUTHERN PAKISTAN**

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Karim Traore<sup>1</sup>, Ali Thera<sup>1</sup>, Guillaume Bonnot<sup>2</sup>, Drissa Coulibaly<sup>1</sup>, Abdoulaye K. Kone<sup>1</sup>, Fayçal Maiga<sup>1</sup>, Anne-Lise Bienvenu<sup>2</sup>, Stephane Picot<sup>2</sup>, Mahamadou Ali Thera<sup>1</sup>

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**EFFICACY AND SAFETY OF ARTESUNATE-AMODIAQUINE (ASAQ) AND ARTEMETHER-LUMEFANTRINE (AL) FOR THE TREATMENT OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN TWO COUNTIES IN LIBERIA, 2022-2023**

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**WIDESPREAD *PFHRP2/3* DELETIONS AND HRP2-BASED FALSE-NEGATIVE RESULTS IN SOUTHERN ETHIOPIA**

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Abdul-Hakim Mutala<sup>1</sup>, Kingsley Badu<sup>1</sup>, Cristian Koepfli<sup>2</sup>, Stephen Opoku Afriyie<sup>3</sup>, Abraham Badu-Tawiah<sup>4</sup>

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### REMOSCOPE: A LABEL-FREE IMAGING CYTOMETER FOR MALARIA DIAGNOSTICS

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### COMPARATIVE STUDIES OF MALARIA PARASITE NONINVASIVE AND INVASIVE DIAGNOSTIC TESTS AMONG PREGNANT WOMEN IN NIGERIA

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### COMPARISON OF PREVALENCE ESTIMATES OF PFHRP2 AND PFHRP3 DELETIONS IN PLASMODIUM FALCIPARUM DETERMINED BY CONVENTIONAL PCR AND MULTIPLEX QPCR AND IMPLICATIONS FOR SURVEILLANCE AND MONITORING

Michelle L. Gatton<sup>1</sup>, David Smith<sup>2</sup>, Cielo Pasay<sup>2</sup>, Karen Anderson<sup>2</sup>, Selam Mihreteab<sup>3</sup>, Hugo O. Valdivia<sup>4</sup>, Juan F. Sanchez<sup>4</sup>, Khalid B. Beshir<sup>5</sup>, Jane Cunningham<sup>6</sup>, Qin Cheng<sup>7</sup>

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### ACUTE UNDIFFERENTIATED FEBRILE ILLNESSES SURVEILLANCE IN TWO MILITARY HEALTH FACILITIES IN ABUJA, NIGERIA

Hanan El Mohammady<sup>1</sup>, Rania Nada<sup>1</sup>, Isabelle Nakhla<sup>1</sup>, Mary Adenuga<sup>2</sup>, Inalegwu Ochai<sup>2</sup>, Feyisayo Jegede<sup>2</sup>, Ojor Ayemoba<sup>3</sup>

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### PLASMODIUM FALCIPARUM HISTIDINE RICH PROTEIN 2/3 DELETIONS AND REPEAT MOTIFS IN INDIA: CHALLENGES IN RDT-BASED MALARIA DIAGNOSIS

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### UNCOVERING TREATMENT GAPS: A CLOSER LOOK AT MALARIA CASE MANAGEMENT IN A DISTRICT REFERRAL HOSPITAL IN GHANA, 2023

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### COST-EFFECTIVENESS COMPARISON OF MALARIA DIAGNOSIS SCENARIOS WITH SYSMEX XN-31 IN A NON-ENDEMIC AREA

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### IDENTIFYING SUBGROUPS WITH DECREASED PERFORMANCE CHARACTERISTICS OF MALARIA RAPID DIAGNOSTIC TESTS

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### FALSE NEGATIVE MALARIA RAPID DIAGNOSTIC TESTS ON A LACTATE DEHYDROGENASE-BASED KIT AMID INCREASING PLASMODIUM OVALE PREVALENCE IN KENYA

Raphael Okoth<sup>1</sup>, Catherine Muriuki<sup>1</sup>, Alfred Odindo<sup>1</sup>, Benjamin Opot<sup>1</sup>, Dennis Juma<sup>1</sup>, Jackline Juma<sup>1</sup>, Agnes Cheruiyot<sup>1</sup>, Redemptah Yeda<sup>1</sup>, Edwin Mwakio<sup>1</sup>, Maurine Mwalo<sup>1</sup>, Risper Maisiba<sup>1</sup>, Farid Abdi<sup>1</sup>, Timothy Egbo<sup>2</sup>, Hoseah M. Akala<sup>1</sup>

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### UNUSUAL PRESENTATION OF MALARIA IN A PEDIATRIC PATIENT DELAYING DIAGNOSIS

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## Malaria - Drug Development and Clinical Trials

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### A PHASE 1B STUDY TO CHARACTERIZE THE SAFETY AND PHARMACOKINETIC/PHARMACODYNAMIC RELATIONSHIP OF MMV367 (GSK701) IN ADULT PARTICIPANTS EXPERIMENTALLY INFECTED WITH BLOOD- STAGE PLASMODIUM FALCIPARUM

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### DOSE-OPTIMIZATION OF THE FIXED-DOSE TRIPLE COMBINATION ANTIMALARIAL THERAPY ARTEMETHER-LUMEFANTRINE-AMODIAQUINE

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### PRE-REFERRAL RECTAL ARTESUNATE IN CHILDREN WITH SEVERE MALARIA: ANY BENEFIT?

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### THE EFFECT OF SINGLE LOW-DOSE PRIMAQUINE TREATMENT FOR UNCOMPLICATED PLASMODIUM FALCIPARUM MALARIA ON HEMOGLOBIN LEVELS IN ETHIOPIA: A LONGITUDINAL COHORT STUDY

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### REPEAT IVERMECTIN MASS DRUG ADMINISTRATIONS FOR MALARIA CONTROL II (RIMDAMAL II): PRIMARY OUTCOME

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### ASSESSMENT OF THE ANTIPLASMODIAL EFFECTS < TOXICITY STUDY OF ENDOPHYTES FUNGI EXTRACT ISOLATED FROM ALSTONIA BOONEI DE WILD

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### IDENTIFICATION OF INHIBITORS OF MOSQUITO STAGES OF PLASMODIUM FALCIPARUM DEVELOPMENT USING AN IN VITRO CULTURE SYSTEM

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### ACCELERATING ANTIMALARIAL DRUG DISCOVERY WITH A HIGH-THROUGHPUT SCREENING FOR FAST-KILLING COMPOUNDS

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### HIGH THROUGHPUT SCREENING IDENTIFIES COMPOUNDS WITH NANOMOLAR ANTIPLASMODIAL ACTIVITY AGAINST THE ASEQUAL STAGE PARASITES

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### NOVEL DRUG DISCOVERY FOR PLASMODIUM FALCIPARUM MALARIA

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### DIHYDROARTEMISININ-PIPERAQUINE AS AN ALTERNATIVE TO SULFADOXINE-PYRIMETHAMINE FOR INTERMITTENT PREVENTIVE TREATMENT IN PREGNANCY: A META-ANALYSIS OF MATERNAL, BIRTH, AND INFANT OUTCOMES

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## Malaria - Elimination

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### SAFETY AND FEASIBILITY OF INTEGRATING MASS DRUG ADMINISTRATION FOR HELMINTH CONTROL WITH SEASONAL MALARIA CHEMOPREVENTION IN SENEGALESE CHILDREN: A RANDOMIZED CONTROLLED, OBSERVER-BLIND TRIAL

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### DEVELOPMENT AND PRE-TEST OF A RISK BENEFIT ASSESSMENT TOOL TO SUPPORT PROGRAMMATIC DECISION-MAKING REGARDING *PLASMODIUM VIVAX* RADICAL CURE TREATMENT OPTIONS IN LATIN AMERICA AND THE CARIBBEAN

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### MALARIA HEALTHCARE SYSTEM OF PAKISTAN AMIDST CLIMATE CRISES: A SWOT ANALYSIS

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### A SCOPING REVIEW OF PATIENT ADHERENCE TO ANTIMALARIAL DRUGS

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### NORMALIZED COMPONENTS OF HEALTH SYSTEMS STRENGTHENING IN DELIVERING MALARIA TREATMENT SERVICES: A 3-YEAR IMPLEMENTATION STUDY

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### TRACKING AND SCALING UP OF SERVICE PROVISION TO FOREST GOERS AND MOBILE AND MIGRANT POPULATIONS FOR CONTROLLING OF LOCAL MALARIA TRANSMISSION IN FORESTED AREAS OF MYANMAR

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### USING A MULTI-PRONGED APPROACH TO TARGETING *PLASMODIUM VIVAX* (PV) TO SHARPLY REDUCE INCIDENCE

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### PRIVATE COMMUNITY PROVIDERS' EXPERIENCES ON *PLASMODIUM VIVAX* RADICAL CURE TOOLS: EVIDENCE FROM MYANMAR

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### ADVANCING MALARIA ELIMINATION IN BRAZIL: PRIORITIES AND STRATEGIES FOR RESEARCH AND ACTION

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## HEALTH EDUCATION FOR MALARIA ELIMINATION IN BRAZIL - MALARIA LEADERSHIP COURSE

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## COVERAGE AND IMPACT OF A PROGRAMMATIC MASS DRUG ADMINISTRATION CAMPAIGN FOR MALARIA IN SOUTHERN MOZAMBIQUE USING ROUTINE SURVEILLANCE DATA

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## ENHANCING THE DESIGN OF RANDOMIZED TRIALS IN MALARIA ELIMINATION SETTINGS: A SIMULATION STUDY OF THE RING TRIAL DESIGN

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## STRATEGIES TO ACHIEVED P. FALCIPARUM ELIMINATION IN CAMBODIA: PRACTICAL APPROACHES AND FINDINGS

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## IMPROVING ADHERENCE AND RADICAL CURE COVERAGE FOR P. VIVAX THROUGH THE IMPLEMENTATION OF G6PD TESTING AT POINTS OF CARE IN CAMBODIA

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## THE ACCEPTABILITY AND FEASIBILITY OF ROUTINE CLINICAL FOLLOW-UP FOR SHORT COURSE RADICAL CURE TREATMENT FOR PLASMODIUM VIVAX MALARIA: A COMPARATIVE ANALYSIS OF CAMBODIA AND ETHIOPIA

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## IMPLEMENTATION OUTCOMES OF 1-3-7 FOCUS INVESTIGATION FOR MALARIA IN A LOW TRANSMISSION SETTING IN SOUTHERN PROVINCE, ZAMBIA: A MIXED METHODS STUDY

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## INCREASING CERTAINTY AROUND IMPACT OF SEASONAL MALARIA CHEMOPREVENTION: A MODELING FRAMEWORK USING ROUTINE DATA SOURCES IN BURKINA FASO

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## MOLECULAR INVESTIGATION OF RECURRENT PLASMODIUM MALARIAE INFECTION IN THE DEMOCRATIC REPUBLIC OF THE CONGO

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### ASSESSING ENTOMOLOGICAL MEASURES OF INDIVIDUAL *P. FALCIPARUM* INFECTION RISK

Max McClure<sup>1</sup>, Emmanuel Arinaitwe<sup>2</sup>, Moses R. Kanya<sup>2</sup>, Philip J. Rosenthal<sup>1</sup>, Joaniter Nankabirwa<sup>2</sup>, Maxwell Kilama<sup>2</sup>, Grant Dorsey<sup>1</sup>, Bryan Greenhouse<sup>1</sup>, Isabel Rodriguez-Barraquer<sup>1</sup>

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### SPACE-TIME SENSITIVE MODELING OF SUBCLINICAL MALARIA PREVALENCE AT THE VILLAGE LEVEL IN LOW ENDEMIC AREAS OF MYANMAR USING RANDOM FOREST MODEL

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### BLOOD TRANSFUSIONS FOR CHRONIC MALARIA ANEMIA IN PRISONERS OF WAR ON THE THAI-BURMA RAILWAY 1943-5

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Babacar Souleymane Sambe<sup>1</sup>, Ibrahima Sarr<sup>1</sup>, Aissatou Diagne<sup>1</sup>, Arona Sabène Diatta<sup>1</sup>, Serigne Ousmane Mbacké Diaw<sup>1</sup>, Joseph Faye<sup>1</sup>, Nafissatou Diagne<sup>2</sup>, Adja Fatou Mbodj<sup>1</sup>, Rokhaya Sane<sup>1</sup>, Babacar Diouf<sup>1</sup>, Alassane Thiam<sup>1</sup>, Arfang Dianmanka<sup>3</sup>, Papa Mbacke Sembene<sup>3</sup>, Fatoumata Diene Sarr<sup>1</sup>, Ibrahima Dia<sup>1</sup>, Inès Vigan-WOmas<sup>1</sup>, Cheikh Sokhna<sup>2</sup>, Aissatou Toure-Balde<sup>1</sup>, Makhtar Niang<sup>1</sup>

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Zhiyuan Mao<sup>1</sup>, Erica Orange<sup>2</sup>, Kafula Silumbe<sup>3</sup>, Ruth Ashton<sup>1</sup>, Josh O. Yukich<sup>1</sup>, Refilwe Yvonne Karabo<sup>1</sup>, Busiku Hamainza<sup>4</sup>, Megan Littrell<sup>5</sup>, Thomas P. Eisele<sup>1</sup>  
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### AN UPDATE OF THE EPIDEMIOLOGICAL PARAMETERS OF MALARIA IN SCHOOL AGE CHILDREN IN KOLLE, A RURAL SETTING, MALI

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Victor S. Koko<sup>1</sup>, Eric Gaye<sup>2</sup>, Jamesetta Smith<sup>2</sup>, Gontopoe Omedo Nuahn<sup>2</sup>, Trokon Washington<sup>1</sup>, Odell Wannie Kume<sup>1</sup>, Saratu Olabode-Ojo<sup>2</sup>  
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Natasha Glending<sup>1</sup>, Werissaw Haileselassie<sup>2</sup>, Ming-Chieh Lee<sup>1</sup>, Guiyun Yan<sup>1</sup>, Daniel M. Parker<sup>1</sup>  
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Cecilia Barrientos<sup>1</sup>, Leopoldo Villegas<sup>2</sup>, Ericka Lopez<sup>3</sup>, Erick Ramos<sup>1</sup>, Deysi Lucero<sup>1</sup>, Evelio Saquil<sup>1</sup>, Manuel Barrientos<sup>1</sup>, Maritza May<sup>1</sup>, Cecilia Tiul<sup>1</sup>, Elsa Coc<sup>1</sup>, Maria Coy<sup>1</sup>, Margarita Li<sup>1</sup>, Maria Ico<sup>1</sup>, Wilmer Augurcia<sup>1</sup>, Victor Oxom<sup>1</sup>, Israel Ico<sup>1</sup>, Isaias Coc<sup>1</sup>, Elias Be<sup>1</sup>, Marvin Rodriguez<sup>1</sup>, Jorge Sacul<sup>1</sup>, Cesar Tiul<sup>1</sup>, Benjamin Yaxcal<sup>4</sup>, Alvaro Choj<sup>4</sup>, Romulo Chub<sup>4</sup>, Pedro Tut<sup>4</sup>, Marcos Marquin<sup>1</sup>, Xiomara Bol<sup>4</sup>, Madelin Arriaza<sup>1</sup>, Hector Soriano<sup>5</sup>, Maura Herrera<sup>5</sup>, Erik K<sup>5</sup>, Karina A<sup>5</sup>, Mayra Arana<sup>5</sup>, Arly Obando<sup>5</sup>, Augusto Zamora<sup>6</sup>, Carlos Blanco<sup>7</sup>, Erik Castillo<sup>8</sup>, Jaime Juarez<sup>9</sup>, Luis Marroquin<sup>10</sup>, Zoraida Morales<sup>11</sup>

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### PEAK PARASITEMIA AND CLINICAL FEATURES OF EXPERIMENTAL BLOOD STAGE MALARIA INFECTION

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### COMPARISON OF THE PERFORMANCE OF ARIMA TIME SERIES MODELS AND FB-PROPHET IN THE PREDICTION OF MALARIA INCIDENCE IN UGANDA AT THE NATIONAL AND SUBNATIONAL LEVEL

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### AN INVESTIGATION OF A PLASMODIUM FALCIPARUM ODYSSEAN MALARIA CASE IN AN INFORMAL SETTLEMENT, GAUTENG, SOUTH AFRICA, JANUARY 2024

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**MALARIA OUTBREAK INVESTIGATION IN MARSABIT COUNTY, KENYA - MARCH 2024**

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**MODELING RECURRENT MALARIA EPISODES OF MALARIA USING MARKOV MULTIPLE-STATE MODELS: A CASE STUDY FOR DANGASSA, MALI**

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**EFFECT OF RAINFALL AND TEMPERATURE ANOMALIES ON MALARIA INCIDENCE IN THE DEMOCRATIC REPUBLIC OF THE CONGO**

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**Malaria - Genetics, Genomics and Evolution**

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**GENETIC DIVERSITY OF *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN IN ETHIOPIA AND COMPARISON WITH OTHER GEOGRAPHICAL ISOLATES**

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(ACMCIP Abstract)

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**POPULATION GENOMICS OF *PLASMODIUM MALARIAE* FROM FOUR AFRICAN COUNTRIES**

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**GENE EXPRESSION NETWORKS IN STAGE-CONTROLLED *PLASMODIUM VIVAX* INFECTIONS FROM NORTHERN THAILAND: A WEIGHTED GENE CO-EXPRESSION NETWORK ANALYSIS (WGCNA)**

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(ACMCIP Abstract)

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**USE OF GENETIC METRICS TO CHARACTERIZE MALARIA TRANSMISSION PATTERNS AND DISTINGUISH COTRANSMISSION FROM SUPERINFECTION IN BURKINA FASO**

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**GENOME-WIDE ASSOCIATION STUDY OF GLOBAL *PLASMODIUM VIVAX* POPULATIONS PROVIDES INSIGHTS INTO THE EVOLUTION OF DRUG RESISTANCE**

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(ACMCIP Abstract)

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**IMPACT OF SICKLE CELL GENOTYPES ON PEDIATRIC MALARIA OUTCOMES IN A HOLOENDEMIC *PLASMODIUM FALCIPARUM* TRANSMISSION REGION: INSIGHTS FROM A LONGITUDINAL STUDY**

Nikita Jaiswal<sup>1</sup>, Clinton Onyango<sup>2</sup>, Qiuying Cheng<sup>3</sup>, Ivy Hurwitz<sup>3</sup>, Perez Olewe<sup>4</sup>, Samuel Anyona<sup>2</sup>, Evans Raballah<sup>5</sup>, Collins Ouma<sup>2</sup>, Kristan Schneider<sup>3</sup>, Douglas J. Perkins<sup>3</sup>

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(ACMCIP Abstract)

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### EVALUATING HOW THE MEANING OF IDENTICAL BY DESCENT VARIES WITH MUTATION AND RECOMBINATION RATES

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### DYSREGULATION OF VASO-OCCLUSIVE AND VASOCONSTRICTIVE MOLECULAR PATHWAYS IN PEDIATRIC PATIENTS WITH SICKLE CELL ANEMIA AND SEVERE MALARIA ANEMIA

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### DECLINING POLYMORPHISM OF THE C-TERMINUS MEROZOITE SURFACE PROTEIN 1 AMIDST INCREASED PLASMODIUM KNOWLESII TRANSMISSION IN THAILAND

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### PREDICTING THE FUNCTIONAL IMPACT OF STRUCTURAL VARIATION AT A PLASMODIUM FALCIPARUM SICKLE-ASSOCIATED LOCUS

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### DEVELOPMENT OF PLASMODIUM FALCIPARUM WHOLE GENOME SEQUENCING WORKFLOW USING OXFORD NANOPORE SEQUENCING TECHNOLOGY TO SUPPORT MALARIA MOLECULAR SURVEILLANCE IN TANZANIA

Catherine Bakari<sup>1</sup>, Aurel Holzschuh<sup>2</sup>, Pierre Schneeberger<sup>2</sup>, Celine I. Mandara<sup>1</sup>, Jeffrey A. Bailey<sup>3</sup>, Jonathan J. Juliano<sup>4</sup>, Pascal Mäser<sup>2</sup>, Deus S. Ishengoma<sup>1</sup>, Christian Nsanzabana<sup>2</sup>

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### SURVEILLING PLASMODIUM FALCIPARUM AT FIRST ANTENATAL CARE VISITS THROUGH GENOMICS IN MOZAMBIQUE

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### ANALYTICAL VALIDATION OF A CAPILLARY ELECTROPHORESIS METHOD TO GENOTYPE P. FALCIPARUM GENES MSP1, MSP2, AND THE NEUTRAL MICROSATELLITE MARKER POLY-A

Culzean Kennedy<sup>1</sup>, Breanna Horton<sup>1</sup>, Zhiyong Zhou<sup>2</sup>, Samaly Souza<sup>2</sup>, Dragan Ljolje<sup>2</sup>, Ira Goldman<sup>2</sup>, Jessica McCaffery<sup>2</sup>, Rispah Abdallah<sup>1</sup>, Amy Kong<sup>2</sup>, Stephen Lindstrom<sup>2</sup>, Molly M. Freeman<sup>2</sup>

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### SURVEILLANCE OF PFHRP2 GENE DELETIONS AND ASSESSMENT OF FALSE NEGATIVE RDT OUTCOMES FOR MALARIA DIAGNOSTICS IN SENEGAL

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### GENOMIC EPIDEMIOLOGY OF MALARIA IN ZANZIBAR: DEFINING THE ROLE OF IMPORTATION AND LOCAL TRANSMISSION

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## EVALUATION OF THE MSP1, MSP2, AND POLY-A METHOD FOR DISTINGUISHING NEW INFECTIONS FROM RECRUDESCENCE

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## Malaria - Immunology

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## SEROLOGICAL BIOMARKERS FOR DETECTION OF ASYMPTOMATIC PLASMODIUM VIVAX-INFECTED INDIVIDUALS IN THE PERUVIAN AMAZON

Alonso Cruz-Echevarria<sup>1</sup>, Elizabeth Villasis<sup>1</sup>, Rhea Longley<sup>2</sup>, Ramin Mazhari<sup>2</sup>, Ivo Mueller<sup>2</sup>, D. Herbert Opi<sup>3</sup>, James Beeson<sup>3</sup>, Joseph Vinetz<sup>4</sup>, Dionicia Gamboa<sup>5</sup>, Katherine Torres<sup>1</sup>

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(ACMCIP Abstract)

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## INVESTIGATING THE ROLE OF NON-VAR2CSA SPECIFIC ANTIBODIES IN PROTECTION FROM PLACENTAL MALARIA

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## EVALUATE THE ROLE OF CYTOKINES AND CHEMOKINES IN THE DEVELOPMENT OF COMPLICATIONS IN MALARIA CAUSED BY P. VIVAX

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(ACMCIP Abstract)

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## IGG ANTIBODY-MEDIATED COMPLEMENT FIXATION AND ACTIVITY AND ITS ASSOCIATIONS WITH PROTECTION AGAINST SEVERE MALARIA

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## MOSQUITO-PLASMODIUM IGG ANTIBODIES AND CLINICAL PRESENTATION OF MALARIA IN COLOMBIA

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## ASSOCIATION OF NOVEL IGG3 ALLELE WITH MALARIA IN CHILDREN FROM SEPIK REGION OF PAPUA NEW GUINEA

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(ACMCIP Abstract)

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## MATURATION AND DIVERSIFICATION OF THE B AND T CELL RECEPTOR REPERTOIRES OVER 9 YEARS OF REPEATED MALARIA INFECTIONS

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**THE CD4<sup>+</sup>T CELL MEMORY IN *PLASMODIUM FALCIPARUM* MALARIA**Marie-Theres Thieme<sup>1</sup>, Johannes Brandt<sup>2</sup>, Maren Sandkuhl<sup>1</sup>, Thomas Jacobs<sup>2</sup>, Maria Sophia Mackroth<sup>1</sup><sup>1</sup>University Medical Center Hamburg-Eppendorf, Hamburg, Germany, <sup>2</sup>Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

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**INFLUENCE OF CYTOKINE RATIO (IL-10: TNF- ALPHA) ON ANAEMIA STATUS OF MALARIOUS CHILDREN IN SOUTH EASTERN NIGERIA**Chinyere IHUARULAM Okoro<sup>1</sup>, Oluchi Ijeoma Okoro<sup>2</sup>, Kingsley Excell Dunga<sup>3</sup>, Easter Godwin Nwokah<sup>4</sup><sup>1</sup>FEDERAL UNIVERSITY TEACHING HOSPITAL, Owerri North, Nigeria, <sup>2</sup>Life streams laboratory, Asaba, Nigeria, <sup>3</sup>Rhema University Aba, Abia, Nigeria, <sup>4</sup>River State University, Portharcourt, Nigeria

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**FICOLIN-1 IN PAEDIATRIC *PLASMODIUM FALCIPARUM* MALARIA AND ITS POSSIBLE ROLE IN PARASITE CLEARANCE AND ANAEMIA**Di Zheng<sup>1</sup>, Natalie Ferrington<sup>1</sup>, Dilini Rathnayake<sup>1</sup>, Agersew Alemu<sup>1</sup>, Visopo Harawa<sup>2</sup>, Emily Karahalios<sup>3</sup>, Wina Hasang<sup>1</sup>, Evelyne Gout<sup>4</sup>, Nicole Thielens<sup>4</sup>, Karl Seydel<sup>5</sup>, Terrie Taylor<sup>5</sup>, Wilson Mandala<sup>6</sup>, Stephen Rogerson<sup>1</sup>, Elizabeth Aitken<sup>1</sup>, Louise Randall<sup>1</sup><sup>1</sup>Peter Doherty Institute of Infection and Immunity, Melbourne, Australia, <sup>2</sup>Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>3</sup>University of Melbourne, Melbourne, Australia, <sup>4</sup>University of Grenoble Alpes, Grenoble, France, <sup>5</sup>Blantyre Malaria Project, Blantyre, Malawi, <sup>6</sup>Kamuzu University of Health Sciences, Blantyre, Malawi

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**ASSESSMENT FOR NEUTROPHIL EXTRACELLULAR TRAPS MARKERS IN *PLASMODIUM FALCIPARUM* MALARIA INFECTED PREGNANT WOMEN IN A HIGH MALARIA BURDEN REGION**Rebecca Chukwuanukwu<sup>1</sup>, Chioma Agu<sup>1</sup>, Alfred Ehiaghe<sup>1</sup>, Dorothy Ezeagwuna<sup>2</sup>, Gerald Udigwe<sup>3</sup>, Martin Herrmann<sup>4</sup><sup>1</sup>Nnamdi Azikiwe University, Awka, Awka, Nigeria, <sup>2</sup>Parasitology Unit, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nnewi, Nigeria, <sup>3</sup>Obstetrics & Gynaecology Department, Nnamdi Azikiwe University, Awka, Nnewi, Nigeria, <sup>4</sup>Friedrich-Alexander University, Erlangen-Nurnberg, Germany

(ACMCIP Abstract)

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**MEMORY CD8<sup>+</sup> T-CELLS SPECIFIC FOR CIRCUMSPOROZOITE PROTEIN EPIPE SEQUENCE YLNKIQNSL RECOGNIZE AND KILL *PLASMODIUM FALCIPARUM* MALARIA INFECTED HEPATOCYTES**Roos van Schuijlenburg<sup>1</sup>, Beatrice Winkel<sup>1</sup>, Sascha Bezemer<sup>1</sup>, Severine C. Chevalley-Maurel<sup>1</sup>, Jeroen C. Sijtsma<sup>1</sup>, Krista E. Meijgaarden<sup>1</sup>, Els Baalbergen<sup>1</sup>, Fiona Geurten<sup>1</sup>, Felix M. Behr<sup>2</sup>, Giampietro Corradin<sup>3</sup>, Ramon Arens<sup>2</sup>, Blandine Franke-Fayard<sup>1</sup>, Meta Roestenberg<sup>1</sup><sup>1</sup>Leiden University Center for Infectious Diseases (LU-CID), Leiden University Medical Center, Leiden, Netherlands, <sup>2</sup>Department of Immunohematology and Blood Transfusion, Leiden University Medical Center, Leiden, Netherlands, <sup>3</sup>Institute of Biochemistry, University of Lausanne, Epalinges, Switzerland

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**BONE VOYAGE: HOW *PLASMODIUM* INFECTION DISRUPTS THE PLASMA CELL MICROENVIRONMENT IN THE BONE MARROW**Elizabeth Fusco, Alexander R. Maldeney, Layne Bower, Wei Luo, Nathan W. Schmidt  
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**NOVEL ASSAY TO ASSESS THE SEROLOGICAL EQUIVALENCE OF VACCINE-INDUCED RESPONSES TO CRITICAL MONOCLONAL ANTIBODIES**Jessica S. Bolton<sup>1</sup>, Randall S. MacGill<sup>2</sup>, Emily Locke<sup>2</sup>, Elke S. Bergmann-Leitner<sup>1</sup><sup>1</sup>Biologics Research & Development Branch, Walter Reed Army Institute of Research, Silver Spring, MD, United States, <sup>2</sup>Center for Vaccine Innovation and Access, PATH, Washington, DC, United States

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**BURKHOLDERIA GLADIOLI'S PRODUCTION OF ARSINOTHRICIN TO LIMIT TRANSMISSIBILITY OF P.F. WHEN INTRODUCED INTO THE AG. MIDGUT**

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**THE LSHTM HUMAN MALARIA TRANSMISSION FACILITY: AN OPEN FACILITY FOR EXPERIMENTAL TRANSMISSION STUDIES OF *PLASMODIUM* PARASITES**

Mojca Kristan, Harry Pollard, Lindsay Stewart, Luke Brandner-Garrod, Mufuliat T. Famodimu, Penny Sparkes, Eduardo Alves, Gisela Henriques, Chris J. Drakeley, Christiaan van Ooij, Michael Delves, Colin J. Sutherland

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**ASSESSING THE IMPACT OF DRUG RESISTANCE ON MALARIA TRANSMISSION**Margarida Ruivo<sup>1</sup>, Ines Marreiros<sup>1</sup>, Ana Belen Garcia<sup>1</sup>, Malhar Krushu<sup>2</sup>, Selina Bopp<sup>2</sup>, David Calvo<sup>1</sup>, Lorena Cortes<sup>1</sup>, Carmen Cuevas<sup>1</sup>, Helena Garuti<sup>1</sup>, Jose Luis Llergo<sup>1</sup>, Noemi Magan<sup>1</sup>, Sara Viera-Morilla<sup>1</sup>, Dyann Wirth<sup>3</sup>, Maria Jose Lafuente-Monasterio<sup>1</sup>, Amanda Lukens<sup>3</sup><sup>1</sup>GSK, Global Health Medicines R&D, Tres Cantos, Madrid, Spain, <sup>2</sup>Harvard T.H. Chan School of Public Health, Boston, MA, MA, United States, <sup>3</sup>Broad Institute of MIT and Harvard, Cambridge, MA, MA, United States

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**EXPERIMENTAL INFESTATION OF *ANOPHELES GAMBIAE* WITH *PLASMODIUM OVALE* ISOLATES FROM PATIENTS WITH UNCOMPLICATED MALARIA**

Fatoumata I. BALLO, Laurent Dembélé, Dinkorma Ouologuem, Karim Sawadogo, Mohamed Touré, Yacouba N. Barré, Siaka M. Goïta, Alpha Seydou Yaro, Abdoulaye Djimé

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**PRELIMINARY CHARACTERIZATION OF *PLASMODIUM FALCIPARUM* SPLICING FACTOR 3A SUBUNIT 2 (SF3A2) GENE IN GAMETOCYTE DEVELOPMENT**

Olatunbosun Olanbani Aringbangba, Camilla V. Pires, Prem Prakash, Shulin Xu, Min Zhang, Chengqi Wang, John Adams

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**Mady Cissoko**<sup>1</sup>, Mahamadou Magassa<sup>1</sup>, Assitan Dembélé<sup>1</sup>, Seybou Coulibaly<sup>1</sup>, Ibrahim A. Cissé<sup>1</sup>, Daouda S. Samaké<sup>1</sup>, Chaka Sanogo<sup>1</sup>, Vincent Sanogo<sup>1</sup>, Aissata Koné<sup>1</sup>, Mamady Koné<sup>2</sup>, Sylla Thiam<sup>3</sup>, Seydou Fomba<sup>1</sup>, Issaka Sagara<sup>2</sup>

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**Daman Sylla**<sup>1</sup>, Adama Sacko<sup>1</sup>, Heather Goodman<sup>2</sup>, Mahamadou H. Maiga<sup>1</sup>, Abdrahamane Fofana<sup>1</sup>, Boubacar Coulibaly<sup>1</sup>, Moussa Diallo<sup>1</sup>, Sale Sidibe<sup>1</sup>, Yacouba Diarra<sup>1</sup>, Amadou Berthe<sup>1</sup>, Mohamed L. Diarra<sup>1</sup>, Moridie Sidibe<sup>1</sup>, Salifou Kone<sup>1</sup>, Sekou Goita<sup>1</sup>, Adama Coulibaly<sup>1</sup>, Mariam Doumbia<sup>1</sup>, Amadou Guindo<sup>1</sup>, Ousmane Sacko<sup>1</sup>, Yacouba Dembele<sup>1</sup>, Amadou S. Traore<sup>1</sup>, Issaka Sagara<sup>1</sup>, Sara A. Healy<sup>2</sup>, Alpha S. Yaro<sup>1</sup>, Patrick E. Duffy<sup>2</sup>, Jen C. Hume<sup>2</sup>

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### COMMUNITY ACCEPTABILITY OF ATTRACTIVE TARGETED SUGAR BAITS IN A CLUSTER RANDOMIZED CONTROLLED TRIAL IN WESTERN KENYA

**Caroline Ogwang**<sup>1</sup>, Teresa Bange<sup>1</sup>, Omollo Mevis<sup>1</sup>, Dominic Ouma<sup>1</sup>, Brian Seda<sup>1</sup>, Julia M. Janssen<sup>2</sup>, Jonathan S. Schultz<sup>3</sup>, Julie R. Gutman<sup>2</sup>, Aaron M. Samuels<sup>3</sup>, Simon Kariuki<sup>1</sup>, Feiko ter Kuile<sup>1</sup>, Sarah G. Staedke<sup>4</sup>, George Okello<sup>4</sup>

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### A SYSTEMATIC REVIEW OF THE COST OF DELIVERING SEASONAL MALARIA CHEMOPREVENTION

**Anika Ruisch**, Miranda Heilweil, Ishani Mathur, Sara Harris, Colin Gilmartin  
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### EQUITY IN ACCESS TO IPTP3+ AMONG WOMEN WHO ATTENDED ANC4 IN 12 SUB-SAHARAN COUNTRIES, BEFORE AND AFTER WHO RECOMMENDATION CHANGES

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### COMMUNITY-BASED STRATEGIES TO INCREASE UPTAKE OF INTERMITTENT PREVENTIVE TREATMENT IN PREGNANCY WITH SULFADOXINE-PYRIMETHAMINE IN SUB-SAHARAN AFRICA: A SYSTEMATIC REVIEW, META-ANALYSIS, META-ETHNOGRAPHY, AND ECONOMIC ASSESSMENT

**Kadiatou Koita**<sup>1</sup>, Kassoum Kayentao<sup>2</sup>, Eve Worrall<sup>1</sup>, Anna Maria Van Eijk<sup>1</sup>, Jenny Hill<sup>1</sup>

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### ASSESSMENT OF EPIDEMIOLOGIC IMPACT ON MALARIA FOLLOWING DRONE-BASED LARVICIDING WITH *BACILLUS THURIGIENSIS ISRAELENSIS* IN TWO DISTRICTS OF MADAGASCAR, 2022

**Anna B. Bowen**<sup>1</sup>, Sarah Zohdy<sup>2</sup>, Jean-Desire Rakotoson<sup>3</sup>, Laurent Kapesa<sup>4</sup>, Solofo Razakamiadana<sup>5</sup>, Omega Raobela<sup>6</sup>

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### THE EFFECT OF INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY (IPTP) ON THE MATERNAL INTESTINAL MICROBIOME AND ITS RELATIONSHIP WITH FETAL GROWTH

**Patricia J. Hunter**<sup>1</sup>, Dagmar G. Alber<sup>1</sup>, Jemima A. Hair<sup>1</sup>, Lily Gates<sup>1</sup>, Godwin Tembo<sup>2</sup>, Crispin Mukerebe<sup>3</sup>, Mwayiwawo Madanitsa<sup>4</sup>, Hellen C. Barsosio<sup>5</sup>, Daniel T. Minja<sup>6</sup>, John P. Lusingu<sup>6</sup>, Eric D. Onyango<sup>6</sup>, Jenny Hill<sup>7</sup>, James Dodd<sup>7</sup>, Ulla Ashorn<sup>8</sup>, Julie R. Gutman<sup>9</sup>, Nigel Klein<sup>1</sup>, Feiko O. ter Kuile<sup>5</sup>, Raymond M. Chico<sup>10</sup>

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### ANTIPLASMODIAL AND INSECTICIDAL ACTIVITIES OF THIRD GENERATION IVERMECTIN HYBRIDS

**Diana Fontinha**<sup>1</sup>, Parth Juneja<sup>2</sup>, Sofia Santana<sup>1</sup>, Catarina Rôla<sup>1</sup>, Carla Bastos Oliveira<sup>1</sup>, Miguel Prudêncio<sup>1</sup>, Kamaljit Singh<sup>2</sup>

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### ASSESSING THE 2023 SCHOOL-BASED INSECTICIDE-TREATED NET DISTRIBUTION IN KONO DISTRICT, SIERRA LEONE

**Keith Esch**<sup>1</sup>, Prince Owusu<sup>2</sup>, Frederick Yamba<sup>3</sup>, Raymond Sudoi<sup>4</sup>, Malia Skjefte<sup>5</sup>, Musa Sillah-Kanu<sup>6</sup>, Jenny Carlson<sup>6</sup>, Temitayo Labor<sup>7</sup>, Kevin Opondo<sup>8</sup>, Djenam Jacob<sup>9</sup>, Charlene Youssef<sup>10</sup>, Prince Nallo<sup>10</sup>, Elisabeth Tyler<sup>1</sup>, Stephen Poyer<sup>11</sup>

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### KNOWLEDGE, ATTITUDES, PRACTICES AND SATISFACTION OF DIGITAL PAYMENT BY OPERATORS OF THE INDOOR SPRAYING CAMPAIGN AGAINST MALARIA IN THE HEALTH DISTRICT OF KOUMPEPTOUM (SENEGAL)

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District sanitaire de Tambacounda, Tambacounda, Senegal

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### LEVERAGING COMMUNITY HEALTH WORKERS TO SUSTAIN UNIVERSAL BED NET COVERAGE IN RURAL UGANDA: A PILOT FEASIBILITY STUDY

Annika K. Gunderson<sup>1</sup>, Rapheal Mbusa<sup>2</sup>, Emmanuel Baguma<sup>2</sup>, Emmanuel Ayebare<sup>2</sup>, John Barber<sup>1</sup>, Moses Ntaro<sup>2</sup>, Edgar M. Mulogo<sup>2</sup>, Ross M. Boyce<sup>1</sup>

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### IMPLEMENTATION PERFORMANCE OF INSECTICIDE TREATED NET (ITN) DISTRIBUTION THROUGH THE HEALTH FACILITIES IN TANZANIA: FIVE YEARS OF EXPERIENCE (2018-2022)

Mponeja Gitanya<sup>1</sup>, Samuel Lazaro<sup>1</sup>, Charles Dismasi<sup>1</sup>, Hannah Koenker<sup>2</sup>, Matt Worges<sup>3</sup>, Benjamin Kamala<sup>4</sup>, Ruth Msolla<sup>4</sup>, Naomi Serbantez<sup>5</sup>, Israel P. Nyarubeli<sup>6</sup>, Heavenlight A. Paulo<sup>6</sup>, William Kisinza<sup>7</sup>, Johnson Matowo<sup>8</sup>

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### COMBINING SEASONAL MALARIA CHEMOPREVENTION WITH A MULTI-STAGE PRODUCT FOR MALARIA PREVENTION: A MATHEMATICAL MODELLING STUDY

Lydia Braunack-Mayer<sup>1</sup>, Josephine Malinga<sup>2</sup>, Narimane Nekkab<sup>1</sup>, Sherrie L. Kelly<sup>1</sup>, Melissa A. Penny<sup>2</sup>

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### IDENTIFICATION AND MAPPING AREAS WITH AN INCREASED RISK OF MALARIA TRANSMISSION AMONG HARD-TO-REACH HIGH-RISK GROUPS IN RWANDA

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### INSECTICIDE TREATED NET (ITN) TARGETED MASS CAMPAIGN (TMC) FOR MALARIA PREVENTION IN THE KAGERA REGION, TANZANIA: IMPLEMENTATION PROCESSES, OUTCOMES AND CHALLENGES

Benjamin Kamala<sup>1</sup>, Peter Gitanya<sup>2</sup>, Naomi Serbantez<sup>3</sup>, Lulu Msangi<sup>3</sup>, Dismass Charles Mwalimu<sup>2</sup>, Samuel Lazaro Nhiga<sup>2</sup>, David Dadi<sup>1</sup>, Dana Loll<sup>4</sup>, Ruth Msolla<sup>1</sup>

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### PREGNANCY DESIRES AND MALARIA PREVENTION IN SUB-SAHARAN AFRICA

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### ASSESSING MISSED OPPORTUNITIES IN ROUTINE LONG-LASTING INSECTICIDE-TREATED NETS DISTRIBUTION AMONG PREGNANT WOMEN ATTENDING PUBLIC HEALTH FACILITIES IN TARGETED COUNTIES IN KENYA

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### DETERMINANTS OF NON-USE OF LONG-LASTING INSECTICIDE-TREATED NETS (LLIN) AMONG MOTHERS OF CHILDREN UNDER 5 YEARS OLD: A SECONDARY ANALYSIS OF DATA FROM THE USAID NOTRE SANTÉ KNOWLEDGE ATTITUDES AND PRACTICES SURVEY

Datolo Kone<sup>1</sup>, Elizabeth Fitch<sup>2</sup>, Richard Reithinger<sup>3</sup>, Aguiima Tankoano<sup>1</sup>, Mohamed Keita Sitan<sup>1</sup>, Lamine Bangoura<sup>4</sup>, Eliane Mbounga<sup>4</sup>, Alioune Camara<sup>5</sup>, Sylvestre Sandouno<sup>1</sup>, Souleymane Berete<sup>1</sup>, Diallo Abdoulaye<sup>6</sup>

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### CHALLENGES IN ESTIMATING COVERAGE INDICATORS FOR PERENNIAL MALARIA CHEMOPREVENTION (PMC) WHEN COMBINING STANDARD ROLLOUT PLUS CATCH-UP APPROACHES: LESSONS LEARNED FROM PILOT IMPLEMENTATION IN DEMOCRATIC REPUBLIC OF CONGO (DRC)

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### QUALITY AND PERFORMANCE OF COMMUNITY-OWNED RESOURCE PERSONS FOR MALARIA COMMUNITY CASE MANAGEMENT (MCCM) IN HARD-TO-REACH COMMUNITIES IN TANZANIA, 2023

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### THE ECONOMIC BENEFITS OF INDOOR RESIDUAL SPRAYING IN RWAMAGANA DISTRICT, EASTERN PROVINCE, RWANDA

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### ASSESSING PATTERNS IN BEDNET USE USING ACCELEROMETER-BASED MONITORING IN COTE D'IVOIRE

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### ANALYZING THE IMPACT OF MALARIA PREVENTIVE INTERVENTION ON MALARIA TEST POSITIVITY RATES: A FOUR YEAR STUDY IN ADAMAWA STATE NIGERIA

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### RECONSIDERING INDOOR RESIDUAL SPRAYING COVERAGE TARGETS: LEVERAGING HIGH-RESOLUTION OBSERVATIONAL DATA FROM BIKO ISLAND TO ESTIMATE THE DOSE-RESPONSE CURVE

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### SEASONAL MALARIA CHEMOPREVENTION COVERAGE SURVEY STRATEGIES TO SUSTAIN HIGH COVERAGE THROUGHOUT CAMPAIGN ARE NEEDED BENIN 2023

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### ENHANCING OFFLINE DATA COLLECTION SYSTEMS THROUGH HYBRID DATA MANAGEMENT: INSIGHTS FROM THE BOHEMIA CLINICAL TRIAL

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### EVALUATING A PROGRAMMATIC MALARIA MASS DRUG ADMINISTRATION IN MOZAMBIQUE: MIXED-METHODS ANALYSIS OF OPERATIONAL PERFORMANCE

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### GENETIC LINKAGE OF DRUG RESISTANCE GENOTYPES TO CONTINENTS USING PFS47 AND PFCPMP FOR TRAVEL-ASSOCIATED PLASMODIUM FALCIPARUM MALARIA CASES WITH AN UNREPORTED TRAVEL HISTORY (USA, 2018-2021)

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### EFFECTS OF FACILITY BASED MALARIA SURVEILLANCE MONITORING AND EVALUATION MENTORSHIP MODEL ON DATA QUALITY IN KAKAMEGA COUNTY, KENYA

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### ANTI-MALARIAL DRUG RESISTANCE INTELLIGENT ADAPTIVE GEOSPATIAL SURVEILLANCE SYSTEM

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### GUIDING LOCALIZED SEASONAL MALARIA CHEMOPREVENTION STRATEGIES WITH ANTENATAL CARE-BASED MALARIA SURVEILLANCE IN TANZANIA

Joseph T. Hicks<sup>1</sup>, Frank Chacky<sup>2</sup>, Sijenunu Aaron<sup>2</sup>, Samwel L. Nhiga<sup>2</sup>, Julie R. Gutman<sup>3</sup>, Patrick GT Walker<sup>1</sup>  
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### FALSE ALARM ON A MALARIA “OUTBREAK” LINKED TO IRREGULARITIES IN MALARIA DIAGNOSTIC SUPPLY: A CALL TO STRENGTHEN SUPPLY CHAIN MANAGEMENT – SIERRA LEONE, MAY-AUGUST 2023

Timothy N. DeVita<sup>1</sup>, Aminata Kabia<sup>2</sup>, James A.M. Khobi<sup>2</sup>, Mugagga Malimbo<sup>3</sup>, Samba Kamara<sup>4</sup>, Bridget Magoba<sup>2</sup>, Gebrekrestos Gebru<sup>2</sup>, Anna Jammeh<sup>2</sup>, John Painter<sup>1</sup>, Thomas Ansumana<sup>5</sup>, Musa Sillah-Kanu<sup>6</sup>, David Schnabel<sup>6</sup>  
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### QUALITY OF MALARIA ROUTINE SURVEILLANCE DATA IN GHANA, 2023

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### TOWARD ZERO MALARIA IN THE DOMINICAN REPUBLIC: INTEGRATING IMPORTED INFECTIONS INTO SURVEILLANCE STRATEGIES

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### ASSESSMENT OF THE MALARIA SURVEILLANCE SYSTEM IN ELIMINATION-TARGETED NORTH BANK REGIONS, THE GAMBIA

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### PREGNANT WOMEN AS A SENTINEL POPULATION FOR GENETIC SURVEILLANCE OF MALARIA IN THE DEMOCRATIC REPUBLIC OF CONGO

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### IMPROVING THE APPROACH TO MONITOR AND REPORT ON COVERAGE OF MALARIA INTERMITTENT PREVENTIVE TREATMENT IN PREGNANCY: TIME FOR A RETHINK

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### MALARIA EPIDEMICS IN LOW AND VERY LOW BURDEN AREAS OF TANZANIA AND ALERT THRESHOLD SENSITIVITY FOR DISTRICT-LEVEL EPIDEMIC DETECTION, 2022-2023

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### MALARIA SURVEILLANCE DATA ANALYSIS, GA EAST MUNICIPALITY, GHANA, 2023

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### QUANTIFYING THE SUITABILITY OF WATERSHED-BASED AREAL UNITS FOR MALARIA MODELING IN THE PERUVIAN AMAZON REGION

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### CONSISTENT POST MARKETING SURVEILLANCE ASSURES QUALITY OF ANTIMALARIAL MEDICINES IN KENYA

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### IMPROVEMENTS IN INTERMITTENT PREVENTIVE TREATMENT FOR MALARIA IN PREGNANCY (IPTP) STOCK AND COVERAGE INDICATORS FOLLOWING DECENTRALIZATION OF SULFADOXINE-PYRIMETHAMINE (SP) PROCUREMENTS, TANZANIA, 2020-2023

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### TRENDS OF MALARIA BURDEN IN KENYA: MAPPING INCIDENCE TO TARGET INTERVENTIONS, 2019-2023

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### FINANCIAL AND ECONOMIC COSTS OF CARE FOR FEBRILE ILLNESS IN A MALARIA ENDEMIC REGION OF WESTERN KENYA - FINDINGS FROM A CROSS-SECTIONAL COMMUNITY SURVEY, 2022 - 2023

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**EXTERNAL VALIDITY OF BED NET INDICATOR ESTIMATES FROM RANDOM DIGIT DIAL MOBILE PHONE SURVEYS CONDUCTED IN TANZANIA**

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**SITUATIONAL ANALYSIS OF THE TOWNSHIP-LEVEL MALARIA SURVEILLANCE SYSTEM IN RAKHINE STATE AND TANINTHARYI REGION OF MYANMAR**

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**EVALUATING THE PERFORMANCE OF THE ECDS-MMS IN VIETNAM: A TAILORED MALARIA SURVEILLANCE ASSESSMENT STUDY**

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**HEALTH FACILITY LED DATA UTILIZATION TO SUPPORT IMPROVED COMMODITY AVAILABILITY AND SERVICE DELIVERY IN RESPONSE TO MALARIA EPIDEMICS IN BUKEDI REGION, UGANDA**

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**PERSPECTIVES OF KEY STAKEHOLDERS ON THE USE OF INFRARED SPECTROSCOPY FOR MALARIA SURVEILLANCE**

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**ACCURACY OF REPORTING OF MALARIA RAPID DIAGNOSTIC TESTS IN UGANDA**

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**SETTING UP A SUSTAINABLE ACTIVE SURVEILLANCE SYSTEM IN SOUTHERN ANGOLA: PROGRESS TOWARDS MALARIA ELIMINATION IN THE SOUTHERN AFRICA REGION**

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**INTRODUCTION OF THE RTS,S MALARIA VACCINE IN BURKINA FASO: RESULTS FROM THE FIRST SUPPORTIVE SUPERVISION**

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**PFS230D1 24- AND 60-COPY SINGLE COMPONENT MALARIA TRANSMISSION BLOCKING NANOPARTICLE VACCINES ELICIT A POTENT AND DURABLE RESPONSE UPON VACCINATION**

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**SINGLE IMMUNIZATION WITH GENETICALLY ATTENUATED PLASMODIUM FALCIPARUM ΔMEI2 (GA2) SPOOROZITES INDUCES HIGH LEVEL PROTECTION AGAINST A CONTROLLED HUMAN MALARIA INFECTION**

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**CHARACTERIZING THE SEROLOGICAL IGG REPERTOIRE OF TANZANIAN CHILDREN VACCINATED WITH NOVEL MALARIA BLOOD-STAGE CANDIDATE RH5.1/MATRIX-M ADJUVANT**

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Thursday  
November 14

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### VALIDATION OF CIRCULAR RNA VACCINE PLATFORM FOR MALARIA TRANSMISSION BLOCKING VACCINE

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### A WHOLE ORGANISM *PLASMODIUM VIVAX* BLOOD STAGE VACCINE PARTIALLY PROTECTS AOTUS MONKEYS AGAINST A HOMOLOGOUS EXPERIMENTAL INFECTION

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### ACCEPTABILITY AND FEASIBILITY OF ADMINISTERING RTS,S/AS01 MALARIA VACCINE TO SCHOOL-AGED CHILDREN IN SOUTHERN MALAWI

Blessings N. Kaunda-Khangamwa<sup>1</sup>, Linda A. Nyondo Mipando<sup>2</sup>, Christopher C. Stanley<sup>1</sup>, Mark L. Wilson<sup>3</sup>, Terrie Taylor<sup>4</sup>, Tabither Kaunda<sup>1</sup>, Lauren M. Cohee<sup>5</sup>, Clarissa Valim<sup>6</sup>, Don P. Mathanga<sup>1</sup>

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### IN-SILICO ANALYSIS OF *PLASMODIUM FALCIPARUM* SURFACE PROTEINS AND MONOCLONAL ANTIBODIES TO DESIGN MALARIA VACCINE

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### ASSESSMENT OF PARENTAL/CAREGIVER PERCEPTION AND ACCEPTANCE OF THE MALARIA VACCINE IN A CONFLICT-AFFECTED REGION IN CAMEROON

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### PHASE 1A CLINICAL TRIAL OF SAFETY AND IMMUNOGENICITY OF RH5.1 AND R78C WITH MATRIX-M™ ADJUVANT IN UK ADULTS - A NOVEL COMBINATION VACCINE CANDIDATE AGAINST THE *P. FALCIPARUM* BLOOD-STAGE RCR INVASION COMPLEX

Jo Salkeld<sup>1</sup>, Dimitra Pipini<sup>1</sup>, Andrew DS Duncan<sup>1</sup>, Melanie Etti<sup>1</sup>, Megan Baker<sup>1</sup>, Nicola Greenwood<sup>1</sup>, Barnabas G. Williams<sup>1</sup>, Lloyd DW King<sup>1</sup>, Ababacar Diouf<sup>2</sup>, Cassandra A. Rigby<sup>1</sup>, Doris Quinkert<sup>1</sup>, Cecilia Carnrot<sup>3</sup>, Alison M. Lawrie<sup>1</sup>, Katherine Skinner<sup>1</sup>, Rachel E. Cowan<sup>1</sup>, Jee-Sun Cho<sup>1</sup>, Carole A. Long<sup>2</sup>, Carolyn M. Nielsen<sup>1</sup>, Kazutoyo Miura<sup>2</sup>, Sarah E. Silk<sup>1</sup>, Simon J. Draper<sup>1</sup>, Angela M. Minassian<sup>1</sup>

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### PRE-CLINICAL AND CLINICAL EFFICACY OF ATTENUATED AND KILLED WHOLE PARASITE MALARIA BLOOD STAGE VACCINES TO LIMIT DISEASE

Danielle I. Stanisic<sup>1</sup>, Winter A. Okoth<sup>1</sup>, Takashima Eizo<sup>2</sup>, Tsuboi Takafumi<sup>2</sup>, Mei-Fong Ho<sup>1</sup>, Kylie Alcorn<sup>3</sup>, James Beeson<sup>4</sup>, Moses Lee<sup>5</sup>, Terry Spithill<sup>6</sup>, James Fink<sup>3</sup>, Kim-Lee Sim<sup>7</sup>, Steve Hoffman<sup>7</sup>, John Gerrard<sup>8</sup>, Michael F. Good<sup>1</sup>

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### IN SILICO EVALUATION OF PREDICTED *PLASMODIUM FALCIPARUM* EPITOPES IN LEADING VACCINE CANDIDATE ANTIGENS

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### IMV: INNOVATIONS IN MALARIA VACCINE DEVELOPMENT PROGRAM

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### HEALTH SYSTEMS CAPACITY STRENGTHENING FOR MENINGITIS SURVEILLANCE AND SAFETY SIGNALS MONITORING: LESSONS FROM THE RTSS/AS01 MALARIA VACCINE PILOT EVALUATION IN GHANA

Samuel Ekow Bernard Harrison<sup>1</sup>, Thomas Gyan<sup>1</sup>, Eliezer Odei-Lartey<sup>1</sup>, Justice Sylverkin<sup>2</sup>, Dennis Adu-Gyasi<sup>1</sup>, Nana Buabeng Yiadom<sup>3</sup>, Albert Dornudo-Agordo<sup>3</sup>, Lawrence Osei-Tutu<sup>2</sup>, Tsiri Agbenyega<sup>3</sup>, Daniel Ansong<sup>2</sup>, Kwaku Poku-Asante<sup>1</sup>

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### CHARACTERIZATION OF THE IMMUNE RESPONSES INDUCED BY THE *PLASMODIUM FALCIPARUM* BLOOD-STAGE VACCINE CANDIDATE, RH5.1/MATRIX M™, IN A PHASE IIB TRIAL IN BURKINABE 5-17MONTH OLDS

Sarah E. Silk<sup>1</sup>, Dimitra Pipini<sup>1</sup>, Ousmane Traoré<sup>2</sup>, Magloire Natama<sup>2</sup>, Jo Salkeld<sup>1</sup>, Athanase Somé<sup>2</sup>, Seyi Soremekun<sup>3</sup>, Ababacar Diouf<sup>4</sup>, Toussaint Rouamba<sup>2</sup>, Florence Ouedraogo<sup>2</sup>, Salou Diallo<sup>2</sup>, Massa dit Achille Bonko<sup>2</sup>, Hermann Sorgho<sup>2</sup>, Umesh Shaligram<sup>5</sup>, Jee-Sun Cho<sup>1</sup>, Alison M. Lawrie<sup>1</sup>, Katherine Skinner<sup>1</sup>, Rachel Roberts<sup>1</sup>, Carolyn M. Nielsen<sup>1</sup>, John Bradley<sup>3</sup>, Carole A. Long<sup>4</sup>, Kazutoyo Miura<sup>4</sup>, Simon J. Draper<sup>1</sup>, Angela M. Minassian<sup>1</sup>, Halidou Tinto<sup>2</sup>

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### CREATING SUPERIOR PFSPZ VACCINES FOR MALARIA BY GENETICALLY CROSSING WEST AND EAST AFRICAN *PLASMODIUM FALCIPARUM* TO PRODUCE PFSPZ WITH GREATER ANTIGENIC DIVERSITY AND POTENCY

B. Kim Lee Sim<sup>1</sup>, Lucia Pazzagli<sup>2</sup>, Bethany Jenkins<sup>1</sup>, Ankit Dwivedi<sup>3</sup>, Asha Patil<sup>1</sup>, Yonas Abebe<sup>1</sup>, Ehud Inbar<sup>1</sup>, Manuel Llinas<sup>4</sup>, Stephen L. Hoffman<sup>1</sup>, Joana Carneiro da Silva<sup>3</sup>, Ashley M. Vaughan<sup>2</sup>

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### IMPLEMENTATION COSTS OF A SCHOOL-BASED RTS,S/AS01 MALARIA VACCINATION PROGRAM IN MALAWI

Jobiba Chinkhumba<sup>1</sup>, Saviour Mphande<sup>1</sup>, Tabitha Kaunda<sup>1</sup>, Christopher Stanley<sup>1</sup>, Harrison Msuku<sup>1</sup>, Clarissa Valim<sup>2</sup>, Terrie Taylor<sup>3</sup>, Don Mathanga<sup>1</sup>

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### RHESUS MODELS FOR PRE-ERYTHROCYTIC STAGE SPOOROZOITE VACCINES AGAINST MALARIA

Sumana Chakravarty<sup>1</sup>, Natasha KC<sup>1</sup>, Jonathan Herman<sup>2</sup>, Brandon Wilder<sup>3</sup>, Stephen L. Hoffman<sup>1</sup>

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### PFSPZ VACCINE ELICITS PFCSP ANTIBODIES THAT CROSS-REACT WITH OTHER *P. FALCIPARUM* PROTEINS AND CORRELATE WITH PROTECTION FROM MALARIA

Andrea A. Berry<sup>1</sup>, Olukemi O. Ifeonu<sup>1</sup>, DeAnna J. Friedman-Klabanoff<sup>1</sup>, Jozelyn Pablo<sup>2</sup>, Andy Teng<sup>2</sup>, Adam D. Shandling<sup>1</sup>, Sumana Chakravarty<sup>3</sup>, Richard S. Pinapati<sup>4</sup>, Jigar J. Patel<sup>4</sup>, John C. Tan<sup>4</sup>, Xiaowu Liang<sup>2</sup>, Philip L. Felgner<sup>5</sup>, Mark A. Travassos<sup>1</sup>, Matthew B. Laurens<sup>1</sup>, Christopher V. Plowe<sup>1</sup>, Shannon Takala Harrison<sup>1</sup>, Azza H. Idris<sup>6</sup>, Robert A. Seder<sup>6</sup>, Stephen L. Hoffman<sup>1</sup>, Kirsten E. Lyke<sup>1</sup>, Joseph J. Campo<sup>2</sup>

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## Bacteriology - Enteric Infections

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### RESULTS FROM A PHASE III STUDY TO ASSESS THE SAFETY, IMMUNE RESPONSE, AND LOT-TO-LOT CONSISTENCY OF EUTCV SINGLE-DOSE AND MULTI-DOSE FORMULATION COMPARED TO THE COMPARATOR VACCINE TYPBAR-TCV® IN HEALTHY AFRICAN ADULTS AND YOUNG CHILDREN 6 MONTHS TO 45 YEARS OF AGE

Birahim Pierre Ndiaye<sup>1</sup>, Lucy Koech<sup>2</sup>, Ndeye Sakha Bob<sup>3</sup>, Niles Eaton<sup>4</sup>, Winnie Keter<sup>2</sup>, Siry Diye<sup>1</sup>, Badara Cissé<sup>1</sup>, Vajra Allan<sup>4</sup>, Yeong Ok Baik<sup>5</sup>, Chankyu Lee<sup>5</sup>, Howard Her<sup>5</sup>, Sookyoung Kim<sup>5</sup>, YoungJin Choi<sup>5</sup>, Moussa Dia<sup>6</sup>, Emily Locke<sup>7</sup>, Gamou Fall<sup>6</sup>, John J. Aponte<sup>8</sup>, Patricia Njuguna<sup>9</sup>

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### MOLECULAR CHARACTERIZATION OF MULTIDRUG RESISTANCE *E. COLI* RECOVERED FROM DIARRHEAGENIC CHILDREN UNDER FIVE YEARS FROM MUKURU INFORMAL SETTLEMENT, NAIROBI, KENYA, BASED ON WGS ANALYSIS

Susan W. Kiiru, Purity Kasiano, John Mwaniki, Samuel Kariuki  
Kenya Medical Research Institute, Nairobi, Kenya

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### ASSOCIATION OF GUT REDOX POTENTIAL WITH SEVERE ACUTE MALNUTRITION AND STUNTING IN HOSPITALIZED CHILDREN

Md. Shabab Hossain  
International Centre for Diarrhoeal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh

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### GENOTYPIC DIVERSITY AND ANTIMICROBIAL RESISTANCE DETERMINANTS IN *SALMONELLA* TYPHI ISOLATED FROM CHILDREN LIVING IN INFORMAL SETTLEMENTS IN NAIROBI, KENYA

Susan K. Kavai<sup>1</sup>, Julius Oyugi<sup>2</sup>, Cecilia M. Mbae<sup>1</sup>, Sylvia Omulo<sup>2</sup>, Samuel M. Kariuki<sup>1</sup>  
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### SEROCONVERSION AND KINETICS OF VIBRIOCIDAL ANTIBODIES DURING THE FIRST 90 DAYS OF RE-VACCINATION WITH ORAL CHOLERA VACCINE IN AN ENDEMIC POPULATION

Caroline C. Chisenga<sup>1</sup>, Bernard Phiri<sup>1</sup>, Harriet Ngombe<sup>1</sup>, Mutinta Muchimba<sup>1</sup>, Kalo musukuma Chifulo<sup>1</sup>, Suwilanji Silwamba<sup>1</sup>, Natasha Makabilo Laban<sup>1</sup>, Charlie Luchen<sup>1</sup>, Fraser Liswaniso<sup>1</sup>, Kennedy Chibesa<sup>1</sup>, Cynthia Mubanga<sup>1</sup>, Kapambwe Mwape<sup>1</sup>, Michelo Simuyandi<sup>1</sup>, Adam Cunningham<sup>2</sup>, David Sack<sup>3</sup>, Samuel Bosomprah<sup>1</sup>

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### ETIOLOGY OF DIARRHEAL DISEASE CAUSING SEVERE DEHYDRATION IN INFANTS AND YOUNG CHILDREN RESIDING IN LOW AND MIDDLE INCOME COUNTRIES

Anna Jones<sup>1</sup>, Sharia M. Ahmed<sup>1</sup>, Ashraful I. Khan<sup>2</sup>, Karen L. Kotloff<sup>3</sup>, James A. Platts-Mills<sup>4</sup>, Eric F. Nelson<sup>5</sup>, Daniel T. Leung<sup>1</sup>

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### ANTIRADICAL SCAVENGING AND UREASE INHIBITION POTENTIALS OF *DICTYOPHLEBA SETOSA* (APOCYNACEAE) AND ISOLATION OF ITS CHEMICAL CONSTITUENTS TOWARDS MANAGEMENT OF GASTRIC AND PEPTIC ULCERS CAUSED BY *HELICOBACTER PYLORI* ACTIVITIES

AKUMA MICHAEL NDE<sup>1</sup>, Pantaleon Ambassa<sup>1</sup>, Bathelemy Ngameni<sup>1</sup>, Mehmet Emin Duru<sup>2</sup>

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Candace McAlester, Susan Ngunjiri, Joyce Ighedosa, Elijah Akpomrughe, Jas Dadhra, Patricia Sviech, Valeria Gomez

ExxonMobil Corp, Spring, TX, United States

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### THE VALIDATION OF A LOW COST STOOL SPECIMEN PRESERVATION METHOD, COMPARING TIME AND TEMPERATURE STORAGE CONDITIONS

Amanda K. Debes<sup>1</sup>, Jamie Perin<sup>1</sup>, Jie Liu<sup>2</sup>, Wensheng Luo<sup>1</sup>, David A. Sack<sup>1</sup>, Nicola Page<sup>3</sup>, Camille Williams<sup>1</sup>

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### ANTIMICROBIAL RESISTANCE AND INTESTINAL SHEDDING OF NONTYPHOIDAL *SALMONELLA* AMONG CHILDREN UNDER FIVE YEARS AND CARRIAGE IN ASYMPTOMATIC HOSTS IN KENYA

Kelvin Kimutai Kering<sup>1</sup>, Celestine Wairimu<sup>1</sup>, Georgina Odityo<sup>1</sup>, Kariuki Njaanake<sup>2</sup>, Marianne Mureithi<sup>2</sup>, Cecilia Mbae<sup>1</sup>, Samuel Kariuki<sup>1</sup>

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### THE ROLE OF FERMENTED PICKLE CONSUMPTION ON THE GUT MICROBIOME OF WOMEN OF REPRODUCTIVE AGE IN RURAL PAKISTAN

Sumbal Hafeez Haris, Najeeha Iqbal, Aqsa Khalid, Juanid Iqbal, Sheraz Ahmed, Furqan Kabir, Syed Asad Ali

Aga Khan University, Karachi, Pakistan

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### MISSED OPPORTUNITIES OF SYNDROME-BASED DIARRHEA MANAGEMENT GUIDELINES TO DETECT NON-DYSENTERIC *SHIGELLA* INFECTIONS IN KENYAN CHILDREN: FINDINGS FROM THE ENTERICS FOR GLOBAL HEALTH -*SHIGELLA* SURVEILLANCE STUDY, 2022-2024

Alex Ondeng Awuor<sup>1</sup>, Alex Ondeng Awuor<sup>1</sup>, Richard O. Omoro<sup>1</sup>, Billy Ogwel<sup>1</sup>, Patricia B. B. Pavlinac<sup>2</sup>, Hannah E. Atlas<sup>3</sup>, Sharon M. Tennant<sup>4</sup>, Karen Kotloff<sup>5</sup>, John B. Ochieng<sup>1</sup>, Sean R. R. Galagan<sup>6</sup>

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### DEVELOPMENT OF A RAPID, PORTABLE PCR ASSAY FOR *SHIGELLA* SEROTYPING

Fahad Khokhar<sup>1</sup>, Vignesh Shetty<sup>2</sup>, Madhumathi Irulappan<sup>3</sup>, Dhivya Murugan<sup>3</sup>, Agila Pragasam<sup>3</sup>, Jobin J. John<sup>3</sup>, Balaji Veeraraghavan<sup>3</sup>, Xiaoliang Ba<sup>1</sup>, Ankur Mutreja<sup>1</sup>, Hilary MacQueen<sup>4</sup>, Sushila Rigas<sup>4</sup>, Kate S. Baker<sup>1</sup>, Mark Holmes<sup>1</sup>

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### ANTIBACTERIAL ACTIVITY OF *CORRYOCACTUS BREVISTYLUS* (SANKY) METHANOL EXTRACT AGAINST *STAPHYLOCOCCUS AUREUS* AND *ENTEROCOCCUS FAECALIS*

Ronald Aquino-Ortega<sup>1</sup>, Hugo Carrillo-Ng<sup>1</sup>, Luz M. Paucar-Menacho<sup>2</sup>, Miguel A. Aguilar-Luis<sup>1</sup>, Wilmer Silva-Caso<sup>1</sup>, Juana del Valle-Mendoza<sup>3</sup>

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## Bacteriology - Other Bacterial Infections

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### THE INTRICATE RELATIONSHIP OF G-QUADRUPLEXES AND PATHOGENICITY ISLANDS

Bo Lyu, Qisheng Song

University of Missouri, Columbia, MO, United States

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### WHOLE GENOME SEQUENCING OF A *CRONOBACTER SAKAZAKII* ST8 STRAIN ISOLATED FROM SPICE POWDER

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Nonlawat Boonyalai, Nattaya Ruamsap, Dutsadee Peerapongpaisarn, Chatchadaporn Thamnurak, Wilawan Oransathid, Nantanut Wongpatcharamongkol, Wirete Oransathid, Woradee Lurchachaiwong, John Griesenbeck, Norman Waters, Samandra Demons, Brian Andrew Vesely

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Jesus D. Rojas<sup>1</sup>, Enrique Canal<sup>2</sup>, Manuela Bernal<sup>2</sup>, Tyler D. Moeller<sup>2</sup>, Paul Rios<sup>2</sup>

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Alastair Fung<sup>1</sup>, Cole Heasley<sup>1</sup>, Lisa G. Pell<sup>1</sup>, Diego G. Bassani<sup>1</sup>, Prakesh S. Shah<sup>2</sup>, Shaun K. Morris<sup>1</sup>, Davidson H. Hamer<sup>3</sup>, Mohammad Shahidul Islam<sup>4</sup>, Abdullah Mahmud<sup>5</sup>, Eleanor Pullenayegum<sup>1</sup>, Samir K. Saha<sup>4</sup>, Rashidul Haque<sup>6</sup>, Iqbal Hossain<sup>6</sup>, Chun-Yuan Chen<sup>1</sup>, Abby Emdin<sup>7</sup>, Karen M. O'Callaghan<sup>8</sup>, Miranda G. Loutet<sup>1</sup>, Shamima Sultana<sup>5</sup>, S. M. Masum Billah<sup>5</sup>, S. M. Abdul Gaffar<sup>5</sup>, Enamul Karim<sup>5</sup>, Sharika Sayed<sup>5</sup>, Shafiqul A. Sarker<sup>5</sup>, Daniel E. Roth<sup>1</sup>

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Tahaniyat Lalani<sup>1</sup>, Adam Maier<sup>2</sup>, Claire Kuo<sup>1</sup>, Derek Larson<sup>2</sup>, David Tribble<sup>1</sup>

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### CLINICAL PRESENTATION, TREATMENT, AND OUTCOMES OF NEUROCYSTICERCOSIS AT AN ACADEMIC MEDICAL CENTER IN THE STATE OF FLORIDA, USA

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Melvin K. Agbogbately<sup>1</sup>, Benno Kreuels<sup>2</sup>, Kwaku I. Duah<sup>1</sup>, Leslie M. Aglanu<sup>1</sup>, Jacqueline G. Asibey<sup>2</sup>, Jade Rae<sup>2</sup>, Jurgen May<sup>2</sup>, John H. Amuasi<sup>1</sup>

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Gordon Kwasi Ampomah Amoh<sup>1</sup>, Beatrice S. Omidij<sup>2</sup>, Joyce O. Inoni<sup>1</sup>, Priscilla N. E. W. Vanduyck-Sey<sup>1</sup>

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Nginache Nampota-Nkomba<sup>1</sup>, Oswald M. Nyirenda<sup>2</sup>, Victoria Mapemba<sup>2</sup>, Priyanka D. Patel<sup>3</sup>, Happy C. Banda<sup>3</sup>, Felistas Mwakiseghile<sup>3</sup>, Theresa Misiri<sup>3</sup>, Richard Wachepa<sup>3</sup>, John Ndaferankhande<sup>3</sup>, Bright Lipenga<sup>3</sup>, Robert S. Heyderman<sup>4</sup>, Marcela Pasetti<sup>1</sup>, Leslie P. Jamka<sup>1</sup>, Shrimati Datta<sup>1</sup>, Melita A. Gordon<sup>3</sup>, Matthew B. Laurens<sup>1</sup>, Kathleen M. Neuzil<sup>1</sup>

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### SUCCESSFUL CHAGAS SCREENING PROGRAM IN OBSTETRIC PATIENTS IN A FEDERALLY QUALIFIED HEALTH CENTER IN NEW YORK

Nancy Piper Jenks<sup>1</sup>, Quratulain Zeeshan<sup>1</sup>, Vasanthi Arumugan<sup>1</sup>, Aarathi Nagaraja<sup>1</sup>, Iris Arzu<sup>1</sup>, Sristi Shrestha<sup>1</sup>, Christina Coyle<sup>2</sup>

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Carla Johnson<sup>1</sup>, Brenda Karumbo<sup>1</sup>, Dagmara McGuinness<sup>1</sup>, Yoana Doncheva<sup>1</sup>, Andrew Cameron<sup>1</sup>, Kevin Couper<sup>2</sup>, Peter Bankhead<sup>3</sup>, Nigel Jamieson<sup>1</sup>, Christopher Moxon<sup>1</sup>

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Molly B. Klarman<sup>1</sup>, Xiaofei Chi<sup>1</sup>, Youseline Cajusma<sup>1</sup>, Katelyn E. Flaherty<sup>1</sup>, Jude Ronald Beausejour<sup>1</sup>, Lerby Exantus<sup>2</sup>, Valery M. Beau de Rochars<sup>1</sup>, Torben K. Becker<sup>1</sup>, Chantale Baril<sup>2</sup>, Matthew J. Gurka<sup>3</sup>, Eric J. Nelson<sup>1</sup>

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### EXPLORING THE IMPACT OF HELMINTH CO-INFECTIONS ON SARS-COV-2 INFECTION DYNAMICS AND IMMUNE RESPONSE: A RETROSPECTIVE COHORT STUDY IN AN AFRICAN POPULATION

Brice Armel Nembot Fogang<sup>1</sup>, Linda Batsa Debrah<sup>1</sup>, Michael Owusu<sup>2</sup>, Adjobimey Tomabu<sup>3</sup>, Achim Hoerauf<sup>3</sup>, Alexander Yaw debrah<sup>4</sup>

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### MULTIPLE PELVIC CONDYLOMATOUS MASSES IN AN AFRICAN CHILD

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### NOT ALL SEVERE MALARIA CASES ARE SEVERE: IS IT TIME TO REDEFINE SEVERITY CRITERIA FOR MALARIA IN NON-ENDEMIC REGIONS

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### FIELD EVALUATION OF A NOVEL SEMI-QUANTITATIVE POINT-OF-CARE DIAGNOSTIC FOR G6PD DEFICIENCY IN INDONESIA

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### CHARACTERIZATION OF MORTALITY AMONG CHILDREN ADMITTED TO A RURAL MOZAMBICAN DISTRICT HOSPITAL: 22 YEARS OF CONTINUOUS HOSPITAL-BASED MORBIDITY SURVEILLANCE

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### ANTIBODY-OMICS REVEALS DISTINCT IMMUNOLOGICAL SIGNATURES IN LEPROSY PATIENTS AND THEIR HOUSEHOLD CONTACTS

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## Helminths – Nematodes – Filariasis (Diagnostics and Therapeutics)

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### DISSECTING THE DIAGNOSTIC PERFORMANCE OF THE ALERE FILARIASIS TEST STRIP FOR THE DETECTION OF ACTIVE WUCHERERIA BANCROFTI INFECTION AND TREATMENT SUCCESS

John Opoku<sup>1</sup>, Linda Batsa Debrah<sup>2</sup>, Stefan Schlabe<sup>3</sup>, Jubin Osei-Mensah<sup>2</sup>, Vera Serwaa Opoku<sup>1</sup>, Derrick Adu Mensah<sup>1</sup>, Kenneth Pfarr<sup>3</sup>, Patricia Jebett Korir<sup>3</sup>, Achim Hoerauf<sup>3</sup>, Ute Klarmann-Schulz<sup>3</sup>, Alexander Yaw Debrah<sup>2</sup>

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### COMPARATIVE ANALYSIS OF THE OV16 ENZYME LINKED IMMUNOSORBENT ASSAY AND THE OV16 RAPID DIAGNOSTIC TEST FOR THE MAPPING OF ONCHOCERCIASIS AND THE DISCONTINUATION OF MASS DRUG ADMINISTRATION

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### FOCAL SPLEEN LESIONS IN LOIASIS: THE SPLOA PILOT STUDY IN GABON

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### ELIMINATION GOALS FOR ONCHOCERCIASIS CAN BE PROGRESSED FASTER BY INCORPORATING TREATMENT WITH REPURPOSED DRUGS THAT TARGET VARIOUS STAGES OF FILARIAL WORMS

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### EVALUATION OF A NOVEL BIPLEX RAPID DIAGNOSTIC TEST FOR ANTIBODY RESPONSES TO LOA LOA AND ONCHOCERCA VOLVULUS INFECTIONS

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### RANDOMIZED, DOUBLE-BLIND TRIAL EVALUATING THE SAFETY AND EFFICACY OF A 3- OR 5-DAY COURSE OF LEVAMISOLE (2.5 MG/KG) IN SUBJECTS WITH LOA LOA MICROFILARAEMIA

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### PROVIDING EVIDENCE ON THE STATUS OF TRANSMISSION OF ONCHOCERCIASIS IN 5 COUNTIES IN LIBERIA

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### DEVELOPMENT OF A SIMPLE AND SENSITIVE SPLINTR LIGASE MEDIATED MICRORNA DETECTION METHOD FOR FILARIAL MIR71 AND BANTAM

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### PERFORMANCE OF ELISAS BASED ON CHIMERIC PROTEINS TO DETECT ANTIBODY TO ONCHOCERCA VOLVULUS INFECTION

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## DEVELOPMENT OF A NEW RAPID DIAGNOSTIC TEST TO SUPPORT ONCHOCERCIASIS ELIMINATION

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## MAMMALIAN EXPRESSED OV16 ELISA PERFORMANCE ON GHANA PROGRAM SAMPLES IN COMPARISON TO ELUTED DRIED BLOOD SPOT ON OV16 RAPID DIAGNOSTIC TEST

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## WHO LABORATORY CAPACITY REVIEW TOOL FOR ONCHOCERCIASIS

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## SAFETY OF A SINGLE DOSE OF MOXIDECTIN AND OF IVERMECTIN: FIRST RESULTS OF A LARGE STUDY IN INDIVIDUALS LIVING IN AN ONCHOCERCIASIS ENDEMIC AREA OF THE DEMOCRATIC REPUBLIC OF CONGO AND IN AN ONCHOCERCIASIS-LYMPHATIC FILARIASIS CO-ENDEMIC AREA IN CÔTE D'IVOIRE

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## FEASIBILITY OF A NOVEL ONCHOCERCIASIS RAPID DIAGNOSTIC TEST IN MARIDI, SOUTH SUDAN

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## A ROBOTIC AI MICROSCOPE FOR AUTONOMOUS FILARIASIS QUANTIFICATION BASED ON SMARTPHONES AND OPTICAL MICROSCOPY

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## PREGNANCY, ONCHOCERCA VOLVULUS INFECTION AND IVERMECTIN USE: A CROSS-SECTIONAL STUDY

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## PRE-CLINICAL DEVELOPMENT OF THE ANTI-WOLBACHIAL DRUG CORALLOPYRONIN A TO TREAT FILARIAES: END RUN TO PHASE 1 TRIAL

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## Helminths – Nematodes – Intestinal Nematodes

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### PERFORMANCE OF QUANTITATIVE PCR FOR THE DETECTION OF SOIL-TRANSMITTED HELMINTHS IN COMPARISON TO KATO-KATZ PRECEDING AND FOLLOWING COMMUNITY-WIDE MASS DRUG ADMINISTRATION IN TAMIL NADU, INDIA

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(ACMCIP Abstract)

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### STATUS OF SOIL TRANSMITTED HELMINTHIASIS AND THEIR RISK-FACTORS AMONG SCHOOL PUPILS AND NOMADIC -FULANIS IN SELECTED COMMUNITIES IN OSUN-STATE, SOUTHWEST, NIGERIA

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(ACMCIP Abstract)

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### EVALUATION OF *STRONGYLOIDES STERCORALIS* SS-IR RECOMBINANT ANTIGEN FOR DIAGNOSTIC AND SURVEILLANCE USING A BEAD-BASED IMMUNOASSAY

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(ACMCIP Abstract)

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### EUKARYOTIC ENTERIC PATHOGENS RELATIONSHIP WITH THE GUT FUNGAL COMMUNITY IN MALIAN CHILDREN

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### PHARMACOPHORE APPROACH TO THE PREDICTION OF ACTIVATORS OF DAF-12 RECEPTOR TO DEACTIVATE AUTO-INFECTION LIFE CYCLE STAGE OF *STRONGYLOIDES STERCORALIS*

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(ACMCIP Abstract)

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### EFFECT OF KNOWLEDGE, AWARENESS AND PARTICIPATION ON SUSTAINED REDUCTION OF SOIL-TRANSMITTED HELMINTH INFECTIONS AMONG SCHOOL-AGE CHILDREN IN RIVERS STATE NIGERIA

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(ACMCIP Abstract)

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### A TWO-PRONGED BIG DATA APPROACH TO CRITICALLY ANALYZE *STRONGYLOIDES STERCORALIS* INFECTIONS AMONG RURAL, IMPOVERISHED SOUTH CAROLINA RESIDENTS

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(ACMCIP Abstract)

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### APPLICATION OF QPCR TO DETERMINE COMMUNITY PREVALENCE OF *STRONGYLOIDES STERCORALIS* IN SOUTHERN INDIA

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(ACMCIP Abstract)

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### IMPACT OF PREVENTIVE CHEMOTHERAPY ON THE STATUS OF SOIL-TRANSMITTED HELMINTHIASIS ACROSS THREE IMPLEMENTATION UNITS IN ONDO STATE, NIGERIA

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### RESISTANCE OF SOIL TRANSMITTED HELMINTHS TO SINGLE DOSE ALBENDAZOLE AND RESULTS OF COMBINED THERAPY WITH ALBENDAZOLE AND IVERMECTIN IN CHILDREN AGED 2 TO 11 YEARS IN THE PERUVIAN AMAZON

Paul Francis Garcia Bardales<sup>1</sup>, Greisi Curico Huanci<sup>2</sup>, Tackeshy N. Pinedo Vazquez<sup>1</sup>, Wagner V. Shapiama Lopez<sup>1</sup>, Maribel Paredes Olortegui<sup>1</sup>, Francesa Schiaffino<sup>3</sup>, Pablo Penataro Yori<sup>4</sup>, Josh M. Colston<sup>4</sup>, Thomas G. Flynn<sup>4</sup>, Graciela R. Meza Sánchez<sup>2</sup>, Hermann F. Silva Delgado<sup>5</sup>, Richard A. Oberhelman<sup>6</sup>, Margaret N. Kosek<sup>7</sup>

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(ACMCIP Abstract)

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### IDENTIFICATION OF NOVEL BIOMARKERS FOR SEROSURVEILLANCE OF HUMAN HOOKWORM INFECTIONS

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(ACMCIP Abstract)

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### SOIL-TRANSMITTED HELMINTHS (STHS) IDENTIFIED IN ENVIRONMENTAL SAMPLES (SOIL AND FECAL MATTER) COLLECTED FROM SOME PRIMARY SCHOOLS IN GHANA

Lordina Nkansah-Gyan, Papa Kofi Amisssah-Reynolds, Victor Agyei, Opoku Gyamfi, Philip Ofori Asante, Edward Ankapong, Frank Essem, Kofi Agyapong Addo Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, Kumasi, Ghana

(ACMCIP Abstract)

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### SEROPREVALENCE AND ASSOCIATED FACTORS OF STRONGYLOIDES STERCORALIS INFECTION AMONG AT-RISK POPULATION IN NORTHERN TAIWAN

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### HIGH PREVALENCE OF INTESTINAL PARASITES AMONG ADULTS LIVING IN 36 VILLAGES IN NORTHERN GABON AND RELATIONSHIP WITH BODY MASS INDEX : CROSS-SECTIONAL STUDY

Noé Patrick M'Bondoukwé<sup>1</sup>, Luccheri Ndong Akomezoghe<sup>1</sup>, Jacques Mari Ndong Ngomo<sup>2</sup>, Roger Haldry Sibi Matotou<sup>1</sup>, Mérédith Flore Ada Mengome<sup>1</sup>, Valentin Migueba<sup>1</sup>, Bridy Chelsy Moutombi Ditombi<sup>1</sup>, Coella Joyce Mihindou<sup>1</sup>, PHYLECOG PARCAM team<sup>1</sup>, Denise Patricia Mawili Mboumba<sup>1</sup>, Marielle Karine Bouyou Akotet<sup>1</sup>

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### THE OCCURRENCE OF CROSS-HOST SOIL TRANSMITTED HELMINTH (ASCARIS, TRICHURIS AND ANCYLOSTOMA SPP.) INFECTIONS IN HUMANS AND DOMESTIC/LIVESTOCK ANIMALS: A SYSTEMATIC REVIEW

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(ACMCIP Abstract)

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### ENVIRONMENTAL SURVEILLANCE TOOLS FOR MONITORING COMMUNITY-LEVEL SOIL-TRANSMITTED HELMINTH PREVALENCE

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(ACMCIP Abstract)

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### TARGET MOLECULES OF BACILLUS THURINGIENSIS CRYSTAL PROTEINS AND ANTHELMINTHIC COMPOUNDS IN C. ELEGANS

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### CHARACTERIZING GENETIC DIVERSITY AND POPULATION STRUCTURE OF HUMAN HOOKWORMS USING WHOLE GENOME DATA FROM ACCESSIBLE SAMPLE TYPES

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### PREVALENCE AND RISK FACTORS OF SOIL-TRANSMITTED HELMINTH INFECTIONS AMONG SCHOOL CHILDREN IN BIKO NORTE PROVINCE, EQUATORIAL GUINEA

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### INOCULUM DEPENDENT ANEMIA AND HUMORAL IMMUNE RESPONSES IN HAMSTERS INFECTED WITH A FIELD-ADAPTED STRAIN OF *NECATOR AMERICANUS*

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### GUT DYSBIOSIS IN MATERNAL HELMINTH INFECTION

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### DISENTANGLING THE COVARYING EFFECTS OF MOTOR DEVELOPMENT AND WEANING FROM BREAST MILK ON INTESTINAL PARASITE INFECTIONS AMONG CHILDREN AGED 0-2 YEARS IN NORTHERN COASTAL ECUADOR

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## HIV and Tropical Co-Infections

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### HIV MORTALITY TRENDS AMONG THE UNITED STATES POPULATION, FROM 1999-2023: A CDC WONDER DATABASE STUDY

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### T CELL RECEPTOR REPERTOIRE ANALYSIS REVEALS A DISTINCT PHENOTYPE OF *MYCOBACTERIUM TUBERCULOSIS* (MTB) SPECIFIC T CELL FUNCTION IN PEOPLE LIVING WITH HIV (PLHIV)

**Elizabeth Tchabwe Chimbayo**<sup>1</sup>, Jimmy Banda<sup>1</sup>, Steven Mitini Nkhoma<sup>1</sup>, David Mhango<sup>1</sup>, Anstead Kamkwatira<sup>1</sup>, Paul Garside<sup>2</sup>, James Brewer<sup>2</sup>, Henry Mwandumba<sup>1</sup>  
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### THE PREVALENCE OF CRYPTOCOCCAL ANTIGENEMIA AMONG PATIENTS WITH ADVANCED HIV DISEASES IN SOUTHWEST AND NORTHCENTRAL NIGERIA

**JUSTIN ONYEBUCHI NWOFE**, Mary Onyenike, Adeola Awolola, Olabamiji Osho, Patrick Okonkwo, Daniel Offie, Emmanuel Ojo, Femi Emmanuel Owolagba, Eke Ofuche, Jay Samuels  
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### THREE NOVEL EPIGENETIC-MODIFYING COMPOUNDS IDENTIFIED AS HIV LATENCY-REVERSING AGENTS IN GHANA

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### HIV SCREENING ON NEUROSURGICAL PATIENTS IN SRI LANKA; INSIGHT TOWARDS WHEN TO DO IT

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### IMPACT OF MHV-68'S HEPATOTROPISM ON A SUBSEQUENT LIVER INFECTION BY MALARIA PARASITES

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### RESPIRATORY VIRUSES AND BACTERIA CARRIAGE AMONG PEOPLE LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS IN ACCRA, GHANA

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### PLACENTAL AND CONGENITAL MALARIA IN HIV POSITIVE PREGNANT WOMEN AND HIV EXPOSED NEONATES IN ABUJA NIGERIA

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### THE IMPACT OF HEPATITIS B CO-INFECTION ON T-CELL RESPONSES IN VIROLOGICALLY SUPPRESSED HUMAN IMMUNODEFICIENCY VIRUS PATIENTS ON ANTIRETROVIRAL THERAPY IN GHANA

Helena Lamptey<sup>1</sup>, **Abigail N A Pobee**<sup>1</sup>, James O. Aboagye<sup>1</sup>, Anthony T. Boateng<sup>1</sup>, Christopher Z-Y Abana<sup>1</sup>, Kwadwo Asamoah Kusi<sup>1</sup>, Evelyn Y. Bonney<sup>1</sup>, George B. Kyei<sup>2</sup>  
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### EXPLORING HISTOPLASMOSIS IN NON-ENDEMIC AREAS: COMPARATIVE ANALYSIS OF CLINICAL FEATURES, RISK FACTORS, AND OUTCOME OF HISTOPLASMOSIS IN HIV-POSITIVE AND HIV-NEGATIVE COHORTS IN WESTERN INDIA

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### UNVEILING THE NEXUS: PREVALENCE AND ATTRIBUTES OF TUBERCULOSIS POSITIVITY AMONG PEOPLE LIVING WITH HIV IN BANGLADESH

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### AGEING AND FRIALTY: THE CASE OF HIV-POSITIVE AND HIV-NEGATIVE INDIVIDUALS IN ASUTIFI-SOUTH DISTRICT AND TECHIAMAN MUNICIPALITY IN AHAFO AND BONO REGIONS OF GHANA

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### TATTOOING, CHRONIC DIARRHEA AND ANEMIA - A CLINICAL TRIAD OF HIV INFECTION

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### OPTIMIZING SEROLOGICAL DIAGNOSIS OF TOXOPLASMOSIS: HETEROLOGOUS EXPRESSION OF GRA1 PROTEIN OF T. GONDII IN E. COLI AS A KEY ANTIGEN IN CHRONIC INFECTION

Brigitte Fiorella Rivera<sup>1</sup>, Stefany Quiñones<sup>1</sup>, Luis Canales<sup>1</sup>, Alonso Flores<sup>1</sup>, Kevin Obando<sup>1</sup>, Jimena Raez<sup>1</sup>, Seichi Mochizuki<sup>1</sup>, Fabrizio Vasquez<sup>1</sup>, Robert Gilman<sup>2</sup>, Mirko Zimic<sup>1</sup>, Maritza Calderon<sup>1</sup>, Patricia Sheen<sup>1</sup><sup>1</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>Johns Hopkins University, Lima, Peru

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### DETERMINANTS OF HEALTH AFFECTING THE CARE CASCADE OF VULNERABLE PEOPLE LIVING WITH HIV IN SENEGAL

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### UNVEILING A BROADER STI SPECTRUM: THE ADVANTAGES OF MULTIPLEX PCR FOR TRANSGENDER WOMEN'S HEALTH

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### NEURODEVELOPMENTAL OUTCOMES IN UGANDAN PERINATALLY-INFECTED CHILDREN WITH HIV AT PRESCHOOL AGE WHO ARE NOT IMMUNE-COMPROMISED

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### INTEGRATING SMOKING CESSATION INTO HIV CARE SETTINGS: A SYSTEMATIC REVIEW OF THE EVIDENCE BASE ON INTERVENTION EFFECTIVENESS AND COST-EFFECTIVENESS

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### COST ANALYSIS OF SMOKING CESSATION INTERVENTIONS FOR SMOKERS WITH HIV IN HIV OUTPATIENT CLINIC SETTINGS IN VIETNAM

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### LEPROSY, PARASITIC CO-INFECTION, AND FOOD INSECURITY: A CROSS-SECTIONAL STUDY IN MINAS GERAIS, BRAZIL

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### CO-INFECTION DYNAMICS: PREVALENCE AND DEMOGRAPHIC INSIGHTS OF HEPATITIS B AND C AMONG HIV PATIENTS

Charity Ndidì Obum-Nnadi, Chika Maureen Ezenwa, Saheed Ayodeji Adekola, Khadijat Toyin Musah

University of Abuja, -- Abuja --, Nigeria

## Kinetoplastida and Other Protozoa - Diagnosis and New Detection Tools (Including Leishmania and Trypanosomes)

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### DEVELOPMENT OF A CHAGAS DISEASE SEROLOGIC SCREENING PROGRAM WITHIN AN ACADEMIC PUBLIC SAFETYNET HOSPITAL IN CALIFORNIA

Emily A. Kelly, Carina Marquez, Jonathan D. Davis, Rachel Alfaro Leone, Caryn Bern, Jeffrey D. Whitman

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### PRELIMINARY VALIDATION OF ACANTHAMOEBA PCR IN A UK PARASITOLOGY REFERENCE LABORATORY

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### EVALUATION OF ANTIGENIC REGIONS OF GRA7 FOR THE DIFFERENTIAL DIAGNOSIS OF ACUTE AND CHRONIC PHASES OF TOXOPLASMOSIS

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### FIRST DOCUMENTED DETECTION OF *TRYPANOSOMA CRUZI* IN PARATRIATOMA HIRSUTA

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### EXPLOITING THE HUMAN AND ANIMAL HOST INTERACTION WITH *TRYPANOSOMA BRUCEI* GAMBIENSE FOR RAPID DIAGNOSTIC TEST DEVELOPMENT

Jones A. Amponsah<sup>1</sup>, Gloria Ivy Mensah<sup>2</sup>, Benjamin Amoani<sup>1</sup>, Irene Ayi<sup>2</sup>, Kennedy Kwasi Addo<sup>2</sup>, Kwadwo Asamoah Kusi<sup>2</sup>, Daniel Haydon<sup>3</sup>, Patient Pati Pyana<sup>4</sup>  
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### EVALUATION OF THE ELISA TECHNIQUE USING SAG1 AND TOTAL ANTIGEN TO DETECT IGG ANTIBODIES AGAINST TOXOPLASMA GONDII IN HEALTHY AND HIGH-RISK HUMAN SERUMS

Camila A. Gutierrez Cobos<sup>1</sup>, Edith S. Málaga Machaca<sup>2</sup>, Gabriel A. Soto Soto<sup>1</sup>, Carol A. Sánchez Chicana<sup>1</sup>, Maritza M. Calderón Sánchez<sup>2</sup>, Juan A. Jiménez Chunga<sup>1</sup>  
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### PROLIFERATING PARASITES- INCREASES IN THE IDENTIFICATION OF CUTANEOUS LEISHMANIASIS CASES IN NEW YORK STATE

Brooke Clemons<sup>1</sup>, Kimberly Mergen<sup>1</sup>, Alissa Collins<sup>1</sup>, Allen Teal<sup>1</sup>, Greicy Zayas<sup>2</sup>, Susan Madison-Antenucci<sup>1</sup>  
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### EVALUATING THE KNOWLEDGE, ATTITUDES, AND PRACTICES OF CHAGAS DISEASE AMONG HEALTH PROFESSIONALS IN SOUTH FLORIDA, USA

Chanakya R. Bhosale<sup>1</sup>, Ambika Kapil<sup>1</sup>, Thomas Matthews<sup>1</sup>, Angeline Triyono<sup>1</sup>, Santiago Ortiz<sup>1</sup>, Anna K. Potter<sup>2</sup>  
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### APPLICATION OF RKMP11 BASED ELISA FOR DIAGNOSIS OF CUTANEOUS LEISHMANIASIS CAUSED BY *L. DONOVANI*

Sachee Bhanu Piyasiri, Nilakshi Samaranyake, Rajika Dewasurendra, Charani Karunathilake, Ganga Rajapakse, Sanath Senanayake, Nadira D. Karunaweera  
 Faculty of Medicine, University of Colombo, Colombo, Sri Lanka

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### IDENTIFICATION OF ANTIBODY BIOMARKERS TO DIFFERENTIATE POST KALA AZAR DERMAL LEISHMANIASIS FROM LEPROSY

Maurice T. Royal, Kimberly Y. Won, William E. Secor, Sukwan E. Handali  
 Center for Disease Control, Atlanta, GA, United States

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### COMPARATIVE EVALUATION OF 4 MOLECULAR DIAGNOSTIC TESTS FOR THE DETECTION AND IDENTIFICATION OF CUTANEOUS LEISHMANIA PARASITES

Yusr Saadi<sup>1</sup>, Hamed Chouaieb<sup>2</sup>, Hejer Souguir<sup>1</sup>, Ahmed Chakroun<sup>3</sup>, Insaf Bel Haj Ali<sup>1</sup>, Akila Fathallah-Mil<sup>2</sup>, Ikram Guizani<sup>1</sup>  
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### PHAGE DISPLAY IMMUNOPRECIPITATION SEQUENCING (PHIP-SEQ) FOR THE IDENTIFICATION OF *TRYPANOSOMA CRUZI* ANTIGENS WITH DIAGNOSTIC POTENTIAL

Ryan J. Marczak, Hannah Kortbawi, Stathis D. Gennetas, Caryn Bern, Joseph L. DeRisi, Jeffrey D. Whitman  
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### PRODUCTION AND EVALUATION OF LB6H RECOMBINANT ANTIGEN PRODUCED IN BRAZIL TO DIAGNOSE AMERICAN TEGUMENTARY LEISHMANIASIS

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### EVALUATION OF THE CROSS-REACTIVITY OF THE RK28 ANTIGEN USED IN THE SEROLOGICAL DIAGNOSIS OF HUMAN VISCERAL LEISHMANIASIS

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### VALIDATION OF A WHOLE BLOOD *TRYPANOSOMA CRUZI* QUANTITATIVE RT-PCR ASSAY ACROSS A RELEVANT RANGE OF PARASITEMIA

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### THE RELATION BETWEEN RECOMBINANT PROTEIN GRA1 AND SEVERITY INDICATORS IN PATIENTS WITH TOXOPLASMOSIS AND HIV/AIDS CO-INFECTION

Luis Canales G.<sup>1</sup>, Edith Málaga<sup>2</sup>, Ricardo Medrano<sup>2</sup>, Brigitte Rivera H.<sup>1</sup>, Seichi Mochizuki<sup>1</sup>, Stefany Quiñones G.<sup>1</sup>, Lynn Pinchi<sup>3</sup>, Viviana Pinedo<sup>4</sup>, Lilia Cabrera<sup>3</sup>, Cesar Ramal A.<sup>5</sup>, Hannah Steinberg<sup>6</sup>, Robert H. Gilman<sup>7</sup>, Nataly Bowman<sup>8</sup>, Maritza Calderón<sup>2</sup>, Patricia Sheen<sup>1</sup>

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### DEVELOPMENT OF ISOTHERMAL AND CRISPR-BASED DIAGNOSTICS FOR THE DETECTION OF *BABESIA* PARASITES

Nirmallya Acharyya, Sabarinath Neerukonda, Brendan Elsworth  
US Food and Drug Administration, Silver Spring, MD, United States

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### *TOXOPLASMA GONDII* IN TERTIARY HOSPITAL, EASTERN SAUDI ARABIA: ROLE OF SEROLOGY AND MOLECULAR DIAGNOSIS AND INSIGHT INTO PREDICTIVE RISK FACTORS

Qasim AlKhaleefah<sup>1</sup>, Obeid E. Obeid<sup>1</sup>, Nourah Al Qahtani<sup>2</sup>, Salma Al Jaroodi<sup>1</sup>, Ayman A. El-Badry<sup>3</sup>

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### CHARACTERIZATION OF LEISHMANIASIS IN THE TOURIST CORRIDOR OF THE AMAZONAS REGION, PERU

Sonia Huyhua<sup>1</sup>, Marianella Villegas-Pingo<sup>2</sup>, Kevin Rivera<sup>3</sup>, Lizandro Gonzales<sup>4</sup>, Hugo Valdivia<sup>5</sup>, Stella M. Chenet<sup>6</sup>

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## Kinetoplastida and Other Protozoa - Genomics, Proteomics and Metabolomics, Molecular Therapeutic Targets (Including *Leishmania* and Trypanosomes)

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### ASSOCIATION BETWEEN IMMUNE PROFILE AND CHAGAS DISEASE PROGRESSION IN NATURALLY INFECTED RHESUS MACAQUES

Rachel Clear<sup>1</sup>, Weihong Tu<sup>1</sup>, Kelly Goff<sup>2</sup>, Preston Marx<sup>2</sup>, Claudia Herrera<sup>1</sup>, Eric Dumontell<sup>1</sup>  
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(ACMCIP Abstract)

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### MOLECULAR EPIDEMIOLOGY OF *TRYPANOSOMA CRUZI* IN EL SALVADOR ELUCIDATED BY MULTI-LOCUS SEQUENCE TYPING USING THIRTEEN HOUSE-KEEPING GENES.

Yuko Nitahara<sup>1</sup>, Marvin S. Rodríguez<sup>2</sup>, Yu Nakagama<sup>1</sup>, Katherine Candray<sup>1</sup>, Junko Shimada<sup>3</sup>, Yasutoshi Kido<sup>1</sup>

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### CO-INFECTIONS OF *LEISHMANIA DONOVANI* AND *LEISHMANIA MAJOR* IN BLOOD OF PATIENTS WITH VISCERAL LEISHMANIASIS FROM GARISSA COUNTY, NORTHERN KENYA

Vane Kwamboka Omwenga<sup>1</sup>, Cyrus Ayieko<sup>2</sup>, Kimita Gathii<sup>3</sup>, Clement Masakhwe<sup>3</sup>, John Waitumbi<sup>3</sup>

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### EVIDENCE FOR VERTICAL TRANSMISSION OF GENETICALLY DIVERSE *TRYPANOSOMA CRUZI* IN A NATURAL RODENT RESERVOIR POPULATION

Nathaniel L. Gibson<sup>1</sup>, Bridget Knudson<sup>2</sup>, Bruno M. Gherzi<sup>1</sup>, Anna C. Peterson<sup>1</sup>, Claudia Riegel<sup>3</sup>, Eric Dumontell<sup>2</sup>, Claudia Herrera<sup>2</sup>, Michael J. Blum<sup>1</sup>

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### GENOME ANALYSIS OF *T. CRUZI* FIELD ISOLATES OFFERS THE OPPORTUNITY TO STUDY THE EFFECT OF INFECTION CONTEXT ON PARASITE GENETIC DIVERSITY

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(ACMCIP Abstract)

## Measures for Control and Elimination of Neglected Tropical Diseases (NTDs)

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### ACCEPTABILITY AND IMPACT OF THE MAGIC GLASSES LOWER MEKONG, A CARTOON-BASED EDUCATION PACKAGE TARGETING SOIL-TRANSMITTED HELMINTHS AND OPISTHORCHIASIS VIVERRINI IN THE LOWER MEKONG BASIN

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### USING PHOTOVOICE AS A COMMUNITY BASED PARTICIPATORY RESEARCH TOOL FOR CHANGING SANITATION AND HYGIENE BEHAVIOURS IN TAABO, COTE D'IVOIRE

Véronique Koffi<sup>1</sup>, Roland Bini<sup>2</sup>, Clémence ESSE<sup>2</sup>, Gilbert Fokou<sup>1</sup>, Piet Vaneeuwijk<sup>3</sup>

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### IMPACT OF COMMUNITY PARTICIPATORY APPROACHES IN ENHANCING ACCESS TO MASS DRUG ADMINISTRATION FOR TRACHOMA IN A PASTORAL CONFLICT AREA OF KENYA

Paul M. Gichuki<sup>1</sup>, Bridget W. Kimani<sup>1</sup>, Tabitha Kanyui<sup>1</sup>, Collins O. Okoyo<sup>1</sup>, Titus Watitu<sup>2</sup>, Wycliff P. Omondi<sup>2</sup>, Doris W. Njomo<sup>1</sup>

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### SUPPORTING LYMPHATIC FILARIASIS MORBIDITY MANAGEMENT AND DISABILITY PREVENTION (MMDP) ACTIVITIES IN WEST AFRICA: CASE STUDY FROM NIGERIA AND SIERRA LEONE

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### ASSESSING THE CAPACITY OF HEALTH FACILITIES TO DIAGNOSE, TREAT, AND MANAGE VISCERAL LEISHMANIASIS: EVIDENCE FROM TIATY, BARINGO COUNTY, KENYA

Leah A. Oruko<sup>1</sup>, Saraina C. Ulysse<sup>1</sup>, Mwatela Kitondo<sup>2</sup>, Hellen Nyakundi<sup>2</sup>, Richard Wamai<sup>3</sup>, Elizabeth Chebet<sup>4</sup>, Jane Sarich<sup>5</sup>

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### ASSESSING COMMUNITY DRUG DISTRIBUTORS PERFORMANCE IN GHANA; A GENDER BASED APPROACH

Charles Brown-Davies<sup>1</sup>, DIANA STUKEL<sup>2</sup>, Irene Dzathor<sup>1</sup>, Emmanuel Nyarko<sup>3</sup>, Ernest Mensah<sup>3</sup>, Maureen Headland<sup>4</sup>

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### MIXED INFECTIONS OF SOIL TRANSMITTED HELMINTHS & *SCHISTOSOMA MANSONI* AMONG SCHOOL GOING CHILDREN IN KAKAMEGA COUNTY, KENYA

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### RISK FACTORS AND ULTRASOUND ASPECTS ASSOCIATED WITH UROGENITAL SCHISTOSOMIASIS AMONG PRIMARY SCHOOL CHILDREN IN MALI WEST AFRICA

Bakary Sidibé<sup>1</sup>, Privat Agniwo<sup>1</sup>, Safiatou N. Doumbo<sup>1</sup>, Assitan Diakité<sup>1</sup>, Hassim Guindo<sup>1</sup>, Moudachirou Ibikounlé<sup>2</sup>, Abdoulaye Dabo<sup>1</sup>, Jerome Boissier<sup>3</sup>, Jerome Boissier<sup>3</sup>, Boris Savassi<sup>3</sup>

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### TREATMENT COVERAGE ACHIEVED UNDER TWO ENHANCED MASS DRUG ADMINISTRATION REGIMENS FOR TRACHOMA IN THE REPUBLIC OF SOUTH SUDAN: ENHANCING THE A IN SAFE (ETAS) TRIAL RESULTS

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### EFFECTIVENESS OF COMMUNITY HEALTH EDUCATION ON VISCERAL LEISHMANIASIS IN IMPROVING KNOWLEDGE, PRACTICE AND HEALTH SEEKING BEHAVIOR IN TIATY, KENYA

Saraina C. Ulysse<sup>1</sup>, Richard G. Wamai<sup>2</sup>, Mwatela Kitondo<sup>2</sup>, Hellen Nyakundi<sup>2</sup>, Leah Oruko<sup>1</sup>, Elizabeth Chebet<sup>4</sup>, Elijah Pili<sup>5</sup>, Miriam Lotodo<sup>5</sup>

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### SOCIO-ECONOMIC PROFILE OF NEVER TREATED INDIVIDUALS DURING MASS DRUG ADMINISTRATION TARGETING ONCHOCERCIASIS IN HARD-TO-REACH AREAS OF MALI: A CROSS-SECTIONAL STUDY

Yaya Ibrahim Coulibaly<sup>1</sup>, Abdoul Fatao Diabate<sup>2</sup>, Moussa Sangare<sup>3</sup>, Sekou Oumarou Thera<sup>2</sup>, Diadje Tanapo<sup>2</sup>, Mahamoud Mahamadou Koureichi<sup>2</sup>, Siaka Yamoussa Coulibaly<sup>2</sup>, Salif Seriba Doumbia<sup>2</sup>, Housseini Dolo<sup>2</sup>, Yacouba Sangare<sup>4</sup>, Dukharmel Nazaire<sup>5</sup>, Thomas B Nutman<sup>6</sup>, Alison Krentel<sup>7</sup>

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### SOCIO-ECONOMIC IMPACT OF 24-MONTH LYMPHEDEMA MANAGEMENT IN AFFECTED PERSONS IN MALI: CROSS-SECTIONAL STUDY

**Housseini Dolo<sup>1</sup>**, Diadje Tanapo<sup>1</sup>, Sekou Oumarou Thera<sup>1</sup>, Moussa Sangare<sup>1</sup>, Abdoul Fatao Diabate<sup>1</sup>, Lamine Diarra<sup>1</sup>, Michel Emmanuel Coulibaly<sup>1</sup>, Lamine Soumaoro<sup>1</sup>, Siaka Yamoussa Coulibaly<sup>1</sup>, Salif Seriba Doumbia<sup>1</sup>, Abdallah Amadou Diallo<sup>1</sup>, Ousmane Faye<sup>2</sup>, Hamadoun Sangho<sup>3</sup>, Seydou Doumbia<sup>1</sup>, Thomas B Nutman<sup>4</sup>, Yaya Ibrahim Coulibaly<sup>1</sup>  
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### SUSTAINABILITY OF LYMPHEDEMA HYGIENE-BASED SELF-CARE WITHIN LEDOXY PATIENTS MORE THAN TWO YEARS AFTER THE CLINICAL TRIAL IN RURAL AREAS, MALI: A CROSS-SECTIONAL STUDY

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### MONITORING THE IMPACT OF COMMUNITY-BASED DEWORMING ON SCHISTOSOMIASIS AND SOIL-TRANSMITTED HELMINTHIASIS AMONG SCHOOL-AGE CHILDREN IN WESTERN KENYA: MIDTERM RESULTS

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### ASSESSMENT OF KNOWLEDGE, ATTITUDES, PRACTICES AND FACTORS CONTRIBUTING TOWARDS ONGOING TRACHOMA TRANSMISSION AND MASS DRUG ADMINISTRATION (MDA) COVERAGE IN UGANDA

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### TREATMENT COVERAGE FOLLOWING AN ENHANCED MASS DRUG ADMINISTRATION STRATEGY FOR TRACHOMA IN AMHARA REGION, ETHIOPIA: THE CHILD MDA PILOT STUDY

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### SAMPLING AND SITE SELECTION STRATEGIES FOR LYMPHATIC FILARIASIS TRANSMISSION ASSESSMENT SURVEYS IN AREAS WITH HIGH SECURITY CHALLENGES: THE BURKINA FASO EXPERIENCE

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### THE CONTROL AND ELIMINATION OF NEGLECTED TROPICAL DISEASES IN MALI: A SUCCESS STORY

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### PRE-STOP OV MDA IN 32 FIRST-LINE VILLAGES IN FOUR OPERATIONAL TRANSMISSION ZONES IN GUINEA

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### A FOLLOW-UP STUDY IN 2024: SCHISTOSOMIASIS IMPACT ASSESSMENT IN EIGHT DISTRICTS FOLLOWING A DECADE OF MASS DRUG ADMINISTRATION

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### FIX-DOSING IVERMECTIN REGIMENS IN MASS DRUG ADMINISTRATION ACTIVITIES. IS IT TIME TO LEAVE THE DOSING POLE BEHIND?

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### SOIL-TRANSMITTED HELMINTH TRANSMISSION DYNAMICS AND OPTIMAL CONTROL

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### STRENGTHENING TRACHOMA CONTROL PROGRAMS THROUGH THE INTEGRATION OF LATERAL FLOW ASSAYS (LFA) FOR SEROLOGICAL MONITORING: A DISTRICT-LEVEL STUDY FROM AMHARA, ETHIOPIA

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### THE LEISHMANIASIS IN ETHIOPIA: A SCOPING REVIEW TO DETERMINE THE SCOPE OF RESEARCH AND REMAINING GAPS

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### STAKEHOLDER PERSPECTIVES ON THE FEASIBILITY AND ACCEPTABILITY OF A FIXED DOSE COMBINATION OF IVERMECTIN AND ALBENDAZOLE IN GHANA

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### SUCCESSES TACKLING PERSISTENCE AND RECRUDESCENCE OF TRACHOMA: KAJIADO COUNTY, KENYA

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Lorena Bruna Pereira de Oliveira<sup>1</sup>, Pedro Marçal<sup>1</sup>, Rafael Gama<sup>1</sup>, Thalisson Gómezes<sup>1</sup>, Marlucy Rodrigues<sup>1</sup>, Olindo Martins Filho<sup>2</sup>, Joaquim Brito de Souza<sup>3</sup>, Alexandre Castelo Branco<sup>4</sup>, Jessica Fairley<sup>5</sup>, Lucia Fraga<sup>6</sup>

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**ALTERATION OF THE MURINE GUT MICROBIOTA MEDIATES ANTIDEPRESSANT EFFECT OF *MALLOTUS OPPOSITIFOLIUS* EXTRACT**Stella F. Bour<sup>1</sup>, Blay Kwofie<sup>2</sup>, Kennedy Kukuia<sup>3</sup><sup>1</sup>Noguchi Memorial Institute for Medical Research, College of Health Sciences, University of Ghana, Legon, Accra, Ghana, <sup>2</sup>Department of Medical Pharmacology, College of Health Sciences, University of Ghana, Legon, Accra, Ghana, <sup>3</sup>Department of Medical Pharmacology, College of Health Sciences, University of Ghana, Legon, Accra, Ghana

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**CUSTOMERS' WILLINGNESS-TO-PAY FOR POULTRY FROM BIOSECURE LIVE BIRD MARKETS IN DHAKA, BANGLADESH**Rebeca Sultana<sup>1</sup>, Nadia Ali Rimi<sup>1</sup>, Md. Jawwad Kamran<sup>1</sup>, Md Mustafizur Rahman<sup>1</sup>, Md. Akhtaruzzaman Khan<sup>2</sup>, Md. Salahuddin Palash<sup>2</sup>, Md. Khaled Saifullah<sup>1</sup>, Sayed Masum Billah<sup>1</sup>, Ireen Sultana Shanta<sup>1</sup>, Kamal Hossain<sup>1</sup>, Patrick Webb<sup>3</sup>, Beatrice Lorge Rogers<sup>3</sup>, Hellen Amuguni<sup>4</sup>, Elizabeth Gold<sup>5</sup>, Jonathon Gass<sup>6</sup>, Sean B. Cash<sup>3</sup>, Laura H. Kwong<sup>7</sup><sup>1</sup>icddr, Dhaka, Bangladesh, <sup>2</sup>Bangladesh Agricultural University, Mymensingh, Bangladesh, <sup>3</sup>Friedman School of Nutrition, Tufts University, Boston, MA, United States, <sup>4</sup>Cummings School of Veterinary Medicine, Tufts University, Boston, MA, United States, <sup>5</sup>John Snow, Inc., Boston, MA, United States, <sup>6</sup>School of Medicine, Tufts University, Boston, MA, United States, <sup>7</sup>School of Public Health, University of California, Berkeley, Berkeley, CA, United States

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**DISENTANGLING THE EFFECTS OF FINE-SCALE MOBILITY ON LEPTOSPIRAL INFECTION USING GPS TELEMETRY DATA**Pablo Ruiz Cuenca<sup>1</sup>, Fabio Neves<sup>2</sup>, Max T. Eyre<sup>3</sup>, Jonathan Read<sup>1</sup>, Federico Costa<sup>2</sup>, Emanuele Giorgi<sup>1</sup><sup>1</sup>Lancaster University, Lancaster, United Kingdom, <sup>2</sup>Universidade Federal da Bahia, Salvador, Brazil, <sup>3</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

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**A SCOPING REVIEW ON CONTROL STRATEGIES FOR *ECHINOCOCCUS GRANULOSUS***Tania De La Cruz-Saldaña<sup>1</sup>, Javier A. Bustos<sup>1</sup>, Nelson Martinez-Merizalde<sup>2</sup>, Lizzie Ortiz-Cam<sup>1</sup>, Maria Paula Requena<sup>1</sup>, Ana Lucia Caceres<sup>1</sup>, Carolina Guzman<sup>1</sup>, Cesar M. Gaviria<sup>3</sup>, Cesar Ugarte-Gil<sup>4</sup>, Ricardo Castillo-Neyra<sup>5</sup><sup>1</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>Universidad Peruana de Ciencias Aplicadas, Lima, Peru, <sup>3</sup>Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>4</sup>University of Texas Medical Branch, Galveston, TX, United States, <sup>5</sup>University of Pennsylvania, Philadelphia, PA, United States

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**IMPACT OF ANGOLAN ROUSETTE BAT (*MYONYCTERIS ANGOLENSIS*) FORAGING SITE CONSISTENCY ON SPILLOVER POTENTIAL IN THE MOUNT ELGON REGION OF UGANDA**Kalani M. Williams<sup>1</sup>, Natalie R. Wickenkamp<sup>1</sup>, Emma K. Harris<sup>1</sup>, Benard Matovu<sup>2</sup>, Betty Nalikka<sup>2</sup>, Lillian Nalukenge<sup>2</sup>, Micheal Mutebi<sup>2</sup>, Aggrey Siya<sup>2</sup>, Tanya A. Dewey<sup>1</sup>, Kevin Castle<sup>3</sup>, Teddy Nakayiki<sup>4</sup>, Leonara Rebecca<sup>4</sup>, Angella Charity Nassuna<sup>4</sup>, Robert M. Kityo<sup>2</sup>, Julius J. Lutwama<sup>4</sup>, Rebekah C. Kading<sup>1</sup><sup>1</sup>Colorado State University, Fort Collins, CO, United States, <sup>2</sup>Makerere University, Kampala, Uganda, <sup>3</sup>Wildlife Veterinary Consulting LLC, Livermore, CO, United States, <sup>4</sup>Uganda Virus Research Institute, Entebbe, Uganda

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**DIVERSE MICROBES HABITING MEDICINAL HERBAL PREPARATIONS EXHIBIT VARIED RESISTANCE TO ESSENTIAL ANTIBIOTICS**Millicent Serwaa Marfo Ogyiri<sup>1</sup>, Stephen Yao Gbedema<sup>1</sup>, Yaw Duah Boakye<sup>1</sup>, Hayford Odoi<sup>2</sup>, Theresa Appiah Agana<sup>1</sup>, Vivian Etsiapa Boamah<sup>1</sup><sup>1</sup>Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, <sup>2</sup>University of Allied Health Sciences, Ho, Ghana

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**A ONE HEALTH APPROACH TO TACKLE PLAGUE OUTBREAKS IN DRC: 3 YEARS OF ONGOING EPIDEMICS**Pascal Adroba<sup>1</sup>, Anne Laudisoit<sup>2</sup>, Shaun Cross<sup>3</sup>, Germain Abhafule<sup>4</sup>, Dedha Jean de Dieu<sup>5</sup>, Floribert Rekaba<sup>6</sup>, Esperance Tshiwedi<sup>7</sup>, Mulopo Noella<sup>7</sup>, Daniel Mukadi<sup>7</sup>, Michael R. Wiley<sup>3</sup>, Placide Mbalwa<sup>7</sup><sup>1</sup>Centre de surveillance et de lutte contre la peste, University of Nebraska Medical Center, Omaha, NE, United States, <sup>2</sup>Ecohealth Alliance, New York, NY, United States, <sup>3</sup>University of Nebraska Medical Center, Omaha, NE, United States, <sup>4</sup>Centre de Recherche en Maladies tropicales, Rethy, Democratic Republic of the Congo, <sup>5</sup>Ministry of Health, Rethy, Democratic Republic of the Congo, <sup>6</sup>University of Monts-Bleus, Kpandroma, Democratic Republic of the Congo, <sup>7</sup>Institut National de Recherche Biomedicale, Kinshasa, Democratic Republic of the Congo

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**SETTING THE PLATFORM FOR THE ELIMINATION OF STRONGYLOIDIASIS IN AUSTRALIA**

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**EPIDEMIOLOGY AND CLINICAL CHARACTERISTICS OF RESPIRATORY SYNCYTIAL VIRUS IN PATIENTS WITH INFLUENZA LIKE ILLNESS IN THE GAMBIA: RESULTS FROM A NEWLY IMPLEMENTED SENTINEL SURVEILLANCE PROGRAM**Amadou Wurry Jallow<sup>1</sup>, Alpha Omar Jallow<sup>2</sup>, Modou Lamin Sanneh<sup>2</sup>, Mamadou Malado Jallow<sup>3</sup>, Alphonse Mendy<sup>2</sup>, Boubacar Diallo<sup>3</sup>, Mamadou Aliou Barry<sup>3</sup>, Sheriffo Jagne<sup>2</sup><sup>1</sup>EDC, MoH, Serrekunda, Gambia, <sup>2</sup>NPHL, Serrekunda, Gambia, <sup>3</sup>Institut Pasteur of Dakar, Dakar, Senegal

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**GENETIC DIVERSITY AND MUTATIONAL PROFILES OF SARS-COV-2 IN ADDIS ABABA, ETHIOPIA (2020 TO 2022)**Dejenie S. Teklu<sup>1</sup>, Abiy Zegeye<sup>2</sup><sup>1</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia, <sup>2</sup>Addis Ababa University, Addis Ababa, Ethiopia



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**RISK FACTORS ASSOCIATED WITH COVID-19 IN-HOSPITAL MORTALITY IN PANAMA**Santiago Hernandez<sup>1</sup>, Ana Belén Araúz<sup>2</sup>, Neil Rupani<sup>1</sup>, Benjamin Jacob<sup>1</sup>, Jason Salemi<sup>1</sup>, Ismael Hoare<sup>1</sup>, Arlene Calvo<sup>1</sup>, Ricardo Izurieta<sup>1</sup><sup>1</sup>University of South Florida, Tampa, FL, United States, <sup>2</sup>Hospital Santo Tomas. Universidad de Panama, Panama City, Panama

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**PULMONARY FUNGAL INFECTIONS AND TUBERCULOSIS CO INFECTION IN YAOUNDE**Claris Killa<sup>1</sup>, SHANG Judith<sup>2</sup>, NAPA Yves<sup>1</sup>, Forsab Joseph<sup>3</sup>, GONSU Hortense<sup>1</sup><sup>1</sup>The University of Yaounde 1, Yaounde, Cameroon, <sup>2</sup>Centres for disease control and prevention, Atlanta, GA, United States, <sup>3</sup>The University of Buea, Yaounde, Cameroon

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**HOUSEHOLD CONTACT TUBERCULOSIS SCREENING EXPERIENCE AND PREDICTORS OF TUBERCULOSIS DISEASE DIAGNOSIS IN RURAL TANZANIA**Ghassan Ilaiwy<sup>1</sup>, Saning'o Lukumay<sup>2</sup>, Domitila Agustino<sup>2</sup>, Paulo Meján<sup>2</sup>, Kusulla Simeon<sup>2</sup>, Estomih Mduma<sup>2</sup>, Scott K. Heysell<sup>1</sup>, Tania A. Thomas<sup>1</sup><sup>1</sup>University of Virginia, Charlottesville, VA, United States, <sup>2</sup>Haydom Global Health Research Center, Haydom, United Republic of Tanzania

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**DETERMINATION OF THE LIMIT OF DETECTION OF HETERORESISTANCE OF MYCOBACTERIUM TUBERCULOSIS IN TUBERCULOSIS PATIENTS BY NANOPORE SEQUENCING TECHNIQUE FROM GENOMIC DNA AND GENE REGIONS IN SPUTUM SAMPLES AND PRIMARY CULTURES COMPARED TO THE AGAR PROPORTIONS METHOD**

Diego Manuel Ramos Lette, Patricia Sheen Cortavarria, Candy Leon, Mirko Zimic, Carlos Barrios, Diego taquiri, Omar Romero, Sonia Huaman

Universidad Peruana Cayetano Heredia, Lima (Lima, Perú), Peru

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**PRELIMINARY COMPARISON OF ILLUMINA MISEQ AND OXFORD NANOPORE TECHNOLOGIES MINION SEQUENCING METHODS FOR CHARACTERIZATION OF KLEBSIELLA PNEUMONIAE ISOLATES**Eungi Yang<sup>1</sup>, Vasanta Chivukula<sup>1</sup>, Will Overholt<sup>1</sup>, Jonas Winchell<sup>2</sup>, Maureen Diaz<sup>2</sup><sup>1</sup>Centers for Disease Control and Prevention/ ASRT, Atlanta, GA, United States, <sup>2</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States

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**RESPIRATORY SYNCYTIAL VIRUS (RSV)-INDUCED METABOLITES REGULATE MITOCHONDRIAL HETEROGENEITY THROUGH LUNG-BRAIN AXIS**

Rohey Njie

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**IMPROVED TUBERCULOSIS DETECTION BY PARTIAL AMPLICON CAPTURE AND RECONSTRUCTION OF PLAMID DNA FRAGMENTS DEGRADED IN URINE**David Evans<sup>1</sup>, Megan Pask<sup>1</sup>, Jonathan Blackburn<sup>2</sup>, Frederick Haselton<sup>1</sup><sup>1</sup>Vanderbilt University, Nashville, TN, United States, <sup>2</sup>University of Cape Town, Cape Town, South Africa

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**RISK OF SARS-COV2 INFECTION AMONG HOSPITAL-BASED HEALTHCARE WORKERS IN THAILAND AT THE MYANMAR BORDER MARCH-JULY 2022**Narumol Sawanpanyalert<sup>1</sup>, Nuttagarn Chuenchom<sup>2</sup>, Meng-Yu Chen<sup>3</sup>, Peangpim Tantilipikara<sup>1</sup>, Suchin Chunwimaleung<sup>4</sup>, Tussanee Nuankum<sup>1</sup>, Yuthana Samanmit<sup>1</sup>, Brett W Petersen<sup>4</sup>, James D. Heffelfinger<sup>4</sup>, Emily Bloss<sup>4</sup>, Somsak Thamthitawat<sup>4</sup>, **Woradee Lurchachaiwong<sup>4</sup>**<sup>1</sup>MoPH Thailand, Nonthaburi, Thailand, <sup>2</sup>Mae Sot General Hospital, Tak, Thailand, <sup>3</sup>Center for Vaccine Equity, Georgia, Georgia, <sup>4</sup>US-CDC Thailand, Nonthaburi, Thailand

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**HEALTHCARE FACILITY-BASED INTENSIFIED TUBERCULOSIS CASE DETECTION IN ETHIOPIA: OPPORTUNITIES AND CHALLENGES**Esayas Kebede Gudina<sup>1</sup>, Nasir Abdo<sup>2</sup>, Demissu Fulas<sup>3</sup>, Kolato Gemedo<sup>3</sup>, Sitota Tesfaye<sup>3</sup>, Dereje Adugna<sup>3</sup>, Gameda Abebe<sup>1</sup><sup>1</sup>Jimma University, Jimma, Ethiopia, <sup>2</sup>Jimma Zone Health Department, Jimma, Ethiopia, <sup>3</sup>Oromia Health Bureau, Addis Ababa, Ethiopia

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**PROTEOMIC ANALYSIS REVEALS MOLECULAR PATHWAYS UNDERLYING ACUTE KIDNEY INJURY IN COVID-19**Ivy Hurwitz<sup>1</sup>, Clinton Onyango<sup>2</sup>, Qiuying Cheng<sup>1</sup>, Mark Unruh<sup>1</sup>, Douglas J. Perkins<sup>1</sup><sup>1</sup>University of New Mexico Health Sciences Center, Albuquerque, NM, United States, <sup>2</sup>Maseno University, Maseno, Kenya

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**ELEVATED PERIPHERAL BLOOD SARS-COV-2 VIRAL LOADS ARE ASSOCIATED WITH THE DEVELOPMENT OF ACUTE KIDNEY INJURY IN COVID-19 PATIENTS**Alexandra Do<sup>1</sup>, Clinton Onyango<sup>2</sup>, Shawn Fernandez<sup>1</sup>, Mark Unruh<sup>1</sup>, Kristan Schneider<sup>1</sup>, Douglas J. Perkins<sup>1</sup>, Ivy Hurwitz<sup>3</sup><sup>1</sup>University of New Mexico Health Sciences Center, Albuquerque, NM, United States, <sup>2</sup>Maseno University, Maseno, Kenya, <sup>3</sup>University of New Mexico Health Sciences Center, ALBUQUERQUE, NM, United States

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**TRENDS IN RESPIRATORY DISEASES DEATHS BEFORE AND DURING THE COVID PANDEMIC BETWEEN 2010 AND 2021 IN KOMBWA SUBCOUNTY OF KENYA**Doris W. Njoroge<sup>1</sup>, Michal M. Ohaga<sup>1</sup>, Peter M. Sifuna<sup>1</sup>, Joseph A. Gisaina<sup>1</sup>, Janet N. Oyieko<sup>1</sup>, Walter O. Otieno<sup>1</sup>, Kirti K. Tiwari<sup>2</sup>, Timothy E. Egbo<sup>1</sup>, Eric C. Garges<sup>2</sup>, Gurdeep S. Buttar<sup>2</sup>, Hoseah M. Akala<sup>1</sup><sup>1</sup>KEMRI/ Walter reed army institute of research- Africa, KISUMU, Kenya, <sup>2</sup>Walter reed army institute of research- Africa, KISUMU, Kenya

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**CHANGES IN THE RESPIRATORY PATHOGENS TREND IN SEVERE ACUTE RESPIRATORY INFECTION CASES PRE- AND POST-COVID-19 PANDEMIC IN THE KINGDOM OF JORDAN, 2018-2023**Mayar Maged Said<sup>1</sup>, Mahmoud Gazo<sup>2</sup>, Mohamed AlHawarate<sup>3</sup>, Moutasium Hossinate<sup>3</sup>, Fatima Thneibat<sup>3</sup>, Basseem A. Hamdy<sup>1</sup>, Omar Nowar<sup>1</sup>, Tamer S. Said<sup>1</sup><sup>1</sup>US. Naval Medical Research Unit -EURAFCENT (NAMRU-EAC), Cairo, Egypt, <sup>2</sup>Jordanian Central Public Health Laboratories Directorate, Amman, Jordan, <sup>3</sup>Ministry of Health, Jordan, Amman, Jordan

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**IL-26 DIFFERENTIALLY AFFECTS THE INFLAMMATORY RESPONSE OF HUMAN MACROPHAGES TO MYCOBACTERIUM TUBERCULOSIS WHOLE CELL LYSATES**Jose Barragan<sup>1</sup>, Diana Padilla<sup>1</sup>, Jorge Cervantes<sup>2</sup><sup>1</sup>TUHS El Paso, El Paso, TX, United States, <sup>2</sup>Nova Southeastern University, Fort Lauderdale, FL, United States

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**MAPPING UNDIAGNOSED TUBERCULOSIS PREVALENCE IN SUB SAHARA AFRICA: GEOSPATIAL META-ANALYSIS**Haileab Fekadu Wolde<sup>1</sup>, Archie C A Clements<sup>2</sup>, Temesgen Yihunie Akalu<sup>1</sup>, Kefyalew Addis Alene<sup>1</sup><sup>1</sup>Curtin University, Perth, Australia, <sup>2</sup>Queen's University, Belfast, United Kingdom**Schistosomiasis and Other Trematodes – Diagnostics and Treatment**

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**DEVELOPMENT OF A NOVEL CELL-FREE CULTURE SYSTEM FOR IN VITRO SCREENING OF NEW ANTI-SCHISTOSOMAL MOLECULES USING PURE AND HYBRID SCHISTOSOMA HAEMATOBIIUM**Koba Privat AGNIWO<sup>1</sup>, Ulrich Fabien Prodjinotho<sup>2</sup>, Bakary Sidibé<sup>1</sup>, Rabiadou Diarra<sup>1</sup>, Abdoulaye Dabo<sup>1</sup>, Clarissa Prazeres da Costa<sup>3</sup>, Niaré Safiatou Doumbo Niare<sup>1</sup>, Laurent Dembele<sup>1</sup><sup>1</sup>University of Sciences, Techniques and Technologies of Bamako (USTTB), Bamako, Mali, <sup>2</sup>Institute for Medical Microbiology, Immunology and Hygiene, Technische Universität München, Munich, Germany, Munich, Germany, <sup>3</sup>Institute for Medical Microbiology, Immunology and Hygiene, Technische Universität München, Munich, Germany, Bamako, Germany

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**IDENTIFYING PLATFORMS FOR OPTIMAL DELIVERY OF A NOVEL PEDIATRIC PRAZIQUANTEL FORMULATION FOR SCHISTOSOMIASIS TREATMENT IN HARD-TO-REACH AREAS AND POPULATIONS IN KENYA - WHAT ARE THE KEY CONTEXTUAL FACTORS?**Phyllis Munyiva Isaiah<sup>1</sup>, Doris Osei Afriyie<sup>1</sup>, Mary Maghanga<sup>2</sup>, Donna Obare Ogeto<sup>3</sup>, Mary Amuyunzu Nyamongo<sup>2</sup>, Peter Steinmann<sup>1</sup><sup>1</sup>Swiss Tropical and Public Health Institute, Allschwil, Switzerland, <sup>2</sup>African Institute for Health and Development, Nairobi, Kenya, <sup>3</sup>Ministry of Health, Nairobi, Kenya

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**LIVER ULTRASOUND FINDINGS BEFORE AND AFTER PRAZIQUANTEL TREATMENT IN UGANDAN PRESCHOOL AGE CHILDREN FROM THE PRAZIQUANTEL IN PRESCHOOLERS (PIP) TRIAL**Sophie Pach<sup>1</sup>, Emily Webb<sup>1</sup>, Andrew Edielu<sup>1</sup>, Roy Nagawa<sup>2</sup>, Victor Anguajibi<sup>3</sup>, Simon Mpooya<sup>4</sup>, Hannah Wu<sup>5</sup>, Susannah Colt<sup>5</sup>, Patrice Mawa<sup>1</sup>, Joachim Richter<sup>6</sup>, Jennifer Friedman<sup>6</sup>, Amaya L. Bustinduy<sup>1</sup><sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>J B International Medical Centre, Kampala, Uganda, <sup>3</sup>China-Uganda Friendship Hospital, Kampala, Uganda, <sup>4</sup>Suubi Medical Centre, Kayunga, Uganda, <sup>5</sup>Center for International Health Research, Brown University, Providence, RI, United States, <sup>6</sup>Germany and Swiss Tropical and Public Health Institute, Basel, Switzerland

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**THE IMPACT OF A NEW RAPID DIAGNOSTIC TEST FOR SCHOOL-BASED PREVALENCE MAPPING AND MONITORING AND EVALUATION OF SCHISTOSOMIASIS: A MODELLING STUDY**Joshua M. Chevalier<sup>1</sup>, Kyra H. Grant<sup>2</sup>, Sarah Girdwood<sup>2</sup>, Thierry Ramos<sup>2</sup>, Brooke E. Nichols<sup>2</sup>, Shaukat Khan<sup>2</sup>, Sarah Hingel<sup>2</sup><sup>1</sup>Amsterdam Institute for Global Health and Development, Amsterdam UMC, University of Amsterdam, Amsterdam, Netherlands, <sup>2</sup>FIND, Geneva, Switzerland

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**ASSESSMENT OF ALBENDAZOLE SUSCEPTIBILITY IN FASCIOLA HEPATICA EGGS FROM ENDEMIC REGIONS OF THE PERUVIAN HIGHLANDS**César A. Murga-Moreno<sup>1</sup>, Dayana M. Terrones-Cerna<sup>1</sup>, David Ruiz-Pérez<sup>1</sup>, Luis I.Alvarez<sup>2</sup>, Laura Ceballos<sup>2</sup>, Miguel M. Cabada<sup>3</sup>, Martha V. Fernandez-Baca<sup>4</sup>, César E. Vila-Anticona<sup>5</sup>, Ana M. Fernández-Sánchez<sup>2</sup>, Rodrigo A. Ore<sup>4</sup>, Cristian Hobán<sup>1</sup>, Pedro Ortiz<sup>1</sup><sup>1</sup>Universidad Nacional de Cajamarca, Cajamarca, Peru, <sup>2</sup>Universidad Nacional del Centro de la Provincia de Buenos Aires, Tandil, Argentina, <sup>3</sup>University of Texas Medical Branch, Galveston, TX, United States, <sup>4</sup>Universidad Peruana Cayetano Heredia, Cusco, Peru, <sup>5</sup>Servicio Nacional de Sanidad Agraria, Junín, Peru

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**SYNTHESIS AND ANTISCHISTOSOMAL STRUCTURE-ACTIVITY RELATIONSHIP PROFILING OF N-PYRIDAZIN-3-YLBENZAMIDES**

Harrison Banda, Peter Cheuka, Evelyn Funjika

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**DETECTION OF SCHISTOSOMA HAEMATOBIIUM CELL-FREE DNA IN URINE SAMPLES STORED ON FILTER PAPERS TO IMPROVE THE DIAGNOSTIC OF URINARY SCHISTOSOMIASIS**

Estelle Mezajou Mewamba, Darelle Bethanie Motia, Rachel Morgane Banga Diengue, Loic Edmond Tekeu Mengoue, Rostand Joel Tatang Atiokeng, Arnol Auvaker Zebaze Tiofack, Pythagore Soubgwi Fogue, Gustave Simo

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**FACTORS INFLUENCING THE RESOLUTION OF FEMALE GENITAL SCHISTOSOMIASIS: A LONGITUDINAL STUDY FROM RURAL MADAGASCAR**Valentina Marchese<sup>1</sup>, Jean-Marc Kutz<sup>1</sup>, Pia Rausche<sup>1</sup>, Tahinamandranto Rasamoelina<sup>2</sup>, Sonya Ratefiarisoa<sup>3</sup>, Ravo Razafindrakoto<sup>2</sup>, Myriam Lassmann<sup>1</sup>, Fiona Franz<sup>1</sup>, Elly Daus<sup>1</sup>, Olivette Totofotsy<sup>3</sup>, Alexina Olivasoza Zafinimampera<sup>3</sup>, André Brito<sup>1</sup>, Philipp Klein<sup>1</sup>, Anna Jaeger<sup>1</sup>, Rivo Solotiana Rakotomalala<sup>3</sup>, Zoly Rakotomalala<sup>3</sup>, Bodo Sahondra Randrianasolo<sup>4</sup>, Irina Kislaya<sup>1</sup>, Eva Lorenz<sup>1</sup>, Jürgen May<sup>1</sup>, Raphael Rakotozandrindrainy<sup>5</sup>, Dewi Ismajani Puradiredja<sup>1</sup>, Monika Hamp<sup>6</sup>, Tarik Gheit<sup>7</sup>, Rivo Andry Rakotoarivelo<sup>8</sup>, Daniela Fusco<sup>1</sup><sup>1</sup>Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>2</sup>Centre d'Infectiologie Charles Mérieux, Antananarivo, Madagascar, <sup>3</sup>Centre Hospitalier Universitaire Androva, Mahajanga, Madagascar, <sup>4</sup>Association K'OLO VANONA, Antananarivo, Madagascar, <sup>5</sup>University of Antananarivo, Antananarivo, Madagascar, <sup>6</sup>Köln-Hohenlind Hospital, Cologne, Germany, <sup>7</sup>International Agency for Research on Cancer, Lyon, France, <sup>8</sup>University of Fianarantsoa, Fianarantsoa, Madagascar

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**ACCURATE DETECTION OF FEMALE GENITAL SCHISTOSOMIASIS - A NEGLECTED GYNECOLOGICAL TROPICAL DISEASE**

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**DEVELOPING A SIMPLE POINT-OF-CARE LATERAL FLOW ASSAY FOR DETECTION OF F. HEPATICA DNA IN CLINICAL AND ENVIRONMENTAL SAMPLES**

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### ENHANCING DETECTION AND MONITORING OF SCHISTOSOMIASIS USING FLOW, A URINE-BASED ANALYTE PRE-CONCENTRATION TECHNOLOGY

Brianna Mullins<sup>1</sup>, Cody Carrell<sup>1</sup>, Danielle de Jong<sup>2</sup>, Jane K. Maganga<sup>3</sup>, Loyce Mhango<sup>3</sup>, Peter Shigella<sup>3</sup>, Philbert Kashangaki<sup>3</sup>, Raymond Kirigiti<sup>4</sup>, Madalyn Gill<sup>1</sup>, Ryan Shogren<sup>1</sup>, John M. Changalucha<sup>3</sup>, Govert J. van Dam<sup>2</sup>, Jennifer A. Downs<sup>5</sup>, Paul L.A.M. Corstjens<sup>2</sup>, Jay W. Warrick<sup>1</sup>

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## Schistosomiasis and Other Trematodes – Epidemiology and Control

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### RISK FACTORS FOR SCHISTOSOMIASIS CURE FAILURE/ REINFECTION AMONG PRE-SCHOOL-AGED CHILDREN 12 MONTHS AFTER TREATMENT IN UGANDA

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### INVESTIGATING THE PREVALENCE, INTENSITY, AND CONTRIBUTING FACTORS OF SCHISTOSOMA MANSONI INFECTION IN ALMATA DISTRICT, TIGRAY, NORTHERN ETHIOPIA

Gessesew Bugssa Hailu<sup>1</sup>, Nega Berhe Belay<sup>2</sup>, Prof. Tilahun Tekelehaymanot<sup>2</sup>

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### NOVEL INTERVENTION STRATEGIES FOR SCHISTOSOMIASIS ELIMINATION

Lydia Trippler<sup>1</sup>, Said Mohammed Ali<sup>2</sup>, Naomi Chi Ndum<sup>1</sup>, Jan Hattendorf<sup>1</sup>, Saleh Juma<sup>3</sup>, Shaali Makame Ame<sup>4</sup>, Fatma Kabole<sup>4</sup>, Stefanie Knopp<sup>1</sup>

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### SOCIO-ENVIRONMENTAL FACTORS AFFECTING THE RISK OF HUMAN FASCIOLIASIS IN CENTRAL VIETNAM

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### DIET OF SCHISTOSOME VECTORS INFLUENCES INFECTION OUTCOMES

Joshua T. Trapp<sup>1</sup>, Wesley Yu<sup>1</sup>, Johannie Spaan<sup>1</sup>, Tom Pennance<sup>1</sup>, Fredrick Rawago<sup>2</sup>, George Ogara<sup>2</sup>, Maurice Odiero<sup>2</sup>, Michelle Steinauer<sup>1</sup>

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### FACTORS ASSOCIATED WITH NATURAL INFECTION BY FASCIOLA HEPATICA IN THE MAIN DAIRY BASIN OF CAJAMARCA IN NORTHERN PERU

Cristian Hoban<sup>1</sup>, César A. Murga-Moreno<sup>1</sup>, Dayana M. Terrones-Cerna<sup>1</sup>, David Ruiz-Pérez<sup>1</sup>, Ana M. Fernández-Sánchez<sup>1</sup>, Jhover Díaz<sup>1</sup>, Sandra Quispe<sup>1</sup>, Miguel M. Cabada<sup>2</sup>, Pedro Ortiz<sup>1</sup>

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### ENVIRONMENTAL DNA OF SCHISTOSOME PARASITES REVEALS POSSIBILITY OF WIDENING THE SNAIL VECTOR SPECTRUM IN ENDEMIC AREAS UNDER CLIMATE CHANGE CONDITIONS IN NIGERIA

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### SUITABLE COMMUNICATION STRATEGIES PRIOR TO THE INTRODUCTION OF A NOVEL PEDIATRIC TREATMENT OPTION < SCHISTOSOMIASIS IN KENYA

Janet Mbinya Masaku<sup>1</sup>, John M. Gachohi<sup>2</sup>, Alice Sinkeet<sup>3</sup>, Mary Maghanga<sup>3</sup>, Florence Wakesho<sup>4</sup>, Wyckliff Omondi<sup>4</sup>, Jennifer Burrill<sup>5</sup>, Ashley Preston<sup>5</sup>, Lisa Sophie Reigl<sup>6</sup>, Isabelle L. Lange<sup>6</sup>, Andrea S. Winkler<sup>6</sup>, Sammy M. Njenga<sup>1</sup>, Mary Amuyunzu Nyamongo<sup>3</sup>

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### ENDEMIC COUNTRY LABORATORY QUALIFICATION OF SCHISTOSOMA HAEMATOBIIUM ANTIBODY BIOMARKERS IN KENYA

Maria Ulke Colman<sup>1</sup>, Isaac Onkanga<sup>2</sup>, Joshua Kivuthi<sup>2</sup>, Maurice Royal<sup>1</sup>, Yong Wang<sup>1</sup>, Sylvia Ossai<sup>1</sup>, Machi Shiiba<sup>3</sup>, Kimberly M. Won<sup>1</sup>, Maurice Odiero<sup>2</sup>, Sukwan Handali<sup>1</sup>, William E. Secor<sup>1</sup>

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### ETIOLOGY OF ANEMIA IN THE CONTEXT OF S. MANSONI INFECTION AMONG PRE-SCHOOL AGED CHILDREN FROM LAKE ALBERT, UGANDA

Alexandra Burgess<sup>1</sup>, Susannah Colt<sup>1</sup>, Andrew Edielu<sup>2</sup>, Hannah Wu<sup>1</sup>, Patrice Mawa<sup>3</sup>, Rachael Nakyasige<sup>3</sup>, Gloria Kakoba Ayebazibwe<sup>3</sup>, Kanika Men<sup>1</sup>, Emily Webb<sup>2</sup>, Amaya Bustinduy<sup>2</sup>, Jennifer Friedman<sup>1</sup>

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# Water, Sanitation, Hygiene and Environmental Health

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## TCBS POSITIVE VIBRIO SPECIES IN WATER SAMPLES OF PRE-URBAN AND PERI-URBAN MAPUTO, MOZAMBIQUE

**Matthew Cappiello**<sup>1</sup>, Henrique Velasco<sup>2</sup>, Inacio Mandomando<sup>3</sup>, Sanjay Mehta<sup>4</sup>  
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## WATER QUALITY AND OCCURRENCE OF ENTERIC BACTERIA AND VIRUSES IN ASIPA RIVER, OYO STATE, WESTERN NIGERIA

**Olatunji Matthew Kolawole**<sup>1</sup>, Oluwasanmi A. Adeyemi<sup>2</sup>, Modupe O. Jimoh<sup>3</sup>  
<sup>1</sup>University of Ilorin, Ilorin, Kwara state, Nigeria, <sup>2</sup>Ajayi Crowther University, Oyo, Oyo state, Nigeria, <sup>3</sup>University of Warwick, Coventry, United Kingdom

6740

## LATRINE AVAILABILITY AND UTILIZATION ASSESSMENT IN PRIMARY SCHOOLS OF MERHABETE, ETHIOPIA: A MIXED METHOD STUDY

**Awraris Hailu Bilchut**<sup>1</sup>, Esmael Habtamu Ali<sup>2</sup>, Nigus Taddese<sup>1</sup>, Melese Kitu<sup>2</sup>, Fikreab Kebede<sup>3</sup>, Ian Fetterman<sup>4</sup>, Hadley Burroughs<sup>4</sup>, Catherine E. Oldenburg<sup>4</sup>, Thomas M. Lietman<sup>4</sup>  
<sup>1</sup>Debre Berhan University, Debre Berhan, Ethiopia, <sup>2</sup>Eyu-Ethiopia, Bahir Dar, Ethiopia, <sup>3</sup>Federal Ministry of Health, Disease Prevention and Control, Addis Ababa, Ethiopia, <sup>4</sup>F.I. Proctor Foundation, University of California, San Francisco, San Francisco, CA, United States

6741

## INTERACTIONS BETWEEN WATER, SANITATION, AND HYGIENE (WASH) AND MOSQUITO DYNAMICS IN WESTERN KENYA: IMPLICATIONS FOR DIARRHEAL AND MALARIA DISEASES

**Noriko Tamari**<sup>1</sup>, Maurice Agawo<sup>2</sup>, Heidi E. Brown<sup>1</sup>, Luigi Sedda<sup>3</sup>, Gary L. Christopherson<sup>1</sup>, Katherine D. Ellingson<sup>1</sup>, Stephen Munga<sup>4</sup>, Kacey C. Ernst<sup>1</sup>  
<sup>1</sup>University of Arizona, Tucson, AZ, United States, <sup>2</sup>Maseno University, Kisumu, Kenya, <sup>3</sup>Lancaster University, Lancaster, United Kingdom, <sup>4</sup>Kenya Medical Research Institute (KEMRI), Kisumu, Kenya

6742

## HOUSEHOLD RISK FACTORS ASSOCIATED WITH HOSPITALIZED DIARRHEAL PATIENTS IN ULAANBAATAR, MONGOLIA

**Amber N. Barnes**<sup>1</sup>, Uyanga Baasandavga<sup>2</sup>, Anu Davaasuren<sup>2</sup>, Battsetseg Gonchigoo<sup>2</sup>, Greg C. Gray<sup>3</sup>  
<sup>1</sup>University of North Florida, Jacksonville, FL, United States, <sup>2</sup>Institute of Veterinary Medicine, Ulaanbaatar, Mongolia, <sup>3</sup>Division of Infectious Diseases, School of Medicine, University of Texas Medical Branch, Galveston, TX, United States

6743

## MERCURY LEVELS IN HAIR OF PREGNANT WOMEN IN TUMBES, PERU: A CROSS-SECTIONAL STUDY

**Sofia I. Chapela-Lara**<sup>1</sup>, Olivia Arar<sup>1</sup>, Lauralee Fernandez<sup>1</sup>, Denys Villareal-Palacios<sup>2</sup>, Percy Vilchez-Barreto<sup>2</sup>, Ricardo Gamboa-Moran<sup>2</sup>, Sarah E. Rothenberg<sup>3</sup>, William K. Pan<sup>4</sup>, Seth E. O'Neal<sup>1</sup>  
<sup>1</sup>Oregon Health and Science University - Portland State University, School of Public Health, Portland, OR, United States, <sup>2</sup>Centro de Salud Global - Tumbes, Tumbes, Peru, <sup>3</sup>Oregon State University, College of Health, Corvallis, OR, United States, <sup>4</sup>Duke University Global Health Institute and Nicholas School of Environment, Durham, NC, United States

6744

## A MECHANISTIC MODELING APPROACH TO ASSESSING THE SENSITIVITY OF OUTCOMES OF WATER, SANITATION, AND HYGIENE INTERVENTIONS TO LOCAL CONTEXTS AND INTERVENTION FACTORS

**Andrew F. Brouwer**<sup>1</sup>, Alicia NM Kraay<sup>2</sup>, Mondal H. Zahid<sup>1</sup>, Marisa C. Eisenberg<sup>1</sup>, Matthew C. Freeman<sup>3</sup>, Joseph NS Eisenberg<sup>1</sup>  
<sup>1</sup>University of Michigan, Ann Arbor, MI, United States, <sup>2</sup>Bill & Melinda Gates Foundation, Seattle, WA, United States, <sup>3</sup>Emory University, Atlanta, GA, United States

6745

## EXPLORING PERCEPTIONS AND UNDERSTANDING OF ORAL HEALTH: A STUDY ON ORAL GINGIVITIS AMONG UNDERGRADUATE STUDENTS IN IBADAN

**Olufemi Adebayo Adedokun**<sup>1</sup>, Kazeem Olabamiji Balogun<sup>2</sup>, Damilola Opeyemi Olatunji<sup>2</sup>, Moses Akinjide Afolabi<sup>2</sup>, Mosunmola Olufunke Adedokun<sup>3</sup>, Caroline Chidinma Nwoko<sup>4</sup>  
<sup>1</sup>University of Ibadan Research Foundation, Ibadan, Nigeria, <sup>2</sup>Adekunle Ajasin University Akungba Akoko, Ondo, Nigeria, <sup>3</sup>University of Ibadan, Ibadan, Nigeria, <sup>4</sup>Adekunle Ajasin University Akungba Akoko, Ibadan, Nigeria

6746

## USE OF THE HOUSEHOLD WATER INSECURITY ACCESS SCALE TO EVALUATE RURAL WATER DELIVERY IN SMALL COMMUNITIES

**Gwenyth J. Lee**<sup>1</sup>, Gustavo Huera<sup>2</sup>, Andrea Sosa<sup>3</sup>, Samuel B. Schlesinger<sup>4</sup>  
<sup>1</sup>Rutgers, The State University of New Jersey, New Brunswick, NJ, United States, <sup>2</sup>Fundación ALTROPICO, Quito, Ecuador, <sup>3</sup>University of Michigan, Ann Arbor, MI, United States, <sup>4</sup>Green Empowerment, Portland, OR, United States

6747

## MENSTRUAL MATERIAL DISPOSAL PRACTICES WITHIN THE GHANAIA SOSCOCULTURAL CONTEXT: A QUALITATIVE STUDY

**Sitsofe Gbogbo**<sup>1</sup>, Israel Wurusah<sup>1</sup>, Emmanuel Gbogbo<sup>1</sup>, Wisdom Axame<sup>1</sup>, Priscilla Klutse<sup>1</sup>, Robert Dowou<sup>1</sup>, Paramount E. Nelson<sup>1</sup>, Ishmael Boateng<sup>1</sup>, Sarah O. Mantey<sup>1</sup>, Nuworza Kugbey<sup>2</sup>, Victor C. Doku<sup>3</sup>, Frank E. Baiden<sup>1</sup>, Fred N. Binka<sup>1</sup>  
<sup>1</sup>University of Health and Allied Sciences, Ho, Ghana, <sup>2</sup>University of Environment and Sustainable Development, Somanya, Ghana, <sup>3</sup>King's College London, London, United Kingdom

6748

## ISOTHERMAL AMPLIFICATION AND COLORIMETRIC DETECTION OF VIBRIOVCHOLERAEE IN ENVIRONMENTAL MATRICES

**Michelande Adolphe**  
*Méditerranée Infection (IHU)/ Aix-Marseille Université, Marseille, France*

6749

## INDICATORS OF DRINKING WATER ACCESS AND ESCHERICHIA COLI CONCENTRATION IN HOUSEHOLD DRINKING WATER IN MADAGASCAR

**Amanda Seyler**<sup>1</sup>, Fabiola Aparicio-Ting<sup>2</sup>, John D. McLennan<sup>3</sup>  
<sup>1</sup>Department of Anthropology and Archaeology, University of Calgary, Calgary, AB, Canada, <sup>2</sup>Department of Community Health Sciences, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada, <sup>3</sup>Departments of Psychiatry and Community Health Sciences, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada

6750

## EVALUATION OF THE ANTIBACTERIAL SUSCEPTIBILITY PATTERN OF VIBRIO SPECIES ISOLATED FROM PERIWINKLES AND AQUATIC SNAILS SOLD AT UMUAGWO MARKET IN IMO STATE, NIGERIA

**Ogechi Innocentia Nwachukwu**, Chinyere Ukaga, Chika Maureen Ezenwa, Treasure Njideka Njoku-Obi  
*Imo State University, Owerri, Imo State, Nigeria, Owerri, Nigeria*

6751

## SOCIOECONOMIC AND COMMUNITY DRIVERS OF SAFE HOUSEHOLD WATER AND SANITATION: A MIXED METHODS ANALYSIS IN NORTHERN ECUADOR

Molly K. Miller-Petrie<sup>1</sup>, Nicolette A. Zhou<sup>2</sup>, Kelsey J. Jesser<sup>2</sup>, Caitlin Hemlock<sup>2</sup>, Christine S. Fagnant-Sperati<sup>2</sup>, William Cevallos<sup>3</sup>, Gabriel Trueba<sup>4</sup>, Gwenyth O. Lee<sup>5</sup>, Joseph N.S. Eisenberg<sup>6</sup>, Karen Levy<sup>2</sup>

<sup>1</sup>Department of Epidemiology, Department of Environmental and Occupational Health Sciences, University of Washington, Seattle, WA, United States, <sup>2</sup>Department of Environmental and Occupational Health Sciences, University of Washington, Seattle, WA, United States, <sup>3</sup>Centro de Biomedicina, Universidad Central del Ecuador, Quito, Ecuador, <sup>4</sup>Instituto de Microbiología, Universidad San Francisco de Quito, Quito, Ecuador, <sup>5</sup>Rutgers Global Health Institute, Rutgers University, New Brunswick, NJ, United States, <sup>6</sup>Department of Epidemiology, University of Michigan, Ann Arbor, MI, United States



## Symposium 29

### The Power of Partnership: The Role of the U.S. Government in Advancing Global Health

Convention Center – Hall I-2 (1st Floor)

Thursday, November 14, 12:15 p.m. - 1:30 p.m.

**This session does not carry CME credit.**

In an era of unprecedented global health challenges, the synergy between government initiatives and international collaborations is pivotal to driving forward innovative research and sustainable solutions. This session will focus on the US government as the largest funder and implementer of global health programs and explore how strategic partnerships between the US government and global health organizations are transforming research landscapes and addressing critical health issues worldwide.

Join us as we delve into the multifaceted roles of the US Federal agencies in shaping and supporting global health research from basic science through operational and implementation research to scaled program delivery. Our distinguished panel of experts will highlight key programs and funding mechanisms that have catalyzed groundbreaking research, improved health outcomes, and strengthened health systems across regions. This will also include discussion on how academia, non-governmental organizations, private sector partners, and international bodies connect with their mission.

This session is designed as a high-level overview for researchers and health professionals who may not directly collaborate with US agencies but who would like to gain a better understanding of how various US Federal agencies support global health. Participants will gain valuable insights into how collective efforts and strategic partnerships can accelerate progress and address the most pressing health challenges facing our world today.

#### CHAIR

Jamie Bay Nishi  
American Society of Tropical Medicine and Hygiene, Arlington, VA, United States

David Hamer  
Boston University, Boston, MA, United States

12:15 p.m.

### WELCOME, INTRODUCTIONS AND OVERVIEWS OF EACH AGENCY

Jamie Bay Nishi  
American Society of Tropical Medicine and Hygiene, Arlington, VA, United States

12:55 p.m.

### FACILITATED Q&A

David Hamer  
Boston University, Boston, MA, United States

### PANELISTS

David Fitter  
Centers for Disease Control and Prevention, Atlanta, GA, United States

Lee Hall  
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

Peter H. Kilmarx  
Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

Kayla F. Laserson  
Centers for Disease Control and Prevention, Atlanta, GA, United States

Amy Lin  
ARPANETH Innovation Network, Advanced Research Projects Agency for Health, Bethesda, MD, United States

Nelson Michael  
Walter Reed Army Institute of Research, Silver Spring, MD, United States

David Walton  
President's Malaria Initiative, Washington, DC, United States

1:15 p.m.

### OPEN Q&A AND WRAP-UP

David Hamer  
Boston University, Boston, MA, United States

## Late-Breaker Abstract Session 30

### Late-Breakers in Basic Science

Convention Center - Room 383/384/385 (3rd Floor)

Thursday, November 14, 12:15 p.m. - 1:30 p.m.

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. See the Meeting App or Late-Breaker Abstract Presentation Schedule booklet (available online) for the presentation schedule.

#### CHAIR

Wei-Kung Wang  
John A. Burns School of Medicine, University of Hawaii at Manoa, Honolulu, HI, United States

Yai Justin Doritchamou  
National Institute of Allergy and Infectious Disease, Bethesda, MD, United States

## Meet the Professors Session 31

### Meet the Professors: Trainee Case Competition

Convention Center - Room 388/389 (3rd Floor)

Thursday, November 14, 12:15 p.m. – 1:30 p.m.

Meet the Professors sessions are valuable learning experiences for trainees and practicing clinicians to hear about clinical reasoning.

This session will feature unique clinical cases of tropical diseases presented by clinical trainees that have been evaluated, diagnosed and treated by the trainee under faculty supervision at their training facility. The cases will be presented as “unknowns” and a panel will discuss the cases with the audience, including their differential diagnoses and approaches to diagnosis and treatment.

#### SESSION ORGANIZER

Jill Weatherhead  
National School of Tropical Medicine, Baylor College of Medicine, Houston, TX, United States

#### PANELISTS

Rachel Martin-Blais  
Nationwide Children's Hospital, Columbus, OH, United States

Henry Wu  
The Emory Clinic, Emory University, Atlanta, GA, United States

Edward T. Ryan  
Massachusetts General Hospital, Boston, MA, United States

#### **PRESENTATION #1**

Clive Martin Rodrigues  
Kings College Hospital NHS Foundation Trust, London, United Kingdom

#### **PRESENTATION #2**

Gabriela Garrido-Pinzás  
Instituto de Medicina Tropical Alexander von Humboldt, Universidad Peruana Cayetano Heredia, Lima, Peru

#### **PRESENTATION #3**

Wilson Goh  
National University Health System (NUHS, Singapore), Singapore

### **Lunch with the American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Councilors**

Convention Center - Room 397 (3rd Floor)  
Thursday, November 14, 12:15 p.m. - 1:30 p.m.

We have reserved the room for attendees to stop by and chat with members of the parasitology subgroup, ACMCIP. Bring your own lunch and network with your fellow parasitologists!

### **American Committee of Medical Entomology (ACME) Trainee Networking Lunch**

Convention Center - Room 398 (3rd Floor)  
Thursday, November 14, 12:15 p.m. - 1:30 p.m.

These lunch table meetings, organized by the ACME subgroup of ASTMH, aims to provide students and postdoctoral fellows an opportunity to interact with established medical entomologists to discuss job opportunities, related scientific work and receive valuable career guidance and direction.

### **Ben Kean Fellowship Committee Meeting**

Hilton - Marlborough A (2nd Floor)  
Thursday, November 14, 12:15 p.m. - 1:30 p.m.

### **Digital Education Committee Meeting**

Hilton - Ascot (3rd Floor)  
Thursday, November 14, 12:15 p.m. - 1:30 p.m.

### **Membership Committee Meeting**

Hilton - Norwich (3rd Floor)  
Thursday, November 14, 12:15 p.m. - 1:30 p.m.



## **Plenary Session 32**

### **Plenary Session II: Charles Franklin Craig Lecture**

Convention Center - Hall I-2 (1st Floor)  
Thursday, November 14, 1:45 p.m. - 2:30 p.m.

#### CHAIR

Albert I. Ko  
Yale School of Public Health, New Haven, CT, United States



The Charles Franklin Craig Lecture is an honor bestowed on a distinguished worker in the field of tropical medicine. Charles Franklin Craig (1872-1950) received his MD from Yale University and entered the Army Medical Corps in 1898, as a pathologist and bacteriologist. After holding a variety of far-flung assignments early in his career, in 1909 he began a long association

with the Army Medical School in Washington DC, rising to become Professor and Commandant of the School. He wrote ten books on malaria, parasitology and infectious diseases, and he discovered and described *Plasmodium ovale*. In 1931 he retired from the Army to become Professor of Tropical Medicine and head of the Department at Tulane School of Medicine. He was President of the American Society of Tropical Medicine (1915), Editor-in-Chief of the *American Journal of Tropical Medicine* (1927-1946) and Editor of the *Journal of the National Malaria Society* (1942-1944).

#### **1:45 p.m. INTRODUCTION**

Albert I. Ko  
Yale School of Public Health, New Haven, CT, United States

**2 p.m.**

## PIONEERING RESEARCH AND CONTROL OF EMERGING INFECTIOUS DISEASES IN THE DEMOCRATIC REPUBLIC OF THE CONGO: LESSONS I'VE LEARNED FROM EBOLA AND MPOX SINCE 1976



Photo courtesy  
Institut de France

**Jean-Jacques Muyembe Tamfum, MD, PhD**

*General Director  
National Institute of Biomedical Research  
Kinshasa, Democratic Republic of the Congo*

Dr. Jean-Jacques Muyembe Tamfum is the Director General of the DRC's National Institute of Biomedical Research in Kinshasa,

full Professor of Microbiology at the University of Kinshasa Medical School and the inaugural president of the Congolese Academy of Science. He has received several honors including lifetime achievement awards from the African Union/Africa CDC and the International Symposium on Filoviruses. He is laureate of Mérieux Foundation and Hideo Noguchi Africa Prizes.

Recently he received an honorary Doctor of Science degree from Harvard and the University of Montpellier (France).

Dr. Muyembe is a Congolese Virologist who leads public health emergency responses to emerging and re-emerging infectious diseases in the Democratic Republic of the Congo. He is most widely known for his seminal work on Ebola virus disease, generating the foundation of our understanding of epidemiology, clinical manifestations and response strategies against Ebola outbreaks.

He is globally recognized leader in the fight against Ebola and is a key figure in the World Health Organization efforts to combat infectious diseases. He is co-discoverer of the Ebola virus in 1976 and co-inventor of the monoclonal antibody "mAb114", approved by FDA as an Ebola treatment under the name "Ebanga" in December 2020.

### Poster Session A Viewing

*Convention Center - Hall I-1 (1st Floor)*  
**Thursday, November 14, 1:45 p.m. - 3 p.m.**

### Exhibit Hall Open

*Convention Center - Hall J (1st Floor)*  
**Thursday, November 14, 2:15 p.m. - 3:15 p.m.**

### Coffee Break

*Convention Center - Hall J (1st Floor)*  
**Thursday, November 14, 2:30 p.m. - 3 p.m.**

### Poster Session A Dismantle

*Convention Center - Hall I-1 (1st Floor)*  
**Thursday, November 14, 3 p.m. - 5:15 p.m.**



## Symposium 33

### Malaria Vector Genomics Surveillance in Africa: A Pan-African-Led Initiative to Deliver an Accessible Data Platform for Research and Public Health

*Convention Center - Hall I-2 (1st Floor)*

**Thursday, November 14, 3 p.m. - 4:45 p.m.**

In sub-Saharan Africa (SSA), the Anopheles vectors of malaria are undergoing rapid genetic and evolutionary changes due to high selection pressure from persistent use of conventional insecticides in the main insecticidal interventions. As new classes of insecticides with new modes of action are introduced into the pipeline, the mosquitoes will only get more adaptive. A clear understanding of the genomic alterations leading to molecular, ecological, and evolutionary changes in the Anopheles genomes is essential to monitor the adaptation of Anopheles vectors to control initiatives. This will enable the initiation of effective insecticide resistance management strategies and guarantee the continued efficacy of conventional and novel vector control products. Over the past six years since 2018, the Pan-African Mosquito Control Association (PAMCA) has partnered with Malaria Genomic Epidemiology (MalariaGEN) group at Wellcome Sanger Institute, UK, and G-AVENIR (Genomics of African Vectors for NMCP Management of Insecticide Resistance) led by KEMRI (Kenya) and TIDRC/UAC (Benin) to support multi-country studies on Anopheles genomic surveillance in malaria-endemic SSA countries. These projects are led by partner SSA institutions and Principal Investigators working in partnership with their NMCPs. The goal of the projects was to collect, collate, and curate essential genomic data on Anopheles genetic diversity, population structure, evolutionary traits and the intersections of these factors with better understanding and management of malaria epidemiology in the continent. This symposium will present key progress milestones in the implementation of the genomics surveillance program with specific updates on building the vector genomics surveillance community network, output of the training initiatives undertaken under this program, advocacy and engagement initiatives with the country NMCPs, and progress with the establishment of the hardware high-performance infrastructure to support bioinformatics analysis across the continent. The symposium will present data from a selection of genomics surveillance studies from this program and how these data are informing malaria vector control policy and operational guidelines changes. #Genomics; #MolecularBiology; #Genetics

#### CHAIR

Elijah Juma  
*Pan-African Mosquito Control Association (PAMCA), Nairobi, Kenya*

Alistair Miles  
*Wellcome Sanger Institute, Cambridgeshire, United Kingdom*

**3 p.m.**

#### INTRODUCTION

3:10 p.m.

**GENOMIC SURVEILLANCE OF ANOPHELES ARABIENSIS IN THE GAMBIA REVEALS EVIDENCE OF INCREASED INSECTICIDE RESISTANCE IN COASTAL POPULATIONS**

Fatoumata Seck

*African Centre of Excellence in Biotechnological Innovations, Banjul, Gambia*

3:35 p.m.

**FIRST REPORT OF ANOPHELES COLUZZII IN KENYA AND COMPARISON OF GENETIC STRUCTURE AND INSECTICIDE RESISTANCE PROFILES WITH CONSPECIFIC POPULATIONS IN WEST AND CENTRAL AFRICA**

Luna Kamau

*Kenya Medical Research Institute (KEMRI), Nairobi, Kenya*

3:50 p.m.

**TAXONOMY, POPULATION STRUCTURE, AND RESISTANCE PROFILES OF ANOPHELES GAMBIAE COMPLEX MOSQUITOES IN TANZANIA**

Sophia Mwinyi

*Ifakara Health Institute, Ifakara, United Republic of Tanzania*

4:05 p.m.

**GENOMIC SURVEILLANCE OF ANOPHELES GAMBIAE S.L IN MALI**

Assétou Diarra

*Malaria Research and Training Center, Bamako, Mali*

4:20 p.m.

**DISCOVERY OF KNOCK-DOWN RESISTANCE IN THE MAJOR MALARIA VECTOR ANOPHELES FUNESTUS REVEALS THE LEGACY OF PERSISTENT DDT POLLUTION.**

Joel Otero

*Ifakara Health Institute & University of Glasgow, Ifakara & Edinburgh, United Republic of Tanzania*

**Scientific Session 34**

**Filariasis – Epidemiology and Control**

*Convention Center - Room 343/344 (3rd Floor)*

**Thursday, November 14, 3 p.m. - 4:45 p.m.**

**#onchocerciasis #loiasis #MDA #hygiene #filariasis**

**CHAIR**

Paul Cantey

*Centers for Disease Control and Prevention, Atlanta, GA, United States*

Philip Budge

*Washington University School of Medicine, St. Louis, MO, United States*

3 p.m.

6752

**MOXIDECTIN PLUS ALBENDAZOLE FOR LYMPHATIC FILARIASIS: EFFECTS THROUGH 36 MONTHS POST-TREATMENT**

Benjamin Koudou<sup>1</sup>, Catherine Bjerum<sup>2</sup>, Allassane Outtara<sup>1</sup>, Paskal Toki Gabo<sup>3</sup>, Charles Goss<sup>4</sup>, Daphne Lew<sup>4</sup>, Christopher King<sup>2</sup>, Peter Fischer<sup>4</sup>, Gary Weil<sup>4</sup>, Philip Budge<sup>5</sup>

<sup>1</sup>Centre Suisse de Recherches Scientifiques en Côte d'Ivoire, Abidjan, Côte D'Ivoire, <sup>2</sup>Case Western Reserve University, Cleveland, OH, United States, <sup>3</sup>Centre Hospitalier Régional d'Agboville, Agboville, Côte D'Ivoire, <sup>4</sup>Washington University in St. Louis, St. Louis, MO, United States, <sup>5</sup>Washington University School of Medicine, St. Louis, MO, United States

(ACMCIP Abstract)

3:15 p.m.

6753

**STRINGENT APPLICATION OF THE ESSENTIAL PACKAGE OF CARE WITH OR WITHOUT ADDITIONAL TREATMENT WITH DOXYCYCLINE IN PATIENTS WITH ADVANCED STAGES (4 - 6) OF FILARIAL LYMPHEDEMA**

Ute Klarmann-Schulz<sup>1</sup>, Sarah M. Sullivan<sup>2</sup>, Yaya I. Coulibaly<sup>3</sup>, Alexander Y. Debrah<sup>4</sup>, Thishan C. Yahathugoda<sup>5</sup>, Akili Kalinga<sup>6</sup>, Suma Krishnasasstry<sup>7</sup>, Jennifer Nadal<sup>8</sup>, Charles Mackenzie<sup>2</sup>, John Horton<sup>9</sup>, Eric Ottesen<sup>2</sup>, Achim Hoerauf<sup>1</sup>

<sup>1</sup>Institute for Medical Microbiology, Immunology and Parasitology (IMMIP), University Hospital Bonn, Bonn, Germany, <sup>2</sup>Neglected Tropical Diseases Support Center, Task Force for Global Health, Atlanta, GA, United States, <sup>3</sup>International Center for Excellence in Research, Bamako, Mali, <sup>4</sup>Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR), Faculty of Allied Health Sciences, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana, <sup>5</sup>Filariasis Research Training and Service Unit, Department of Parasitology, Faculty of Medicine, University of Ruhuna, Galle, Sri Lanka, <sup>6</sup>National Institute for Medical Research (NIMR), Dar es Salaam, United Republic of Tanzania, <sup>7</sup>Filariasis Research center, Govt. T. D. Medical College, Alappuzha, Kerala, India, <sup>8</sup>Institute for Medical Biometry, Informatics and Epidemiology (IMBIE), University Hospital Bonn, Bonn, Germany, <sup>9</sup>Tropical Projects, Hitchin, United Kingdom

(ACMCIP Abstract)

3:30 p.m.

6754

**EVIDENCE OF RENEWED ONCHOCERCIASIS TRANSMISSION IN THE METEMA SUB-FOCUS AFTER TREATMENTS STOPPED IN 2017**

Yewondwossen Bitew<sup>1</sup>, Emily Griswold<sup>2</sup>, Jenna E. Coalson<sup>2</sup>, Aderajew Mohammed<sup>1</sup>, Mitiku Adugna<sup>3</sup>, Fetene Mihretu<sup>3</sup>, Kadu Meribo<sup>4</sup>, Tewodros Seid<sup>1</sup>, Tekola Endeshaw<sup>1</sup>, Desalegn Jemberie<sup>1</sup>, Fikresilasie Samuel<sup>1</sup>, Firdaweke Bekele<sup>1</sup>, Tadesse Asmare<sup>1</sup>, Henok Birhanu<sup>1</sup>, Adane Yayeh<sup>1</sup>, Geremew Haileyesus<sup>1</sup>, Gedefaw Ayenew<sup>3</sup>, Yihenew Wubet<sup>3</sup>, Anley Haile<sup>1</sup>, Fikre Seife<sup>4</sup>, Zerihun Tadesse<sup>1</sup>, Frank O. Richards<sup>2</sup>, Gregory S. Noland<sup>2</sup>

<sup>1</sup>The Carter Center, Addis Ababa, Ethiopia, <sup>2</sup>The Carter Center, Atlanta, GA, United States, <sup>3</sup>The Carter Center, Bahir Dar, Ethiopia, <sup>4</sup>Federal Ministry of Health, Addis Ababa, Ethiopia

3:45 p.m.

6755

**ASSOCIATION BETWEEN ANATOMICAL HYPOSPLENISM AND LOA LOA MICROFILAREMIA IN A RURAL AREA OF THE REPUBLIC OF CONGO: A POPULATION-BASED CROSS-SECTIONAL STUDY (THE MORLO PROJECT)**

Cédric B. Chesnais<sup>1</sup>, Valentin Dupasquier<sup>2</sup>, Elodie Lebretonchel<sup>3</sup>, Sébastien D. S. Pion<sup>1</sup>, Charlotte Boullé<sup>1</sup>, Ludovic G. Rancé<sup>2</sup>, Marhand Hemilembolo<sup>4</sup>, Michel Boussinesq<sup>1</sup>, Jeremy T. Campillo<sup>5</sup>, Francois Missamou<sup>6</sup>

<sup>1</sup>Institut de Recherche pour le Développement, Montpellier, France, <sup>2</sup>Montpellier University Hospital, Montpellier, France, <sup>3</sup>Hôpital Bichat-Claude Bernard, Paris, France, <sup>4</sup>Programme National de Lutte contre l'Onchocercose, Brazzaville, Republic of the Congo, <sup>5</sup>Inserm, Montpellier, France, <sup>6</sup>Programme National de Lutte contre l'Onchocercose, Br, Republic of the Congo

4 p.m.

6756

**IMPACT OF TRIPLE-DRUG MASS DRUG ADMINISTRATION ON THE SEROPREVALENCE OF ANTIBODIES TO LYMPHATIC FILARIASIS IN SAMOA**

Harriet Lawford<sup>1</sup>, Helen Mayfield<sup>1</sup>, Filipina Amosa-Lei Sam<sup>2</sup>, Satu Viali<sup>2</sup>, Tito Kamu<sup>3</sup>, Robert Thomsen<sup>4</sup>, Colleen Lau<sup>1</sup>

<sup>1</sup>UQ Centre for Clinical Research, The University of Queensland, Brisbane, Australia, <sup>2</sup>National University of Samoa, Apia, Samoa, <sup>3</sup>Tupua Tamasese Meaole Hospital, Apia, Samoa, <sup>4</sup>Ministry of Health, Apia, Samoa



4:15 p.m.

6757

### EVALUATION OF THE EFFECT OF ONE ROUND OF MASS DRUG ADMINISTRATION WITH IDA ON HUMAN *BRUGIA MALAYI* INFECTIONS IN BELITUNG DISTRICT, INDONESIA

Taniawati Supali<sup>1</sup>, Yenny Djuardi<sup>1</sup>, Sudirman Surdirman<sup>1</sup>, Elisa Iskandar<sup>1</sup>, Rahmat Alfian<sup>1</sup>, Yossi Destani<sup>1</sup>, Emanuele Giorgi<sup>2</sup>, Peter U. Fischer<sup>3</sup>

<sup>1</sup>Department of Parasitology, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia, <sup>2</sup>Faculty of Health and Medicine, Lancaster University, Lancaster, United Kingdom, <sup>3</sup>Division of Infectious Diseases, Washington University School of Medicine, Saint Louis, MO, United States

4:30 p.m.

6758

### INVESTIGATION OF POTENTIAL ONCHOCERCIASIS HOTSPOTS IN PARTS OF ENUGU SOUTHEAST NIGERIA THAT ARE UNDER POST TREATMENT SURVEILLANCE

Adamu Sallau<sup>1</sup>, Jenna E. Coalson<sup>2</sup>, Lazarus Nweke<sup>3</sup>, Emmanuel Miri<sup>1</sup>, Emmanuel Emukah<sup>1</sup>, Cephas Ityonzughu<sup>1</sup>, Lindsay Rakers<sup>2</sup>, Emily Griswold<sup>2</sup>, Solomon Adelayo<sup>1</sup>, Samuel Ifeanyichukwu<sup>1</sup>, Ifeoma Otiji<sup>3</sup>, Ebere Ogbodo<sup>3</sup>, Andrew Obasi<sup>1</sup>, Egeonu Attamah-Isiani<sup>1</sup>, Chukwuemeka Makata<sup>4</sup>, Fatai Oyediran<sup>4</sup>, Bertram E.B. Nwoke<sup>5</sup>, Frank O. Richards<sup>2</sup>, Gregory S. Noland<sup>2</sup>

<sup>1</sup>The Carter Center, Jos, Nigeria, <sup>2</sup>The Carter Center, Atlanta, GA, United States, <sup>3</sup>State Ministry of Health, Enugu, Nigeria, <sup>4</sup>Federal Ministry of Health, Abuja, Nigeria, <sup>5</sup>Imo State University, Owerri, Nigeria

## Scientific Session 35

### Water, Sanitation, Hygiene and Environmental Health (WaSH-E): Interventions

Convention Center - Room 345 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

#Epidemiology #InfectiousDisease #Prevention #FieldStudies

#### CHAIR

Laura Braun  
London School of Hygiene & Tropical Medicine, London, United Kingdom

Jade Benjamin-Chung  
Stanford University, Stanford, CA, United States

3 p.m.

6759

### MITIGATING COLONIZATION WITH CARBAPENEM-RESISTANT ORGANISMS AMONG NEONATAL INTENSIVE CARE UNIT ADMISSIONS: EVALUATING THE EFFECTIVENESS OF INFECTION CONTROL INTERVENTIONS

Fahmida Chowdhury<sup>1</sup>, Gazi Md. Salahuddin Mamun<sup>1</sup>, Sanzida Khan<sup>1</sup>, Syeda Mah-E-Muneer<sup>1</sup>, Aminul Islam<sup>1</sup>, Dilruba Ahmed<sup>1</sup>, Debashis Sen<sup>1</sup>, Md. Golam Dostogir Harun<sup>1</sup>, Lisa P Oakley<sup>2</sup>, Gemma Parra<sup>2</sup>, Ashley Styczynski<sup>2</sup>

<sup>1</sup>icddr, Dhaka, Bangladesh, <sup>2</sup>Centers for Disease Control and Prevention (US-CDC), Atlanta, GA, United States

3:15 p.m.

6760

### URBAN SANITATION UPGRADES IN MAPUTO, MOZAMBIQUE ASSOCIATED WITH REDUCED DETECTION OF ENTERIC PATHOGENS IN FECAL SLUDGES

Gouthami Rao<sup>1</sup>, Márcia Chiluvane<sup>2</sup>, Yarrow Linden<sup>1</sup>, Jack Dalton<sup>1</sup>, Drew Capone<sup>3</sup>, Amanda Lai<sup>1</sup>, David Holcomb<sup>1</sup>, Erin Kowalsky<sup>1</sup>, Elly Mataveia<sup>2</sup>, Victória Cumbane<sup>2</sup>, Vanessa Monteiro<sup>2</sup>, Edna Viegas<sup>2</sup>, Joe Brown<sup>1</sup>

<sup>1</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>2</sup>Instituto Nacional de Saúde, Maputo, Mozambique, <sup>3</sup>Indiana University, Bloomington, IN, United States

3:30 p.m.

6761

### EFFECTS OF HOUSEHOLD CONCRETE FLOORS ON MATERNAL AND CHILD HEALTH (CRADLE TRIAL): A RANDOMIZED CONTROLLED TRIAL

FARJANA JAHAN<sup>1</sup>, Mahbubur Rahman<sup>1</sup>, Suhi Hanif<sup>2</sup>, Afsana Yeamin<sup>1</sup>, Abul Kasham Shoab<sup>1</sup>, Zahid Hayat Mahmud<sup>3</sup>, Fahmida Tofail<sup>4</sup>, Rashidul Haque<sup>5</sup>, Ayse Ercumen<sup>6</sup>, Jade Benjamin-Chung<sup>2</sup>

<sup>1</sup>Environmental Health and WASH, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh, <sup>2</sup>Department of Epidemiology & Population Health, Stanford University, California, CA, United States, <sup>3</sup>Laboratory of Environmental Health, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh, <sup>4</sup>Nutrition Research Division, International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>5</sup>Infectious Diseases Division, International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>6</sup>Department of Forestry and Environmental Resources, North Carolina State University, Raleigh, NC, United States

3:45 p.m.

6762

### EFFECTS OF A WATER, SANITATION, AND HYGIENE PROGRAM ON DIARRHEA AND CHILD GROWTH IN THE DEMOCRATIC REPUBLIC OF THE CONGO: A CLUSTER-RANDOMIZED CONTROLLED TRIAL OF THE PREVENTATIVE-INTERVENTION-FOR-CHOLERA-FOR-7-DAYS (PICHAT7) PROGRAM

Christine Marie George<sup>1</sup>, Presence Sanvura<sup>2</sup>, Jean-Claude Bisimwa<sup>2</sup>, Kelly Endres<sup>1</sup>, Alves Namunesha<sup>2</sup>, Willy Felicien<sup>2</sup>, Jamie Perin<sup>1</sup>, David Sack<sup>1</sup>, Camille Williams<sup>1</sup>, Raissa Boroto<sup>2</sup>, Gisèle Nsimire<sup>2</sup>, Feza Rugusha<sup>2</sup>, Freddy Endeleya<sup>2</sup>, Pacifique Kitumaini<sup>2</sup>, Claude Lunyelunye<sup>2</sup>, Emmanuel Buhendwa<sup>2</sup>, Brigitte Munyerenkana<sup>2</sup>, Jessy Timsifu<sup>2</sup>, Pascal Kitumanini<sup>2</sup>, Blessing Muderhwa Banywesize<sup>2</sup>, Justin Bengheya<sup>3</sup>, Ghislain Maheshe<sup>2</sup>, Cirhuza Cikomola<sup>2</sup>, Alain Mwishingo<sup>2</sup>, Lucien Bisimwa<sup>2</sup>

<sup>1</sup>Johns Hopkins School of Public Health, Baltimore, MD, United States, <sup>2</sup>Université Catholique de Bukavu, Bukavu, Democratic Republic of the Congo, <sup>3</sup>Division Provinciale de la Santé Sud Kivu, Ministère de la Santé, Bukavu, Democratic Republic of the Congo

4 p.m.

6763

### REDUCED EXPOSURE TO ENTERIC PATHOGENS IN CHILDREN LIVING FROM BIRTH IN HOUSEHOLDS SERVED BY SANITATION UPGRADES IN URBAN MAPUTO, MOZAMBIQUE

Erin Kowalsky<sup>1</sup>, Márcia Chiluvane<sup>2</sup>, David Holcomb<sup>1</sup>, Vanessa Monteiro<sup>2</sup>, Victória Cumbane<sup>2</sup>, Elly Mataveia<sup>2</sup>, Toheedat Bakare<sup>1</sup>, Drew Capone<sup>3</sup>, Gouthami Rao<sup>1</sup>, Sindhuja Damodaran<sup>1</sup>, Samuel Pomper<sup>1</sup>, Oliver Cumming<sup>4</sup>, Edna Viegas<sup>2</sup>, Joe Brown<sup>1</sup>

<sup>1</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>2</sup>Instituto Nacional de Saúde, Mozambique, Maputo, Mozambique, <sup>3</sup>Indiana University, Bloomington, IN, United States, <sup>4</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

4:15 p.m.

6764

### A CLUSTER RANDOMIZED CONTROLLED TRIAL FOR THE EFFECT OF A WATER, SANITATION AND HYGIENE KIT COMBINED WITH STANDARD OUTPATIENT TREATMENT ON DRINKING WATER QUALITY IN NORTHERN SENEGAL

Laura Braun<sup>1</sup>, Serigne Niang<sup>2</sup>, Djiby N'diaye<sup>2</sup>, Joseph Wells<sup>1</sup>, Matar Ba<sup>2</sup>, Clara Macleod<sup>1</sup>, Albert E. Cabo<sup>2</sup>, Yahya Gnokane<sup>2</sup>, Françoise Siroma<sup>3</sup>, Jean Lapegue<sup>2</sup>, Moustapha Seye<sup>4</sup>, Antonio Vargas<sup>5</sup>, Alexandre Devort<sup>2</sup>, Dleynaba N'diaye<sup>5</sup>, Oliver Cumming<sup>1</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Action Against Hunger, Dakar, Senegal, <sup>3</sup>Action against Hunger, Dakar, Senegal, <sup>4</sup>LARTES, Dakar, Senegal, <sup>5</sup>Action Against Hunger, Madrid, Spain, <sup>6</sup>Action Against Hunger, Paris, France

4:30 p.m.

6765

### DRINKING WATER QUALITY AND ACCESS IMPACTS ON INFANT GUT MICROBIOME COMPOSITION IN MOZAMBIKAN INFANTS

Courtney Victor<sup>1</sup>, Konstantinos T. Konstantinidis<sup>2</sup>, Sandy McGunegill<sup>1</sup>, Rassul Nalá<sup>3</sup>, Jedidiah S. Snyder<sup>1</sup>, Matthew C. Freeman<sup>1</sup>, Karen Levy<sup>4</sup>  
<sup>1</sup>Emory University, Atlanta, GA, United States, <sup>2</sup>Georgia Institute of Technology, Atlanta, GA, United States, <sup>3</sup>Ministry of Health (Instituto Nacional de Saúde), Marracuene, Mozambique, <sup>4</sup>University of Washington, Seattle, WA, United States

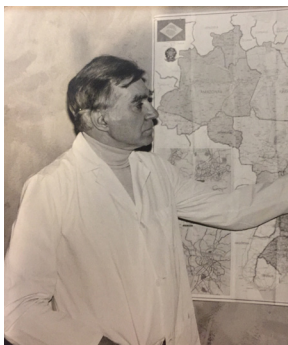
## Symposium 36

### American Committee on Clinical Tropical Medicine and Travelers' Health (Clinical Group - ACCTMTH) Symposium I: Vincenzo Marcolongo Lecture: Schistosomiasis: Insights into Immunology and Treatment from Human Challenge Studies

Convention Center - Room 352 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

Supported with funding from the International Association for Medical Assistance to Travellers (IAMAT)



Vincenzo Marcolongo

This session features the Vincenzo Marcolongo Lecture, which honors Dr. Vincenzo Marcolongo, the founder of IAMAT - the International Association for Medical Assistance to Travelers in 1960. Dr. Marcolongo's lifelong work was devoted to the medical needs of travelers. Through IAMAT and numerous publications, Dr. Marcolongo worked tirelessly to inform travelers of health risks and raise awareness of travelers' health. His foresight, compassion and generosity continue to serve as inspiration for IAMAT's work. To quote Dr. Vincenzo Marcolongo, "Distinguished physicians and respected medical institutions, with a sense of solidarity which makes them like one family, are now working in harmony to assist the traveler who may require medical assistance on his journey... The need for peace and understanding between the peoples of the world has never been as great as now. Peace can come only with understanding, and travel is an important means of acquiring it."

Schistosomiasis is an acute and chronic parasitic disease caused by blood flukes (trematode worms) of the genus *Schistosoma*. Schistosomiasis transmission occurs in 78 countries, latest estimates revealed at least 251.4 million people requiring preventive treatment in 2021. In addition, female genital schistosomiasis is an emerging disease with considerable morbidity in low and middle income countries. Control of schistosomiasis depends on a single drug, praziquantel, with variable cure rates, high reinfection rates, and risk of drug resistance. A vaccine could transform schistosomiasis control efforts. Recent developments in understanding of parasite biology and host immune response as well as controlled human schistosoma infection models are advancing efforts in vaccine

development. Dr. Meta Roestenberg will deliver the Marcolongo Lecture and provide an update on the latest insights into Schistosomiasis immunology and treatment based on the human challenge work and reflect on its implications for schistosome control strategies. #ClinicalResearch #Immunology #Vaccinology

#### CHAIR

Kyle Petersen  
Uniformed Services University, Bethesda, MD, United States

3 p.m.

#### INTRODUCTION TO VINCENZO MARCOLONGO LECTURE

Kyle Petersen  
Uniformed Services University, Bethesda, MD, United States

3:10 p.m.

#### VINCENZO MARCOLONGO LECTURE: SCHISTOSOMIASIS: INSIGHTS INTO IMMUNOLOGY AND TREATMENT FROM HUMAN CHALLENGE STUDIES



**Meta Roestenberg, MD**  
Professor, Human Models for Vaccine Development  
Universiteit Leiden  
Leiden, The Netherlands

Meta Roestenberg is an infectious diseases clinician heading the Controlled Human Infection Center at Leiden University Medical Center in the Netherlands. She leads a group of translational researchers in answering key questions related to host-pathogen interaction by making use of controlled human infection models. Her research group was the first to establish a controlled human infection model using single-sex schistosomes and the first to establish a controlled human infection model for hookworm using higher doses of larvae, enhancing the power of experimental hookworm infections. Moreover, the team pioneered the clinical testing of a genetically attenuated sporozoite vaccine against malaria by intravenous administration and demonstrated the exceptional potency of late-arresting genetically attenuated malaria parasite vaccines. Recognizing the ethical complexity of such healthy volunteer studies, the group is active in establishing ethical frameworks for such challenge trials, contributing to generating guidelines and leading discussions.

3:55 p.m.

#### ACCTMTH ANNUAL BUSINESS MEETING

Kyle Petersen  
Uniformed Services University, Bethesda, MD, United States

4:25 p.m.

#### NETWORKING RECEPTION

Thursday  
November 14

## Scientific Session 37

### American Committee of Molecular Cellular and Immunoparasitology (ACMCIP): Molecular Approaches to Parasite Infection, Growth and Development

Convention Center - Room 353 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

Supported with funding from the Burroughs Wellcome Fund

#MolecularBiology #CellBiology  
#InfectiousDisease #Pathogenesis

#### CHAIR

Scott E. Lindner  
Pennsylvania State University, University Park, PA, United States

Hang Thi Thu Nguyen  
Yale University, New Haven, CT, United States

3 p.m.

8433

#### A SPECIALIZED RIBOSOME PROMOTES HOST-TO-VECTOR TRANSMISSION IN THE HUMAN MALARIA PARASITE

Tiziano Vignolini, Justine Couble, Grégory Doré, Sebastian Baumgarten  
Pasteur Institute, Paris, France

3:15 p.m.

8434

#### HIDE AND GO SEQ: CAPTURING THE ANTIBODY-VSG ARMS RACE DURING TRYPANOSOMA BRUCEI INFECTION

Lulu M. Singer<sup>1</sup>, Jaime E. So<sup>2</sup>, Alexander K. Beaver<sup>2</sup>, Monica R. Mugnier<sup>1</sup>  
<sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD, United States

3:30 p.m.

6766

#### GENOME-WIDE ASSOCIATION STUDY OF AN AFRICAN SNAIL VECTOR OF SCHISTOSOMIASIS IDENTIFIES GENES ASSOCIATED WITH RESISTANCE TO INFECTION BY SCHISTOSOMA MANSONI

Tom Pennance<sup>1</sup>, Jacob A. Tennesen<sup>2</sup>, Johannie M. Spaan<sup>1</sup>, Tammie McQuistan<sup>1</sup>, George Ogara<sup>3</sup>, Fredrick Rawago<sup>1</sup>, Martin W. Mutuku<sup>4</sup>, Gerald M. Mkoji<sup>4</sup>, Eric S. Loker<sup>5</sup>, Maurice R. Odiere<sup>3</sup>, Michelle Steinauer<sup>1</sup>

<sup>1</sup>Western University of Health Sciences, Lebanon, OR, United States, <sup>2</sup>Harvard T.H. Chan School of Public Health, Boston, MA, United States, <sup>3</sup>Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, <sup>4</sup>Centre for Biotechnology Research and Development, Kenya Medical Research Institute, Nairobi, Kenya, <sup>5</sup>University of New Mexico, Albuquerque, NM, United States

(ACMCIP Abstract)

3:45 p.m.

6767

#### GENERATING THE GENERATOR: A GIANT COMPLEX ESSENTIAL FOR MITOCHONDRIAL BIOGENESIS IN PLASMODIUM FALCIPARUM

Ijeoma Okoye, Ian Lamb, Swati Dass, Joanne M. Morrissey, Michael W. Mather, Akhil B. Vaidya  
Drexel University College of Medicine, Philadelphia, PA, United States

(ACMCIP Abstract)

4 p.m.

6768

#### A DRUGGABLE AGC KINASE CLRK MEDIATES TEMPORAL REGULATION OF CYCLIC NUCLEOTIDE SIGNALING AND CONTROLS PARASITE EGRESS AND INVASION

Deepti Sarkar, Ravi Kumar Narayanasamy, Luciana Ribeiro Dinis, Abhai Tripathi, Isabelle Coppens, Prakash Srinivasan  
Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, United States

(ACMCIP Abstract)

4:15 p.m.

6769

#### INCREASED DUFFY BINDING PROTEIN 1 EXPRESSION CORRELATES WITH PLASMODIUM CYNOMOLGI GROWTH IN CONTINUOUS CULTURE

Wayne Cheng<sup>1</sup>, Magdalena Argomaniz<sup>1</sup>, Caitlin C. Cooper<sup>1</sup>, Amadis Vivas<sup>1</sup>, Saniya Sabnis<sup>1</sup>, Sarah G. Roberson<sup>1</sup>, Celia L. Saney<sup>1</sup>, Mary R. Galinski<sup>2</sup>, Steven P. Maher<sup>1</sup>, Dennis E. Kyle<sup>1</sup>, Chester J. Joyner<sup>1</sup>

<sup>1</sup>University of Georgia, Athens, GA, United States, <sup>2</sup>Emory University, Atlanta, GA, United States

(ACMCIP Abstract)

4:30 p.m.

6770

#### TISSUE COLONIZATION AND INFECTION ESTABLISHMENT OF TRYPANOSOMA BRUCEI BRUCEI AT THE BITE SITE

Hang Thi Thu Nguyen, Daniel Bruzzese, Erick Awuoch, Brian Weiss, Serap Aksoy  
Yale University, New Haven, CT, United States

(ACMCIP Abstract)

## Symposium 38

### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) Symposium I: Historical and Future Perspectives on Yellow Fever Virus

Convention Center - Room 354/355 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

This session does not carry CME credit.

Yellow fever virus (YFV) is an epidemic-prone arbovirus spread by various mosquito genera in the subtropics and tropics of South America and Africa. This event aims to bring together accomplished scientists engaged in YFV research for a discussion of the YFV history, current perspectives, and therapeutic development. #TranslationalScience #EmergingDiseaseThreats #Pathogenesis #Epidemiology #Evolution

#### CHAIR

Mauricio Nogueira  
Faculdade de Medicina de Sao Jose do Rio Preto, Sao Jose do Rio Preto, Brazil

Shannan Rossi  
University of Texas Medical Branch, Galveston, TX, United States

3 p.m.

#### INTRODUCTION

3:10 p.m.

#### HISTORY OF YFV

Tom Monath  
Crozet BioPharma LLC, Devens, MD, United States

**3:30 p.m.**

### **YFV TREATMENTS - A FOCUS ON MONOCLONALS**

Esper G. Kallas

*University of Sao Paulo, School of Medicine, Sao Paulo, Brazil*

**3:55 p.m.**

### **YFV IN SOUTH AMERICA**

Marta Giovanetti

*Laboratorio de Flavivirus, Fundacao Oswaldo Cruz, Rio de Janeiro, Brazil*

**4:20 p.m.**

### **YFV IN NEW ORLEANS**

Robert F. Garry

*Tulane University, New Orleans, LA, United States*

## **Symposium 39**

### **One Health Action for All: Assessment and Evaluation**

*Convention Center - Room 356 (3rd Floor)*

**Thursday, November 14, 3 p.m. - 4:45 p.m.**

The globe faces a prominent and urgent public health threat at the human-animal-environment interface, particularly concerning the emergence of diseases such as avian influenza, severe acute respiratory syndrome (SARS-CoV-1), and COVID-19. This highlights a vulnerability exacerbated by dense human populations and increased human-animal interactions. Adding to these concerns, challenges with antimicrobial resistance and food security issues have been exacerbated by the interaction of diverse ecological landscape and social-economic patterns. The significance of adopting a One Health approach to address these challenges is well-recognized. However, there are persistent challenges in implementing One Health at the national and sub-national levels, and this imposes an urgent need for executive assessments to guide One Health actions. Recognizing this critical gap, a number of research teams, are leading innovative explorations in developing tools and measurements for One Health assessment and evaluation. For example, the team from School of Global Health, Chinese Center for Tropical Diseases Research, Shanghai Jiao Tong University School of Medicine, with the support of the Bill & Melinda Gates Foundation, lead the establishment of the global One Health index (GOHI) and One Health Action Commission (OHAC). The discussion on the assessment and evaluation of One Health holds significant values. The performance evaluation of One Health helps countries understand their own shortcomings and gaps in One Health development. This facilitates the implementation of One Health approaches and the determination of priority areas for international aid related to One Health, thereby promoting the achievement of the Sustainable Development Goals. Meanwhile, the assessments lay the foundations for the incubation of One Health pilot projects and help to design prototypes tailoring into local scenarios. This symposium serves a catalytic role in improving exchanges benefiting various audience in assessment and evaluation on One Health implementation in LMICs, with following specific objectives: (i) it promotes dissemination of innovative techniques and research breakthroughs of One Health assessment and evaluation, thereby driving the advancement

of relevant methodologies and tools; (ii) it encourages the discussion on the gaps in One Health practices and the priorities for One Health assessment and evaluation, particularly in areas such as infectious disease control and prevention, emergency response, and antimicrobial resistance monitoring; (iii) it deepens the understanding of the essence of One Health assessment and evaluation, and promotes its application in decision-making related to health issues. #Elimination #EmergingDiseaseThreats #Epidemiology #FieldStudies #InfectiousDisease

#### **CHAIR**

Xiaonong Zhou

*School of Global Health, Chinese Center for Tropical Diseases Research, Shanghai Jiao Tong University School of Medicine, Shanghai, China*

**3 p.m.**

#### **INTRODUCTION**

**3:05 p.m.**

#### **THE PROGRESS OF CHINA IN PROMOTING ONE HEALTH APPROACH**

Xiaonong Zhou

*National Institute of Parasitic Diseases at Chinese Center for Disease Control and Prevention, Shanghai, China*

**3:30 p.m.**

#### **TRIPLE-CRISES-INDUCED FOOD INSECURITY: SYSTEMATIC UNDERSTANDING AND RESILIENCE BUILDING APPROACHES IN AFRICA**

Tambo Ernest

*University of Global Health Equity, Kigali, Rwanda*

**3:55 p.m.**

#### **DETERMINANTS FOR THE RISK OF MALARIA INFECTIONS AMONG CHILDREN IN REFUGEE SETTLEMENTS IN UGANDA**

Song Liang

*University of Massachusetts Amherst, Amherst, United States*

**4:20 p.m.**

#### **HOW FAR HAS THE GLOBE GONE IN ACHIEVING ONE HEALTH: EVIDENCE FROM GLOBAL ONE HEALTH INDEX (GOHI)**

Xiaoxi Zhang

*School of Global Health, Chinese Center for Tropical Diseases Research, School of Medicine, Shanghai Jiao Tong University, Shanghai, China*



## **Symposium 40**

### **Hansen's Disease (Leprosy) in the United States: Local Lessons and Global Implications**

*Convention Center - Room 357 (3rd Floor)*

**Thursday, November 14, 3 p.m. - 4:45 p.m.**

Hansen's disease, or leprosy, is a disease documented since ancient times. However, we are still struggling on our way towards elimination of this persistent and disabling disease, with more than 200,000 new cases reported every year to WHO. Several crucial characteristics of this disease are posing a challenge to reaching the goal of transmission interruption and elimination, including the long incubation time, diagnostic difficulties, our inability to predict who is at risk, and unavailability of *in vitro*

culturing. Furthermore, stigma and discrimination are long-standing barriers to early detection of leprosy and disability prevention. Needless to say that social exclusion contributes to the decrease in quality of life of those affected by the disease. In the United States (US), while leprosy is often considered to be eliminated, in reality, there are still 150 to 200 new cases reported yearly to the CDC or the National Hansen's Disease (Leprosy) Program. Cases arise not only among migrants but also within domestic populations, possibly contracting the disease from animal reservoirs, particularly armadillos. This potential zoonotic transmission could complicate global disease control efforts. Louisiana, host to this year's ASTMH, is a home to Carville where it was the only national leprosarium in the continental United States (1894-2005). Renowned for the discovery of promin (later dapson), the first leprosy drug, Carville's legacy continues as the National Hansen's Disease Museum and as the National Hansen's Disease Program in Baton Rouge. The latter's Laboratory Research Branch holds the world's sole armadillo-based leprosy model and a diverse array of research initiatives. In this symposium, we aim to elucidate the global and US leprosy statuses, disease control efforts, and targets. Pioneering work at the National Hansen's Disease Program will be presented. Furthermore, no discussion on leprosy would be complete without addressing the stigma associated with the disease. A second-generation family member of a Carville survivor will share her experience that have separated her from her parents and offer insights into how the residents forged their own world behind a barbed wire fence. To achieve the targets as outlined in the NTD Roadmap 2021-2030, Louisiana and US experiences warrant revisitation. With stagnant global case figures over the past two decades, a paradigm shift in leprosy control is imperative. Our focus should extend beyond countries where the disease is identified to be endemic. Given globalization and the zoonotic nature of leprosy, cases emerge regardless of geographical boundaries. We anticipate our symposium will shed a light on this facet of leprosy and contribute to the global fight against the disease. #Elimination #Epidemiology #HostResponse #PopulationSurveillance #SocialScience

**CHAIR**

Rie R. Yotsu  
*Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States*

Barbara M. Stryjewska  
*National Hansen's Disease Program, Baton Rouge, LA, United States*

**3 p.m.**  
**INTRODUCTION**

**3:10 p.m.**  
**GLOBAL EPIDEMIOLOGY OF HANSEN'S DISEASE (LEPROSY) AND ROADMAP TO 2030**

Subbanna Jonnalagada  
*World Health Organization - Global Leprosy Programme, New Delhi, India*

**3:25 p.m.**  
**EPIDEMIOLOGY OF HANSEN'S DISEASE IN THE UNITED STATES**

Caroline A. Schrodtt  
*CDC, Bacterial Special Pathogens Branch, Division of High-Consequence Pathogens & Pathology, Atlanta, GA, United States*

**3:40 p.m.**  
**TREATMENT FOR HANSEN'S DISEASE AND ITS IMMUNOLOGICAL COMPLICATIONS**

Barbara M. Stryjewska  
*National Hansen's Disease Program, Baton Rouge, LA, United States*

**3:55 p.m.**  
**EVALUATING NEW THERAPEUTIC AND PROPHYLACTIC COMPOUNDS & REGIMENS AGAINST MYCOBACTERIUM LEPRAE INFECTION**

Ramanuj Lahiri  
*National Hansen's Disease Program, Baton Rouge, LA, United States*

**4:10 p.m.**  
**HANSEN'S DISEASE, THE SEPARATING SICKNESS: LIVED EXPERIENCE FROM CARVILLE, LOUISIANA**

Anne Harmon Brett  
*Friends of the Carville Historic District, Vacherie, LA, United States*

**4:25 p.m.**  
**HANSEN'S DISEASE (LEPROSY), THE SEPARATING SICKNESS: LIVED EXPERIENCE FROM CARVILLE, LOUISIANA**

Claire Manes  
*Friends of Carville Historic District, Lafayette, LA, United States*

**4:35 p.m.**  
**CAN WE ELIMINATE HANSEN'S DISEASE (LEPROSY)? - FROM LOCAL TO GLOBAL PERSPECTIVE**

Rie Yotsu  
*Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States*

**Scientific Session 41**

**Global Health: Community Health, NTDs and NCDs**

*Convention Center - Room 383/384/385 (3rd Floor)*  
**Thursday, November 14, 3 p.m. - 4:45 p.m.**

**#Elimination #Epidemiology #FieldStudies #InfectiousDisease**

**CHAIR**

Grace Murilla  
*Yale University and Trypanosomiasis Res Ctr-KARI, Nairobi, Kenya*

Karla Estudillo Fuentes  
*Emory University, Atlanta, GA, United States*

**3 p.m.**

**6771**

**BROKERED DESIGN: COMMUNITY-DRIVEN LEARNING FOR MALARIA ELIMINATION IN THE DOMINICAN REPUBLIC**

Karla Estudillo Fuentes<sup>1</sup>, Luccene Desir<sup>2</sup>, Victoria Krauss<sup>2</sup>, Gregory Noland<sup>2</sup>, Karen Hamre<sup>2</sup>, Nicole Michelen Strofer<sup>3</sup>, Domingo Cabral<sup>4</sup>, Jose Luis Cruz Raposo<sup>5</sup>, James Lavery<sup>1</sup>

<sup>1</sup>Human Engagement Learning Platform, Hubert Department of Global Health, Rollins School of Public Health, Emory University, Atlanta, GA, United States, <sup>2</sup>The Carter Center, Atlanta, GA, United States, <sup>3</sup>Malaria and Neglected Tropical Diseases Program, Clinton Health Access Initiative, Santo Domingo, Dominican Republic, Santo Domingo, Dominican Republic, <sup>4</sup>Centro de Prevención y Control de Enfermedades Transmitidas por Vectores y Zoonosis, Ministerio de Salud y Asistencia Social, Santo Domingo, Dominican Republic, <sup>5</sup>Centro de Prevención y Control de Enfermedades Transmitidas por Vectores y Zoonosis, Ministerio de Salud y Asistencia Social, Dominican Republic, Santo Domingo, Dominican Republic

3:15 p.m.

6772

**ACCELERATING PROGRESS TOWARDS THE ELIMINATION OF MALARIA AND OTHER VBDS: ENGAGING WOMEN IN VECTOR CONTROL, THE PAMCA EXPERIENCE**

Damaris Matoke-Muhia, Jessy Goupeyou-Youmsi, Rosalia Joseph, Christina Sudi, Emma Orefuwa  
Pan Africa Mosquito Control Association, Nairobi, Kenya

3:30 p.m.

6773

**ADDRESSING HEALTH DISPARITIES AMONG TRANSGENDER WOMEN IN THE MIDDLE EAST: APPLYING THE ADAPT-ITT MODEL TO REFINE AND ENHANCE A COMMUNITY-BASED HIV INTERVENTION**

Sasha Abdallah Fahme<sup>1</sup>, Rachel Kaplan<sup>2</sup>, Leah Zraika<sup>3</sup>, Parya Saberi<sup>2</sup>  
<sup>1</sup>Weill Cornell Medicine, New York, NY, United States, <sup>2</sup>University of California San Francisco, San Francisco, CA, United States, <sup>3</sup>Helem Lebanon, Beirut, Lebanon

3:45 p.m.

6774

**TOWARDS INCLUSIVE HEALTHCARE: UNDERSTANDING CAREGIVER PERCEPTION ON THE USE OF A DIGITAL TOOL BY CLINICIANS TO MANAGE SICK CHILDREN IN PRIMARY HEALTHCARE SETTINGS OF TANZANIA: A MIXED METHOD STUDY**

Geoffrey I. Ashery<sup>1</sup>, Ibrahim E. Mtebene<sup>1</sup>, Alexandra V. Kulinkina<sup>2</sup>, Godfrey A. Kavishe<sup>3</sup>, Rainer Tan<sup>4</sup>, Chacha D. Mangu<sup>5</sup>, Lameck L. Luwanda<sup>1</sup>, Peter Agrea<sup>5</sup>, Nyanda E. Ntinginya<sup>6</sup>, Honorati M. Masanja<sup>1</sup>, Valérie D'Acromont<sup>4</sup>, Sabine Renggli<sup>1</sup>  
<sup>1</sup>Ifakara Health Institute, Dar es Salaam, United Republic of Tanzania, <sup>2</sup>Swiss Tropical and Public Health Institute, Basel, Switzerland, <sup>3</sup>National Institute of Medical Research, MMRC, Mbeya, United Republic of Tanzania, <sup>4</sup>University of Lausanne, Lausanne, Switzerland, <sup>5</sup>National Institute for Medical Research, MMRC, Mbeya, United Republic of Tanzania, <sup>6</sup>National Institute for Medical Research, Mbeya, United Republic of Tanzania

4 p.m.

6775

**DECOMPOSITION ANALYSIS OF CHANGE IN THE BURDEN OF NEGLECTED TROPICAL DISEASES, 1990-2021**

Ewerton Cousin, Cathleen Keller, Joanna Whisnant, Stephanie R. M. Zimsen, Taren Gorman, Olivia Nesbit, Lydia Plante, Michael Celone, Quince Hara, Jonathan F. Mosser  
Institute for Health Metrics and Evaluation, University of Washington, Seattle, WA, United States

4:15 p.m.

6776

**SPATIAL ACCESS TO HEALTH SERVICES IN THE TRI-BORDER REGION OF ARGENTINA, BOLIVIA, AND PARAGUAY**

Carla Rodriguez Gonzalez<sup>1</sup>, Susana Ávila<sup>2</sup>, Mariana Fernández<sup>2</sup>, Favio Crudo<sup>2</sup>, Veronica Andreo<sup>1</sup>, Maria Victoria Periago<sup>2</sup>  
<sup>1</sup>Instituto Gulich, Cordoba, Argentina, <sup>2</sup>Fundacion Mundo Sano, Buenos Aires, Argentina

4:30 p.m.

6777

**ASSOCIATION OF BLOOD PRESSURE AND ANTHROPOMETRIC INDICATORS WITH GENE VARIANTS IN ADULTS IN THE KASSENSA NANKANA MUNICIPAL AND KASSENSA NANKANA WEST DISTRICT OF GHANA**

Joseph Alale Aweeya<sup>1</sup>, Godfred Agongo<sup>2</sup>, Patrick O. Ansah<sup>1</sup>, Lord Gowans<sup>3</sup>  
<sup>1</sup>Navrongo Health Research Centre, Navrongo, Ghana, <sup>2</sup>C. K. Tedam University of Technology and Applied Sciences, Navrongo, Ghana, <sup>3</sup>Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

**Scientific Session 42**

**Global Health: Global Health Security, Emerging Infectious Diseases and Pandemic Preparedness**

Convention Center - Room 388/389 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

This session does not carry CME credit.

#InfectiousDisease #EmergingDiseaseThreats #Diagnostics #Prevention #Modeling

**CHAIR**

Miguel Reina Ortiz  
Indiana University Fairbanks School of Public Health, Indianapolis, IN, United States

Claire Quiner  
RTI International, Research Triangle Park, NC, United States

3 p.m.

6778

**USE OF A ONE HEALTH APPROACH TO DETECT EIGHT NOVEL HIGH RISK PATHOGENS IN ACUTE FEBRILE PATIENTS IN NIGERIA**

Claire Quiner<sup>1</sup>, Jay Samuels<sup>2</sup>, Jean Kim<sup>1</sup>, Philippe Chebu<sup>2</sup>, Cyril Erameh<sup>3</sup>, Vivian Kwaghe<sup>4</sup>, Lauren Courtney<sup>1</sup>, Onyia Ejike<sup>4</sup>, Ikponmwosa Odia<sup>3</sup>, Eke Ofuche<sup>2</sup>, Femi Owolagba<sup>2</sup>, Kat Asman<sup>1</sup>, Osas Edeawe<sup>3</sup>, Ephraim Ogbaini<sup>3</sup>, Nankpah Vongdip<sup>4</sup>, Victoria Orok<sup>4</sup>, Oladimeji Matthew<sup>4</sup>, Blessed Okira<sup>4</sup>, Jacqueline Agbukor<sup>3</sup>, Julius Imoyera<sup>3</sup>, Adamu Ephraim<sup>1</sup>, Emmanuel Oga<sup>1</sup>

<sup>1</sup>RTI International, Research Triangle Park, NC, United States, <sup>2</sup>APIN Public Health Initiatives, Abuja, Nigeria, <sup>3</sup>Irrua Specialist Teaching Hospital, Irrua, Nigeria, <sup>4</sup>University of Abuja Teaching Hospital, Abuja, Nigeria

3:15 p.m.

6779

**PATHOGEN ANALYSIS NETWORK FOR DETECTING MICROBES IN REAL-TIME (PANDEMIC)**

Jessica D. Wiley<sup>1</sup>, Ryan C. Chapman<sup>1</sup>, Karla Prieto<sup>1</sup>, Michael R. Wiley<sup>2</sup>  
<sup>1</sup>PraesensBIO, LLC, Omaha, NE, United States, <sup>2</sup>University of Nebraska Medical Center, Omaha, NE, United States

3:30 p.m.

6780

**SPATIAL VARIATION IN ENVIRONMENTAL AND SOCIODEMOGRAPHIC DRIVERS OF LEPTOSPIROSIS IN THE DOMINICAN REPUBLIC USING A GEOGRAPHICALLY WEIGHTED REGRESSION**

Beatris M. Martin<sup>1</sup>, Benn Sartorius<sup>1</sup>, Helen Mayfield<sup>1</sup>, Angela Cadavid Restrepo<sup>2</sup>, Cecilia J. Then Paulino<sup>3</sup>, Marie C. Etienne<sup>3</sup>, Ronald Skewes-Ramm<sup>3</sup>, Eric J. Nilles<sup>4</sup>, Colleen L. Lau<sup>1</sup>

<sup>1</sup>Centre for Clinical Research, Faculty of Medicine, The University of Queensland, Brisbane, Australia, <sup>2</sup>School of Public Health, Faculty of Medicine, The University of Queensland, Brisbane, Australia, <sup>3</sup>Ministerio de Salud, Republica Dominicana, Santo Domingo, Dominican Republic, <sup>4</sup>Brigham and Womens Hospital, Harvard Medical School, Boston, MA, United States

3:45 p.m.

6781

**UTILIZATION OF NEAR REAL-TIME ENVIRONMENTAL DATA FOR AN 'EARLY WARNING SYSTEM' TO INCREASE PUBLIC PREPAREDNESS OF THE SEASONALITY AND SPREAD OF LYME DISEASE IN THE UNITED STATES**

Patrick H. Kelly<sup>1</sup>, Sarah Willis<sup>1</sup>, James H. Stark<sup>1</sup>, Agustín Estrada-Peña<sup>2</sup>  
<sup>1</sup>Pfizer, New York City, NY, United States, <sup>2</sup>Ministry of Health, Madrid, Spain

Thursday  
November 14

4 p.m.

6782

### COUNTRIES' PROGRESS TOWARDS GLOBAL HEALTH SECURITY (GHS) INCREASED HEALTH SYSTEMS RESILIENCE DURING THE CORONAVIRUS DISEASE-19 (COVID-19) PANDEMIC: A DIFFERENCE-IN-DIFFERENCE STUDY OF 191 COUNTRIES

Tyler Y. Headley<sup>1</sup>, Sooyoung Kim<sup>2</sup>, Yesim Tozan<sup>3</sup>

<sup>1</sup>New York University Abu Dhabi, Abu Dhabi, United Arab Emirates, <sup>2</sup>New York University School of Global Public Health, Department of Public Health Policy and Management, New York, NY, United States, <sup>3</sup>New York University School of Global Public Health, Department of Global and Environmental Health, New York, NY, United States

4:15 p.m.

6783

### DISTRICT READINESS TO RESPOND TO INFECTIOUS DISEASE PUBLIC HEALTH EMERGENCIES ACCORDING TO THE 7-1-7 TIMELINESS METRICS IN EASTERN UGANDA

Richard Ssekitooleko<sup>1</sup>, Herbert Isabirye<sup>2</sup>, Benjamin Fuller<sup>3</sup>, Margaret R Lawrence<sup>3</sup>, Solome Okware<sup>1</sup>, Annet Alenyo<sup>1</sup>, Immaculate Atuhaire<sup>1</sup>, Andrew Bakainaga<sup>1</sup>, Elizabeth Mgamb<sup>1</sup>, Yonas Tegegn Woldemariam<sup>1</sup>, Christopher C. Moore<sup>3</sup>

<sup>1</sup>World Health Organization, Kampala, Uganda, <sup>2</sup>Infectious Disease Institute and the National Public Health Emergency Operations Center, Kampala, Uganda, <sup>3</sup>University Of Virginia, Charlottesville, VA, United States

4:30 p.m.

### Lightning Talks

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

6930

### LESSONS FROM COVID-19 VACCINATION IMPLEMENTATION IN 52 AFRICAN COUNTRIES: IMPLICATIONS FOR FUTURE PANDEMIC PREPAREDNESS

Muhammed Olanrewaju Afolabi<sup>1</sup>, Oghenebrume Wariri<sup>2</sup>, Christinah Mukandavire<sup>1</sup>, Yauba Saidu<sup>3</sup>, Emmanuel A. Okpo<sup>4</sup>, Olalekan Uthman<sup>5</sup>, Beate Kampmann<sup>1</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>MRC Unit The Gambia at the London School of Hygiene & Tropical Medicine, Banjul, Gambia, <sup>3</sup>Clinton Health Access Initiative, Yaounde, Cameroon, <sup>4</sup>UK Health Security Agency, Newcastle, United Kingdom, <sup>5</sup>University of Warwick Medical School, Coventry, United Kingdom

6932

### RAPID RESPONSE MOBILE SUITCASE LABORATORY AS A TOOL FOR COMBATING INFECTIOUS DISEASE OUTBREAKS

Paula Emily Schweizer<sup>1</sup>, Rea Maja Kobialka<sup>1</sup>, Arianna Ceruti<sup>1</sup>, Prakash Ghosh<sup>1</sup>, Martin Faye<sup>2</sup>, Oumar Faye<sup>2</sup>, Andy Mahine Diouf<sup>2</sup>, Soa Fy Andriamandimby<sup>3</sup>, Dinesh Mondal<sup>4</sup>, Sarah Schurig<sup>1</sup>, Manfred Weidmann<sup>5</sup>, Julius Boniface Okuni<sup>6</sup>, Kamal H Eltom<sup>7</sup>, Sheila Makiala-Mandanda<sup>8</sup>, Mitali Chatterjee<sup>9</sup>, Michael Frimpong<sup>10</sup>, Ndongo Dia<sup>2</sup>, George Olusegun Ademowo<sup>11</sup>, Mohamed A. Shalaby<sup>12</sup>, Uwe Truyen<sup>1</sup>, Ahmed Abd El Wahed<sup>1</sup>

<sup>1</sup>Institute of Animal Hygiene and Veterinary Public Health, Leipzig University, Leipzig, Germany, <sup>2</sup>Virology Department, Institut Pasteur de Dakar, Dakar, Senegal, <sup>3</sup>Virology Unit, Institut Pasteur de Madagascar, Madagascar, Madagascar, <sup>4</sup>Nutrition Research Division, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh, <sup>5</sup>Institute of Microbiology and Virology, Medizinische Hochschule Brandenburg Theodor Fontane, Neuruppin, Germany, <sup>6</sup>College of Veterinary Medicine, Animal Resources and Biosecurity, Makerere University, Kampala, Uganda, <sup>7</sup>Department of Animal Health and Safety of Animal Products, Institute for Studies and Promotion of Animal Exports, University of Khartoum, Khartoum, Sudan, <sup>8</sup>Department of Virology at the Institut National de Recherche Biomédicale (INRB); Faculty of Medicine, University of Kinshasa, Kinshasa, Democratic Republic of the Congo, <sup>9</sup>Department of Pharmacology, Institute of Postgraduate Medical Education and Research, Kolkata, India, <sup>10</sup>Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR), Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, <sup>11</sup>Institute for Advanced Medical Research and Training (IAMRAT), College of Medicine, University of Ibadan, Ibadan, Nigeria, <sup>12</sup>Department of Virology, Faculty of Veterinary Medicine, Cairo University, Cairo, Egypt

7677

### MODELLING THE EFFECT OF SEASONAL MALARIA CHEMOPREVENTION ON THE TRANSMISSION DYNAMICS OF MALARIA IN ZAMFARA STATE, NORTHWEST NIGERIA

Debra U. Okeh<sup>1</sup>, Afeez Abidemi<sup>2</sup>, Emmanuel A. Bakare<sup>3</sup>, Samson O. Olagbami<sup>2</sup>, Godswill U. Ogbonnaya<sup>1</sup>, Godwin O. Okafor<sup>1</sup>, Kingsley Metu<sup>1</sup>, Ugochukwu U. Onyeonoro<sup>1</sup>, Azubuike K. Onyebuchi<sup>1</sup>, Victor O. Ameh<sup>3</sup>, Emmanuel Shekarau<sup>3</sup>, Augustine U. Akubue<sup>4</sup>, Amos K. Langat<sup>5</sup>, Perpetua O. Nnemelu<sup>6</sup>, Idowu Olasupo<sup>2</sup>

<sup>1</sup>Federal Medical Centre Umuahia, Abia, Nigeria, <sup>2</sup>International Centre for Applied Mathematical Modelling and Data Analytics, Federal University Oye, Ekiti, Nigeria, <sup>3</sup>National Malaria Elimination Programme, Abuja, Nigeria, <sup>4</sup>Central Washington College, Enugu, Nigeria, <sup>5</sup>Pan African University Institute for Basic Sciences Technology and Innovation, Nairobi, Kenya, <sup>6</sup>Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria

6885

### SYNDEMIC MODELLING: A NOVEL MATHEMATICAL MODELLING FRAMEWORK FOR SIMULATING MULTIPLE PATHOGENS DYNAMICS IN CONTEXT

Caroline Franco<sup>1</sup>, Lisa J. White<sup>2</sup>, Sheetal Silal<sup>3</sup>

<sup>1</sup>University of Aberdeen, Aberdeen, United Kingdom, <sup>2</sup>University of Oxford, Oxford, United Kingdom, <sup>3</sup>University of Cape Town, Cape Town, South Africa

6933

### ADAPTING RAPID LABORATORY BIORISK SELF-ASSESSMENTS TO BETTER INCORPORATE CYBER-BIOSECURITY RISKS

Ming Yang Ong<sup>1</sup>, Emilie Ryan-Castillo<sup>1</sup>, Lauren Miller<sup>1</sup>, Brian Samuelson<sup>1</sup>, Claire Standley<sup>1</sup>, Kaitlin Sandhaus<sup>2</sup>, Kevin Omondi<sup>3</sup>, Tura Galgado<sup>3</sup>

<sup>1</sup>Georgetown University Center for Health Science and Security, Washington D.C., DC, United States, <sup>2</sup>Global Implementation Solutions, Chicago, IL, United States, <sup>3</sup>Global Implementation Solutions, Nairobi, Kenya

## Scientific Session 43

### Malaria: Antimalarial Resistance and Chemotherapy

Convention Center - Room 391/392 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

#Resistance #PopulationSurveillance #Elimination  
#Genomics #Therapeutics

#### CHAIR

David Serre

University of Maryland School of Medicine, Baltimore, MD, United States

Ethan Booth

Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand

3 p.m.

6784

### A SUBSET OF CAMBODIAN PLASMODIUM VIVAX PARASITES TREATED WITH ARTESUNATE DISPLAY SLOW CLEARANCE AND A DELAYED AND UNIQUE GENE EXPRESSION RESPONSE

Kieran Tebben<sup>1</sup>, Virak Eng<sup>2</sup>, David Serre<sup>1</sup>, Jean Popovici<sup>2</sup>

<sup>1</sup>University of Maryland School of Medicine, Baltimore, MD, United States, <sup>2</sup>Institut Pasteur du Cambodge, Phnom Penh, Cambodia

3:15 p.m.

6785

**EVALUATION OF AN IMPROVED SYBR GREEN I ASSAY FOR SURVEILLANCE OF ANTIMALARIAL RESISTANCE IN EX VIVO AND CULTURED ISOLATES**

**Agnes C. Cheruiyot**, Redemptah Yeda, Farid Abdi, Dennis Juma, Benjamin Opot@usamru-k.org Opot, Raphael Okoth, Jackline Juma, Risper Maisiba, Maurine Mwalo, Edwin Mwakio, Timothy E. Egbo, Hosea Akala  
*Kenya Medical Research Institute/ USAMRU-A, Kisumu, Kenya*

3:30 p.m.

6786

**EMERGING BIOLOGICAL THREATS TO MALARIA CONTROL IN UGANDA: EVIDENCE OF VALIDATED MARKERS OF PARTIAL ARTEMISININ RESISTANCE AND PFHRP2/3 DELETIONS IN A HIGH TRANSMISSION SETTING**

**Dr. Bosco B. Agaba**<sup>1</sup>, Trevor Jye<sup>2</sup>, David Smith<sup>3</sup>, Prof. Antonio Martin<sup>4</sup>, Associate Prof. Beshir Khalid<sup>5</sup>, Prof. Moses R. Kamya<sup>6</sup>, Prof. Pontiano Kaleebu<sup>7</sup>, Prof. Piot Peter<sup>8</sup>, Prof. Qin Cheng<sup>9</sup>

<sup>1</sup>Malaria Control Division/London School of Hygiene & Tropical Medicine/Peter Piot Fellow for Global Health Innovation: Epidemic Preparedness & Response/Mbarara University of Science and Technology, Kampala, Uganda, <sup>2</sup>QIMR Berghofer Medical Research Institute, Brisbane, Australia, <sup>3</sup>Australian Defence Force Malaria and Infectious Disease Institute, Australia, Brisbane, Australia, <sup>4</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>5</sup>London School of Hygiene & Tropical Medicine, London, Australia, <sup>6</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>7</sup>London School of Hygiene & Tropical Medicine/Uganda Virus Research Institute, Entebbe, Uganda, <sup>8</sup>Australian Defence Force Malaria and Infectious Disease Institute, Australia, Brisbane, Australia

3:45 p.m.

6787

**ARTESUNATE-PYRONARIDINE IS EFFICACIOUS FOR THE TREATMENT OF UNCOMPLICATED PLASMODIUM VIVAX INFECTIONS AND BLOCKS TRANSMISSION MORE THAN CHLOROQUINE IN ETHIOPIA**

**Migbaru Keffale Bezabih**<sup>1</sup>, Sinknesh Wolde<sup>1</sup>, Misganaw Misganaw<sup>1</sup>, Hiwot Teka<sup>2</sup>, Bereket Hailegiorgis<sup>3</sup>, Natnael Lemessa<sup>1</sup>, Legesse Alamerie Ejigu<sup>1</sup>, Samuel Girma<sup>2</sup>, Mekonnen Tadesse<sup>3</sup>, Fikregabrail Aberra Kassa<sup>1</sup>, Mikiyas Gebremichael<sup>1</sup>, Wakweya Chali<sup>1</sup>, Amanuel Shimelash<sup>1</sup>, Melat Abdo<sup>1</sup>, Addisu Gizat<sup>1</sup>, Getinet Habtamu<sup>1</sup>, Gudisa Assefa Bayissa<sup>4</sup>, Teun Bousema<sup>5</sup>, Fitsum G. Tadesse<sup>6</sup>

<sup>1</sup>Armauer Hansen Research Institute (AHRI), Addis Ababa, Ethiopia, <sup>2</sup>U.S. President's Malaria Initiative, USAID, Addis Ababa, Ethiopia, <sup>3</sup>ICAP at Columbia University, Addis Ababa, Ethiopia, <sup>4</sup>Ministry of Health, Addis Ababa, Ethiopia, <sup>5</sup>Armauer Hansen Research Institute (AHRI), Nijmegen, Netherlands, <sup>6</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

4 p.m.

6788

**INTERACTIVE GENETIC EPIDEMIOLOGY TOOLS FOR SURVEILLANCE OF DRUG-RESISTANT MALARIA PARASITE STRAINS**

**Ethan James Booth**, Varanya Wasakul, Tess Verschuuren, Olivo Miotto  
*Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand*

4:15 p.m.

6789

**PARTNERSHIP FOR ANTIMALARIAL RESISTANCE MONITORING IN AFRICA (PARMA) HUBS: LOCALIZATION AND CAPACITY STRENGTHENING FOR AFRICAN RESEARCHERS BY AFRICAN RESEARCHERS**

**Awa Deme**<sup>1</sup>, Irene Cavros<sup>2</sup>, Mamadou A. Diallo<sup>1</sup>, Mouhamad Sy<sup>1</sup>, Bassirou Ngom<sup>1</sup>, Amy Gaye<sup>1</sup>, Aita Sene<sup>1</sup>, Djiby Sow<sup>1</sup>, Tolla Ndiaye<sup>1</sup>, Ibrahima M. Ndiaye<sup>1</sup>, Daba Zoumarou<sup>1</sup>, Jessica McCaffery<sup>3</sup>, Marko Bajic<sup>3</sup>, Cassandra Webster<sup>4</sup>, Jehan Ahmed<sup>5</sup>, Daouda Ndiaye<sup>1</sup>  
<sup>1</sup>International Research Training Center on Genomics and Health Surveillance (CIGASS), Dakar, Senegal, <sup>2</sup>U.S. President's Malaria Initiative, Malaria Branch, U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>3</sup>U.S. President's Malaria

*Initiative, Laboratory Science and Diagnostics Branch, U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>4</sup>CDC Foundation, Atlanta, GA, United States, <sup>5</sup>PATH, Washington, DC, United States*

4:30 p.m.

**Lightning Talks**

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

7911

**PFPRELI: A NOVEL MOLECULAR MEDIATOR OF RESISTANCE TO PLASMODIUM FALCIPARUM SERINE HYDROLASE INHIBITORS**

**Sunil K. Narwal**<sup>1</sup>, John M. Bennett<sup>2</sup>, Krittikorn Kumpornsin<sup>3</sup>, John Okombo<sup>1</sup>, Tomas Yeo<sup>1</sup>, Case McNamara<sup>3</sup>, Matthew Bogyo<sup>2</sup>, David A. Fidock<sup>4</sup>

<sup>1</sup>Department of Microbiology and Immunology, Columbia University Irving Medical Center, New York, NY, United States, <sup>2</sup>Department of Chemistry, Stanford University, Stanford, CA, United States, <sup>3</sup>Calibr at Scripps Research Institute, La Jolla, CA, CA, United States, <sup>4</sup>Department of Microbiology and Immunology, Columbia University Irving Medical Center, New York, NY, United States

7918

**PROFILING OF DRUG RESPONSES AND ANTIMALARIAL DRUG RESISTANCE MARKERS IN P. FALCIPARUM CLONES FROM A GHANAIAN DHA-SELECTED CLINICAL ISOLATE**

**Bridget Adikah**, Silas Yeboah, Jersley Chirawurah, Elizabeth Akrong, Gordon Awandare, Lucas Amenga-Etego, Yaw Aniweh  
*West Africa Centre for Cell Biology of Infectious Pathogens, Legon, Ghana*

7146

**A DOUBLE THREAT TO ACT EFFICACY IN AFRICA: REDUCED SUSCEPTIBILITY OF PLASMODIUM FALCIPARUM TO BOTH ARTEMISININ AND LUMEFANTRINE**

**Colin J. Sutherland**, Sade Pratt, Donnelly A. van Schalkwyk  
*London School of Hygiene & Tropical Medicine, London, United Kingdom*

7147

**COMBINATION OF REDOX MODIFIERS WITH ARTEMISININ RESULTS IN INCREASED PARASITE SUSCEPTIBILITY TO ARTEMISININS**

**Annie Roys**<sup>1</sup>, Ghizal Siddiqui<sup>1</sup>, Carlo Giannangelo<sup>1</sup>, Darren Creek<sup>1</sup>, Natalie Counihan<sup>2</sup>  
<sup>1</sup>Monash institute of pharmaceutical science, Melbourne, Australia, <sup>2</sup>Deakin University, Geelong, Australia

7898

**ASSESSMENT OF ANTIMALARIAL RESISTANCE AND ASSOCIATED MARKERS IN GAMBIAN P. FALCIPARUM CLINICAL ISOLATES**

**Ndey Fatou Drammeh**, Fatoumatta Bojang, Nora Nganyewo, Aminata Seedy Jawara, Simon Correa, Eniyou Cheryll Oriero, Alfred Amambua-Ngwa  
*Medical Research Council Unit The Gambia at London School of Hygiene & Tropical Medicine, Banjul, Gambia*

Thursday  
November 14



## Scientific Session 44

### Malaria: Genetics, Genomics and Evolution

Convention Center - Room 393/394 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

#Genetics #Evolution #Modeling  
#PopulationSurveillance #Genomics

#### CHAIR

Angela M. Early

Broad Institute of MIT and Harvard, Cambridge, MA, United States

Alfred Amambua-Ngwa

Medical Research Council Unit The Gambia at London School of Hygiene & Tropical Medicine, Banjul, Gambia

3 p.m.

6790

#### NEW INSIGHTS ON SELECTION OF MALARIA PARASITES REVEALED BY GENOMES OF OLDEST ARCHIVED *PLASMODIUM FALCIPARUM* POPULATION SAMPLES

Alfred Amambua-Ngwa<sup>1</sup>, Mouhamadou Fadel Diop<sup>1</sup>, Christopher J. Drakeley<sup>2</sup>, Umberto D'Alessandro<sup>1</sup>, Dominic Kwiatkowski<sup>3</sup>, David J. Conway<sup>2</sup>

<sup>1</sup>Medical Research Council Unit The Gambia at London school of Hygiene and Tropical Medicine, Banjul, Gambia, <sup>2</sup>London school of Hygiene and Tropical Medicine, London, United Kingdom, <sup>3</sup>MRC Centre for Genomics and Global Health, Big Data Institute, Oxford University, Oxford, United Kingdom

(ACMCIP Abstract)

3:15 p.m.

6791

#### A COMPLEX *PLASMODIUM FALCIPARUM* CRYPTOTYPE CIRCULATING AT LOW FREQUENCY ACROSS THE AFRICAN CONTINENT

Olivo Miotto<sup>1</sup>, Alfred Amambua-Ngwa<sup>2</sup>, Lucas N. Amenga-Etego<sup>3</sup>, Muzamil M. Abdel Hamid<sup>4</sup>, Ishag Adam<sup>5</sup>, Enoch Aninagyei<sup>6</sup>, Tobias Apinjoh<sup>7</sup>, Gordon A. Awandare<sup>8</sup>, Philip Bejon<sup>9</sup>, Gwladys Bertin<sup>9</sup>, Marielle Bouyou-Akotet<sup>10</sup>, Claessens Antoine<sup>11</sup>, David J. Conway<sup>12</sup>, Umberto D'Alessandro<sup>2</sup>, Mahamadou Diakite<sup>13</sup>, Abdoulaye Djimdé<sup>13</sup>, Arjen M. Dondorp<sup>14</sup>, Patrick Duffy<sup>15</sup>, Rick M. Fairhurst<sup>15</sup>, Caterina I. Fanello<sup>14</sup>, Anita Ghansah<sup>16</sup>, Deus S. Ishengoma<sup>17</sup>, Mara Lawniczak<sup>18</sup>, Oumou Maïga-Ascofaré<sup>19</sup>, Sarah Auburn<sup>20</sup>, Anna Rosanas-Urgell<sup>21</sup>, Varanya Wasakul<sup>14</sup>, Nina FD White<sup>18</sup>, Alexandria Harrott<sup>18</sup>, Jacob Almagro-Garcia<sup>18</sup>, Richard D. Pearson<sup>18</sup>, Sonia Goncalves<sup>18</sup>, Cristina Ariani<sup>18</sup>, Zbynek Bozdech<sup>22</sup>, William Hamilton<sup>18</sup>, Victoria Simpson<sup>18</sup>, Dominic Kwiatkowski<sup>23</sup>

<sup>1</sup>University of Oxford, Bangkok, Thailand, <sup>2</sup>Medical Research Council Unit The Gambia at LSHTM, Banjul, Gambia, <sup>3</sup>West African Centre for Cell Biology of Infectious Pathogens (WACCBIP), University of Ghana, Accra, Ghana, <sup>4</sup>Institute of Endemic Diseases, University of Khartoum, Khartoum, Sudan, <sup>5</sup>Department of Obstetrics and Gynecology, Unaizah College of Medicine and Medical Sciences, Qassim University, Unaizah, Saudi Arabia, <sup>6</sup>Department of Biomedical Sciences of School of Basic and Biomedical Sciences, University of Health and Allied Science, Ho, Ghana, <sup>7</sup>Department of Biochemistry and Molecular Biology, University of Buea, Buea, Cameroon, <sup>8</sup>KEMRI Wellcome Trust Research Programme, Kilifi, Kenya, <sup>9</sup>Institute of Research for Development (IRD), Paris, France, <sup>10</sup>Faculty of Medicine, University of Health Sciences, Libreville, Gabon, <sup>11</sup>LPHI, MIVEGEC, INSERM, CNRS, IRD, University of Montpellier, Montpellier, France, <sup>12</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>13</sup>Malaria Research and Training Centre, University of Science, Techniques and Technologies of Bamako, Bamako, Mali, <sup>14</sup>Mahidol-Oxford Tropical Medicine Research Unit, Mahidol University, Bangkok, Thailand, <sup>15</sup>National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, <sup>16</sup>Noguchi Memorial Institute for Medical Research (NMIMR), Accra, Ghana, <sup>17</sup>National Institute for Medical Research (NIMR), Dar Es Salaam, United Republic of Tanzania, <sup>18</sup>Wellcome Sanger Institute, Hinxton, United Kingdom, <sup>19</sup>Bernhard Nocht Institute for Tropical Medicine (BNITM), Hamburg, Germany, <sup>20</sup>Menzies School of Health Research, Charles Darwin University, Darwin, Australia, <sup>21</sup>Institute of Tropical Medicine Antwerp, Antwerp, Belgium, <sup>22</sup>School of Biological Sciences, Nanyang Technological University, Singapore, Singapore, <sup>23</sup>Big Data Institute, Oxford University, Oxford, United Kingdom

(ACMCIP Abstract)

3:30 p.m.

6792

#### UNDERSTANDING GENETIC AND TRANSCRIPTIONAL COMPLEXITY IN MALARIA: INSIGHTS FROM SINGLE-CELL RNA-SEQUENCING IN MALI

Sunil Kumar Dogga<sup>1</sup>, Jesse Rop<sup>1</sup>, Seri Kitada<sup>1</sup>, Yomna Gohar<sup>2</sup>, Antoine Dara<sup>3</sup>, Dinkorma Ouologuem<sup>3</sup>, Fataimoudou Tandina<sup>3</sup>, Sekou Sissoko<sup>3</sup>, Arthur Talman<sup>4</sup>, Abdoulaye Djimdé<sup>3</sup>, Mara Lawniczak<sup>1</sup>

<sup>1</sup>Wellcome Sanger Institute, Hinxton, United Kingdom, <sup>2</sup>Institute of Medical Microbiology and Hospital Hygiene, Heidelberg, Germany, <sup>3</sup>University of Science, Techniques and Technologies of Bamako, Bamako, Mali, <sup>4</sup>MIVEGEC, University of Montpellier, IRD, CNRS, Montpellier, France

(ACMCIP Abstract)

3:45 p.m.

6793

#### GENETIC VARIATIONS IN *P. FALCIPARUM* INVASION LIGANDS AND THEIR COGNATE HUMAN RECEPTOR VARIANTS IN MALARIA CASES FROM THE GAMBIA

Nora Nghochuzie Ngyanyewo<sup>1</sup>, Martha Anita Martha<sup>1</sup>, Mouhamadou Fadel Diop<sup>1</sup>, Eniyou C. Oriero<sup>1</sup>, Lucas N. Amenga-Etego<sup>2</sup>, Alfred Amambua-Ngwa<sup>1</sup>

<sup>1</sup>Medical Research Council Unit The Gambia at London School of Hygiene & Tropical Medicine, Banjul, Gambia, <sup>2</sup>West African Centre for Cell Biology and Infectious Pathogens, Accra, Ghana

(ACMCIP Abstract)

4 p.m.

6794

#### DEFINING IMMUNE ESCAPE POLYMORPHISMS IN *PLASMODIUM VIVAX*: INSIGHTS FROM THE ANALYSIS OF ALLELIC TURNOVER OF 16 ANTIGENS IN A LONGITUDINAL COHORT OF PAPUA NEW GUINEAN CHILDREN

Alison Paolo Namuco Bareng<sup>1</sup>, Myo Naung<sup>1</sup>, Zahra Razook<sup>1</sup>, Alicia Arnott<sup>2</sup>, Enmoore Lin<sup>3</sup>, Benson Kiniboro<sup>3</sup>, Moses Laman<sup>3</sup>, Leanne Robinson<sup>4</sup>, Ivo Mueller<sup>2</sup>, Alyssa Barry<sup>1</sup>

<sup>1</sup>Deakin University, Victoria, Australia, <sup>2</sup>Walter and Eliza Hall Institute, Victoria, Australia, <sup>3</sup>Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, <sup>4</sup>Burnet Institute, Victoria, Australia

(ACMCIP Abstract)

4:15 p.m.

6795

#### SOFTWARE TO ESTIMATE THE PROBABILITY THAT A RECURRENT MALARIA INFECTION IS A REINFECTION, RECRUDESCENCE OR RELAPSE

Aimee R. Taylor<sup>1</sup>, Yong See Foo<sup>2</sup>, Michael T. White<sup>1</sup>

<sup>1</sup>Institut Pasteur, Université Paris Cité, Paris, France, <sup>2</sup>The University of Melbourne, Parkville, Melbourne, Australia

(ACMCIP Abstract)

4:30 p.m.

6796

#### GENETIC REGULATION OF *PLASMODIUM FALCIPARUM* OXIDATIVE STRESS RESPONSES

Camilla V. Pires<sup>1</sup>, Jenna Oberstaller<sup>1</sup>, Min Zhang<sup>1</sup>, Chengqi Wang<sup>1</sup>, Thomas Otto<sup>2</sup>, Julian Rayner<sup>3</sup>, John Adams<sup>1</sup>

<sup>1</sup>University of South Florida, Tampa, FL, United States, <sup>2</sup>University of Glasgow, Glasgow, United Kingdom, <sup>3</sup>University of Cambridge, Cambridge, United Kingdom

(ACMCIP Abstract)

## Scientific Session 45

### Malaria: Elimination

Convention Center - Room 395/396 (3rd Floor)

Thursday, November 14, 3 p.m. - 4:45 p.m.

#Resistance #InfectiousDisease #Elimination  
#Modeling #Diagnostics

#### CHAIR

Aissatou Diawara

Global Institute for Disease Elimination (GLIDE), Abu Dhabi, United Arab Emirates

Truphena Onyango

KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya

3 p.m.

6797

#### ASSESSMENT OF STRATEGIES USED IN THE MALARIA ELIMINATION DEMONSTRATION PROJECT (MEDP) FOR THE REDUCTION OF MALARIA IN A TRIBAL DISTRICT OF MADHYA PRADESH, INDIA

Harsh Rajvanshi<sup>1</sup>, Farzana Islam<sup>2</sup>, Altaf Lal<sup>1</sup>

<sup>1</sup>Foundation for Disease Elimination and Control of India, Mumbai, India, <sup>2</sup>Jamia Hamdard University, New Delhi, India

3:15 p.m.

6798

#### ADVANCING MALARIA ELIMINATION ASSESSMENT IN LORETO, PERU THROUGH THE FREEDOM FROM INFECTION MODEL

Jorge Ruiz-Cabrejos<sup>1</sup>, Luca Nelli<sup>2</sup>, Bryan Fernandez-Camacho<sup>1</sup>, Brian Peña-Calero<sup>1</sup>, Jose Luis Barboza<sup>1</sup>, Luciana Bartolini-Arana<sup>1</sup>, Hugo Rodriguez-Ferrucci<sup>3</sup>, Veronica E. Soto-Calle<sup>4</sup>, Isabel Byrne<sup>5</sup>, Monica Hill<sup>5</sup>, Lynn Grignard<sup>5</sup>, Kevin Tetteh<sup>5</sup>, Alejandro Llanos-Cuentas<sup>6</sup>, Chris Drakeley<sup>5</sup>, Gillian Stresman<sup>5</sup>, Gabriel Carrasco-Escobar<sup>1</sup>

<sup>1</sup>Health Innovation Laboratory, Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>School of Biodiversity, One Health and Veterinary Medicine, University of Glasgow, Glasgow, United Kingdom, <sup>3</sup>Universidad Nacional de la Amazonia Peruana, Iquitos, Peru, <sup>4</sup>Dirección de Prevención y Control de Enfermedades Metaxénicas y Zoonosis, Ministerio de Salud, Lima, Peru, <sup>5</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>6</sup>Institute of Tropical Medicine Alexander von Humboldt, Universidad Peruana Cayetano Heredia, Lima, Peru

3:30 p.m.

6799

#### COMMUNITY EXPERIENCES AND PERCEPTIONS OF THE BOHEMIA TRIAL OF IVERMECTIN MASS DRUG ADMINISTRATION: A LONGITUDINAL QUALITATIVE STUDY IN KWALE COUNTY, KENYA

Truphena N. Onyango, Khadija Nuru, Karisa Kazungu, Winnie Wangari, Caroline Jones

KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya

3:45 p.m.

6800

#### REACTIVE CASE DETECTION IN ZANZIBAR, A MALARIA ELIMINATION-TARGETED SETTING EXPERIENCING MALARIA UPSURGES IN 2023

Michael Gulaka<sup>1</sup>, Abdulhamid Ramadhan<sup>2</sup>, Mohamed Ali Kitwasi<sup>2</sup>, Stella Makwaruzi<sup>1</sup>, Saidi Mgata<sup>1</sup>, Geoffrey Makenga<sup>1</sup>, Nicodemus Govella<sup>1</sup>, Marguerite M. Clougherty<sup>3</sup>, Roly Gosling<sup>3</sup>, Shija J. Shija<sup>2</sup>, Albert Ikonje<sup>4</sup>, Sarah-Blythe Ballard<sup>5</sup>, Naomi Serbantez<sup>4</sup>, Sigsibert Mkude<sup>1</sup>

<sup>1</sup>Population Services International (PSI), Dar es Salaam, United Republic of Tanzania, <sup>2</sup>Zanzibar Malaria Elimination Program, Ministry of Health, Zanzibar, United Republic of Tanzania, <sup>3</sup>Population Services International (PSI), Washington DC, WA, United States, <sup>4</sup>U.S. President's Malaria Initiative, U.S. Agency for International Development, Dar es Salaam, United Republic of Tanzania, <sup>5</sup>U.S. President's Malaria Initiative, U.S. Centers for Disease Control and Prevention, Dar es Salaam, United Republic of Tanzania

4 p.m.

6801

#### RE-EMERGENCE OF PLASMODIUM VIVAX MALARIA CASES IN BORDER AREAS OF MYANMAR AND STRATEGIC EFFORTS TO INTEGRATE NEW TOOLS AT NATIONAL LEVEL FOR ELIMINATION OF PLASMODIUM VIVAX MALARIA FROM 2021 TO 2023

Zwe Thihaa Kyaw, Wah Wah Thaw, Kyi Tun Lwin, Soe Htike, Day Naing Aung, Han Lin Aung, Khin Zarli Aye  
PATH, Yangon, Myanmar

4:15 p.m.

6802

#### OPTIMIZING LAST-MILE DELIVERY THROUGH THE INTEGRATION OF MALARIA COMMODITIES DISTRIBUTION IN MALAWI

Fikadu Batu<sup>1</sup>, Daniel Tadesse Tadesse<sup>1</sup>, Lumbani Munthali<sup>2</sup>, Lumbani Makwakwa<sup>3</sup>, Denver Raisi<sup>1</sup>, Elias Mwalabu<sup>1</sup>, Charles Nzawa<sup>1</sup>

<sup>1</sup>USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project, Lilongwe, Malawi, <sup>2</sup>Ministry of Health-NMCP, Lilongwe, Malawi, <sup>3</sup>USAID, Lilongwe, Malawi

4:30 p.m.

#### Lightning Talks

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

7934

#### MALARIA MASS DRUG ADMINISTRATION WITH DIHYDROARTEMISININE PIPERAQUINE (DHAPQ) IN TWO DIFFERENT SETTINGS OF MALARIA TRANSMISSION IN MALI

Daouda SANOGO<sup>1</sup>, Mahamoudou Toure<sup>2</sup>, Moussa Keita<sup>3</sup>, Fousseyni Kane<sup>1</sup>, Soumba Keita<sup>1</sup>, Cheick Oumar Doumbia<sup>1</sup>, Hamady Coulibaly<sup>1</sup>, Mountaga Diallo<sup>1</sup>, Mahamadou Diakite<sup>3</sup>, Nafomon Sogoba<sup>4</sup>, Seydou Doumbia<sup>5</sup>

<sup>1</sup>University Clinical Research Center(UCRC), Bamako, Mali, <sup>2</sup>University of Sciences, Tech and Techniques of Bamako (USTTB)/University Clinical Research Center(UCRC), Bamako, Mali, <sup>3</sup>University of Sciences, Tech and Technologies of Bamako(USTTB)/University Clinical Research Center(UCRC), Bamako, Mali, <sup>4</sup>University of Sciences, Tech and Technologies of Bamako (USTTB)/University Clinical Research Center(UCRC), Bamako, Mali, <sup>5</sup>University of Sciences, Tech and Technologies of Bamako (USTTB)/University Clinical Research Center(UCRC), Bamako, Mali, Bamako, Mali

7944

#### EPIDEMIOLOGICAL, VECTOR BIONOMICS AND PARASITOLOGICAL DYNAMICS IMPENDING MALARIA ELIMINATION IN A HOLOENDEMIC REGION OF ZAMBIA

Modest Mulenga<sup>1</sup>, Mike Chaponda<sup>2</sup>, Mbanga Muleba<sup>2</sup>, Jean-Bertin Kabuya<sup>2</sup>, William Moss<sup>3</sup>, ICEMR Southern Africa –<sup>4</sup>

<sup>1</sup>Lusaka Apex Medical University, Lusaka, Zambia, <sup>2</sup>Tropical Diseases Research Centre, Ndola, Zambia, <sup>3</sup>Johns Hopkins School of Public Health, Baltimore, MD, United States, <sup>4</sup>–, Baltimore, MD, United States

7938

#### ACHIEVING ZERO INDIGENOUS MALARIA CASES, SUB-NATIONAL MALARIA ELIMINATION VERIFICATION IN KING CETSHWAYO DISTRICT, SOUTH AFRICA. A FIRST IN SUB-SAHARAN AFRICA

Ednah Ramokone Baloyi<sup>1</sup>, Sadiq K. Wanjala<sup>2</sup>, Bongani E. Simelane<sup>3</sup>, Nompumelelo Z. Mdletshe<sup>3</sup>, Tshikae B. Power<sup>3</sup>, Ziyanda Fekema<sup>4</sup>, Mabatho Mogadime<sup>1</sup>, Bridget M. Shandukani<sup>1</sup>, Babongile Mhlongo<sup>3</sup>

<sup>1</sup>National Department of Health, Pretoria, South Africa, <sup>2</sup>Clinton Health Access Initiative, Richards Bay, South Africa, <sup>3</sup>Malaria Program, KwaZulu Natal Provincial Department of Health, Jozini, South Africa, <sup>4</sup>Humana People to People, Pretoria, South Africa

## 7205

**INTEGRATING ACTIVE SURVEILLANCE AND ENTOMOLOGY FELLOWSHIP FOR SUSTAINABLE MALARIA CONTROL AND ELIMINATION IN SOUTHERN ANGOLA**

André Domingos<sup>1</sup>, Generoso Wangama<sup>2</sup>, José Franco Martins<sup>3</sup>, Cani Pedro Jorge<sup>3</sup>, Luzala Garcia<sup>3</sup>, Fernanda Guimarães<sup>3</sup>, Paulo Máquina<sup>4</sup>, Manuel Lando<sup>5</sup>, Ana Direito<sup>6</sup>, Xavier Badia<sup>7</sup>, Gonçalo Alves<sup>7</sup>, **Teresa Nobrega<sup>8</sup>**

<sup>1</sup>Provincial Public Health Department, Ondjiva, Angola, <sup>2</sup>SADC E8 fellowship, Cuangar, Angola, <sup>3</sup>National Malaria Control Programme, Ministry of Health, Luanda, Angola, <sup>4</sup>SADC Elimination 8, Luanda, Angola, <sup>5</sup>The Mentor Initiative, Ondjiva, Angola, <sup>6</sup>The Mentor Initiative, Luanda, Angola, <sup>7</sup>The Mentor Initiative, Haywards Heath, United Kingdom

## 7194

**IMPROVING INTEGRATED COMMUNITY CASE MANAGEMENT (ICCM) BY COMMUNITY HEALTH WORKERS - AN EXAMPLE OF MALARIA MANAGEMENT IN NCHELENGE DISTRICT, ZAMBIA**

**Gift Hapenga<sup>1</sup>**, Chilowekwa Shike<sup>1</sup>, Tawonga Manda<sup>1</sup>, Jennifer Somtore<sup>2</sup>, Rabson Zyambo<sup>3</sup>, Tamara Ngona<sup>4</sup>

<sup>1</sup>USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project, Lusaka, Zambia, <sup>2</sup>U.S. President's Malaria Initiative (PMI), Lusaka, Zambia, <sup>3</sup>USAID, Lusaka, Zambia, <sup>4</sup>Ministry of Health-NMEC, Lusaka, Zambia

**Break**

Thursday, November 14, 4:45 p.m. - 5:15 p.m.

**Symposium 46****Infectious Diseases Surveillance and Modeling in LMICs: From Data Collection to Forecasting**

Convention Center - Hall I-2 (1st Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

The COVID-19 pandemic, Ebola, cholera, and endemic diseases rising to epidemic levels have burdened existing public health infrastructure and surveillance systems globally. Resource scarcity and limited clinical reporting compounds these public health challenges in low- and middle-income countries. To confront these challenges, public health personnel within LMICs have made significant innovations, including enhancement of clinical data collection, surveillance systems, response infrastructure, and forecasting future outbreaks. This symposium presents five unique perspectives from LMICs on three continents, with examples of public health officials and NGOs who have partnered to improve public health in the face of multiple outbreaks. Each speaker outlines innovations in surveillance, response, or forecasting capabilities in resource-limited settings. The ability to track, respond, and forecast outbreaks hinges upon the accuracy of the data collected. Implementing technologies such as DHIS2 has augmented this effort, but the challenges of on-ground implementation are significant. Carol Kyoziira, the Principal Biostatistician for the Ugandan Ministry of Health, will outline the challenges and, ultimately, the success of implementing a nationwide health data collection system in the face of multiple disease outbreaks, including Ebola, cholera, and COVID-19. Dr. Isobel Blake will present research on the value of sewage surveillance in Bangladesh for COVID-19 monitoring. Results from this surveillance system were shared with the National COVID-19 task force every week via a real-time dashboard, enhancing

response throughout Bangladesh. Dr. John Giles will discuss the development of a stochastic spatial model of Cholera transmission in Sub-Saharan Africa using incidence data collected as part of a national-level surveillance program. The model leverages multiple data streams to produce short-term district-level predictions of Cholera incidence with implications for the recent 2023-24 Cholera outbreak and future public health responses. Paul Garcia will outline a novel approach to rapid pathogen identification during the early stages of an outbreak and how his team has coupled this technology with notification and implementation of rapid response capabilities in Peru. Finally, we highlight advances in response and forecasting. The Uganda Ministry of Health has constructed a national network of Emergency Operations Centers, which uses real-time forecasting data to predict and rapidly respond to outbreaks. Dr. Richard Ssekitoleko of WHO-Uganda and Mr. Herbert Isabirye of the Ugandan Ministry of Health will outline the creation of the EOCs in Uganda during Ebola and COVID-19 outbreaks and how forecasting has augmented response efforts. #Modeling #Epidemiology #InfectiousDisease #PopulationSurveillance

**CHAIR**

Mami Taniuchi  
University of Virginia, Charlottesville, VA, United States

Ben Fuller  
University of Virginia, Charlottesville, VA, United States

**5:15 p.m.  
INTRODUCTION****5:25 p.m.  
ESTABLISHMENT OF DHIS2 AS A TOOL FOR DISEASE SURVEILLANCE THROUGHOUT UGANDA**

Carol Kyoziira  
Uganda Ministry of Health, Kampala, Uganda

**5:40 p.m.  
WASTEWATER SURVEILLANCE FOR SARS-COV-2 AND OTHER PATHOGENS FOR PUBLIC HEALTH IMPACT: BANGLADESH EXPERIENCE**

Isobel Blake  
Imperial College London, London, United Kingdom

**5:55 p.m.  
A SURVEILLANCE AND RESPONSE SYSTEM FOR ACUTE FEBRILE ILLNESS IN THE PERUVIAN AMAZON**

Paul Garcia  
Asociación Benefica PRISMA, Iquito, Loreto, Peru

**6:10 p.m.  
A STOCHASTIC SPATIAL MODEL OF CHOLERA TRANSMISSION IN SUB-SAHARAN AFRICA AS PART OF A NATIONAL-LEVEL SURVEILLANCE PROGRAM**

John Giles  
The Bill & Melinda Gates Foundation, Institute for Disease Modeling, Seattle, WA, United States

**6:25 p.m.  
THE ESTABLISHMENT OF A NATIONAL EMERGENCY RESPONSE NETWORK TO FORECAST AND COMBAT PATHOGENS OF INTEREST IN UGANDA**

Richard Ssekitoleko  
WHO-Uganda, Uganda Ministry of Health, Kampala, Uganda

**6:40 p.m.**

**THE ESTABLISHMENT OF A NATIONAL EMERGENCY RESPONSE NETWORK TO FORECAST AND COMBAT PATHOGENS OF INTEREST IN UGANDA**

Herbert Isabirye

*Uganda National Public Health Emergency Operations Center, Kampala, Uganda*

**Symposium 47**

**A Tribute to Carlos (Kent) Campbell: Global Leader in the Fight Against Malaria**

*Convention Center - Room 343/344 (3rd Floor)*

Thursday, November 14, 5:15 p.m. - 7 p.m.

**THIS SESSION DOES NOT CARRY CME CREDIT.**

Carlos (Kent) Campbell, MD, MPH, FASTMH, ASTMH President (2007), Councilor (1990-1994) and recipient of the Society's Joseph Augustin Le Prince Medal (2012) passed away in Tucson, Arizona, on February 20, 2024, at age 80. Known to many for his kind, charismatic demeanor, visionary thinking, and good-natured sense of humor expressed in his southern drawl, Kent was a global leader in the fight against malaria who had a profound impact on efforts to control and eliminate the disease. This tribute symposium will track his remarkable life and career from his pre-CDC life in eastern Tennessee and at Haverford, Duke and Harvard through his start at the Centers for Disease Control as an EIS Officer in 1972, his start in malaria in El Salvador (1973-1976) followed by his leadership as Malaria Branch Chief (through 1993), his move to Arizona to develop and serve as interim Dean of the University of Arizona College of Public Health (1995-2002) and his return to malaria-specific work with UNICEF and then the Bill and Melinda Gates Foundation where he worked to co-develop the MACEPA Program and the Center of Excellence for Malaria at PATH (2003-2014) and establish collaborations with many African malaria-endemic countries and the global malaria community. As Kent noted in 2014, "Building a set of systems changes forever the potential of African communities: that's what's kept me in this business. When I started, malaria was merely a biological entity people studied in the lab, and I've seen a rapid shift during my career." The symposium will focus on his ever-evolving work and the qualities and reach of his mentorship over 40+ years. We will be joined by Kent's immediate family and many of his collaborating colleagues.

Reception to follow.

#InfectiousDisease #Elimination

**CHAIR**

Stephen L. Hoffman

*Sanaria, Rockville, MD, United States*

Regina Rabinovich

*ISGlobal, Barcelona, Spain*

**5:15 p.m.**

**INTRODUCTION**

**5:30 p.m.**

**FAMILY LIFE**

Kristine Campbell

*University of Utah Medical Center, Salt Lake City, UT, United States*

Patrick Campbell

*St Jude Children's Research Hospital, Memphis, TN, United States*

**5:35 p.m.**

**KENT'S WEST AFRICAN ADVENTURE WITH LASSA**

Thomas P. Monath

*Quigley Biopharma LLC, Bolton, MA, United States*

**5:45 p.m.**

**EL SALVADOR**

David Brandling Bennett

*Medical Epidemiologist, Retired, Seattle, WA, United States*

**5:55 p.m.**

**CDC MALARIA BRANCH CHIEF**

Altaf A. Lal

*Sun Pharmaceuticals Industries Limited, Atlanta, GA, United States*

Bernard Nahlen

*University of Notre Dame, Eck Institute for Global Health, South Bend, IN, United States*

Eve Lackritz

*Center for Infectious Disease Research and Policy (CIDRAP), University of Minnesota, Minneapolis, MN, United States*

**6:15 p.m.**

**BUILDING THE UNIVERSITY OF ARIZONA'S SCHOOL OF PUBLIC HEALTH**

Imam Hakim

*The University of Arizona School of Public Health, Tuscon, AZ, United States*

**6:25 p.m.**

**UNICEF TO GATES TO MACEPA**

Richard Steketee

*Medical Epidemiologist, Retired, Bethesda, MD, United States*

Kafula Silumbe

*Monitoring and Evaluation, MACEPA/PATH, Lusaka, Zambia*

Busiku Hamainza

*Zambia Ministry of Health, Lusaka, Zambia*

Kammerle Schneider

*PATH, Seattle, WA, United States*

**6:45 p.m.**

**CLOSING REMARKS FROM FAMILY**

Kristine Campbell

*University of Utah Medical Center, Salt Lake City, UT, United States*

Patrick Campbell

*St Jude Children's Research Hospital, Memphis, TN, United States*

**6:55 p.m.**

**REMARKS FROM AUDIENCE AND CLOSING**

Thursday  
November 14

## Scientific Session 48

### Water, Sanitation, Hygiene and Environmental Health (WaSH-E): Outcomes

Convention Center - Room 345 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

#Epidemiology #MolecularBiology #InfectiousDisease

#### CHAIR

Christine Marie George

Johns Hopkins Bloomberg School of Public Hlth, Maryland, MD, United States

Isaac Chun Hai Fung

Georgia Southern University, Statesboro, GA, United States

5:15 p.m.

6803

#### EXAMINATION OF PATHOGENS AND FECAL MARKERS IN THE ENVIRONMENT DUE TO INADEQUATE SANITATION SERVICES IN THE ALABAMA BLACK BELT.

Olivia A. Harmon, Megan Lott, Joe Brown

The University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

5:30 p.m.

6804

#### FECAL EXPOSURE PATHWAYS FOR CHILDREN IN LOW-INCOME, UNPLANNED COMMUNITIES OF URBAN MAPUTO, MOZAMBIQUE USING A QUANTITATIVE MICROBIAL RISK ASSESSMENT FRAMEWORK (QMRA)

Julia Silva Sobolik<sup>1</sup>, Elly Mataveia<sup>2</sup>, Mahira Amade<sup>2</sup>, Cynthia Silva<sup>2</sup>, Lílina Dengo-Baloi<sup>1</sup>, Laura Braun<sup>1</sup>, Oliver Cumming<sup>1</sup>, Edna Viegas<sup>2</sup>, Jackie Knee<sup>1</sup>

<sup>1</sup>LSHTM, London, United Kingdom, <sup>2</sup>Centro de Investigação e Treino em Saúde da Polana Caniço (CISPOC), Maputo, Mozambique

5:45 p.m.

6805

#### UNDERSTANDING ANTIBIOTIC RESISTANCE, VIRULENCE, AND BIOFILM FORMATION IN *ACINETOBACTER BAUMANNII*: INSIGHTS FROM GORANCHATBARI SUB-CATCHMENT, DHAKA CITY

Mohammad Rafiqul Islam, Mohammad Atique Ul Alam, Md. Sakib Hossain, Amanta Rahman, Ashrin Haque, Md. Foysal Abedin, Md. Hajbiur Rahman, Md. Shafiqul Islam, Zahid Hayat Mahmud  
icddr, Dhaka, Bangladesh

6 p.m.

6806

#### ENVIRONMENTAL EXPOSURES ASSOCIATED WITH ENTERIC PATHOGEN CARRIAGE IN CHILDREN AGED 6 MONTHS IN NORTHERN ECUADOR

Kelsey J. Jesser<sup>1</sup>, Nicolette A. Zhou<sup>2</sup>, Caitlin Hemlock<sup>1</sup>, Molly K. Miller-Petrie<sup>1</sup>, Christine S. Fagnant-Sperati<sup>1</sup>, April Ballard<sup>3</sup>, Paige Witucki<sup>4</sup>, Andrea Sosa-Moreno<sup>4</sup>, Gabriel Trueba<sup>5</sup>, William Cevallos<sup>6</sup>, Gwenyth O. Lee<sup>7</sup>, Joseph N.S. Eisenberg<sup>4</sup>, Karen Levy<sup>1</sup>  
<sup>1</sup>University of Washington, Seattle, WA, United States, <sup>2</sup>University of Washington, SEATTLE, WA, United States, <sup>3</sup>Georgia State University, Atlanta, GA, United States, <sup>4</sup>University of Michigan, Ann Arbor, MI, United States, <sup>5</sup>Universidad San Francisco de Quito, Quito, Ecuador, <sup>6</sup>Universidad Central del Ecuador, Quito, Ecuador, <sup>7</sup>Rutgers University, New Brunswick, NJ, United States

6:15 p.m.

6807

#### SOIL-BORNE EXPOSURE TO ANTIMICROBIAL RESISTANT *E. COLI* AND SOIL-TRANSMITTED HELMINTHS THROUGH SOIL FLOORS IN RURAL BANGLADESH

Ayşe Ercumen<sup>1</sup>, Md. Sakib Hossain<sup>2</sup>, Tahani Tabassum<sup>2</sup>, Ashrin Haque<sup>2</sup>, Amanta Rahman<sup>2</sup>, Md. Hajbiur Rahman<sup>2</sup>, Claire Anderson<sup>3</sup>, Sumaiya Tazin<sup>1</sup>, Suhi Hanif<sup>2</sup>, Md. Rana Miah<sup>2</sup>, Afsana Yeamin<sup>2</sup>, Farjana Jahan<sup>2</sup>, Abul Kasham Shoaib<sup>2</sup>, Zahid Hayat Mahmud<sup>2</sup>, Mahbubur Rahman<sup>2</sup>, **Jade Benjamin-Chung<sup>3</sup>**

<sup>1</sup>North Carolina State University, Raleigh, NC, United States, <sup>2</sup>icddr, Dhaka, Bangladesh, <sup>3</sup>Stanford University, Stanford, CA, United States

6:30 p.m.

6808

#### ASSOCIATION OF WATER, SANITATION AND HYGIENE (WASH) AND ANIMAL OWNERSHIP TO RELAPSE TO ACUTE MALNUTRITION (AM) FOLLOWING RECOVERY FROM SEVERE ACUTE MALNUTRITION (SAM) AMONG CHILDREN 6-59 MONTHS IN MALI, SOUTH SUDAN AND SOMALIA: A PROSPECTIVE COHORT STUDY

Lauren Eleanor D'Mello-Guyett<sup>1</sup>, Sarah King<sup>2</sup>, Sherifath Mama Chabi<sup>3</sup>, Feysal A. Mohamud<sup>4</sup>, Nancy Lamaka<sup>5</sup>, John Agong<sup>5</sup>, Malyun Mohamed<sup>4</sup>, Karim Kone<sup>3</sup>, Karim Gallandat<sup>1</sup>, Mesfin Gose<sup>3</sup>, Mohamed S. Omar<sup>4</sup>, Magloire Bunkembo<sup>3</sup>, Indi Trehan<sup>6</sup>, Anastasia Marshak<sup>7</sup>, Khamisa Ayoub<sup>8</sup>, Ahmed H. Olad<sup>9</sup>, Bagayogo Aliou<sup>10</sup>, Heather Stobaugh<sup>11</sup>, Oliver Cumming<sup>1</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>3</sup>Action Against Hunger, Bamako, Mali, <sup>4</sup>Action Against Hunger, Mogadishu, Somalia, <sup>5</sup>Action Against Hunger, Juba, South Sudan, <sup>6</sup>University of Washington, Seattle, WA, United States, <sup>7</sup>Tufts University, Boston, MA, United States, <sup>8</sup>Ministry of Health for the Republic of South Sudan, Juba, South Sudan, <sup>9</sup>Federal Ministry of Health for the Federal Republic of Somalia, Mogadishu, Somalia, <sup>10</sup>Ministry of Health and Social Development for the Republic of Mali, Bamako, Mali, <sup>11</sup>Action Against Hunger, Washington DC, DC, United States

6:45 p.m.

6809

#### COMMUNITY PERCEPTIONS OF OPEN DEFECATION AND SCHISTOSOMIASIS CONTROL: LESSONS LEARNED FROM A RAPID ETHNOGRAPHIC ASSESSMENT STUDY IN THREE ENDEMIC LAKESHORE COMMUNITIES IN MAYUGE, UGANDA

Lucy Pickering<sup>1</sup>, Edith Nalwadda<sup>2</sup>, Lazaaro Mujumbusi<sup>3</sup>, Agnes Ssali<sup>3</sup>, Janet Seeley<sup>3</sup>, Poppy H L Lamberton<sup>1</sup>

<sup>1</sup>University of Glasgow, Glasgow, United Kingdom, <sup>2</sup>Independent Researcher, Entebbe, Uganda, <sup>3</sup>MRC/UVRI & LSHTM Uganda Research Unit, Entebbe, Uganda



## Symposium 49

### American Committee on Clinical Tropical Medicine and Travelers' Health (Clinical Group - ACCTMTH) Symposium II: What's New with Vaccines for Tropical and Travel Medicine?

Convention Center - Room 352 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

In the last few years there have been exciting new developments in vaccines to prevent infectious diseases in people traveling to, working, or residing in areas endemic for diseases transmitted by insect or animal bites. This symposium explores the clinical use of vaccines that are in advanced clinical trials, that are recently approved, or that have new dosing recommendations. This symposium will specifically discuss vaccination for Chikungunya, Tick-Borne Encephalitis and Rabies. #Vaccinology #Prevention #InfectiousDisease

## CHAIR

Kyle Petersen  
*Uniformed Services University, Bethesda, MD, United States*

Susan Hills  
*Centers for Disease Control and Prevention, Fort Collins, CO, United States*

5:15 p.m.

## INTRODUCTION

Kyle Petersen  
*Uniformed Services University, Bethesda, MD, United States*

5:35 p.m.

## CHIKUNGUNYA VACCINES: CURRENT STATUS AND CONSIDERATIONS FOR USE

Susan Hills  
*Centers for Disease Control and Prevention, Fort Collins, CO, United States*

6 p.m.

## TOWARDS SHORTER RABIES PREP REGIMENS IN TRAVELERS

Patrick Soentjens  
*Institute of Tropical Medicine, Antwerp, Belgium*

6:25 p.m.

## TBE, AN UNDERESTIMATED RISK FOR TRAVELERS TO EUROPE? FROM EPIDEMIOLOGY TO VACCINATION PROGRAMS.

Ursula Widermann-Schmidt  
*Medical University of Vienna, Vienna, Austria*

## Scientific Session 50

### American Committee of Molecular Cellular and Immunoparasitology (ACMCIP): Parasite - Host Microenvironments

Convention Center - Room 353 (3rd Floor)  
Thursday, November 14, 5:15 p.m. - 7 p.m.

Supported with funding from the Burroughs Wellcome Fund

#HostResponse #Pathogenesis #InfectiousDisease  
#CellBiology #Immunology

## CHAIR

Selina Bopp  
*Harvard T.H. Chan School of Public Health, Boston, MA, United States*

Joao Luiz Silva-Filho  
*Wellcome Centre for Integrative Parasitology, University of Glasgow, Glasgow, United Kingdom*

5:15 p.m.

8435

## ESTABLISHMENT OF A LABORATORY SYSTEM TO INTERROGATE TRYPANOSOMA CRUZI DEVELOPMENT WITHIN THE KISSING BUG VECTOR RHODNIUS PROLIXUS

Ruby Harrison<sup>1</sup>, Kevin J. Vogel<sup>2</sup>, Drew Etheridge<sup>1</sup>  
<sup>1</sup>University of Georgia Center for Tropical and Emerging Global Diseases, Athens, GA, United States, <sup>2</sup>University of Georgia Department of Entomology, Athens, GA, United States

5:30 p.m.

8436

## CIRCADIAN RHYTHMS MEDIATE MALARIA TRANSMISSION POTENTIAL

Inês Bento<sup>1</sup>, Brianna Parrington<sup>2</sup>, Rushlenne Pascual<sup>2</sup>, Alexander Goldberg<sup>2</sup>, Eileen Wang<sup>3</sup>, Hani Liu<sup>2</sup>, Mira Zelle<sup>2</sup>, Joseph Takahashi<sup>4</sup>, Joshua Elias<sup>3</sup>, Maria Mota<sup>1</sup>, Filipa Rijo-Ferreira<sup>5</sup>  
<sup>1</sup>Instituto de Medicina Molecular, João Lobo Antunes, Faculdade de Medicina Universidade de Lisboa, Lisbon, Portugal, <sup>2</sup>Berkeley Public Health, Molecular and Cell Biology Department, University of California, Berkeley, Berkeley, CA, United States, <sup>3</sup>Chan Zuckerberg Biohub - San Francisco, San Francisco, CA, United States, <sup>4</sup>Department of Neuroscience, Peter O'Donnell Jr. Brain Institute, University of Texas Southwestern Medical Center, Howard Hughes Medical Institute, Dallas, TX, United States, <sup>5</sup>Berkeley Public Health, Molecular and Cell Biology Department, University of California, Berkeley, Chan Zuckerberg Biohub - San Francisco, Berkeley, CA, United States

5:45 p.m.

6810

## HOST GASTRIC CORPUS MICROENVIRONMENT FACILITATES ASCARIS SUUM LARVAL HATCHING AND INFECTION IN A MURINE MODEL

Yifan Wu<sup>1</sup>, Grace Adeniyi-Ipadeola<sup>1</sup>, Mahliyah Adkins-Threats<sup>1</sup>, Matthew Seasock<sup>1</sup>, Charlie Suarez-Reyes<sup>1</sup>, Ricardo Fujiwara<sup>2</sup>, Maria E. Bottazzi<sup>1</sup>, Lizhen Song<sup>1</sup>, Jason C. Mills<sup>1</sup>, Jill E. Weatherhead<sup>1</sup>  
<sup>1</sup>Baylor College of Medicine, Houston, TX, United States, <sup>2</sup>Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

(ACMCIP Abstract)

6 p.m.

6811

## COMPREHENSIVE SINGLE CELL RNA SEQUENCING UNVEILS THE TRANSCRIPTIONAL DYNAMICS OF PLASMODIUM VIVAX HYPNOZOITE FORMATION

Gigliola Zanghi<sup>1</sup>, Lindsay V. Clark<sup>1</sup>, Nastaran Rezakhani<sup>1</sup>, Wanlapa Roobsoong<sup>2</sup>, Jetsumon Sattabongkot<sup>3</sup>, Sumana Chakravarty<sup>4</sup>, Stephen L. Hoffman<sup>4</sup>, B. Kim Lee Sim<sup>4</sup>, Stefan H.I. Kappe<sup>1</sup>, Ashley M. Vaughan<sup>1</sup>  
<sup>1</sup>Seattle Children's, Seattle, WA, United States, <sup>2</sup>Mahidol Vivax Research Unit, Faculty of Tropical Medicine, Bangkok, Thailand, <sup>3</sup>Mahidol Vivax Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, <sup>4</sup>Sanaria Inc., Rockville, MD, United States

(ACMCIP Abstract)

6:15 p.m.

6812

## P. VIVAX-INDUCED BM ALTERATIONS PERSIST LONG AFTER ACUTE PHASE OF INFECTION

Joao Luiz Silva-Filho<sup>1</sup>, Jessica RS Alves<sup>2</sup>, Anne CG Almeida<sup>3</sup>, Erich De Paula<sup>2</sup>, Stefanie Lopes<sup>4</sup>, Kevin Couper<sup>5</sup>, Thomas Otto<sup>1</sup>, Gisely Mello<sup>6</sup>, Wuelton Monteiro<sup>3</sup>, Marcus Lacerda<sup>3</sup>, Fabio TM Costa<sup>2</sup>, Matthias Marti<sup>1</sup>  
<sup>1</sup>University of Glasgow, Glasgow, United Kingdom, <sup>2</sup>University of Campinas, Campinas, Brazil, <sup>3</sup>Tropical Medicine Foundation Dr. Heitor Vieira Dourado, Manaus, Brazil, <sup>4</sup>Fiocruz, Manaus, Brazil, <sup>5</sup>University of Manchester, Manchester, United Kingdom, <sup>6</sup>Tropical Medicine Foundation Dr. Heitor Vieira Dourado University of Glasgow, Manaus, Brazil

(ACMCIP Abstract)

6:30 p.m.

6813

## A HUMAN PLURIPOTENT STEM CELL DERIVED MODEL OF THE NEUROVASCULAR UNIT COMPRISED OF BRAIN MICROVASCULAR ENDOTHELIAL CELLS, ASTROCYTES, AND NEURONS IN CEREBRAL MALARIA

Adnan Gopinadhan<sup>1</sup>, Finley Andrew<sup>1</sup>, Rylee Anderson<sup>2</sup>, Alejandro Soto<sup>1</sup>, Jason M. Hughes<sup>2</sup>, Andrea L. Conroy<sup>1</sup>, Chandly John<sup>1</sup>, Scott G. Canfield<sup>2</sup>, Dibyadyuti Datta<sup>1</sup>  
<sup>1</sup>Indiana University, Indianapolis, IN, United States, <sup>2</sup>Indiana University, Terre Haute, IN, United States

(ACMCIP Abstract)

6:45 p.m.

6814

### DIETARY EFFECTS ON THE COURSE OF VISCERAL LEISHMANIASIS IN A MOUSE MODEL

Natalie Jarvis, Grace Gutzman, Yani Chen, Bayan Zhanbolat, Patrick Nuro-Gyina, Jacilara Conceicao, Mary Wilson  
University of Iowa, Iowa City, IA, United States

(ACMCIP Abstract)

## Symposium 51

### American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) Symposium II: Annual Business Meeting

Convention Center - Room 354/355 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

ACAV provides a forum for exchanging information among people interested in arbovirus research and research in diseases caused by high consequence viral pathogens. This session will include the ACAV business meeting, award presentations, research presentations by ACAV award recipients, and outbreak reports. These presenters will describe their research on arbovirology and emerging viral diseases. #EmergingDiseaseThreats #Prevention #Vaccinology #InfectiousDisease #Trainee

#### CHAIR

Mauricio Nogueira  
Faculdade de Medicina de Sao Jose do Rio Preto, Sao Jose do Rio Preto, Brazil

Shannan Rossi  
University of Texas Medical Branch, Galveston, TX, United States

5:15 p.m.

#### INTRODUCTION

5:25 p.m.

#### ACAV AWARDS AND BUSINESS MEETING

Mauricio Nogueira  
Faculdade de Medicina de Sao Jose do Rio Preto, Sao Jose do Rio Preto, Brazil

5:45 p.m.

#### CHIKUNGUNYA VIRUS OUTBREAK REPORT

William Marciel de Souza  
University of Texas Medical Branch, Galveston, TX, United States

6 p.m.

#### CREID/CREATE-NEO OUTBREAK REPORT

Shannan Rossi  
University of Texas Medical Branch, Galveston, TX, United States

6:15 p.m.

#### SCHERER/HARDY AWARD PRESENTATION

Mauricio Nogueira  
Faculdade de Medicina de Sao Jose do Rio Preto, Sao Jose do Rio Preto, Brazil

6:30 p.m.

#### NETWORKING RECEPTION

## Symposium 52

### Setting the Research Agenda for Integrating One Health and Hygiene: A Delphi Method Synthesis of Expert Opinion

Convention Center - Room 356 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

The UNEP One Health Joint Plan of Action underscores that the lack of One Health and Water, Sanitation and Hygiene (WASH) integration contributes to health problems for people, animals and their shared environment. Developing a roadmap for effective integration of hygiene and One Health necessitates consultations with experts from across these domains to identify gaps and priorities for research and practice. The objective of this symposium is to develop a research agenda for integrating One Health and hygiene by building on two previous events at WASH-focused conferences in 2023 (UNC Water & Health, Global Hygiene Summit), where WASH researchers, policymakers and funders were consulted to generate an initial list of gaps and priorities, stakeholders and thematic areas for effective integration. ASTMH provides an opportunity to continue this effort by 1) presenting preliminary findings to a broader interdisciplinary audience of experts in epidemiology, public health, animal health, One Health and WASH and 2) consulting with these experts to identify priorities within and across disciplines. The symposium will employ the Delphi method to harness the collective expertise of conference attendees, engaging participants in a collaborative process to identify and rank gaps and priorities for integrating One Health and hygiene and build a research agenda consensus. The symposium will be organized into three parts: 1. Introductory presentations : First, speakers will give an overview of the multiple domains of hygiene, their relevance to One Health and the rationale for their integration. This will be followed by a summary of findings from the UNC Water & Health and Global Hygiene Summit events, including WASH-experts' opinions on opportunities, challenges and key stakeholders for One Health and hygiene integration for five thematic areas: research gaps, research methodology, intervention development, evaluation of interventions and programs and translation of research to practice. 2. Live discussion and voting: For each thematic area, symposium participants will complete a questionnaire via QR code to rank items on the initial working list of key gaps, priorities and stakeholders derived from the 2023 events. Participants will respond to questions at the same time and voting results will be shown graphically in real-time with time allocated for reaction, discussion and debate after each set of results are presented. Participants will then be asked to vote in a second round to provide an opportunity for consensus building. 3. Summary and closing: The chairs will summarize voting results and main discussion points to highlight where consensus was/ was not reached. A final open-floor discussion of findings will follow. #Prevention #InfectiousDisease #Epidemiology

#### CHAIR

Max T. Eyre  
London School of Tropical Medicine, London, United Kingdom

Elizabeth Thomas  
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

**5:15 p.m.**  
**INTRODUCTION**

**5:25 p.m.**  
**INTEGRATING HYGIENE INTO ONE HEALTH**

Kelly Baker  
*University of Iowa College of Public Health, Iowa City, IA, United States*

**5:40 p.m.**  
**RESEARCH AND LEARNING PRIORITIES FOR INTEGRATING HYGIENE AND ONE HEALTH: AN OVERVIEW OF PRELIMINARY FINDINGS**

Fanta Gutema  
*University of Iowa College of Public Health, Iowa City, IA, United States*

**5:55 p.m.**  
**LIVE DISCUSSION AND VOTING**

Max T. Eyre  
*London School of Tropical Medicine, London, United Kingdom*

**6:10 p.m.**  
**SUMMARY & CLOSING**

Elizabeth Thomas  
*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*

## Symposium 53

### End-to-End Development of a Lassa Fever Vaccine Program

*Convention Center - Room 357 (3rd Floor)*

**Thursday, November 14, 5:15 p.m. - 7 p.m.**

Lassa fever (LF) is a serious viral hemorrhagic disease endemic to West Africa caused by zoonotic Lassa virus (LASV), a member of the arenavirus family, transmitted from rodents to humans. Though seasonal in nature, LF cases are reported year-round in some countries, and endemicity is likely to strengthen in west, central, and eastern Africa in the future. Case fatality rates are as high as 15-20%, and there is currently no licensed vaccine against LF. Therefore, the development of an effective and safe vaccine against LF is a high priority. IAVI, a nonprofit vaccine development and global health organization with over 25 years of experience conducting research, capacity building, and community engagement, including in West Africa, has a portfolio of vesicular stomatitis virus (VSV)-based vaccine candidates targeting several emerging infectious diseases (EIDs) including LF caused by LASV. IAVI's VSV construct is based on the same technology utilized in Merck's licensed ERVEBO® vaccine against Ebola Zaire. Based on highly promising preclinical data, IAVI has fully engaged in end-to-end product development with VSV-LASV, initiating a Phase I study at sites in the US and Liberia in June 2023, with enrollment in a Phase IIa trial to begin in early 2024. IAVI's model for innovative partnerships, involving alignment with organizations that have similar missions to our own, sets a precedent for other vaccine developers in the EID space. This symposium is chaired by representatives from partners engaged in end-to-end LF vaccine development (Liberian government, Walter Reed Army Institute of Research, and IAVI) and featuring a diverse array of speakers to facilitate in-depth review and discussion of epidemiological, preclinical, and clinical considerations involved in

establishing IAVI's VSV-LASV program. Speaker presentations will include: (1) Results from an acute Lassa Fever study and evolving molecular virology of Lassa (HJF 032) (Redeemer's University, Nigeria), (2) Overview of Lassa epidemiology studies supporting trial development (CEPI-ENABLE), (3) Preclinical data supporting the VSV-LASV program (IAVI), (4) Results from IAVI C102 Phase 1 trial with VSV-LASV in US and Liberian cohorts (PREVAIL), and (5) Challenges in end-to-end vaccine development for Lassa fever (IAVI). This session will provide a robust overview of end-to-end product development for a critical LF vaccine and outline a partnership-based model that future vaccine developers may draw upon in establishing novel programs. #ClinicalResearch #EmergingDiseaseThreats #Epidemiology #InfectiousDisease #Vaccinology

#### CHAIR

Swati Gupta  
*IAVI, New York, NY, United States*

Melanie McCauley  
*Henry Jackson Foundation, Bethesda, MD, United States*

Bernice Dahn  
*University of Liberia, Monrovia, Liberia*

**5:15 p.m.**  
**INTRODUCTION**

**5:30 p.m.**  
**RESULTS FROM AN ACUTE LASSA FEVER STUDY AND EVOLVING MOLECULAR VIROLOGY OF LASSA (HJF 032)**

Christian Happi  
*Redeemer's University, Ede, Osun State, Nigeria*

**5:45 p.m.**  
**OVERVIEW OF LASSA EPIDEMIOLOGY STUDIES SUPPORTING TRIAL DEVELOPMENT**

Henshaw Mandi  
*CEPI, Oslo, Norway*

**6 p.m.**  
**PRECLINICAL DATA SUPPORTING THE VSV-LASV PROGRAM**

Christopher Cooper  
*IAVI, New York City, NY, United States*

**6:15 p.m.**  
**RESULTS FROM IAVI C102 PHASE 1 TRIAL WITH VSV-LASV IN US AND LIBERIAN COHORTS**

Mark Kieh  
*Partnership for Research on Ebola Virus in Liberia (PREVAIL), Monrovia, Liberia*

**6:30 p.m.**  
**CHALLENGES IN END-TO-END VACCINE DEVELOPMENT FOR LASSA FEVER**

Johan Vekemans  
*IAVI, New York City, NY, United States*



## Scientific Session 54

### Global Health: Research, Training, Policy and Decolonization

Convention Center - Room 383/384/385 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

**THIS SESSION DOES NOT CARRY CME CREDIT.**

#Trainee #EarlyCareer #MNCH #InfectiousDisease

#### CHAIR

Andres G. Lescano

Universidad Peruana Cayetano Heredia, Lima, Peru

Kassahun Alemu Gelaye

HeSET Maternal and Child Health Research Program, Addis Ababa, Ethiopia

5:15 p.m.

6815

#### PERSPECTIVES ON EQUITABLE PARTNERSHIPS IN GLOBAL HEALTH

Senait Kebede, Mischka Garel, Michael Chung, Rebecca Martin

Emory Global Health Institute, Emory University, Atlanta, GA, United States

5:30 p.m.

6816

#### INNOVATION FOR NEGLECTED DISEASES: TWO DECADES OF PROGRESS AND GAPS IN NEW DRUG APPROVALS

Paul G. Ashigbie<sup>1</sup>, Rajiv Shah<sup>2</sup>, Jonathan M. Spector<sup>1</sup>, Thierry T. Diagona<sup>3</sup>

<sup>1</sup>Global Health, Biomedical Research, Novartis, Cambridge, MA, United States, <sup>2</sup>Global Health and Sustainability, Novartis, Basel, Switzerland, <sup>3</sup>Global Health, Biomedical Research, Novartis, Emeryville, CA, United States

5:45 p.m.

6817

#### BUILDING CAPACITY FOR MATERNAL, NEWBORN & CHILD HEALTH RESEARCH IN LOW-INCOME COUNTRY SETTINGS: A RESEARCH FELLOWSHIP EXPERIENCE IN ETHIOPIA

Kassahun Alemu Gelaye<sup>1</sup>, Lisanu Taddesse<sup>1</sup>, Clara Pons-Duran<sup>2</sup>, Clara Pons-Duran<sup>2</sup>, Bezawit Mesfin Hunegnaw<sup>3</sup>, Robera Olana Fite<sup>1</sup>, Abebe Belayneh Bekele<sup>1</sup>, Frederick GB Goddard<sup>4</sup>, Assaye K. Nigusie<sup>5</sup>, Yifru Berhan<sup>6</sup>, Delayehu Bekele<sup>6</sup>, Theodoros Getachew<sup>7</sup>, Ebba Abate<sup>8</sup>, Grace J. Chan<sup>9</sup>

<sup>1</sup>HeSET Maternal and Child Health Research Program, Addis Ababa, Ethiopia, <sup>2</sup>Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, USA, <sup>3</sup>Harvard School of Public Health, MA, United States, <sup>4</sup>Department of Pediatric and Child Health, Saint Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia, Addis Ababa, Ethiopia, <sup>5</sup>Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, USA, Addis Ababa, MA, United States, <sup>6</sup>College of Medicine and Health Sciences, Bahir Dar University, Bahir Dar, Ethiopia, <sup>7</sup>Department of Obstetrics and Gynecology, Saint Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia, Addis Ababa, Ethiopia, <sup>8</sup>Health System and Reproductive Health Research Directorate, Ethiopian Public Health Institute, Addis Ababa, Ethiopia, Addis Ababa, Ethiopia, Addis Ababa, Ethiopia, <sup>9</sup>Director General, Ethiopian Public Health Institute, Addis Ababa, Ethiopia, Addis Ababa, Ethiopia, <sup>9</sup>Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, USA, Boston, MA, United States

6 p.m.

6818

#### EAST AND SOUTHERN AFRICAN CONSORTIUM FOR OUTBREAK EPIDEMIOLOGY TRAINING (ENTRANT)

Emily Webb<sup>1</sup>, Nega Assefa<sup>2</sup>, John Changelucha<sup>3</sup>, Maryirene Ibeto<sup>1</sup>, Joseph Jarvis<sup>1</sup>, Achilles Kiwanuka<sup>4</sup>, Madisa Mine<sup>5</sup>, Julius Oyugi<sup>6</sup>, Kwame Shanaube<sup>7</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Haramaya University, Haramaya, Ethiopia, <sup>3</sup>Mwanza Interventions Trials Unit, Mwanza, United Republic of Tanzania, <sup>4</sup>MRC/UVRI and LSHTM Uganda Research Unit, Entebbe, Uganda, <sup>5</sup>National Health Laboratories, Gaborone, Botswana, <sup>6</sup>University of Nairobi, Nairobi, Kenya, <sup>7</sup>Zambart, Lusaka, Zambia

6:15 p.m.

6819

#### WHO ANC POLICY AND SKILLED BIRTH ATTENDANCE IN SUB-SAHARAN AFRICA

Michael Bride<sup>1</sup>, Bolanle Olapeju<sup>2</sup>

<sup>1</sup>Johns Hopkins University Center for Communication Programs, Baltimore, MD, United States, <sup>2</sup>Uniformed Services University of the Health Sciences, Bethesda, MD, United States

6:30 p.m.

6820

#### ENHANCING THE QUALITY OF COMMUNITY HEALTH SERVICES IN MADAGASCAR: A MIXED METHODS EVALUATION OF A CHV PEER SUPERVISION MODEL IN FOUR REGIONS

Kanto Jude Ramanamahefa<sup>1</sup>, Samantha Herrera<sup>2</sup>, Tsinjo Fehizoro Razafindratsinana<sup>1</sup>, Anna Bowen<sup>3</sup>, Erica Berlin<sup>4</sup>, Andry Rabemanantsoa<sup>1</sup>, Hery Suzanette Gnetsa<sup>5</sup>, Jose Clement Randrianarisoa<sup>6</sup>, Jayne Webster<sup>7</sup>, Jessie Hamon<sup>7</sup>, Cara Smith Gueye<sup>8</sup>

<sup>1</sup>Population Services International, Antananarivo, Madagascar, <sup>2</sup>U.S. President's Malaria Initiative Insights, Washington, DC, United States, <sup>3</sup>U.S. President's Malaria Initiative, U.S. Centers for Disease Control and Prevention, Antananarivo, Madagascar, <sup>4</sup>Population Services International, Washington, DC, United States, <sup>5</sup>Community Health Service, Ministry of Public Health, Antananarivo, Madagascar, <sup>6</sup>National Malaria Control Program, Antananarivo, Madagascar, <sup>7</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>8</sup>University of California, San Francisco Malaria Elimination Initiative, San Francisco, CA, United States

6:45 p.m.

6821

#### AI IN GLOBAL HEALTH: CHALLENGES AND OPPORTUNITIES

Naomi Waithira<sup>1</sup>, Mavuto Mukaka<sup>1</sup>, Evelyne Kestelyn<sup>2</sup>, Keitcheya Chotthanawatit<sup>1</sup>, Anne Osterreider<sup>3</sup>, Trudie Lang<sup>3</sup>, Phaik Yeong Cheah<sup>1</sup>

<sup>1</sup>MORU Tropical Health Network, Bangkok, Thailand, <sup>2</sup>Oxford Clinical Research Unit, Ho Chi Minh City, Vietnam, <sup>3</sup>University of Oxford, Oxford, United Kingdom

## Scientific Session 55

### Global Health: Maternal, Newborn and Child Health

Convention Center - Room 388/389 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

#MNCH #Immunology #ChildHealth

#### CHAIR

Mamadou Otto Diallo

Centers for Disease Control and Prevention, Atlanta, GA, United States

Sophia T. Tan

Stanford University, Palo Alto, CA, United States

5:15 p.m.

6822

#### CLINICODEMOGRAPHIC PROFILE AND SURVIVAL PROSPECTS OF WOMEN WITH PERIPARTUM CARDIOMYOPATHY IN TANZANIA: A PROSPECTIVE COHORT STUDY.

Pedro Kisali Pallangyo, Zabella Mkojera, Makrina Komba, Peter R. Kisenge  
Jakaya Kikwete Cardiac Institute, Dar es Salaam, United Republic of Tanzania

5:30 p.m.

6823

**BURDEN, DISTRIBUTION, TIMING AND CAUSES OF STILLBIRTH AND NEONATAL MORTALITIES IN A HEALTH AND DEMOGRAPHIC SURVEILLANCE SYSTEM (HDSS) IN KAREMO AND MANYATTA IN WESTERN KENYA, 2018-2023**

George Aol Otieno<sup>1</sup>, Richard O. Onyando<sup>1</sup>, Godfrey M. Bigogo<sup>1</sup>, Joyce Were<sup>1</sup>, Beth A. Odhiambo<sup>1</sup>, Stephen O. Munga<sup>1</sup>, Beth T. Barr<sup>2</sup>, Nehemia O. Abongo<sup>1</sup>, Brian Genga<sup>1</sup>, Jonathan A. Muir<sup>1</sup>, Victor Akelo<sup>3</sup>, Aggrey Igunza<sup>1</sup>, Thomas Misore<sup>1</sup>

<sup>1</sup>Kenya Medical Research Institute, Kisumu, Kenya, <sup>2</sup>Nyanja Health Research Institute, Salima, Malawi, <sup>3</sup>Liverpool School Of Tropical Medicine, Kisumu, Kenya

5:45 p.m.

6824

**VACCINATION COVERAGE AND TIMELINESS AMONG INFANTS IN ETHIOPIA**

Clara Pons-Duran<sup>1</sup>, Bezawit Mesfin Hunegnaw<sup>2</sup>, Chalachew Bekele<sup>2</sup>, Kassahun Alemu<sup>1</sup>, Raffi Pontes<sup>3</sup>, Fiseha Tadesse<sup>4</sup>, Melkamu Ayalew<sup>5</sup>, Abraham Alebie<sup>2</sup>, Lisanu Tadesse<sup>1</sup>, Delayehu Bekele<sup>2</sup>, Sebastien Haneuse<sup>3</sup>, Grace J. Chan<sup>3</sup>

<sup>1</sup>HaSET Maternal and Child Health Research Program, Addis Ababa, Ethiopia, <sup>2</sup>St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia, <sup>3</sup>Harvard T.H. Chan School of Public Health, Boston, MA, United States, <sup>4</sup>Debre Birhan Hospital, Debre Birhan, Ethiopia, <sup>5</sup>Federal Ministry of Health, Addis Ababa, Ethiopia

6 p.m.

6825

**UNDERSTANDING IMPACT OF DOMESTIC VIOLENCE ON PERINATAL DEATH IN RURAL BANGLADESH; FINDINGS FROM CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE, BANGLADESH**

Mohammad Zahid Hossain<sup>1</sup>, Afsana Afrin<sup>1</sup>, Shahana Parveen<sup>1</sup>, Daliya Yeasmin<sup>1</sup>, Afruna Rahman<sup>1</sup>, Shams El Arifeen<sup>1</sup>, Emily Susan Gurley<sup>2</sup>

<sup>1</sup>icddr, Dhaka, Bangladesh, <sup>2</sup>John Hopkins University, Baltimore, MD, United States

6:15 p.m.

6826

**MASS AZITHROMYCIN DISTRIBUTION AND CAUSE-SPECIFIC MORTALITY AMONG CHILDREN AGED 1-59 MONTHS IN BURKINA FASO**

Ali Sie<sup>1</sup>, Mamadou Ouattara<sup>1</sup>, Mamadou Bountogo<sup>1</sup>, Boubacar Coulibaly<sup>1</sup>, Valentin Boudo<sup>1</sup>, Thierry Ouedraogo<sup>1</sup>, Elisabeth Gebreegziabher<sup>2</sup>, Huiyu Hu<sup>2</sup>, Elodie Lebas<sup>2</sup>, Benjamin F. Arnold<sup>2</sup>, Thomas M. Lietman<sup>2</sup>, Catherine Oldenburg<sup>2</sup>

<sup>1</sup>Centre de Recherche en Santé de Nouna, Nouna, Burkina Faso, <sup>2</sup>University of California, San Francisco, San Francisco, CA, United States

6:30 p.m.

6827

**CLUSTER VARIATION IN UNDER-FIVE MORTALITY IN A PROACTIVE CASE DETECTION INTERVENTION BY COMMUNITY HEALTH WORKERS IN MALI: ANALYSIS OF THE PROCCM TRIAL**

Emily Treleaven<sup>1</sup>, Amadou Beydi Cisse<sup>2</sup>, Oumar Tolo<sup>2</sup>, Noumoutie Sanogo<sup>2</sup>, Kalo Dao<sup>2</sup>, Djoume Diakite<sup>2</sup>, Ari Johnson<sup>3</sup>, Kassoum Kayentao<sup>4</sup>

<sup>1</sup>University of Michigan, Ann Arbor, MI, United States, <sup>2</sup>Muso, Bamako, Mali, <sup>3</sup>Muso, San Francisco, CA, United States, <sup>4</sup>Malaria Research & Training Center, Bamako, Mali

6:45 p.m.

**LIGHTNING TALKS**

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

7696

**CORRELATES OF INTESTINAL FATTY ACID BINDING PROTEIN, A MARKER OF INTESTINAL INJURY, IN A COHORT OF KENYAN CHILDREN UNDER 5 BEING DISCHARGED FROM HOSPITALS FOR NON-TRAUMATIC CAUSES**

Olivia N. McCollum<sup>1</sup>, Kevin Kariuki<sup>2</sup>, Elise Kang<sup>3</sup>, Morgan Litchford<sup>3</sup>, Doreen Rwigi<sup>1</sup>, Kirkby Tickell<sup>1</sup>, Joyce Otieno<sup>2</sup>, Benson Singa<sup>2</sup>, Mame M. Diakhate<sup>1</sup>, Dara Lehman<sup>3</sup>, Judd L. Walson<sup>1</sup>, Jennifer A. Slyker<sup>1</sup>, Patricia B. Pavlinac<sup>1</sup>

<sup>1</sup>University of Washington-Seattle, Seattle, WA, United States, <sup>2</sup>Kenya Medical Research Institute (KEMRI), Nairobi, Kenya, <sup>3</sup>Fred Hutch Cancer Center, Seattle, WA, United States

6904

**ASSOCIATIONS BETWEEN IMMUNE STATUS AND CHILD DEVELOPMENT IN RURAL BANGLADESH**

Sophia T. Tan<sup>1</sup>, Andrew N. Mertens<sup>2</sup>, Md. Ziaur Rahman<sup>3</sup>, Fahmida Tofail Tofail<sup>4</sup>, Helen O. Pitchik<sup>2</sup>, Da Kyung Jung<sup>2</sup>, Caitlin Hemlock<sup>5</sup>, Benjamin F. Arnold<sup>6</sup>, Lisa Hester<sup>7</sup>, Mohammed Rabiul Karim<sup>4</sup>, Sunny Shahriar<sup>4</sup>, Shahjahan Ali<sup>8</sup>, Abul K. Shoab<sup>4</sup>, Md. Saheen Hossen<sup>4</sup>, Palash Mutsuddi<sup>4</sup>, Syeda L. Famida<sup>4</sup>, Salma Akther<sup>4</sup>, Mahbubur Rahman<sup>4</sup>, Leanne Unicomb<sup>4</sup>, Patricia Kariger<sup>2</sup>, Alan E. Hubbard<sup>2</sup>, Christine P. Stewart<sup>9</sup>, John M. Colford Jr.<sup>2</sup>, Stephen P. Luby<sup>1</sup>, Firdaus S. Dhabhar<sup>10</sup>, Lia C. H. Fernald<sup>2</sup>, Audrie Lin<sup>3</sup>

<sup>1</sup>Division of Infectious Diseases and Geographic Medicine, Stanford University, Palo Alto, CA, United States, <sup>2</sup>School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>3</sup>Department of Microbiology and Environmental Toxicology, University of California, Santa Cruz, Santa Cruz, CA, United States, <sup>4</sup>International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>5</sup>School of Public Health, University of Washington, Seattle, WA, United States, <sup>6</sup>Francis I. Proctor Foundation, University of California, San Francisco, San Francisco, CA, United States, <sup>7</sup>Department of Medicine, University of Maryland, Baltimore, MD, United States, <sup>8</sup>Colorado School of Public Health, University of Colorado, Denver, CO, United States, <sup>9</sup>Institute for Global Nutrition, University of California, Davis, Davis, CA, United States, <sup>10</sup>University of Miami, Miami, FL, United States

6946

**IMPACTS OF BAD OBSTETRIC HISTORY ON ANTENATAL CARE UPTAKE IN SUBSEQUENT PREGNANCIES: INSIGHTS FROM CHAMPS BANGLADESH**

Maria Rahman Mim<sup>1</sup>, Rajib Biswas<sup>1</sup>, Shovo Debnath<sup>1</sup>, Taukir Tanjim<sup>1</sup>, Emily S. Gurley<sup>2</sup>, Kazi Munisul Islam<sup>1</sup>, Qazi Sadeq-ur Rahman<sup>1</sup>, Md. Abdus Salam<sup>1</sup>, Md. Atique Iqbal Chowdhury<sup>1</sup>, Sanwarul Bari<sup>1</sup>, Shams El Arifeen<sup>1</sup>, Mohammad Zahid Hossain<sup>1</sup>

<sup>1</sup>International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>2</sup>John Hopkins University, Baltimore, MD, United States

6902

**REASONS FOR NON-PARTICIPATION IN AZITHROMYCIN MASS DRUG ADMINISTRATION TO REDUCE MORTALITY AMONG CHILDREN 1-11 MONTHS OLD IN NIGER: A CROSS-SECTIONAL COVERAGE EVALUATION SURVEY**

Carolyn Brandt<sup>1</sup>, Ahmed M. Arzika<sup>2</sup>, Ramatou Maliki<sup>2</sup>, Alio Karamba<sup>2</sup>, Nasser Galo<sup>2</sup>, Naser Harouna<sup>2</sup>, Diallo Beidi<sup>2</sup>, Elodie Lebas<sup>1</sup>, Brittany Peterson<sup>1</sup>, Benjamin F. Arnold<sup>1</sup>, Thomas M. Lietman<sup>1</sup>, Kieran S. O'Brien<sup>1</sup>

<sup>1</sup>Francis I. Proctor Foundation, University of California, San Francisco, San Francisco, CA, United States, <sup>2</sup>Centre de Recherche et Interventions en Santé Publique, Bimi N'Gaoure, Niger

6937

**A SURVIVOR CASE OF NEONATAL TETANUS: CASE DESCRIPTION AND SURVEILLANCE SYSTEM EVALUATION IN THE URBAN HEALTH DISTRICT OF EBOLOWA, CAMEROON, MARCH 2023**

Ngotty Essebe Ruth-Aimée<sup>1</sup>, Signe Benjamin<sup>2</sup>, Atouba Benjamin<sup>3</sup>, Anya Priscilla<sup>4</sup>, Mendjime Patricia<sup>5</sup>

<sup>1</sup>Cameroon Field Epidemiology Training Program, Ministry of Public Health, Regional Delagation for the West, Bafoussam, Cameroon, <sup>2</sup>Ministry of Public Health, Regional Delegation for the South, Ebolowa, Cameroon, <sup>3</sup>Ministry of Public Health, Regional Delegation for the South, Ebolowa, Cameroon, <sup>4</sup>Department for the Control of Disease Epidemics and Pandemics; Cameroon Field Epidemiology Training Program, Yaounde, Cameroon, <sup>5</sup>Department for the Control of Disease Epidemics and Pandemics; Cameroon Field Epidemiology Training Program, Yaounde, Cameroon

## Scientific Session 56

### Malaria: Drug Development and Clinical Trials

Convention Center - Room 391/392 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

This session does not carry CME credit.

#Therapeutics #Resistance #Prevention  
#TranslationalScience #Elimination

#### CHAIR

Bridget Barber

QIMR Berghofer Medical Research Institute, Brisbane, Australia

David Saunders

US Army, Rockville, MD, United States

5:15 p.m.

6828

#### COMBINATION OF A REDUCTASE INHIBITOR WITH PRIMAQUINE PREVENTS HEMOLYSIS OF G6PD DEFICIENT RBCS

Ariel M. Hay<sup>1</sup>, Paul Buehler<sup>2</sup>, Joseph Kao<sup>2</sup>, Derek R. Lamb<sup>2</sup>, Robert Commons<sup>3</sup>, Eric A. Legendzov<sup>2</sup>, Mitasha S. Palha<sup>2</sup>, James C. Zimring<sup>1</sup>

<sup>1</sup>University of Virginia, Charlottesville, VA, United States, <sup>2</sup>University of Maryland, Baltimore, MD, United States, <sup>3</sup>Menzies School of Health Research, Darwin, Australia

5:30 p.m.

6829

#### RUXOLITINIB AS AN ADJUNCTIVE TREATMENT TO REDUCE INFLAMMATORY RESPONSES IN MALARIA: A RANDOMIZED PLACEBO CONTROLLED TRIAL IN VOLUNTEERS EXPERIMENTALLY INFECTED WITH *P. FALCIPARUM*

Bridget E. Barber<sup>1</sup>, Rebecca Webster<sup>1</sup>, Nischal Sahai<sup>2</sup>, Indika Leelasena<sup>2</sup>, Eniko Ujvary<sup>2</sup>, Sue Mathison<sup>2</sup>, Luzia Bukali<sup>1</sup>, Damian Oyong<sup>3</sup>, Fabian de Labastida Rivera<sup>1</sup>, Jessica Engel<sup>1</sup>, Dean W. Andrew<sup>1</sup>, Megan S. Soon<sup>1</sup>, Nicholas L. Dooley<sup>3</sup>, Jessica R. Loughland<sup>1</sup>, Jeremy Gower<sup>1</sup>, Jenny Peters<sup>1</sup>, Ria Woo<sup>1</sup>, Adam Potter<sup>1</sup>, Stacey Llewellyn<sup>1</sup>, Fiona Amante<sup>1</sup>, Teija Frame<sup>1</sup>, Julianne Hamelink<sup>1</sup>, Mayimuna Nalubega<sup>1</sup>, Reena Mukhiya<sup>3</sup>, James S. McCarthy<sup>4</sup>, Christian Engwerda<sup>1</sup>, Michelle J. Boyle<sup>3</sup>

<sup>1</sup>QIMR Berghofer Medical Research Institute, Brisbane, Australia, <sup>2</sup>University of Sunshine Coast, Brisbane, Australia, <sup>3</sup>Burnet Institute, Brisbane, Australia, <sup>4</sup>University of Melbourne, Melbourne, Australia

5:45 p.m.

6830

#### IMPROVING ANTIMALARIAL DRUG EFFICACY ASSESSMENT: COMPARATIVE ANALYSIS OF LENGTH POLYMORPHIC MARKERS AND CLASSIFICATION ALGORITHMS IN TWO PHASE II CLINICAL TRIALS

Daniela Montero Salas<sup>1</sup>, Monica Golumbeanu<sup>1</sup>, Sara L. Cantoreggi<sup>1</sup>, Celine Risterucci<sup>2</sup>, Cornelis Winnips<sup>2</sup>, Christian Nsanzabana<sup>1</sup>

<sup>1</sup>Swiss Tropical and Public Health Institute, Allschwil, Switzerland, <sup>2</sup>Novartis Pharma, Basel, Switzerland

6 p.m.

6831

#### FUNGAL DERIVED DEOXAPHOMINES TARGET *PLASMODIUM FALCIPARUM* SEGREGATION THROUGH INHIBITION OF PFACTIN1

Sarah Jiang<sup>1</sup>, Jin Woo Lee<sup>2</sup>, Jennifer Collins<sup>3</sup>, Samuel Schaefer<sup>1</sup>, Daisy Chen<sup>1</sup>, Flore Nardella<sup>3</sup>, Karen Wendt<sup>4</sup>, Thilini Peramuna<sup>4</sup>, Raphaella Paes<sup>3</sup>, Greg Durst<sup>5</sup>, Kirsten Hanson<sup>6</sup>, Debopam Chakrabarti<sup>3</sup>, Robert Cichewicz<sup>4</sup>, Elizabeth Winzeler<sup>1</sup>

<sup>1</sup>UCSD, San Diego, CA, United States, <sup>2</sup>Duksung Women's University, Seoul, Republic of Korea, <sup>3</sup>University of Central Florida, Orlando, FL, United States, <sup>4</sup>University of Oklahoma, Norman, OK, United States, <sup>5</sup>Lgenia Inc, Fortville, IN, United States, <sup>6</sup>University of Texas at San Antonio, San Antonio, TX, United States

6:15 p.m.

6832

#### *PLASMODIUM FALCIPARUM* FIELD ISOLATES TO GUIDE CLINICALLY RELEVANT DOSE RATIOS FOR CABAMIQUINE: PYRONARIDINE COMBINATION USING TRANSLATIONAL MODELING

Mohamed MAIGA<sup>1</sup>, Sebastian G. Wicha<sup>2</sup>, Perrine Courlet<sup>3</sup>, Abdoulaye Djimé<sup>1</sup>, Thomas Spangenberg<sup>4</sup>, Laurent Dembélé<sup>1</sup>, Claudia Demarta-Gatsi<sup>4</sup>

<sup>1</sup>Université des Sciences des Techniques et des Technologies de Bamako (USTTB), Bamako, Mali, <sup>2</sup>Universität Hamburg, Hamburg, Germany, <sup>3</sup>Merck Institute for Pharmacometrics, Ares Trading S.A., Lausanne, Switzerland, an affiliate of Merck KGaA, Darmstadt, Germany, <sup>4</sup>Global Health Institute of Merck, Ares Trading SA, Eysins, Switzerland, an affiliate of Merck KGaA, Darmstadt, Germany

6:30 p.m.

6833

#### DIHYDROARTEMISININ-PIPERAQUINE PLUS SULFADOXINE-PYRIMETHAMINE FOR INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANT WOMEN: A DOUBLE-BLINDED RANDOMIZED CONTROLLED TRIAL

Abel Kakuru<sup>1</sup>, Jimmy Kizza<sup>1</sup>, Miriam Aguti<sup>1</sup>, Harriet Adrama<sup>1</sup>, John Ategeka<sup>1</sup>, Peter Olwoch<sup>1</sup>, Miriam Nakalembe<sup>2</sup>, Joaniter Nankabirwa<sup>1</sup>, Bishop Opira<sup>1</sup>, Timothy Ssemukuye<sup>1</sup>, Nida Ozarslan<sup>3</sup>, Anju Ranjit<sup>3</sup>, Erin Dela Cruz<sup>3</sup>, Stephanie Gaw<sup>3</sup>, Tamara D. Clark<sup>2</sup>, Michelle E. Roh<sup>3</sup>, Prasanna Jagannathan<sup>4</sup>, Philip J. Rosenthal<sup>5</sup>, Moses R. Kanya<sup>2</sup>, Grant Dorsey<sup>3</sup>

<sup>1</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>2</sup>Makerere University College of Health Sciences, Kampala, Uganda, <sup>3</sup>University of California, San Francisco, San Francisco, CA, United States, <sup>4</sup>Stanford University, San Francisco, CA, United States

6:45 p.m.

6834

#### EFFECT OF INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY ON VAGINAL MICROBIOTA, HOST IMMUNE RESPONSE AND PREGNANCY OUTCOMES: A CASE-CONTROL STUDY FROM THE ASPIRE TRIAL IN ZAMBIA

Tanweer Beleil<sup>1</sup>, Marwah Bagabas<sup>1</sup>, Patricia Hunter<sup>2</sup>, Sherrienne Ng<sup>1</sup>, Jemima Hair<sup>2</sup>, Gonçalo Correia<sup>1</sup>, Yun S. Lee<sup>1</sup>, Enesia B. Chaponda<sup>3</sup>, Ephraim Chikwanda<sup>4</sup>, Mike Chaponda<sup>4</sup>, Nigel Klein<sup>2</sup>, Lynne Sykes<sup>1</sup>, Jane Bruce<sup>5</sup>, Ludovica Ghilardi<sup>6</sup>, Philippe Mayaud<sup>5</sup>, Daniel Chandramohan<sup>5</sup>, Phillip R. Bennett<sup>1</sup>, R Matthew Chico<sup>5</sup>, David A. MacIntyre<sup>1</sup>

<sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>University College London, London, United Kingdom, <sup>3</sup>University of Zambia, Lusaka, Zambia, <sup>4</sup>Tropical Diseases Research Centre, Ndola, Zambia, <sup>5</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

## Symposium 57

### Building Out Malaria: Housing Modification for Malaria Prevention

Convention Center - Room 393/394 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

Scale-up of proven, WHO-recommended malaria control interventions has not been sufficient to control malaria in Uganda and other countries, emphasizing the need to explore innovative approaches. Housing modification, a promising strategy and once a key pillar of malaria control, remains underutilized in most endemic areas, including sub-Saharan Africa where up to 80% of malaria transmission occurs indoors at night. Simple changes to prevent house entry by mosquitoes can reduce malaria, making housing modification an innovative and promising strategy to address the need for long-term, sustainable interventions. Evidence that housing structural design can provide protection from malaria is limited but encouraging. To explore housing modification as a malaria control intervention, a recent cluster-

randomized trial evaluated two innovative housing modifications developed through community-driven design: house screening and Eave Tubes. Both are new, long term, sustainable interventions; Eave Tubes are also an innovative insecticide resistance mitigation tool. The symposium will provide an overview of housing characteristics in Uganda and house-related behaviors associated with risk of malaria from several studies. New evidence from the Housing Modification trial in Uganda will focus on epidemiological and entomological effectiveness, and acceptability of housing modification. Feasibility and cost-effectiveness presentations will elucidate housing modification cost drivers, willingness to pay, equity, and potential scale up pathways through public and private market venues, as well as policy considerations. The symposium will conclude with a panel discussion on the challenges and promise of housing modification, discussing approaches to multisectoral engagement for scale up and adaptation with a long-term view on malaria control. #ClinicalResearch #Epidemiology #Prevention

#### CHAIR

Samuel Gonahasa  
*Infectious Diseases Research Collaboration (IDRC), Kampala, Uganda*

Nelli Westercamp  
*Centers for Disease Control and Prevention, Atlanta, GA, United States*

#### 5:15 p.m. INTRODUCTION

#### 5:25 p.m. HOUSING CHARACTERISTICS AND THEIR ASSOCIATION WITH RISK OF MALARIA IN UGANDA

Joaniter Nankabirwa  
*Makarere University Kampala, Kampala, Uganda*

#### 5:45 p.m. IMPACT OF HOUSING MODIFICATION ON MALARIA BURDEN AND ENTOMOLOGICAL OUTCOMES: MAIN RESULTS OF THE CLUSTER RANDOMIZED TRIAL IN UGANDA

Nelli Westercamp  
*Centers for Diseases Control and Prevention, Atlanta, GA, United States*

#### 6:05 p.m. FEASIBILITY AND COSTING OF IMPLEMENTING HOUSING MODIFICATION FOR MALARIA CONTROL

Katherine Snyman  
*London School of Hygiene & Tropical Medicine, London, United Kingdom*

#### 6:25 p.m. HOUSING CONTEXT, POLICY AND SCALE UP CONSIDERATIONS FOR HOUSING MODIFICATION AS MALARIA PREVENTION METHOD: FROM GRASSROOT UPTAKE TO FUNDER-DRIVEN IMPLEMENTATION

Samuel Gonahasa  
*Infectious Diseases Research Collaboration, Kampala, Uganda*

## Scientific Session 58

### Cestodes

*Convention Center - Room 395/396 (3rd Floor)*

**Thursday, November 14, 5:15 p.m. - 7 p.m.**

**#ClinicalResearch #Epidemiology #Diagnostics  
#InfectiousDisease**

#### CHAIR

Eva Clark  
*Baylor College of Medicine, Houston, TX, United States*

Elise M. O'Connell  
*NIH, Bethesda, MD, United States*

**5:15 p.m.**

**6835**

#### SEROPREVALENCE OF *TAENIA SOLIUM* ANTIBODIES AND ASSOCIATED RISK FACTORS AMONG CHILDREN 0-14 YEARS IN NIGERIA

Jennifer Akambo<sup>1</sup>, Samuel A. Oyebanjo<sup>2</sup>, Mary L. Kamb<sup>1</sup>, Andrew Hill<sup>1</sup>, Nishanth Parameswaran<sup>1</sup>, Nnaemeka C. Iriemenam<sup>3</sup>, Gretchen Cooley<sup>1</sup>, Nwachukwu E. William<sup>4</sup>, Nwando Mba<sup>4</sup>, McPaul I. J. Okoye<sup>3</sup>, Jeffrey W. Priest<sup>5</sup>, Diana L. Martin<sup>1</sup>, Paul Cantey<sup>1</sup>, Chikwe Ihekweazu<sup>4</sup>

<sup>1</sup>Division of Parasitic Diseases and Malaria, U.S. Centers for Disease Control and Malaria, Atlanta, GA, United States, <sup>2</sup>Institute of Human Virology, Abuja, FCT, Nigeria, <sup>3</sup>Division of Global HIV & TB, U.S. Centers for Disease Control and Prevention, Abuja, FCT, Nigeria, <sup>4</sup>Nigeria Centre for Disease Control and Prevention, Abuja, FCT, Nigeria, <sup>5</sup>Division of Foodborne, Waterborne and Environmental Diseases, U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States

(ACMCIP Abstract)

**5:30 p.m.**

**6836**

#### PULMONARY CYSTIC ECHINOCOCCOSIS TREATMENT OUTCOMES AMONG 280 PATIENTS AT TWO TERTIARY CARE CENTERS IN CUSCO, PERU

Roberto Pineda-Reyes<sup>1</sup>, Maria L. Morales<sup>2</sup>, Karen Mozo<sup>2</sup>, Maria A. Caravedo<sup>3</sup>, Angel Gamarra<sup>4</sup>, Ramiro Hermoza<sup>4</sup>, Rocio Cuaresma<sup>4</sup>, Miguel M. Cabada<sup>3</sup>

<sup>1</sup>Swiss Tropical and Public Health Institute, Allschwil, Switzerland, <sup>2</sup>Cusco Branch - Alexander von Humboldt Tropical Medicine Institute/Universidad Peruana Cayetano Heredia, Cusco, Peru, <sup>3</sup>Infectious Disease Division, University of Texas Medical Branch, Galveston, TX, United States, <sup>4</sup>Department of Surgery, Hospital Regional del Cusco, Cusco, Peru

(ACMCIP Abstract)

**5:45 p.m.**

**6837**

#### *TAENIA SOLIUM* FATTY ACID BINDING PROTEIN 1 INDUCES SUPPRESSES TLR4 SIGNALING AND DOWNREGULATE IRE-1A IN A PPAR-G DEPENDENT MANNER

Amit Prasad, Suraj S. Rawat  
*Indian Institute of Technology Mandi, mandi, India*

(ACMCIP Abstract)

**6 p.m.**

**6838**

#### HIGH PREVALENCE AND HOUSEHOLD CLUSTERING OF LIVER CYSTIC ECHINOCOCCOSIS IN A RURAL COMMUNITY IN THE CENTRAL ANDES OF PERU: A POPULATION - BASED SURVEY

Saul J. Santivanez<sup>1</sup>, Percy Soto-Becerra<sup>1</sup>, Raul Enriquez<sup>1</sup>, Luis Tello<sup>1</sup>, Oswaldo G.E. Espinoza-Hurtado<sup>1</sup>, Andreas Neumayr<sup>2</sup>, Hector H. Garcia<sup>3</sup>

<sup>1</sup>Universidad Continental, Huancayo, Peru, <sup>2</sup>Swiss Tropical and Public Health Institute, Basel, Switzerland, <sup>3</sup>Center for Global Health, Universidad Peruana Cayetano Heredia, Lima, Peru

(ACMCIP Abstract)

6:15 p.m.

6839

### DIAGNOSTIC PERFORMANCE OF A MULTIANTIGEN PRINT IMMUNOASSAY (MAPIA) FOR ANTIBODY DETECTION IN HUMAN NEUROCYSTICERCOSIS

Luz M. Toribio Salazar<sup>1</sup>, Carolina Guzman<sup>1</sup>, Herbert Saavedra<sup>2</sup>, Isidro Gonzales<sup>1</sup>, Javier A. Bustos<sup>1</sup>, Sukwan Handali<sup>3</sup>, Hector Garcia<sup>1</sup>

<sup>1</sup>UNIVERSIDAD PERUANA CAYETANO HEREDIA, Lima, Peru, <sup>2</sup>Instituto Nacional de Ciencias Neurologicas, Lima, Peru, <sup>3</sup>Division of Parasitic Diseases, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention USA, Atlanta, GA, United States

(ACMCIP Abstract)

6:30 p.m.

6840

### COMPARISON OF THE ANTIBODY DYNAMICS IN TWO MODELS OF EXPERIMENTAL PIG CYSTICERCOSIS USING A MULTIPLEX BEAD ASSAY (MBA)

Luz M. Toribio Salazar<sup>1</sup>, Sukwan Handali<sup>2</sup>, Gianfranco Arroyo<sup>1</sup>, Javier A. Bustos<sup>1</sup>, Hector Garcia<sup>1</sup>

<sup>1</sup>UNIVERSIDAD PERUANA CAYETANO HEREDIA, Lima, Peru, <sup>2</sup>Centers for Disease Control and Prevention, Atlanta, GA, Atlanta, GA, United States

(ACMCIP Abstract)

6:45 p.m.

6841

### CHARACTERIZATION OF THE ACUTE NEUROINFLAMMATORY RESPONSE INDUCED BY ANTIPARASITIC TREATMENT IN THE CAROTID PORCINE MODEL OF NEUROCYSTICERCOSIS

Gianfranco Arroyo<sup>1</sup>, Lizzie Tello-Ccente<sup>1</sup>, Rosa Diaz-Gongora<sup>1</sup>, Yessenia Salas<sup>1</sup>, Miguel A. Orrego-Solano<sup>1</sup>, Javier A. Bustos<sup>1</sup>, Manuela R Verastegui<sup>1</sup>, Robert H Gilman<sup>2</sup>, Hector H. Garcia<sup>1</sup>

<sup>1</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>Johns Hopkins University, Baltimore, MD, United States

(ACMCIP Abstract)

## Special Session 59

### Ponder to Probe: A Climate-Health Networking Event

Convention Center - Room 398 (3rd Floor)

Thursday, November 14, 5:15 p.m. - 7 p.m.

The ASTMH Committee on Global Health (ACGH) invites you to join us for an informal discussion on how climate change affects global health. Chat with experts who are working in the field and ask them how climate change affects their work, what we can do to better incorporate climate change into our work, and what we can do to help mitigate the problem.

#### CHAIR

James Colborn

Clinton Health Access Initiative, Inc., Evergreen, CO, United States

#### Break

Thursday, November 14, 7 p.m. - 7:30 p.m.

## Special Session 60

### Clinical Pub Trivia Night

Hilton - Churchill A1 (2nd Floor)

Thursday, November 14, 7:30 p.m. – 9:15 p.m.

Come join us for a fun-filled collegial competition, sponsored by the ASTMH Clinical Group. This is a chance to meet others interested in clinical tropical medicine, show your knowledge, learn some new fun facts, and enjoy free snacks. Don't worry if you are new to trop med. Teams will be a mix of people with different levels of experience, and you won't be asked to answer any question alone. The winning team takes home prizes and bragging rights.

#### CHAIR

Jill Weatherhead

Baylor College of Medicine, Houston, TX, United States.

## Sponsored Symposium

### The Rising Tide: Dengue Fever and Climate Change

#### Sponsored by Abbott

Convention Center - Room 354/355 (3rd Floor)

Thursday, November 14, 7:30 p.m. – 9:15 p.m.

See page 51 for information.

## Sponsored Symposium

### One Health: From Plagues and Pestilence to Pesticides, Pharmaceuticals and Public Health

#### Sponsored by Bayer U.S. Crop Science

Convention Center - Room 383/384/385 (3rd Floor)

Thursday, November 14, 7:30 p.m. – 9:15 p.m.

See page 51 for information.

## Friday, November 15

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### Registration

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Convention Center - Lobby I (1st Floor)  
Friday, November 15, 7 a.m. - 5 p.m.

### Speaker Ready Room (Closed 11 a.m. - Noon)

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Convention Center - Room 387 (3rd Floor)  
Friday, November 15, 7 a.m. - 6 p.m.

### TropStop -Student/Trainee Lounge

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Convention Center - Room 346/347 (3rd Floor)  
Friday, November 15, 7 a.m. - 5 p.m.

This casual setting, designed with students, trainees and residents in mind (coffee, internet), is your place for a break from the fast pace of the meeting and relax with colleagues and friends. Check out the Career Chats, held in the TropStop. This will be your opportunity to meet professionals in the fields of tropical medicine and global health who will share their personal career paths and answer your questions about the various bumps and forks in the road.

### Meeting Sign-Up Room

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Hilton - Norwich Room and Windsor Room (3rd Floor)  
Friday, November 15, 7 a.m. - 7 p.m.

### Nursing Mothers Room

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Convention Center - Office I120 and Office J121 (1st Floor)  
Friday, November 15, 7 a.m. - 7 p.m.

### Prayer Room

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Convention Center - Room 342 (3rd Floor)  
Friday, November 15, 7 a.m. - 7 p.m.

### Burroughs Wellcome Fund - ASTMH Fellowship Committee Meeting

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Convention Center - Room 349 (3rd Floor)  
Friday, November 15, 7 a.m. - 8 a.m.

### Trainee Membership Committee

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Hilton - Ascot (3rd Floor)  
Friday, November 15, 7 a.m. - 8 a.m.

## Sponsored Symposium

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### Results from Large-Scale Trials of the Sarabi Attractive Targeted Sugar Bait to Reduce Malaria Burden in Kenya, Mali and Zambia

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#### Sponsored by IVCC

Convention Center - Room 343/344 (3rd Floor)  
Friday, November 15, 7 a.m. - 8:45 a.m.

See page 52 for information.

## Sponsored Symposium

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### Tropical Fever Syndromic Diagnostics to Enhance Patient Management: A Clinical and Microbiologist Point of View

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#### Sponsored by bioMérieux SA

Convention Center - Room 352 (3rd Floor)  
Friday, November 15, 7 a.m. - 8:45 a.m.

See page 54 for information.

## Sponsored Symposium

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### Asymptomatic Malaria in Pregnancy: An Urgent Problem to Resolve

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#### Sponsored by Abbott

Convention Center - Room 354/355 (3rd Floor)  
Friday, November 15, 7 a.m. - 8:45 a.m.

See page 53 for information.

## Sponsored Symposium

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### When Neglected Tropical Diseases Go Global: Focus on Chikungunya and Mpox

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#### Sponsored by Bavarian Nordic

Convention Center - Room 383/384/385 (3rd Floor)  
Friday, November 15, 7 a.m. - 8:45 a.m.

See page 53 for information.

## Sponsored Symposium

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### Malaria Prevention: A Trilogy of Tools to Accelerate to Zero Deaths

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#### Sponsored by Medicines for Malaria Venture and TDR

Convention Center - Room 395/396 (3rd Floor)  
Friday, November 15, 7 a.m. - 8:45 a.m.

See page 54 for information.

## Press Room

Convention Center - Room 340 (3rd Floor)  
Friday, November 15, 7:45 a.m. - 5 p.m.



## Plenary Session 61

### Plenary Session III: Commemorative Lecture

Convention Center - Hall I-2 (1st Floor)  
Friday, November 15, 9 a.m. - 9:45 a.m.

**THIS SESSION DOES NOT CARRY CME CREDIT.**

#### CHAIR

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

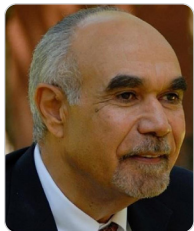
9 a.m.

#### INTRODUCTION

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

9:15 a.m.

#### COMMEMORATIVE LECTURE: OVERCOMING CHALLENGES TO IMPLEMENT PATIENT CARE, TRAINING, RESEARCH AND GLOBAL HEALTH IN HAITI: 1979-2024



#### Jean William "Bill" Pape, MD

Founder and Director  
Les Centres GHESKIO, Port-au-Prince, Haiti  
Howard and Carol Holtzmann Professor of  
Clinical Medicine  
Weill Cornell Medical College, New York, NY,  
United States

Dr. Jean William "Bill" Pape is the founder and director of Les Centres GHESKIO in Port-au-Prince, Haiti, and the Howard and Carol Holtzmann Professor of Clinical Medicine at Weill Cornell Medical College in New York.

Born and raised in Haiti, Dr. Pape is a visionary leader whose seminal work has had a major impact on healthcare delivery in his native country and around the world. Despite man-made and natural disasters, he has persevered to save hundreds of thousands of lives in Haiti while improving many more globally. His story and that of GHESKIO, the organization he founded, exemplify resilience, innovation, and entrepreneurial leadership in one of the poorest countries in the world.

Bill Pape graduated from Columbia University with a BS in 1971 and from Cornell University with an MD in 1975. After completing his postdoctoral training in infectious diseases at the New York Hospital, he joined the Cornell faculty. He then returned to Haiti to establish the Cornell Infectious Diseases Research and Training Unit. Dr. Pape subsequently identified the cause of infantile diarrhea, which was the leading cause of infant mortality at the time. He introduced a comprehensive treatment, including oral rehydration therapy, which reduced the hospital infant mortality rate at the State

University Hospital (HUEH) from over 40% to less than 1% within a year. The nationwide implementation of this program led to a 50% reduction in infant mortality across the country.

Dr. Pape is credited with recognizing and providing the first comprehensive description of AIDS in the developing world. In 1982, he established GHESKIO (a French acronym for the Haitian Study Group on Kaposi Sarcoma and Opportunistic Infections), one of the first centers dedicated to the study of AIDS. Four decades later, GHESKIO remains one of the largest AIDS and TB treatment, training, and research centers in the Americas, providing free care to more than 300,000 patients with HIV, STIs, TB, diarrheal, and cardiovascular diseases annually. Dr. Pape's work in Haiti has had a global impact on HIV and TB prevention and treatment.

Under his leadership, the GHESKIO team has saved many people despite overwhelming odds. In 2010, after Haiti was devastated by an earthquake that killed an estimated 300,000 people, followed by the worst cholera outbreak in modern history, Dr. Pape transformed the GHESKIO campus into a trauma hospital and survivor camp, saving thousands of lives.

### Exhibit Hall Open

Convention Center - Hall J (1st Floor)  
Friday, November 15, 9:30 a.m. - 10:30 a.m.

### Coffee Break

Convention Center - Hall J (1st Floor)  
Friday, November 15, 9:45 a.m. - 10:15 a.m.

### Poster Session B Set-Up

Convention Center - Hall I-1 (1st Floor)  
Friday, November 15, 9:45 a.m. - 10:15 a.m.

### Poster Session B Viewing

Convention Center - Hall I-1 (1st Floor)  
Friday, November 15, 10:15 a.m. - Noon



## Symposium 62

### Falling Dominoes: Antimalarial Resistance Proliferation in East and Central Africa

Convention Center - Hall I-2 (1st Floor)  
Friday, November 15, 10:15 a.m. - Noon

The wide-held belief that artemisinin-based combination therapies (ACTs) would maintain efficacy for years to come in Africa is no longer true. In recent years, four across East Africa have reported confirmed partial artemisinin resistance, and some are also reporting declining lumefantrine efficacy. Recent reports from Israel, Belgium, and the United Kingdom have shown increasing instances of ACT treatment failure in travelers returning from East Africa. The short-term outlook for

alternative antimalarials to ACTs is extremely limited; preserving the efficacy of ACTs in the region is critical for the treatment of the individual and for public health. Therapeutic efficacy studies (TES) are the gold standard for monitoring a country's first and second-line antimalarial efficacy and can be used to pair clinical and molecular data to discover the presence of genetic markers associated with delayed parasite clearance or ACT failure. TES are designed to provide straightforward, standardized data to policy-makers responsible for setting antimalarial drug policy in malaria-endemic countries. Routinely implemented TES have been key in identifying both artemisinin partial resistance and decreased artemether-lumefantrine efficacy throughout East and Central Africa. These TES have sparked response actions, in-line with WHO's November 2022 Strategy to Respond to Antimalaria Drug Resistance in Africa, including changing or diversifying first and second-line ACTs, strengthening malaria-control efforts in affected areas, and enhancing molecular surveillance. While there have been successes in response to TES findings, challenges remain including identification of best practices for mitigating drug resistance, lack of additional resources for enhanced malaria control efforts in affected areas, and limited affordable alternatives for current drug regimens. This symposium will present TES data for studies carried out between 2022 and 2024 from seven countries (Democratic Republic of Congo, Ethiopia, Kenya, Uganda, Republic of Tanzania, Rwanda, and Burundi) in the epicenter of emergence and spread of artemisinin partial resistance. Talks will also feature country-led actions to prepare for or respond to concerning findings, including drug policy changes, expanded molecular surveillance, and cross-border collaboration. A culminating panel and question and answer session will allow expert speakers to discuss commonalities in both clinical and molecular outcomes presented, overall implications of the current data for the region, challenges with responding to drug resistance, and reasons to be hopeful for the future of antimalarial treatments. #Resistance #Therapeutics #Genomics #EmergingDiseaseThreats #FieldStudies

#### **CHAIR**

Leah F. Moriarty  
*President's Malaria Initiative, Malaria Branch, Centers for Disease Control and Prevention, Atlanta, GA, United States*

Fitsum Girma G. Tadesse  
*AHRI, Addis Ababa, Ethiopia*

#### **10:15 a.m.** **INTRODUCTION**

#### **10:25 a.m.** **MOUNTING A COMPREHENSIVE RESPONSE TO ARTEMISININ PARTIAL RESISTANCE; LESSONS FROM KENYA AND TANZANIA**

Sarah-Blythe Ballard  
*US Centers for Disease Control and Prevention, Atlanta, United States*

#### **10:40 a.m.** **RESULTS OF THE 2023-2024 THERAPEUTIC EFFICACY STUDY IN DEMOCRATIC REPUBLIC OF CONGO AND IMPLICATIONS FOR MITIGATING PARTIAL ARTEMISININ RESISTANCE AND REDUCED EFFECTIVENESS IN THE REGION**

Gauthier Mesia Kahunu  
*University of Kinshasa, Kinshasa, Democratic Republic of the Congo*

#### **10:55 a.m.** **COMMUNICATING THERAPEUTIC EFFICACY RESULTS TO STAKEHOLDERS TO INFORM IMPLEMENTATION OF RESPONSE ACTIVITIES**

Moses Kanya  
*Infectious Diseases Research Collaboration, Kinshasa, Uganda*

#### **11:10 a.m.** **PRELIMINARY RESULTS FROM BURUNDI TES 2024**

Louise Mahan  
*United States Agency for International Development, Bujumbura, Burundi*

#### **11:25 a.m.** **USING THERAPEUTIC EFFICACY DATA TO INFORM DRUG RESISTANCE MANAGEMENT POLICIES IN RWANDA**

Jean Damascene Niyonzima  
*Rwanda Biomedical Center, Kigali, Rwanda*

## **Symposium 63**

### **A Life Well Lived in Global Disease Control and Eradication: Remembering ASTMH President Dr. Joel Breman**

*Convention Center - Room 343/344 (3rd Floor)*

**Friday, November 15, 10:15 a.m. - Noon**

**THIS SESSION DOES NOT CARRY CME CREDIT.**

In this symposium, speakers will reflect on the life and contributions of Dr. Joel Breman, 2020 ASTMH President, which include significant impacts in smallpox eradication, discovery and control of the Ebola virus, malaria control, and Guinea worm eradication. Following the speakers and video tributes, there will be time for personal and professional remembrances from the audience.

#### **CHAIR**

Karen A. Goraleski  
*ASTMH CEO Emeritus, Alexandria, VA, United States*

Peter H. Kilmarx  
*Fogarty International Center, Bethesda, MD, United States*

#### **10:15 a.m.** **TRIBUTE TO DR. JOEL BREMAN FROM THE WORLD HEALTH ORGANIZATION [VIDEO]**

Tedros Adhanom Ghebreyesus  
*World Health Organization, Geneva, Switzerland*

#### **10:30 a.m.** **REMEMBRANCE OF DR. JOEL BREMAN [VIDEO]**

Bill Foege  
*Emory University, Atlanta, GA, United States*

#### **10:35 a.m.** **THE DISCOVERY OF EBOLA AND JOEL BREMAN'S LEGACY**

Jean-Jacques Muyembe  
*Institut National de la Recherche Biomédicale (INRB), Kinshasa, Democratic Republic of the Congo*



**10:50 a.m.****DR. JOEL BREMAN: MALARIA SCIENCE AND PROGRAMS FOR THE PEOPLE**Richard W. Steketeer  
Consultant, Bethesda, MD, United States**11:05 a.m.****REMEMBERING JOEL BREMAN: A LEGACY OF WARMTH, WISDOM, AND GLOBAL HEALTH LEADERSHIP**Anne W. Rimoin  
UCLA Fielding School of Public Health, Los Angeles, CA, United States**11:20 a.m.****DR. JOEL BREMAN AND GLOBAL DISEASE ERADICATION [MODERATOR READING]**Donald R. Hopkins  
Carter Center, Atlanta, GA, United States**11:25 a.m.****REMEMBRANCES****11:55 a.m.****CLOSING REMARKS**Karen A. Goraleski  
ASTMH CEO Emeritus, Alexandria, VA, United StatesPeter H. Kilmarx  
Fogarty International Center, Fogarty International Center, Bethesda, MD, United States**Scientific Session 64****Filariasis – Clinical, Immunology, and Diagnosis**

Convention Center - Room 345 (3rd Floor)

Friday, November 15, 10:15 a.m. - Noon

**This session does not carry CME credit.**

#lymphatic filariasis #loiasis #biomarkers #xenomonitoring #diagnostics

**CHAIR**Marco A. Biamonte  
Big Eye Diagnostics, Inc., San Diego, CA, United StatesJérémy Campillo  
TransVIHMI, Institut de Recherche pour le Développement, Montpellier, France**10:15 a.m.****6842****A CRISPR-CAS13A ASSAY FOR DETECTION OF CIRCULATING CELL FREE RNA (CCFRNA) IN ACTIVE WUCHERERIA BANCROFTI INFECTION**Carlos F. Ng<sup>1</sup>, Sasisekhar Bennuru<sup>2</sup>, Amy Lyden<sup>1</sup>, Andres A. Dextre<sup>1</sup>, Zaina L. Moussa<sup>1</sup>, María Diaz De León Derby<sup>1</sup>, Thomas B. Nutman<sup>2</sup>, Daniel A. Fletcher<sup>1</sup>  
<sup>1</sup>University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>National Institutes of Health, Bethesda, MD, United States**10:30 a.m.****6843****A BIOMARKER ASSAY TO DETECT PEOPLE WITH HIGH LOA LOA MICROFILARIA COUNTS**Sarah E. Greene<sup>1</sup>, Yuefang Huang<sup>1</sup>, Kerstin Fischer<sup>1</sup>, Bruce A. Rosa<sup>1</sup>, John Martin<sup>1</sup>, Makedonka Mitreva<sup>1</sup>, Samuel Wanji<sup>2</sup>, Joseph Kamgno<sup>3</sup>, Philip J. Budge<sup>1</sup>, Gary J. Weil<sup>1</sup>, Peter U. Fischer<sup>1</sup>  
<sup>1</sup>Washington University in St Louis, SAINT LOUIS, MO, United States, <sup>2</sup>University of Buea, Buea, Cameroon, <sup>3</sup>University of Yaounde, Yaounde, Cameroon**10:45 a.m.****6844****A RANDOMIZED DOUBLE-BLIND STUDY COMPARING THE EFFECT OF 3 ANNUAL OR FIVE 6-MONTHLY SINGLE DOSES OF MOXIDECTIN OR IVERMECTIN IN INDIVIDUALS ≥12 YEARS OLD WITH ONCHOCERCA VOLVULUS INFECTION IN ITURI PROVINCE, DEMOCRATIC REPUBLIC OF CONGO: EFFICACY AND SAFETY DATA 12 MONTHS AFTER THE FIRST TREATMENT**Tony O. Ukety<sup>1</sup>, Michel Mandro-Ndahura<sup>2</sup>, Pascal Adroba<sup>1</sup>, Deogratias Ucima<sup>1</sup>, Françoise Ngave<sup>1</sup>, Kaki Kambale-Tsongo<sup>1</sup>, Amos Nyathirombo<sup>1</sup>, Innocent Mananu<sup>1</sup>, Jack Zawadi<sup>1</sup>, Gisèle Abeditho<sup>1</sup>, Patrick Ubimo<sup>1</sup>, Jules Upenjirwoth<sup>1</sup>, Moïse Alidra<sup>1</sup>, Joël Mande<sup>1</sup>, Germain Abafule<sup>1</sup>, Claude Uvon<sup>1</sup>, Anuarite Raciui<sup>1</sup>, Salomon Maki<sup>1</sup>, Lyna Biwaga<sup>1</sup>, Mathieu Njabu<sup>1</sup>, Anouk Neven<sup>3</sup>, Annette C. Kuesel<sup>4</sup>, Moraye Bear<sup>5</sup>, Beatriz Mosqueira<sup>6</sup>, Mupenzi Mumbere<sup>6</sup>, Melinda Lowe<sup>6</sup>, Sally Kinrade<sup>6</sup><sup>1</sup>Centre de Recherche en Maladies Tropicales Ituri, Rethy, Democratic Republic of the Congo, <sup>2</sup>Ituri Provincial Health Division, Bunia, Democratic Republic of the Congo, <sup>3</sup>Luxembourg Institute of Health, Strassen, Luxembourg, <sup>4</sup>World Health Organization Special Programme for Research and Training in Tropical Diseases (TDR), Geneva, Switzerland, <sup>5</sup>Forsythe and Bear, LLC, Los Angeles County, CA, United States, <sup>6</sup>Medicines Development for Global Health, Southbank, Australia**11 a.m.****6845****MULTIPLEXING NOVEL BIOMARKERS TO AID POST-ELIMINATION SURVEILLANCE IN LYMPHATIC FILARIASIS**Rachel E. Pietrow<sup>1</sup>, Belinda Jackson<sup>2</sup>, Edward E. Mitre<sup>2</sup>, Thomas B. Nutman<sup>1</sup>, Sasisekhar Bennuru<sup>1</sup><sup>1</sup>Laboratory of Parasitic Diseases, NIAID, National Institutes of Health, Bethesda, MD, United States, <sup>2</sup>Microbiology and Immunology, School of Medicine, Uniformed Services University of Health Sciences, Bethesda, MD, United States**11:15 a.m.****6846****FIELD EVALUATION IN GHANA OF A NEW OVND5 REAL-TIME PCR METHOD FOR DETECTION OF ONCHOCERCA VOLVULUS DNA IN POOLED SIMULIUM DAMNOSUM S.L. BLACKFLIES**Jessica Prince-Guerra<sup>1</sup>, Gifty Boateng<sup>2</sup>, Rexford Adade<sup>2</sup>, Andrew Abbott<sup>1</sup>, Joseph Opape<sup>3</sup>, Odame Asiedu<sup>3</sup>, Ellen J. Doku<sup>3</sup>, Kofi Asemanyi-Mensah<sup>3</sup>, Ben Masiira<sup>4</sup>, Thomson Lakwo<sup>4</sup>, Ernest Kenu<sup>4</sup>, Moukaram Tertuliano<sup>1</sup>, Stephen Lindstrom<sup>1</sup>, Paul Cantey<sup>1</sup><sup>1</sup>US Centers for Disease Control and Prevention (CDC), Atlanta, GA, United States, <sup>2</sup>National Public Health and Reference Laboratory, Ghana Health Service, Accra, Ghana, <sup>3</sup>Neglected Tropical Diseases Program, Ghana Health Services, Accra, Ghana, <sup>4</sup>African Field Epidemiology Network, Kampala, Uganda**11:30 a.m.****6847****SAFETY AND EFFICACY OF A SINGLE DOSE OF 2 MG MOXIDECTIN IN LOA LOA INFECTED INDIVIDUALS: A DOUBLE-BLIND, RANDOMIZED IVERMECTIN-CONTROLLED TRIAL WITH ASCENDING MICROFILARIAL DENSITIES**Guy Wafeu<sup>1</sup>, Tristan Lepage<sup>2</sup>, Jérémy T. Campillo<sup>3</sup>, Arnaud Efon-Ekangou<sup>1</sup>, Hugues C. Nana-Djeunga<sup>1</sup>, Narcisse Nzune-Toche<sup>1</sup>, André Domche<sup>1</sup>, Laurentine Sumo<sup>1</sup>, Guy-Roger Njitchouang<sup>1</sup>, Martine A F Tsasse<sup>1</sup>, Jean Bopda<sup>1</sup>, Yves A. Balog<sup>1</sup>, Yannick Niamsi-Emalio<sup>1</sup>, Stève Mbickmen-Tchana<sup>1</sup>, Gervais K. Talla<sup>1</sup>, Yannick Sédrick N. Kana<sup>1</sup>, Félicité Diane M. Messina<sup>1</sup>, Sebastien D S Pion<sup>4</sup>, Annette C. Kuesel<sup>5</sup>, Michel Boussinesq<sup>4</sup>, Cédric B. Chesnais<sup>4</sup><sup>1</sup>Higher Institute of Scientific and Medical Research, Yaoundé, Cameroon, <sup>2</sup>Montpellier University Hospital, Montpellier, France, <sup>3</sup>Inserm, Montpellier, France, <sup>4</sup>Institut de recherche pour le développement, Montpellier, France, <sup>5</sup>UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, Geneva, Switzerland

11:45 a.m.

6848

### NEXT GENERATION OV16-BASED RAPID TESTS: FIELD DATA

**Marco Biamonte**<sup>1</sup>, Sam Marton<sup>1</sup>, Lauren Boone<sup>1</sup>, Justin Nueve<sup>1</sup>, Rhea Perez<sup>1</sup>, Lily Sullins<sup>1</sup>, Jean Saunders<sup>2</sup>, Matthias Schwarz<sup>2</sup>, Adina Gerson-Gurwitz<sup>2</sup>, Sasisekhar Bennuru<sup>3</sup>, Rachel Pietrow<sup>3</sup>, Yaya Coulibaly<sup>4</sup>, Patrick N. Kpanyen<sup>5</sup>, Kerstin Fischer<sup>6</sup>, Peter U. Fischer<sup>6</sup>, Sarah Sullivan<sup>7</sup>, Lee Hundley<sup>7</sup>, Yvonne Ashong<sup>8</sup>, Dziedzom K. de Souza<sup>8</sup>  
<sup>1</sup>Big Eye Diagnostics, Inc., San Diego, CA, United States, <sup>2</sup>DDTD, San Diego, CA, United States, <sup>3</sup>NIAD, Bethesda, MD, United States, <sup>4</sup>ICER Mali, Université des Sciences, des Techniques et des Technologies de Bamako, Bamako, Mali, <sup>5</sup>National Public Health Institute of Liberia (NPHIL), Monrovia, Liberia, <sup>6</sup>Washington University School of Medicine, St Louis, MO, United States, <sup>7</sup>COR-NTD, Task Force for Global Health, Decatur, GA, United States, <sup>8</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana

## Symposium 64A

### Early Lessons from the 2024 Rwanda Marburg Outbreak

Convention Center – Room 350/351 (3rd Floor)  
Friday, November 15, 10:15 a.m. - Noon

**This session will not carry CME credit.**

On 27 September 2024, the Ministry of Health of the Republic of Rwanda declared an outbreak of Marburg virus disease (MVD). MVD is a rare but severe hemorrhagic fever that can cause serious illness and death. Symptoms may include fever, headache, muscle and joint pain, fatigue, loss of appetite, gastrointestinal symptoms, or unexplained bleeding (hemorrhaging). Historically, the case fatality rate ranges from 20% to 90%. There is no approved treatment or vaccine.

As of 23 October, Rwanda's Ministry of Health has laboratory confirmed 64 cases of MVD and reported 15 deaths (CFR: 24%). Most reported cases involve healthcare workers with defined epidemiological links. A phase 2 safety and immunogenicity trial began enrollment on October 6, with over 875 individuals vaccinated by October 17. Healthcare providers have administered Remdesivir as both treatment for confirmed cases and post-exposure prophylaxis for close contacts. A randomized controlled trial began on October 15. Additionally, a limited number of monoclonal antibody (MBP-019) infusions have been provided.

This panel aims to provide a comprehensive update on the 2024 Marburg outbreak response in Rwanda, identify challenges, showcase successful interventions, and offer recommendations for improving responses to future outbreaks.

#### CHAIR

Chris Braden  
U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States

#### 10:15 a.m. INTRODUCTION

#### 10:20 a.m. MARBURG RESPONSE OVERVIEW

Invited: Sabin Nsanzimana  
Ministry of Health, Rwanda, Kigali, Rwanda

#### 10:35 a.m. USG RESPONSE

Athalia Christie  
Senior US Official, Marburg Response Team, CDC, Atlanta, GA, United States

#### 10:40 a.m. US DOMESTIC PREPAREDNESS

Joel Montgomery  
U.S. CDC, Chief, Viral Special Pathogens Branch, Atlanta, GA, United States

#### 10:45 a.m. MARBURG WHO RESPONSE

Frédérique Jacqueroiz Bausch  
GOARN and World Health Organization, Geneva, Switzerland

#### 10:50 a.m. VACCINE TRIAL

#### 10:45 a.m. DISCUSSION

## Scientific Session 65

### Arthropods: Arthropods/Entomology - Other

Convention Center - Room 352 (3rd Floor)  
Friday, November 15, 10:15 a.m. - Noon

#EcologicalStudies #MolecularBiology #CellBiology

#### CHAIR

Brian L. Weiss  
Yale School of Public Health, New Haven, CT, United States

Ivy Okello  
Sokoine University of Agriculture, Morogoro, United Republic of Tanzania

#### 10:15 a.m. 6849

### IXOKALLIPIN, A NEW PLASMA KALLIKREIN INHIBITOR FROM *IXODES SCAPULARIS* BINDS TO THE CELL MEMBRANE AND IMPAIRS HEMOSTASIS AND THE SKIN WOUND HEALING

Markus Berger, Jan Kotal, **Lucas Tirloni**  
National Institute of Allergy and Infectious Diseases, Hamilton, MT, United States

#### 10:30 a.m. 6850

### TSETSE-ENDOSYMBIONT METABOLIC COMPETITION FOR ACYL-CARNITINES REGULATES FLY FECUNDITY BY SUPPRESSING THE VIABILITY OF STORED SPERM

**Brian L. Weiss**, Erick Awuoche, Serap Aksoy  
Yale School of Public Health, New Haven, CT, United States

#### 10:45 a.m. 6851

### ANALYSIS OF THE SCABIES ASSOCIATED MICROBIOTA DEMONSTRATES A SHIFT TO OPPORTUNISTICALLY PATHOGENIC BACTERIA

**Sara Taylor**<sup>1</sup>, Martha Zakrzewski<sup>1</sup>, Charlotte Bernigaud<sup>2</sup>, Nuzhat Surve<sup>3</sup>, Pallavi Surase<sup>3</sup>, Deepani D. Fernando<sup>1</sup>, Gourie P. Hule<sup>4</sup>, Mohan G. Karmakar<sup>4</sup>, Francoise Botterel<sup>2</sup>, Olivier Chosidow<sup>2</sup>, Katja Fischer<sup>1</sup>  
<sup>1</sup>QIMR Berghofer MRI, Brisbane, Australia, <sup>2</sup>Dermatology Department, Assistance Publique des Hôpitaux de Paris (AP-HP), Hôpital Henri Mondor, Université Paris-Est, Créteil, France, Paris, France, <sup>3</sup>King Edward Memorial Hospital Seth Gordhandas Sunderdas Medical College, Mumbai, India, Mumbai, India, <sup>4</sup>King Edward Memorial Hospital Seth Gordhandas Sunderdas Medical College, Mumbai, India, Mumbai, India

11 a.m.

6852

### LEISHMANIA TRANSMISSION IS DISRUPTED IN SANDFLIES COLONIZED BY *DELFTIA TSURUHATENSIS* TC1 BACTERIA

Pedro Cecilio<sup>1</sup>, Luana A. Rogerio<sup>2</sup>, Tiago D. Serafim<sup>2</sup>, Kristina Tang<sup>2</sup>, Laura Willen<sup>2</sup>, Eva Iniguez<sup>2</sup>, Claudio Meneses<sup>2</sup>, Luis F. Chaves<sup>3</sup>, Yue Zhang<sup>4</sup>, Wei Huang<sup>5</sup>, Pablo Castaneda-Casado<sup>6</sup>, Marcelo Jacobs-Lorena<sup>5</sup>, Jesus G. Valenzuela<sup>2</sup>, Janneth Rodrigues<sup>6</sup>, Fabiano Oliveira<sup>2</sup>

<sup>1</sup>Vector Biology Section, LMVR, NIAID, NIH, Rockville, MD, United States, <sup>2</sup>Vector Molecular Biology Section, LMVR, NIAID, NIH, Rockville, MD, United States, <sup>3</sup>Department of Environmental and Occupational Health, School of Public Health-Bloomington, Indiana University, Bloomington, IN, United States, <sup>4</sup>Integrated Data Sciences Section (IDSS), Research Technologies Branch, NIAID, NIH, Bethesda, MD, United States, <sup>5</sup>Department of Molecular Microbiology and Immunology, Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>6</sup>Global Health Medicines R&D, GSK, Tres Cantos, Madrid, Spain

11:15 a.m.

6853

### BLOOD FEEDING ACTIVATES THE TERMINAL DIFFERENTIATION OF PRECURSOR CELLS IN TICK SALIVARY GLANDS

Sazzad Mahmood<sup>1</sup>, Ana Beatriz Barletta Ferreira<sup>2</sup>, Oladele Oluwayiose<sup>3</sup>, Christine A. Schneider<sup>4</sup>, Jacqueline Leung<sup>4</sup>, Melina Garcia Guizzo<sup>5</sup>, Stephen Lu<sup>5</sup>, Lucas Christian Sousa-Paula<sup>1</sup>, Markus Berger<sup>1</sup>, Justin Lack<sup>3</sup>, Carolina Barillas-Mury<sup>2</sup>, Jose M. Ribeiro<sup>5</sup>, Lucas Tirloni<sup>1</sup>

<sup>1</sup>Tick-Pathogen Transmission Unit, Laboratory of Bacteriology, National Institute of Allergy and Infectious Diseases, National Institute of Health, Hamilton, MT, United States, <sup>2</sup>Mosquito Immunity and Vector Competence Section, Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institute of Health, Rockville, MD, United States, <sup>3</sup>Collaborative Bioinformatics Research, National Institute of Allergy and Infectious Diseases, National Institute of Health, Bethesda, MD, United States, <sup>4</sup>Electron Microscopy Unit, Research Technologies Branch, National Institute of Allergy and Infectious Diseases, National Institute of Health, Hamilton, MT, United States, <sup>5</sup>Vector Biology Section, Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institute of Health, Rockville, MD, United States

11:30 a.m.

6854

### SEASONAL VARIATION IN TSETSE FLY APPARENT DENSITY AND TRYPANOSOMA SPP. INFECTION RATE AND OCCURRENCE OF DRUGRESISTANT TRYPANOSOMES IN LAMBWE, KENYA

Ivy S. Okello<sup>1</sup>, Gillian Eastwood<sup>2</sup>, Jahashi Nzalawahe<sup>1</sup>, Eliakunda Mafie<sup>1</sup>  
<sup>1</sup>Sokoine University of Agriculture, Morogoro, United Republic of Tanzania, <sup>2</sup>Virginia Polytechnic Institute and State University, Blacksburg, VA, United States

11:45 a.m.

6855

### CHANGES IN CYTOFORM (CYTOSPECIES AND CYTOTYPE) COMPOSITION OF VECTORS OF ONCHOCERCIASIS IN NORTHERN CAMEROON AND ITS POSSIBLE IMPLICATIONS FOR DISEASE ELIMINATION

Franklin Ayisi<sup>1</sup>, Dziedzom de Souza<sup>2</sup>, Jamie Tallant<sup>3</sup>, Eric Bertrand Fokam<sup>4</sup>, Daniel Adjebi Boakye<sup>3</sup>

<sup>1</sup>African Regional Postgraduate Programme in Insect Science (ARPPIS), University of Ghana, Accra, Ghana, <sup>2</sup>Noguchi Memorial Institute for Medical Research (NMIMR), University of Ghana, Accra, Ghana, <sup>3</sup>The End Fund/Reaching the Last Mile Fund (RLMF), New York, NY, United States, <sup>4</sup>Department of Animal Biology and Conservation, University of Buea, Buea, Cameroon



## Symposium 66

### Clinical Tropical Medicine Debates: COVID and Cholera Vaccines

Convention Center - Room 353 (3rd Floor)

Friday, November 15, 10:15 a.m. - Noon

There is more than one approach to many clinical issues in Tropical Medicine, particularly when there is conflicting information or a lack of evidence for best approaches to patient care. This symposium will explore the use of Nirmatrelvir/ritonavir for standby treatment of COVID in international travelers and expanded use of vaccines for prevention of Cholera in a debate style format. Presenters will articulate a pro or con position around each issue followed by a panel discussion of the merits of each argument. #InfectiousDisease #Vaccinology #Therapeutics

#### CHAIR

Kyle Petersen

Uniformed Services University, Bethesda, MD, United States

John W. Sanders

Wake Forest University School of Medicine, Winston-Salem, NC, United States

10:15 a.m.

#### INTRODUCTION

10:25 a.m.

#### NIRMATRELVIR/RITONAVIR STANDBY TREATMENT FOR INTERNATIONAL TRAVELERS: PRO

David O. Freedman

University of Alabama Birmingham, Birmingham, AL, United States

10:45 a.m.

#### NIRMATRELVIR/RITONAVIR STANDBY TREATMENT FOR INTERNATIONAL TRAVELERS: CON

Pragna Patel

US Centers for Disease Control, Atlanta, GA, United States

11:05 a.m.

#### EXPANDED CHOLERA VACCINATION FOR INTERNATIONAL TRAVELERS: PRO

Claudio F. Lanata

Instituto de Investigacion Nutricional, Lima, Peru

11:25 a.m.

#### EXPANDED CHOLERA VACCINATION FOR INTERNATIONAL TRAVELERS: CON

Daniel Leung

University of Utah School of Medicine, Salt Lake City, UT, United States

11:45 a.m.

#### PANELIST: TROPICAL MEDICINE DEBATES

Lin Chen

Mount Auburn Hospital, Cambridge, MA, United States

## Symposium 67

### Schistosomiasis and Pre-School Age Children: Burden, Morbidity, and Update on Treatment Approaches

Convention Center – Room 354/355 (3rd Floor)  
Friday, November 15, 10:15 a.m. - Noon

This symposium is designed to address the global burden of disease due to schistosomiasis among pre-school aged children, which has much less frequently been addressed in the extant literature and at American Society of Tropical Medicine and Hygiene meetings. Many studies have called to attention the high prevalence of infection in this age group, however until recently, less work has been done to understand the unique impact of schistosomiasis on key morbidities during this vulnerable period of rapid growth, increased risk for infectious diseases, and high risk for anemia and undernutrition. The symposium will describe the prevalence of infection globally in this age group. The symposium will also address key morbidities due to schistosomiasis in pre-school age children which may be uniquely experienced among vulnerable young children. Specifically, we will address the burden due to anemia, intestinal morbidity, and gaps in research with respect to schistosomiasis' impact on linear growth and nutritional status in this age group. In addition, we will review key Praziquantel treatment trials with varying doses (20, 40, 60 mg/kg) for *S. mansoni* in Cote D'Ivoire and in Lake Albert, Uganda (40 vs 80 mg/kg dosing) with a focus on safety and efficacy in this age group. We will also examine studies that have looked at the impact of more frequent treatment (bi annual vs. annual) in this young age group. In addition, we will also present results for the safety and efficacy of newer oral dispersible formulations for young children. Finally, we will address current implementation approaches and paths forward for implementation of both crushed tablets and oral dispersible formulations in this unique age group. We will highlight challenges and provide suggested solutions to approach treatment in 5-10 years. The final part of the symposium will be devoted to a panel discussion with questions and answers, encouraging input from leaders in our expected audience. #Therapeutics #Pediatrics #Child health #Epidemiology #Infectious Diseases

#### CHAIR

Jennifer F. Friedman  
Center for International Health Research, RI Hospital and Brown University, Providence, RI, United States

Amaya L. Bustinduy  
London School of Hygiene & Tropical Medicine, London, United Kingdom

#### 10:15 a.m. INTRODUCTION

#### 10:25 a.m. PREVALENCE AND MORBIDITY DUE TO SCHISTOSOMIASIS AMONG PRE SCHOOL AGE CHILDREN AND BURDEN OF ANEMIA DUE TO SCHISTOSOMIASIS IN THIS AGE GROUP

Susannah Colt  
Center for International Health Research, RI Hospital and Brown University, Providence, RI, United States

#### 10:40 a.m. IMPACT OF VARYING PRAZIQUANTEL DOSES (20, 40, 60 MG/KG) ON SAFETY AND EFFICACY FOR THE TREATMENT OF SCHISTOSOMIASIS

Jean Coulibaly  
Université Félix Houphouët-Boigny, Abidjan, Côte D'Ivoire

#### 10:55 a.m. ORODISPERSIBLE ARPAZIQUANTEL DEVELOPMENT AND NEXT STEPS

Rana Afshar  
Ares Trading - an affiliate of Merck Darmstadt KGaA, Geneva, Switzerland

#### 11:10 a.m. NEEDS AND GAPS IN TREATMENT FOR SCHISTOSOMIASIS AMONG PRESCHOOL AGED CHILDREN

Prudence Beinamaryo  
Ministry of Health, Uganda, Kampala, Uganda

#### 11:25 a.m. IMPACT OF 40 VS 60 MG/KG OF PRAZIQUANTEL ON CURE RATE, EGG REDUCTION RATE, AND MORBIDITY AMONG PRE SCHOOL AGED CHILDREN IN UGANDA

Amaya Lopez Bustinduy  
London School of Hygiene & Tropical Medicine, London, United Kingdom

## Symposium 68

### Health Inequities of Migrants Crossing the Darien Gap

Convention Center - Room 356 (3rd Floor)  
Friday, November 15, 10:15 a.m. - Noon

The Darien Gap is a 60-mile break in the Pan-American Highway located between Colombia and Panama. Over the past three years (since 2021-2022), the Darien Gap has become the leading transit point for migrants in route to the United States secondary to changes in Visa requirements into countries in Central America and Mexico. In the decade from 2010-2020 approximately 11,000 persons transited the Darien Gap per year. However, in 2021, the number of people crossing the gap increased to 130,000, in 2022 increased to 250,000 and 2023 increased to 520,000 migrants passed through the Darien Gap. Migrants who transverse the Darien Gap are most commonly from Venezuela and Haiti but also persons from other regions of the world including Afghanistan, Pakistan, Angola and Bangladesh seeking refuge and resettlement in the United States are documented. The route through the Darien is dangerous secondary to the presence of criminal groups, exposure to wild animals and insects, unstable terrain of swamps, jungles and mountains, lack of safe drinking water and lack of access to medical care. As a result, the morbidity and mortality related to crossing the Darien Gap is increasing. Panamanian medical authorities have established infrastructure to provide humanitarian aid to migrants. This symposium will discuss the current health crisis in the Darien Gap including the health risks and medical needs of migrants making the passage through the Darien. #ChildHealth #InfectiousDisease #SocialScience

**CHAIR**

Jill Weatherhead  
Baylor College of Medicine, Houston, TX, United States

Carlos Franco-Paredes  
Colorado State University, Fort Collins, CO, United States

**10:15 a.m.**  
**INTRODUCTION TO THE DARIEN**

Carlos Franco-Paredes  
Colorado State University, Fort Collins, CO, United States

**10:30 a.m.**  
**UNDERSTANDING THE CHANGING MIGRATION PATTERNS THROUGH THE DARIEN GAP**

Julie Turkewitz  
New York Times, Bogota, Colombia

**11 a.m.**  
**PROVIDING MEDICAL CARE IN THE DARIEN GAP.**

Ana Belen Araruz  
Hospital Santo Tomas, Panama City, Panama

**11:30 a.m.**  
**CLINICAL OBSERVATIONS DURING RESETTLEMENT IN THE US FOR POPULATIONS THAT IMMIGRATED THROUGH THE DARIEN GAP**

Christian Olivio  
Ryan Health, New York City, NY, United States

**Symposium 69**

**Diagnostic Tool Development and Deployment in the Context of Trachoma, Guinea Worm, and Polio Elimination and Eradication Programs – Lessons Learned and Considerations for Future Initiatives**

Convention Center - Room 357 (3rd Floor)  
Friday, November 15, 10:15 a.m. - Noon

All neglected tropical disease (NTD) programs have a need for accurate and reliable diagnostic tools to help guide the timely implementation of program interventions. Sensitive and specific diagnostic tools are needed to generate data for programmatic decision-making and policy action. However, specific diagnostic tools and their use cases are dictated by the nature of the disease and the scope of the given NTD program. Diagnostic tools need to be fit-for-purpose, though the specific needs and purposes of the tools may change over the life of a given NTD elimination or eradication program. This symposium will follow a format of five talks topically related to diagnostic development and deployment and conclude with a moderated discussion amongst panelists and symposium participants to address some of these NTD diagnostic considerations. Through the talks, symposium participants will learn how diagnostic tools have been developed to support trachoma, Guinea worm, and polio elimination and eradication programs. Panelists will share what it takes to validate, field test, and ultimately deploy successful diagnostic interventions in disease-endemic contexts. Presentations will touch on lessons learned and possible implications for future diagnostic initiatives while alluding to what is on the horizon for

diagnostics development. Presenters from disease-endemic countries will reflect on the data and programmatic opportunities generated by the introduction of novel diagnostic tools within the context of their NTD programs. Collectively, the panelists will highlight diagnostic considerations and use cases common to some NTDs and also identify unique requirements of certain NTD programs and how those may change during the lifespan of NTD elimination and eradication programs. #Diagnostics #Elimination #InfectiousDisease #PopulationSurveillance #Prevention

**CHAIR**

Adam J. Weiss  
The Carter Center, Atlanta, GA, United States

Diana L. Martin  
Centers for Disease Control and Prevention, Atlanta, GA, United States

**10:15 a.m.**  
**INTRODUCTION**

**10:25 a.m.**  
**NOVEL TOOLS FOR AN ANCIENT DISEASE: THE NEED FOR SPEED AND DIFFERENT DIAGNOSTIC TOOLS**

Maryann G. Delea  
The Carter Center, Atlanta, GA, United States

**10:40 a.m.**  
**DEVELOPMENT AND DEPLOYMENT OF NOVEL DIAGNOSTIC TOOLS FOR ENVIRONMENTAL SURVEILLANCE OF POLIO AND OTHER INFECTIOUS DISEASES IN LOW TO MIDDLE INCOME COUNTRIES: LESSONS LEARNED AND CONSIDERATIONS FOR OTHER NTD PROGRAMS**

Mami Taniuchi  
University of Virginia, Charlottesville, VA, United States

**10:55 a.m.**  
**POSSIBLE OPPORTUNITIES FOR NOVEL DIAGNOSTIC TOOLS TO SUPPORT GUINEA WORM ERADICATION EFFORTS AND CHALLENGES TO FIELD VALIDATION AND IMPLEMENTATION**

Richard Ngandolo Bongo Nare  
Institut de Recherche en Elevage pour le Développement (IRED), N'Djamena, Chad

**11:10 a.m.**  
**BRINGING NEW APPROACHES FOR TRACHOMA SURVEILLANCE FROM RESEARCH TO PROGRAM AND IMPLICATIONS FOR OTHER NTDS**

Diana L. Martin  
Centers for Disease Control and Prevention, Atlanta, GA, United States

**11:25 a.m.**  
**IMPLEMENTATION OF TRACHOMA SEROLOGICAL TOOLS TO SUPPORT PROGRAMS IN LMICS AND NEW TESTS ON THE HORIZON**

Sammy Njenga  
Kenya Medical Research Institute, Nairobi, Kenya

## Symposium 70

### Earth Observation for Health: Integrating Novel Data Streams in Decision-Support Systems for Climate Sensitive Infectious Diseases

Convention Center - Room 383/384/385 (3rd Floor)

Friday, November 15, 10:15 a.m. - Noon

Global environmental change disrupts existing social and ecological systems, with major impacts on the transmission of climate-sensitive infectious diseases. Changes in temperature and rainfall patterns can directly alter distribution and life cycles of disease vectors. Extreme weather, droughts and other disasters can severely impact disease control program operations and lead to increased population movement or other behavioral changes. Climate change impacts are highly context specific and can be exacerbated by other environmental changes, such as urbanization and deforestation. Disease surveillance systems need to detect and respond to these changing risks. The increasing availability of Earth Observation data from drones and satellites, improved forecasts and advances in machine learning offer new opportunities to use environmental data to target surveillance. This symposium will present novel tools for integrating environmental data into operational disease surveillance activities, with examples at local, national, and regional levels. This will include the use of forecasts of El Niño Southern Oscillation driven climate anomalies in dengue early warning systems in Latin America and the Caribbean, how spatial and environmental data is used to target disease surveillance in Singapore, Colombia and Mozambique and the use of drones and satellite-based radar data to design more efficient vector surveillance in forested regions of Malaysia and Peru. A multidisciplinary panel with experience in research and policy will discuss experiences and challenges of linking health and environmental data for disease surveillance and identify future research priorities. #ClimateChange #Epidemiology #InfectiousDisease #Modeling #PopulationSurveillance

#### CHAIR

Kimberly Fornace

National University of Singapore, Singapore, Singapore

Rachel Lowe

Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain

10:15 a.m.

#### INTRODUCTION

10:25 a.m.

#### COMBINING EARLY INDICATORS OF CLIMATIC ANOMALIES AND DOMINANT SEROTYPE SWITCHES TO PREDICT DENGUE OUTBREAKS IN SINGAPORE

Chia-Chen Chang

National Environmental Agency, Singapore, Singapore

10:45 a.m.

#### BUILDING AN URBAN SYSTEMS APPROACH FOR UNDERSTANDING Aedes-BORNE DISEASES IN COLOMBIA

Pallavi Kache

Centers for Disease Control and Prevention, Atlanta, GA, United States

11:05 a.m.

#### EL NIÑO DRIVEN DISEASE FORECASTING (ENDCAST) OF INFECTIOUS DISEASE OUTBREAKS IN HOTSPOTS ACROSS THE LATIN AMERICA AND CARIBBEAN

Chloe Fletcher

Barcelona Supercomputing Centre, Barcelona, Spain

11:25 a.m.

#### INTEGRATING DRONE AND SYNTHETIC APERTURE RADAR (SAR) SATELLITE DATA TO DESIGN VECTOR SURVEILLANCE FOR FORESTED LANDSCAPES IN MALAYSIA AND PERU

Edgar Manrique Valverde

Universidad Peruana Cayetano Heredia, Lima, Peru

11:45 a.m.

#### MOZAMBIQUE'S CLIMATE AND HEALTH OBSERVATORY EXPERIENCES ON SUPPORTING HEALTH SYSTEMS FOR INFECTIOUS DISEASE SURVEILLANCE

Tatiana Marrufo

Instituto Nacional de Saúde, Moçambique, Maputo, Mozambique

## Symposium 71

### Working Together: How NTD Elimination and Maternal Health Programs Can Learn and Collaborate to Decrease Disease and Maternal Mortality

Convention Center - Room 388/389 (3rd Floor)

Friday, November 15, 10:15 a.m. - Noon

The Symposium will update participants on progress around the neglected intersection of Sexual and Reproductive Health and Rights (SRHR) and Tropical Medicine since the ASTMH session held in 2021. Using female genital schistosomiasis (FGS), Chagas, and recent advances in rapid reduction of maternal mortality and morbidity as examples to look at the critical interface between programs to accelerate progress across the SDGs. For example, using a set of public health tools typically combined in disease eradication programs and applying these tools systematically with low-cost disease-specific technologies recently led to a 34.5% reduction in overall maternal mortality in health facilities nationwide in Niger. Additionally, the ability to rapidly prevent obstructed labor mortality and obstetric fistula incidence was documented in 2014, though on a smaller scale. Through congenital Chagas prevention work, Chagas screening has been successfully integrated into maternal screening in many endemic areas building on the strength of HIV and HepB prevention. In female genital schistosomiasis (FGS) interventions have been integrated across sexual and reproductive health programs to improve outcomes for women and girls. In addition to educating participants about these advances, the Symposium will end with a panel discussion and open input from participants and a panel, to think together about research and programmatic implications of the advances shared through the three opening presentations, and explore other opportunities to break down the silos between maternal health and tropical diseases. #MNCH #InfectiousDisease #Prevention #TranslationalScience #ChildHealth

Friday  
November 15

**CHAIR**

Julie Jacobson  
*Bridges to Development, Vashon, WA, United States*

Anders Seim  
*HDI (Health & Development International), Fjellstrand, Norway*

**10:15 a.m.**  
**INTRODUCTION****10:25 a.m.**  
**DISEASE ERADICATION TOOLS HELPING REDUCE PPH MORTALITY IN NIGER**

Zeidou Alassoum  
*HDI (Health & Development International), Niamey, Niger*

**10:45 a.m.**  
**NIGER'S RAPID REDUCTION OF POSTPARTUM HEMORRHAGE MORTALITY IN HEALTH FACILITIES HELPED BY DISEASE ERADICATION TOOLS**

Asma Gali  
*Ministry of Health of Niger (ret.), Niamey, Niger*

**11:05 a.m.**  
**UPDATES ON THE INTERSECTION OF SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS (SRHR) AND TROPICAL DISEASES; HIGHLIGHTS ON CONGENITAL CHAGAS AND FEMALE GENITAL SCHISTOSOMIASIS (FGS)**

Julie Jacobson  
*Bridges to Development, Vashon, WA, United States*

**11:25 a.m.**  
**PANEL DISCUSSION AND OPEN QUESTIONS ON THE INTERSECTION OF MATERNAL HEALTH AND TROPICAL DISEASES**

Anders R. Seim  
*HDI (Health & Development International), Fjellstrand, Norway*

**Scientific Session 72****Malaria: Immunology**

*Convention Center - Room 391/392 (3rd Floor)*  
**Friday, November 15, 10:15 a.m. - Noon**

**CHAIR**

Katherine Dobbs  
*Case Western Reserve University, Cleveland, OH, United States*

Prasida Holla  
*Indiana University School of Medicine, Indianapolis, IN, United States*

**10:15 a.m.****6856****MATERNAL MICROCHIMERISM IS ASSOCIATED WITH AN ALTERED TRANSCRIPTIONAL PROFILE OF *PLASMODIUM FALCIPARUM*-SPECIFIC T CELLS IN MALIAN CORD BLOOD**

Yonghou Jiang<sup>1</sup>, John Houck<sup>1</sup>, Marc Carlson<sup>1</sup>, Almahamoudou Mahamar<sup>2</sup>, Goussou Santara<sup>2</sup>, Oumar Attaher<sup>2</sup>, Robert Morrison<sup>3</sup>, Sudhir Kumar<sup>4</sup>, Blair Armistead<sup>1</sup>, Irfan Zaidi<sup>3</sup>, Stefan Kappe<sup>5</sup>, Alassane Dicko<sup>2</sup>, Patrick E. Duffy<sup>3</sup>, Michal Fried<sup>3</sup>, Marion Pepper<sup>6</sup>, **Whitney E. Harrington<sup>5</sup>**

<sup>1</sup>Seattle Children's Research Institute, Seattle, WA, United States, <sup>2</sup>International Center for Excellence in Research, Bamako, Mali, <sup>3</sup>Laboratory of Malaria Immunology & Vaccinology, National Institute of Allergy and Infectious Disease, Bethesda, MD, United States, <sup>4</sup>Department of Biomedical Sciences, Iowa State University, Ames, IA, United States, <sup>5</sup>Seattle Children's Research Institute / University of Washington, Seattle, WA, United States, <sup>6</sup>University of Washington, Seattle, WA, United States

**(ACMCIP Abstract)****10:30 a.m.****6857****TRANSPLACENTAL TRANSFER OF FUNCTIONAL ANTIBODIES DIRECTED AGAINST *PLASMODIUM FALCIPARUM* BLOOD STAGE ANTIGENS**

**Djellili Biaou<sup>1</sup>**, Aziz Bouraima<sup>2</sup>, Ibrahim Sadissou<sup>2</sup>, David Courtin<sup>1</sup>, Andre Garcia<sup>1</sup>, Florence Migot-Nabias<sup>1</sup>, Achille Massougbojji<sup>3</sup>, Michael Theisen<sup>4</sup>, Sébastien Dechavanne<sup>1</sup>, Celia Dechavanne<sup>1</sup>

<sup>1</sup>Affiliation 1: Université de Paris, Institut de Recherche pour le Développement (IRD), UMR 261 MERIT, Paris France. Affiliation 2: CERPAGE (Centre d'Etude et de Recherche sur les Pathologies Associées à la Grossesse et à l'Enfance), Cotonou, Benin, <sup>2</sup>CERPAGE (Centre d'Etude et de Recherche sur les Pathologies Associées à la Grossesse et à l'Enfance), Cotonou, Benin, <sup>3</sup>Institut de Recherche Clinique du Bénin (IRCB), Cotonou, Benin, <sup>4</sup>Centre for Medical Parasitology at Department of International Health, Immunology and Microbiology, University of Copenhagen and Department for Congenital Disorders, Statens Serum Institut, Copenhagen, Denmark

**(ACMCIP Abstract)****10:45 a.m.****6858****ANTIBODY FC GLYCOSYLATION MODULATES NATURAL KILLER CELL-MEDIATED ADCC IN MALARIA-EXPOSED PREGNANT WOMEN**

**Savannah N. Lewis<sup>1</sup>**, Adam S. Kiro Singh<sup>1</sup>, Kattria van der Ploeg<sup>1</sup>, Kathleen D. Press<sup>1</sup>, Felistas Namirimu Nankya<sup>2</sup>, Kenneth Musinguzi<sup>2</sup>, Evelyn Nansubuga<sup>2</sup>, Stephen Tukwasibwe<sup>2</sup>, Mary Lopez-Perez<sup>3</sup>, Moses R. Kanya<sup>2</sup>, Philip Rosenthal<sup>4</sup>, Grant Dorsey<sup>4</sup>, Lars Hviid<sup>3</sup>, Prasanna Jagannathan<sup>1</sup>

<sup>1</sup>Stanford University School of Medicine, Stanford, CA, United States, <sup>2</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>3</sup>University of Copenhagen, Copenhagen, Denmark, <sup>4</sup>University of California, San Francisco, San Francisco, CA, United States

**(ACMCIP Abstract)****11 a.m.****6859****CHRONIC *PLASMODIUM* INFECTIONS CAUSE PERSISTENT CHANGES IN THE HOST IMMUNOLOGICAL LANDSCAPE**

**Saniya S. Sabnis<sup>1</sup>**, Celia L. Saney<sup>1</sup>, Monica Cabrera-Mora<sup>2</sup>, The MaHPIC Consortium –<sup>2</sup>, Ignacio Sanz<sup>2</sup>, F. Eun-Hyung Lee<sup>2</sup>, Jessica C. Kissinger<sup>1</sup>, Regina Joice-Cordy<sup>3</sup>, Alberto Moreno<sup>2</sup>, Tracey J. Lamb<sup>4</sup>, Mary R. Galinski<sup>2</sup>, Chester J. Joyner<sup>1</sup>

<sup>1</sup>University of Georgia, Athens, GA, United States, <sup>2</sup>Emory University, Atlanta, GA, United States, <sup>3</sup>Wake Forest University, Winston-Salem, NC, United States, <sup>4</sup>University of Utah, Salt Lake City, UT, United States

**(ACMCIP Abstract)**

11:15 a.m.

6860

### BASELINE INNATE IMMUNE ACTIVATION AND INFLAMMATION IS CORRELATED WITH CONTROL OF SUBSEQUENT PARASITEMIA IN VERY YOUNG MALIAN CHILDREN

**Prasida Holla**<sup>1</sup>, Jyoti Bhardwaj<sup>2</sup>, Erik L. Gaskin<sup>2</sup>, Safiatou Doumbo<sup>3</sup>, Aissata Ongoiba<sup>3</sup>, Philip L. Felgner<sup>4</sup>, Christine S. Hopp<sup>5</sup>, Xiaoling Xuei<sup>6</sup>, Labeeb Hossain<sup>7</sup>, Kassoum Kayentao<sup>3</sup>, Boubacar Traore<sup>3</sup>, Peter D. Crompton<sup>8</sup>, Tuan M. Tran<sup>9</sup>  
<sup>1</sup>Ryan White Center for Pediatric Infectious Diseases and Global Health, Indiana University School of Medicine, Indianapolis, IN, United States, <sup>2</sup>Division of Infectious Diseases, Department of medicine, Indiana University School of Medicine, Indianapolis, IN, United States, <sup>3</sup>Mali International Center of Excellence in Research, University of Sciences, Techniques and Technologies of Bamako, Bamako, Mali, <sup>4</sup>Division of Infectious Diseases, School of Medicine, University of California, Irvine, Irvine, CA, United States, <sup>5</sup>Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>6</sup>Medical and Molecular Genetics, Indiana University School of Medicine, Indianapolis, IN, United States, <sup>7</sup>Indiana University Bloomington, Bloomington, IN, United States, <sup>8</sup>Laboratory of Immunogenetics, National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, MD, United States, <sup>9</sup>Ryan White Center for Pediatric Infectious Diseases and Global Health & Division of Infectious Diseases, Department of medicine, Indiana University School of Medicine, Indianapolis, IN, United States

(ACMCIP Abstract)

11:30 a.m.

6861

### PVDBP GENE AMPLIFICATION PROTECTS PLASMODIUM VIVAX IN VIVO AGAINST HOST NATURALLY ACQUIRED ANTI-PVDBP IMMUNITY

**Lea Baldor**<sup>1</sup>, Brice Feufack-Donfack<sup>1</sup>, Dynang Seng<sup>1</sup>, Sokleap Heng<sup>1</sup>, Nichole D. Salinas<sup>2</sup>, Niraj H. Tolia<sup>2</sup>, Chetan E. Chitnis<sup>3</sup>, Ivo Mueller<sup>4</sup>, Christopher L. King<sup>5</sup>, Eugenia Lo<sup>6</sup>, Benoit Witkowski<sup>7</sup>, Claude Flamand<sup>1</sup>, Jean Popovici<sup>1</sup>  
<sup>1</sup>Institut Pasteur Cambodge, Phnom Penh, Cambodia, <sup>2</sup>National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States, <sup>3</sup>Institut Pasteur Paris, Paris, France, <sup>4</sup>The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia, <sup>5</sup>Center for Global Health and Diseases, Cleveland, OH, United States, <sup>6</sup>Department of Microbiology and Immunology, Drexel University, Philadelphia, PA, United States, <sup>7</sup>Institut Pasteur Madagascar, Antananarivo, Madagascar

(ACMCIP Abstract)

11:45 a.m.

6862

### IMMUNO-INFORMATIC APPROACH TO IDENTIFYING VARIANT-TRANSCENDENT NATURALLY-ACQUIRED PROTECTION AGAINST PLASMODIUM FALCIPARUM

**Katherine Chew**, Steve Taylor, Wendy O'Meara, Christine Markwalter  
Duke University, Durham, NC, United States

(ACMCIP Abstract)

## Scientific Session 73

### Malaria: Prevention

Convention Center - Room 393/394 (3rd Floor)

Friday, November 15, 10:15 a.m. - Noon

#Prevention #InfectiousDisease #FieldStudies

#### CHAIR

Caroline A. Ogbang  
Kenya Medical Research Institute, Centre for Global Health Research, Kisumu, Kenya

Alphonse Ouedraogo  
Groupe Action de Recherche en Santé, Ouedraogo, Burkina Faso

10:15 a.m.

6863

### OLYSET®PLUS CEILING NETS PROTECT AGAINST MALARIA: FINDINGS FROM A CLUSTER RANDOMIZED CONTROLLED TRIAL OF THE EFFECTIVENESS OF OLYSET®PLUS CEILING NET ON REDUCING MALARIA PREVALENCE AND INCIDENCE ON MFANGANO ISLAND, LAKE VICTORIA BASIN, KENYA

**Wataru Kagaya**<sup>1</sup>, Chim Wai Chan<sup>2</sup>, James Kongere<sup>3</sup>, Bernard N. Kanoi<sup>4</sup>, Mtakai Ngara<sup>5</sup>, Protus Omondi<sup>2</sup>, Laura Barbieri<sup>2</sup>, Achyut KC<sup>5</sup>, Gordon Okomo<sup>6</sup>, Noboru Minakawa<sup>1</sup>, Jesse Gitaka<sup>4</sup>, Akira Kaneko<sup>5</sup>  
<sup>1</sup>Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan, <sup>2</sup>Graduate School of Medicine, Osaka Metropolitan University, Osaka, Japan, <sup>3</sup>Centre for Research in Tropical Medicine and Community Development, Nairobi, Kenya, <sup>4</sup>Directorate of Research and Innovation, Mount Kenya University, Thika, Kenya, <sup>5</sup>Karolinska Institutet, Stockholm, Sweden, <sup>6</sup>Ministry of Health, Homa Bay County, Homa Bay, Kenya

10:30 a.m.

6864

### EFFECTIVENESS OF CHLORFENAPYR-PYRETHROID INSECTICIDE-TREATED NETS ON DECREASING MALARIA IN LIBERIA: AN OBSERVATIONAL ANALYSIS USING ROUTINE HEALTH FACILITY DATA, 2019-2023

**Emily R. Hilton**<sup>1</sup>, D. Levi Hinneh<sup>2</sup>, Chrispin Williams<sup>3</sup>, Patrick Konwloh<sup>2</sup>, Trokon Washington<sup>2</sup>, Ibrahim Baber<sup>4</sup>, Yemane Yihdego<sup>5</sup>, Tuwuyor Belleh<sup>4</sup>, Miriam Williams<sup>5</sup>, Melissa Yoshimizu<sup>6</sup>, Uwem Inyang<sup>7</sup>, Sarah Burnett<sup>8</sup>  
<sup>1</sup>PMI Evolve Project, PATH, Seattle, WA, United States, <sup>2</sup>National Malaria Control Program, Monrovia, Liberia, <sup>3</sup>National Malaria Control Program, Monrovia, Liberia, <sup>4</sup>PMI Evolve Project, Abt Associates, Monrovia, Liberia, <sup>5</sup>PMI Evolve Project, Abt Associates, Rockville, MD, United States, <sup>6</sup>U.S. President's Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States, <sup>7</sup>U.S. President's Malaria Initiative, U.S. Agency for International Development, Monrovia, Liberia, <sup>8</sup>PMI Evolve Project, PATH, Washington, DC, United States

10:45 a.m.

6865

### REDUCTION IN MALARIA CASES AFTER DEPLOYMENT OF IG2 NETS IN AN AREA WITH KNOWN PYRETHROID RESISTANCE AND MARKED OUTDOOR BITING - AN INTERRUPTED TIME SERIES ANALYSIS

**Samuel Kweku Oppong**<sup>1</sup>, Otubea Owusu-Akrofi<sup>2</sup>, Christian Atta-Obeng<sup>2</sup>, Wahjib Mohammed<sup>2</sup>, Punam Amratia<sup>3</sup>, Nana Yaw Peparah<sup>2</sup>, Peter Gething<sup>4</sup>, Keziah L. Malm<sup>2</sup>  
<sup>1</sup>Curtin University, Bentley, Australia, <sup>2</sup>National Malaria Elimination Programme, Accra, Ghana, <sup>3</sup>Malaria Atlas Project, Dar es Salaam, United Republic of Tanzania, <sup>4</sup>Malaria Atlas Project, Telethon Kids Institute, PERTH, Australia

11 a.m.

6866

### EFFECT OF ATTRACTIVE TARGETED SUGAR BAITS (ATSBS) ON MALARIA INCIDENCE IN CHILDREN IN WESTERN KENYA: A CLUSTER-RANDOMIZED CONTROLLED TRIAL

**Caroline Ogbang**<sup>1</sup>, Alice Kamau<sup>2</sup>, Kizito Obiet<sup>1</sup>, Brian Seda<sup>1</sup>, Daniel McDermott<sup>2</sup>, Julia M. Janssen<sup>2</sup>, Wycliffe Odongo<sup>3</sup>, Julie R. Gutman<sup>3</sup>, Jonathan Schultz<sup>4</sup>, Frank Aduwo<sup>1</sup>, Mercy Chepkirui<sup>1</sup>, Oliver Towett<sup>1</sup>, Maia Lesosky<sup>5</sup>, Martin Donnelly<sup>2</sup>, Simon Kariuki<sup>1</sup>, Aaron Samuels<sup>4</sup>, Feiko ter Kuile<sup>2</sup>, Sarah G. Staedke<sup>2</sup>  
<sup>1</sup>Kenya Medical Research Institute, Centre for Global Health Research, Kisumu, Kenya, <sup>2</sup>Liverpool School of Tropical Medicine, Liverpool, Liverpool, United Kingdom, <sup>3</sup>Division of Parasitic Diseases and Malaria, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>4</sup>Malaria Branch, National Center for Emerging and Zoonotic Infectious Diseases, US Centers for Disease Control and Prevention, Kisumu, Kenya, <sup>5</sup>Imperial College London, London, United Kingdom



11:15 a.m.

6867

### SAFETY < EFFICACY OF INTERMITTENT PRESUMPTIVE TREATMENT IN PREGNANCY WITH SULFADOXINE-PYRIMETHAMINE USING RAPID DIAGNOSTIC TEST SCREENING < TREATMENT WITH DIHYDROARTEMISININ-PIPERAQUINE AT FIRST ANTENATAL CARE VISIT PRELIMINARY RESULTS

Jean-Bertin Bukasa Kabuya<sup>1</sup>, Matthew Ippolito<sup>2</sup>, Christine Manyando<sup>1</sup><sup>1</sup>Tropical Diseases Research Centre, Ndola, Zambia, <sup>2</sup>Johns Hopkins University, Baltimore, MD, United States

11:30 a.m.

6868

### THE IMPACT OF SEASONAL MALARIA CHEMOPREVENTION ON THE EDUCATIONAL OUTCOMES OF SCHOOL-AGED CHILDREN IN SUB-SAHARAN AFRICA

Mohammed Ndiaye<sup>1</sup>, Donal Bisanzio<sup>2</sup>, Amber Gove<sup>2</sup>, Lauren Cohee<sup>3</sup>, Richard Reithinger<sup>2</sup><sup>1</sup>University of Maryland, College Park, MD, United States, <sup>2</sup>RTI International, Washington, DC, United States, <sup>3</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom

11:45 a.m.

### Lightning Talks

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

8018

### PHARMACOKINETIC AND PHARMACODYNAMIC MODELING OF MONTHLY TAFENOQUINE IN HEALTHY VIETNAMESE VOLUNTEERS FOR MALARIA PROPHYLAXIS AND ELIMINATION

Song H. Le<sup>1</sup>, The T. Nguyen<sup>1</sup>, Thu M. Nguyen<sup>2</sup>, Long K. Tran<sup>2</sup>, Huy C. Nguyen<sup>3</sup>, Andrew G. Letizia<sup>3</sup>, John S. Brooks<sup>3</sup>, Michael J. Gregory<sup>3</sup>, Geoffrey W. Birrell<sup>4</sup>, Karin Van Breda<sup>4</sup>, Dennis Shanks<sup>4</sup>, Michael D. Edstein<sup>4</sup>, Joel Tarning<sup>5</sup><sup>1</sup>108 Military Central Hospital, Hanoi, Vietnam, <sup>2</sup>Vysnova Partners (A Culmen International Company), Alexandria, VA, United States, <sup>3</sup>U.S. Naval Medical Research Unit INDO PACIFIC, Singapore, Singapore, <sup>4</sup>Australian Defence Force Malaria and Infectious Disease Institute, Brisbane, Australia, <sup>5</sup>Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand

6456

### ASSESSMENT OF EPIDEMIOLOGIC IMPACT ON MALARIA FOLLOWING DRONE-BASED LARVICIDING WITH *BACILLUS THURINGIENSIS ISRAELENسيس* IN TWO DISTRICTS OF MADAGASCAR, 2022

Anna B. Bowen<sup>1</sup>, Sarah Zohdy<sup>2</sup>, Jean-Desire Rakotoson<sup>3</sup>, Laurent Kapesa<sup>4</sup>, Solofa Razakamiadana<sup>5</sup>, Omega Raobela<sup>6</sup><sup>1</sup>CDC - PMI, Antananarivo, Madagascar, <sup>2</sup>CDC, ATLANTA, GA, United States, <sup>3</sup>ABT Associates, PMI EVOLVE, Antananarivo, Madagascar, <sup>4</sup>USAID-PMI, Antananarivo, Madagascar, <sup>5</sup>USAID - PMI, Antananarivo, Madagascar, <sup>6</sup>National Malaria Program, Antananarivo, Madagascar

7281

### PRECARIOUS SECURITY CONTEXT AND ADAPTATIVE METHODS TO IMPLEMENT SEASONAL MALARIA CHEMOPREVENTION (SMC) IN BURKINA FASO

Moumouni Bonkoungou<sup>1</sup>, Ousmane Badolo<sup>1</sup>, Frederic Guigma<sup>1</sup>, Francine Ouedraogo<sup>1</sup>, Edward Kenyi<sup>2</sup>, Andre Kone<sup>1</sup>, Lolade Oseni<sup>2</sup>, Sidzabda KOMPAORE<sup>3</sup>, Martine Balima<sup>1</sup>, Amssetou Ouyi<sup>1</sup>, Justin Tiendrebeogo<sup>1</sup>, Sayouba Sebgo<sup>1</sup>, Mame Birame DIOUF<sup>4</sup>, Irène Yaméogo Ngendakumana<sup>4</sup>, Gladys Tetteh<sup>2</sup><sup>1</sup>U.S. President's Malaria Initiative, IHS Project, Ouagadougou, Burkina Faso, <sup>2</sup>Jhpiego, Baltimore, MD, United States, <sup>3</sup>Secretariat Permanent pour l'Élimination du Paludisme (SP/ Palu), Ministry of Health, Ouagadougou, Burkina Faso, <sup>4</sup>U.S. President's Malaria Initiative, United States Agency for International Development, Ouagadougou, Burkina Faso

8041

### WHAT HAPPENS WHEN CHEMOPREVENTION OF SEASONAL MALARIA IS STOPPED: EXPERIENCE IN THE SOUTHERN SENEGALESE REGION OF SÉDHIU

amadou yéri camara<sup>1</sup>, carlotta carboni<sup>2</sup>, primo buscemi<sup>2</sup>, maria caldes<sup>2</sup>, mansour faye<sup>1</sup>, mamadou lamine gueye<sup>3</sup>, alioune badara gueye<sup>4</sup>, adama faye<sup>5</sup>, ibrahima seck<sup>6</sup><sup>1</sup>region medicale de sedhiou, sedhiou, senegal, <sup>2</sup>centre de sante globale, florence university, italy, <sup>3</sup>region medicale de kolda, kolda, senegal, <sup>4</sup>usaid/pmi, sedhiou, italy, <sup>5</sup>service medecine preventive, universite cheikh anta diop de dakar, senegal, <sup>6</sup>ised, cheikh anta diop university of dakar, senegal

## Symposium 74

### The Path Towards a Treatment for Dengue: Endemic Country Leadership, Progress and Perspectives

Convention Center - Room 395/396 (3rd Floor)

Friday, November 15, 10:15 a.m. - Noon

**This session does not carry CME credit.**

Dengue virus is the most important arboviral infection worldwide, having caused over 5 million cases and 5,000 deaths since the start of 2023. Climate change, human migration, inequities, and lack of effectiveness of vector control measures have contributed to a notable increase in the geographical area of transmission and number of cases in recent years. Despite the advances in vaccines and new vector control measures, the burden of disease is likely to remain high and even increase as these recent technologies have a slow and limited implementation in the affected areas. Currently dengue case management relies exclusively in the stratification of severity of cases and hydration, with difficulties of application in strained health system and to individuals with specific conditions, such as extremes of ages and people with comorbidities. In 2022, the Dengue Alliance was launched by institutions from dengue-endemic countries with DNDi with the aim to develop affordable and accessible treatment for dengue. In this symposium, the landscape from pre-clinical studies to clinical trials of promising approaches for finding effective and accessible dengue treatments will be addressed by a range of speakers with complimentary and diverse expertise and backgrounds. #ClimateChange #ClinicalResearch #EmergingDiseaseThreats #Therapeutics #TranslationalScience

#### CHAIR

André Machado Siqueira  
INI, FIOCRUZ, Rio de Janeiro, BrazilIsabela Ribeiro  
Drugs for Neglected Diseases initiative (DNDi), Geneva, Switzerland

10:15 a.m.

#### INTRODUCTION

10:25 a.m.

### OVERVIEW OF EPIDEMIOLOGY, GAPS IN DENGUE MANAGEMENT AND THE NEED FOR TREATMENTS, AND THE NEW TARGET PRODUCT PROFILE

Steven Lim  
Ministry of Health, Raja Permaisuri Bainun Hospital, Ipoh, Malaysia

**10:40 a.m.****NEW SEROPREVALENCE STUDIES OF DENGUE IN THE AFRICAN CONTINENT: AN UPDATED GLOBAL BURDEN MAP**

Anna Vicco  
Imperial College, London, United Kingdom

**10:55 a.m.****PRECLINICAL RESULTS AND RATIONALE FOR SELECTION OF ANTIVIRAL AND HOST-DIRECTED TREATMENT CANDIDATES FOR CLINICAL TESTING**

Mauro M. Teixeira  
Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

**11:10 a.m.****CHALLENGES AND OPPORTUNITIES OF DENGUE TREATMENT DEVELOPMENT**

Richa Chandra  
Novartis, East Hanover, NJ, United States

**11:35 a.m.****CLINICAL TRIAL PLATFORM FOR THE EVALUATION OF NEW DENGUE TREATMENTS**

Isabela Ribeiro  
DNDi, Zurich, Switzerland

**Exhibit Hall Open**

Convention Center - Hall J (1st Floor)  
Friday, November 15, Noon - 1:30 p.m.

**Poster Session 75****Poster Session B**

Convention Center - Hall I-1 (1st Floor)  
Friday, November 15, Noon - 1:45 p.m.

**Poster Session B Directory**

- Global Health - Diversity, Inclusion, Decolonization and Human Rights: 6869-6883
- Global Health - Information/Communication/Technologies Solutions in Global Health including Modeling: 6884-6898
- Global Health - Other: 6899-6929
- Global Health - Security/Emerging Infection Preparedness, Surveillance and Response(s): 6930-6950
- Ectoparasite-Borne Disease - Babesiosis and Lyme Disease: 6951-6955
- Ectoparasite-Borne Disease - Other: 6956-6969
- Mosquitoes - Biology and Genetics of Insecticide Resistance: 6970-6983
- Mosquitoes - Biology, Physiology and Immunity: 6984-6993
- Mosquitoes - Bionomics, Behavior and Surveillance: 6994-7007
- Mosquitoes - Epidemiology and Vector Control: 7008-7040
- Mosquitoes - Molecular Biology, Population Genetics and Genomics: 7041-7051
- Viruses - Emerging Viral Diseases: 7052-7068
- Viruses - Epidemiology: 7069-7089
- Viruses - Field and ecological studies of viruses, including surveillance and spillover risk and emergence: 7090-7101
- Viruses - Immunology: 7102-7119
- Viruses - Therapeutics and Antiviral Drugs: 7120-7137
- Viruses - Transmission Biology: 7138-7145
- Malaria - Antimalarial Resistance and Chemotherapy: 7146-7167
- Malaria - Diagnosis - Challenges and Innovations: 7168-7179
- Malaria - Drug Development and Clinical Trials: 7180-7191
- Malaria - Elimination: 7192-7207
- Malaria - Epidemiology: 7208-7238
- Malaria - Genetics, Genomics and Evolution: 7239-7254
- Malaria - Immunology: 7255-7268
- Malaria - Pathogenesis: 7269-7280
- Malaria - Prevention: 7281-7306
- Malaria - Surveillance and Data Utilization: 7307-7330
- Malaria - Vaccines and Immunotherapeutics: 7331-7349
- Bacteriology - Enteric Infections: 7350-7365
- Bacteriology - Other Bacterial Infections: 7366-7379
- Cestodes (including taeniasis and cysticercosis, echinococcosis/hydatid disease, and others): 7380-7397
- Clinical Tropical Medicine: 7398-7423
- Helminths - Nematodes - Filariasis (Epidemiology and Modeling): 7424-7435
- Kinetoplastida and Other Protozoa - Epidemiology (Including Leishmania and Trypanosomes): 7436-7457
- Measures for Control and Elimination of Neglected Tropical Diseases (NTDs): 7458-7487

One Health: The Interconnection between People, Animals, Plants and Their Shared Environment: 7488-7501

Pneumonia, Respiratory Infections and Tuberculosis: 7502-7518

Schistosomiasis and Other Trematodes – Diagnostics and Treatment: 7519-7531

Schistosomiasis and Other Trematodes – Epidemiology and Control: 7532-7541

Water, Sanitation, Hygiene and Environmental Health: 7542-7555

## Global Health - Diversity, Inclusion, Decolonization and Human Rights

6869

### URGENCY OF PHARMACEUTICAL SECTOR REFORM TO ACHIEVE UNIVERSAL HEALTH COVERAGE IN NEPAL

Pradip Lamsal, Krishna P Adhikary  
Helping Hands Community Hospital, Kathmandu, Nepal

6870

### UNDERSTANDING COVID-19 VACCINE HESITANCY AMONG KEY STAKEHOLDERS IN A CONFLICT AFFECTED AREA OF CAMEROON, A FOCUS GROUP DISCUSSION APPROACH

HENRY FOMUKONG NZOZONE<sup>1</sup>, Ngwingnchi Belove Asaah<sup>2</sup>, Joyce Amambo Nzozone<sup>1</sup>, Oben Pamela epse Besong<sup>3</sup>

<sup>1</sup>konye Health District, Regional Delegation Of Public Health, Southwest, Cameroon, <sup>2</sup>Panafrican Institute of Development, west Africa, SOUTHWEST, Cameroon, <sup>3</sup>Regional Coordination unit EPI, REGIONAL DELEGATION OF PUBLIC HEALTH, SOUTHWEST, Cameroon

6871

### THE INFLUENCING FACTORS OF QUALITY OF LIFE AMONG INDIVIDUALS RESIDING IN RURAL AND URBAN AREAS OF THAILAND DURING THE COVID-19 PANDEMIC

Wiriy Mahikul, Wisut Lamlerthton, Kanchana Ngaosuwan, Kornphaka Phatthanagumphol, Pisinee Narayam, Nattakitta Mektripop  
Chulabhorn Royal Academy, Lak Si, Thailand

6872

### MEASURING CLIENT EXPERIENCE OF CARE FOR PERENNIAL MALARIA CHEMOPREVENTION (PMC) IN BENIN

Cyprien Zinsou<sup>1</sup>, Paul Bouanchaud<sup>2</sup>, Isidore Kikissagbe<sup>1</sup>, Ghyslain Guedegbe<sup>1</sup>, Maya Schane<sup>3</sup>, Charlotte Eddis<sup>3</sup>

<sup>1</sup>ABMS, Cotonou, Benin, <sup>2</sup>PSI, Washington, DC, United States, <sup>3</sup>PSI, Abidjan, Côte D'Ivoire

6873

### THE WHO VACCINE INNOVATION FRAMEWORK: COUNTRY STAKEHOLDER DELIBERATIONS TO ASSESS THE PROGRAMMATIC NEED AND USE CASE FOR INNOVATIVE VACCINE PRODUCTS

Anna-Lea Kahn, Dijana Spasenoska  
World Health Organization, Geneva, Switzerland

6874

### EQUALITY IN AJTMH PUBLICATIONS FROM 1952 TO 2024: WHAT CAN WE LEARN TO MAKE GLOBAL HEALTH RESEARCH PUBLISHING MORE EQUITABLE? PROTOCOL FOR A BIBLIOMETRIC ANALYSIS

Nabila F. Youssouf<sup>1</sup>, Rebecca L. Luckett<sup>1</sup>, Sara Schwanke Khilji<sup>1</sup>, Pooja Gala<sup>2</sup>  
<sup>1</sup>Botswana Harvard Health Partnership, Gaborone, Botswana, <sup>2</sup>New York University, New York City, NY, United States

6875

### FINANCING LANDSCAPE FOR KEY POPULATIONS HIV/AIDS IN UGANDA: MARCH 2022

ARNOLD TAREMWA<sup>1</sup>, Charlotte Muheki<sup>2</sup>, Felix Rutaro<sup>3</sup>

<sup>1</sup>MINISTRY OF HEALTH, Kampala, Uganda, <sup>2</sup>Healthnet Consult, Kampala, Uganda, <sup>3</sup>HealthNet Consult, Kampala, Uganda

6876

### EXPLORING ROLES, POWER DYNAMICS, AND CULTURAL SIGNIFICANCE OF ELDERS' AUTHORITY DURING DEATH IN RURAL SOUTH AFRICA

Zokwane L. Mondlane<sup>1</sup>, Laura-Lynne Brandt<sup>1</sup>, Gift Mathebula<sup>1</sup>, Sara Jewett<sup>2</sup>, Kathleen Kahn<sup>1</sup>, Jessica Price<sup>1</sup>, Ryan G. Wagner<sup>1</sup>

<sup>1</sup>MRC/Wits Rural Health and Health Transition Unit, Agincourt, University of the Witwatersrand, Bushbuckridge, South Africa, <sup>2</sup>University of the Witwatersrand, Health & Society Division, School of Public Health, Johannesburg, South Africa

6877

### CENTRING LIVED EXPERIENCE WITHIN HEALTH SYSTEMS REFORM CO-PRODUCED APPROACHES AMONG PEOPLE AFFECTED BY SKIN NEGLECTED TROPICAL DISEASES IN LIBERIA

Emmanuel Zaizay<sup>1</sup>, Hannah Berrian<sup>2</sup>, Laura Dean<sup>3</sup>, Shahreen Chowdhury<sup>3</sup>, India Hotop<sup>3</sup>, Wede Tate<sup>2</sup>, Jerry Kollie<sup>2</sup>, Colleen Parker<sup>4</sup>, John Solunta Smith Jr.<sup>2</sup>, Karsor Kollie<sup>4</sup>, Zeela Zaizay<sup>5</sup>, Tia Akpan<sup>6</sup>, Rosalind McCollum<sup>3</sup>, Sally Theobald<sup>3</sup>

<sup>1</sup>\*, Monrovia, Liberia, <sup>2</sup>UL-PIRE Africa Center, Monrovia, Liberia, <sup>3</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>4</sup>Ministry of Health, Monrovia, Liberia, <sup>5</sup>Actions Transforming Lives (ACT), Monrovia, Liberia, <sup>6</sup>American Leprosy Missions (ALM), Greenville, SC, United States

6878

### EMPOWERING EARLY-CAREER WOMEN IN BIOSCIENCES: A PILOT MENTORSHIP INITIATIVE AT NNAMDI AZIKIWE UNIVERSITY, NIGERIA

Ogechukwu Benedicta Aribodor<sup>1</sup>, Eneyi E. Kpokiri<sup>2</sup>

<sup>1</sup>Department of Zoology, Nnamdi Azikiwe University, Awka, Nigeria, <sup>2</sup>Department of Clinical Research, Faculty of Infectious and Tropical Diseases London School of Hygiene & Tropical Medicine, London, United Kingdom

6879

### NAVIGATING HEALTHCARE HURDLES IN LORETO: EVALUATING BARRIERS TO ACCESS

Maribel Paredes Olortegui<sup>1</sup>, Karin F. Perez Garcia<sup>1</sup>, Mario Güimack Fajardo<sup>1</sup>, Loida F. Zegarra Paredes<sup>1</sup>, Francesa Schiaffino<sup>2</sup>, Josh M. Colston<sup>3</sup>, Pablo Peñataro Yori<sup>3</sup>, Patricia Pavlinac<sup>4</sup>, Margaret N. Kosel<sup>3</sup>

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### ADDRESSING STRUCTURAL BARRIERS AND HUMAN RIGHTS IN MALARIA SERVICES IN UGANDA AND KENYA

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### ADVANCING GENDER EQUALITY WILL STRENGTHEN INTERVENTIONS FOCUSED ON ENDING THE MALARIA EPIDEMIC

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### LEVERAGING GLOBAL FUND INVESTMENTS: PROTECTING THE RIGHT TO HEALTH AND LIMITING FINANCIAL HARDSHIP

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### CITIZENS AS INFLUENCERS OF HEALTH SERVICE AVAILABILITY AND NOT AS CONSUMERS ONLY

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## Global Health - Information/ Communication/Technologies Solutions in Global Health including Modeling

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### LESSONS LEARNED FROM GEOGRAPHIC INFORMATION SYSTEMS FOR INFECTIOUS DISEASES RESEARCH AND SURVEILLANCE

Tippa Wongstitwilairoong<sup>1</sup>, Darunee Buddhari<sup>2</sup>, John Mark Velasco<sup>3</sup>, Diones Paula Corazon<sup>3</sup>, Alera Maria Theresa<sup>4</sup>, Sanjaya Kumar Shrestha<sup>5</sup>, Tipawan Kangvanrattana<sup>1</sup>, Kathryn McGuckin Wuertz<sup>1</sup>, Aaron Farmer<sup>1</sup>

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### SYNDEMIC MODELLING: A NOVEL MATHEMATICAL MODELLING FRAMEWORK FOR SIMULATING MULTIPLE PATHOGENS DYNAMICS IN CONTEXT

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### MALARIA IN THE REPUBLIC OF GUINEA: COSTS ASSOCIATED WITH THE CARE PATHWAY FROM THE PATIENT'S PERSPECTIVE, 2022 - 2023

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Evans Omondi, Samuel Iddi, Steve Cygu, Abdhalah Ziraba, Damazo Kadengye, Agnes Kiragga  
*African Population and Health Research Center, Nairobi, Kenya*

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### WHATSAPP MESSAGING AND USE OF MALARIA SERVICE GUIDES AND FEVER MANAGEMENT TOOLS IN CROSS RIVER STATE, NIGERIA

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### COMPARATIVE ANALYSIS: USING A HYBRID ICF VERIFICATION TOOL IN A 28,000-PARTICIPANT CLINICAL TRIAL AT COMMUNITY LEVEL IN MOZAMBIQUE AND KENYA

Eldo Aly Elobolobo<sup>1</sup>, Lisa Collins<sup>2</sup>, Leslie Sam<sup>2</sup>, Jamal Salim<sup>3</sup>, Paula Ruiz-Castillo<sup>2</sup>, Mary Mael<sup>2</sup>, Isaac Ringera<sup>3</sup>, Mercie Kariuki<sup>3</sup>, Shadrack Karisa<sup>3</sup>, Vegovito Vegove<sup>4</sup>, Patricia Bellot<sup>2</sup>, Isaiiah Omondi<sup>3</sup>, Carlos Chaccour<sup>2</sup>, Regina Rabinovich<sup>2</sup>, Marta Maia<sup>3</sup>

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### NETWORKING OF MEDICAL LABORATORY DATA IN MADAGASCAR

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### PHYSICIANS' PERSPECTIVES OF INFORMAL HEALTH PRACTITIONERS IN BANGLADESH AND POTENTIAL FOR ENGAGEMENT

Zahid Hasan Khan<sup>1</sup>, Olivia R. Hanson<sup>2</sup>, Sarah A. Dallas<sup>2</sup>, Mohammad Ashraful Amin<sup>1</sup>, Ishtiakul Islam Khan<sup>1</sup>, Debashish Biswas<sup>1</sup>, Md. Taufiqul Islam<sup>1</sup>, Eric J. Nelson<sup>3</sup>, Firdausi Qadri<sup>1</sup>, Melissa H. Watt<sup>2</sup>, Daniel Leung<sup>2</sup>, Ashraful Islam Khan<sup>1</sup>

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### MODELING THE IMPACT OF CORE AND SUPPLEMENTARY TOOLS ON PYRETHROID RESISTANCE AND MALARIA TRANSMISSION DYNAMICS

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Bhekumusa Lukhele<sup>1</sup>, Mac Delay<sup>1</sup>, Fortunata Shabalala<sup>2</sup>, Mfundu Motsa<sup>3</sup>, Alexander Kay<sup>4</sup>, Christina El-saedi<sup>5</sup>, Bongani Masango<sup>3</sup>, Gregory Pavela<sup>1</sup>, Katia Bruxvoort<sup>1</sup>

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### DIGITIZATION OF COMMUNITY HEALTH IN BURKINA FASO: CONSIDERING THE PERSPECTIVES OF COMMUNITY WORKERS THROUGH USER ACCEPTABILITY TESTING (UATS)

Alain Kabore<sup>1</sup>, Assetta Bara /Compaore<sup>1</sup>, Fatou Fall<sup>2</sup>, Bry Sylla<sup>3</sup>, Adama Yameogo<sup>1</sup>, William Ouango<sup>3</sup>, Jean Serge Dimitri Ouattara<sup>3</sup>

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Fredrick omiti<sup>1</sup>, Wycliffe Odongo<sup>2</sup>, Mevis Omollo<sup>1</sup>, Kizito Obiet<sup>1</sup>, Brian Seda<sup>1</sup>, Victoria, Seffren<sup>2</sup>, Jonathan Schultz<sup>2</sup>, Simon Kariuki<sup>1</sup>, Feiko terKuile<sup>4</sup>, Gutman Julie R<sup>2</sup>

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### EXPLORING EXPERTS' PERSPECTIVES ON THE ADOPTION AND USE OF MULTIPLEX BEAD ASSAYS FOR INTEGRATED SEROSURVEILLANCE IN LOW- AND MIDDLE-INCOME COUNTRIES

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### DETECTION OF RECURRENT MALARIA BY IMPROVING THE ACCURACY OF UNIQUE PATIENT IDENTIFICATION WITH BIOMETRICS IN PAPUA, INDONESIA

Liony Fransisca<sup>1</sup>, Reynold Rizal Ubra<sup>2</sup>, Enny Kenangalem<sup>1</sup>, Benedikt Ley<sup>3</sup>, Ric N. Price<sup>3</sup>, Nicholas M. Douglas<sup>3</sup>, Jeanne Rini Poesoprodjo<sup>1</sup>

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Boubacar Sidiki Maiga<sup>1</sup>, Alassane Bangoura<sup>1</sup>, Jean Yves Mukamba<sup>2</sup>, Chrestien Yameni<sup>3</sup>, Fatoumata Keita<sup>1</sup>

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### SUCCESSFUL TASK SHIFTING: CROSS-SECTIONAL STUDY OF AN EMERGENCY OBSTETRIC CARE PROGRAM IN AN LMIC SETTING

Rita Thapa<sup>1</sup>, Abigail Knoble<sup>2</sup>, Suresh Tamang<sup>1</sup>, Bal Sundar Chansi Shrestha<sup>1</sup>, Arpana Kalaunee<sup>1</sup>, Indra Rai<sup>1</sup>, Bikash Shrestha<sup>1</sup>, Pravin Paudel<sup>1</sup>, Archana Amatya<sup>1</sup>, Ruma Rajbhandari<sup>2</sup>

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### COMMUNITY-BASED PARTICIPATORY INTERVENTION TO FIGHT DENGUE FEVER IN CÔTE D'IVOIRE

Véronique Koffi<sup>1</sup>, Julien Zahouli<sup>2</sup>, Carelle Brika<sup>1</sup>, Larissa Angoua<sup>3</sup>, Claver Adjobi<sup>4</sup>, Pélagie Aboa<sup>2</sup>, Sarah Ruel-Bergeron<sup>5</sup>, Laura Vavassory<sup>6</sup>, Giovanfrancesco Ferrari<sup>7</sup>, Pie Müller<sup>7</sup>

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### METHODOLOGICAL INSIGHTS FROM REFLEXIVE VIDEO ETHNOGRAPHY: A CASE STUDY OF LEPROSY PATIENTS IN MALAYSIA

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### REASONS FOR NON-PARTICIPATION IN AZITHROMYCIN MASS DRUG ADMINISTRATION TO REDUCE MORTALITY AMONG CHILDREN 1-11 MONTHS OLD IN NIGER: A CROSS-SECTIONAL COVERAGE EVALUATION SURVEY

Carolyn Brandt<sup>1</sup>, Ahmed M. Arzika<sup>2</sup>, Ramatou Maliki<sup>2</sup>, Alio Karamba<sup>2</sup>, Nasser Galo<sup>2</sup>, Naser Harouna<sup>2</sup>, Diallo Beidi<sup>2</sup>, Elodie Lebas<sup>1</sup>, Brittany Peterson<sup>1</sup>, Benjamin F. Arnold<sup>1</sup>, Thomas M. Lietman<sup>1</sup>, Kieran S. O'Brien<sup>1</sup>

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### TRENDS IN ANC CONTACTS AND EXCLUSIVE BREASTFEEDING IN SUB-SAHARAN AFRICA

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### ASSOCIATIONS BETWEEN IMMUNE STATUS AND CHILD DEVELOPMENT IN RURAL BANGLADESH

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**CONTRIBUTION OF VACCINE PREVENTABLE DISEASES TO CHILD MORTALITY IN AFRICA AND ASIA - CHILD HEALTH AND MORTALITY PREVENTIONS SURVEILLANCE (CHAMPS)**

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**ENHANCING DATA AVAILABILITY AND QUALITY WITH AN EASY-TO-USE TOOL DURING THE LOGISTICS MANAGEMENT INFORMATION SYSTEM REFORM IN MADAGASCAR, 2022-2023**

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PSI- Madagascar/ IMPACT, ANTANANARIVO, Madagascar

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**INTEGRATED DISEASE SURVEILLANCE AND RESPONSE SYSTEM: NEED FOR LABORATORY CONFIRMATION OF CASES IN BONO REGION**

**Samara Ansata Mohammed<sup>1</sup>**, Kofi Amoh Kodie<sup>1</sup>, Prince Quarshie<sup>1</sup>, Jane Addae Kyereme<sup>1</sup>, Bernice Konadu<sup>1</sup>, George Asare Tarbi<sup>1</sup>, Emmanuel Bachan<sup>1</sup>, Joshua Asare<sup>1</sup>, Daniel Konka<sup>2</sup>, Dennis Adu-Gyasi<sup>3</sup>

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**RECURRENT ADMISSIONS AND MORTALITY RATE IN CHILDREN LESS THAN 2 YEARS OLD IN RURAL GAMBIAN SETTING**

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**UTILIZING GEOSPATIAL DATA FOR TARGETED ADVOCACY TO ENHANCE MINIMALLY INVASIVE TISSUE SAMPLING (MITS) COLLECTION FOR CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE (CHAMPS) IN PAKISTAN**

**Hannah Melchinger<sup>1</sup>**, Sameer Belgaumi<sup>1</sup>, Nazia Ahsan<sup>2</sup>, Raheel Allana<sup>2</sup>, Fauzia Malik<sup>1</sup>, Saad B. Omer<sup>1</sup>, Momin Kazi<sup>2</sup>

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**PERCEPTIONS TO AND DECISION-MAKING DYNAMICS OF ANTENATAL CARE DURING PREGNANCY: A QUALITATIVE EXPLORATION IN RURAL BANGLADESH**

**Shahana Parveen<sup>1</sup>**, Dalia Yeasmin<sup>1</sup>, Farhana Hasnat Khan<sup>1</sup>, Syead Tamim Mahmud<sup>1</sup>, Faruque Hussain<sup>1</sup>, Shams El Arifeen<sup>1</sup>, Mohammad Zahid Hossain<sup>1</sup>, Emily S. Gurley<sup>2</sup>

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**HOW SUPPLY CHAIN SHAPES LABORATORY PERFORMANCE IN SEROSURVEILLANCE BEFORE, DURING, AFTER COVID-19**

**Shahjahan Ali<sup>1</sup>**, Ibrahim Swaray<sup>2</sup>, Wilhelmina Strasheim<sup>3</sup>, Daniel Mumba<sup>4</sup>, Oscar Kai<sup>5</sup>, May Chu<sup>1</sup>

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**ASSESSING THE QUALITY OF CARE PROVIDED TO WOMEN ATTENDING ANTENATAL CLINIC IN SIAYA COUNTY WESTERN KENYA**

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**COMMUNITY-BASED ASSESSMENT OF SOCIAL BEHAVIOR AND INTERACTION PATTERNS USING WEARABLE PROXIMITY SENSORS AND CONTACT DIARIES IN PAKISTAN: A QUALITATIVE STUDY**

**Noureen Ahmed<sup>1</sup>**, Hannah Melchinger<sup>1</sup>, Nazia Ahsan<sup>2</sup>, Raheel Allana<sup>2</sup>, Tehreem Maqsood<sup>2</sup>, Najeeb ur Rehman<sup>2</sup>, Benjamin A. Lopman<sup>3</sup>, Saad B. Omer<sup>1</sup>, Fauzia A. Malik<sup>1</sup>, Abdul Momin Kazi<sup>2</sup>

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**ENGAGING PRIVATE PROVIDERS FOR ROUTINE IMMUNIZATION (RI)-INTEGRATED HEALTH SERVICES IN URBAN SLUMS OF HIGH-RISK UNION COUNCILS (HRUCS) IN KARACHI, PAKISTAN**

**Zahid A. Memon<sup>1</sup>**, Shifa Habib<sup>1</sup>, Ammarah Ali<sup>1</sup>, Ahsanullah Bhurgri<sup>2</sup>, Shehla Zaidi<sup>3</sup>

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**UNDERSTANDING COMMUNITY PERSPECTIVES AND DECISION MAKING TO INFORM CHILD MORTALITY SURVEILLANCE AND MITS STRATEGIES IN KARACHI PAKISTAN: ESTABLISHING A NEW SITE**

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**HEALTHCARE SEEKING BEHAVIOR AND DISEASE PERCEPTION ASSOCIATED WITH CHOLERA AND DIARRHEAL ILLNESSES AMONG POPULATIONS IN CHOLERA ENDEMIC REGIONS IN NAMPULA PROVINCE, MOZAMBIQUE**

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Friday  
November 15

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### UNDERLYING CONDITIONS AND CONTRIBUTORS OF PERINATAL ASPHYXIA AMONG STILLBIRTHS AND EARLY NEONATAL DEATHS ENROLLED IN THE CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE (CHAMPS), WESTERN KENYA, 2017 TO 2022

Joyce Akinyi Were<sup>1</sup>, Richard Omore<sup>1</sup>, Aggrey Igunza<sup>1</sup>, Dickson Gethi<sup>1</sup>, Harun Owuor<sup>1</sup>, Kephass Otieno<sup>1</sup>, Edwin Kiplagat<sup>1</sup>, Fredrick Onduru<sup>1</sup>, Broline Asuma Sagini<sup>1</sup>, Beth Tippett Barr<sup>1</sup>, Victor Akelo<sup>2</sup>

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Taukir Tanjim<sup>1</sup>, Shovo Debnath<sup>1</sup>, Emily S. Gurley<sup>2</sup>, Kazi Munisul Islam<sup>1</sup>, Rajib Biswas<sup>1</sup>, Maria Rahman Mim<sup>1</sup>, Qazi Sadeq-ur Rahman<sup>1</sup>, Md. Abdus Salam<sup>1</sup>, Md. Atique Iqbal Chowdhury<sup>1</sup>, Sanwarul Bari<sup>1</sup>, Shams El Arifeen<sup>1</sup>, Mohammad Zahid Hossain<sup>1</sup>

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Tedila Habte Memera<sup>1</sup>, Hannah Margaret Edwards<sup>2</sup>, Esey Gabore<sup>1</sup>, Helen Hawkings<sup>2</sup>

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HOMEGNON ANTONIN FERREOL BAH<sup>1</sup>, Ana Paula Medeiros Pereira<sup>2</sup>, Juan Pablo Aguilar Ticona<sup>1</sup>, Nivison Nery Jr<sup>1</sup>, Mariam O. Fofana<sup>3</sup>, Murilo Enrique Dorion Nieto<sup>3</sup>, Renato Victoriano<sup>4</sup>, Cristiane Wanderley Cardoso<sup>2</sup>, Federico Costa<sup>1</sup>, Mitermayer G. Reis<sup>4</sup>, Derek A. T. Cummings<sup>5</sup>, Albert I. Ko<sup>3</sup>

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Shabina Ariff

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Claudia Herrera<sup>1</sup>, Leroy Versteeg<sup>2</sup>, Priscila Silva Farani<sup>3</sup>, Antoine Amblard-Rambert<sup>4</sup>, Norman Beatty<sup>5</sup>, Maria Elena Botazzi<sup>2</sup>, Pierre Buekens<sup>6</sup>, Eric Dumonteil<sup>1</sup>, Angel Ramos-Ligonio<sup>7</sup>, Peter Hotez<sup>2</sup>, Rachel Clear<sup>1</sup>, Bridget Knudson<sup>1</sup>, Etienne Waleckx<sup>8</sup>, Idalia Paredes Sotelo<sup>9</sup>

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### INTESTINAL INFLAMMATION AND ENTERIC PATHOGENS CARRIAGE IN POST COVID-19 PATIENTS

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## Global Health - Security/Emerging Infection Preparedness, Surveillance and Response(s)

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### LESSONS FROM COVID-19 VACCINATION IMPLEMENTATION IN 52 AFRICAN COUNTRIES: IMPLICATIONS FOR FUTURE PANDEMIC PREPAREDNESS

**Muhammed Olanrewaju Afolabi**<sup>1</sup>, Oghenebrume Warri<sup>2</sup>, Christinah Mukandavire<sup>1</sup>, Yauba Saïdu<sup>3</sup>, Emmanuel A. Okpo<sup>4</sup>, Olalekan Uthman<sup>5</sup>, Beate Kampmann<sup>1</sup>

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**Farzana Zaman**<sup>1</sup>, Muhammad Asaduzzaman<sup>2</sup>

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**Paula Emily Schweizer**<sup>1</sup>, Rea Maja Kobialka<sup>1</sup>, Arianna Ceruti<sup>1</sup>, Prakash Ghosh<sup>1</sup>, Martin Faye<sup>2</sup>, Oumar Faye<sup>2</sup>, Andy Mahine Diouf<sup>2</sup>, Soa Fy Andriamandimby<sup>3</sup>, Dinesh Mondal<sup>4</sup>, Sarah Schurig<sup>1</sup>, Manfred Weidmann<sup>5</sup>, Julius Boniface Okuni<sup>6</sup>, Kamal H Eltom<sup>7</sup>, Sheila Makiala-Mandanda<sup>8</sup>, Mitali Chatterjee<sup>9</sup>, Michael Frimpong<sup>10</sup>, Ndongo Dia<sup>2</sup>, George Olusegun Ademowo<sup>11</sup>, Mohamed A. Shalaby<sup>12</sup>, Uwe Truyen<sup>1</sup>, Ahmed Abd El Wahed<sup>1</sup>

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### PERFORMANCE OF MALARIA ELIMINATION ACTIVITIES IN SEKE DISTRICT, MASHONALAND EAST PROVINCE, ZIMBABWE, 2023

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### UTILIZATION OF PREPOSITIONED RESEARCH LABORATORY CAPABILITIES TO SUPPORT SUDAN VIRUS DISEASE RESPONSE IN UGANDA

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### A SURVIVOR CASE OF NEONATAL TETANUS: CASE DESCRIPTION AND SURVEILLANCE SYSTEM EVALUATION IN THE URBAN HEALTH DISTRICT OF EBOLWA, CAMEROON, MARCH 2023

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### THE IMPACT OF COVID-19 POLICY CHANGES ON RT ESTIMATION IN WEST VIRGINIA, JANUARY 22, 2020-DECEMBER 31, 2020

Abigail A. Buesseler<sup>1</sup>, Xinyi Hua<sup>1</sup>, Dorcas Adom<sup>1</sup>, Shobhan Das<sup>1</sup>, Wendy Kutten<sup>1</sup>, Olawumi O. Olatunde<sup>1</sup>, Olivia Sheppard<sup>1</sup>, Jhy-Charm Soo<sup>1</sup>, Jing Kersey<sup>1</sup>, Kin On Kwok<sup>2</sup>, Gerardo Chowell<sup>3</sup>, **Isaac Chun-Hai Fung<sup>1</sup>**

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### ASSESSING IMMUNIZATION COVERAGE AND POLIO VACCINATION STATUS AMONG CHILDREN AGED 12-23 MONTHS. FINDINGS FROM A CROSS-SECTIONAL SURVEY IN HIGH-RISK UNIONS COUNCILS OF PAKISTAN

Imtiaz Hussain, Muhammad Umer, Ahmad Khan, Sajid B. Soofi  
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### THE ACCEPTABILITY OF MINIMALLY INVASIVE TISSUE SAMPLING FOR CAUSE OF DEATH DETERMINATION IN RURAL SOUTH AFRICA: A QUALITATIVE ANALYSIS

Laura-Lynne Brandt, Jessica Price, Zokwane L. Modlane, Gift Mathebula, Sara Jewett, Kathleen Kahn, Ryan G. Wagner  
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### REACHING THE UNREACHABLE CHILDREN FOR ESSENTIAL VACCINATIONS AN OUTREACH APPROACH THROUGH HEALTH CAMP IMPLEMENTATION

Muhammad Umer, Imtiaz Hussain, Ahmad Khan, Sajid Soofi  
The Aga Khan University, Karachi, Pakistan

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### EARLY DETECTION OF CHOLERA OUTBREAKS IN URBAN AND RURAL AREAS OF NAMPULA PROVINCE IN MOZAMBIQUE: PRELIMINARY INTERIM RESULTS OF ENHANCED ACUTE DIARRHEAL DISEASE SURVEILLANCE IN CHOLERA ENDEMIC SETTINGS

Liliana Dengo Baloi<sup>1</sup>, José Paulo Langa<sup>1</sup>, Cynthia Semá Baltazar<sup>1</sup>, Jucunú J. Elias Chitio<sup>1</sup>, Imelda Miambo<sup>1</sup>, Sofião Manjor<sup>1</sup>, Nelmo Manjate<sup>1</sup>, Simões Mala<sup>1</sup>, Naira Luiz Kanje<sup>1</sup>, Aurea Tovele<sup>1</sup>, Américo Barata<sup>2</sup>, Atija Marcelino<sup>2</sup>, Madalena Zacarias<sup>2</sup>, Jamilo Chabane<sup>2</sup>, Ondari D. Mogeni<sup>3</sup>, Saemna Park<sup>3</sup>, David Mukasa<sup>3</sup>, Geun Hyeog Jang<sup>3</sup>, Hyoryoung Lee<sup>3</sup>, Young Ae You<sup>3</sup>, Deok Ryun Kim<sup>3</sup>, Yeonji Jeon<sup>3</sup>, Ju Yeon Park<sup>3</sup>, Julia Lynch<sup>3</sup>, Se Eun Park<sup>3</sup>

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Nsonghomanyi Fritz Roland Fonkeng<sup>1</sup>, Marie Brunetti<sup>1</sup>, Manuela Rehr<sup>1</sup>, Onyebuchi Okoro<sup>2</sup>, Toluwanimi Adewole<sup>1</sup>, Devy Emperador<sup>1</sup>, Emmanuel Agogo<sup>1</sup>, Heidi Albert<sup>1</sup>, Afolabi Akinpelu<sup>3</sup>, Babatunde Olajumoke<sup>3</sup>

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### HEALTH SYSTEM STRENGTHENING THROUGH DATA QUALITY IMPROVEMENTS: A COMPARATIVE ANALYSIS OF HEALTH FACILITY DATA QUALITY PERFORMANCE FROM INITIAL ASSESSMENTS TO SUBSEQUENT VISITS

Aderonke Omokhapue<sup>1</sup>, Gloria Sillo<sup>2</sup>, Comfort Kingsley-Randa<sup>3</sup>, Chinwe Nweze<sup>4</sup>, Olayemi Abimbola<sup>1</sup>, Justice Adaji<sup>1</sup>, IniAbasi Nglass<sup>1</sup>, Uchenna Nwokenna<sup>1</sup>, Abanyi Liambee<sup>5</sup>, Peter Ejim<sup>6</sup>, Pam Danjuma<sup>7</sup>, Kabiru Bungudu<sup>8</sup>, Arja Huestis<sup>9</sup>, Rudi Thetard<sup>9</sup>, Thomas Hall<sup>9</sup>, Grace Nwankwo<sup>10</sup>, Erkwagh Dagba<sup>10</sup>, Veronica Momoh<sup>10</sup>, Jules Mihigo<sup>10</sup>, Chukwu Okoronkwo<sup>11</sup>, Nnenna Ogbulafor<sup>11</sup>, Godwin Ntadom<sup>11</sup>

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### ETIOLOGY OF INFECTIOUS DIARRHEA IN MADAGASCAR: FINDINGS FROM THE COMMUNITY-BASED SURVEILLANCE SYSTEM FROM 2019 TO 2023

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### IMPACTS OF BAD OBSTETRIC HISTORY ON ANTENATAL CARE UPTAKE IN SUBSEQUENT PREGNANCIES: INSIGHTS FROM CHAMPS BANGLADESH

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### DENGUE PREPAREDNESS. FRAMEWORK FOR INNOVATIVE TOOLS AND STRATEGIES FOR SURVEILLANCE AND RESPONSE IN OIL AND GAS COMPANY

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### ADVANCING MALARIA CARE THROUGH VARIED INTERVENTIONS: IMPROVING MALARIA RAPID DIAGNOSTIC TEST (RDT) USE IN FOUR NIGERIAN STATES - BENUE, NASARAWA, PLATEAU, AND ZAMFARA

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### OPTIMIZING THE END OF CYCLE (EOC) REPORTING FOR SEASONAL MALARIA CHEMOPREVENTION (SMC) CAMPAIGN IN ZAMFARA STATE, NIGERIA

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### IMPLEMENTATION OF AN APPROACH TO INTEGRATE COMMUNITY HEALTH INTERVENTIONS INTO COORDINATION, MONITORING AND EVALUATION AT THE HEALTH DISTRICT LEVEL IN CÔTE D'IVOIRE

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## Ectoparasite-Borne Disease - Babesiosis and Lyme Disease

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### PROJECTING *Ixodes scapularis* DIN IN EASTERN UNITED STATES, 1997-2022

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### A SIMPLE AND SENSITIVE COLORIMETRIC NUCLEIC ACID TEST FOR *BABESIA MICROTI* SURVEILLANCE IN WHOLE BLOOD AND TICK VECTORS

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### DISENTANGLING THE RELATIONSHIP BETWEEN THE DEER TICK MICROBIOME AND TICK-BORNE PATHOGENS

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### COINFECTION OF *ANAPLASMA PHAGOCYTOPHILUM* AND *BORRELIA BURGdorferi* IN NON-HUMAN PRIMATES. IMPACT ON IMMUNE RESPONSE AND DISEASE SEVERITY

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### HEMOPLASMA AND PIROPLASM SPECIES IN WHITE-EARED OPOSSUMS (*DIDELPHIS ALBIVENTRIS*) FROM ALAGOAS, NORTHEASTERN BRAZIL - PRELIMINARY DATA

Ana CS Silva<sup>1</sup>, **Jessica Miller**<sup>2</sup>, Eptácio C. Farias Junior<sup>3</sup>, Ana CP Azevedo<sup>4</sup>, Jonatas C. Almeida<sup>5</sup>, João L. Garcia<sup>1</sup>, Thiago F. Martins<sup>5</sup>, Marcelo B. Labruna<sup>6</sup>, Thallitha SWJ Vieira<sup>2</sup>, Rafael Vieira<sup>2</sup>

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## Ectoparasite-Borne Disease - Other

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### POTENTIALLY NOVEL *Ehrlichia* sp. IN WHITE-EARED OPOSSUMS (*DIDELPHIS ALBIVENTRIS*) FROM ALAGOAS, NORTHEASTERN BRAZIL-PRELIMINARY DATA

Ana CS Silva<sup>1</sup>, **Jessica Miller**<sup>2</sup>, Eptácio C. Farias Junior<sup>3</sup>, Ana CP Azevedo<sup>4</sup>, Jonatas C. Almeida<sup>5</sup>, João L. Garcia<sup>1</sup>, Thiago F. Martins<sup>5</sup>, Marcelo B. Labruna<sup>6</sup>, Thallitha SWJ Vieira<sup>2</sup>, Rafael Vieira<sup>2</sup>

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### HUMAN HEALTH DISPARITIES IN MITE-BORNE ILLNESSES

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### A NEW MULTIPLEX SEROLOGIC ASSAY FOR DETECTION OF *Bartonella* SPECIES IN IRAQ DEPLOYED MILITARY WORKING DOGS

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### SEVERE TICK-BORNE DISEASE IN NORTH CAROLINA, A TEN-YEAR REVIEW OF HOSPITALIZED CASES

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### MINIMUM FEEDING TIME REQUIRED FOR HAEMAPHYSALIS LONGICORNIS TO TRANSMIT SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME VIRUS

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### INVESTIGATION INTO THE BACTERIOME OF TICKS COLLECTED FROM NINE KENYAN COUNTIES

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### HOUSEHOLD INSECTICIDE USE AND REAT FLEA RESISTANCE IN MADAGASCAR: IMPLICATIONS FOR PUBLIC HEALTH

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### COXIELLA BURNETII IN RUMINANTS AND DONKEYS (EQUUS ASINUS) FROM SOMALIA

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### SEROPREVALENCE OF RICKETTSIA SPP. IN CATTLE, SHEEP, GOATS AND DONKEYS (EQUUS ASINUS) FROM SOMALIA

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### ELUCIDATING THE TICK MICROBIAL PROFILE IN DISTINCT ECOLOGICAL REGIONS OF EAST AFRICA

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### EFFICACY OF TWO DOSES OF IVERMECTIN TABLET IN TREATMENT OF SCABIES IN COMPARISON TO ONCE APPLICATION OF 5% PERMETHRIN LOTION- A RANDOMIZED CONTROLLED TRIAL

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### CORRECT KNOWLEDGE, ATTITUDES, AND CONFIDENCE FOR APPROACHING RICKETTSIOSIS IN A SAMPLE OF MEDICAL STUDENTS IN CLINICAL SCIENCES FROM ENDEMIC AND NON-ENDEMIC REGIONS OF MEXICO

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### EXPLORING TICK VECTOR DYNAMICS IN CRIMEAN-CONGO HEMORRHAGIC FEVER OUTBREAK ZONES OF EAST AFRICA

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### A DETAILED CHARACTERIZATION OF RICKETTSIA BELLII ECOLOGY AND HOST INTERACTIONS

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## Mosquitoes - Biology and Genetics of Insecticide Resistance

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### TWO HIGHLY SELECTED MUTATIONS IN THE TANDEMLY DUPLICATED CYP6P4A AND CYP6P4B GENES DRIVE PYRETHROID INSECTICIDE RESISTANCE AND CAUSE LOSS OF INSECTICIDE-TREATED BED NET EFFICACY AGAINST THE MAJOR MALARIA VECTOR ANOPHELES FUNESTUS IN WEST AFRICA

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### INSECTICIDE RESISTANCE STATUS AND HIGH KDR FREQUENCY IN *Aedes aegypti* IN A DENGUE ENDEMIC CITY OF HONDURAS

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### RELATIONSHIPS BETWEEN BIOLOGICAL AGE, DISTANCE FROM AQUATIC HABITATS, AND PYRETHROID RESISTANCE STATUS OF *Anopheles funestus* MOSQUITOES IN SOUTH-EASTERN TANZANIA

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### HOUSEHOLD RISK FACTORS ASSOCIATED WITH INCREASED MOSQUITO DENSITIES AND INSECTICIDE RESISTANCE PROFILES OF MAIN MALARIA VECTORS IN KWALE COUNTY, COASTAL KENYA

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### THE IMPACT OF NEXT-GENERATION DUAL-ACTIVE INGREDIENT LONG-LASTING INSECTICIDAL NET DEPLOYMENT ON INSECTICIDE RESISTANCE IN MALARIA VECTORS: RESULTS OF A THREE-YEAR CLUSTER-RANDOMIZED CONTROLLED TRIAL IN BENIN

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### THE E205D MUTATION IN THE P450 GENE CYP6P3 DRIVES PYRETHROID RESISTANCE IN THE MAJOR AFRICAN MALARIA VECTOR *ANOPHELES GAMBIAE*

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### ACE-1 DUPLICATION AND COPY NUMBER VARIATION ARE CORRELATED TO RESISTANCE TO ORGANOPHOSPHATES IN *ANOPHELES GAMBIAE* FROM CENTRAL AFRICA

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### MALARIA VECTOR ECOLOGICAL DIVERSITY INFLUENCING TRANSMISSION AND RESISTANCE TO INSECTICIDES

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### DYNAMICS OF RESISTANCE INTENSITY AND MECHANISMS OF *ANOPHELES GAMBIAE* TO PYRETHROID INSECTICIDES BETWEEN 2021 TO 2023 IN RWANDA

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### INSECTICIDE RESISTANCE PROFILE OF *Aedes* MOSQUITOES IN OGUN STATE, NIGERIA

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### HIGH SURVIVORSHIP OF *ANOPHELES GAMBIAE* LARVAE TO LETHAL CONCENTRATIONS OF CLOTHIANIDIN, ACETAMIPRID OR IMIDACLOPRID IS CONSISTENT WITH CROSS-RESISTANCE TO NEONICOTINOIDS

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### DIVERGENCES AND SIMILARITIES ON INSECTICIDE RESISTANCE PROFILES IN WILD POPULATIONS OF *ANOPHELES GAMBIAE* SL BREEDING IN VEGETABLE FARMS IN COTONOU, BENIN

DEFO TALOM Blaise Armand<sup>1</sup>, Lontsi-Demano Michel<sup>1</sup>, Zeukeng Francis<sup>2</sup>, Nakebang Amen Fadel<sup>3</sup>, Djouaka Rousseau<sup>1</sup>

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### KEY RESISTANCE P450S PROFICIENT PYRETHROID METABOLIZERS, ARE REDUCING NEONICOTINOID EFFICACY IN *ANOPHELES FUNESTUS* WHILE EXACERBATING THE POTENCY OF CHLORFENAPYR

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### BACTERIA COMMUNITY EXACERBATE PYRETHROID RESISTANCE IN *ANOPHELES FUNESTUS*, MAJOR MALARIA VECTOR IN AFRICA

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## Mosquitoes - Biology, Physiology and Immunity

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### SEX PEPTIDE RECEPTOR IS NOT REQUIRED FOR REFRACTORINESS TO REMATING OR INDUCTION OF EGG LAYING IN *AEDES AEGYPTI*

Irene Alexandra Amaro<sup>1</sup>, Margot P. Wohl<sup>2</sup>, Sylvie Pitcher<sup>1</sup>, Catalina Alfonso-Parra<sup>3</sup>, Frank Avila<sup>4</sup>, Andrew Paige<sup>5</sup>, Michelle Helinski<sup>6</sup>, Laura Duvall<sup>5</sup>, Laura Harrington<sup>1</sup>, Mariana Wolfner<sup>1</sup>, Conor McMeniman<sup>2</sup>  
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### MICRO-SPATIAL PARTITIONING INFLUENCES THE DIVERSIFICATION OF MOSQUITO-ASSOCIATED VIRUS PROFILES AMONG *AEDES AEGYPTI* MOSQUITOES IN PUERTO RICO

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### HOST-SPECIFIC DYNAMICS OF MICROBIOTA ASSEMBLY IN *AEDES AEGYPTI* MOSQUITOES AFTER RECIPROCAL TRANSPLANTATION OF CRYOPRESERVED WHOLE GUT-DERIVED MICROBIAL COMMUNITIES

Holly Nichols<sup>1</sup>, Vishaal Dhokiyaa<sup>2</sup>, Ananya Hoque<sup>2</sup>, Eva Heinz<sup>2</sup>, Grant Hughes<sup>2</sup>, Kerri Coon<sup>1</sup>  
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### INVESTIGATING THE EFFECTS OF TEMPERATURE CHANGE ON OVIPOSITION AND PROGENY VIABILITY OF *AEDES AEGYPTI* AND *CULEX TARSALIS* MOSQUITOES

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### A SINGLE-CELL ATLAS OF THE *CULEX TARSALIS* MIDGUT DURING WEST NILE VIRUS INFECTION

Emily Anne Fitzmeyer<sup>1</sup>, Taru S. Dutt<sup>1</sup>, Silvain Pinaud<sup>2</sup>, Barbara Graham<sup>1</sup>, Corey Campbell<sup>1</sup>, Sarah Hélène Merkle<sup>3</sup>, Jessica L. Hill<sup>1</sup>, Hunter Ogg<sup>1</sup>, Emily N. Gallichotte<sup>1</sup>, Marcela Henao Tamayo<sup>1</sup>, Gregory D. Ebel<sup>1</sup>  
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### THE CONTRIBUTION OF SPECIFIC PROPHENOLOXIDASES TO PLASMODIUM MELANIZATION IN *ANOPHELES GAMBIAE* MOSQUITOES

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### KINETICS OF MAYARO VIRUS INFECTIONS OF NEW WORLD AND OLD WORLD *ANOPHELES* VECTORS

Luis Antonio Alonso Palomares, Jeremiah Miller, Ava Sheppard, Jhon Williams, John Lednický, Rhoel R. Dinglasan  
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### OPTIMIZATION OF ANTIMALARIAL DRUGS DELIVERY AND EVALUATING THEIR EFFECTS ON THE SURVIVAL AND FECUNDITY OF LABORATORY REARED *ANOPHELES GAMBIAE* MOSQUITOES

Moline Achieng Okal<sup>1</sup>, Cyrus Ayieko<sup>2</sup>, Hoseah Akala<sup>1</sup>, John Waitumbi<sup>1</sup>  
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### *ENTEROBACTER CLOACAE* AND *SERRATIA MARCESCENS* METABOLITES MINIMIZE *PLASMODIUM* GAMETOCYTE DEVELOPMENT *IN VITRO*.

Esinam Abla Akorli, Grace Odoom, Emmanuel Osei-Frempong, Jeffrey Kankam Boateng, Stephanie N.A Addo, Jewelna Akorli  
 Noguchi Memorial Institute for Medical Research, Legon, Ghana

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### *ELIZABETHKINGIA ANOPHELIS* MSU001 ISOLATED FROM *ANOPHELES STEPHENSII*: MOLECULAR CHARACTERIZATION AND COMPARATIVE GENOME ANALYSIS

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# Mosquitoes - Bionomics, Behavior and Surveillance

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## REPRODUCTIVE STRATEGIES ASSIST THE BIOLOGICAL INVASION PROCESS OF *Aedes albopictus*

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## CHARACTERIZING RESIDUAL MALARIA TRANSMISSION IN THREE SELECTED HIGH BURDEN DISTRICTS OF WESTERN PROVINCE, ZAMBIA

**Benjamin Chanda**<sup>1</sup>, Tresford Kaniki<sup>1</sup>, Patricia Mambo<sup>1</sup>, Rayford Muyabe<sup>1</sup>, Mwansa Mwenya<sup>1</sup>, Chama Chisya<sup>1</sup>, Busiku Hamainza<sup>2</sup>, Thomas Burkot<sup>3</sup>, Ruth Ashton<sup>4</sup>, Erica Oranga<sup>5</sup>, Megan Littrell<sup>6</sup>, Keith J. Mbata<sup>7</sup>, Joseph Wagman<sup>6</sup>  
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## FOREST EDGE LANDSCAPE CONTEXT AFFECTS MOSQUITO COMMUNITY COMPOSITION AND RISK OF PATHOGEN EMERGENCE

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## MOLECULAR XENOMONITORING FOR POST-VALIDATION SURVEILLANCE OF LYMPHATIC FILARIASIS IN BANGLADESH: EVIDENCE TO SUPPORT LF ELIMINATION AS A PUBLIC HEALTH PROBLEM

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## DETECTION OF *Aedes albopictus* IN DISTRICT 3 OF MANAGUA, NICARAGUA

**Jacqueline Mojica**<sup>1</sup>, Jose G. Juarez<sup>1</sup>, Harold Suazo<sup>1</sup>, Maria M. Lopez<sup>1</sup>, Angel Balmaseda<sup>1</sup>, Eva Harris<sup>2</sup>, Josefina Coloma<sup>2</sup>  
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## GLOBAL ANALYSIS OF *ANOPHELES STEPHENSI* BIONOMICS AND CONTROL APPROACHES THROUGH A SYSTEMATIC LITERATURE REVIEW

**Tabeth Mwema**<sup>1</sup>, Sarah Zohdy<sup>2</sup>, Mekala Sundaram<sup>3</sup>, Christopher A. Lepzcyk<sup>1</sup>, Lana Narine<sup>1</sup>, Janna R. Willoughby<sup>1</sup>  
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## ASSESSMENT OF TWENTY-FOUR HOURS BITING PATTERNS AND HUMAN EXPOSURE RISK TO BITES OF *ANOPHELES* MOSQUITOES IN SOUTH-EASTERN TANZANIA

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## CHARACTERIZATION OF THE SPECIFIC COMPOSITION, TROPHIC AND RESTING PREFERENCES AS WELL AS THE LEVEL OF INFECTION OF MALARIA VECTORS IN THE CITY OF OUAGADOUGO, BURKINA FASO

**Nicolas ZANRE**<sup>1</sup>, Aboubacar Sombié<sup>2</sup>, Awa Gnémé<sup>1</sup>, Hyacinthe K. Toé<sup>1</sup>, Antoine Sanon<sup>1</sup>, Athanase Badolo<sup>1</sup>  
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## DEVELOPMENT OF ENVIRONMENTAL DNA (EDNA) SAMPLING FOR ARBOVIRUS VECTOR SURVEILLANCE IN SOUTHERN NEVADA

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## UNDERSTUDIED MALARIA VECTORS MAY DRIVE RESIDUAL MALARIA TRANSMISSION IN CHOMA DISTRICT, AN AREA OF LOW MALARIA TRANSMISSION

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## THE ESCALATING BIOLOGICAL THREAT: OBSERVATIONS FROM TEN YEARS OF MAPPING INSECTICIDE RESISTANCE IN MALARIA VECTORS

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## 7005

**QUANTIFYING FEW, FIXED, AND FINDABLE: A DIGITAL, STRATIFIED SURVEILLANCE APPROACH TO ASSESS LARVAL SOURCE MANAGEMENT FEASIBILITY IN MOZAMBIQUE'S CAPITAL CITIES**

**Samira Sibindy<sup>1</sup>**, Alexandra Wharton-Smith<sup>2</sup>, Dulcisaria Marrenjo<sup>1</sup>, Abdul Sumail<sup>2</sup>, Paul Hollwedel<sup>2</sup>, Arnon Hourri Yafin<sup>2</sup>, Baltazar Candrinho<sup>1</sup>

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## 7006

**HOW DOES BEDNET USE AFFECT FEMALE ANOPHELES EXPOSURE IN COTE D'IVOIRE: ASSESSING VECTOR-HUMAN INTERACTION USING ENTOMOLOGICAL SURVEILLANCE AND ACCELEROMETER-BASED BEDNET MONITORING**

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## 7007

**ADVANCES IN ARTIFICIAL INTELLIGENCE FOR VECTOR IDENTIFICATION AND MONITORING**

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## Mosquitoes - Epidemiology and Vector Control

## 7008

**DOES DOMESTIC USE OF INSECTICIDAL SPRAYS UNDERMINE PUBLIC HEALTH CONTROL STRATEGIES?**

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## 7009

**APPLICATION OF PREDICTIVE MODELLING OF DENGUE CASE NUMBERS USING METEOROLOGICAL DATA IN PERU**

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## 7010

**SEMI-FIELD EVALUATION OF AQUATIC PREDATORS FOR THE CONTROL OF ANOPHELES FUNESTUS IN RURAL SOUTHEASTERN TANZANIA**

**Herieth H. Mahenge**, Letus L. Muyaga, Joel D. Nkya, Andrew D. Kafwenji, Yohana A. Mwalugelo, Najat F. Kahamba, Halfan S. Ngowo, Emmanuel E. Kaindoa

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## 7011

**NAVIGATING THE EVALUATION OF NOVEL IRS PRODUCTS: LESSONS LEARNED FROM ASSESSING RESIDUAL EFFICACY WITHOUT SUSCEPTIBLE MOSQUITO COLONIES**

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**DEVELOPMENT AND EVALUATION OF A NOVEL, MULTI-ACTIVE INGREDIENT ATTRACTIVE TOXIC SUGAR BAIT FOR MOSQUITO CONTROL**

Alexandra Bauer, Daniel W. Pérez-Ramos, Abdullah A. Alomar, Raquel Lima de Souza, Maria EB Resck, Yesenia L. Sanchez, Ana Romero-Weaver, Eva A. Buckner, **Eric P. Caragata**, Barry W. Alto

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**HOW FREQUENTLY DO WE NEED TO TREAT BREEDING SITES WITH BTI? EVIDENCE FROM LARGE-SCALE LARVAL SOURCE MANAGEMENT ON BIKO ISLAND**

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## 7014

**ASSESSING THE SUSCEPTIBILITY AND EFFICACY OF TRADITIONAL NEUROTOXIC (PYRETHROID) AND NEW GENERATION INSECTICIDES (CHLORFENAPYR, CLOTHIANIDIN, AND PYRIPROXYFEN), ON WILD PYRETHROID RESISTANT POPULATIONS OF ANOPHELES GAMBIAE FROM SOUTHERN BENIN**

**Germain Gil Padonou<sup>1</sup>**, David Mahouton Zoungbédj<sup>1</sup>, Alphonse Keller Konkon<sup>1</sup>, Albert Sourou Salako<sup>1</sup>, Virgile Gnanguènon<sup>2</sup>, Raoul Olouko<sup>2</sup>, Daniel Impoinvil<sup>3</sup>, Lamine Baba-Moussa<sup>4</sup>, Martin C. Akogbéto<sup>1</sup>

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**SPECIES-SPECIFIC SALIVARY ANTIGEN ELISAS AS BIOMARKERS OF EXPOSURE TO LA CROSSE VIRUS VECTORS IN NORTH CAROLINA**

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**IMPACT OF INDOOR RESIDUAL SPRAYING WITH SUMISHIELD® 50WG ON ENTOMOLOGICAL DRIVERS OF TRANSMISSION IN KIGOMA REGION NORTHWEST TANZANIA**

**Alphaxard Manjurano<sup>1</sup>**, Karen Nelwin<sup>1</sup>, Eric Lyimo<sup>1</sup>, Coleman Kishamawe<sup>1</sup>, Jacklin Masha<sup>1</sup>, Ziada Kiwanuka<sup>1</sup>, Doris Mangalu<sup>1</sup>, Charles Dismas Mwalimu<sup>2</sup>, Gaudence Rutta<sup>3</sup>, Naomi Serbantez<sup>4</sup>, Lulu Msangi<sup>4</sup>, Kristen George<sup>5</sup>, Lilia Gerberg<sup>5</sup>, Bradford Lucas<sup>5</sup>, Mubita Lwifwatila<sup>3</sup>, Sheila Ogoma Barasa<sup>3</sup>

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**COMPARISON OF UNTREATED AND TREATED INSECTICIDE-TREATED NETS TO DETERMINE THE VALIDITY OF WHO TUNNEL ASSAYS**

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### LATE MORNING BITING BEHAVIOUR OF *ANOPHELES FUNESTUS* IS A RISK FACTOR FOR MALARIA TRANSMISSION IN SCHOOLS IN SIAYA, WESTERN KENYA

Seline Omondi<sup>1</sup>, Jackline Kosgei<sup>1</sup>, George Musula<sup>1</sup>, Margaret Muchoki<sup>1</sup>, Bernard Abong'o<sup>1</sup>, Silas Agumba<sup>1</sup>, Caroline Ogwang<sup>1</sup>, Daniel P. McDermott<sup>2</sup>, Martin J. Donnelly<sup>2</sup>, Sarah G. Staedke<sup>2</sup>, Jonathan Schultz<sup>3</sup>, Julie R. Gutman<sup>3</sup>, John E. Gimnig<sup>3</sup>, Eric Ochomo<sup>1</sup>  
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### KNOCKING OUT TO KNOCK IN: IMPACT OF LOSS OF END JOINING FACTORS ON HOMOLOGY DIRECTED REPAIR INCIDENCE IN THE DISEASE VECTOR MOSQUITO, *Aedes Aegypti*

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### ANTIBODIES TO *Aedes Aegypti* D7L SALIVARY PROTEINS AS A NEW SEROLOGICAL TOOL TO ESTIMATE HUMAN EXPOSURE TO *Aedes* MOSQUITOES

Sophana Chea<sup>1</sup>, Laura Willen<sup>2</sup>, Sreynik Nhek<sup>1</sup>, Piseth Ly<sup>1</sup>, Kristina Tang<sup>2</sup>, James Oristian<sup>2</sup>, Roberto Salas-Carrillo<sup>2</sup>, Aiyana Ponce<sup>2</sup>, Paola Carolina Valenzuela Leon<sup>2</sup>, Dara Kong<sup>1</sup>, Sokna Ly<sup>3</sup>, Ratanak Sath<sup>3</sup>, Chanthap Lon<sup>3</sup>, Rithea Leang<sup>4</sup>, Rekol Huy<sup>4</sup>, Christina Yek<sup>2</sup>, Jesus G. Valenzuela<sup>2</sup>, Eric Calvo<sup>2</sup>, Jessica E. Manning<sup>2</sup>, Fabiano Oliveira<sup>2</sup>  
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### THREE YEARS OF ENTOMOLOGICAL SURVEILLANCE IN HOUSES RECEIVING TARGETED INDOOR RESIDUAL SPRAYING (TIRS) AGAINST *Aedes Aegypti* IN MEXICO

Azael Che-Mendoza<sup>1</sup>, Wilbert Bibiano-Marin<sup>1</sup>, Natalie Dean<sup>2</sup>, Elizabeth Halloran<sup>3</sup>, Ira Longini<sup>4</sup>, Matthew H Collins<sup>2</sup>, Lance A Waller<sup>2</sup>, Hector Gomez-Dantes<sup>5</sup>, Audrey Lehart<sup>6</sup>, Thomas Hladish<sup>4</sup>, Anuar Medina-Barreiro<sup>1</sup>, Gloria Barrera-Fuentes<sup>1</sup>, Gabriela Gonzalez-Olivera<sup>1</sup>, Norma Pavia-Ruz<sup>1</sup>, Guadalupe Ayora-Talavera<sup>1</sup>, Oscar David Kirstein<sup>2</sup>, Pablo Manrique-Saide<sup>1</sup>, Gonzalo Vazquez-Prokopec<sup>2</sup>  
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### TESTING A COMBINED IIT-SIT APPROACH TO CONTROL *Aedes Aegypti* AND URBAN ARBOVIRUS TRANSMISSION IN YUCATAN, MEXICO

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### NON-HOUSEHOLD ENVIRONMENTS PROMOTE DENGUE TRANSMISSION: IMPLICATIONS FOR VECTOR CONTROL

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### VERTICAL AND HORIZONTAL TRANSMISSION OF *MICROSPORIDIA MB*: A *PLASMODIUM* INHIBITING NATURAL SYMBIONT OF *ANOPHELES*

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### DATA-DRIVEN TARGETING OF MALARIA AT-RISK POPULATIONS FOR DISTRIBUTION OF TOPICAL REPELLENTS IN ZIMBABWE

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### TWO MOSQUITO SALIVARY ANTIGENS DEMONSTRATE PROMISE AS BIOMARKERS OF RECENT EXPOSURE TO *P. falciparum* INFECTED MOSQUITO BITES

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### DEPLOYMENT OF ATTRACTIVE TARGETED SUGAR BAITS IN WESTERN ZAMBIA: INSTALLATION, MONITORING, REMOVAL, AND DISPOSAL PROCEDURES DURING A PHASE III CLUSTER RANDOMIZED CONTROL TRIAL

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### MALDI-TOF MASS SPECTROMETRY AS A RELIABLE APPROACH FOR THE SURVEILLANCE OF CHIKUNGUNYA VIRUS IN MOSQUITO VECTORS

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### LANDSCAPE PREDICTORS OF *Aedes aegypti* ABUNDANCE IN A DENGUE-ENDEMIC LOCALITY IN MANAGUA, NICARAGUA

Sophia E. Kruger<sup>1</sup>, Dimitris Gounaridis<sup>2</sup>, José G. Juárez<sup>3</sup>, Harold Suazo<sup>3</sup>, Jacqueline Mojica<sup>3</sup>, Eva Harris<sup>4</sup>, Josefina Coloma<sup>4</sup>, Joseph N.S. Eisenberg<sup>1</sup>  
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### THE POTENTIAL USE OF DIGITAL TOOLS FOR LARVAL SURVEYS IN VECTOR CONTROL: EXPERIENCE FROM ANAMBRA AND ONDO STATES OF NIGERIA

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### STRATEGIES FOR ALTERING THE FREQUENCY AND COVERAGE OF INSECTICIDE-TREATED NET MASS CAMPAIGNS WITH DIFFERENT NET TYPES TO MAXIMIZE CASES AVERTED UNDER FIXED BUDGETS

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### MODELLING THE POTENTIAL OF GENE DRIVE MOSQUITOES FOR MALARIA CONTROL IN SETTINGS WITH MULTIPLE VECTOR SPECIES IN MAINLAND TANZANIA

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### VALIDATION USING ATTRACTIVE SUGAR BAITS (ASBS) CONTAINING A FLUORESCENT DYE IN SIIAYA, WESTERN KENYA: AN EVALUATION OF *ANOPHELES* FEEDING RATES

Jackline Jeruto Kosgei<sup>1</sup>, Seline Omondi<sup>1</sup>, Daniel McDermott<sup>2</sup>, Vincent Moshi<sup>1</sup>, Martin Donnelly<sup>2</sup>, Collins Ouma<sup>3</sup>, Julian Entwistle<sup>4</sup>, Angela F. F. Harris<sup>4</sup>, John E. Gimngi<sup>5</sup>, Feiko O. Ter Kuile<sup>6</sup>, Bernard Abongo<sup>1</sup>, Eric Ochomo<sup>1</sup>  
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### COMPARISON OF SEASONAL MOSQUITO POPULATIONS ACROSS A DIVERSIFYING SEMI-PASTORAL LANDSCAPE IN LOITOKITOK SUB-COUNTY, KENYA

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### THE USE OF INSECTICIDE TREATED EAVE RIBBONS AS A PROTECTION TOOL AGAINST POPULATIONS OF MOSQUITOES THAT TRANSMIT MALARIA AND DENGUE

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### MALARIA TRANSMISSION RISK IN THE CITY OF ACCRA, GHANA

Abdul Rahim Mohammed Sabtiu, Isaac Kwame Sraku, Yaw Akuamoah-Boateng, Judith Azumah, Anisa Abdulai, Simon K. Attah, Fred Aboagye-Antwi, Yaw Asare Afrane  
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### UNDERSTANDING THE ECO-EPIDEMIOLOGY OF MOSQUITOES IN HOUSTON, TEXAS: INFORMING PUBLIC HEALTH STRATEGIES

Morgan Jibowu<sup>1</sup>, Melissa Nolan<sup>2</sup>, Maximea Vigilant<sup>3</sup>, Eric L. Brown<sup>4</sup>, Ryan Ramphul<sup>4</sup>, Heather T. Essigmann<sup>4</sup>, Sarah M. Gunter<sup>1</sup>  
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### URBAN VECTORIAL TRANSMISSION OF MALARIA IN KOULIKORO DISTRICT, MALI

Moussa KEITA<sup>1</sup>, Alassane dit ASSITOUN<sup>1</sup>, Mahamoudou Touré<sup>2</sup>, Daouda OULOUEM<sup>1</sup>, Ibrahim SISSOKO<sup>1</sup>, Daouda Sanogo<sup>2</sup>, Fousseyni KANE<sup>1</sup>, Soumba KEITA<sup>2</sup>, Sory Ibrahim DIAWARA<sup>1</sup>, Mahamadou DIAKITE<sup>1</sup>, Seydou DOUMBIA<sup>1</sup>, Nafomon SOGOBA<sup>1</sup>  
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### THE IMPACT OF CLIMATE CHANGE ON MOSQUITO ENTOMOLOGY AND SPATIOTEMPORAL DENGUE TRANSMISSION

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### TRENDS IN ORGANOPHOSPHATE RESISTANCE AMONG *Aedes aegypti* IN TAPACHULA: IMPLICATIONS FOR VECTOR CONTROL FROM 2018 TO 2021

Karla Saavedra-Rodriguez<sup>1</sup>, Alma Lopez-Solis<sup>2</sup>, Francisco Solis-Santoyo<sup>2</sup>, Farah Vera-Malooof<sup>2</sup>, Patricia Penilla-Navarro<sup>2</sup>  
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### INNOVATIONS RESULTING FROM THE USE OF CULTURED *ANOPHELES* CELL LINES

Jessica Jagelski, Michael Larsen, Niklas Klaus, Michael B. Wells  
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### HYBRIDIZATION BETWEEN *Aedes aegypti* AND *Aedes mascarensis* MOSQUITOES LEADS TO DISRUPTION OF MALE SEX DETERMINATION

Jiangtao Liang<sup>1</sup>, Lin Kang<sup>2</sup>, Pawel Michalak<sup>2</sup>, Igor Sharakhov<sup>1</sup>  
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### CHROMATIN ARCHITECTURE OF THE MALARIA VECTOR, *ANOPHELES COLUZZII*

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### HEAD-SPECIFIC TRANSCRIPTOMIC STUDY REVEALS KEY REGULATORY PATHWAYS FOR WINTER DIAPAUSE IN MOSQUITO *Culex pipiens*

Prabin Dhungana, Xueyan Wei, Cheolho Sim  
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### SUPPRESSION OF H3K27ME2 DEMETHYLASE DISRUPTED DIAPAUSE FORMATION IN MOSQUITO *Culex pipiens*

Xueyan Wei, Prabin Dhungana, Cheolho Sim  
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### MOLECULAR DIVERSITY OF *Anopheles* SPECIES OVER THREE YEARS OF INSECTICIDE-TREATED DURABILITY MONITORING IN KAYES, WESTERN MALI

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### MOLECULAR SURVEILLANCE OF ANOPHELINE VECTORS TO SUPPORT MALARIA ELIMINATION IN BRAZIL

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### POPULATION STRUCTURE OF THE *Aedes albopictus* VIROME IN SUFFOLK COUNTY, LONG ISLAND, NY

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### RADIATION EXPOSURE INDUCES GENOME-WIDE ALTERNATIVE SPLICING EVENTS IN *Aedes aegypti* MOSQUITOES

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### HYBRID ASSEMBLY AND ANNOTATION OF TWO GEOGRAPHICALLY DISTINCT STRAINS OF THE MALARIA VECTOR *Anopheles albimanus* REVEALS LOW INTRA-SPECIFIC DIVERGENCE

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### PHOSPHOPROTEOMICS ANALYSES OF *Aedes aegypti* FAT BODY REVEAL BLOOD MEAL-INDUCED SIGNALING AND METABOLIC PATHWAYS

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## Viruses - Emerging Viral Diseases

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### PREVALENCE OF MALARIA AND LONG-COVID AMONG INDIVIDUALS PREVIOUSLY INFECTED WITH THE SARS-COV-2 VIRUS IN ETHIOPIA AND UGANDA: A CASE CONTROL STUDY

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### EMERGENCE OF CRIMEAN CONGO HEMORRHAGIC FEVER VIRUS IN EASTERN SENEGAL IN 2022

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### INVESTIGATING THE EMERGING BURDEN OF DENGUE IN THE KATHMANDU VALLEY, NEPAL THROUGH A LONGITUDINAL POPULATION-BASED SEROSURVEY

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### DETECTION OF ANTIBODIES TO POSSIBLE FILOVIRUS-LIKE PATHOGENS IN RURAL COMMUNITIES IN SARAWAK, MALAYSIA

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### RE-EMERGENCE OF RIFT VALLEY FEVER VIRUS LINEAGE H IN SENEGAL IN 2022: *IN VITRO* CHARACTERIZATION AND IMPACT ON ITS GLOBAL EMERGENCE IN WEST AFRICA

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### MPOX VIRUS SEROPREVALENCE AMONG INDIVIDUALS VULNERABLE TO INFECTION IN EAST AFRICA

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### FOLLOWING A 50-YEAR HIATUS TAMANA BAT VIRUS (TABV) IS DETECTED AGAIN IN IQUITOS, PERU

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### METABOLOMIC BIOMARKERS IN DENGUE VIRUS INFECTION FOR PREDICTING SEVERE DISEASE

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### PREVALENCE AND PREDICTORS OF PERSISTENT SYMPTOMS POST-ACUTE COVID-19 INFECTION AMONG A COHORT OF FRONTLINE HEALTHCARE WORKERS IN BANGLADESH

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### VIRAL CLEARANCE IN COVID-19 PATIENTS WITH AND WITHOUT COMORBIDITIES IN BAMAKO, MALI

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### CLINICAL AND RISK FACTOR PROFILE OF OROPOUCHE VIRUS DISEASE DURING AN ONGOING OUTBREAK IN THE PERUVIAN AMAZON: FINDINGS FROM THE RIVERA ACUTE FEBRILE ILLNESS SURVEILLANCE STUDY

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### THE GLOBAL HEALTH BURDEN OF CHIKUNGUNYA FROM 2011 TO 2020: A MODEL-DRIVEN ANALYSIS ON THE IMPACT OF AN EMERGING VECTOR-BORNE DISEASE

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### RAPID ALTERNATIVE DETECTION ASSAY OF SARS-COV2 RNA USING A ONE-STEP RT-FAST-MULTIPLEX PCR AND LATERAL FLOW IMMUNOASSAY

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### FIELD EVALUATION OF VALIDITY AND FEASIBILITY OF PAN LASSA RAPID DIAGNOSTIC TEST (RDT) FOR LASSA FEVER IN ABAKALIKI, NIGERIA: A PROSPECTIVE DIAGNOSTIC ACCURACY STUDY

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### COMPARATIVE ANALYSIS OF NS1/IGM RAPID DIAGNOSTIC TESTS (RDT) WITH NS1 AND IGM ELISA FOR DENGUE CASES AND ITS POSSIBLE CORRELATION WITH UNDER-REPORTING OF DENGUE CASES IN INDIA

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### DETECTION OF ANTI-MARBURG VIRUS IGG ANTIBODIES IN WATSA, DEMOCRATIC REPUBLIC OF THE CONGO: 25 YEARS AFTER OUTBREAK

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### DETECTION AND PARTIAL GENOMIC CHARACTERIZATION OF ROTAVIRUS A STRAINS CIRCULATING IN DIARRHEAL OUTBREAKS IN LLAMA AND ALPACA FLOCKS FROM BOLIVIA

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## Viruses - Epidemiology

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### COMORBIDITIES AND HOSPITALIZATION RISK FROM DENGUE, CHIKUNGUNYA, AND ZIKA, PUERTO RICO, 2012-2023

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### TRANSMISSION DYNAMICS OF RIFT VALLEY FEVER AND CRIMEAN-CONGO HEMORRHAGIC FEVER VIRUSES IN THREE DIFFERENT ECOLOGICAL REGIONS IN SENEGAL

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### UNRAVELING THE TRANSMISSION DYNAMICS OF RIFT VALLEY FEVER : INSIGHTS FROM EAST AND CENTRAL AFRICA

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### DENGUE VIREMIA AMONG FEBRILE PERSONS IN GRENADA, WEST INDIES

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### SURVEILLANCE OF CORONAVIRUS IN WILD MAMMALS SEIZED AND RESCUED BY THE NATIONAL FOREST AND WILDLIFE SERVICE OF LIMA, PERU

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### ASSESSING CORRELATIONS IN SEROLOGICAL STATUS TO MULTIPLE VACCINE-PREVENTABLE DISEASES: A CASE-CONTROL STUDY IN ZAMBIA, 2016

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### A SYSTEMATIC LITERATURE REVIEW OF COMMUNITY ARI AND AGE INCIDENCE RATES

Sumona Datta<sup>1</sup>, Adva Gadoth<sup>2</sup>, Morgan A. Marks<sup>2</sup>, Katherine B. Carlson<sup>2</sup>, Emma Viscidi<sup>2</sup>, Marilú Chiang<sup>3</sup>, Robert H. Gilman<sup>4</sup>, Carlton A. Evans<sup>5</sup>

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## 7076

**MARBURG VIRUS DISEASE OUTBREAK PREPAREDNESS AND RESPONSE IN THE SOUTH REGION OF CAMEROON, FEBRUARY - APRIL 2023**

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## 7077

**INVESTIGATING THE EPIDEMIOLOGY AND RISK FACTORS FOR DENGUE VIRUS AND CHIKUNGUNYA VIRUS INFECTIONS IN KARACHI, PAKISTAN**

**Aslam Khan<sup>1</sup>**, Momin Kazi<sup>1</sup>, Junaid Iqbal<sup>2</sup>, Raheel Allana<sup>2</sup>, Talyha Khalid<sup>2</sup>, Caroline Ichura<sup>1</sup>, Desiree LaBeaud<sup>1</sup>  
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## 7078

**CLINICAL CHARACTERISTICS ASSOCIATED WITH DENGUE SEROTYPES IN AMAZONAS, PERU**

**Milagros L. Garcia-Cordova<sup>1</sup>**, Fátima Burgos<sup>1</sup>, Rafael Tapia-Limonchi<sup>1</sup>, Lizandro Gonzales<sup>2</sup>, Carmen Gutierrez<sup>3</sup>, Stella M. Chenet<sup>1</sup>  
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## 7079

**SEROPREVALENCE OF CHIKUNGUNYA VIRUS INFECTION IN SURAT THANI PROVINCE, THAILAND**

**Pathraporn Wichaidit<sup>1</sup>**, Thanita Somton<sup>1</sup>, Krida Uakridathikarn<sup>1</sup>, Arunee Tipwong<sup>1</sup>, Sophon Iamsirithaworn<sup>2</sup>, Taweewun Hunsawong<sup>3</sup>, Aaron Farmer<sup>3</sup>, Darunee Buddhari<sup>3</sup>  
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## 7080

**FACTORS ASSOCIATED WITH DEATH IN PATIENTS ADMITTED WITH EBOLA VIRUS DISEASE TO EBOLA TREATMENT UNITS IN GUINEA, SIERRA LEONE, AND LIBERIA DECEMBER 2013 TO MARCH 2016**

**Ibrahima KABA<sup>1</sup>**, Trokon Omarley Yeabah<sup>2</sup>, Gomathi Ramaswamy<sup>3</sup>, Prabin Dahal<sup>4</sup>, Alexandre Delamou<sup>1</sup>, Benjamin T. Vonhm<sup>2</sup>, Ralph W. Jetoh<sup>2</sup>, Laura Menson<sup>5</sup>, Adam C. Levine<sup>6</sup>, Pryanka Relan<sup>7</sup>, Anthony D. Harries<sup>8</sup>, Ajay MV Kumar<sup>8</sup>  
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## 7081

**MODELING DENGUE FORCE OF INFECTION AMONG EXPATRIATES LIVING IN THAILAND**

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## 7082

**TRENDS IN MORTALITY CAUSED BY VIRAL HEPATITIS IN THE UNITED STATES POPULATION: A RETROSPECTIVE CROSS-SECTIONAL STUDY USING THE CDC WONDER DATABASE**

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## 7083

**DENGUE SEROPREVALENCE AND FORCE OF INFECTION IN THE DEMOCRATIC REPUBLIC OF THE CONGO**

**Antoine Nkuba Ndaye<sup>1</sup>**, Vicco Anna<sup>2</sup>, Benoit Mputu-Ngoyi<sup>1</sup>, Paul Tshiminyi-Munkamba<sup>1</sup>, Lionel Baketana-Kinzonzi<sup>1</sup>, Elysé Matungulu-Biyala<sup>1</sup>, Frida Nkawa<sup>1</sup>, Shubham Shrivastava<sup>3</sup>, Belen Pedrique<sup>4</sup>, Martine Guillem<sup>4</sup>, Isabela Ribeiro<sup>4</sup>, Sheila Makiala-Mandanada<sup>1</sup>, Steve Ahuka-Mundeke<sup>1</sup>, Ilaria Dorigatti<sup>2</sup>  
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## 7084

**A MULTICENTER STUDY TO ASSESS THE EFFECTIVENESS OF AN INACTIVATED COVID-19 VACCINE AGAINST HOSPITALIZED COVID-19 IN THE PHILIPPINES**

**Kristal An Agrupis<sup>1</sup>**, Maria Vinna Crisostomo<sup>1</sup>, Jedas Veronica Daag<sup>1</sup>, March Helena Jane Lopez<sup>1</sup>, Kiarah Louise Florendo<sup>1</sup>, Jude Raphael Lo<sup>1</sup>, Yang-Yang Qi<sup>2</sup>, Gianne Lariz Magsakay<sup>1</sup>, Gretchen Velasco-Ranada<sup>3</sup>, Mitzi Marie Chua<sup>4</sup>, Mitzi Lou Osabel<sup>5</sup>, Lorenz von Seidlein<sup>6</sup>, Xuan-Yi Wang<sup>2</sup>, Michelle Ylade<sup>1</sup>, Jacqueline Deen<sup>1</sup>  
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## 7085

**MOLECULAR EPIDEMIOLOGY IMMUNOLOGICAL RESPONSES TO SARS-COV-2 OTHER RESPIRATORY VIRUSES IN SELECTED URBAN RURAL AREAS OF GHANA**

**GEORGE AGYEI<sup>1</sup>**, MICHAEL OWUSU<sup>1</sup>, PHILIP EL-DUAH<sup>2</sup>, Yaw Adu-Sarkodie<sup>1</sup>  
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**BEYOND RAINFALL: ENVIRONMENTAL DRIVERS OF HISTORIC RIFT VALLEY FEVER OUTBREAKS IN KENYA**Gina E C Chamley<sup>1</sup>, Keli Gerken\* (joint 1st author)<sup>2</sup>, Juliane Heck<sup>3</sup>, Bernard Bett<sup>4</sup>, Eric M. Fèvre<sup>2</sup><sup>1</sup>School of Public Health, Imperial College London, and Institute for Global Health, University College London, London, United Kingdom, <sup>2</sup>International Livestock Research Institute, Nairobi, Kenya and Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool, Liverpool, United Kingdom, <sup>3</sup>Deanery School of Biomedical Sciences, University of Edinburgh, Edinburgh, United Kingdom, <sup>4</sup>International Livestock Research Institute, Nairobi, Kenya

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**CAN'T START A FIRE WITHOUT A SPARK: HIGHLY VARIABLE VIRUS IMPORTATION RATES UNDERLIE THE UNPREDICTABLE TIMING OF CHIKUNGUNYA OUTBREAKS**Alexander Dolnick Meyer<sup>1</sup>, Sandra Mendoza Guerrero<sup>2</sup>, Steven T. Stoddard<sup>2</sup>, T. Alex Perkins<sup>1</sup><sup>1</sup>University of Notre Dame, Notre Dame, IN, United States, <sup>2</sup>Bavarian Nordic Inc, San Diego, CA, United States

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**RISK FACTORS FOR LASSA FEVER VIRUS INFECTION IN A POPULATION-BASED COHORT STUDY IN SIERRA LEONE (IAVI X100)**Donald Grant<sup>1</sup>, Matt A. Price<sup>2</sup>, Nell Bond<sup>3</sup>, Celia R. Glezer<sup>4</sup>, Emily J. Engel<sup>4</sup>, Robert F. Garry<sup>4</sup>, Robert Samuels<sup>1</sup>, Crystal Y. Zheng<sup>4</sup>, Mambu Momoh<sup>1</sup>, Lansansa Kanneh<sup>1</sup>, John S. Schieffelin<sup>4</sup>, Jeffrey G. Shaffer<sup>4</sup>, Suzanna C. Francis<sup>2</sup>, Marija Zaric<sup>2</sup>, Patricia E. Fast<sup>2</sup>, Swati Gupta<sup>2</sup><sup>1</sup>Kenema Government Hospital, Kenema, Sierra Leone, <sup>2</sup>IAVI, New York, NY, United States, <sup>3</sup>Tulane University, New Orleans, LA, United States, <sup>4</sup>Tulane University, New Orleans, LA, United States

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**MOLECULAR DIAGNOSIS AND CLINICAL CHARACTERISTICS OF CHIKUNGUNYA VIRUS INFECTIONS IN THE PERUVIAN JUNGLE, 2020-2023**Miguel A. Aguilar-Luis<sup>1</sup>, Hugh Watson<sup>2</sup>, Ronald Aquino-Ortega<sup>1</sup>, Yordi Tarazona-Castro<sup>1</sup>, Wilmer Silva-Caso<sup>1</sup>, SeungHwan Lee<sup>3</sup>, Sang Chun Ji<sup>3</sup>, Felipe Cabellos-Altamirano<sup>4</sup>, Juana del Valle-Mendoza<sup>1</sup><sup>1</sup>Universidad Peruana de Ciencias Aplicadas, Lima, Peru, <sup>2</sup>Evotec ID, Lyon, France, <sup>3</sup>Seoul National University College of Medicine and Hospital, Seoul, Republic of Korea, <sup>4</sup>Dirección Subregional de Salud de Jaén, Jaén, Peru**Viruses - Field and Ecological Studies of Viruses, Including Surveillance and Spillover Risk and Emergence**

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**UNVEILING THE PATH TO POLIO ERADICATION: INSIGHTS FROM CONSECUTIVE SEROPREVALENCE SURVEYS AMONG PAKISTANI CHILDREN**Sajid Bashir Soofi<sup>1</sup>, Muhammad Umer<sup>1</sup>, Imtiaz Hussain<sup>1</sup>, Shabina ariff<sup>1</sup>, Jeff Partridge<sup>2</sup>, Imran Ahmed<sup>1</sup>, Ahmad Khan<sup>1</sup><sup>1</sup>Aga Khan University, Karachi, Pakistan, <sup>2</sup>Bill & Melinda Gates Foundation, Seattle, WA, United States

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**ADDRESSING CHALLENGES IN WASTEWATER EPIDEMIOLOGICAL SURVEILLANCE IN TROPICAL REGIONS: COSTA RICAN EXPERIENCE**Luz Chacon Jimenez<sup>1</sup>, Luis Rivera-Montero<sup>1</sup>, Jose Montiel-Mora<sup>1</sup>, Ernesto Alfaro-Arrieta<sup>2</sup>, Pablo Rivera-Navarro<sup>3</sup>, Kenia Barrantes-Jiménez<sup>1</sup><sup>1</sup>Universidad de Costa Rica, Montes de Oca, Costa Rica, <sup>2</sup>Laboratorio Nacional del Aguas, Instituto Costarricense de Acueductos y Alcantarillados (National Water Laboratory, Costa Rican Institute of Aqueducts and Sewerage (Instituto Costarricense de Acueductos y Alcantarillados), La Unión, Costa Rica, <sup>3</sup>Laboratorio Nacional del Aguas, Instituto Costarricense de Acueductos y Alcantarillados (National Water Laboratory, Costa Rican Institute of Aqueducts and Sewerage (Instituto Costarricense de Acueductos y Alcantarillados), La Unión, Costa Rica

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**HIGH CIRCULATION OF AVIAN INFLUENZA H9N2 SUBTYPE IN LIVE BIRD MARKETS, A NEW EMERGING THREAT IN SENEGAL**Mamadou Malado Jallow<sup>1</sup>, Moussa Moise Diagne<sup>1</sup>, Ndiende Koba Ndiaye<sup>1</sup>, Marie Pedepa Mendy<sup>1</sup>, Seynabou Mbaye Ba Souna Diop<sup>1</sup>, Sara Sy<sup>1</sup>, Davy Kiory<sup>1</sup>, Deborah Goudiaby<sup>1</sup>, Malick Fall<sup>2</sup>, Ndongo Dia<sup>1</sup><sup>1</sup>Institut Pasteur de Dakar, Dakar, Senegal, <sup>2</sup>Département de Biologie Animale, Faculté des Sciences et Techniques, Université Cheikh Anta DIOP, Dakar, Senegal

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**THE PHAGE FACTOR IN ANTIBIOTIC RESISTANCE SPREAD IN THE HOSPITAL AND URBAN SEWAGE SYSTEMS IN GREATER ACCRA REGION, GHANA**

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**COMET: A DATABASE TO UNTANGLE VIRAL, MOSQUITO, AND ABIOTIC DRIVERS OF VECTOR COMPETENCE**Emily N. Gallichotte<sup>1</sup>, Cole Brookson<sup>2</sup>, Gregory D. Ebel<sup>1</sup>, Colin Carlson<sup>2</sup><sup>1</sup>Colorado State University, Fort Collins, CO, United States, <sup>2</sup>Georgetown University, Washington DC, DC, United States

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**CO-OCCURRENCE OF VIRAL PATHOGENS IN CHILDREN: INVESTIGATING RESPIRATORY AND GASTROINTESTINAL SYMPTOMS IN SÃO PAULO, BRAZIL, 2021**Adriana Luchs<sup>1</sup>, Natanael S. Adiwardana<sup>2</sup>, Ellen Viana<sup>1</sup>, Lais S. Azevedo<sup>1</sup>, Raquel Guiducci<sup>1</sup>, Yasmin França<sup>1</sup>, Simone Guadagnucci<sup>1</sup>, Adriana Parise<sup>1</sup>, Vanessa M. Silva<sup>1</sup>, Mauricio L. Nogueira<sup>3</sup><sup>1</sup>Adolfo Lutz Institute, Sao Paulo, Brazil, <sup>2</sup>Pediatric Emergency Care at Barueri Central Emergency Center, Sao Paulo, Brazil, <sup>3</sup>São José do Rio Preto School of Medicine, Sao Jose do Rio Preto, Brazil

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**CO-CIRCULATION OF TWO LINEAGES OF OROPOUCHE VIRUS IN THE AMAZON BASIN, COLOMBIA, 2024**Daniel Limonta<sup>1</sup>, Jaime Usuga<sup>2</sup>, Laura S. Perez-Restrepo<sup>2</sup>, Karl A. Ciuoderis<sup>3</sup>, Isabel Moreno<sup>2</sup>, Angela Arevalo<sup>2</sup>, Vanessa Vargas<sup>2</sup>, Michael G. Berg<sup>4</sup>, Gavin A. Cloherty<sup>4</sup>, Juan P. Hernandez-Ortiz<sup>2</sup>, Jorge E. Osorio<sup>2</sup><sup>1</sup>University of Wisconsin, Madison, WI, United States, <sup>2</sup>One Health Colombia, National University of Colombia, Medellín, Colombia, <sup>3</sup>Global Health Institute, University of Wisconsin, Madison, WI, United States, <sup>4</sup>Infectious Diseases Research, Abbott Diagnostics and Abbott Pandemic Defense Coalition, Abbott Park, IL, United States

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**SEROPREVALENCE OF DENGUE VIRUS IN THE TAMPA BAY REGION OF FLORIDA AMONG HOSPITALIZED PATIENTS WITH RESPIRATORY SYMPTOMS IN 2020 AND 2021**Emma C. Underwood<sup>1</sup>, Iset Vera<sup>1</sup>, Dylan Allen<sup>1</sup>, Joshua Alvior<sup>1</sup>, Marci O'Driscoll<sup>2</sup>, Suzane Silbert<sup>2</sup>, Kami Kim<sup>1</sup>, Kelli L. Barr<sup>1</sup><sup>1</sup>University of South Florida, Tampa, FL, United States, <sup>2</sup>Tampa General Hospital, Tampa, FL, United States

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**EFFECT OF PRIOR DENGUE INFECTION AND SINGLE-DOSE DENGUE VACCINATION ON THE RISK OF SUBSEQUENT VIROLOGICALLY CONFIRMED DENGUE: A FIVE-YEAR PROSPECTIVE COHORT STUDY IN CEBU, PHILIPPINES**Michelle Ylade<sup>1</sup>, Ma. Vinna Crisostomo<sup>1</sup>, Jedas Veronica Daag<sup>1</sup>, Kristal An Agrupis<sup>1</sup>, Anna Maureen Cuachin<sup>1</sup>, Ava Kristy Sy<sup>2</sup>, Deok Ryun Kim<sup>3</sup>, Hyeon Seon Ahn<sup>3</sup>, Ana Coello Escoto<sup>4</sup>, Leah Katzelnick<sup>4</sup>, Cameron Adams<sup>5</sup>, Laura White<sup>5</sup>, Aravinda de Silva<sup>5</sup>, Jacqueline Deen<sup>1</sup>, Anna Lena Lopez<sup>1</sup><sup>1</sup>University of the Philippines Manila, Manila, Philippines, <sup>2</sup>Research Institute for Tropical Medicine, Muntinlupa, Philippines, <sup>3</sup>International Vaccine Institute, Seoul, Republic of Korea, <sup>4</sup>National Institutes of Health, Bethesda, MD, United States, <sup>5</sup>University of North Carolina School of Medicine, Chapel Hill, NC, United States

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**MORPHOLOGICAL AND MOLECULAR IDENTIFICATION OF Aedes mosquito potential vector of Arbovirus in Kati Faladie, Mali**

Fatalmoudou Tandina, Antoine Dara, Laurent Dembele, Kadia Doumbia, Sekou Sissoko, Adam Garango, Mohamed Touré, Fatoumata Ballo, Siaka Goita, Abdoulaye Djimé

USTTB, Bamako, Mali

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**PRELIMINARY EVIDENCE OF SILENT CIRCULATION OF ORTHOFLAVIVIRUS NILENSE IN EQUIDAE POPULATION IN PIAUI STATE, NORTHEAST BRAZIL**André A. Dos Santos<sup>1</sup>, Jéssica C. De Almeida Dias<sup>2</sup>, Marcio J. L. Siconelli<sup>2</sup>, Milene S. Ferreira<sup>3</sup>, Livia C. Martins<sup>3</sup>, BENEDITO Antonio Lopes da FONSECA<sup>2</sup>, Lilian S. Catenacci<sup>4</sup><sup>1</sup>Instituto de Medicina Veterinária - Universidade Federal do Pará, Belém, Brazil, <sup>2</sup>School of Medicine of Ribeirão Preto, Ribeirão Preto, Brazil, <sup>3</sup>Evandro Chagas Institute, Belém, Brazil, <sup>4</sup>Centro de Ciências Agrárias - Universidade Federal do Piauí, Teresina, Brazil

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**CHARACTERIZATION OF KOUTANGO VIRUS FROM PHLEBOTOMINE SANDFLIES COLLECTED IN ISIOLO AND BARINGO COUNTIES OF KENYA**Jane Wambui Thiiru<sup>1</sup>, Solomon K. Langat<sup>2</sup>, Francis Mulwa<sup>2</sup>, Stephanie Cinkovich<sup>3</sup>, Hellen Koka<sup>2</sup>, Santos Yalwala<sup>1</sup>, Samoel Khamadi<sup>2</sup>, Justus Onguso<sup>4</sup>, Nicholas Odemba<sup>1</sup>, Francis Ngere<sup>1</sup>, Jaree Johnson<sup>5</sup>, Elly Ojwang<sup>6</sup>, Timothy Egbo<sup>6</sup>, Eric Garges<sup>6</sup>, Fredrick Eyase<sup>1</sup><sup>1</sup>Walter Reed Army Institute of Research-Africa (WRAIR-Africa)/Kenya Medical Research Institute, Nairobi, Kenya, <sup>2</sup>Nairobi, Kenya, <sup>3</sup>Centre for Virus Research, Kenya Medical Research Institute, Nairobi, Kenya, <sup>4</sup>Global Emerging Infections Surveillance Branch, United States Armed Forces Health Surveillance Division., Maryland, MD, United States, <sup>5</sup>Institute for Biotechnology Research, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, <sup>6</sup>United States Armed Forces Pest Management Board, Maryland, MD, United States, <sup>6</sup>Walter Reed Army Institute of Research - Africa, Kisumu, Kenya**Viruses - Immunology**

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**DISSECTING ANTIGEN-SPECIFIC T CELL RESPONSES TO MPOX IN VACCINATION AND INFECTION BY GENOME-WIDE ANTIGEN SCREENING**

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**PRIOR ZIKA VIRUS INFECTION RESTRICTS DIVERSITY OF SUBSEQUENT ACUTE-PHASE PLASMA BLAST RESPONSE TO DENGUE VIRUS SEROTYPE 2 AND PREFERENTIALLY SELECTS A SINGLE CLONE**Tulika Singh<sup>1</sup>, Sandra Bos<sup>1</sup>, Tiffany Kim<sup>2</sup>, Gerald Vásquez Alemán<sup>3</sup>, Miriam Walter<sup>2</sup>, Nharae Lee<sup>1</sup>, Elias Duarte<sup>1</sup>, Aaron Graber<sup>1</sup>, Amir Balakhmet<sup>1</sup>, Jose Victor Zambrana<sup>3</sup>, Jorge Ruiz<sup>3</sup>, Angel Balmaseda<sup>4</sup>, Eun-Young Kim<sup>2</sup>, Steven Wolinsky<sup>2</sup>, Eva Harris<sup>1</sup><sup>1</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>Feinberg School of Medicine, Northwestern University, Chicago, IL, United States, <sup>3</sup>Sustainable Sciences Institute, Managua, Nicaragua, <sup>4</sup>Laboratorio Nacional de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

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**BLOOD BIOMARKERS THAT PROSPECTIVELY PREDICT HIV-1 INFECTION IN HIGH RISK ADULTS**

Kioko Mwikali, Abdurahman Abdi, Eunice Nduati

KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya

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**SURVEILLANCE OF ACUTE FEBRILE ILLNESSES IN THE COUNTRY OF GEORGIA: INSIGHTS FROM A HOSPITAL-BASED STUDY**Magda Metreveli<sup>1</sup>, Nora Kokaia<sup>2</sup>, Manana Makharadze<sup>2</sup>, Tamar Jajanidze<sup>1</sup>, Shorana Mazmaniani<sup>1</sup>, Damon Ellison<sup>3</sup>, Thomas Musich<sup>1</sup>, Nino Trapaidze<sup>1</sup><sup>1</sup>Walter Reed Army Institute of Research-Europe and the Middle East, Tbilisi, Georgia, <sup>2</sup>Research Institute of Medical Parasitology and Tropical Medicine, Tbilisi, Georgia, <sup>3</sup>Walter Reed Army Institute of Research-Europe and Middle East, Silver Spring, MD, United States

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**HUMAN IN VITRO MODELING CHARACTERIZES MECHANISM OF ACTION OF ADJUVANTATION SYSTEMS DEFINING SCALABLE AND AFFORDABLE PRECISION VACCINE FORMULATIONS FOR EARLY CHILDHOOD**

Sanya Thomas, Caitlin Syphurs, Kevin Ryff, Simon Doss-Gollin, Kayla Lesch, Ofer Levy, Joann Arce, Simon van Haren

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**SEROLOGICAL PROFILING OF RESPONSES TO VACCINATION AND/OR INFECTIONS CRITICAL TO UNLOCK IMMUNE CORRELATES OF PROTECTION**Jessica S. Bolton<sup>1</sup>, Rupsa Boelig<sup>2</sup>, Elke S. Bergmann-Leitner<sup>1</sup><sup>1</sup>Biologics Research & Development Branch, Walter Reed Army Institute of Research, Silver Spring, MD, United States, <sup>2</sup>Department of Obstetrics and Gynecology, Division of Maternal Fetal Medicine, Sidney Kimmel Medical College, Thomas Jefferson University, Philadelphia, PA, United States

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### CYTOKINE PROFILING REVEALS DISTINCTIVE IMMUNE RESPONSES IN DENGUE, ZIKA, CHIKUNGUNYA AND MAYARO VIRUS INFECTIONS

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### SERUM INTERLEUKIN-6 AND ZINC LEVELS ARE ASSOCIATED WITH SEVERITY IN COVID-19 PATIENTS FROM LIMA, PERU

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### SERUM SPIKE SPECIFIC IGG3 SERVES AS A DISTINGUISHING IMMUNOLOGICAL MARKER BETWEEN SARS-COV-2 INFECTION AND VACCINATION

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### NO DISTINCT CYTOKINE, CHEMOKINE AND GROWTH FACTOR (CCG) BLOOD PROFILE ASSOCIATED WITH MONKEYPOX VIRUS CLADE IIB INFECTED PATIENTS

**Eugene Bangwen**, Nicole Berens-Riha, Nicky De Vrij, Ann Ceulemans, Isabel Brosius, Elise De Vos, Thao-Thy Pham, Marjan Van Esbroeck, Koen Vercauteren, Christophe Van Dijck, Wim Adriaensen, Laurens Liesenborghs

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### MODULATION OF THE SPP1 GENE BY CHIKUNGUNYA VIRUS INFECTION *IN VITRO* AND ITS POSSIBLE IMPLICATION IN INFLAMMATION AND DISEASE SEVERITY

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### INFLUENCE OF COUNSELLING ON POSITIVE STATUS DISCLOSURE AND VIRAL SUPPRESSION AMONG PEOPLE LIVING WITH HIV IN GHANA

Miriam Mensah<sup>1</sup>, **Sampson Kafui Djonor<sup>2</sup>**, Kekeli Akosua Seanefu<sup>3</sup>, Vincent Ganu<sup>4</sup>, Peter Pupilampu<sup>4</sup>, Margaret M. Lartey<sup>5</sup>, Peter Worlanyo Abomah<sup>6</sup>, Gladstone Agbakpe<sup>6</sup>

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### PERSISTENCE OF ANTI-YELLOW FEVER VIRUS IMMUNOGLOBULIN M ANTIBODIES POST-VACCINATION AND ITS REACTIVITY TO THE ENVELOPE DOMAIN III ANTIGEN OF THE YELLOW FEVER VIRUS

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### AEDES AEGYPTI MOSQUITO SALIVA INHIBITS HUMAN T CELL PROLIFERATION: IMPLICATIONS FOR ARBOVIRAL DISEASE OUTCOME?

**Laura Willen<sup>1</sup>**, Kristina Tang<sup>1</sup>, Sreynik Nhek<sup>2</sup>, Claudio Meneses<sup>1</sup>, Christina Yek<sup>2</sup>, Jessica Manning<sup>1</sup>, Fabiano Oliveira<sup>1</sup>

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### HUMORAL IMMUNITY FOLLOWING VACCINATION IS SUFFICIENT TO PROTECT AGAINST RIFT VALLEY FEVER VIRUS ENCEPHALITIS

**Karina Mueller Brown**, Dominique J. Barbeau, Anita K. McElroy  
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### DEFINING INNATE IMMUNE MEDIATORS REQUIRED FOR THE EFFECTIVE RIFT VALLEY FEVER VIRUS ANTIVIRAL RESPONSE

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### IDENTIFICATION OF EPITOPE-SPECIFIC T CELL RESPONSES TO LASSA BY GENOME-WIDE ANTIGEN SCREENING AND CONSERVATION ACROSS ARENAVIRIDAE

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### FILOVIRUS VIRUS GLYCOPROTEIN - EPITOPE MAPPING, AND PSEUDOTYPING

**Edgar Davidson<sup>1</sup>**, Sonya M. Jacobsen<sup>1</sup>, Philipp A. Ilinykh<sup>2</sup>, Alexander Bukreyev<sup>2</sup>, James E. Crowe Jr.<sup>3</sup>, Benjamin J. Doranz<sup>1</sup>

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## Viruses - Therapeutics and Antiviral Drugs

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### INHIBITORY EFFECTS OF PLANT-DERIVED COMPOUNDS ON ROTAVIRUS PATHOGENESIS

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**THE ARYL HYDROCARBON RECEPTOR/AXL PATHWAY AT THE CROSSROADS BETWEEN POLLUTION AND VIRAL INFECTIONS**Miguel A. Pelaez<sup>1</sup>, Maria F. Torti<sup>1</sup>, Carla Tomatis<sup>2</sup>, Eugenio A. Carrera Silva<sup>2</sup>, Cybele C. Garcia<sup>1</sup><sup>1</sup>Departamento de Química Biológica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Autónoma de Buenos Aires, Argentina, <sup>2</sup>Instituto de Medicina Experimental, Academia Nacional de Medicina-CONICET, Ciudad Autónoma de Buenos Aires, Argentina

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**SARS-COV-2 MAIN PROTEASE: MOLECULAR DYNAMIC SIMULATION WITH COMPOUNDS FROM AFRICAN NATURAL PRODUCTS**DIABATE Oudou<sup>1</sup>, Cheickna CISSE<sup>2</sup>, Jeffrey G Shaffer<sup>3</sup>, Abdoulaye DIAWARA<sup>1</sup>, Mamadou WELE<sup>1</sup>, Seydou DOUMBIA<sup>4</sup>, Opeyemi SOREMEKUN<sup>5</sup>, Segun FATUMO<sup>6</sup><sup>1</sup>African Centre of Excellence in Bioinformatics (ACE-B), University of Sciences, Technics and Technologies of Bamako (USTTB), Mali, Bamako, Mali, <sup>2</sup>University of Sciences, Technics and Technologies of Bamako (USTTB), Mali, Bamako, Mali, <sup>3</sup>Department of Biostatistics and Data Science, Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, USA, New Orleans, NY, United States, <sup>4</sup>University of Clinical Research Center (UCRC), University of Sciences, Technics and Technologies of Bamako (USTTB), Mali, Bamako, Mali, <sup>5</sup>The African Computational Genomics (TAGC) Research group, MRC/UVRI and LSHTM, Entebbe, Uganda, Entebbe, Uganda, <sup>6</sup>Department of Non-communicable Disease Epidemiology (NCDE), London School of Hygiene & Tropical Medicine London, UK, UK, United Kingdom

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**PROMISING EFFECT OF SILYMARIN IN AN ANIMAL MODEL OF ARTHRITIS AND MYOSITIS INDUCED BY ALPHAVIRUS MAYARO AND CHIKUNGUNYA VIRUSES**Rafaela Lameira Souza Lima<sup>1</sup>, Ariane Coelho Ferraz<sup>1</sup>, Marília Bueno da Silva Menegatto<sup>1</sup>, Maria Eduarda Diniz Starling<sup>1</sup>, Oluwashola Samuel Olaolu<sup>1</sup>, José Carlos de Magalhães<sup>2</sup>, Cintia Lopes de Brito Magalhães<sup>1</sup><sup>1</sup>Federal University of Ouro Preto, Ouro Preto, Brazil, <sup>2</sup>Federal University of São João del Rey, Ouro Branco, Brazil

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**DISCOVERY OF NOVEL HENIPAVIRUS INHIBITORS**Judith Straimer<sup>1</sup>, James R. Manning<sup>1</sup>, Johanna Jansen<sup>1</sup>, Richard T. Eastman<sup>1</sup>, Ryan Chan<sup>1</sup>, Fred King<sup>1</sup>, Yvonne Wang<sup>1</sup>, Ahmed Rohaim<sup>1</sup>, Tiffany Tsang<sup>1</sup>, Colin Deniston<sup>1</sup>, Cosmo Buffalo<sup>1</sup>, Darlene Chen<sup>1</sup>, Atul Sathe<sup>1</sup>, Shreeya Hegde<sup>1</sup>, Jeanne Dudley<sup>1</sup>, Debapriya Sengupta<sup>1</sup>, Zhenhang Chen<sup>2</sup>, Alka Jays<sup>3</sup>, Moushimi Amaya<sup>3</sup>, Rachel O'Toole<sup>4</sup>, Olivier Escaffre<sup>4</sup>, Robert Cross<sup>4</sup>, Bo Liang<sup>2</sup>, Alexander Freiberg<sup>4</sup>, Christopher Broder<sup>3</sup>, Thomas Geisbert<sup>4</sup>, Nadine Jarrousse<sup>1</sup><sup>1</sup>Novartis Biomedical Research, Emeryville, CA, United States, <sup>2</sup>Emory University, Atlanta, GA, United States, <sup>3</sup>Uniformed Services University, Bethesda, MD, United States, <sup>4</sup>The University of Texas Medical Branch, Galveston, TX, United States

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**ASSAY DEVELOPMENT OF FLAVIVIRUSES CELL-BASED LUCIFERASE REPORTER SYSTEM TO ENABLE HIGH THROUGHPUT DRUG DISCOVERY**

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**ESTABLISHMENT OF A BSL-2 NIPAH MINIGENOME SYSTEM FOR ANTIVIRAL DRUG DISCOVERY.**

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**RAPID-RESPONSE RNA-FISH ASSAY PLATFORM FOR CORONAVIRUS ANTIVIRAL HIGH-THROUGHPUT SCREENING**

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**UNVEILING THE ANTIVIRAL POTENTIAL OF WEDELACTONE AGAINST THE OROPOUCHE VIRUS**Marielena Vogel Saivish<sup>1</sup>, Rafaela dos S. Peinado<sup>2</sup>, Gabriela de Lima Menezes<sup>3</sup>, Roosevelt Alves da Silva<sup>4</sup>, Umberto Laino Fulco<sup>3</sup>, Carolina C. Pacca<sup>5</sup>, Raphael J. Eberle<sup>6</sup>, Mônica A. Coronado<sup>6</sup>, Mauricio Lacerda Nogueira<sup>1</sup><sup>1</sup>Faculdade de Medicina de São José do Rio Preto / The University of Texas Medical Branch, São José do Rio Preto / Galveston - TX, Brazil, <sup>2</sup>São Paulo State University, São José do Rio Preto, Brazil, <sup>3</sup>Universidade Federal do Rio Grande do Norte, Natal, Brazil, <sup>4</sup>Universidade Federal de Jataí, Jataí, Brazil, <sup>5</sup>Fundação Oswaldo Cruz - Instituto Rene Rachou, Belo Horizonte, Brazil, <sup>6</sup>Institute of Biological Information Processing IBI-7: Structural Biochemistry, Forschungszentrum Jülich, Jülich, Germany

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**2-PYRIMIDONE COMPOUND SERIES PREVENTS ACUTE VIREMIA AND CHRONIC CHIKUNGUNYA VIRUS IN A MOUSE MODEL OF INFECTION**Zachary Streblov<sup>1</sup>, Nicole Haese<sup>1</sup>, Corinne Augelli-Szafran<sup>2</sup>, Takeshi Ando<sup>1</sup>, Michael Denton<sup>1</sup>, Samuel Medica<sup>1</sup>, Craig Kreklywich<sup>1</sup>, Mark Heise<sup>3</sup>, Thomas Morrison<sup>4</sup>, Omar Moukha-Chafiq<sup>2</sup>, Ashish Pathak<sup>5</sup>, Daniel Streblov<sup>1</sup><sup>1</sup>Oregon Health and Science University, Beaverton, OR, United States, <sup>2</sup>Southern Research, Birmingham, AL, United States, <sup>3</sup>University of North Carolina School of Medicine, Chapel Hill, NC, United States, <sup>4</sup>University of Colorado School of Medicine, Aurora, CO, United States, <sup>5</sup>NIH/NIAID, Rockville, MD, United States

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**IN VITRO ANTI-SARS-COV-2 ACTIVITY OF CPM01 HERBAL TINCTURE AND ITS FRACTIONS**Frederick Ayertey<sup>1</sup>, James O. Aboagye<sup>2</sup>, Sylvester Kaminta<sup>2</sup>, Peter P. Wormenor<sup>2</sup>, Araba Abaidoo-Myles<sup>2</sup>, Christopher Z. Abana<sup>2</sup>, Anthony T. Boateng<sup>2</sup>, Prince A. Nartey<sup>2</sup>, Charlotte B. Bortey<sup>2</sup>, Dzidzor Attoh<sup>2</sup>, Helena Lamptey<sup>2</sup>, Evelyn Y. Bonney<sup>2</sup>, Kofi Donkor<sup>1</sup>, Alex Asaase<sup>1</sup>, George B. Kyei<sup>2</sup><sup>1</sup>Centre for Plant Medicine Research, Mampong-Akwapem, Ghana, <sup>2</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana

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**GENERATION OF ANTIVIRAL RECOMBINANT PROTEINS TO OVERCOME MOSQUITO-BORNE VIRUS INFECTION**Erin Markle<sup>1</sup>, Anak Agung Dew Megawati<sup>1</sup>, Michelle Azuma<sup>1</sup>, Alexander Franz<sup>2</sup>, Loubna Tazi<sup>1</sup>, Gregory Brennan<sup>1</sup>, Stefan Rothenburg<sup>1</sup><sup>1</sup>University of California, Davis, Davis, CA, United States, <sup>2</sup>University of Missouri, Columbia, Columbia, MO, United States

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**USE OF AN INSECT CELL EXPRESSION PLATFORM FOR THE PRODUCTION OF NIPAH AND CRIMEAN-CONGO HEMORRHAGIC FEVER VIRAL FUSION, GLYCO-, AND NUCLEOPROTEINS**Isabelle E. Y. Eiser<sup>1</sup>, Albert To<sup>1</sup>, Lisa Hensley<sup>2</sup>, Axel Lehrer<sup>1</sup><sup>1</sup>University of Hawaii, Honolulu, HI, United States, <sup>2</sup>Zoonotic and Emerging Disease Research Unit, National Bio and Agro-Defense Facility, USDA Agricultural Research Service (ARS), Manhattan, KS, United States

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### INITIAL CLINICAL CHARACTERIZATION OF EGT710, A NOVEL CORONAVIRUS MPRO INHIBITOR, FOLLOWING ORAL ADMINISTRATION TO HEALTHY ADULTS

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### INVESTIGATION OF ANTIVIRAL ACTIVITY OF MEK INHIBITORS AGAINST YELLOW FEVER VIRUS USING *IN VIVO* MODEL

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### EX VIVO ANALYSIS OF AN IL2/ANTI-IL2 COMPLEX FOR THE TREATMENT OF CHRONIC CHIKUNGUNYA ARTHRITIS IN A COLOMBIAN COHORT

**Sarah R. Tritsch**, Jose Forero Mejia, Alfonso Sucerquia Hernández, Christopher N. Mores, Aileen Y. Chang  
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### NOVEL IL2 FUSION PROTEIN FOR THE TREATMENT OF CHIKUNGUNYA VIRUS-INDUCED CHRONIC ARTHRITIS IN A MOUSE MODEL

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### SYNTHESIS OF NOVEL QUINONES WITH ANTIVIRAL ACTIVITY AGAINST IMPORTANT HUMAN FLAVIVIRUSES

**Henry Puerta-Guardo<sup>1</sup>**, Julio Aguiar Pech<sup>2</sup>, Manuel Parra-Cardena<sup>1</sup>, Guadalupe Ayora Talavera<sup>1</sup>, Rocio de Lourdes Borges Argáez<sup>2</sup>  
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## Viruses - Transmission Biology

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### BIASES IN ATTRIBUTION METHODS FOR NOROVIRUS ACUTE GASTROENTERITIS

**Dehao Chen<sup>1</sup>**, Kristin Nelson<sup>1</sup>, Kayoko Shioda<sup>2</sup>, Andrew F. Brouwer<sup>3</sup>, Alicia N. M. Kraay<sup>4</sup>, Andreas Handel<sup>5</sup>, Ben Lopman<sup>1</sup>, Elizabeth T. Rogawski McQuade<sup>1</sup>  
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### TOSCANA VIRUS - FINDING THE NEW VECTORS

Nikola Polanska<sup>1</sup>, Adrien Thiesson<sup>2</sup>, Maxime Ratinier<sup>2</sup>, Frederick Arnaud<sup>2</sup>, Marketa Stejskalova<sup>1</sup>, Marketa Rehbergerova<sup>1</sup>, Alain Kohl<sup>3</sup>, Petr Volf<sup>1</sup>, **Magdalena Jancarova<sup>1</sup>**  
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### THE IMPACT OF CHRONIC SCHISTOSOMIASIS ON CO-INFECTIONS WITH DENGUE VIRUS IN MADAGASCAR

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### MONITORING SURFACE CONTAMINATION WITH SARS-COV-2 AND INFLUENZA IN AN ADVANCED RESEARCH LABORATORY SETTING IN GHANA: A PROPOSAL FOR EFFECTIVE PREVENTIVE MEASURES

**Roberta Dedei Afi Tackie**, Ivy Asantewaa Asante, Joseph Ahia Quacoo, Vanessa Louise Magnusen, Juliet Sefakor Wordui, Nana Afia Asante Ntim, Joseph Asuam Nyarko, Victor Akyedzi Osei  
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### MULTIFACTORIAL CHARACTERIZATION OF DENGUE TRANSMISSION DYNAMICS IN THE FRENCH CARIBBEAN ISLANDS TO BETTER PREPARE FOR FUTURE EPIDEMICS

**Margot Garcia -- Van Smévoorde<sup>1</sup>**, Elodie Calvez<sup>1</sup>, Geraldine Piorkowski<sup>2</sup>, Xavier de Lamballerie<sup>2</sup>, Georges Dos Santos<sup>3</sup>, Raymond Césaire<sup>4</sup>, Anubis Vega-Rua<sup>1</sup>  
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### A COMPREHENSIVE ANALYSIS OF COINFECTION DYNAMICS MODULATING MOSQUITO VECTOR COMPETENCE

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### MIDGUT ESCAPE OF YELLOW FEVER 17D VACCINE IN Aedes Aegypti AT AUGMENTED TEMPERATURES

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### A SPATIALLY RESOLVED AND ENVIRONMENTALLY INFORMED FORECAST MODEL OF WEST NILE VIRUS AND ST. LOUIS ENCEPHALITIS VIRUS IN COACHELLA VALLEY, CALIFORNIA

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## Malaria - Antimalarial Resistance and Chemotherapy

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### A DOUBLE THREAT TO ACT EFFICACY IN AFRICA: REDUCED SUSCEPTIBILITY OF *PLASMODIUM FALCIPARUM* TO BOTH ARTEMISININ AND LUMEFANTRINE

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### COMBINATION OF REDOX MODIFIERS WITH ARTEMISININ RESULTS IN INCREASED PARASITE SUSCEPTIBILITY TO ARTEMISININS

**Annie Roys<sup>1</sup>**, Ghizal Siddiqui<sup>1</sup>, Carlo Giannangelo<sup>1</sup>, Darren Creek<sup>1</sup>, Natalie Counihan<sup>2</sup>  
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### VARIABILITY IN ANTIMALARIAL DRUG SUSCEPTIBILITY PATTERNS IN KISUMU AND MARIGAT DURING THE PERIOD OF INCREASING FREQUENCY OF ARTEMISININ RESISTANCE GENOTYPES

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### MALARIA DIAGNOSIS AND DRUG RESISTANCE IN A MILITARY HOSPITAL IN YAOUNDE, CAMEROON

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### INVESTIGATING *PLASMODIUM FALCIPARUM* EX-VIVO DRUG RESPONSES TO ARTEMISININ-BASED COMBINATION THERAPIES (ACTS) PARTNER DRUGS IN GHANA

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### AMPLICON DEEP SEQUENCING OF *PFKELCH13* GENE IN PATIENTS WITH *PLASMODIUM FALCIPARUM* MALARIA DURING THE THERAPEUTIC EFFICACY STUDY TRIALS FROM 2020 TO 2022 IN SENEGAL

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### DISSECTING THE ROLE OF *PLASMEPSIN II AND III* IN PIPERAQUINE RESISTANT *P. FALCIPARUM* LINES

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### POPULATION PHARMACOKINETICS OF ARTEMETHER-LUMEFANTRINE PLUS AMODIAQUINE IN PATIENTS WITH UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA

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### MODEL-GUIDED STRATEGIES FOR MITIGATING ANTIMALARIAL DRUG RESISTANCE: BENEFITS OF EARLY ADOPTION OF TRIPLE ARTEMISININ-BASED COMBINATION THERAPIES IN UGANDA AND TANZANIA

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### INCREASING VALIDATED ARTEMISININ PARTIAL RESISTANCE MARKERS CONFIRMED IN ETHIOPIA DURING NATIONAL SENTINEL-BASED *PLASMODIUM FALCIPARUM* MOLECULAR SURVEILLANCE

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## UNDERSTANDING THE BIPHASIC DOSE-RESPONSE CURVE ASSOCIATED WITH PIPERAQUINE RESISTANCE IN *PLASMODIUM FALCIPARUM*

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## EX VIVO SUSCEPTIBILITY OF UGANDAN *PLASMODIUM FALCIPARUM* ISOLATES TO DIHYDROARTEMISININ AND THE NOVEL TRIOXOLANE LEAD RLA-4735

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## HIGH EFFICACY OF ARTEMETHER LUMEFANTRINE AND ARTESUNATE PYRONARIDINE WITH SINGLE LOW DOSE PRIMAQUINE IN ADULT PATIENTS WITH *PLASMODIUM FALCIPARUM* IN A SETTING WITH HIGH PREVALENCE OF MARKERS OF PARTIAL ARTEMISININ RESISTANCE AND *PFHRP2* OR 3 GENE DELETION IN ETHIOPIA: A SINGLE BLIND RANDOMIZED CONTROLLED TRIAL

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## EXPLORING THE *IN VITRO* PHARMACOLOGY OF 8-AMINOQUINOLINE ANTIMALARIAL COMPOUNDS

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## THERAPEUTIC EFFICACY AND SAFETY OF ARTEMETHER LUMEFANTRINE (AL) AND ARTESUNATE AMODIAQUINE (ASQA) FOR THE TREATMENT OF UNCOMPLICATED FALCIPARUM MALARIA IN KAGERA REGION, TANZANIA 2023

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## THE UTILITY OF QPCR ESTIMATION OF PARASITE DENSITY IN EVALUATING THE EFFECT OF SULFADOXINE-PYRIMETHAMINE AS PERENNIAL MALARIA CHEMOPREVENTION

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## COMPARATIVE EVALUATION OF ANTIMALARIAL DRUG EFFICACY IN THREE STUDY SITES IN MALI

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## MINIMUM INOCULUM OF RESISTANCE STUDIES TO SUPPORT ANTIMALARIAL DRUG DISCOVERY

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## RISK OF SELECTION AND TIMELINES FOR THE CONTINUED SPREAD OF ARTEMISININ AND PARTNER DRUG RESISTANCE IN AFRICA

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### GENOMIC SURVEILLANCE OF *PLASMODIUM FALCIPARUM* IN GOLD MINING AREAS IN THE BRAZILIAN AMAZON BASIN

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### LEVERAGING A *PLASMODIUM FALCIPARUM* GENETIC CROSS TO IDENTIFY CANDIDATE DETERMINANTS OF MULTIGENIC RESISTANCE TO QUININE AND CHLOROQUINE

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### THE GULART STUDY: A CROSS-SECTIONAL SURVEY OF ARTEMISININ PARTIAL RESISTANCE AND SPECIES DIVERSITY IN 5 NORTHERN UGANDAN DISTRICTS

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## Malaria - Diagnosis - Challenges and Innovations

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### DIAGNOSIS OF *PLASMODIUM* SPECIES USING A.I. TECHNIQUES VERSUS STANDARD MICROSCOPY

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### GENOTYPING OF *PLASMODIUM FALCIPARUM* MEROZOITE SURFACE PROTEIN 2 (PFMASP-2) REVEALED DIFFERENT ALLELIC PROFILES IN BLOOD AND SALIVA SAMPLES FROM MFOU HEALTH DISTRICT IN CAMEROON

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### POINT-OF-CARE TEST OF BLOOD *PLASMODIUM* RNA WITHIN A PASTEUR PIPETTE USING A NOVEL ISOTHERMAL AMPLIFICATION WITHOUT NUCLEIC ACID PURIFICATION

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### MOLECULAR AND SEROLOGICAL ANALYSIS OF AFEBRILE *PLASMODIUM FALCIPARUM* INFECTION IN SOUTHERN MOZAMBIQUE: A PROSPECTIVE COHORT

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### MALARIA PREVALENCE AMONG PATIENTS ATTENDING TWO HEALTH CENTRES IN IKWUANO L.G.A, ABIA STATE, NIGERIA USING BLOOD AND URINE SAMPLES

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### STRENGTHENING THE QUALITY OF MALARIA MICROSCOPY THROUGH A CASCADE TRAINING MODEL IN TANZANIA

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### MALARIA MICROSCOPY EVALUATION AND QUALITY ASSURANCE IN RURAL CLINICS IN WESTERN KENYA

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### AN EFFECTIVE CASCADING CLASSIFIER FOR PATIENT-LEVEL MALARIA DIAGNOSIS ON THE MILAB™ PLATFORM WITH FOCUS-STACKING TINY VISION TRANSFORMER

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### DETECTION OF *PLASMODIUM VIVAX* IN NORTHERN KENYA VIA MICROSCOPY CONFIRMED BY MOLECULAR SPECIATION

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### EVALUATION OF THE PERFORMANCES OF RAPID DIAGNOSTIC TESTS TO DETERMINE THE PREVALENCE OF PLASMODIUM FALCIPARUM PFHRP2 GENE DELETIONS IN THE HEALTH DISTRICT OF NANORO, BUKINA FASO

**Ipéné Mylène Carenne BAYALA**<sup>1</sup>, Awa Gnémé<sup>1</sup>, Paul Sondo<sup>2</sup>, Eulalie Compaoré<sup>1</sup>, Bérenger Kaboré<sup>3</sup>, Elisée Kambou<sup>4</sup>, Solange Millogo<sup>4</sup>, Chantal Kouevi<sup>1</sup>, Marc Tahita<sup>3</sup>, Franck Hien<sup>3</sup>, Karim Derra<sup>3</sup>, Elie Rouamba<sup>3</sup>, Hamidou Ilboudo<sup>3</sup>, Halidou Tinto<sup>3</sup>  
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### STRENGTHENING THE LABORATORY DIAGNOSIS OF MALARIA IN GUINEA: THE KEY ROLE PLAYED BY WHO-CERTIFIED LOCAL EXPERTS

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### ECONOMIC EVALUATION OF MALARIA DIAGNOSTIC STRATEGIES FOR MALARIA CAMPS IN REMOTE VILLAGES OF ODISHA STATE, INDIA

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## Malaria - Drug Development and Clinical Trials

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### EFFICACY AND SAFETY OF ARTEMETHER + LUMEFANTRINE AND ARTESUNATE + AMODIAQUINE FOR UNCOMPLICATED MALARIA IN EQUATORIAL GUINEA

**Matilde Riloha Rivas**<sup>1</sup>, Maria Consuelo Oki<sup>2</sup>, Juan Carlos Momo Besaha<sup>2</sup>, Policarpo Ncogo<sup>3</sup>, Jose Raso Bijeri<sup>1</sup>, Elizabeth Nyakarungu<sup>2</sup>, Luz García<sup>4</sup>, Adrian Eho May<sup>1</sup>, Jesus Nzang<sup>1</sup>, Valero Ondo<sup>3</sup>, Florentino Abaga Ondo<sup>3</sup>, Wonder P. Phiri<sup>2</sup>, Carlos A. Guerra<sup>5</sup>, Guillermo A. García<sup>5</sup>, Claudia A. Daubenberger<sup>6</sup>, Pedro Berzosa Díaz<sup>4</sup>  
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### EVALUATION OF THE EFFICACY OF ARTEMISININ-BASED COMBINATION THERAPIES ON PLASMODIUM FALCIPARUM, PLASMODIUM MALARIAE AND PLASMODIUM OVALE INFECTIONS IN MALI

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### OPTIMIZATION OF MULTIPLE-STAGE ACTIVE ANTIMALARIAL PRODIGININES

**Papireddy Kancharla**<sup>1</sup>, Amrendra Kumar<sup>1</sup>, Sivanna Chithanna<sup>1</sup>, Mahesh Gaddam<sup>1</sup>, Xiaowei Zhang<sup>2</sup>, Yuexin Li<sup>2</sup>, Patricia Lee<sup>3</sup>, Diana Caridha<sup>3</sup>, Michael Madejczyk<sup>3</sup>, Xiannu Jin<sup>3</sup>, William Dennis<sup>3</sup>, Karl Kudyba<sup>3</sup>, Sharon Mceneaney<sup>3</sup>, Hieu Dinh<sup>3</sup>, Kristina Pannone<sup>3</sup>, Cameron Blount<sup>3</sup>, Ravi Chetree<sup>3</sup>, Jesse DeLuca<sup>3</sup>, Martin Evans<sup>3</sup>, Robert Nadeau<sup>3</sup>, Chau Vuong<sup>3</sup>, Susan Leed<sup>3</sup>, Norma Roncal<sup>3</sup>, Jordan Charlton<sup>4</sup>, Angely Binauhan<sup>4</sup>, Kimberley Navarrete<sup>4</sup>, Navaeh Miller<sup>4</sup>, Roland Cooper<sup>4</sup>, Kevin Reynolds<sup>1</sup>, Alison Roth<sup>3</sup>, Jane Kelly<sup>1</sup>  
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### PRECLINICAL DEVELOPMENT OF NOVEL DUAL-STAGE ACTIVE ANTIMALARIALS

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### DRUG INTERACTION BETWEEN DIHYDROARTEMISININ-PIPERAQUINE AND SULFADOXINE-PYRIMETHAMINE IN PREGNANT WOMEN RECEIVING MALARIA CHEMOPREVENTION

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### MICROVOLUME ANALYSIS OF ANTIMALARIAL DRUGS FOR PEDIATRIC PHARMACOKINETIC-PHARMACODYNAMIC STUDIES

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### PRIMAQUINE PHARMACOKINETICS AND RADICAL CURE EFFICACY IN PLASMODIUM VIVAX-INFECTED ADULTS IN THAILAND

**Michele D. Spring**<sup>1</sup>, Pattaraporn Vanachayangkul<sup>2</sup>, Sabaitip Sriwichai<sup>3</sup>, Worachet Kuntawunginn<sup>3</sup>, Chanikarn Kodchakorn<sup>3</sup>, Montri Arsanok<sup>3</sup>, Ta-aksorn Winita<sup>3</sup>, Parat Boonyarangka<sup>3</sup>, Paphavee Lertsethtakorn<sup>3</sup>, Thunyarat Anothaisintawe<sup>3</sup>, Krit Harncharoenkul<sup>3</sup>, Krisada Jongsakul<sup>3</sup>, Jeffrey Livezey<sup>3</sup>  
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### DISCOVERY OF NOVEL ANTIPLASMODIAL COMPOUNDS USING RING FUSION OF INDOLE ALKALOIDS

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**IN SILICO, IN VIVO AND IN VITRO TOXICITY ASSESSMENT OF NOVEL HETEROCYCLICS WITH ANTIMALARIAL ACTIVITY**

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**PARASITE CLEARANCE AND PROTECTION FROM PLASMODIUM FALCIPARUM INFECTION: CLINICAL RESULTS FROM A THREE-ARM, PARALLEL, DOUBLE-BLINDED, PLACEBO-CONTROLLED, RANDOMIZED TRIAL OF PRESUMPTIVE SULFADOXINE-PYRIMETHAMINE VERSUS SULFADOXINE-PYRIMETHAMINE PLUS AMODIAQUINE VERSUS ARTESUNATE MONOTHERAPY AMONG ASYMPTOMATIC CHILDREN 3-5 YEARS OF AGE IN CAMEROON**

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**PARASITE CLEARANCE AND PROTECTION FROM PLASMODIUM FALCIPARUM INFECTION: CLINICAL RESULTS FROM A TWO-ARM, PARALLEL, DOUBLE-BLINDED, PLACEBO-CONTROLLED, RANDOMIZED TRIAL OF PRESUMPTIVE SULFADOXINE-PYRIMETHAMINE VERSUS ARTESUNATE MONOTHERAPY AMONG ASYMPTOMATIC CHILDREN 3-5 YEARS OF AGE IN ZAMBIA**

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**PACRALIMA NITIDA FRUIT-RIND AND LEAF EXTRACTS EXHIBITED ANTIPLASMODIAL AND IMMUNO-MODULATORY EFFECTS AGAINST PLASMODIUM BERGHEI-INFECTION IN SWISSMICE**

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**Malaria - Elimination**

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**EFFECT OF SEASONAL MALARIA CHEMOPREVENTION IN STUNTING CHILDREN IN KOULIKORO, MALI**

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**EXPERIENCES FROM DIGITALIZING ITN MASS DISTRIBUTION CAMPAIGNS IN ZAMBIA**

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**IMPROVING INTEGRATED COMMUNITY CASE MANAGEMENT (ICCM) BY COMMUNITY HEALTH WORKERS - AN EXAMPLE OF MALARIA MANAGEMENT IN NCHELANGE DISTRICT, ZAMBIA**

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**QUANTIFYING THE ROLE OF IMPORTATION ON SUSTAINED MALARIA TRANSMISSION IN SOUTHEAST UGANDA**

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**MALARIA ELIMINATION IN CABO VERDE: AN OVERVIEW ABOUT THE HISTORY, CASE DATA FROM THE LAST 35 YEARS (1985-2023) AND CHALLENGES AHEAD**

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**ARE THERE GENDER DIFFERENCES IN THE GAPS IN MALARIA TREATMENT CASCADE IN GHANA? IMPLICATIONS FOR MALARIA ELIMINATION**

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## ONE HEALTH BY USING GREEN SYNTHESIS OF NANOPARTICLES TO IMPROVE COMMUNITY ENVIRONMENT

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## PREVALENCE OF GLUCOSE-6-PHOSPHATE DEHYDROGENASE DEFICIENCY IN A MALARIA-ENDEMIC REGION OF COLOMBIA: IMPLICATIONS FOR RADICAL CURE OF *PLASMODIUM VIVAX*

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## MASS DRUG ADMINISTRATION FOR MALARIA IN LOS CHILES, COSTA RICA: ITS IMPLICATIONS FOR ELIMINATION

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### NOSOCOMIAL MALARIA: RISK OF MALARIA AFTER HOSPITALIZATION AT JINJA REGIONAL REFERRAL HOSPITAL, UGANDA: A COHORT STUDY

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### MOLECULAR EPIDEMIOLOGY OF RESIDUAL *PLASMODIUM* SPP. TRANSMISSION IN A PERUVIAN AMAZON BASIN COMMUNITY

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### EXPLAINING TRENDS IN *PLASMODIUM FALCIPARUM* TRANSMISSION IN AFRICA SINCE 2000

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### SPATIO-TEMPORAL EPIDEMIOLOGY OF URBAN MALARIA OVER DIFFERENT TRANSMISSION SEASONS IN ACCRA, GHANA

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### DESCRIPTION OF INPATIENT MALARIA CASE MANAGEMENT AT HEALTH FACILITIES IN SOUTHEASTERN TANZANIA, 2023

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### MAPPING MALARIA SEASONALITY IN SUB-SAHARAN AFRICA: METHODOLOGY AND INSIGHTS

Michael McPhail<sup>1</sup>, Francesca Sanna<sup>1</sup>, Tasmin Symons<sup>1</sup>, Michele Nguyen<sup>2</sup>, Charlie Whittaker<sup>3</sup>, Punam Amratia<sup>4</sup>, Peter W. Gething<sup>1</sup>, Daniel J. Weiss<sup>5</sup>

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### LONG-ACTING FORMULATION OF IVERMECTIN FOR EFFECTIVE MALARIA CONTROL: INSIGHTS FROM AN AGE-STRUCTURED MODELLING STUDY

Angélique Porciani<sup>1</sup>, André Sagna<sup>2</sup>, Christophe Roberge<sup>3</sup>, Sophie Le Lamer-Déchamps<sup>3</sup>, Nicolas Moiroux<sup>1</sup>, Roch Dabiré<sup>4</sup>, Fabrice Anyrekun Somé<sup>4</sup>, Sié Hermann Pooda<sup>5</sup>, Karine Mouline<sup>1</sup>, Ramses Djidjou-Demasse<sup>6</sup>

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### BACTERIAL VAGINOSIS IS ASSOCIATED WITH INCREASED RISK OF PLACENTAL MALARIA

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### ASSESSMENT OF THE INFECTIVITY OF MALARIA PARASITES FROM ASYMPTOMATIC SCHOOL CHILDREN TO ANOPHELES MOSQUITOES IN A HIGH TRANSMISSION AREA IN GHANA

Mawusi Adepa Mawuli<sup>1</sup>, Linda Eva Amoah<sup>2</sup>, Neils Ben Quashie<sup>2</sup>, Isaac Sraaku<sup>1</sup>, Yaw Asare Afrane<sup>1</sup>

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### G6PD DEFICIENCY VARIANTS AND MALARIA: INSIGHTS FROM A HOSPITAL BASED STUDY IN AWKA, SOUTHEAST NIGERIA

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### DECLINE IN THE INCIDENCE OF MALARIA IN BENIN IN 2023: INVESTIGATION OF ASSOCIATED FACTORS AND HOW TO MAINTAIN THE TREND

Emmanuel Koffi YOVO<sup>1</sup>, Julien Aïssan<sup>2</sup>, Achille Couao-Zotti<sup>2</sup>, William HOUNDJO<sup>2</sup>, Macoumba Toure<sup>3</sup>, Lundi-Anne Omam<sup>1</sup>, Didier Agossadou<sup>1</sup>, Rock Aikpon<sup>2</sup>, Arnaud Le Menach<sup>4</sup>, Olajumoke Adekeye<sup>1</sup>, Cyriaque Afoukou<sup>2</sup>, Achille Batonon<sup>2</sup>

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### MODELING THE TEMPORAL INCIDENCE OF FEVER AND CLINICAL MALARIA IN DANGASSA, DISTRICT OF KATI, MALI FROM 2014 TO 2016

Oumar Oumar Thiero<sup>1</sup>, Kola Cisse<sup>2</sup>, Soumba Keita<sup>3</sup>, Aissata Massambou Sacko<sup>2</sup>, Seydou Doumbia<sup>3</sup>

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### UNDERSTANDING RELATIONSHIPS BETWEEN ENVIRONMENTAL TEMPERATURE, RAINFALL, AND MALARIA IN CHILDREN UNDER 5 YEARS OF AGE IN SENEGAL

Donal Bisanzio<sup>1</sup>, Carrie Ngongo<sup>2</sup>, Abdou Gueye<sup>3</sup>, Gabriella Corrigan<sup>1</sup>, Algaye Ngom<sup>3</sup>, Mamoudou Aw<sup>3</sup>, Cheikh Gassama<sup>4</sup>, Tidiane Gadiaga<sup>5</sup>

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### TOWARDS ELUCIDATING THE IMPACT OF TRANSMISSION HETEROGENEITY ON THE RELATIONSHIP BETWEEN MALARIA PARASITE GENETICS AND CLINICAL INCIDENCE

Joshua Suresh<sup>1</sup>, Jessica Ribado<sup>1</sup>, Albert Lee<sup>1</sup>, Katherine E. Battle<sup>1</sup>, Mame Cheikh Seck<sup>2</sup>, Jules Gomis<sup>2</sup>, Younouss Diedhiou<sup>2</sup>, Ngayo Sy<sup>3</sup>, Medoune Ndiop<sup>4</sup>, Fatou Ba Fall<sup>4</sup>, Ibrahima Diallo<sup>2</sup>, Doudou Sene<sup>4</sup>, Mamadou Alpha Diallo<sup>2</sup>, Yaye Die Ndiaye<sup>2</sup>, Mouhamad Sy<sup>2</sup>, Aita Sene<sup>2</sup>, Djiby Sow<sup>2</sup>, Baba Dieye<sup>2</sup>, Abdoulaye Tine<sup>2</sup>, Joshua L. Proctor<sup>1</sup>, Bronwyn MacLinnis<sup>5</sup>, Daouda Ndiaye<sup>2</sup>, Daniel L. Hartl<sup>6</sup>, Dyann F. Wirth<sup>7</sup>, Sarah K. Volkman<sup>7</sup>, Caitlin A. Bever<sup>1</sup>, Wesley Wong<sup>7</sup>

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(ACMCIP Abstract)

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### PLASMODIUM FALCIPARUM GENE SIGNATURES OF MALARIA DISEASE SEVERITY IN KENYAN CHILDREN

Beauty Kolade<sup>1</sup>, Kristen Wilding<sup>1</sup>, Qiuying Cheng<sup>2</sup>, Ivy Hurwitz<sup>2</sup>, Evans Raballah<sup>3</sup>, Samuel B. Anyona<sup>3</sup>, Kristan A. Schneider<sup>4</sup>, Ananias A. Escalante<sup>5</sup>, Axl G. Cepeda<sup>5</sup>, Benjamin McMahon<sup>1</sup>, Douglas J. Perkins<sup>2</sup>

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(ACMCIP Abstract)

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### PLASMODIUM FALCIPARUM GENETIC DIVERSITY IN THE BLOOD STAGE VACCINE CANDIDATE ANTIGEN PFCYRPA IN SENEGAL

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(ACMCIP Abstract)

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**EFFECTS OF RECOMBINATION ON LINKAGE DISEQUILIBRIUM IN THE EPIDEMIOLOGY OF *PLASMODIUM FALCIPARUM* MALARIA**Kien Tran, Nguyen Tran, Maciej Boni  
Temple University, Philadelphia, PA, United States[\(ACMCIP Abstract\)](#)

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**ASSESSING CHANGES IN *PLASMODIUM FALCIPARUM* GENETIC DIVERSITY IN NIGERIA POST-ACTS IMPLEMENTATION**Fehintola Victoria Ajogbasile<sup>1</sup>, Andrés Aranda-Diaz<sup>1</sup>, Ying-An Angie Chen<sup>2</sup>, Christian Happi<sup>3</sup>, Bryan GreenHouse<sup>1</sup><sup>1</sup>University of California San Francisco (UCSF), San Francisco, CA, United States, <sup>2</sup>National Cheng Kung University, Tainan, Taiwan, <sup>3</sup>Redeemer's University, Ede, Nigeria[\(ACMCIP Abstract\)](#)

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**MALKINID (MALARIA KINSHIP IDENTIFIER): A LIKELIHOOD MODEL FOR IDENTIFYING PARASITE GENEALOGY RELATIONSHIPS BASED ON GENETIC RELATEDNESS**Wesley Wong<sup>1</sup>, Lea Wang<sup>2</sup>, Stephen S. Schaffner<sup>3</sup>, Xue Li<sup>4</sup>, Ian Cheeseman<sup>4</sup>, Timothy J.C. Anderson<sup>4</sup>, Ashley Vaughan<sup>5</sup>, Michael Ferdig<sup>6</sup>, Sarah K. Volkman<sup>1</sup>, Daniel L. Hartl<sup>7</sup>, Dyann F. Wirth<sup>1</sup><sup>1</sup>Harvard TH Chan School of Public Health, Boston, MA, United States, <sup>2</sup>Harvard University, Cambridge, MA, United States, <sup>3</sup>Broad Institute, Cambridge, MA, United States, <sup>4</sup>Texas Biomedical Research Institute, San Antonio, TX, United States, <sup>5</sup>Seattle Children's, Seattle, WA, United States, <sup>6</sup>University of Notre Dame, Notre Dame, IL, United States, <sup>7</sup>Harvard University, Cambridge, MA, United States[\(ACMCIP Abstract\)](#)

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***PLASMODIUM FALCIPARUM* ADAPTS TO FRONTLINE DRUG CHANGES THROUGH NEW HAPLOTYPES AT OLD TARGETS**Angela M. Early<sup>1</sup>, Stéphane Pelleau<sup>2</sup>, Lise Musset<sup>3</sup>, Daniel E. Neafsey<sup>4</sup><sup>1</sup>Broad Institute of MIT and Harvard, Cambridge, MA, United States, <sup>2</sup>Institut Pasteur, Paris, France, <sup>3</sup>Institut Pasteur de la Guyane, Cayenne, French Guiana, <sup>4</sup>Harvard T.H.Chan School of Public Health, Boston, MA, United States[\(ACMCIP Abstract\)](#)

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**HMMIBD-RS, AN ENHANCED IMPLEMENTATION OF HMMIBD FOR PARALLELIZABLE IDENTITY-BY-DESCENT DETECTION FROM HAPLOID GENOMES**Bing Guo, Timothy D. O'Connor, Shannon Takala-Harrison  
University of Maryland School of Medicine, Baltimore, MD, United States[\(ACMCIP Abstract\)](#)

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**GENETIC SURVEILLANCE REVEALS THE CLONAL REPLACEMENT DYNAMICS AND SPATIAL STRUCTURE OF *PLASMODIUM FALCIPARUM* IN SÃO TOMÉ AND PRÍNCIPE**YingAn A. Chen<sup>1</sup>, Peng-Yin Ng<sup>1</sup>, Daniel Garcia<sup>1</sup>, Ju-Hsuan Wang<sup>1</sup>, Yu-Wen Huang<sup>1</sup>, Aaron Elliot<sup>2</sup>, Brian Palmer<sup>2</sup>, Arlindo Carvalho<sup>3</sup>, Lien-Fen Tseng<sup>4</sup>, Cheng-Sheng Lee<sup>1</sup>, Kun-Hsien Tsai<sup>5</sup>, Bryan Greenhouse<sup>2</sup>, Hsiao-Han Chang<sup>1</sup><sup>1</sup>National Tsing Hua University, Hsinchu, Taiwan, <sup>2</sup>University of California, San Francisco, San Francisco, CA, United States, <sup>3</sup>University of Sao Tome and Principe, Sao Tome, Sao Tome and Principe, <sup>4</sup>Taiwan Anti-Malarial Advisory Mission, Sao Tome, Sao Tome and Principe, <sup>5</sup>National Taiwan University, Taipei, Taiwan[\(ACMCIP Abstract\)](#)

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**APPLICATION OF HIGHLY MULTIPLEXED AMPLISEQ TARGETED NGS ASSAYS FOR GENOMIC SURVEILLANCE USE CASES FOR *P. FALCIPARUM* AND *P. VIVAX* IN ASIA, AFRICA AND LATIN AMERICA**Johanna H. Kattenberg<sup>1</sup>, Mathijs Mutsaers<sup>1</sup>, Nguyen Van Hong<sup>2</sup>, Luis E. Cabrera-Sosa<sup>3</sup>, Florence Ouédraogo<sup>4</sup>, Bénédicte Palata<sup>5</sup>, Nguyen Thi Hong Ngoc<sup>2</sup>, Nguyen Huong Binh<sup>2</sup>, Papy Mandoko<sup>5</sup>, Dionicia Gamboa<sup>3</sup>, Hamtandi M. Natama<sup>4</sup>, Anna Rosanas-Urgell<sup>1</sup>  
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**TEMPORAL GENOMIC ANALYSIS REVEALED MAINTAINED GENETIC DIVERSITY AND COMPLEXITY OF INFECTION AMONG *PLASMODIUM FALCIPARUM* INFECTIONS IN MAINLAND TANZANIA:2021-2022**Dativa Pereus<sup>1</sup>, Abebe Fola<sup>2</sup>, Misago Seth<sup>1</sup>, Rashid Madebe<sup>1</sup>, Catherine Bakari<sup>1</sup>, Celine Mandara<sup>1</sup>, Beatus Lyimo<sup>3</sup>, Rebecca DeFeo<sup>2</sup>, Rule Budodo<sup>1</sup>, Filbert Francis<sup>1</sup>, Zachary Popkin-Hal<sup>4</sup>, Ramadhan Moshi<sup>1</sup>, Ruth Mbwambo<sup>1</sup>, Doris Mbata<sup>1</sup>, Daniel Mbwambo<sup>5</sup>, Sijenu Aaron<sup>6</sup>, Abdallah Lusasi<sup>7</sup>, Victor Mobegi<sup>8</sup>, Gerald Juma<sup>3</sup>, Jonathan Juliano<sup>4</sup>, Jeffrey A. Bailey<sup>2</sup>, Deus Ishengoma<sup>1</sup><sup>1</sup>National Institute for Medical Research, Dar es Salaam, United Republic of Tanzania, <sup>2</sup>Brown University, Providence, RI, United States, <sup>3</sup>Nelson Mandela African Institute of Science and Technology, Arusha, United Republic of Tanzania, <sup>4</sup>University of North Carolina, Chapel Hill, NC, United States, <sup>5</sup>National Malaria Control Program, Dodoma, United Republic of Tanzania, <sup>6</sup>National Malaria Control Programme, Dar es Salaam, United Republic of Tanzania, <sup>7</sup>National Malaria Control Programme, Dodoma, United Republic of Tanzania, <sup>8</sup>University of Nairobi, Nairobi, Kenya[\(ACMCIP Abstract\)](#)

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**DIVERSITY AND MULTIPLICITY OF *PLASMODIUM FALCIPARUM* INFECTIONS AMONG ASYMPTOMATIC SCHOOL CHILDREN IN ANKAZOABO, SOUTHERN MADAGASCAR**Fanomezantsoa Ralinoro<sup>1</sup>, Omega Raobela<sup>2</sup><sup>1</sup>National Malaria Control Program, Antananarivo, Madagascar, <sup>2</sup>National Malaria Control Programme, Antananarivo, Madagascar[\(ACMCIP Abstract\)](#)

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**REVEALING NOVEL GENETIC VARIANTS IN THE MALARIA TRANSMISSION BLOCKING VACCINE CANDIDATE PFS25**Alessandra Orfano<sup>1</sup>, Awa Cisse<sup>1</sup>, Zizhang Sheng<sup>2</sup>, Yicheng Guo<sup>2</sup>, Leeah Han<sup>1</sup>, Laty G. Thiam<sup>3</sup>, Khadiatou Mangou<sup>3</sup>, Adam J. Moore<sup>4</sup>, Aboubacar Ba<sup>1</sup>, Rebecca Li<sup>1</sup>, Mariama N. Pouye<sup>3</sup>, Fatoumata Diallo<sup>3</sup>, Seynabou D. Sene<sup>3</sup>, Elhadji M. Ngom<sup>3</sup>, Bacary D. Sadio<sup>5</sup>, Alassane Mbengue<sup>3</sup>, Christopher Membi<sup>6</sup>, Thomas Bazié<sup>7</sup>, Fabrice A. Somé<sup>7</sup>, Natalie Olson<sup>8</sup>, Saurabh Patel<sup>9</sup>, Lawrence Shapiro<sup>10</sup>, Sunil Parikh<sup>1</sup>, Brian Foy<sup>11</sup>, Michael Cappello<sup>1</sup>, Zul Premji<sup>6</sup>, Roch K. Dabiré<sup>7</sup>, Jean-Bosco Ouedraogo<sup>7</sup>, Amy K. Bei<sup>1</sup><sup>1</sup>Yale School of Public Health, New Haven, CT, United States, <sup>2</sup>Aaron Diamond AIDS Research Center, Columbia University Vagelos College of Physicians and Surgeons, New York, NY, United States, <sup>3</sup>G4-Malaria Experimental Genetic Approaches & Vaccines, Pôle Immunopathologie et Maladies Infectieuses, Institut Pasteur de Dakar, Dakar, Senegal, <sup>4</sup>Department of Pathology, Microbiology, and Immunology, School of Veterinary Medicine, University of California Davis, Davis, CA, United States, <sup>5</sup>Pôle Virologie, Institut Pasteur de Dakar, Dakar, Senegal, <sup>6</sup>Department of Parasitology and Medical Entomology, Muhimbili University College of Health Sciences, Dar-es-Salaam, United Republic of Tanzania, <sup>7</sup>Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, <sup>8</sup>Department of Environmental Health at Emory University, Atlanta, GA, United States, <sup>9</sup>Department of Biochemistry and Molecular Biophysics, Columbia University, New York, NY, United States, <sup>10</sup>Department of Biochemistry and Molecular Biophysics, Columbia University, New York, CT, United States, <sup>11</sup>Arthropod-borne and Infectious Diseases Laboratory, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO, United States[\(ACMCIP Abstract\)](#)

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### AMPLICON AND SNP GENOTYPING OF *P. FALCIPARUM* AND *P. VIVAX* CASES IDENTIFIES HIGHLY RELATED SAMPLE CLUSTERS AS BHUTAN APPROACHES ELIMINATION

Emma Rowley<sup>1</sup>, Kelsey Murt<sup>1</sup>, Jean-Paul Courneya<sup>1</sup>, Bing Guo<sup>1</sup>, Biraj Shrestha<sup>1</sup>, Mariusz Wojnarski<sup>2</sup>, Risintha Premaratne<sup>3</sup>, Xong Hong Li<sup>3</sup>, Kesang Wangchuck<sup>4</sup>, Sonam Wangdi<sup>3</sup>, Kim Lindblade<sup>5</sup>, Tobgye Tobgye<sup>6</sup>, Shannon Takala-Harrison<sup>1</sup>

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(ACMCIP Abstract)

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### PULSED MICROWAVE IRRADIATION INDUCES APOPTOSIS LIKE CELL DEATH IN *PLASMODIUM FALCIPARUM* VIA FAS/FASL DEATH RECEPTOR PATHWAY

Lina Margarita Solis Castillero, Carmenza Spadafora, Ricardo Correa, Lorena Coronado

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(ACMCIP Abstract)

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### SETTING A MRDT-BASED STRATEGY FOR MONITORING THE OCCURRENCE OF *PLASMODIUM FALCIPARUM* HRP2 AND HRP3 DELETIONS IN MADAGASCAR

Dina Ny Aina Liantsoa Randriamiarinjatovo<sup>1</sup>, Sehen Razanatsiorimalala<sup>1</sup>, Arsène Indriambelo<sup>2</sup>, Viviane Razafindravao<sup>3</sup>, Laurence Randrianasolo<sup>1</sup>, Milijaona Randrianarivojosia<sup>1</sup>

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(ACMCIP Abstract)

## Malaria - Immunology

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### GUT MICROBIOTA-INDUCED IMMUNE TOLERANCE IMPAIRS SYSTEMIC IMMUNITY AGAINST SEVERE MALARIA

Rafael Polidoro<sup>1</sup>, Marcos V. Rangel-Ferreira<sup>1</sup>, Olivia J. Bednarski<sup>1</sup>, José Carlos Alves-Filho<sup>2</sup>, Nathan W. Schmidt<sup>1</sup>

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(ACMCIP Abstract)

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### AGEING OF *PLASMODIUM FALCIPARUM* MALARIA SPOROZOITES ALTERS THEIR MOTILITY, INFECTIVITY AND REDUCES IMMUNE ACTIVATION *IN VITRO*

Roos van Schuijlenburg<sup>1</sup>, Samaneh Azargoshasb<sup>2</sup>, Clarize M. de Korne<sup>1</sup>, Jeroen C. Sijtsma<sup>1</sup>, Sascha Bezemer<sup>1</sup>, Alwin J. van der Ham<sup>1</sup>, Els Baalbergen<sup>1</sup>, Fiona Geurten<sup>1</sup>, Laura M. de Bes-Roeleveld<sup>1</sup>, Severine C. Chevalley-Maurel<sup>1</sup>, Matthias N. van Oosterom<sup>2</sup>, Fijs W.B. van Leeuwen<sup>2</sup>, Blandine Franke-Fayard<sup>1</sup>, Meta Roestenberg<sup>1</sup>

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(ACMCIP Abstract)

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### LEVERAGING BIRTH COHORTS TO TRACE COMPLICATED MALARIA RISK AND ITS IMMUNOLOGICAL CORRELATES AT EACH INFECTION IN INFANCY

Florian A. Bach<sup>1</sup>, Abel Kakuru<sup>2</sup>, Grant Dorsey<sup>3</sup>, Moses Kamya<sup>2</sup>, Prasanna Jagannathan<sup>1</sup>

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(ACMCIP Abstract)

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### REACTIVITY OF ANTIBODIES AGAINST MALARIA AND OTHER PARASITIC DISEASES TO THE ANTIGENS N, S AND S1 SUBUNIT RDB951 USED IN COVID-19 SEROLOGY

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(ACMCIP Abstract)

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### A NOVEL MURINE MODEL FOR INVESTIGATING THE PATHOGENIC ROLE OF COAGULATION IN MALARIA-ASSOCIATED ACUTE RESPIRATORY DISTRESS SYNDROME

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(ACMCIP Abstract)

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### COMPARING MIXTURE MODELING APPROACHES FOR CLASSIFYING LONG-TERM MALARIA SEROLOGICAL MARKERS IN NORTHERN LAOS

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(ACMCIP Abstract)

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### TARGETS OF CSP-BASED MALARIA VACCINES: WHAT WE MISSED IN 1987 AND WHAT IS MISSING NOW

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(ACMCIP Abstract)

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### INVESTIGATING THE ASSOCIATION BETWEEN MALARIA INFECTION AND AUTOANTIBODY PRODUCTION IN MURINE AND HUMAN STUDIES

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### PROTEIN SEQUENCE AND STRUCTURE, AND ANTIBODY PROFILE OF THE AMA1 FROM THREE *PLASMODIUM* SPECIES

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### MALARIA EXPOSURE RISK AND NATURALLY ACQUIRED IMMUNITY AMONG STUDENTS FROM SOUTHERN AND NORTHERN GHANA

Nana Akua O. Koranteng<sup>1</sup>, Adwoa A. Afari<sup>2</sup>, Beatrice Asantewaa<sup>2</sup>, Mathias Naporoo<sup>3</sup>, Helena Lamptey<sup>1</sup>, Michael F. Ofori<sup>1</sup>, Zakaria Seidu<sup>4</sup>

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(ACMCIP Abstract)

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### UNVEILING IMMUNODOMINANT REGIONS OF PFCERL1: INSIGHTS FOR MALARIA VACCINE DEVELOPMENT

Comfort Kotey<sup>1</sup>, Franklin Yengdem Nuokpem<sup>1</sup>, Josiah Darko Affum<sup>1</sup>, Clement Owusu Asante<sup>1</sup>, Daniel Dosoo<sup>1</sup>, Godwin Woode<sup>1</sup>, Gordon Awandare<sup>1</sup>, Kwadwo Asamoah Kusi<sup>2</sup>, Yaw Aniweh<sup>1</sup>

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### EARLY MALARIA IMMUNE SIGNATURES IN NAÏVE ADULTS EXPERIMENTALLY INFECTED WITH *PLASMODIUM FALCIPARUM* REVEAL HIGH AND LOW RESPONDERS

Gemma Moncunill<sup>1</sup>, Carla Sanchez<sup>2</sup>, Gloria Patricia Gomez<sup>1</sup>, Marta Vidal<sup>1</sup>, Joe J. Campo<sup>1</sup>, Alfons Jimenez<sup>1</sup>, Diana Barrios<sup>1</sup>, Eric James<sup>2</sup>, Peter Billingsley<sup>2</sup>, Benjamin Mordmüller<sup>3</sup>, Kim Lee Sim<sup>2</sup>, Almudena Legarda<sup>1</sup>, Peter G. Kremsner<sup>3</sup>, Stephen L. Hoffman<sup>2</sup>, Pedro L. Alonso<sup>1</sup>, Carlota Dobaño<sup>1</sup>

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### ANTI-CIRCUMSPOROZOITE PROTEIN ANTIBODIES AS MARKERS FOR MALARIA TRANSMISSION MONITORING

Linda Akuffo, Kwadwo Asamoah Kusi, Rawdat Baba-Adam, Eric Kyei-Baafour, Bright Asare, Oscar Darko

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### PLASMA BLAST IG REPERTOIRE DYNAMICS THROUGH REPEAT *PLASMODIUM FALCIPARUM* CHALLENGES REVEAL SIGNATURES OF NEGATIVE SELECTION

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## Malaria - Pathogenesis

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### VENOUS BLOOD GAS ANALYSIS IN UGANDAN CHILDREN WITH SEVERE MALARIA

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(ACMCIP Abstract)

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### DYSREGULATION OF NETOSIS IN PEDIATRIC PATIENTS WITH SEVERE MALARIAL ANEMIA

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### ASYMPTOMATIC *P. FALCIPARUM* INFECTION IS NOT ASSOCIATED WITH EXPOSURE TO SOIL TRANSMITTED HELMINTHS IN CHILDREN FROM A MULTI SCHOOL-BASED STUDY IN ESSE, CAMEROON

Lauren Lajos<sup>1</sup>, Balotin Fogang<sup>2</sup>, Anne Jensen<sup>3</sup>, Derrick Atchombat<sup>2</sup>, Douglas H. Cornwall<sup>3</sup>, Christiane Donkeu<sup>2</sup>, Chris-Marco Nana-Mbianda<sup>2</sup>, Celine Slam<sup>3</sup>, Hugues Clotaire Nana Djeunga<sup>4</sup>, Bin Zhan<sup>5</sup>, Anne J. Blaschke<sup>1</sup>, Krow Ampofo<sup>1</sup>, Paul Olivier Koki Ndombo<sup>6</sup>, Lawrence Ayong<sup>2</sup>, Tracey Lamb<sup>3</sup>

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### UPREGULATION OF GENE TRANSCRIPTS FOR SEVEN CRITICAL *PLASMODIUM FALCIPARUM* GLYCOLYTIC ENZYMES IN PEDIATRIC SEVERE MALARIAL ANEMIA

Sarah Naulikha Kituyi<sup>1</sup>, Quiying Cheng<sup>2</sup>, Clinton Onyango<sup>3</sup>, Ivy Hurwitz<sup>3</sup>, Beauty Kolade<sup>4</sup>, Philip Seidenberg<sup>3</sup>, Christophe Lambert<sup>3</sup>, Benjamin McMahon<sup>4</sup>, Kristan Schneider<sup>3</sup>, Ananias Escalante<sup>5</sup>, Samuel Anyona<sup>6</sup>, Collins Ouma<sup>6</sup>, Douglas J. Perkins<sup>3</sup>

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### HEME AND HEMOGLOBIN SCAVENGING DEFICIENCIES IN PEDIATRIC SEVERE MALARIAL ANEMIA-- INSIGHTS FROM PLASMA PROTEOMICS

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### TRANSCRIPTOMIC INSIGHTS INTO COMPLEMENT-ASSOCIATED GENE DYSREGULATION IN CHILDHOOD SEVERE MALARIAL ANEMIA

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### PLASMODIUM KNOWLESII INFECTION IS ASSOCIATED WITH ELEVATED CIRCULATING BIOMARKERS OF BRAIN INJURY AND ENDOTHELIAL ACTIVATION

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### TRANSCRIPTOME PROFILE OF BLOODSTAGE PLASMODIUM FALCIPARUM IN CHILDREN WITH SEVERE MALARIAL ANEMIA

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### PROBING THE RELATIONSHIPS BETWEEN COAGULATION, INFLAMMATION, AND OXIDATIVE STRESS IN PLACENTAL MALARIA PATHOGENESIS

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### REGULATED CELL DEATH IN PLACENTAL MALARIA: NECROPTOSIS ASSOCIATES WITH INFECTION AND INFANT BIRTH WEIGHT

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### THE RELATIONSHIP BETWEEN PLACENTAL MALARIA INFECTION, HIV, INTESTINAL PERMEABILITY, AND INFLAMMATION IN POST-PARTUM KENYAN WOMEN

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(ACMCIP Abstract)

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### BIOCHEMICAL AND BIOINFORMATIC CHARACTERISATION OF UNDERSTUDIED ERYTHROCYTE SURFACE EXPRESSED HYPERVARIABLE PROTEIN FAMILIES IN PLASMODIUM FALCIPARUM

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(ACMCIP Abstract)

## Malaria - Prevention

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### PRECARIOUS SECURITY CONTEXT AND ADAPTATIVE METHODS TO IMPLEMENT SEASONAL MALARIA CHEMOPREVENTION (SMC) IN BURKINA FASO

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### PERFORMANCE OF A NEW COMMUNITY HEALTH POLICY IN BENIN FOR DISTRIBUTING INSECTICIDE-TREATED NETS: EXPERIENCE OF 2023 MASS CAMPAIGN

**Rock Aikpon**<sup>1</sup>, Achille Batonon<sup>1</sup>, Cyriaque Affoukou<sup>1</sup>, Virgile Gnanguenon<sup>2</sup>, Catherine Dentinger<sup>3</sup>, Daniel Impoinvil<sup>3</sup>, Gil Padonou<sup>4</sup>, Martin Akogbéto<sup>4</sup>  
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### EVALUATION OF SEASONAL MALARIA CHEMOPREVENTION IMPLEMENTATION IN THE UPPER EAST REGION OF NORTHERN GHANA

Emmanuel Yidana Ayamba<sup>1</sup>, Emmanuel K. Dzotsi<sup>2</sup>, William Dormechele<sup>1</sup>, Nana A. Ansah<sup>1</sup>, Oscar Bangre<sup>1</sup>, Josephat A. Nyuzagh<sup>2</sup>, Sydney A. Abilba<sup>2</sup>, Samuel K. Boaky-Boateng<sup>2</sup>, Patrick O. Ansah<sup>1</sup>

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### LOCALIZATION IN ACTION: TRANSITIONING INDOOR RESIDUAL SPRAYING MANAGEMENT TO HOST COUNTRY GOVERNMENT IN ANKAZOABO DISTRICT, ATSIMO ANDREFANA REGION, MADAGASCAR, 2023

RAMANDIMBIARIJAONA Herizo

NMCP Madagascar, Antananarivo, Madagascar

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### SEASONAL MALARIA CHEMOPREVENTION IN NORTHERN MOZAMBIQUE: A COST-EFFECTIVENESS ANALYSIS

Neide Canana<sup>1</sup>, Baltazar Candrinho<sup>2</sup>, Albertino Zunza<sup>1</sup>, Maria Rodrigues<sup>1</sup>, Sonia Enosse<sup>1</sup>, Kevin Backer<sup>3</sup>, Ivan Alejandro Pulido Tarquino<sup>1</sup>, Elisa Maffioli<sup>4</sup>

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### ACCEPTABILITY OF A SCREENING AND TREATMENT STRATEGY TO THE POPULATION AS PART OF STRENGTHENING THE IMPACT OF SEASONAL MALARIA CHEMOPREVENTION IN BURKINA FASO

Kadija OUEDRAOGO<sup>1</sup>, Fadima Bocoum<sup>2</sup>, Chantal fifi Kouevi<sup>1</sup>, Solange Traoré<sup>1</sup>, Elisée Kambou<sup>1</sup>, Bérenger Kaboré<sup>1</sup>, Toussaints Rouamba<sup>1</sup>, Paul Sondo<sup>1</sup>, Halidou Tinto<sup>1</sup>

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### LEVERAGING PERENNIAL MALARIA CHEMOPREVENTION (PMC) PILOT IMPLEMENTATION TO PAVE THE WAY FOR PMC AND MALARIA VACCINE CO-IMPLEMENTATION IN THE DEMOCRATIC REPUBLIC OF CONGO

Aline Maliwani<sup>1</sup>, Mvuama Mazangama<sup>2</sup>, Nono Koka<sup>3</sup>, Packy Mukanya<sup>1</sup>, Jicko Bondole<sup>2</sup>, Gloire Mbaka Onya<sup>2</sup>, Rova Ratsimandisa<sup>2</sup>, Michael Hainsworth<sup>4</sup>, Arantxa Roca Feltrer<sup>5</sup>, Caterina Guinovart<sup>6</sup>, Eric Mukomena<sup>1</sup>, Henry Ntuku<sup>7</sup>

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### ACCEPTABILITY OF INTEGRATING NOVEL MALARIA PREVENTION TOOLS INTO ROUTINE IMMUNIZATION VISITS IN CAMEROON

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### IMPACT ON PREGNANCY OUTCOMES OF INTERMITTENT PREVENTIVE TREATMENT WITH SULPHADOXINE-PYRIMETHAMINE IN URBAN AND PERI-URBAN PAPUA NEW GUINEA - A RETROSPECTIVE COHORT STUDY

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### A RANDOMIZED CONTROLLED TRIAL OF DIHYDROARTEMISININE PIPERAQUINE FOR SEASONAL MALARIA CHEMOPREVENTION IN CHILDREN UNDER 10 YEARS OLD IN KOULIKORO, MALI

Mahamoudou Toure<sup>1</sup>, Soumba Keita<sup>1</sup>, Moussa Keita<sup>2</sup>, Ibrahim Sanogo<sup>1</sup>, Daouda Sanogo<sup>1</sup>, Fousseyni Kane<sup>1</sup>, Hamady Coulibaly<sup>1</sup>, Mountaga Diallo<sup>1</sup>, Bourama Traore<sup>1</sup>, Dejeneba Dabita<sup>1</sup>, Sekou Amadou Traore<sup>1</sup>, Cheick Oumar Tangara<sup>1</sup>, Sidi Niare<sup>3</sup>, Mariam Tall<sup>4</sup>, Aissata Kone<sup>5</sup>, Mahamadou H Magassa<sup>5</sup>, Nafomon Sogoba<sup>6</sup>, Mahamadou Diakite<sup>1</sup>, Jeffrey G. Shaffer<sup>7</sup>, Seydou Doumbia<sup>1</sup>

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### EVALUATION OF CLOTHIANIDIN INDOOR RESIDUAL SPRAYING (IRS) AND PIPERONYL BUTOXIDE (PBO) INSECTICIDE-TREATED NET (ITN) CO-DEPLOYMENT COMPARED TO PBO ITNS ONLY USING HEALTH MANAGEMENT INFORMATION SYSTEM DATA IN SIERRA LEONE, 2017-2023

Natalie C. Galles<sup>1</sup>, Frederick Yamba<sup>2</sup>, Musa Sillah-Kanu<sup>2</sup>, Kevin Opondo<sup>3</sup>, Yemane Yihdego<sup>4</sup>, Evelyn Alyko<sup>5</sup>, David Schnabel<sup>5</sup>, Rebecca S. Levine<sup>6</sup>, Jenny Carlson Donnelly<sup>7</sup>, Celeste Carr<sup>8</sup>, Tony Hughes<sup>9</sup>, Isabel Swamidoss<sup>5</sup>, Ramlat Jose<sup>8</sup>, Laurent Iyikirenga<sup>3</sup>, Djenam Jacob<sup>4</sup>, Dennis Marke<sup>2</sup>, Ronald Carshon-Marsh<sup>2</sup>, Samuel Juana Smith<sup>2</sup>, Mac-Abdul Falama<sup>2</sup>, Sarah Burnett<sup>10</sup>

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Friday  
November 15



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**SUB-NATIONAL AND SUB-ANNUAL COVERAGE OF SEASONAL MALARIA CHEMOPREVENTION IN AFRICA 2012-2023**

Adam Saddler<sup>1</sup>, Samuel K. Oppong<sup>1</sup>, Susan F. Rumisha<sup>2</sup>, Alioune Camara<sup>3</sup>, Christian Rassi<sup>4</sup>, Chuks Nnaji<sup>4</sup>, Paul Milligan<sup>5</sup>, Tasmin L. Symons<sup>1</sup>, Peter W. Gething<sup>1</sup>, Daniel J. Weiss<sup>6</sup>

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**DEVELOPMENT OF AN ELQ-331 LOADED IMPLANT FOR LONG-TERM PROTECTION AGAINST MALARIA**

Diana Caridha<sup>1</sup>, Michael J. Rubal<sup>2</sup>, Sunil Sreedharan<sup>3</sup>, Sovitj Pou<sup>4</sup>, Sandra J. Drabik<sup>2</sup>, Patricia J. Lee<sup>1</sup>, Raj Patel<sup>3</sup>, Martin Smilkstein<sup>4</sup>, Daniel J. Selig<sup>1</sup>, Albert Zwiener<sup>2</sup>, Michael S. Madejczyk<sup>1</sup>, Katherine M. Liebman<sup>4</sup>, Jasmine Jaramillo<sup>2</sup>, Aaron Nilsen<sup>4</sup>, Robert Gutierrez<sup>1</sup>, Brandon Pybus<sup>5</sup>, Michael Riscoe<sup>4</sup>, Jesse P. Deluca<sup>1</sup>

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**THREE YEARS OF MONITORING AND EVALUATING SEASONAL MALARIA CHEMOPREVENTION DELIVERY IN NEW LOCATIONS IN EAST AND SOUTHERN AFRICA: RESULTS AND LESSONS FROM THREE COUNTRIES**

Chukwudi Nnaji<sup>1</sup>, Salima El Hajj<sup>1</sup>, Celio Matusse<sup>2</sup>, Sonia Enosse<sup>2</sup>, Albertino Zunza<sup>2</sup>, Norman Awen<sup>3</sup>, Abubaker Rom Ayuiel<sup>3</sup>, Jamshed Khan<sup>3</sup>, David Odong Salandini<sup>4</sup>, Tonny Kyagulanyi<sup>4</sup>, Anthony Nuwa<sup>4</sup>, Maurice Kwizera<sup>4</sup>, Joshua Okafor<sup>1</sup>, Monica de Cola<sup>1</sup>, Christian Rassi<sup>1</sup>

<sup>1</sup>Malaria Consortium, London, United Kingdom, <sup>2</sup>Malaria Consortium, Maputo, Mozambique, <sup>3</sup>Malaria Consortium, Juba, South Sudan, <sup>4</sup>Malaria Consortium, Kampala, Uganda

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**FACTORS ASSOCIATED WITH MALARIA INCIDENCE AMONG CHILDREN RECEIVING SEASONAL MALARIA CHEMOPREVENTION IN NINE STATES IN NIGERIA**

Olabisi A. Ogunmola<sup>1</sup>, Ebenezer C. Ikechukwu<sup>1</sup>, Jennifer Chukwumerije<sup>1</sup>, Chukwudi Nnaji<sup>2</sup>, Chibuzo Oguoma<sup>1</sup>, Olusola Oresanya<sup>1</sup>

<sup>1</sup>Malaria Consortium, Abuja, Nigeria, <sup>2</sup>Malaria Consortium, London, United Kingdom

## 7296

**CLUSTER RANDOMIZED CONTROLLED TRIAL TO ASSESS THE SAFETY AND TOLERABILITY OF FIVE MONTHS' REPEATED DOSES OF DIHYDROARTEMISININ PIPERAQUINE AND SULFADOXINE PYRIMETHAMINE PLUS AMODIAQUINE WHEN USED FOR SEASONAL MALARIA CHEMOPREVENTION IN CHILDREN UNDER FIVE IN UGANDA**

ANTHONY NUWA<sup>1</sup>, Chukwudi Nnaji<sup>2</sup>, Richard K. Kajubi<sup>1</sup>, Baker N. Kevin<sup>2</sup>, Musa Odongo<sup>1</sup>, David S. Odong<sup>1</sup>, Maureen Nakirunda<sup>1</sup>, Tonny Kyagulanyi<sup>1</sup>, Godfrey Magumba<sup>1</sup>, Christian Rassi<sup>2</sup>, Katherine Theiss-Nyland<sup>2</sup>, Jimmy Opigo<sup>3</sup>, James K. Tibenderana<sup>2</sup>

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**DIRECT EVIDENCE OF FACTORS ASSOCIATED WITH SEASONAL VARIATIONS IN THE USE OF INSECTICIDE-TREATED NETS IN NIGERIA**

Tarekegn A. Abeku<sup>1</sup>, Azuka Iwegbu<sup>2</sup>, Saliu Ogunmola<sup>2</sup>, Oluwabukola Babalola<sup>3</sup>, Olusola Oresanya<sup>2</sup>, Abiola Oluwagbemiga<sup>2</sup>

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**PROMOTING THE USE OF THE INTERCEPTOR DUAL AI G2 INSECTICIDE TREATED NETS TO REDUCE MALARIA INFECTIONS THROUGH FOCUSED SOCIAL BEHAVIOR CHANGE CAMPAIGNS IN NAMAYINGO DISTRICT, UGANDA**

Rebecca Babiry, Peter Anyumiza, Collin Baluku, Flavia Kabasuga, Geoffrey Nuwamanya

1. Programme for Accessible Health Communication and Education (PACE), Kampala, Uganda

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**CLOSING THE ACCESS-USE GAP: INVESTIGATING INFLUENCERS OF BEHAVIOR AROUND INSECTICIDE-TREATED NET USE IN NIGERIA AND UGANDA**

Elisabeth G. Chestnutt<sup>1</sup>, Kristina Londakova<sup>2</sup>, Niamh Thompson<sup>2</sup>, Mia Mayixuan Li<sup>2</sup>, Zain Hussain<sup>2</sup>, Anthony Nuwa<sup>3</sup>, Olusola Oresanya<sup>4</sup>, Tarekegn A. Abeku<sup>1</sup>, Katherine Theiss-Nyland<sup>1</sup>

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**PREDICTORS OF COHORT RETENTION AMONG ELIGIBLE CHILDREN RECEIVING SEASONAL MALARIA CHEMOPREVENTION IN NINE STATES IN NIGERIA**

Ebenezer C. Ikechukwu<sup>1</sup>, Olabisi A. Ogunmola<sup>1</sup>, Chukwudi Nnaji<sup>2</sup>, Ekechi Okereke<sup>1</sup>, Jennifer Chukwumerije<sup>1</sup>, Chibuzo Oguoma<sup>1</sup>, Daniel Emeto<sup>1</sup>

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**A REVISED TOOLKIT TO SUPPORT PLANNING, IMPLEMENTATION AND MONITORING OF CONTINUOUS DISTRIBUTION OF INSECTICIDE TREATED NETS**

Stephen Poyer<sup>1</sup>, Eleanore Sternberg<sup>2</sup>, Robert Opoku<sup>3</sup>, Ketty Ndhlovu Sichalwe<sup>4</sup>, Prince Owusu<sup>5</sup>, Hannah Koenker<sup>6</sup>, Mary Kante<sup>7</sup>, Lilia Gerberg<sup>8</sup>, Mary Erskine<sup>3</sup>

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**IMPACT OF SEASONAL MALARIA CHEMOPREVENTION ON THE INCIDENCE OF MALARIA AMONG CHILDREN UNDER THE AGE OF FIVE YEARS IN LAU LOCAL GOVERNMENT AREA OF TARABA STATE, NIGERIA**

Tukur Aliyu<sup>1</sup>, Khalid Kasim<sup>1</sup>, Joshua Emeni<sup>1</sup>, Mohammed Alhassan<sup>1</sup>, Victoria Erinle<sup>2</sup>, Chinedu J. Chukwu<sup>2</sup>, Uchechukwu N. Ikhimioya<sup>2</sup>, Thomas Hall<sup>3</sup>, Bravo Otohaboru<sup>2</sup>, Temitope Ipinmoye<sup>4</sup>, Emmanuel Obi<sup>4</sup>, Frank Oronsaye<sup>4</sup>, Sonachi S. Ezeiru<sup>4</sup>, Emmanuel D. Shekarau<sup>5</sup>, Nnenna Ogbulafor<sup>5</sup>, Issa B. Kawu<sup>5</sup>, Chukwu Okoronkwo<sup>5</sup>, Godwin Ntadom<sup>5</sup>, James Ssekitooleko<sup>6</sup>

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### THE IMPACT OF THREE ADDITIONAL DOSES OF PMC ADMINISTERED THROUGH EPI SCHEDULES ON VITAMIN A SUPPLEMENT UPTAKE IN CAMEROON

Michaela Gross<sup>1</sup>, Jonna M. Mosoff<sup>2</sup>, Albertine Lele<sup>3</sup>, Mercy Tah-Monunde<sup>3</sup>, James Sinsai<sup>3</sup>, Alba McGirr<sup>2</sup>, Carine Nfor<sup>3</sup>, Sham Lal<sup>2</sup>, Roland Gosling<sup>2</sup>, Wilfred F. Mbacham<sup>3</sup>, Akindeh M. Nji<sup>3</sup>, R Matthew Chico<sup>2</sup>, Gillian Stresman<sup>1</sup>

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### DOES MOSQUITO NET USE CONTRIBUTE TO MALARIA PREVENTION: AN ANALYSIS OF LOT QUALITY ASSURANCE SURVEY AND ROUTINE HEALTH FACILITY DATA FOR CONFIRMED MALARIA CASES

Richard Ongom Opio<sup>1</sup>, Angela Kateemu<sup>1</sup>, Edward Mugwanya<sup>1</sup>, Edgar Agaba<sup>2</sup>, Kenneth Kasule<sup>3</sup>, Ronald Kimuli<sup>4</sup>, Amy Casella<sup>5</sup>, Aliza Hasham<sup>5</sup>, Benjamin Binagwa<sup>1</sup>, Nancy Brady<sup>5</sup>

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### LEVERAGING BEHAVIORAL SCIENCE FOR ENHANCED MALARIA PREVENTION IN UGANDA: HOUSEHOLD ACTION AGAINST MALARIA

Aaron Musimenta<sup>1</sup>, Dorah Taranta<sup>1</sup>, Rukia Nakamate<sup>2</sup>, Angela Kateemu<sup>1</sup>, Edward Mugwanya<sup>1</sup>, Benjamin Binagwa<sup>1</sup>, Nancy Brady<sup>3</sup>, Disan Ndaula<sup>4</sup>, Amy Casella<sup>3</sup>, Aliza Hasham<sup>3</sup>

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### CONTRIBUTION OF SOCIAL BEHAVIOR CHANGE THROUGH COMMUNITY HEALTH WORKERS AND LOCAL LEADERS IN REDUCING MALARIA INCIDENCE IN KAYONZA DISTRICT, EASTERN PROVINCE OF RWANDA

GAHIGANA Seraphina<sup>1</sup>, Manasseh WANDERA GIHANA<sup>1</sup>, KABATESI Irene<sup>1</sup>, Aimable Mbituyumuremyi<sup>2</sup>, Michee Kabera<sup>2</sup>, Janepher TURATSINZE<sup>1</sup>, Alice Bagwire Kashaija<sup>3</sup>

<sup>1</sup>Society for Family Health, Kigali, Rwanda, <sup>2</sup>Rwanda Biomedical Center, Malaria & Other Parasitic Diseases Division, Kigali, Rwanda, <sup>3</sup>Jhpiego, Kigali, Rwanda, Kigali, Rwanda

## Malaria – Surveillance and Data Utilization

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### TRENDS AND LEVELS OF MALARIA INCIDENCE DURING INDOOR RESIDUAL SPRAYING IN HOMABAY COUNTY, 2019-2023

Dr. Beatrice K. Machini<sup>1</sup>, Dr. Kibor Keitany<sup>1</sup>, James N. Kiarie<sup>1</sup>, Dr. Otieno Dan James<sup>2</sup>, Stephen Aricha<sup>1</sup>, Dr. Joash Auka<sup>3</sup>

<sup>1</sup>National Malaria Control Program, Nairobi, Kenya, <sup>2</sup>World Health Organization, Nairobi, Kenya, <sup>3</sup>Ministry of Health, Nairobi, Kenya

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### ENHANCING MALARIA DIAGNOSIS, TREATMENT, AND DATA MANAGEMENT THROUGH TRAINING AND SUPERVISION OF HEALTHCARE PERSONNEL IN SIX NORTHERN PROVINCES OF ANGOLA, 2018-2023

Jose Franco Martins<sup>1</sup>, Erin Eckert<sup>2</sup>, Joana Martinho do Rosario<sup>3</sup>, Teresa Nobrega<sup>4</sup>, Anya Fedorova<sup>5</sup>, Benjamin Nieto-Andrade<sup>5</sup>

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### BUILDING A LOCAL INSTITUTION WITH GLOBAL REACH: INVESTING IN AFRICA UNIVERSITY FOR ENTOMOLOGICAL SURVEILLANCE TO FIGHT MALARIA IN ZIMBABWE

Sungano Mharakurwa<sup>1</sup>, Juliet Sithole<sup>1</sup>, Jeanette Dadzie<sup>1</sup>, Aramu Makuwaza<sup>1</sup>, Nobert Mudare<sup>1</sup>, Ottias Tapfumane<sup>2</sup>, Andrew Tangwena<sup>2</sup>, Wilson Chauke<sup>2</sup>, Patience Dhliwayo<sup>2</sup>, Busisani Dube<sup>3</sup>, Regis Magauzi<sup>3</sup>, Jesicca Kafuko<sup>3</sup>, Erik J. Reaves<sup>4</sup>

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### USING MALARIA ROUTINE DATA QUALITY AUDITS TO IMPROVE MALARIA DATA QUALITY IN THE DEMOCRATIC REPUBLIC OF THE CONGO

Bruno Kapinga<sup>1</sup>, Yves Ilunga<sup>1</sup>, Erick Tshikamba<sup>2</sup>, Yibayiri Osee Sanogo<sup>3</sup>, Hyacinthe Kaseya<sup>4</sup>, Packy Mbayo<sup>4</sup>, Eric Mukomena<sup>4</sup>

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### INSECTICIDE RESISTANCE DATA TO INFORM INTERVENTION SELECTION AND TARGETING IN UGANDA

Medard Rukaari<sup>1</sup>, Jimmy Opigo<sup>1</sup>, Munashe Madinga<sup>2</sup>, Lucia Fernandez<sup>3</sup>, Sylvia Nanfuka Kirumira<sup>4</sup>, Juliet Nakiganda<sup>4</sup>, Natalie Priestley<sup>4</sup>, Fredrick Luwaga<sup>4</sup>, Lorraine Kabunga<sup>4</sup>

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### DECADAL TRENDS IN UNDER-5 MALARIA MORTALITY; INSIGHTS FROM AN ENDEMIC HDSS SITE IN RURAL WESTERN KENYA

PETER SIFUNA, Michal Mbinji, Doris Njoroge, Walter Otieno  
WRAIR AFRICA, KISUMU, Kenya

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### NAVIGATING VILLAGE BOUNDARIES: A COMPARATIVE EXPLORATION OF THREE MAPPING TECHNIQUES

Wycliffe Odongo<sup>1</sup>, Daniel McDermott<sup>2</sup>, Kizito Obiet<sup>3</sup>, Brian Seda<sup>3</sup>, Oliver Towett<sup>3</sup>, Frank Aduwo<sup>3</sup>, Simoon Kariuki<sup>3</sup>, Julie Gutman<sup>1</sup>

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Angelina Julius<sup>1</sup>, Daniel Petro<sup>2</sup>, Daniel challe<sup>1</sup>, Salehe Mandai<sup>1</sup>, Gervas Alexander<sup>1</sup>, Rashid Madebe<sup>1</sup>, Seth Misago<sup>1</sup>, Dativa Pereus<sup>3</sup>, Filbert Francis<sup>4</sup>, Catherine Bakari<sup>1</sup>, Rule Budodo<sup>1</sup>, Ramadhan Moshi<sup>1</sup>, Ruth Mbwambo<sup>1</sup>, Daniel Mbwambo<sup>5</sup>, Ntuli Kapologwe<sup>6</sup>, Sijenuu Aarlon<sup>5</sup>, Celine Mandara<sup>1</sup>, Deus Ishengoma<sup>1</sup>

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Cyriaque Afoukou<sup>1</sup>, Achille Batonon<sup>1</sup>, Dossou-Yovo Sebastiano<sup>1</sup>, Bocar Anne<sup>2</sup>, Madi Ahle<sup>3</sup>, Richard Dossou-Yovo<sup>3</sup>, Djawad Ramanou<sup>3</sup>, Didier Agossadou<sup>3</sup>, Bradley Didier<sup>2</sup>, Macoumba Toure<sup>2</sup>, Kevin Njiru<sup>2</sup>, Olajumoke Adekeye<sup>3</sup>, Lundi-Anne Ornam<sup>3</sup>

<sup>1</sup>Ministry of Health, Cotonou, Benin, <sup>2</sup>Clinton Health Access Initiative, Dakar, Senegal, <sup>3</sup>Clinton Health Access Initiative, Cotonou, Benin

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Andrew Andrada<sup>1</sup>, Thomas P. Eisele<sup>1</sup>, Chama Chishya<sup>2</sup>, John Chulu<sup>2</sup>, Handrinah Banda<sup>2</sup>, Chanda Chitoshi<sup>2</sup>, Annie Arnzen<sup>3</sup>, Erica Orange<sup>3</sup>, Busiku Hamainza<sup>4</sup>, Kafula Silumbe<sup>5</sup>, Megan Littrell<sup>6</sup>, Ruth Ashton<sup>1</sup>

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### CREATING COMMUNITY RESOURCES TO MAKE MALARIA GENOMIC DATA ANALYSIS MORE ACCESSIBLE BY EVALUATING, IMPROVING, AND HARMONIZING SOFTWARE TOOLS

Shazia Ruybal-Pésantéz<sup>1</sup>, Aimee Taylor<sup>2</sup>, Alfred Simkin<sup>3</sup>, Jason Hendry<sup>4</sup>, Jody Phelan<sup>5</sup>, Jorge Amaya-Romero<sup>6</sup>, Karamoko Niare<sup>7</sup>, Kathryn Murie<sup>8</sup>, Kirsty McCann<sup>9</sup>, Maxwell Murphy<sup>9</sup>, Mouhamadou Fadel Diop<sup>10</sup>, Nicholas Hathaway<sup>11</sup>, Nicholas Brazeau<sup>12</sup>, Sophie Berube<sup>13</sup>, Stephen Schaffner<sup>14</sup>, Bryan Greenhouse<sup>9</sup>, Amy Wesolowski<sup>13</sup>, Robert Verity<sup>1</sup>

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### USING ROUTINE SURVEILLANCE DATA TO ASSESS ADHERENCE TO MALARIA TREATMENT GUIDELINES IN THE COUNTY REFERRAL HOSPITALS IN KENYA

Robert M. Mwangi<sup>1</sup>, Fredrick O. Odhiambo<sup>2</sup>, Regina J. Kandie<sup>1</sup>, Emma Nyandigisi<sup>1</sup>, Beatrice K. Machini<sup>1</sup>

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### ADAPTING MALARIA INDICATOR SURVEYS TO INVESTIGATE TREATMENT ADHERENCE: A PILOT STUDY ON BIKO ISLAND, EQUATORIAL GUINEA

David S. Galick<sup>1</sup>, Olivier Tresor Donfack<sup>1</sup>, Teresa Ayingono Ondo Mfumu<sup>1</sup>, Cristina Ngui Otego Onvogo<sup>1</sup>, Teobaldo Babo Dougan<sup>1</sup>, Monica Idelvina<sup>1</sup>, Godino Esono Nguema<sup>1</sup>, Charity Okoro Eribo<sup>1</sup>, Maria Mirella Buila Euka<sup>1</sup>, Kate Martin<sup>2</sup>, Wonder P. Phiri<sup>1</sup>, Carlos A. Guerra<sup>2</sup>, Guillermo A. García<sup>2</sup>

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### MALARIA OUTBREAK INVESTIGATION IN THE ARID NORTHERN WAJIR COUNTY, KENYA, DEC 2023-FEB 2024

Diana Rose Wangari Mwaura<sup>1</sup>, Megumi Itoh<sup>2</sup>, Brian Signu<sup>1</sup>, Elizabeth N. Kileku<sup>1</sup>, Rose Ajambo<sup>3</sup>, Ahmed Abade<sup>1</sup>, Beatrice Machini<sup>4</sup>, James Kiarie<sup>4</sup>, James Sang<sup>4</sup>, Jane Githuku<sup>5</sup>, Maurice Owiny<sup>1</sup>

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### QUALITY OF MALARIA SERVICE DELIVERY BY HEALTH CARE WORKERS FOR PATIENTS PRESENTING WITH FEBRILE ILLNESS IN HEALTH FACILITIES IN SOUTHEASTERN TANZANIA, 2023

Stella Makwaruzi<sup>1</sup>, Michael Gulaka<sup>1</sup>, Saidi Mgata<sup>1</sup>, Geoffrey Makenga<sup>1</sup>, Marguerite M. Clougherty<sup>2</sup>, Albert Ikonje<sup>3</sup>, Chonge Kitojo<sup>3</sup>, Sarah-Blythe Ballard<sup>4</sup>, Naomi Serbantez<sup>3</sup>, Sigsibert Mkude<sup>1</sup>, Abdallah Lusasi<sup>5</sup>, Samwel Lazaro<sup>5</sup>

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## 7322

### OPERATIONAL FACTORS INFLUENCING TIMELY MALARIA CASE REPORTING BY PRIVATE HEALTH FACILITIES IN URBAN DISTRICT, UNGUJA ZONE, ZANZIBAR

Mwatima S. Ali<sup>1</sup>, Shija J. Shija<sup>1</sup>, Mohamed Ali Haji<sup>1</sup>, Geoffrey Makenga<sup>2</sup>, Humphrey Mkali<sup>2</sup>, Marguerite M. Clougherty<sup>3</sup>, Naomi Serbantez<sup>4</sup>, Wahida Shirazi<sup>1</sup>, Happiness P. Saronga<sup>5</sup>, Phares G. Mujinja<sup>5</sup>

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### RETROSPECTIVE ANALYSIS OF MALARIA INCIDENCE IN GUINEA 2018 TO 2022

Abdourahmane Diallo<sup>1</sup>, Oumar Billa<sup>2</sup>, Nouman Diakité<sup>1</sup>, Ousmane Diallo<sup>3</sup>, Mohamed Saran Condé<sup>4</sup>, Lazare Loua<sup>1</sup>, Mohamed Dioubate<sup>1</sup>, Mohamed Binne Camara<sup>1</sup>, Galatas Beatriz<sup>5</sup>, Jaline Gerardin<sup>6</sup>, Alioune Camara<sup>1</sup>

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**7324****COST-UNIT ANALYSIS OF VECTORCAM: A NOVEL COMMUNITY-BASED AI TOOL FOR VECTOR SURVEILLANCE TO IDENTIFY MOSQUITOES' SPECIES IN RURAL UGANDA**

**Marina Rincon Torroella**, Bryan Patenaude, Sunny Patel, April Zambelli-Weiner, Soumyadip Acharya  
*Johns Hopkins University, Baltimore, MD, United States*

**7325****ASSESSING THE FEASIBILITY OF IDENTIFYING AND VALIDATING SEROLOGICAL MARKERS OF RECENT LOW DENSITY PLASMODIUM FALCIPARUM INFECTIONS IN A PRE-ELIMINATION SETTING**

Jessica Schue<sup>1</sup>, Nora Pisanic<sup>1</sup>, Delis Mattei-Lopez<sup>1</sup>, Tamaki Kobayashi<sup>1</sup>, Japhet Matoba<sup>2</sup>, Michael Musonda<sup>2</sup>, Ben Katowa<sup>2</sup>, Harry Hamapumbu<sup>1</sup>, Edgar Simulundu<sup>2</sup>, Douglas E. Norris<sup>1</sup>, Christopher D. Heaney<sup>1</sup>, Amy Wesolowski<sup>1</sup>, William J. Moss<sup>1</sup>, **Sophie Berube**<sup>1</sup>  
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**7326****IMPACT OF ROUTINE DATA QUALITY AUDITS (RDQA) IN IMPROVING DATA QUALITY AND MALARIA MANAGEMENT STANDARDS IN HEALTH FACILITIES IN THE DEMOCRATIC REPUBLIC OF CONGO (DRC)**

**Jicko Bondole**<sup>1</sup>, Aline Nkulu<sup>1</sup>, Jimmy Anzolo<sup>1</sup>, Rova Ratsimandisa<sup>1</sup>, Michael Hainsworth<sup>2</sup>, Arantxa Roca Feltrer<sup>3</sup>, Hyacinthe Kaseya<sup>4</sup>, Alain Bokota<sup>4</sup>, Ghislain Kikunda<sup>4</sup>, Andre Kaseba<sup>4</sup>, Eric Mukomena<sup>4</sup>  
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**7327****DESCRIPTION OF FACTORS ASSOCIATED WITH MALARIA PREVALENCE IN TWO TRANSMISSION SETTINGS IN SIAYA COUNTY, WESTERN KENYA (2022-2024)**

**Oliver Towett**<sup>1</sup>, Victoria Seffren<sup>2</sup>, Alice Kamau<sup>3</sup>, Brian Seda<sup>1</sup>, Daniel McDermott<sup>3</sup>, Caroline Ogwang<sup>1</sup>, Kizito Obiet<sup>1</sup>, Julia Janssen<sup>2</sup>, Maia Lesosky<sup>4</sup>, Wycliffe Odongo<sup>2</sup>, Julie R. Gutman<sup>2</sup>, Jonathan Schultz<sup>2</sup>, Simon Kariuki<sup>1</sup>, Aaron M. Samuels<sup>2</sup>, Feiko ter Kuile<sup>3</sup>, Sarah G. Staedke<sup>3</sup>  
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**7328****IMPORTANCE OF A STRONG LOGISTIC MANAGEMENT INFORMATION SYSTEM TO REDUCE MALARIA COMMODITY LOSSES IN MADAGASCAR**

**Solofo Razakamiadana**<sup>1</sup>, Yvette Razafimaharo<sup>2</sup>, Jemima Andriamihamina<sup>1</sup>, Jocelyn Razafindrakoto<sup>1</sup>, Anna Bowen<sup>1</sup>  
<sup>1</sup>*US President's Malaria Initiative, Antananarivo, Madagascar*, <sup>2</sup>*National malaria program, Antananarivo, Madagascar*

**7329****MOLECULAR SURVEILLANCE OF MALARIA IN ENDEMIC REGIONS IN UGANDA REVEALS HIGH GENETIC DIVERSITY OF PLASMODIUM FALCIPARUM AND CORRELATION WITH TRANSMISSION INTENSITY**

**Shahid Kiyaga**<sup>1</sup>, Thomas Katairo<sup>1</sup>, Monica Mbabazi<sup>1</sup>, Diana Kisakye<sup>1</sup>, Bienvenu Nsengimaana<sup>1</sup>, Stephen Tukwasibwe<sup>1</sup>, Francis Ddumba<sup>1</sup>, Victor Asua<sup>1</sup>, David P. Kateete<sup>2</sup>, Joyce N. Nabende<sup>2</sup>, Samuel L. Nsohya<sup>1</sup>, Moses R. Kanya<sup>1</sup>, Isaac Ssewanyana<sup>1</sup>, Andres Aranda-Diaz<sup>3</sup>, Philip J. Rosenthal<sup>3</sup>, Mellisa Conrad<sup>3</sup>, Bryan Greenhouse<sup>3</sup>, Jessica Briggs<sup>3</sup>  
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**7330****THE INTEGRAL ROLE OF GIS IN THE SEASONAL MALARIA CHEMOPREVENTION CAMPAIGN TO IMPROVE MONITORING\_A CASE STUDY OF TARABA STATE, NORTHEAST, NIGERIA**

Chinedu J. Chukwu<sup>1</sup>, **Jerry Agulehi**<sup>1</sup>, Isaac Adejo<sup>1</sup>, Dozie Ezechukwu<sup>1</sup>, Victoria C. Erinle<sup>1</sup>, Thomas A. Hall<sup>2</sup>, Sonachi S. Ezeiru<sup>3</sup>, Frank Oronsaye<sup>3</sup>, Emmanuel U. Obi<sup>3</sup>, Chukwu Okoronkwo<sup>4</sup>, Godwin N. Ntadom<sup>4</sup>, James Ssekitooleko<sup>5</sup>  
<sup>1</sup>*Management Sciences for Health, Abuja, Nigeria*, <sup>2</sup>*Management Sciences for Health, Arlington, VA, United States*, <sup>3</sup>*Catholic Relief Services, Abuja, Nigeria*, <sup>4</sup>*National Malaria Elimination Program, Abuja, Nigeria*, <sup>5</sup>*The Global Fund to Fight AIDS, Tuberculosis and Malaria, Geneva, Switzerland*

**Malaria - Vaccines and Immunotherapeutics****7331****EXTENDED INTERVAL REGIMEN OF PREQUALIFIED MALARIA VACCINE R21 ADJUVANTED WITH 3M052 ELICITS HIGH AVIDITY ANTI-CIRCUMSPOROZOITE PROTEIN ANTIBODIES IN NON-HUMAN PRIMATES**

**Kan Li**<sup>1</sup>, Prabhu S. Arunachalam<sup>2</sup>, Matthew O. Herbst<sup>1</sup>, Gillian Q. Horn<sup>1</sup>, Milite Abraha<sup>1</sup>, Siam Shabbir<sup>1</sup>, Rachel L. Spreng<sup>1</sup>, Adrian V.S. Hill<sup>3</sup>, Sheetij Dutta<sup>4</sup>, S. Moses Dennison<sup>1</sup>, Bali Pulendran<sup>2</sup>, Georgia D. Tomaras<sup>1</sup>  
<sup>1</sup>*Duke University, Durham, NC, United States*, <sup>2</sup>*Stanford University, Stanford, CA, United States*, <sup>3</sup>*University of Oxford, Oxford, United Kingdom*, <sup>4</sup>*Walter Reed Army Institute of Research, Silver Spring, MD, United States*

**7332****IMPACT OF RTS,S MALARIA VACCINE ON PLASMODIUM FALCIPARUM INFECTION IN SCHOOL-AGED CHILDREN: INTERIM RESULTS FROM INDIVIDUALLY RANDOMIZED CLINICAL TRIAL IN MALAWI**

**Christopher C. Stanley**<sup>1</sup>, Tabither Kaunda<sup>1</sup>, Harrisson Msuku<sup>1</sup>, Alfred Matengeni<sup>1</sup>, Karl B. Seydel<sup>2</sup>, Lauren M. Cohee<sup>3</sup>, Terrie Taylor<sup>2</sup>, Clarissa Valim<sup>4</sup>, Don P. Mathanga<sup>1</sup>  
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**7333****ACCELERATED STABILITY STUDY OF CGMP DRUG PRODUCT INTERMEDIATE PVS230D1-EPA CONJUGATE**

**Daming Zhu**, Holly McClellan, Weili Dai, Brendon Carnell, Karine Reiter, Nicholas J. MacDonald, Kelly M. Rausch, David L. Narum, Patrick E. Duffy  
*Laboratory of Malaria Immunology and Vaccinology, National Institute of Allergy and Infectious Disease, National Institutes of Health, Bethesda, MD, United States*

Friday  
November 15

## 7334

**DEVELOPMENT OF VACCINE CANDIDATES AGAINST PLACENTAL MALARIA USING PEPTIDE-DECORATED ANTIGENIC LIPOSOMES**

Payton LeBlanc

University of Alberta, Edmonton, AB, Canada

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**SAFETY AND REACTOGENICITY OF THE MALARIA VACCINE CANDIDATE ANAPN1 IN HEALTHY ADULTS IN GABON: PRELIMINARY DATA OF A RANDOMIZED, CONTROLLED, PHASE1 DOSE-ESCALATION CLINICAL TRIAL**

Jeannot Frejus Zinsou<sup>1</sup>, Grace Cherile Ongouta<sup>1</sup>, Jean Ronald Edoa<sup>1</sup>, Elsy Dansou<sup>1</sup>, Latifeh Dahmash<sup>2</sup>, Bayode Romeo Adegbite<sup>1</sup>, Benjamin Akim Mordmueller<sup>3</sup>, Rhoel Ramos Dinglasan<sup>2</sup>, Ayola Akim Adegnika<sup>1</sup>

<sup>1</sup>CERMEL, Lambarene, Gabon, <sup>2</sup>University of Florida, Gainesville, FL, United States, <sup>3</sup>Radboud University Medical Center, Nijmegen, Netherlands

## 7336

**CAREGIVER PERCEPTION AND ACCEPTABILITY OF THE MALARIA VACCINE RTS,S PRIOR TO INTRODUCTION IN THE FAR NORTH REGION OF CAMEROON**

Innocent M. Ali<sup>1</sup>, Arsène Dombou Zeufack<sup>1</sup>, Nelris M. Kongor<sup>1</sup>, Voundi J. Voundi<sup>2</sup>, Jean Pierre Kidwang<sup>2</sup>, Dominique Bomba<sup>2</sup>, Abas Muliom<sup>3</sup>, Dorothy F. Achu<sup>4</sup>, Jean-Louis A. Ndiaye<sup>5</sup>, Joel Ateba<sup>2</sup>

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## 7337

**EFFECTIVENESS AND IMPACT OF THE RTS,S/AS01<sub>E</sub> MALARIA VACCINE ONE YEAR AFTER THE PRIMARY VACCINATION IN REAL-LIFE SETTINGS IN THREE SUB-SAHARAN AFRICAN COUNTRIES: INTERIM RESULTS**
Valerie Haine<sup>1</sup>, RTS,S Epidemiology EPI-MAL-003 study group<sup>2</sup><sup>1</sup>GSK, Wavre, Belgium

## 7338

**CHARACTERIZING HUMAN MONOCLONAL ANTIBODIES INDUCED BY VACCINES AGAINST *PLASMODIUM VIVAX* DUFFY-BINDING PROTEIN**

Mimi M. Hou<sup>1</sup>, Martino Bardelli<sup>1</sup>, Doris Quinkert<sup>1</sup>, Cassandra A. Rigby<sup>1</sup>, Carolyn M. Nielsen<sup>1</sup>, Robert W. Moon<sup>2</sup>, Kirsty McHugh<sup>1</sup>, Angela M. Minassian<sup>1</sup>, Simon J. Draper<sup>1</sup>

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## 7339

**COMPARATIVE STUDY OF ANTIBODY EFFECTOR FUNCTIONS IN UK INDIVIDUALS AFTER VACCINATION EITHER WITH RTS,S AS01<sub>B</sub> OR R21 MATRIX-M ENROLLED INTO CONTROLLED HUMAN MALARIA INFECTION STUDIES**

Olivia Muñoz<sup>1</sup>, Samuel Provstgaard-Morys<sup>1</sup>, Ben Hollingdale<sup>1</sup>, Adriana Tomic<sup>2</sup>, Katie Ewer<sup>1</sup>, Adrian V S Hill<sup>1</sup>, Lisa Stockdale<sup>1</sup>

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**SAFETY AND IMMUNOGENICITY OF THE MALARIA VACCINE R21/ MATRIX-M™ IN UGANDAN CHILDREN LIVING WITH HIV**

Fernando Ramos Lopez<sup>1</sup>, Gloria Lubega<sup>2</sup>, Lisa Stockdale<sup>1</sup>, Meera Madhavan<sup>1</sup>, Michael Mubiru<sup>2</sup>, Joseph Lutaakome<sup>2</sup>, Emma Beaumont<sup>3</sup>, Mehreen Dattoo<sup>1</sup>, Katerina Rapi<sup>1</sup>, Amelia Bajer<sup>1</sup>, Sophie Weston<sup>1</sup>, Alison Lawrie<sup>1</sup>, Jack Quaddy<sup>1</sup>, Mary Nyantaro<sup>2</sup>, Prasad S Kulkarni<sup>4</sup>, Sandesh Bharati<sup>4</sup>, Eugene Ruzagire<sup>2</sup>, Adrian V.S. Hill<sup>1</sup>

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**A NOVEL EX VIVO ASSAY TO EVALUATE FUNCTIONAL EFFECTIVENESS OF *PLASMODIUM VIVAX* TRANSMISSION BLOCKING VACCINE USING PVS25 TRANSGENIC *P. BERGHEI***

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## 7342

**MALARIA VACCINE INTRODUCTION REDUCED CLINICAL MALARIA IN KENYA: TIME-SERIES ANALYSIS OF ROUTINE HEALTH FACILITY SURVEILLANCE DATA (2020-2022)**

John A. Painter<sup>1</sup>, Erika A. Wallender<sup>2</sup>, Andrew Hill<sup>3</sup>, Mary Hamel<sup>4</sup>, Rafiq Okine<sup>5</sup>, Eliane Furrer<sup>6</sup>, Rose Jalang'o<sup>6</sup>, Nelli Westercamp<sup>7</sup>

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## 7343

**IMMATURE DENDRITIC CELL TARGETING MRNA VACCINE ENHANCES PROTECTION FROM *PLASMODIUM* LIVER STAGE INFECTION BY ENHANCING T CELL RESPONSES AND ANTIBODY TITERS AGAINST CSP REPEAT REGIONS**

Sean Yanik, Varsha Venkatesh, James Gordy, Richard Markham, Prakash Srinivasan Johns Hopkins, Baltimore, MD, United States

## 7344

**THE PVRBP2B-TFR1 INTERACTION IS NOT ESSENTIAL FOR RETICULOCYTES INVASION BY *PLASMODIUM VIVAX* ISOLATES FROM CAMBODIA**

Lionel B. Feufack<sup>1</sup>, Lea Baldor<sup>1</sup>, Camille Roesch<sup>1</sup>, Baura TAT<sup>1</sup>, Agnes Orban<sup>1</sup>, Dynang Seng<sup>1</sup>, Leonore Carias<sup>2</sup>, Christopher L. King<sup>2</sup>, Alice SM Ong<sup>3</sup>, Bruce Russel<sup>3</sup>, François Nosten<sup>4</sup>, Haitong Mao<sup>5</sup>, Laurent Renia<sup>6</sup>, Eugenia Lo<sup>7</sup>, Benoit Witkowski<sup>1</sup>, Jean Popovici<sup>1</sup>

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**THE EFFECTS OF VACCINE ADJUVANTS & MAJOR HISTOCOMPATIBILITY COMPLEX (MHC) ON THE IMMUNOGENICITY OF A SUBDOMINANT EPITOPE IN *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN**

Mohammad Rafiul Hoque<sup>1</sup>, Daniel Ferrer Vinals<sup>1</sup>, Simranjit Grewal<sup>1</sup>, Catherine Mitran<sup>1</sup>, John Klassen<sup>1</sup>, Michael Hawkes<sup>2</sup>, Stephanie K. Yanow<sup>1</sup>

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**VACCINE DESIGNS TO ELICIT PROTECTIVE ANTIBODIES AGAINST *PLASMODIUM FALCIPARUM* CSP**

Mohammad Naghizadeh<sup>1</sup>, Yevel Flores-Garcia<sup>2</sup>, Sayit Mahmut Erdogan<sup>1</sup>, Gregory M. Martin<sup>3</sup>, Fabien Cannac<sup>3</sup>, Nis Borbye-Lorenzen<sup>4</sup>, Randall S. MacGil<sup>5</sup>, Emily Locke<sup>5</sup>, C. Richter King<sup>5</sup>, Ashley Birkett<sup>5</sup>, Lorraine A Soisson<sup>6</sup>, Robin Miller<sup>7</sup>, Kristin Skogstrand<sup>4</sup>, Adam F. Sander<sup>1</sup>, Morten Agertoug Nielsen<sup>1</sup>, Ian Wilson<sup>3</sup>, Andrew B. Ward<sup>3</sup>, Fidel Zavala<sup>8</sup>, Michael Theisen<sup>4</sup>

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**AMA1-SPECIFIC HUMAN MONOCLONAL ANTIBODIES INHIBIT *PLASMODIUM VIVAX* PRE-ERYTHROCYTIC AND BLOOD STAGE INFECTION**

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**DESIGN AND EVALUATION OF CHIMERIC *PLASMODIUM FALCIPARUM* CIRCUMSPOROZOITE PROTEIN-BASED MALARIA VACCINES**

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**ASEPTIC, PURIFIED, VIALED *PLASMODIUM VIVAX* SPOOROZOITES FOR CONTROLLED HUMAN MALARIA INFECTION**

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**Bacteriology - Enteric Infections**

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**ANTIMICROBIAL RESISTANCE OF *SHIGELLA* AMONG CHILDREN UNDER FIVE YEARS WITH DIARRHEA OVER A DECADE IN THE GAMBIA**

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**COMPARING WHOLE CELL PSORALEN INACTIVATED *SHIGELLA* VACCINE VERSUS FORMALIN INACTIVATED *SHIGELLA* VACCINE IN MICE**

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**ESTABLISHING CHOLERA SURVEILLANCE IN RURAL NEPAL DURING COVID-19 PANDEMIC: LESSONS LEARNED**

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**A COMPARISON OF SEROLOGIC, MOLECULAR, AND GENOMIC APPROACHES FOR SEROTYPING *SHIGELLA FLEXNERI* STRAINS ISOLATED FROM THE PERUVIAN AMAZON**

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**INTERIM SAFETY DATA FROM A PHASE 1/2A, RANDOMIZED, CONTROLLED, OBSERVER-BLIND TRIAL TO EVALUATE THE SAFETY, REACTOGENICITY AND IMMUNOGENICITY OF A TRIVALENT VACCINE AGAINST INVASIVE NONTYPHOIDAL SALMONELLOSIS (INTS) AND TYPHOID FEVER IN HEALTHY EUROPEAN AND AFRICAN ADULTS**

Yasir Shitu Isa<sup>1</sup>, Kanchanamala Withanage<sup>2</sup>, Priyanka D. Patel<sup>3</sup>, Antonio Lorenzo Di Pasquale<sup>1</sup>, Alimamy Serry-Bangura<sup>4</sup>, Giulia Luna Cilio<sup>4</sup>, Omar Rossi<sup>1</sup>, Beatrice Grossi<sup>1</sup>, Chiara Crispino<sup>1</sup>, Rita La Gaetana<sup>1</sup>, Ilse De Coster<sup>2</sup>, Valentino Conti<sup>1</sup>, Rocio Canals<sup>1</sup>, Ashwani Kumar Arora<sup>1</sup>, Usman Nasir Nakakana<sup>1</sup>, Melita Gordon<sup>3</sup>

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### POLYCHROMATIC FLOW CYTOMETRY PANELS TO CHARACTERIZE ANTIGEN-SPECIFIC MEMORY B-CELLS INDUCED BY ENTEROTOXIGENIC *ESCHERICHIA COLI* VACCINES

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### RETAINING AZITHROMYCIN SUSCEPTIBILITY IN THE FACE OF INCREASING USE IN SUB-SAHARAN AFRICA-THE ROLE OF EFFLUX PUMP INHIBITORS

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### ESTIMATING THE COST-OF-ILLNESS RELATED TO CHOLERA IN MOZAMBIQUE AND NEPAL

**Prerana Parajulee**<sup>1</sup>, Jung Seok Lee<sup>1</sup>, Nelmo Manjate<sup>2</sup>, Sofiao Manjo<sup>2</sup>, Kshitij Karki<sup>3</sup>, Rakchya Amatya<sup>3</sup>, Bisekha Jaiswal<sup>3</sup>, Geun Hyeog Jang<sup>1</sup>, Jae Woong Lee<sup>1</sup>, Haeun Cho<sup>1</sup>, Hyoryoung Lee<sup>1</sup>, Nimesh Poudyal<sup>1</sup>, Yubin Lee<sup>1</sup>, Yeonji Jeon<sup>1</sup>, Igor Capitrine<sup>2</sup>, Liliana Dengo<sup>2</sup>, Deepak Bajracharya<sup>3</sup>, Daniel Chulwoo Rhee<sup>1</sup>, Krishna Prasad Paudel<sup>4</sup>, Jose Paulo Langa<sup>2</sup>, SeEun Park<sup>1</sup>, Julia Lynch<sup>1</sup>  
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### SINGLE DOSE AZITHROMYCIN AMONG CHILD CONTACTS OF CHOLERA PATIENTS CAN REDUCE CHOLERA AT HOUSEHOLD LEVEL: A DOUBLE-BLINDED RANDOMIZED CONTROL TRIAL

**Fahima Chowdhury**<sup>1</sup>, Afroza Akter<sup>1</sup>, Taufiqur R. Bhuiyan<sup>1</sup>, Imam Tauheed<sup>1</sup>, Denise Chac<sup>2</sup>, Damien M. Slater<sup>3</sup>, Sowmya R. Rao<sup>4</sup>, Ana Weil<sup>2</sup>, Regina C. LaRocque<sup>3</sup>, Firdausi Qadri<sup>1</sup>, Jason B. Harris<sup>3</sup>  
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### TYPHOID CONJUGATE VACCINE INTRODUCTION: DECISION-MAKING IN THE CONTEXT OF LIMITED DATA USING A BURDEN AND RISK ASSESSMENT FRAMEWORK

**Lucy Breakwell Nagle**<sup>1</sup>, Yesser Sebeh<sup>2</sup>, Zimy Wansaula<sup>1</sup>, Katrin Sadigh<sup>1</sup>, Henry Njuguna<sup>1</sup>, Matthew Mikoleit<sup>1</sup>, Musa Y. Hindiyeh<sup>3</sup>, Jenny Walldorf<sup>3</sup>, Carol Tevi Benissan<sup>3</sup>, Molly Hancuh<sup>2</sup>, Amanda Tiffany<sup>1</sup>, Anna A. Minta<sup>3</sup>, Adwoa D. Bentsi-Enchill<sup>3</sup>  
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### MEASURING THE EFFECTIVENESS AND IMPACT OF TYPHOID CONJUGATE VACCINE FOLLOWING NATIONAL INTRODUCTION IN MALAWI (MITIMA)

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### EVALUATING THE IMPACT OF VACCINATION WITH ORAL CHOLERA VACCINE ON CHOLERA BURDEN IN HIGH TRANSMISSION AREAS OF DHAKA, BANGLADESH AN INTERRUPTED TIME SERIES ANALYSIS

**Ashraful Islam Khan**<sup>1</sup>, Md Taufiqul Islam<sup>1</sup>, Zahid Hasan Khan<sup>1</sup>, Mohammad Ashraful Amin<sup>1</sup>, Md Golam Firoj<sup>1</sup>, Taufiqur Rahman Bhuiyan<sup>1</sup>, Fahima Chowdhury<sup>1</sup>, Farhana Khanam<sup>1</sup>, Faisal Ahmmed<sup>1</sup>, ASG Faruque<sup>1</sup>, Lucy Breakwell<sup>2</sup>, Amanda Tiffany<sup>2</sup>, Firdausi Qadri<sup>1</sup>  
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### GENETIC DETERMINANTS OF EXTENDED-SPECTRUM BETA-LACTAMASE RESISTANCE IN *SHIGELLA* SPECIES IN KENYA

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### MOLECULAR CHARACTERIZATION AND PHENOTYPIC ANTIMICROBIAL RESISTANCE PROFILE OF DIARRHEAGENIC *ESCHERICHIA COLI* ISOLATED FROM PATIENTS WITH ACUTE DIARRHEA VISITING KERICHO COUNTY REFERRAL HOSPITAL, KERICHO, KENYA

**Alex Oduor Ragalo**, Erick Kipkirui, Mary Kirui, Ronald Kirera, Janet Ndonge, Nancy Kipkemoi, Margret Koech, Kirti Tiwari, Elizabeth Odundo  
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### CAMPYLOBACTER SPP AND ANTIMICROBIAL RESISTANCE IN A DIARRHEAL CASE-CONTROL STUDY IN KENYA

**Mary Kirui**, Janet Ndonge, Erick Kipkirui, Ronald Kirera, Nancy Kipkemoi, Margaret Koech, Kirti K. Tiwari, Elizabeth Odundo  
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### TIMING OF CHOLERA CASES ADMISSIONS AND IMPLICATIONS FOR CASE MANAGEMENT IN THE DEMOCRATIC REPUBLIC OF THE CONGO

**Espoir Bwenge Malembaka**<sup>1</sup>, Patrick Musole Bugeme<sup>1</sup>, Chloe Hutchins<sup>2</sup>, Jules Jackson<sup>1</sup>, Jaime Muftini Saidi<sup>3</sup>, Jean-Marie Masugamuhanya Cirhonda<sup>4</sup>, Joël Mashauri Zigashane<sup>4</sup>, Faraja Masembe Lulela<sup>4</sup>, Jackie Knee<sup>2</sup>, Andrew S. Azman<sup>1</sup>  
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## Bacteriology - Other Bacterial Infections

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### ANTIMICROBIAL RESISTANCE PATTERNS AT AN URBAN REFERRAL HOSPITAL IN BLANTYRE, MALAWI

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### SPATIAL PATTERNS OF HANSEN'S DISEASE AND WASH RISK FACTORS IN MINAS GERAIS, BRAZIL

Nikki Mastrud<sup>1</sup>, Pedro Marçal<sup>2</sup>, Lorena Oliveira<sup>3</sup>, Marcos Pinheiro<sup>4</sup>, Thomas R. Ziegler<sup>1</sup>, Jeffrey M. Collins<sup>1</sup>, Lucia A. Fraga<sup>4</sup>, Julie Clennon<sup>1</sup>, Lance Waller<sup>1</sup>, Jessica Fairley<sup>1</sup>  
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### THE IMPACTS OF THE CROSSTALK BETWEEN BACTERIAL VAGINOSIS ASSOCIATED BACTERIA AND *TRICHOMONAS VAGINALIS* ON THE PATHOGENESIS AND HOST IMMUNE RESPONSES

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### PHYLOGENETIC AND PHENOTYPIC CHARACTERIZATION OF *BURKHOLDERIA PSEUDOMALLEI* ISOLATES FROM GHANA REVEALS A NOVEL SEQUENCE TYPE AND COMMON PHENOTYPES

Regina Z. Cer<sup>1</sup>, Kevin L. Schully<sup>1</sup>, Logan J. Voegtly<sup>1</sup>, Gregory K. Rice<sup>1</sup>, Hannah Drumm<sup>1</sup>, Maren Fitzpatrick<sup>1</sup>, Francisco Malagon<sup>1</sup>, April Shea<sup>2</sup>, F. J. Lourens Robberts<sup>3</sup>, Paul K. A. Dartey<sup>4</sup>, Alex Owusu-Ofori<sup>5</sup>, Danielle V. Clark<sup>6</sup>, Kimberly A. Bishop-Lilly<sup>1</sup>  
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### REAL TIME PCR-HIGH RESOLUTION MELTING ANALYSIS FOR PATHOGENIC *LEPTOSPIRA* SPP. IDENTIFICATION

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### MULTI-DRUG THERAPY IS REQUIRED TO EFFECTIVELY TREAT *BARTONELLA* INFECTION IN DIFFERENT ENVIRONMENTS

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### EPIDEMIOLOGY OF INVASIVE *STAPHYLOCOCCUS AUREUS* IN PATIENTS SEEN AT AN OUTPATIENT CLINIC IN THE GAMBIA

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### CLINICAL CHARACTERIZATION OF HUMAN LEPTOSPIROSIS IN A REGION OF THE COLOMBIAN CARIBBEAN

Virginia C. Rodríguez-Rodríguez<sup>1</sup>, Ana Castro-Cordero<sup>1</sup>, Eidy Martínez-Ibarra<sup>1</sup>, Alfonso Calderón-Rangel<sup>1</sup>, Piedad Agudelo-Florez<sup>2</sup>  
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### SEROLOGICAL ASSESSMENT OF *HELICOBACTER PYLORI* INFECTION AND ITS ASSOCIATED RISK FACTORS IN ASYMPTOMATIC GHANAIAN PATIENTS, ATTENDING AGONA GOVERNMENT HOSPITAL

Kofi Agypong Addo<sup>1</sup>, Daniel Kusi Ampofo<sup>2</sup>, Samuel Ofori Ayetibo<sup>1</sup>, Austine Tweneboah<sup>3</sup>, Papa Kofi Amisshah-Reynolds<sup>1</sup>, Victor Agyei<sup>1</sup>, Kingsley Badu<sup>2</sup>  
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### ASSESSING PROGRESS TOWARDS THE ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION OF SYPHILIS IN PERU

Jazmin Qquellon, Ariana Cardenas, Andrea Castro-Caparó, Gabriel Carrasco-Escobar  
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### BACTERIOLOGICAL PROFILES OF DIABETIC ULCERS IN CASES OF MAJOR LIMB AMPUTATION: INSIGHTS FROM SOLOMON ISLANDS

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### HANSEN'S DISEASE (LEPROSY) IN THE UNITED STATES OF AMERICA: A SYSTEMATIC REVIEW

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### COXBASE GOES WIKI - HOW TO CREATE SUSTAINABILITY FOR GENOMIC Q FEVER DATA

Vanessa Scharf<sup>1</sup>, Silke Fischer<sup>2</sup>, Andrea Helbich<sup>3</sup>, Mandela Fasemore<sup>1</sup>, Mathias Walter<sup>4</sup>, Gilles Vergnaud<sup>5</sup>, Thomas Dandekar<sup>6</sup>, Konrad Förstner<sup>1</sup>, Dimitrios Frangoulidis<sup>3</sup>  
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### ROLE OF ACRA B AND OQXAB EFFLUX PUMPS IN AMIKACIN AND CIPROFLOXACIN RESISTANCE AMONG CLINICAL ISOLATES OF *KLEBSIELLA PNEUMONIAE* IN LIMA, PERU

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## Cestodes (Including Taeniasis and Cysticercosis, Echinococcosis/Hydatid Disease, and Others)

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### PREVENTION AND CONTROL OF HYDATID CYST: STRATEGIES, CHALLENGES, AND FUTURE DIRECTIONS

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(ACMCIP Abstract)

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### CLINICAL MANAGEMENT AND RECURRENCE OF HUMAN CYSTIC ECHINOCOCCOSIS IN A SECONDARY HEALTHCARE CENTER OF A HIGHLY ENDEMIC AREA IN THE ANDES OF CUSCO, PERU

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### SUBARACHNOID NEUROCYSTICERCOSIS: CLINICAL, SEROLOGICAL AND NEUROIMAGING EVOLUTION AFTER ANTIPARASITIC TREATMENT

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### EXPERIMENTAL INFECTIONS DEMONSTRATE CONCOMITANT IMMUNITY AGAINST TAENIA SOLIUM IN PIGS: QUANTIFYING THE IMPACTS OF AGE AND PRIOR INFECTIONS ON THE NUMBER OF CYSTS

Eloy Gonzales-Gustavson<sup>1</sup>, Gabrielle Bonnet<sup>2</sup>, Francesco Pizzitutti<sup>3</sup>, Miguel Muro<sup>4</sup>, Mayra Elizalde<sup>4</sup>, Claudio Muro<sup>4</sup>, Ricardo Gamboa<sup>4</sup>, Gianfranco Arroyo<sup>4</sup>, Sarah Gabriël<sup>5</sup>, Hector H. Garcia<sup>4</sup>, Seth E. O'Neal<sup>6</sup><sup>1</sup>Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>2</sup>Centre for the Mathematical Modeling of Infectious Diseases, London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>3</sup>Geography Institute, Universidad San Francisco de Quito, Quito,Ecuador, <sup>4</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>5</sup>Department of Veterinary Public Health and Food Safety, Ghent University, Ghent, Belgium, <sup>6</sup>School of Public Health, Oregon Health & Science University and Portland State, Portland, OR, United States

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### ECHINOCOCCOSIS: ASSESSING SURVEILLANCE NEEDS FOR AN EMERGING INFECTIOUS DISEASE IN THE UNITED STATES

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### POVERTY LEVELS ASSOCIATED WITH THE PREVALENCE OF LIVER CYSTIC ECHINOCOCCOSIS IN A PERUVIAN RURAL COMMUNITY

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### ALVEOLAR ECHINOCOCCOSIS: NOT JUST IN ENDEMIC COUNTRIES

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### SURGICAL TECHNIQUES AND COST ANALYSIS OF PULMONARY ECHINOCOCCOSIS: A SINGLE CENTER EXPERIENCE

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### FORMALIN INJECTION LEADING TO CHEMICAL CHOLANGITIS IN SURGERY FOR ECHINOCOCCAL CYST: A CASE REPORT

Sofia Frattola<sup>1</sup>, Gianluca D'Alessandro<sup>1</sup>, Andrea Lombardi<sup>2</sup>, Chiara Stocchero<sup>1</sup>, Tommaso Mancilli<sup>3</sup>, Raffaella Lissandrin<sup>1</sup>, Francesca Donato<sup>2</sup>, Clara Dibenedetto<sup>4</sup>, Marcello Maestri<sup>1</sup>, Enrico Brunetti<sup>1</sup><sup>1</sup>San Matteo Hospital Foundation, Pavia, Italy, <sup>2</sup>IRCCS Ca' Granda – Ospedale Maggiore Policlinico, Milano, Italy, <sup>3</sup>University of Florence, Firenze, Italy, <sup>4</sup>IRCCS Ca' Granda – Ospedale Maggiore Policlinico, Milano, Italy, Milano, Italy

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**7389****A RARE CASE OF NEUROCYSTICERCOSIS WITH THE NORTHERN HEMISPHERE TAPEWORM *TAENIA CRASSICEPS***

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[\(ACMCIP Abstract\)](#)**7390****PYROPTOSIS CELL DEATH IN RAT BRAIN TISSUE WITH NEUROCYSTICERCOSIS**María Milagros Dueñas-Mendoza<sup>1</sup>, Lizbeth C. Fustamante-Fernandez<sup>1</sup>, Ayme Y. Huaman-Navarro<sup>1</sup>, Danitza G. Dávila-Villacorta<sup>1</sup>, Cesar Gavidia<sup>2</sup>, Robert Gilman<sup>3</sup>, Manuela R. Verástegui<sup>1</sup>, Cysticercosis Working Group in Peru<sup>1</sup><sup>1</sup>Infectious Diseases Laboratory Research-LID and Faculty of Science and Philosophy, Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>3</sup>Bloomberg School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD, United States[\(ACMCIP Abstract\)](#)**7391****A ONE HEALTH SYSTEMATIC REVIEW OF ECHINOCOCCAL INFECTIONS IN CANADA**Katrina Di Bacco<sup>1</sup>, Marine Hubert<sup>1</sup>, Olivier Mukuku<sup>1</sup>, Cédric Yansouni<sup>2</sup>, Hélène Carabin<sup>1</sup><sup>1</sup>Université de Montréal, Montreal, QC, Canada, <sup>2</sup>McGill University, Montreal, QC, Canada[\(ACMCIP Abstract\)](#)**7392****COMPARISON OF THE DIAGNOSTIC ACCURACY OF LIVER ULTRASONOGRAPHY AND COMPUTED TOMOGRAPHY FOR CYSTIC ECHINOCOCCOSIS IN A NATURALLY INFECTED SHEEP MODEL**Saul J. Santivanez<sup>1</sup>, Raul Enriquez<sup>1</sup>, Percy Soto-Becerra<sup>1</sup>, Andreas Neumayr<sup>2</sup>, Cesar Gavidia<sup>3</sup>, Oswaldo G.E. Espinoza-Hurtado<sup>1</sup>, Hector H. Garcia<sup>4</sup><sup>1</sup>Universidad Continental, Huancayo, Peru, <sup>2</sup>Swiss Tropical and Public Health Institute, Basel, Switzerland, <sup>3</sup>Facultad de Medicina Veterinaria, Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>4</sup>Center for Global Health, Universidad Peruana Cayetano Heredia, Lima, Peru[\(ACMCIP Abstract\)](#)**7393****STUDY OF THE PREVALENCE OF CYSTIC ECHINOCOCCOSIS IN LIVESTOCK COMMUNITIES OF CUSCO, PERU**Jorge Hurtado-Alegre, Oswaldo G.E. Espinoza-Hurtado, Raul Enriquez, Natalia Valverde-Espinoza, Dan Cajacuri-Solis, **Saul J. Santivanez**

Universidad Continental, Huancayo, Peru

[\(ACMCIP Abstract\)](#)**7394****IMMUNOHISTOCHEMICAL IDENTIFICATION AND SPATIAL DISTRIBUTION OF TWO ANTIGENS IN CEREBRAL PORCINE NEUROCYSTICERCOSIS**

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[\(ACMCIP Abstract\)](#)**7395****EVALUATION OF DAMAGE IN AXONAL TRANSPORT THROUGH THE IMMUNOREACTIVITY OF THE MOTOR PROTEINS KINESIN AND DYNEIN IN BRAIN TISSUE OF RATS WITH NEUROCYSTICERCOSIS**Ayme Yadine Huaman Navarro<sup>1</sup>, Lizbeth Clemen Fustamante Fernández<sup>1</sup>, María Milagros Dueñas Mendoza<sup>1</sup>, Danitza Griselda Dávila Villacorta<sup>1</sup>, Cesar M. Gavidia<sup>2</sup>, Manuela R. Verástegui<sup>1</sup>, Robert H. Gilman<sup>3</sup>, Cysticercosis Working Group in Peru<sup>1</sup><sup>1</sup>Infectious Diseases Laboratory Research-LID and Faculty of Science and Philosophy, Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru, <sup>3</sup>Bloomberg School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD, United States[\(ACMCIP Abstract\)](#)**7396****IDENTIFICATION OF PROTEINS WITH TGF- B FUNCTION IN THE EXCRETORY SECRETORY PRODUCTS OF *TAENIA SOLIUM* LARVAL STAGE**

Oscar Nizama, Nancy Chile, Gino Castillo, Michael Orejon, Ana Palacios, Manuela Verástegui, Robert Gilman

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[\(ACMCIP Abstract\)](#)**7397****DEFINING THE CELLULAR COMPOSITION OF THE CSF IN SUBARACHNOID NEUROCYSTICERCOSIS THROUGH MULTIDIMENSIONAL SPECTRAL FLOW CYTOMETRY**

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Theresa Sepulveda, Fernando H. Centeno, Jose A. Serpa-Alvarez, Jill Weatherhead, Eva H. Clark

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**7400****ASSOCIATIONS BETWEEN C-REACTIVE PROTEIN, MALARIA, AND MALNUTRITION AMONG CHILDREN WITH FEBRILE ACUTE RESPIRATORY ILLNESS IN UGANDA**Caitlin A. Cassidy<sup>1</sup>, Di Hu<sup>1</sup>, John S. Preisser<sup>1</sup>, Lydia Kabugho<sup>2</sup>, Emmanuel Baguma<sup>2</sup>, Georget Kibaba<sup>2</sup>, Fred Mwembembezi<sup>2</sup>, Jonathan J. Juliano<sup>1</sup>, Edgar M. Mulogo<sup>2</sup>, Ross M. Boyce<sup>1</sup>, Emily J. Ciccone<sup>1</sup><sup>1</sup>The University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>2</sup>Mbarara University of Science and Technology, Mbarara, Uganda



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**UNRAVELLING THE ENIGMA: HOW SIMULATION-BASED CLINICAL TRAINING ENHANCES THE DIAGNOSIS OF VIRAL ENCEPHALITIS - INSIGHTS FROM GHANA'S SECOND LARGEST REFERRAL HOSPITAL****Richmond Yeboah**<sup>1</sup>, Joseph Bonney<sup>2</sup>, Richmond Gorman<sup>1</sup>, Yaw A. Amoako<sup>3</sup>, Richard O. Phillips<sup>1</sup>, Augustina A. Sylverken<sup>1</sup><sup>1</sup>KUMASI CENTRE FOR COLLABORATIVE RESEARCH IN TROPICAL MEDICINE, KUMASI, Ghana, <sup>2</sup>EMERGENCY MEDICINE DIRECTORATE, KOMFO ANOKYE TEACHING HOSPITAL, KUMASI, Ghana, <sup>3</sup>DEPARTMENT OF MEDICINE, KOMFO ANOKYE TEACHING HOSPITAL, KUMASI, Ghana

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**SEVERE *PLASMODIUM FALCIPARUM* MALARIA WITH SYMMETRIC PERIPHERAL GANGRENE: A REPORT OF TWO CASES****Allassane Dia**, Francois Ndiaye, Elhadji Ndiassé DIOP, Ndeye Faty Massata DIOP, Khalifa Ababacar Wade*Principal Hospital of Dakar (HPD), Dakar, Senegal*

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**ENVIRONMENTAL ENTERIC DYSFUNCTION IN NON-SLUM-DWELLING WELL-NOURISHED WOMEN IN DHAKA CITY****Mustafa Mahfuz**<sup>1</sup>, Rumana Sharmin<sup>1</sup>, A. H. M. Rezwan<sup>1</sup>, Md. Shabab Hossain<sup>1</sup>, S. M. Khodeza Nahar Begum<sup>2</sup>, M. Masudur Rahman<sup>3</sup>, Tahmeed Ahmed<sup>1</sup><sup>1</sup>International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>2</sup>Bangladesh Specialized Hospital, Dhaka, Bangladesh, <sup>3</sup>Sheikh Russel National Gastroenterology Institute and Hospital, Dhaka, Bangladesh

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**ADAPTIVE DENGUE ANTIVIRAL PLATFORM TRIAL (ADAPT): A RANDOMIZED, ADAPTIVE, OPEN LABEL TRIAL FOR ANTIVIRAL SCREENING IN PATIENTS WITH EARLY SYMPTOMATIC DENGUE****Angela McBride**<sup>1</sup>, Vuong Nguyen Lam<sup>2</sup>, Huyen Tran Bang<sup>2</sup>, Trieu Huynh Trung<sup>2</sup>, Nguyet Nguyen Minh<sup>2</sup>, Tran Luu Hoai Bao<sup>2</sup>, Chanh Ho Quang<sup>2</sup>, Dong Thi Hoai Tam<sup>2</sup>, Evelyne Kestelyn<sup>2</sup>, James Watson<sup>1</sup>, Sophie Yacoub<sup>1</sup><sup>1</sup>University of Oxford, Oxford, United Kingdom, <sup>2</sup>Oxford University Clinical Research Unit, Ho Chi Minh City, Vietnam

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**SURVIVING SNAKEBITE ENVENOMING- DECADES-LONG WAR WITH CHRONIC KIDNEY DISEASE: A CASE SERIES FROM RAJASTHAN, INDIA****Divya Tanwar**, Samarth Bhat K S, Akhilesh Kumar PH, Sudharshan Jagennath, Akash Virupaxi Bhagoji, M K Garg, Maya Gopalakrishnan  
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**ESTIMATES AND SPATIAL PREVALENCE OF *TRYPANOSOMA CRUZI* INFECTION AMONG CHILDREN IN NEW YORK CITY****Priya Mallikarjuna**, Nicholas DeFelice, Juan David Ramirez, Alberto Paniz*Mount Sinai Hospital, New York, NY, United States*

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**EPIDEMIOLOGY OF NEUROCYSTICERCOSIS: A 30 YEAR PILOT STUDY OF HOSPITALIZED PATIENTS IN FLORIDA****Maggie Zawoy**<sup>1</sup>, Waverly Leonard<sup>1</sup>, Norman Beatty<sup>2</sup><sup>1</sup>University of Florida College of Medicine, Gainesville, FL, United States, <sup>2</sup>Division of Infectious Diseases and Global Medicine, University of Florida College of Medicine, and Emerging Pathogens Institute, University of Florida, Gainesville, FL, United States

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**TARGETED CLINICAL MENTORSHIP IMPROVES PERFORMANCE OF MALARIA SERVICES IN ZIMBABWE****Leocadia Mangwanya***Zimbabwe Assistance Program in Malaria II, Jhpiego, Harare, Zimbabwe*

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### STRONG HEARTS: A NOVEL PRIMARY-CARE BASED DIAGNOSIS AND TREATMENT SUPPORT PROGRAM FOR CHAGAS DISEASE IN EAST BOSTON, MA, USA (2017-2023)

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### BURULI ULCER CASE DETECTION AND DIAGNOSIS IN THE OBOM SUB MUNICIPAL IN GA SOUTH MUNICIPALITY OF THE GREATER ACCRA REGION, GHANA

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### DENGUE SEVERITY PREDICTION IN A HYPERENDEMIC REGION IN COLOMBIA

**Jorge Emilio Salazar Flórez**<sup>1</sup>, Katerine Marín Velasquez<sup>2</sup>, Luz Stella Giraldo Cardona<sup>1</sup>, Ángela María Segura Cardona<sup>3</sup>, Berta Nelly Restrepo Jaramillo<sup>2</sup>, Margarita Arboleda<sup>2</sup>  
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**David A. Forero-Peña**<sup>1</sup>, Fhabián Carrión-Nessi<sup>1</sup>, Jose E. Piñango<sup>2</sup>, Daniela Restuccia<sup>1</sup>, Jorge Hosmi<sup>1</sup>, Ivan Mendoza<sup>3</sup>, Juan D. Ramirez<sup>4</sup>, Alberto E. Paniz-Mondolfi<sup>5</sup>, José A. Suárez<sup>6</sup>  
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### POTENTIAL RISK INCURRED BY HEALTH CARE PROVIDERS ATTENDING TO MALARIA PATIENTS ACROSS KENYA

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### EXPLORING ACUTE UNDIFFERENTIATED FEVERS AT A TERTIARY CARE HOSPITAL IN INDIA: ETIOLOGICAL PROFILE, CLINICAL CHARACTERISTICS AND BIOMARKERS

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### SUBCUTANEOUS MYCOSES: ENDEMIC BUT NEGLECTED AMONG THE NEGLECTED TROPICAL DISEASES IN ETHIOPIA

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### IMPACT OF INTESTINAL PARASITE INFECTION (IPI) ON HUMAN PAPILOMA VIRUS (HPV) INFECTION AND REPRODUCTIVE HEALTH: EXPLORING ALTERATIONS IN INTESTINAL AND CERVICOVAGINAL (CV) MICROBIOME

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### DOES THE RUN-IN PHASE ADD WHEN ASSESSING SAFETY OF TRYPANOCIDAL THERAPIES? THE EXPERIENCE OF THE EQUITY TRIAL

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## Helminths – Nematodes – Filariasis (Epidemiology and Modeling)

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### BRUGIA IMPACT SURVEY AS AN ALTERNATIVE METHOD FOR LYMPHATIC FILARIASIS TRANSMISSION ASSESSMENT SURVEY IN INDONESIA

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### ASSESSMENT OF DISABILITY AND HEALTH-RELATED QUALITY OF LIFE USING WHODAS 2.0 TOOL IN A POPULATION LIVING IN LOA LOA ENDEMIC AREAS OF THE REPUBLIC OF CONGO (THE MORLO PROJECT)

Marlhand C. Hemilembolo<sup>1</sup>, Jérémy T. Campillo<sup>2</sup>, Sébastien D S Pion<sup>3</sup>, Elodie Lebretonche<sup>4</sup>, Samuel Beneteau<sup>3</sup>, Valentin Dupasquier<sup>5</sup>, Ludovic Rancé<sup>5</sup>, Francois Missamou<sup>1</sup>, Michel Boussinesq<sup>3</sup>, **Cédric B. Chesnais**<sup>3</sup>  
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### BASELINE EVALUATION OF ONCHOCERCIASIS TRANSMISSION IN FIVE DISTRICTS OF BENIN

Romarc B. Tchebe<sup>1</sup>, Pelagie M. Boko-Collins<sup>2</sup>, Andrew Abbott<sup>3</sup>, Ben Masiira<sup>4</sup>, Lakwo Thomson<sup>4</sup>, E. Scott Elder<sup>3</sup>, **Ndeye-Marie Bassabi-Alladji<sup>1</sup>**, Paul T. Cante<sup>3</sup>

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### SUBSTANTIAL PROGRESS TOWARDS ENDING LYMPHATIC FILARIASIS AS A PUBLIC HEALTH PROBLEM IN DELTA STATE, NIGERIA

**Emmanuel Emukah<sup>1</sup>**, Paul Yinkore<sup>2</sup>, Adamu Sallau<sup>1</sup>, Lindsay Rakers<sup>3</sup>, Emily Griswold<sup>3</sup>, Jenna Coalson<sup>3</sup>, Emmanuel S. Miri<sup>1</sup>, Vincent Anighoro<sup>4</sup>, Blessing Ikponmwosa<sup>1</sup>, Solomon Adelamo<sup>1</sup>, Philomena Dikedi<sup>1</sup>, Ndudi Okocha<sup>1</sup>, Emeka Uzoma<sup>5</sup>, Ununumah Egbelu<sup>5</sup>, Maryam Abduljeleel<sup>5</sup>, Chinwe Okoye<sup>5</sup>, Fatai Oyediran<sup>5</sup>, Frank O. Richards<sup>3</sup>, Gregory S. Noland<sup>3</sup>

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### MIXED TREATMENT STRATEGIES ARE AN EFFECTIVE HEALTH CAMPAIGN TO IMPROVE DRUG COVERAGE FOR RIVER BLINDNESS ELIMINATION IN INSECURE AREAS OF EDO STATE, NIGERIA

**Emmanuel Emukah<sup>1</sup>**, Emily Griswold<sup>2</sup>, Jenna Coalson<sup>2</sup>, Emmanuel S. Miri<sup>1</sup>, Victor Irabor<sup>1</sup>, Bertram E. B Nwoke<sup>3</sup>, Omosigho Izedonmwon<sup>4</sup>, Efeomon Eseigbe<sup>4</sup>, Happy Poko<sup>5</sup>, Elfrida Omogun<sup>5</sup>, Esther Ajayi-David<sup>6</sup>, Adamu Sallau<sup>1</sup>, Solomon Adelamo<sup>1</sup>, Blessing Ikponmwosa<sup>1</sup>, Emalee Martins<sup>2</sup>, Chukwuemeka Makata<sup>5</sup>, Fatai Oyediran<sup>5</sup>, Frank Richards<sup>2</sup>, Gregory S. Noland<sup>2</sup>

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### POST-TREATMENT SURVEILLANCE FOR LYMPHATIC FILARIASIS SUPPORTS CESSATION OF TRANSMISSION IN HISTORICALLY CLASSIFIED ENDEMIC FOCI IN THE DOMINICAN REPUBLIC

**Karen E.S. Hamre<sup>1</sup>**, Luccène Désir<sup>1</sup>, Keyla Ureña<sup>2</sup>, Julio Alexis Batista<sup>2</sup>, Francisca Araujo Jimenez<sup>2</sup>, Angelita Méndez Florian<sup>2</sup>, Carmen Cuello Montilla<sup>2</sup>, Esmilke Urbaz<sup>2</sup>, Antonio Feliz<sup>2</sup>, Luisa Aurora Feliz Cuevas<sup>2</sup>, Jose Luis Cruz Raposo<sup>2</sup>, Gregory S. Noland<sup>1</sup>, Manuel Gonzales<sup>2</sup>

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### COMORBIDITY BETWEEN LYMPHATIC FILARIASIS AND HYPERTENSION & DIABETES: A PROSPECTIVE CASE-COHORT STUDY IN KENYA

**Michael O. Ofire<sup>1</sup>**, Christine A. Onyango<sup>2</sup>, Robert O. Ofwete<sup>1</sup>, Wyckliff P. Omond<sup>3</sup>, Sultani H. Matendechero<sup>3</sup>, Irene Cham<sup>4</sup>, Ivy Sempele<sup>4</sup>

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### ONCHOCERCIASIS SEROPREVALENCE IN BIÉ PROVINCE, ANGOLA: A CROSS-SECTIONAL SURVEY TO GUIDE EFFORTS TOWARDS ELIMINATION

**Marta Sólveig Palmeirim<sup>1</sup>**, Martins Imhansoloeva<sup>1</sup>, Mohamad Assoum<sup>1</sup>, Luis Lufunda<sup>2</sup>, Teresa Nóbrega<sup>2</sup>, Cecília Almeida<sup>3</sup>, José Franco Martins<sup>4</sup>, John Kaldor<sup>1</sup>, Elsa Mendes<sup>4</sup>, Susana Vaz Nery<sup>1</sup>

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### POST-TREATMENT SURVEILLANCE FOR LYMPHATIC FILARIASIS IN HAITI: RESULTS FROM TRANSMISSION ASSESSMENT SURVEY (TAS-3) IN NIPPES AND SOUTH-EAST

**Luccène Désir<sup>1</sup>**, Karen E.S Hamre<sup>1</sup>, Gregory Smith Noland<sup>1</sup>, Victoria Krauss<sup>1</sup>, Valery Madsen Beau De Rochars<sup>1</sup>, Marc-Aurèle Telfort<sup>2</sup>, Mériilien Jean-Baptiste<sup>2</sup>, Linda Ferdé<sup>2</sup>

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### HIGH MORTALITY AMONG PERSONS WITH SUSPECTED EPILEPSY: A FOCUS ON ONCHOCERCIASIS-ENDEMIC COUNTIES OF SOUTH SUDAN

**Luís-Jorge Amara<sup>1</sup>**, Stephen Raimon Jada<sup>2</sup>, Jane Y. Carter<sup>3</sup>, Yak Yak Bol<sup>4</sup>, Joseph N Siewe Fodjo<sup>1</sup>, Robert Colebunders<sup>1</sup>

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### INTEGRATED LYMPHATIC FILARIASIS, SCHISTOSOMIASIS AND SOIL TRANSMITTED HELMINTHIASIS IMPACT ASSESSMENT IN OHAUKWU, EBONYI STATE, NIGERIA

**Abel Eigege<sup>1</sup>**, Jenna Coalson<sup>2</sup>, Kenrick Nwodu<sup>1</sup>, Christopher Nwuzor<sup>1</sup>, Adamu Sallau<sup>1</sup>, Imaobong Umah<sup>3</sup>, Chinwe Okoye<sup>3</sup>, Solomon Jacob<sup>3</sup>, Emeka Uzoma<sup>3</sup>, Solomon Adelamo<sup>1</sup>, Gideon Ntuen<sup>3</sup>, Kehinde Busari<sup>3</sup>, Maryam Abduljeleel<sup>3</sup>, Halima Toro<sup>3</sup>, Chidiebere Njoku<sup>1</sup>, Obasi Andrew<sup>1</sup>, Samuel Ifeanyichukwu<sup>1</sup>, Yohanna Sambo<sup>1</sup>, Lindsay Rakers<sup>2</sup>, Emily Griswold<sup>2</sup>, Emmanuel Miri<sup>1</sup>, Gregory Noland<sup>2</sup>, Hyacinth Ebenyi<sup>4</sup>, Fatai Oyediran<sup>3</sup>, Chukwuma Anyaike<sup>3</sup>, Rita Urude<sup>3</sup>, Ununumah Egbelu<sup>2</sup>, Ifeanyi Nwofoke<sup>4</sup>, Edwin Okpani<sup>4</sup>

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### COMPREHENSIVE ASSESSMENT OF ONCHOCERCIASIS TRANSMISSION DYNAMICS AND COMMUNITY PERCEPTIONS: A CASE STUDY IN HYPO-ENDEMIC COMMUNITIES OF OGUN STATE, NIGERIA

**Ifeoluwa Adeniyi George<sup>1</sup>**, Olaitan Omitola<sup>1</sup>, Hamed Mogaji<sup>2</sup>, Uwem Ekpo<sup>3</sup>

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## Kinetoplastida and Other Protozoa - Epidemiology (Including *Leishmania* and Trypanosomes)

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### INTESTINAL HELMINTHIASIS IS NOT ASSOCIATED WITH CLINICAL AND THERAPEUTIC ASPECTS OF DISSEMINATED LEISHMANIASIS CAUSED BY *LEISHMANIA BRAZILIENSIS* IN AN ENDEMIC AREA OF BRAZIL

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### AN INVESTIGATION OF MUCOSAL LEISHMANIASIS IN THE MILITARY HEALTH SYSTEM

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### FIRST DETECTION OF *LEISHMANIA MAJOR* IN DOGS LIVING IN AN ENDEMIC AREA OF ZONOTIC CUTANEOUS LEISHMANIASIS IN TUNISIA

Lilia Zribi<sup>1</sup>, Maria Paola Maurelli<sup>2</sup>, Nour el Houda Ben Fayala<sup>3</sup>, Valentina Foglia Manzillo<sup>3</sup>, Ines Balestrino<sup>3</sup>, Noureddine Hamdi<sup>4</sup>, Aida Bouratbine<sup>1</sup>, Manuela Gizzarelli<sup>3</sup>, Karim Aoun<sup>1</sup>, Gaetano Oliva<sup>3</sup>

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### SYSTEMATIC LITERATURE REVIEW AND META-ANALYSIS OF LIPOSOMAL AMPHOTERICIN B (AMBISOME) EFFECTIVENESS DATA FROM CLINICAL TRIALS FOR THE TREATMENT OF VISCERAL LEISHMANIASIS (VL) IN SOUTHEAST ASIA

Kirsten Carter<sup>1</sup>, Rashidkhan Pathan<sup>2</sup>, Ekkehard Glimm<sup>1</sup>, Aparajita Mandal<sup>2</sup>, Gerhild Angyalosi<sup>1</sup>

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### GENOTYPING OF *BLASTOCYSTIS* SP. ISOLATES FROM FECAL SAMPLES FROM CHILDREN OF THE EDUCATIONAL INSTITUTION «128 LA LIBERTAD» (SAN JUAN LURIGANCHO), LIMA, PERU

Juan Jimenez<sup>1</sup>, Yanina Huachopoma<sup>2</sup>, Carol Sanchez<sup>2</sup>, Julia Castro<sup>2</sup>, Maritza Calderon<sup>3</sup>, Edward Valencia<sup>2</sup>

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### EPIDEMIOLOGICAL DYNAMICS OF LEISHMANIASIS IN THE SOUSS-MASSA REGION, MOROCCO (2017-2022)

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### THE EFFECTS OF ADVERSE ENVIRONMENTAL EXPOSURES ON RISK FOR CONGENITAL CHAGAS TRANSMISSION AND ADVERSE BIRTH OUTCOMES IN SANTA CRUZ, BOLIVIA

Matthew J. Ward<sup>1</sup>, Natalie M. Bowman<sup>2</sup>, Heather H. Burris<sup>3</sup>, Chris Gennings<sup>1</sup>, Robert H. Gilman<sup>4</sup>, Aman Patel<sup>1</sup>, Nicholas B. DeFelice<sup>1</sup>

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### MODELING CLIMATE DRIVERS OF CUTANEOUS LEISHMANIASIS INCIDENCE IN NORTHERN SYRIA

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### SPECIES IDENTIFICATION OF CUTANEOUS LEISHMANIASIS CAUSING PARASITES IN NEPAL

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### BLASTOCYSTOSIS INFECTIONS AMONG CHILDREN ATTENDING FOUR HOSPITALS IN WESTERN KENYA

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### THE GROWING PROBLEM OF LEISHMANIASIS IN TUSCANY, ITALY: INVESTIGATION OF UNDERREPORTED HUMAN CASES AND COMPARISON WITH CANINE INCIDENCE USING A MULTIDISCIPLINARY APPROACH

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### UNTRANGLING THE LEISHMANIASIS THREAT: A MULTIFACETED ANALYSIS OF TRANSMISSION NETWORKS, ECOLOGICAL FACTORS, AND GEOGRAPHIC IMPLICATIONS IN A LEISHMANIASIS ENDEMIC REGION IN THE EASTERN MEDITERRANEAN

Oscar David Kirstein, Shirly Elbaz, Debora Diaz, Liora Studentsky, Irina Ben Avi, Laor Orshan, Tamar Grossman, Maya Davidovich-Cohen  
Israel Ministry of Health, Jerusalem, Israel

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### ASSESSING TOXOPLASMA GONDII SEROPREVALENCE AMONG IMMUNOCOMPETENT AND IMMUNOCOMPROMISED INDIVIDUALS LIVING IN PERU: A COMPARATIVE STUDY BETWEEN LIMA AND IQUITOS

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### DEFORESTATION, LAND REVERSION, AND TRYPANOSOMA CRUZI INFECTION IN DOGS LIVING IN RURAL COMMUNITIES IN CENTRAL PANAMA

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### KNOWLEDGE ABOUT CHAGAS DISEASE AMONG HEALTHCARE PROFESSIONALS

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### IMPACT OF BLASTOCYSTIS SUBTYPES ON POLYPARASITISM IN COLOMBIAN CHILDREN

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### IMPACT OF EDUCATIONAL ACTIVITIES AND AN ELECTRONIC MEDICAL RECORD TEMPLATE ON CHAGAS DISEASE SCREENING

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### BIBLIOMETRIC META-ANALYSIS OF CHAGAS DISEASE AND EQUITABLE ACCESS TO HEALTH CARE

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### CAPACITY-BUILDING IN MOLECULAR SURVEILLANCE OF INFECTIOUS DISEASES: PROGRESS AND ACHIEVEMENTS OF THE INSTITUTE OF RESEARCH IN TROPICAL DISEASES (IET) IN AMAZONAS, PERU

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### TSLP UPREGULATES IFN-GAMMA PRODUCTION IN CUTANEOUS LEISHMANIASIS PATIENTS

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(ACMCIP Abstract)

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### FOLLICULAR T HELPER (TFH) VERSUS HYBRID TH1/TFH CELLS AND THE OUTCOME B CELL RESPONSE IN TRYPANOSOMA CRUZI INFECTION OF SUSCEPTIBLE AND RESISTANT MICE

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(ACMCIP Abstract)

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### GALNAC AND GLCNAC CARBOHYDRATES INCREASE THE PRESENCE AND ACTIVITY OF THE MYELOPEROXIDASE ENZYME DURING ENTAMOEBA HISTOLYTICA AND NEUTROPHIL INTERACTIONS, POSSIBLY BY BLOCKING AMEBIC ADHESION

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(ACMCIP Abstract)

## Measures for Control and Elimination of Neglected Tropical Diseases (NTDs)

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### LACK OF INFORMATION AS A REASON FOR NON-PARTICIPATION IN MASS DRUG ADMINISTRATION TARGETING ONCHOCERCIASIS: A MIXED METHOD STUDY

Yaya Ibrahim Coulibaly<sup>1</sup>, Moussa Sangare<sup>2</sup>, Abdoul Fatao Diabate<sup>3</sup>, Diadje Tanapo<sup>3</sup>, Sekou Oumarou Thera<sup>3</sup>, Mahamoud Mahamadou Koureichi<sup>3</sup>, Siaka Yamoussa Coulibaly<sup>3</sup>, Salif Seriba Doumbia<sup>3</sup>, Housseini Dolo<sup>3</sup>, Yacouba Sangare<sup>4</sup>, Dukharmel Nazaire<sup>5</sup>, Thomas B Nutman<sup>6</sup>, Alison Krentel<sup>7</sup>

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### EVALUATION OF SOIL-TRANSMITTED HELMINTHIASIS AND SCHISTOSOMIASIS COVERAGE FOLLOWING SIX YEARS OF MASS DRUG ADMINISTRATION IN FIVE NIGERIA STATES

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### CHALLENGES IN MEASURING AND DISCUSSING ELIMINATION GOALS: FROM MODELLING TO POLICY

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### COVERAGE EVALUATION SURVEY OF LYMPHATIC FILARIASIS RE- MASS DRUG ADMINISTRATION AFTER PRE-TAS FAILURE IN 4 DISTRICTS OF MOZAMBIQUE, 2023

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### COMPLETING THE TRACHOMA MAP IN SOUTH SUDAN: RESULTS OF THREE BASELINE PREVALENCE SURVEYS IN EASTERN EQUATORIA STATE, 2023-2024

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### ANALYSIS OF THE SITUATION OF LEPROSY CASES IN CHILDREN AGED FROM 5 TO 14 YEARS FROM 2022 TO 2023 IN CONAKRY (GUINEA)

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### ADDRESSING "LEAVING NO ONE BEHIND" IN AN NTD PROGRAMMATIC CONTEXT: EXPERIENCE FROM THE DEWORMING INNOVATION FUND

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### FACTORS ASSOCIATED WITH PERSISTENT AND RECRUDESCENT ACTIVE TRACHOMA: RESULTS FROM ADAPTIVE COVERAGE EVALUATION SURVEYS IN UGANDA

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### DETERMINANTS FOR UPTAKE OF MASS DRUG ADMINISTRATION FOR SCHISTOSOMIASIS CONTROL IN BUTIABA, UGANDA

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### FORECASTING OF ONCHOCERCIASIS PREVALENCE IN WEST AFRICA THROUGH TIME SERIES MODELING

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### MIND THE GAP: GENDER DIFFERENCES IN PREVENTATIVE TREATMENT OF SEVEN NEGLECTED TROPICAL DISEASES

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### TRACHOMA ZONES OF CONCERN: IDENTIFYING AREAS OF TRACHOMA RISK BEFORE AND AFTER ELIMINATION USING NOVEL GEOSPATIAL ANALYSIS

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### IMPROVING THE QUALITY OF MASS DRUG ADMINISTRATION IN GHANA USING ELECTRONIC DATA CAPTURE

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### OCULAR CHLAMYDIAL TRACHOMATIS INFECTION IMMEDIATELY FOLLOWING AN ENHANCED MASS DRUG ADMINISTRATION STRATEGY FOR TRACHOMA IN AMHARA, ETHIOPIA: THE CHILD MDA PILOT STUDY

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### ANTIBODY-OMICS REVEALS BIOMARKERS OF SCHISTOSOMIASIS AND CROSS-TALK WITH TUBERCULOSIS

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### IMMUNOLOGICAL BIOMARKERS FOR DETECTING SUBCLINICAL LEPROSY INFECTION: CROSS-TALK BETWEEN LID-1 AND PGL-1 IN INDIVIDUAL IMMUNE RESPONSES

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### EXPLORING THE IMPACT OF DECENTRALIZATION IN IN THE LEPROSY ENDEMIC REGION OF EASTERN MINAS GERAIS USING GEOSPATIAL AND QPCR TECHNIQUES

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### MYCOBACTERIUM LEPRAE AND SCHISTOSOMA MANSONI CO-INFECTION IN COMMUNITIES OF EASTERN MINAS GERAIS, BRAZIL

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### MODEL-BASED GEOSTATISTICS TO SELECT SITES FOR MONITORING LYMPHATIC FILARIASIS TRANSMISSION INTERRUPTION FOLLOWING MASS DRUG ADMINISTRATION WITH IVERMECTIN, DIETHYLCARBAMAZINE AND ALBENDAZOLE IN EAST NEW BRITAIN, PAPUA NEW GUINEA

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### LONGITUDINAL ANALYSIS OF THE PREVALENCE OF MINOR PLASMODIUM SPP. INFECTING HUMANS THROUGH SEQUENTIAL INTERVENTIONS IN NORTHERN GHANA

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### OPTIMIZING DRUG DISTRIBUTOR PERFORMANCE IN NEGLECTED TROPICAL DISEASE MASS DRUG ADMINISTRATION PROGRAMS; RESULTS FROM A MULTI-COUNTRY EVALUATION

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### ASSESSMENT OF QUALITY OF ONCHOCERCIASIS MASS DRUG ADMINISTRATION, INSIGHTS FROM A COVERAGE SURVEY IN NINE DISTRICTS OF OROMIA REGION, ETHIOPIA

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### PRODUCTIVITY RETURNS FROM 10 YEARS OF THE KENYAN NATIONAL SCHOOL BASED DEWORMING PROGRAM

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### MORBIDITY MANAGEMENT OF LYMPHATIC FILARIASIS: STRENGTHENING SURGICAL APPROACHES TO FILARIAL HYDROCELES IN KENYA

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### FACTORS ASSOCIATED WITH FAILING ASSESSMENTS TO STOP MASS DRUG ADMINISTRATION FOR ONCHOCERCIASIS IN KONTA SPECIAL WOREDA, SOUTHWEST ETHIOPIA PEOPLE'S REGION

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### OPTIMIZATION APPROACHES FOR INTEGRATION OF NEGLECTED TROPICAL DISEASES INTO HEALTHCARE SYSTEMS IN KENYA GT; PROCESS NARRATION

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### EMPOWERING WOMEN IN BIHAR, INDIA TO ELIMINATE LYMPHATIC FILARIASIS

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### STATUS OF LYMPHATIC FILARIASIS TRANSMISSION IN PASTORALIST AREAS OF SOUTH AND SOUTHWEST ETHIOPIA

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### OUTCOME OF SNAKEBITE VICTIMS MANAGED BY TRAINED HEALTH ASSISTANTS AT A SNAKEBITE TREATMENT CENTER IN NEPAL

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### GENDER AND AGE MODULATING THE HEMATOLOGICAL PROFILES OF LEPROSY PATIENTS: ADISCURSIVE ANALYSIS

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## One Health: The Interconnection between People, Animals, Plants and Their Shared Environment

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### SPATIOTEMPORAL DISTRIBUTION AND DIVERSITY OF AIRBORNE RESISTANT BACTERIA: AN EXPLORATORY ONE HEALTH STUDY IN THE URBAN AND RURAL ENVIRONMENTS OF BANGLADESH

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### FINDINGS FROM A SIMULATION EXERCISE UTILIZING THE ONE HEALTH TRANSBOUNDARY ASSESSMENT FOR PRIORITY ZOOSES (OHTAPZ) TOOL TO MEASURE HEALTH SECURITY PREPAREDNESS, DETECTION, AND RESPONSE CAPACITIES AT THE JORDAN-IRAQ BORDER

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### PHARMACOKINETIC PROPERTIES AND MOSQUITO-LETHAL EFFECTS OF A NOVEL LONG-LASTING FORMULATION OF IVERMECTIN IN CATTLE

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### MOLECULAR CHARACTERIZATION AND PHYLOGENETIC ANALYSIS OF BOVINE FASCIOSIS IN UPPER EAST REGION, GHANA

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### POSITIVE ASSOCIATION OF ORAL INFECTION BY *TRICHOMONAS TENAX* WITH PERIODONTITIS IN THE DOMESTIC DOG

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### BEHAVIORAL AND BIOLOGICAL SURVEILLANCE OF EMERGING INFECTIOUS DISEASES AT THE HIGH-RISK HUMAN-ANIMAL INTERFACE IN BANGLADESH

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### MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS AND MICROBIOME: A ONE HEALTH CONCERN

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### ONE HEALTH AWARENESS, INTERPRETATION AND PRIORITIZATION IN THE GAMBIA: A PARTICIPATORY SITUATIONAL ANALYSIS OF NATIONAL STAKEHOLDERS ACROSS GOVERNMENT, ACADEMIA AND CIVIL SOCIETY

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### BRUCELLOSIS SEROPREVALENCE AND RISK FACTORS AMONG HIGH-RISK GROUPS AT TWO URBAN SITES IN KENYA

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### THE HIGHEST MPOX OUTBREAK EVER REPORTED IN CAMEROON; THE CASE OF MBONGE HEALTH DISTRICT OF THE SOUTH WEST REGION: A CROSS SECTIONAL ANALYTICAL STUDY, JUNE 2023

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### SURVEILLANCE AND HOME RANGE ANALYSIS OF OLIVE BABOONS TO INFORM PROGRAMMATIC DECISIONS FOR GUINEA WORM ERADICATION IN GAMBELLA, ETHIOPIA

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### (UN)SUSTAINABLE SCIENCE: ENVIRONMENTAL FOOTPRINT OF RESEARCH, CLINICAL MICROBIOLOGY AND VETERINARY LABORATORIES LOCALLY AND GLOBALLY

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### AVIAN VACCINATION VIA RECOMBINANT *LACTOBACILLUS*-BOUND BIRDSEED TO CURB THE SPREAD OF WEST NILE VIRUS

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### THE FINANCIAL IMPACT OF LIVESTOCK SCHISTOSOMIASIS AND UNDERSTANDING THE IMPORTANCE OF POLICY BUY-IN ON INTERVENTION SUCCESS

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## Pneumonia, Respiratory Infections and Tuberculosis

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### COMPARATIVE ANALYSIS OF STEROID-RDV COMBINATION THERAPY VERSUS STEROIDS ALONE IN HOSPITALIZED COVID-19 PATIENTS: A SARS-COV-2 VIRAL LOAD DYNAMICS STUDY

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## MULTIPLE VIRAL COINFECTIONS IN TUBERCULOSIS PATIENTS IN BAMAKO, MALI

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## EFFECT OF PRIOR ANTIBIOTICS USE ON BLOOD CULTURE POSITIVITY IN CHILDREN UNDER 5 YEARS WITH SUSPECTED INVASIVE PNEUMOCOCCAL DISEASES IN RURAL GAMBIA

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## RAPID IDENTIFICATION OF NON-TUBERCULOUS MYCOBACTERIAL SPECIES USING FLUOROCYCLER® XT IN SUSPECTED PATIENTS IN BAMAKO, MALI

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## EVALUATION OF TRENDS IN PNEUMOCOCCAL ANTIBIOTIC RESISTANCE IN INVASIVE PNEUMOCOCCAL DISEASES IN RURAL GAMBIA

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## COMMUNITY PERCEPTION AND IMPACT OF A MOBILE VAN FOR POST-MORTEM SAMPLE COLLECTION IN KARACHI, PAKISTAN: CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE (CHAMPS)

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## HOW CROSS-BORDER COLLABORATION BETWEEN CAMEROON AND GABON ENHANCED PROMPT RESPONSE TO A DIPHTHERIA OUTBREAK, DECEMBER 2023

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## COMPARATIVE MORTALITY ANALYSIS: ERADICATION VS PERSISTENCE OF PSEUDOMONAS INFECTIONS

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## DRIVERS OF COMMON MENTAL HEALTH DISORDERS AMONG TUBERCULOSIS KEY VULNERABLE POPULATIONS IN ASHANTI REGION GHANA

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## CARDIOVASCULAR DISEASES ASSOCIATED WITH INFLUENZA INFECTION: SYSTEMATIC REVIEW AND META-ANALYSIS

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## TUBERCULOSIS TREATMENT COMPLETION AND CHALLENGES IN RURAL TANZANIA

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## MATERNAL SARS-COV-2 INFECTION, VACCINATION, AND INFANT STUNTING IN UGANDA

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### DISENTANGLING THE SEROCONVERSION AND SEROREVERSION RATES OF SEASONAL CORONAVIRUSES USING AGE-STRATIFIED SEROPREVALENCE DATA

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### PREDICTING TUBERCULOSIS TREATMENT RELAPSE USING STATISTICAL DATA MINING TOOLS. A CASE STUDY OF CAPE COAST TEACHING HOSPITAL, GHANA

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### TIERED MULTIPLEX PCR DETECTION OF RESPIRATORY PATHOGENS IN CAMBODIA'S SEVERE ACUTE RESPIRATORY INFECTION SENTINEL SURVEILLANCE SYSTEM, MAY-DECEMBER 2023

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## Schistosomiasis and Other Trematodes – Diagnostics and Treatment

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### SENSITIVITY OF CLUSTER, PRACTICAL AND SENTINEL IMPACT ASSESSMENT METHODOLOGIES FOR ADJUSTING PREVENTIVE CHEMOTHERAPY FOR SCHISTOSOMIASIS ELIMINATION IN NIGERIA

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### RAPID VISUAL DETECTION OF S. HAEMATOBIIUM USING RECOMBINASE POLYMERASE AMPLIFICATION FROM SERIALY DILUTED AND FIELD-COLLECTED HUMAN URINE SAMPLES

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### INTEGRATIVE METABOLOMIC APPROACHES REVEAL TYROSINE METABOLISM AS A POTENTIAL BIOMARKER FOR EARLY *SCHISTOSOMA MANSONI* INFECTION IN CHILDREN LIVING IN POLYPARASITISM SETTINGS IN CAMEROON

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### THE SHORT-TERM IMPACT OF *SCHISTOSOMA MANSONI* INFECTION ON HEALTH-RELATED QUALITY OF LIFE: IMPLICATIONS FOR CURRENT ELIMINATION POLICIES

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### REAL-TIME PCR ASSAY FOR DETECTION OF *PARAGONIMUS KELLICOTTI* IN HUMAN STOOL

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### COMMUNITY AWARENESS OF FEMALE GENITAL SCHISTOSOMIASIS AND MASS DRUG ADMINISTRATION PARTICIPATION IN THE ABOBO DISTRICT, ETHIOPIA - FINDINGS FROM THE FAST PACKAGE PILOT PROJECT

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## Schistosomiasis and Other Trematodes – Epidemiology and Control

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### MOVING FROM DISTRICT TO SUB-DISTRICT SCHISTOSOMIASIS IMPLEMENTATION IN SENEGAL: TIME TO CHANGE AND ADAPT STRATEGIES

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### PREDICTORS OF SCHISTOSOMIASIS JAPONICUM INFECTION RISK IN SICHUAN, CHINA

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### MORPHOMETRIC TRAITS OF *FASCIOLA HEPATICA*'S INTERMEDIATE HOSTS IN AREAS WITH HUMAN AND ANIMAL FASCIOLIASIS AND STUDY OF PHYSICO-CHEMICAL PROPERTIES OF ITS WATER SOURCES

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### COMPARING STOOL PCR, RECOMBINASE POLYMERASE AMPLIFICATION, AND MICROSCOPY TO DETECT *FASCIOLA HEPATICA* INFECTION IN THE RABBIT MODEL

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### DETECTION OF FASCIOLA HEPATICA DNA IN DIFFERENT SPECIMENS USING A MINIPCR THERMOCYCLER AND LED LIGHT HANDHELD VIEWER

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### PRE- AND POST-PRAZIQUANTEL TREATMENT ASSOCIATIONS OF SCHISTOSOMA MANSONI INFECTION WITH LATENT TUBERCULOSIS AND IMMUNE RESPONSES IN TANZANIA

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### THE COLONIAL IMPACT ON SCHISTOSOMIASIS RESEARCH, PRESENT DAY INEQUALITIES AND MOVING TOWARDS AN EQUITABLE RESEARCH ENVIRONMENT

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### QUANTIFYING CHANGES IN THE FORCE OF INFECTION OVER 20 YEARS OF MASS DRUG ADMINISTRATION FOR SCHISTOSOMA MANSONI

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### ASSOCIATIONS BETWEEN SCHISTOSOMA MANSONI INTENSITY, C-REACTIVE PROTEIN (CRP), AND STUNTING AMONG PRESCHOOL-AGED CHILDREN IN UGANDA

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### MORBIDITY IN PRE-SCHOOL-AGED CHILDREN AND ADULTS IN A SCHISTOSOMA MANSONI ENDEMIC COMMUNITY OF LAKE VICTORIA, UGANDA

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## Water, Sanitation, Hygiene and Environmental Health

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### EFFECTS OF COMMUNITY-LED TOTAL SANITATION ON IMPROVING HYGIENE AND SANITATION IN 3 VILLAGES OF THE EAST REGION, CAMEROON, APRIL - SEPTEMBER 2023

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### HOLISTIC APPROACHES TO WATERBORNE URINARY TRACT INFECTIONS

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### SPATIAL DISTRIBUTIONS & DIVERSITY OF ENTERIC PATHOGENS IN PUBLIC ENVIRONMENT IN LOW-AND MIDDLE-INCOME NEIGHBORHOODS IN NAIROBI, KENYA

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### MENTAL AND ENVIRONMENTAL HEALTH IN URBAN SALVADOR, BRAZIL: LINKS AND OPPORTUNITIES

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7546

### ACCEPTABILITY, USAGE AND SATISFACTION OF CHLORINE FOR WATER TREATMENT AFTER DOOR-TO-DOOR MASS DISTRIBUTION IN DISPLACED POPULATION OF CABO DELGADO PROVINCE, MOZAMBIQUE

**Santinha Juma**<sup>1</sup>, Mariana Pimenta<sup>2</sup>, James Waringa<sup>3</sup>, Nelson Sequiao<sup>3</sup>, David Prieto<sup>3</sup>, **Sergio Lopes**<sup>2</sup>, Xavier Badia-Rius<sup>2</sup>  
<sup>1</sup>Direcção Provincial de Saúde, Pemba, Mozambique, <sup>2</sup>The MENTOR Initiative, Haywards Heath, United Kingdom, <sup>3</sup>The MENTOR Initiative, Pemba, Mozambique

**7547****EVALUATING FECAL SLUDGE TREATMENT TECHNOLOGIES IN HUMANITARIAN CONTEXT: A COMPREHENSIVE STUDY IN COX'S BAZAR, BANGLADESH**

Mohammad Rafiqul Islam<sup>1</sup>, Mohammad Atique Ul Alam<sup>1</sup>, Md. Sakib Hossain<sup>1</sup>, M. Moniruzzaman<sup>2</sup>, Md. Hajbiur Rahman<sup>1</sup>, Faisal Chowdhury Galib<sup>1</sup>, Md. Shafiqul Islam<sup>1</sup>, **Zahid Hayat Mahmud<sup>1</sup>**  
<sup>1</sup>icddr, Dhaka, Bangladesh, <sup>2</sup>University of Manitoba, Winnipeg, MB, Canada

**7548****EFFECT OF AN ONSITE SHARED SANITATION INTERVENTION ON MARKERS OF ENVIRONMENTAL ENTERIC DYSFUNCTION IN CHILDREN LIVING IN MAPUTO, MOZAMBIQUE**

**Jackie Kneel<sup>1</sup>**, Trent Sumner<sup>2</sup>, Zaida Adriano<sup>3</sup>, Claire Anderson<sup>4</sup>, Judite Monteiro Braga<sup>5</sup>, Drew Capone<sup>6</sup>, Veronica Casmo<sup>5</sup>, David Holcomb<sup>7</sup>, Evgeniya Molotkova<sup>8</sup>, Celina Russo<sup>2</sup>, Winne Zambrana<sup>4</sup>, Rassul Nalá<sup>5</sup>, Oliver Cumming<sup>1</sup>, Joe Brown<sup>7</sup>  
<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Georgia Institute of Technology, Atlanta, GA, United States, <sup>3</sup>We Consult, Maputo, Mozambique, <sup>4</sup>Stanford University, Stanford, CA, United States, <sup>5</sup>Instituto Nacional de Saúde de Moçambique, Maputo, Mozambique, <sup>6</sup>Indiana University Bloomington, Bloomington, IN, United States, <sup>7</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>8</sup>Virginia Tech, Roanoke, VA, United States

**7549****RISK FACTORS FOR CHILDHOOD DIARRHEAL DISEASES IN PERI-URBAN AREAS OF OUAGADOUGOU, BURKINA FASO: A HOUSEHOLD SURVEY**

**Denise Hien<sup>1</sup>**, Alimatou Hema<sup>1</sup>, Jean Sawadogo<sup>1</sup>, Ben Idriss Soulama<sup>1</sup>, Alphonse Ouédraogo<sup>1</sup>, Alfred Bewendtaoré Tiono<sup>1</sup>, Sophie Houard<sup>2</sup>, Sodiomon Bienvenu Sirima<sup>1</sup>  
<sup>1</sup>Groupe de Recherche Action en Santé, Ouagadougou, Burkina Faso, <sup>2</sup>European Vaccine Initiative, Heidelberg, Germany

**7550****NOROVIRUS INFECTION RISKS ASSOCIATED WITH CONSUMPTION OF CONTAMINATED TOMATOES - AN APPLICATION OF A NOVEL QMRA-IDT MODEL**

**Julia S. Sobolik**, Elizabeth T. Sajewski, Ben A. Lopman, Juan S. Leon  
 Emory University, Atlanta, GA, United States

**7551****PREVALENCE OF ANTIMICROBIAL RESISTANT ENTEROBACTERIA'S IN A COMMUNITY AND IN THE ENVIRONMENT IN SALVADOR, BRAZIL**

**Davi V R S Eloy**, Lee S A Andrade, Hálcia R S Borges, João R P C Filho, Luciano K. Silva, Ronald E. Blaton, Mitermayer G. Reis  
 Oswaldo Cruz Foundation, Salvador, Brazil

**7552****PIPED WATER INTERMITTENCY AND ITS IMPACT ON WATER QUALITY AT POINT OF USE**

**Andrea Sosa-Moreno<sup>1</sup>**, Gwenyth O. Lee<sup>2</sup>, Josefina Coloma<sup>3</sup>, Gabriel Trueba<sup>4</sup>, William Cevallos<sup>5</sup>, Karen Levy<sup>6</sup>, Joseph NS. Eisenberg<sup>1</sup>  
<sup>1</sup>University of Michigan, Ann Arbor, MI, United States, <sup>2</sup>Rutgers University, New Brunswick, NJ, United States, <sup>3</sup>University of California, Berkeley, CA, United States, <sup>4</sup>Universidad San Francisco de Quito, Quito, Ecuador, <sup>5</sup>Universidad Central del Ecuador, Quito, Ecuador, <sup>6</sup>University of Washington, Seattle, WA, United States

**7553****IMPROVEMENT AND DISPARITY IN WASH IN GHANA: COMPARATIVE ANALYSIS OF 2014 AND 2022 GHANA DEMOGRAPHIC AND HEALTH SURVEY DATA**

**Kofi Agyabeng<sup>1</sup>**, Delia A. B Bandoh<sup>2</sup>, Yakubu Alhassan<sup>1</sup>, Morrison Asiamah<sup>1</sup>, Duah Dwomoh<sup>1</sup>  
<sup>1</sup>University of Ghana School of Public Health, Accra, Ghana, <sup>2</sup>University of Ghana School of Public Health, ACCRA, Ghana

**7554****MOLECULAR DIAGNOSTICS OF PARASITES IN DIFFERENT ENVIRONMENTS AND CLIMATES THROUGHOUT LATIN AMERICA**

**Rojelio Mejia<sup>1</sup>**, Athos Silva de Oliveira<sup>1</sup>, Maria Jose Villar<sup>1</sup>, Irene Guadalupe<sup>2</sup>, Liliana E. Villanueva-Lizama<sup>3</sup>, Melisa Díaz Fernández<sup>4</sup>, Elvia Nieves<sup>4</sup>, Cristina Almazan<sup>4</sup>, Dharlton Gomes Soares<sup>5</sup>, Chiara C O Amorim<sup>5</sup>, Eric Wetzel<sup>6</sup>, Julio V. Cruz-Chan<sup>3</sup>, Alejandro Krolewiecki<sup>4</sup>, Ruben Cimino<sup>4</sup>, Stefan M. Geiger<sup>5</sup>, Ricardo T. Fujiwara<sup>5</sup>, Carlos Pineda<sup>7</sup>, Philip J. Cooper<sup>8</sup>  
<sup>1</sup>Baylor College of Medicine, Houston, TX, United States, <sup>2</sup>IESS Hospital, Puyo, Ecuador, <sup>3</sup>Universidad Autónoma de Yucatán, Mérida, Mexico, <sup>4</sup>Universidad Nacional de Salta, Salta, Argentina, <sup>5</sup>Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, <sup>6</sup>Wabash College, Crawfordsville, IN, United States, <sup>7</sup>Universidad Nacional Hermilio Valdizán, Huánuco, Peru, <sup>8</sup>Universidad Internacional del Ecuador, Quito, Ecuador

**7555****PREVALENCE OF INTESTINAL PARASITIC INFECTION IN PEOPLE FROM MARGINALIZED COMMUNITIES IN MEXICO CITY AND THE STATE OF PUEBLA, MEXICO**

**Maria de Lourdes Caballero-Garcia<sup>1</sup>**, Constanza Diaz Escobar-Orozco<sup>2</sup>, Maria del Pilar Crisostomo-Vazquez<sup>1</sup>, Mariana Soria-Guerrero<sup>1</sup>, Leticia Eligio-Garcia<sup>1</sup>, Fortino Solorzano-Santos<sup>1</sup>  
<sup>1</sup>Children's Hospital of Mexico Federico Gomez, México, Mexico, <sup>2</sup>Simon Bolivar University, México, Mexico

**The Power of Partnership: Spotlight on Philanthropy**

Convention Center - Hall I-2 (1st Floor)  
 Friday, November 15, 12:15 p.m. - 1:30 p.m.

Join us for a dynamic panel discussion on the transformative power of partnership and philanthropy in advancing global health research. This session will explore how strategic collaborations between philanthropic organizations and scientific communities are driving innovative solutions to pressing health challenges worldwide. Panelists from leading philanthropic entities will share insights into their unique approaches, highlighting how their support intersects with and amplifies global health research efforts. Discover how these alliances are fostering breakthroughs, accelerating progress, advancing health equity, and ultimately saving and improving lives.

**CHAIR**

**Jamie Bay Nishi**  
 American Society of Tropical Medicine and Hygiene, Arlington, VA, United States  
**Kristy Murray**  
 Emory University, Atlanta, GA, United States

**12:15 p.m. INTRODUCTION**

Friday  
 November 15



**12:25 p.m.****WELCOME, INTRODUCTIONS AND OVERVIEWS HOW EACH ORGANIZATION CONNECTS TO GLOBAL HEALTH**

Jamie Bay Nishi  
*American Society of Tropical Medicine and Hygiene, Arlington, VA, United States*

**12:50 p.m.****FACILITATED Q&A WITH THE PANEL**

Kristy Murray  
*Emory University, Atlanta, GA, United States*

**PANELISTS**

Alex Bowles  
*GiveWell, San Francisco, CA, United States*

Osamu Kunii  
*GHIT Fund, Tokyo, Japan*

Victoria P. McGovern  
*Burroughs Wellcome Fund, Research Triangle Park, NC, United States*

Jagmeet Sra  
*Wellcome Trust, London, United Kingdom*

Estee Torok  
*Bill & Melinda Gates Foundation, London, United Kingdom*

**1:15 p.m.****OPEN Q&A AND WRAP UP**

Kristy Murray  
*Emory University, Atlanta, GA, United States*

**Late-Breaker Abstract Session 77****Late-Breakers in Clinical and Applied Sciences**

*Convention Center - Room 383/384/385 (3rd Floor)*  
**Friday, November 15, 12:15 p.m. - 1:30 p.m.**

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. See the Meeting App or Late-Breaker Abstract Presentation Schedule booklet (available online) for the presentation schedule.

**CHAIR**

Miguel Cabada  
*University of Texas Medical Branch, Galveston, TX, United States*

Paige Waterman  
*WRAIR, Bethesda, MD, United States*

**Meet the Professors Session 78****Meet the Professors: Tropical Dermatology: Skin Manifestations and Envenomation**

*Convention Center - Room 388/389 (3rd Floor)*  
**Friday, November 15, 12:15 p.m. - 1:30 p.m.**

Meet the Professors sessions are valuable learning experiences for trainees and practicing clinicians to hear about clinical reasoning from leaders in the field. In this session, Dr. Nnedu will be presenting clinical cases with important skin findings, and Dr. Sharma, ACCTMTH LMIC Clinician Travel Award recipient, will present cases associated with envenomation.

**SESSION ORGANIZER**

Daniel Leung  
*University of Utah, Salt Lake City, UT, United States*

**SESSION CHAIR**

Rachel Martin-Blais  
*Nationwide Children's Hospital, Columbus, OH, United States*

**PRESENTATION #1**

Obinna Nnaemeka Nnedu  
*Infectious Diseases, Ochsner Clinic Foundation, New Orleans, LA, United States*

**PRESENTATION #2**

Sanjib Kumar Sharma  
*B.P. Koirala Institute of Health Sciences, Dharan, Nepal*

**CTropMed Exam Committee Meeting**

*Hilton - Ascot (3rd Floor)*  
**Friday, November 15, 12:15 p.m. - 1:30 p.m.**

**President's Symposium Expanding Pathways to Global Health: Opportunity, Collaboration and Education**

*Convention Center - Hall I-2 (1st Floor)*  
**Friday, November 15, 1:45 p.m. - 3:30 p.m.**

Global health educational opportunities for clinicians, scientists and those interested in public health sit within a handful of geographies and relatively small subset of institutions that are the envy of the world. Compounding this are funding shortages to universities and increasing costs of medical and advanced scientific education. How do we ensure we are removing barriers and fostering opportunities for the next generation of scientists, clinicians, public health and policymakers advancing the field of global health? How do we broaden access to education and ensure opportunities to introduce individuals to global health. During this session we will hear from thought leaders on the opportunities and challenges ahead and ASTMH President Dr. Linnie Golightly will facilitate a dialogue to solicit input from people in our community writ large, along with a distinguished panel to better plan how to expand build the global health pathway for professionals going forward.

## CHAIR

Linnie Golightly  
Weill Cornell Medicine, New York, NY, United States

1:50 p.m.

### WELCOME AND INTRODUCTION

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

2 p.m.

### MODERATOR: PANEL DISCUSSION

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

### PANELISTS

Gordon A. Awandare  
Biochemistry Cell and Molecular Biology, University of Ghana, Legon, Ghana

Virginia Caine  
President, National Medical Association and Indiana University School of Medicine,  
Indianapolis, IN, United States

Michellene Davis  
President and CEO, National Medical Fellowships, Alexandria, VA, United States

Thomas LaVeist  
Tulane University, New Orleans, LA, United States

David Walton  
President's Malaria Initiative, Washington, DC, United States

2:35 p.m.

### MODERATOR: FACILITATED Q&A

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

3:05 p.m.

### MODERATOR: OPEN Q&A

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

3:25 p.m.

### WRAP-UP AND CONCLUSIONS

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

## Scientific Session 80

### Ectoparasite-Borne Diseases I

Convention Center - Room 343/344 (3rd Floor)

Friday, November 15, 1:45 p.m. - 3:30 p.m.

*This session does not carry CME credit.*

#InfectiousDisease #EmergingDiseaseThreats  
#Diagnostics #Pathogenesis

## CHAIR

Jessica Crooker  
SUNY Upstate Medical University, Syracuse, NY, United States

Meghan Hermance  
University of South Alabama, Mobile, AL, United States

1:45 p.m.

7556

### COINFECTION OF POWASSAN VIRUS AND *BORRELIA BURGENDORFERI* IN A C3H MOUSE MODEL

Jessica Crooker, Dakota Paine, Saravanan Thangamani  
SUNY Upstate Medical University, Syracuse, NY, United States

2 p.m.

7557

### HOST-SPECIFIC ADAPTATION OF POWASSAN VIRUS TO *AMBLIOMMA AMERICANUM*: ROLE OF PRM IN TICK-SPECIFIC VIRAL FITNESS

Rachel E. Lange<sup>1</sup>, Alan P. Dupuis<sup>2</sup>, Melissa A. Prusinski<sup>3</sup>, Alexander T. Ciota<sup>2</sup>  
<sup>1</sup>University at Albany School of Public Health, Albany, NY, United States, <sup>2</sup>The Arbovirus Laboratory, Wadsworth Center, New York State Department of Health, Slingerlands, NY, United States, <sup>3</sup>New York State Department of Health, Bureau of Communicable Disease Control, Vector Ecology Laboratory, Albany, NY, United States

2:15 p.m.

7558

### FIRST EVIDENCE OF NON-VIREMIC TRANSMISSION OF POWASSAN VIRUS BETWEEN CO-FEEDING TICKS

Clemence Obellianne, Parker D. Norman, Eliane Esteves, Meghan E. Hermance  
University of South Alabama, Mobile, AL, United States

2:30 p.m.

7559

### DEFINING THE KINETICS OF SFTSV ACQUISITION AND DISSEMINATION WITHIN FEEDING *HAEMAPHYSALIS LONGICORNIS* NYMPHS

Eliane Esteves, Bailey Hettlinger, Ahmed Garba, Clemence Obellianne, Meghan Hermance  
University of South Alabama, Mobile, AL, United States

2:45 p.m.

7560

### NOVEL HYBRID ELISA AS A SINGLE-TIER TEST FOR LYME DISEASE

Nadya Karaseva<sup>1</sup>, Drew Miller<sup>1</sup>, Hunter Kellogg<sup>1</sup>, Gary P. Wormser<sup>2</sup>, Elizabeth J. Horn<sup>3</sup>, Andrew E. Levin<sup>1</sup>  
<sup>1</sup>Kepera Diagnostics, LLC, Framingham, MA, United States, <sup>2</sup>New York Medical College, Valhalla, NY, United States, <sup>3</sup>Lyme Disease Biobank, Portola Valley, CA, United States

3 p.m.

7561

### ANTIBODIES CONTRIBUTE TO VACCINE-CONFERRED PROTECTION AGAINST FATAL RICKETTSIOSIS IN MICE

Rong Fang<sup>1</sup>, Loka Reddy Velatooru<sup>1</sup>, David Walker<sup>1</sup>, Ulrike Munderloh<sup>2</sup>, Shahid Karim<sup>3</sup>, Carsen Roach<sup>1</sup>  
<sup>1</sup>utmb, Galveston, TX, United States, <sup>2</sup>University of Minnesota, St. Paul, MN, United States, <sup>3</sup>University of Southern Mississippi, Hattiesburg, MS, United States

3:15 p.m.

7562

### CAPPABLE-SEQ ENABLES ENRICHMENT AND GENOMIC SEQUENCING OF RNA VIRUSES FROM THE DEER TICK *IXODES SCAPULARIS*

Amit Sinha, Zhiru Li, Cécile Hugel, Clotilde KS Carlow  
New England Biolabs Inc., Ipswich, MA, United States

## Scientific Session 81

### Bacteriology: Cholera

Convention Center - Room 345 (3rd Floor)

Friday, November 15, 1:45 p.m. - 3:30 p.m.

#InfectiousDisease #Vaccinology  
#PopulationSurveillance #Epidemiology #Diagnostics

#### CHAIR

Christine Marie George

Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

Amanda Tiffany

Centers for Disease Control and Prevention, Atlanta, GA

1:45 p.m.

7563

#### A DECADE OF CHOLERA BURDEN IN AFRICA, A SPATIAL STATISTICAL ANALYSIS FROM 2011-2020

**Qulu Zheng<sup>1</sup>**, Javier Perez-Saez<sup>1</sup>, Joshua Kaminsky<sup>1</sup>, Kaiyue Zou<sup>1</sup>, Christina Alam<sup>1</sup>, Maya Demby<sup>1</sup>, Rachel DePencier<sup>2</sup>, Justin Lessler<sup>3</sup>, Abhirup Datta<sup>4</sup>, Andrew S. Azman<sup>1</sup>, Elizabeth C. Lee<sup>1</sup>

<sup>1</sup>Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>2</sup>Johns Hopkins University School of Nursing, Baltimore, MD, United States, <sup>3</sup>Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>4</sup>Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

2 p.m.

7564

#### A 4-YEAR STUDY OF THE CLINICAL AND ENVIRONMENTAL EPIDEMIOLOGY OF *VIBRIO CHOLERAE* AND HOUSEHOLD TRANSMISSION DYNAMICS IN URBAN DEMOCRATIC REPUBLIC OF THE CONGO: PICHAT7 PROGRAM

**Christine Marie George<sup>1</sup>**, Presence Sanvura<sup>2</sup>, Jean-Claude Bisimwa<sup>2</sup>, Kelly Endres<sup>1</sup>, Alves Namunesha<sup>2</sup>, Willy Felicien<sup>2</sup>, Jamie Perin<sup>1</sup>, David Sack<sup>1</sup>, Camille Williams<sup>1</sup>, Feza Rugusha<sup>2</sup>, Ghislain Maheshe<sup>3</sup>, Cirhuza Cikomola<sup>2</sup>, Lucien Bisimwa<sup>2</sup>, Alain Mwishingo<sup>2</sup>  
<sup>1</sup>Johns Hopkins School of Public Health, Baltimore, MD, United States, <sup>2</sup>Université Catholique de Bukavu, Bukavu, Democratic Republic of the Congo, <sup>3</sup>Faculty of Medicine, Catholic University of Bukavu, Bukavu, Democratic Republic of the Congo

2:15 p.m.

7565

#### ENHANCING CHOLERA SURVEILLANCE IN NEPAL: FINDINGS FROM CHOLERA OUTBREAK IN KATHMANDU VALLEY, 2022

**Yubin Lee<sup>1</sup>**, Daniel Chulwoo Rhee<sup>1</sup>, Krishna Prasad Paudel<sup>2</sup>, Abhiyan Gautam<sup>3</sup>, Runa Jha<sup>4</sup>, Jyoti Acharya<sup>4</sup>, Deepak Bajracharya<sup>5</sup>, Kshitij Karki<sup>5</sup>, Bisekha Jaiswal<sup>5</sup>, Rakchya Amatya<sup>5</sup>, Rakesh Yadav<sup>1</sup>, Manoj Kumar Mahato<sup>1</sup>, Haeun Cho<sup>1</sup>, Jaewoong Lee<sup>1</sup>, Prerana Parajulee<sup>1</sup>, Derick Kimathi<sup>1</sup>, Nimesh Poudyal<sup>1</sup>, Jungseok Lee<sup>1</sup>, Jacqueline Kyoungah Lim<sup>1</sup>, Chuman Lal Das<sup>3</sup>, Amanda Debs<sup>6</sup>, David Sack<sup>6</sup>, Julia Lynch<sup>1</sup>

<sup>1</sup>International Vaccine Institute, Seoul, Republic of Korea, <sup>2</sup>Planning, Policy and Monitoring Division, Ministry of Health and Population, Kathmandu, Nepal, <sup>3</sup>Epidemiology and Disease Control Division, Kathmandu, Nepal, <sup>4</sup>National Public Health Laboratory, Kathmandu, Nepal, <sup>5</sup>Group for Technical Assistance, Kathmandu, Nepal, <sup>6</sup>Johns Hopkins University, Baltimore, MD, United States

2:30 p.m.

7566

#### CHOLERA RESURGENCE IN HAITI, 2022. POST-ELIMINATION CHALLENGES

**Stanley JUIN<sup>1</sup>**, Edwige Michel<sup>2</sup>, Wilfredo R. Matias<sup>1</sup>, Nadia Phaimyr D. Jn Charles<sup>3</sup>, Yodeline Guillaume<sup>1</sup>, Roberta Bouilly<sup>2</sup>, Anne Marie Desormeaux<sup>3</sup>, Kenold Rendel<sup>2</sup>, Valusnor Compère<sup>4</sup>, Katilla Pierre<sup>2</sup>, Jean Romuald Ernest<sup>2</sup>, Gerard Joseph<sup>4</sup>, Jacques Boncy<sup>4</sup>, Donald Lafontant<sup>2</sup>, Louise Catherine Iverse<sup>5</sup>  
<sup>1</sup>MGH, Boston, MA, United States, <sup>2</sup>MSPP-DELR, Port-au-Prince, Haiti, <sup>3</sup>CDC, Port-au-Prince, Haiti, <sup>4</sup>MSPP-LNSP, Port-au-Prince, Haiti, <sup>5</sup>Harvard Global Health Institute, Cambridge, MA, United States

2:45 p.m.

7567

#### AN UPDATED SYSTEMATIC REVIEW AND META-ANALYSIS OF PROTECTION PROVIDED BY KILLED WHOLE-CELL ORAL CHOLERA VACCINES

Hanmeng Xu<sup>1</sup>, **Amanda Tiffany<sup>2</sup>**, Suman Kanungo<sup>3</sup>, Francisco Luquero<sup>4</sup>, Firdausi Qadri<sup>5</sup>, Vincent Mendiboure<sup>6</sup>, Malika Bouhenia<sup>6</sup>, Lucy Breakwell<sup>2</sup>, Andrew S Azman<sup>1</sup>  
<sup>1</sup>Johns Hopkins University, Baltimore, MD, United States, <sup>2</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>3</sup>ICMR-National Institute of Cholera and Enteric Diseases, Kolkata, India, <sup>4</sup>Gavi, the vaccine alliance, Geneva, Switzerland, <sup>5</sup>icdrb, Dhaka, Bangladesh, <sup>6</sup>World Health Organization, Geneva, Switzerland

3 p.m.

7568

#### EVALUATION OF ORAL CHOLERA VACCINE (EUVICHOL-PLUS) EFFECTIVENESS AGAINST *VIBRIO CHOLERAE* IN BANGLADESH AN INTERIM ANALYSIS

**Firdausi Qadri<sup>1</sup>**, Farhana Khanam<sup>1</sup>, Faisal Ahmmed<sup>1</sup>, Md. Nazmul Hasan Rajib<sup>1</sup>, Md Ismail Hossen<sup>1</sup>, Fahima Chowdhury<sup>1</sup>, Ashrafur Islam Khan<sup>1</sup>, Taufiqur Rahman Bhuiyan<sup>1</sup>, Shahinur Haque<sup>1</sup>, Prasanta Kumar Biswas<sup>1</sup>, Amirul Islam Bhuiyan<sup>1</sup>, Zahid Hasan Khan<sup>1</sup>, Mohammad Ashrafur Amin<sup>1</sup>, Aninda Rahman<sup>2</sup>, S M Shahriar Rizvi<sup>2</sup>, Tahmina Shirin<sup>3</sup>, Md Nazmul Islam<sup>2</sup>, Amanda Tiffany<sup>4</sup>, Lucy Breakwell<sup>4</sup>, John D. Clemens<sup>5</sup>  
<sup>1</sup>International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>2</sup>Communicable Disease Control, Dhaka, Bangladesh, Dhaka, Bangladesh, <sup>3</sup>Institute for Epidemiology Disease Control and Research, Dhaka, Bangladesh, Dhaka, Bangladesh, <sup>4</sup>Global Immunization Division, US CDC, US, SD, United States, <sup>5</sup>International Vaccine Institute, Seoul, Republic of Korea, Korea, Republic of Korea

3:15 p.m.

7569

#### VIRULENT BACTERIOPHAGE, ANTIBIOTICS, AND DEHYDRATION SEVERITY NEGATIVELY IMPACT CHOLERA DIAGNOSTIC PERFORMANCE: AN EXTERNAL VALIDATION STUDY

**Sharia M. Ahmed<sup>1</sup>**, Md. Abu Sayeed<sup>2</sup>, Emilee Cato<sup>2</sup>, Ashton Creasy-Marrazzo<sup>2</sup>, Kamrul Islam<sup>3</sup>, Md I Ul Khabir<sup>3</sup>, Md Taufiqur R. Bhuiyan<sup>3</sup>, Yasmin Begum<sup>3</sup>, Emma K. Freeman<sup>2</sup>, Anirudh Vustepalli<sup>2</sup>, Lindsey M. Brinkley<sup>2</sup>, Laura S. Bailey<sup>2</sup>, Kari B. Basso<sup>2</sup>, Dennis Chao<sup>4</sup>, Daniel Leung<sup>1</sup>, Firdausi Qadri<sup>3</sup>, Jason Andrews<sup>5</sup>, Jesse Shapiro<sup>6</sup>, Ashrafur I. Khan<sup>3</sup>, Eric Nelson<sup>2</sup>  
<sup>1</sup>University of Utah, Salt Lake City, UT, United States, <sup>2</sup>University of Florida, Gainesville, FL, United States, <sup>3</sup>International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>4</sup>Bill & Melinda Gates Foundation, Seattle, WA, United States, <sup>5</sup>Stanford University, Stanford, CA, United States, <sup>6</sup>McGill, Montreal, QC, Canada

## Scientific Session 82

### Mosquitoes – Biology and Genetics of Insecticide Resistance

Convention Center - Room 352 (3rd Floor)

Friday, November 15, 1:45 p.m. - 3:30 p.m.

#Evolution #MolecularBiology #Genomics #Resistance

#### CHAIR

Victoria Ingham

Heidelberg University Hospital, Heidelberg, Germany

Brook Jensen

Arizona State University, Tempe, AZ, United States

1:45 p.m.

7570

#### DOES INSECTICIDE EXPOSURE IMPACT PLASMODIUM TRANSMISSION?

Victoria Ingham, Patrick Hoerner

Heidelberg University Hospital, Heidelberg, Germany

2 p.m.

7571

#### A CELL ATLAS OF ANOPHELES COLUZZII MALPIGHIAN TUBULES

Naomi Anne Dyer<sup>1</sup>, Jesús Reiné<sup>2</sup>, Mara Lawniczak<sup>3</sup>, Ilona L. Flis<sup>1</sup>, Eloise Aliski<sup>4</sup>

<sup>1</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>2</sup>University of Oxford, Oxford, United Kingdom, <sup>3</sup>Wellcome Sanger Institute, Cambridge, United Kingdom, <sup>4</sup>University of Liverpool, Liverpool, United Kingdom

2:15 p.m.

7572

#### ELUCIDATING THE ROLE OF ARGININOSUCCINATE LYASE IN CONFERRING PYRETHROID RESISTANCE IN THE MAJOR AFRICAN VECTORS ANOPHELES FUNESTUS

Vanessa Brigitte Ngannang-Fezeu<sup>1</sup>, Leon M. J. Mugenzi<sup>2</sup>, Magellan Tchouakui<sup>3</sup>, Mersimime Kouamo<sup>3</sup>, Murielle Wondji<sup>3</sup>, Jude D. Bigoga<sup>4</sup>, Charles S. Wondji<sup>5</sup>

<sup>1</sup>Centre for Research in Infectious Diseases/ University of Yaounde 1, Yaounde, Cameroon, <sup>2</sup>Syngenta Crop Protection, Werk Stein, Schaffhauserstrasse, Stein CH4332, Switzerland, <sup>3</sup>Centre for Research in Infectious Diseases, Yaounde, Cameroon, <sup>4</sup>University of Yaounde 1, Cameroon, Yaounde, Cameroon, <sup>5</sup>Vector Biology Department, Liverpool School of Tropical Medicine (LSTM), Pembroke Place, Liverpool, L3 5QA, United Kingdom

2:30 p.m.

7573

#### UNDERSTANDING SELECTION DYNAMICS AND EVALUATING EFFICACY OF INSECTICIDE RESISTANCE MANAGEMENT STRATEGIES USING KNOCK-DOWN RESISTANT Aedes Aegypti

Brook M. Jensen<sup>1</sup>, Alden S. Estep<sup>2</sup>, Silvie Huijben<sup>1</sup>

<sup>1</sup>Arizona State University, Tempe, AZ, United States, <sup>2</sup>USDA ARS Center for Medical Agricultural and Veterinary Entomology, Gainesville, FL, United States

2:45 p.m.

7574

#### MITIGATING INSECTICIDE RESISTANCE WITH GENERATION MICROBIAL BIOPESTICIDES

George Dimopoulos

Johns Hopkins University, Baltimore, MD, United States

3 p.m.

7575

#### URIDINE DIPHOSPHATE (UDP)-GLYCOSYLTRANSFERASES (UGTS) CONFER INSECTICIDE RESISTANCE IN THE MAJOR MALARIA VECTORS ANOPHELES GAMBIAE S.L AND ANOPHELES FUNESTUS

Rhiannon Agnes Ellis Logan, Julia Bettina Mäurer, Charlotte Wapler, Victoria Anne Ingham

Heidelberg University, Heidelberg, Germany

3:15 p.m.

7576

#### DISCOVERY OF KNOCK-DOWN RESISTANCE IN THE MAJOR MALARIA VECTOR ANOPHELES FUNESTUS REVEALS THE LEGACY OF PERSISTENT DDT POLLUTION

Joel O. Otero<sup>1</sup>, Tristan P. W. Dennis<sup>2</sup>, Brian Polo<sup>3</sup>, Joachim Nwezeobi<sup>4</sup>, Marilou Boddé<sup>4</sup>, Sanjay Nagi<sup>2</sup>, Anastasia Hernandez-Koutoucheva<sup>4</sup>, Ismail Nambunga<sup>1</sup>, Hamis Bwanary<sup>1</sup>, Gustav Mkandawile<sup>1</sup>, Nicodem Govella<sup>1</sup>, Emmanuel Kaindoa<sup>1</sup>, Heather Ferguson<sup>5</sup>, Eric Ochomo<sup>3</sup>, Chris Clarkson<sup>4</sup>, Alistair Miles<sup>4</sup>, Mara Lawniczak<sup>4</sup>, David Weetman<sup>2</sup>, Francesco Baldini<sup>5</sup>, Fredros Okumu<sup>1</sup>

<sup>1</sup>Ifakara Health Institute, Morogoro, United Republic of Tanzania, <sup>2</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>3</sup>Kenya Medical Research Institute, Kisumu, Kenya, <sup>4</sup>Wellcome Sanger Institute, Hinxton, United Kingdom, <sup>5</sup>University of Glasgow, Glasgow, United Kingdom

## Symposium 83

### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Symposium I: Single-Cell Approaches in Parasitology

Convention Center - Room 353 (3rd Floor)

Friday, November 15, 1:45 p.m. - 3:30 p.m.

Single cell approaches have become a very important tool for learning about the heterogeneity that exists within populations of cells through the analysis of singular cells, using one or multiple 'omics, imaging or other methodologies. These approaches have led to major insights in a range of fields, including molecular, cellular and immunoparasitology. Here in this symposium, we are featuring cutting-edge research talks by scientists who apply single-cell approaches toward making novel understandings within their particular subfields of parasitology. We start off with research on the use of single-cell optical metabolic imaging in *Toxoplasma gondii* leading toward a more comprehensive understanding of how infection with this parasite alters the host cell from a metabolic standpoint on an individual cell level. We will then move toward the use of single-cell approaches paired with 'omics technologies. Here, we will learn about how single-cell transcriptomics profiling applied to the adult stage of the schistosome, a parasitic flatworm, can be used to gain insights about the disease schistosomiasis. And finally, we will hear about the use of single cell genomics in the context of genetic cross studies being conducted to study drug-resistance in *Plasmodium falciparum* parasites to further our knowledge about genetic underpinnings of malaria drug resistance. All in all, this symposium will give its audience a broad range of exciting scientific talks about how single cell approaches are being used right now across a range of parasitic diseases to study host-pathogen interactions, within-parasite biology, and drug-resistance determinants, among

other prescient questions in parasitology. #CellBiology #Genomics #HostResponse #InfectiousDisease #MolecularBiology

#### CHAIR

Regina Cordy  
Wake Forest University, Winston Salem, NC, United States

Selina Bopp  
Harvard T.H. Chan School of Public Health, Boston, MA, United States

1:45 p.m.

#### INTRODUCTION

1:55 p.m.

#### EXPLORING THE GENETICS OF MALARIA PARASITE INFECTIONS WITH SINGLE CELL APPROACHES

Ian Cheeseman  
Texas Biomedical Research Institute, San Antonio, TX, United States

2:10 p.m.

#### USE OF SINGLE-CELL RNASEQ FOR MALARIA TRANSMISSION STUDIES IN THE LAB AND IN THE FIELD

Roberto Rudge de Moraes Barros  
Federal University of Sao Paulo in Brazil, Sao Paulo, Brazil

2:25 p.m.

#### METABOLIC CHANGES TO HOST CELLS WITH *TOXOPLASMA GONDII* INFECTION

Gina M. Gallego-López  
University of Wisconsin-Madison, Madison, WI, United States

2:45 p.m.

#### IDENTIFICATION OF RARE AND UNCOMMON PARASITIZED CELL POPULATIONS IN CHRONIC *L. DONOVANI* INFECTION BY SINGLE CELL TRANSCRIPTOMICS

Abhay Satoskar  
Ohio State University, Columbus, OH, United States

3 p.m.

#### SINGLE CELL SEQUENCING TO UNDERSTAND SCHISTOSOME BIOLOGY

James Collins  
UT Southwestern Medical Center, Dallas, TX, United States

## Scientific Session 84

### Viruses - Emerging Viral Diseases

Convention Center - Room 354/355 (3rd Floor)

Friday, November 15, 1:45 p.m. - 3:30 p.m.

This session does not carry CME credit.

#EmergingDiseaseThreats #InfectiousDisease #Modeling

#### CHAIR

Ralph Huits  
IRCCS Ospedale Sacro Cuore Don Calabria, Negrar, Italy

Lais Picinini Freitas  
Université de Montréal, Montreal, QC, Canada

1:45 p.m.

7577

#### INVESTIGATION OF AN UNEXPLAINED NEUROLOGICAL SYNDROME IN A CLUSTER OF INDIVIDUALS IN BUNDIBUGYO DISTRICT, UGANDA

Sophia Mulei<sup>1</sup>, Shannon Whitmer<sup>2</sup>, Stephen Balinandi<sup>1</sup>, Jimmy Baluku<sup>1</sup>, Katrin Sadigh<sup>2</sup>, Kami Smith<sup>2</sup>, Dianah Namanya<sup>1</sup>, Calvin Torach<sup>1</sup>, Joanita Mutesi<sup>1</sup>, Jackson Kyondo<sup>1</sup>, Alex Tumusiime<sup>1</sup>, Daniel Orit<sup>3</sup>, Daniel Kadobera<sup>3</sup>, Andrea Winquist<sup>2</sup>, James Sejvar<sup>2</sup>, Luke Nyakarahuka<sup>1</sup>, Mary Choi<sup>2</sup>, Joel Montgomery<sup>2</sup>, Julius Lutwama<sup>1</sup>, Trevor Shoemaker<sup>2</sup>, John Klena<sup>2</sup>

<sup>1</sup>Uganda Virus Research Institute, Entebbe, Uganda, <sup>2</sup>United States Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>3</sup>Uganda National Institute of Public Health, Kampala, Uganda

2 p.m.

7578

#### NIPAH VIRUS IN BREAST MILK: EXPANDING THE HORIZON OF TRANSMISSION DYNAMICS

Dewan Intiaz Rahman<sup>1</sup>, Immamul Muntasir<sup>2</sup>, Md. Zulqarnine Ibne Noman<sup>1</sup>, Md. Jahidur Rahman<sup>2</sup>, Md. Foyjul Islam<sup>2</sup>, Fateha Akhter Ema<sup>1</sup>, Rashedul Alam Emon<sup>1</sup>, Monjurul Islam<sup>3</sup>, Ahmad Raihan Sharif<sup>2</sup>, Wasik Rahman Aquib<sup>1</sup>, Ayesha Siddika<sup>1</sup>, Md. Mahfuzur Rahman<sup>1</sup>, Neeshorgo Niloy<sup>1</sup>, Rashedul Hassan<sup>2</sup>, Md. Omar Qayum<sup>2</sup>, Mohammad Enayet Hossain<sup>1</sup>, Ariful Islam<sup>3</sup>, Kamal Ibne Amin Chowdhury<sup>1</sup>, Mahbubur Rahman<sup>2</sup>, Sharmin Sultana<sup>2</sup>, John D. Klena<sup>4</sup>, Mohammed Ziaur Rahman<sup>1</sup>, Jonathan H. Epstein<sup>3</sup>, Sayera Banu<sup>1</sup>, Joel M. Montgomery<sup>4</sup>, Tahmina Shirin<sup>1</sup>, Syed Moinuddin Satter<sup>1</sup>

<sup>1</sup>icddr, Dhaka, Bangladesh, <sup>2</sup>Institute of Epidemiology, Disease Control and Research (IEDCR), Dhaka, Bangladesh, <sup>3</sup>EcoHealth Alliance, New York, NY, United States, <sup>4</sup>Viral Special Pathogens Branch, Division of High Consequence Pathogens and Pathology, Centers for Disease Control and Prevention, Atlanta, GA, United States

2:15 p.m.

7579

#### DENGUE VIREMIA KINETICS AND THE EFFECTS ON PLATELET COUNT AND CLINICAL OUTCOMES

Nguyen L. Vuong<sup>1</sup>, Nguyen T. H. Quyen<sup>1</sup>, Nguyen T. H. Tien<sup>1</sup>, Duong T. H. Kien<sup>1</sup>, Huynh T. L. Duyen<sup>1</sup>, Phung K. Lam<sup>1</sup>, Dong T. H. Tam<sup>1</sup>, Tran V. Ngoc<sup>2</sup>, Thomas Jaenisch<sup>3</sup>, Cameron P. Simmons<sup>4</sup>, Sophie Yacoub<sup>1</sup>, Bridget A. Wills<sup>1</sup>, Ronald B. Geskus<sup>1</sup>

<sup>1</sup>Oxford University Clinical Research Unit, Ho Chi Minh City, Vietnam, <sup>2</sup>Hospital for Tropical Diseases, Ho Chi Minh City, Vietnam, <sup>3</sup>Center for Global Health, Colorado School of Public Health, Aurora, CO, United States, <sup>4</sup>World Mosquito Program, Monash University, Monash, Australia

2:30 p.m.

7580

#### CHARACTERIZATION OF ANTIGEN-SPECIFIC HUMORAL IMMUNE RESPONSES IN ACUTE AND PAST DENGUE, ZIKA, AND WEST NILE VIRUS INFECTIONS

Christina Deschermeier<sup>1</sup>, Christa Ehmen<sup>2</sup>, Rutinea Ferraz<sup>2</sup>, Ronald von Possel<sup>2</sup>, Jörg Blessmann<sup>2</sup>, Latdamone Keoviengkhone<sup>3</sup>, Vatsana Sopraseuth<sup>3</sup>, Simone Kann<sup>4</sup>, Leonardo Maya Amaya<sup>5</sup>, Gadith Rivera Salcedo<sup>5</sup>, Iryna Demchyshyna<sup>6</sup>, Petra Emmerich<sup>2</sup>

<sup>1</sup>Panadea Diagnostics GmbH, Hamburg, Germany, <sup>2</sup>Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>3</sup>Savannakhet Provincial Hospital, Savannakhet, Lao People's Democratic Republic, <sup>4</sup>Medical Mission Institute, Würzburg, Germany, <sup>5</sup>Hospital Eduardo Arredondo Daza, Valledupar, Colombia, <sup>6</sup>Public Health Center of Ministry of Health of Ukraine, Kyiv, Ukraine

2:45 p.m.

7581

#### A MULTIVARIATE SPATIAL MODELING OF SIMULTANEOUS EPIDEMICS OF DENGUE, CHIKUNGUNYA, AND ZIKA IN COLOMBIA

Lais Picinini Freitas<sup>1</sup>, Mabel Carabali<sup>2</sup>, Alexandra M. Schmidt<sup>2</sup>, Jorge Emilio Salazar Flórez<sup>3</sup>, Brayan Ávila Monsalve<sup>4</sup>, César García-Balaguera<sup>4</sup>, Berta N. Restrepo<sup>3</sup>, Gloria I. Jaramillo-Ramirez<sup>4</sup>, Kate Zinszer<sup>1</sup>

<sup>1</sup>Centre de recherche en santé publique, École de Santé Publique - Université de Montréal, Montreal, QC, Canada, <sup>2</sup>Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, QC, Canada, <sup>3</sup>Universidad CES, Instituto Colombiano de Medicina Tropical, Medellín, Colombia, <sup>4</sup>Universidad Cooperativa de Colombia, Facultad de Medicina, Villavicencio, Colombia

3 p.m.

7582

**PANDEMIC BURDEN IN LOW-INCOME SETTINGS AND IMPACT OF LIMITED AND DELAYED INTERVENTIONS: A GRANULAR MODELLING ANALYSIS OF COVID-19 IN KABWE, ZAMBIA**

Pablo Noel Perez-Guzman<sup>1</sup>, Stephen L. Chanda<sup>2</sup>, Albertus Schaap<sup>3</sup>, Kwame Shanaube<sup>3</sup>, Marc Baguelin<sup>1</sup>, Sarah T. Nyangu<sup>3</sup>, Muzala Kapina<sup>2</sup>, Patrick GT Walker<sup>1</sup>, Helen Ayles<sup>3</sup>, Roma Chilengi<sup>2</sup>, Robert J. Verity<sup>1</sup>, Katharina D. Hauck<sup>1</sup>, Edward S. Knock<sup>1</sup>, Anne Cori<sup>1</sup>  
<sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>Zambia National Public Health Institute, Lusaka, Zambia, <sup>3</sup>Zambart, Lusaka, Zambia

3:15 p.m.

7583

**PREVALENCE OF ASYMPTOMATIC MPOX INFECTION IN THE SAN FRANCISCO BAY AREA, 2022**

Zachary T. Renfro, Caitlin Contag, Adi Xiyal Mukund, Meg Quint, James Dickerson, Fumiko Yamamoto, Jorge Salinas, Vivian Levy, Benjamin Laniakea, Benjamin Pinsky  
Leland Stanford Junior University, Stanford, CA, United States



**Symposium 85**

**Acute Kidney Injury in Severe Malaria - Diagnosis, Burden, Pathways, and Prevention**

Convention Center - Room 356 (3rd Floor)  
Friday, November 15, 1:45 p.m. - 3:30 p.m.

*This session does not carry CME credit.*

Acute kidney injury (AKI) is defined as an abrupt loss of kidney function. In the past decade, AKI has emerged as a clinical complication of importance in both adults and children with severe malaria that is associated with increased mortality, and long-term morbidity with survivors at risk of chronic kidney disease and neurocognitive impairment. However, AKI remains an unrecognized complication of severe malaria due to a lack of clear guidelines on how to diagnose it. In this symposium we will outline approaches to diagnose AKI using evidence-based global consensus guidelines, provide an overview on the burden of AKI and its associated clinical outcomes, present the latest information on the pathophysiology of AKI, and outline approaches to prevent AKI, promote AKI recovery, and provide kidney support and dialysis in low-and-middle income countries. #ClinicalResearch #TranslationalScience #Pathogenesis #InfectiousDisease #Diagnostics

**CHAIR**

Andrea L. Conroy  
Indiana University School of Medicine, Indianapolis, IN, United States

Ruth Namazzi  
Makerere University, Kampala, Uganda

**1:45 p.m.  
INTRODUCTION**

**1:55 p.m.  
RECOGNIZING ACUTE KIDNEY INJURY IN SEVERE MALARIA: USING CONSENSUS DEFINITIONS TO IDENTIFY PATIENTS AT RISK**

Stuart Goldstein  
University of Cincinnati, Cincinnati, United States

2:15 p.m.

**BURDEN AND LONG-TERM COMPLICATIONS OF ACUTE KIDNEY INJURY IN SEVERE MALARIA**

Anthony Batte  
Makerere University, Kampala, Uganda

2:35 p.m.

**THE PATHOPHYSIOLOGY OF SEVERE MALARIA ASSOCIATED AKI: A REVIEW OF STUDIES FROM CHILDREN AND ADULTS**

Ruth Namazzi  
Makerere University, Kampala, Uganda

2:55 p.m.

**AKI RECOGNITION AND MANAGEMENT IN SEVERE MALARIA: PREVENTION, RECOVERY, ACCESS TO DIALYSIS**

Katherine A. Plewes  
Mahidol Oxford Research Unit, Bangkok, Thailand

**Scientific Session 86**

**Measures for Control and Elimination of Neglected Tropical Diseases I**

Convention Center - Room 357 (3rd Floor)  
Friday, November 15, 1:45 p.m. - 3:30 p.m.

#Epidemiology #Elimination #InfectiousDisease #Prevention

**CHAIR**

Paul Cantey  
Centers for Disease Control and Prevention, Atlanta, GA, United States

Victoria Turay  
Helen Keller International, Freetown, Sierra Leone

1:45 p.m.

7584

**FACTORS INFLUENCING SCALE-UP OF COMMUNITY-WIDE MDA FOR SOIL-TRANSMITTED HELMINTHS: A MULTI-SITE QUALITATIVE ANALYSIS**

Arianna Rubin Means<sup>1</sup>, Malvika Saxena<sup>2</sup>, Bérou Abiguël Elijan<sup>3</sup>, Emma Murphy<sup>1</sup>, Alexandra M. Schaefer<sup>1</sup>, Hugo Legge<sup>4</sup>, Providence Nindi<sup>5</sup>, Chawanangwa Mahebere Chirambo<sup>5</sup>, Angelin Titus<sup>2</sup>, Jabaselvi Johnson<sup>2</sup>, Comlanvi Innocent Togbevi<sup>3</sup>, Félicien Chabi<sup>3</sup>, Léopold Wèkè<sup>3</sup>, Euripide Avokpaho<sup>3</sup>, Kumudha Aruldas<sup>2</sup>, Khumbo Kalua<sup>5</sup>, Sitara Swarna Rao Ajjampur<sup>2</sup>, Moudachirou Ibikounlé<sup>3</sup>, Judd L. Walson<sup>6</sup>  
<sup>1</sup>University of Washington, Seattle, WA, United States, <sup>2</sup>Christian Medical College, Vellore, India, <sup>3</sup>IRCB, Cotonou, Benin, <sup>4</sup>LSHTM, London, United Kingdom, <sup>5</sup>BICO, Blantyre, Malawi, <sup>6</sup>Johns Hopkins University, Baltimore, MD, United States

2 p.m.

7585

**ADDRESSING CHALLENGES IN SOIL TRANSMITTED HELMINTHIASIS CONTROL IN BANGLADESH: LESSONS FROM 15 YEARS OF MASS DRUG ADMINISTRATION**

Tilak Chandra Nath<sup>1</sup>, Mandira Mukutmoni<sup>2</sup>, Hamida Khanum<sup>2</sup>, Jamal Uddin Bhuiya<sup>1</sup>  
<sup>1</sup>Sylhet Agricultural University, Sylhet, Bangladesh, <sup>2</sup>Dhaka University, Dhaka, Bangladesh

Friday  
November 15

2:15 p.m.

7586

### FACTORS INFLUENCING THE UPTAKE OF MASS DRUG ADMINISTRATION FOR SCHISTOSOMIASIS AMONG PRESCHOOL-AGED CHILDREN: A CROSS-SECTIONAL STUDY FROM MADAGASCAR

Valentina Marchese<sup>1</sup>, Diavolana Koecher Andrianarimanana<sup>2</sup>, Sonya Ratefiarisoa<sup>2</sup>, Ariane Guth<sup>1</sup>, Myriam Lassmann<sup>1</sup>, Fiona Franz<sup>1</sup>, Elly Daus<sup>1</sup>, André Brito<sup>1</sup>, Tahinamandranto Rasamoelina<sup>3</sup>, Pia Rausche<sup>1</sup>, Olivette Totofotsy<sup>2</sup>, Alexina Olivasoa Zafinimampera<sup>2</sup>, Irina Kislaya<sup>1</sup>, Jürgen May<sup>1</sup>, Rivo Andry Rakotoarivelo<sup>4</sup>, Daniela Fusco<sup>1</sup>  
<sup>1</sup>Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>2</sup>Centre Hospitalier Universitaire Androva, Mahajanga, Madagascar, <sup>3</sup>Centre d'Infectiologie Charles Mérieux, Antananarivo, Madagascar, <sup>4</sup>University of Fianarantsoa, Fianarantsoa, Madagascar

2:30 p.m.

7587

### EXPLORING THE RELATIONSHIP BETWEEN WASH (WATER, SANITATION, AND HYGIENE) ACCESS IN SCHOOLS AND SCHISTOSOMIASIS PREVALENCE

Ibrahim Kargbo-Labour<sup>1</sup>, Victoria Turay<sup>2</sup>, Sugandh Juneja<sup>2</sup>, Amos S. James<sup>2</sup>, Alusine S. Kamara<sup>2</sup>, Abdulai Conteh<sup>1</sup>, Abdulai Koroma<sup>2</sup>, Unidiatu Kabia<sup>2</sup>, Gandi Kallon<sup>2</sup>, Elisabeth Chop<sup>3</sup>, Cleo Stern<sup>3</sup>, Anna Phillips<sup>4</sup>, Angela Weaver<sup>3</sup>, Yaobi Zhang<sup>3</sup>  
<sup>1</sup>Neglected Tropical Disease Program, Ministry of Health and Sanitation, Freetown, Sierra Leone, <sup>2</sup>Helen Keller International, Freetown, Sierra Leone, <sup>3</sup>Helen Keller International, New York, NY, United States, <sup>4</sup>FHI 360, Washington, DC, United States

2:45 p.m.

7588

### MODELING THE IMPACT OF IMPROVED WATER, SANITATION AND HYGIENE CONDITIONS DUE TO THE CORONAVIRUS DISEASE PREVENTION MEASURES ON SOIL-TRANSMITTED HELMINTHIASIS AND SCHISTOSOMIASIS INFECTIONS IN KENYA: WHAT LESSONS CAN WE LEARN FROM THIS NATURAL EXPERIMENT?

Collins Okoyo<sup>1</sup>, Mark Minner<sup>2</sup>, Chrispin Owaga<sup>3</sup>, Wyckliff P. Omondi<sup>4</sup>, Christin Wambugu<sup>4</sup>, Florence Musalia<sup>5</sup>, Graham Medley<sup>6</sup>, Peter Diggle<sup>7</sup>, Charles Mwandawiro<sup>1</sup>  
<sup>1</sup>Kenya Medical Research Institute, Nairobi, Kenya, <sup>2</sup>Evidence Action, Washington, WA, United States, <sup>3</sup>Evidence Action, Nairobi, Kenya, <sup>4</sup>Ministry of Health, Nairobi, Kenya, <sup>5</sup>Ministry of Education, Nairobi, Kenya, <sup>6</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>7</sup>Lancaster University, London, United Kingdom

3 p.m.

7589

### IMPACT OF FOUR ROUNDS PER YEAR OF IVERMECTIN TREATMENT IN THE WUDI GEMZU HOTSPOT, METEMA SUB FOCUS, NORTHWEST ETHIOPIA

Aderajew M. Abdulkadir<sup>1</sup>, Tewodros S. Mohammed<sup>1</sup>, Fetene M. Shita<sup>2</sup>, Yihene Wubet<sup>2</sup>, Gedefaw Ayenew<sup>2</sup>, Worku Mamo<sup>2</sup>, Yewondwossen Bitew<sup>1</sup>, Mitiku Aduugna<sup>2</sup>, Fikresilasie Samuel<sup>1</sup>, Fikre Seife<sup>3</sup>, Kadu Meribo<sup>3</sup>, Emily Griswold<sup>4</sup>, Anley Haile<sup>1</sup>, Zerihun Tadesse<sup>1</sup>, Jenna E. Coalson<sup>4</sup>, Frank O. Richards<sup>4</sup>, Gregory S. Noland<sup>4</sup>  
<sup>1</sup>The Carter Center, Addis Ababa, Ethiopia, <sup>2</sup>The Carter Center, Bahir Dar, Ethiopia, <sup>3</sup>Ministry of Health, Addis Ababa, Ethiopia, <sup>4</sup>The Carter Center, Atlanta, GA, United States

3:15 p.m.

7590

### EVIDENCE OF INTERRUPTION OF ONCHOCERCIASIS TRANSMISSION IN FOUR DISTRICTS OF NORTHERN GHANA: PRELIMINARY RESULTS FROM A LONGITUDINAL SURVEY TO EVALUATE A 2% OV16 SEROPREVALENCE THRESHOLD FOR STOPPING MASS DRUG ADMINISTRATION

Andrew Abbott<sup>1</sup>, Joseph Opare<sup>2</sup>, Odamé Asiedu<sup>2</sup>, Ellen J. Doku<sup>2</sup>, Kofi Asemanyi-Mensah<sup>2</sup>, Kofi Agyabeng<sup>3</sup>, Ben Masiira<sup>4</sup>, Thomson Lakwo<sup>4</sup>, Ernest Kenu<sup>5</sup>, Gifty Boateng<sup>6</sup>, Lorreta Antwi<sup>6</sup>, Rexford Adade<sup>6</sup>, E. Scott Elder<sup>1</sup>, Jessica Prince-Guerra<sup>1</sup>, Stephen Lindstrom<sup>1</sup>, Moukaram Tertuliano<sup>1</sup>, Andrew Hill<sup>1</sup>, Paul T. Cantey<sup>1</sup>  
<sup>1</sup>US Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>2</sup>Neglected Tropical Diseases Program, Ghana Health Service, Accra, Ghana, <sup>3</sup>Biostatistics Department, School of Public Health, University of Ghana, Legon, Ghana, <sup>4</sup>African Field Epidemiology Network, Kampala, Uganda, <sup>5</sup>African Field Epidemiology Network, Accra, Ghana, <sup>6</sup>National Public Health and Reference Laboratory, Ghana Health Service, Accra, Ghana

## Scientific Session 87

### Global Health: Special Populations (Refugees, Internally Displaced, Migrants, etc.)

Convention Center - Room 383/384/385 (3rd Floor)  
 Friday, November 15, 1:45 p.m. - 3:30 p.m.

#InfectiousDisease #PopulationSurveillance  
 #ClimateChange

#### CHAIR

Catherine Oldenburg  
 University of California, San Francisco, San Francisco, CA, United States

Isabirye Herbert Kiirya  
 Mbale Regional EPublic Health Emergency Operations Center, Kampala, Uganda

1:45 p.m.

7591

### CROSS BORDER MOBILITY AND THE OCCURRENCE OF PUBLIC HEALTH EMERGENCIES IN REFUGEE HOST DISTRICTS IN UGANDA

Isabirye Herbert Kiirya<sup>1</sup>, Benjamin Fuller<sup>2</sup>, Lawrence Margaret<sup>3</sup>, Francis Kakooza<sup>4</sup>, Judith Nanyondo<sup>4</sup>, Dathan Byonanebye<sup>4</sup>, Anton Driz<sup>5</sup>, Joshua Kayiwa<sup>1</sup>, Issa Makumbi<sup>1</sup>, Henry Bosa Kyobe<sup>6</sup>, Immaculate Atuhaire<sup>7</sup>, Immaculate Atuhaire<sup>7</sup>, Ssekitooleko Richard<sup>9</sup>, Christopher C Moore<sup>9</sup>

<sup>1</sup>National Public Health Emergency operations center, Kampala, Uganda, <sup>2</sup>Department of Medicine, University of Virginia, Charlottesville, VA, United States, <sup>3</sup>School of Medicine, University of Virginia, Charlottesville, VA, United States, <sup>4</sup>Infectious Diseases Institute, Kampala City, Uganda, <sup>5</sup>Monday.com, Jerusalem, Israel, <sup>6</sup>Ministry of Health, Kampala City, Uganda, <sup>7</sup>World Health Organization Uganda Office, Kampala City, Uganda, <sup>8</sup>World Health Organization Uganda Office, Kampala, Uganda, <sup>9</sup>Division of Infectious Diseases and International Health, Department of Medicine, University of Virginia, Charlottesville, VA, United States

2 p.m.

7592

### THE DEADLY ASSOCIATIONS BETWEEN CONFLICT, MALARIA AND MALNUTRITION ACROSS WAR TORN COMMUNITIES IN CENTRAL AFRICAN REPUBLIC ONE OF THE WORLDS MOST CHALLENGING HUMANITARIAN CRISES

Nicola Stambach<sup>1</sup>, Helen Lambert<sup>2</sup>, Katie Eves<sup>1</sup>, Blaise Alenwi Nfornuh<sup>1</sup>, Emily Bowler<sup>1</sup>, Peter Williams<sup>2</sup>, Marcel Lama<sup>3</sup>, Pascal Bakamba<sup>3</sup>, Richard James Allan<sup>1</sup>  
<sup>1</sup>The MENTOR Initiative, Haywards Heath, United Kingdom, <sup>2</sup>University of Surrey, Guildford, United Kingdom, <sup>3</sup>Ministry of Health, Bangui, Central African Republic

2:15 p.m.

7593

**INTERNALLY DISPLACED PERSONS AND MEASLES EPIDEMIOLOGY IN THE DEMOCRATIC REPUBLIC OF CONGO: INSIGHTS FROM ROUTINE DATA**

Joule N. Madinga<sup>1</sup>, Armand Mutwadi<sup>1</sup>, Papy Kwete<sup>1</sup>, Harry Kayembe<sup>2</sup>, Placide Mbala<sup>1</sup>, Niko Speybroeck<sup>3</sup>

<sup>1</sup>Institut national de Recherche biomédicale (INRB) Kinshasa, DRC, Kinshasa, Democratic Republic of the Congo, <sup>2</sup>University of Kinshasa, Kinshasa, Democratic Republic of the Congo, <sup>3</sup>Université catholique de Louvain, Brussels, Belgium

2:30 p.m.

7594

**ASSESSING HEALTH DISPARITIES AND ACCESS: AFGHAN REFUGEES HEALTH IN PAKISTAN THROUGH DATA DRIVEN ANALYSIS**

Saeed Ahmad, Fahmeeda Idrees

Health Services Academy, Islamabad, Pakistan

2:45 p.m.

7595

**ENVIRONMENTAL AND TOPOGRAPHIC PREDICTORS OF FASCIOLA HEPATICA INFECTED HOUSEHOLDS: INSIGHTS FROM CUSCO, PERU**

Bryan Fernandez-Camacho<sup>1</sup>, Antony Barja-Ingaruca<sup>1</sup>, Luis Revilla-Dominguez<sup>1</sup>, Rodrigo A. Ore<sup>2</sup>, Jose L. Alcaacantor-Muñoz<sup>2</sup>, Melinda B. Tanabe<sup>3</sup>, Maria L. Morales<sup>2</sup>, Gabriel Carrasco-Escobar<sup>1</sup>, Miguel M Cabada<sup>2</sup>

<sup>1</sup>Health Innovation Laboratory, Institute of Tropical Medicine "Alexander von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>Cusco Branch - "Alexander von Humboldt" Tropical Medicine Institute, Universidad Peruana Cayetano Heredia, Cusco, Peru, <sup>3</sup>Division of Infectious Disease, The University of Texas Medical Branch, Gavelston, TX, United States

3 p.m.

7596

**VISUALIZING EXCESS MORTALITY TRENDS: BURIAL SITE SURVEILLANCE IN KARACHI, PAKISTAN, PRE AND POST-COVID-19 PANDEMIC**

Sameer Mohiuddin Belgaumi<sup>1</sup>, Raheel Allana<sup>2</sup>, Saima Jamal<sup>2</sup>, Saad B. Omer<sup>1</sup>, Abdul Momin Kazi<sup>2</sup>

<sup>1</sup>University of Texas Southwestern Medical Center, Dallas, TX, United States, <sup>2</sup>Aga Khan University, Karachi, Pakistan

3:15 p.m.

7597

**FEASIBILITY OF DRONE-BASED ENVIRONMENTAL AND TOPOGRAPHIC SURVEILLANCE FOR FASCIOLA HEPATICA IN THE PERUVIAN ANDES**

Bryan Fernandez-Camacho<sup>1</sup>, Antony Barja-Ingaruca<sup>1</sup>, Luis Revilla-Dominguez<sup>1</sup>, Rodrigo A. Ore<sup>2</sup>, Jose L. Alcaacantor-Muñoz<sup>2</sup>, Maria L. Morales<sup>2</sup>, Melinda B. Tanabe<sup>3</sup>, Gabriel Carrasco-Escobar<sup>1</sup>, Miguel M Cabada<sup>2</sup>

<sup>1</sup>Health Innovation Laboratory, Institute of Tropical Medicine "Alexander von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>Cusco Branch - "Alexander von Humboldt" Tropical Medicine Institute, Universidad Peruana Cayetano Heredia, Cusco, Peru, <sup>3</sup>Division of Infectious Disease, The University of Texas Medical Branch, Gavelston, TX, United States

**Symposium 88**

**Advancing Research to Improve Treatment of Neglected Tropical Diseases in Children**

Convention Center - Room 388/389 (3rd Floor)

Friday, November 15, 1:45 p.m. - 3:30 p.m.

**THIS SESSION DOES NOT CARRY CME CREDIT.**

At least 500 million children throughout the world are affected by neglected tropical diseases (NTDs). Finding effective treatments for NTDs in pediatric populations is key to meeting the World Health Organization NTD Roadmap goals for 2030 and reducing a heavy future burden of morbimortality. This panel will discuss current challenges and initiatives to improve access to treatments for neglected diseases in pediatric populations. The panel will include the perspective of researchers working on four different neglected diseases: Chagas disease, sleeping sickness, mycetoma, and schistosomiasis. Jaime Altcheh of the Ricardo Gutierrez Children's Hospital in Argentina is an expert on pediatric Chagas disease and has served as lead investigator on multiple clinical trials of new pediatric treatments. He will discuss lessons learned from these studies, as well as a new target product profile to guide future clinical research for pediatric Chagas disease. Peter Steinmann of the Swiss TPH will discuss the experience of ADOPT (Adoption of Levo-Praziquantel 150mg for schistosomiasis by endemic countries), an initiative of the Pediatric Praziquantel Consortium, which aims to facilitate large-scale delivery of this new treatment to preschool age children in Africa. Olaf Valverde of the Drugs for Neglected Diseases initiative will discuss recent clinical trials in pediatric populations to treat human African trypanosomiasis, including an ongoing trial (ACOZI-Kids), to evaluate acoziborole for treatment of Stage 1 and Stage 2 sleeping sickness caused by T.b.gambiense. Borna Nyaoke of the Drugs for Neglected Diseases initiative will explore the impact of mycetoma on pediatric patients in endemic countries in Africa and Asia, and discuss the current pipeline of new treatments. About 25% of people affected by mycetoma in Sudan are children, and the disease has long lacked a viable treatment, but there are recent therapeutic advances to share. Saschveen Singh of Medecins sans Frontieres will discuss treatment and access challenges for children with cutaneous and visceral forms of leishmaniasis, as well as efforts to confront the burden of NTDs among children who are affected by humanitarian crises. #ChildHealth; #Pediatrics; #Therapeutics; #Elimination; #FieldStudies

**CHAIR**

Maria-Jesus Pinazo

Drugs for Neglected Diseases initiative LATAM, Rio de Janeiro, Brazil

Jaime Altcheh

Hospital de niños Ricardo Gutierrez, Buenos Aires, Argentina

1:45 p.m.

**INTRODUCTION**

Friday  
November 15



**1:55 p.m.**

**STATE-OF-THE-ART IN THE DEVELOPMENT OF PEDIATRIC FORMULATIONS FOR THE TREATMENT OF NEWBORNS AND INFANTS WITH CHAGAS DISEASE**

Jaime Altcheh  
*Hospital de Niños R. Gutierrez, Buenos Aires, Argentina*

**2:15 p.m.**

**ENDING THE NEGLECT OF MYCETOMA IN CHILDREN**

Borna Nyaoke  
*Drugs for Neglected Diseases initiative, Nairobi, Kenya*

**2:35 p.m.**

**IMPLEMENTATION RESEARCH TO SUPPORT THE INTRODUCTION OF AN INNOVATION INTO ROUTINE USE-THE ADOPT PROGRAM**

Peter Steinmann  
*Swiss Tropical and Public Health Institute, Basel, Switzerland*

**2:55 p.m.**

**ACCESS & OTHER CHALLENGES FOR CHILDREN WITH VISCERAL + CUTANEOUS LEISHMANIASIS**

Saschveen Singh  
*Medecins sans Frontieres, Paris, France*

**3:15 p.m.**

**NEW HUMAN AFRICAN TRYPANOSOMIASIS TREATMENTS FOR CHILDREN: DNDI RESEARCH ON NECT, FEXINIDAZOLE AND ACOZIBOROLE**

Olaf Valverde  
*Drugs for Neglected Diseases initiative, Geneva, Switzerland*

**Symposium 89**

**Ganaplacide (KAF156) A Next-Generation, Non-Artemisinin, for the Treatment of *P. falciparum* Malaria**

*Convention Center - Room 391/392 (3rd Floor)*  
**Friday, November 15, 1:45 p.m. - 3:30 p.m.**

**This session does not carry CME credit.**

In 2022, an estimated 249 million cases of malaria and 608,000 deaths occurred worldwide: 94% of predominantly *P. falciparum* malaria cases were recorded in the African Region. Artemisinin-based combination therapies (ACTs) are the current standard-of-care for *P. falciparum* malaria. Unfortunately, reports suggest that decades of continuous use of artemisinin and 4-aminoquinoline derivatives may have fostered the emergence of drug resistance in *Plasmodium* species in Southeast Asia and beyond, representing a major threat to artemisinin-based combination therapies (ACT) and intravenous artesunate. Already ubiquitous throughout the Greater Mekong Subregion of Southeast Asia, artemisinin partial resistance has emerged in several countries in East Africa and the Horn of Africa. If widespread artemisinin drug resistance was to occur, malaria pharmacotherapy would be severely impaired. Thus, there is an urgent need for new antimalarials with novel mechanisms of action which are effective against parasites harboring commonly occurring resistance mutations. The symposium will open with an overview of the past and

current malaria treatment options. Talks, delivered on behalf of the WANECAM2 consortium members, then describe the EDCTP2-funded WANECAM2 consortium's capacity building in clinical research and its efforts for the clinical development of a novel combination therapy consisting of ganaplacide (KAF156) and lumefantrine – solid dispersion formulation ((LUM-SDF). #ChildHealth #ClinicalResearch #Infectious Disease #Therapeutics

**CHAIR**

Martin P. Grobusch  
*Amsterdam University Medical Centers, Amsterdam, Netherlands*

Abdoulaye Djimde  
*Malaria Research and Training Centre of the University of Science, Techniques and Technologies of Bamako, Mali, Bamako, Mali*

**1:45 p.m.**

**INTRODUCTION**

**1:55 p.m.**

**OVERVIEW OF CURRENT *P. FALCIPARUM* MALARIA TREATMENT OPTIONS**

Issaka Sagara  
*University of Sciences, Techniques and Technologies of Bamako (USTTB), Mali, Bamako, Mali*

**2:20 p.m.**

**CAPACITY BUILDING AND METHODS FOR ASSESSMENT OF TRANSMISSION BLOCKING ACTIVITIES OF THE NEW NON-ARTEMISININ-BASED COMBINATION THERAPY (KAF156) IN A PHASE 3 MULTI-COUNTRY STUDY**

Rella Z. Manego  
*CERMEL, Lambarene, Gabon*

**2:45 p.m.**

**METHODS TO ASSESS *P. FALCIPARUM* DYNAMICS OF SELECTION OF DRUG RESISTANCE MARKERS OF THE NEW A NON-ARTEMISININ-BASED COMBINATION THERAPY (KAF156)**

Colin Sutherland  
*LSHTM, London, United Kingdom*

**3:10 p.m.**

**RESULTS OF THE KALUMI STUDY: EFFECT OF FOOD ON EXPOSURE OF GANAPLACIDE-LUMEFANTRINE SDF COMBINATION. EARLY INDICATORS OF TRANSMISSION BLOCKING AND EFFECT IN K13 MUTATED PARASITES**

Caroline Boulton  
*Novartis Pharma AG, Basel, Switzerland*

**Scientific Session 90**

**Malaria Epidemiology I: High Risk Groups**

*Convention Center - Room 393/394 (3rd Floor)*  
**Friday, November 15, 1:45 p.m. - 3:30 p.m.**

**#MNCH #Modeling #PopulationSurveillance #Epidemiology**

**CHAIR**

Richard James Maude  
*Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand*

Nathalia Ramme Medeiros de Albuquerque  
*University of Sao Paulo, Sao Paulo, Brazil*

1:45 p.m.

7598

**QUANTIFYING THE IMPACT OF MALARIA IN PREGNANCY ON MATERNAL ANEMIA AND ITS ASSOCIATED BURDEN ACROSS AFRICA**

Sequoia I. Leuba<sup>1</sup>, Robert Verity<sup>1</sup>, Julie R. Gutman<sup>2</sup>, Kassoum Kayentao<sup>3</sup>, Simon Kariuki<sup>4</sup>, Mwayiwawo Madanitsa<sup>5</sup>, James Dodd<sup>6</sup>, Brian Greenwood<sup>7</sup>, Patrick GT Walker<sup>1</sup>

<sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>Malaria Branch, Division of Parasitic Diseases and Malaria, Center for Global Health, Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>3</sup>Malaria Research and Training Center, Mali International Center for Excellence in Research, University of Sciences, Techniques, and Technologies of Bamako, Bamako, Mali, <sup>4</sup>Kenya Medical Research Institute, Centre for Global Health Research, Kisumu, Kenya, <sup>5</sup>Department of Clinical Sciences, Malawi University of Science and Technology, Limbe, Malawi, <sup>6</sup>Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>7</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

2 p.m.

7599

**ESTIMATING THE BURDEN OF SEVERE MALARIA IN CHILDREN, SUB-SAHARAN AFRICA 2015 TO 2022**

Annie J. Browne<sup>1</sup>, Francesca Sanna<sup>1</sup>, Paulina A. Dzianach<sup>1</sup>, Jaiilos Ludinda<sup>1</sup>, Susan F. Rumisha<sup>1</sup>, Tasmin L. Symons<sup>1</sup>, Peter W. Gething<sup>1</sup>, Daniel J. Weiss<sup>2</sup>

<sup>1</sup>Telethon Kids Institute, Perth, Australia, <sup>2</sup>Curtin University, Perth, Australia

2:15 p.m.

7600

**RISK FACTORS FOR EMERGENT MALARIA CASES IN MUTARE CITY, ZIMBABWE, 2022-2023**

Sungano Mharakurwa, Tanatswa X. Gara-Mundere, Trust Nyakunu, Brenda Makonyere, Tariro Chikava, Natasha Mbwana, Charmaine Matimba, Nobert Mudare, Shungu Munyati, Lovemore Gwanzura  
Africa University, Mutare, Zimbabwe

2:30 p.m.

7601

**UTILIZATION OF ANTENATAL CARE SERVICES AMONG WOMEN OF REPRODUCTIVE AGE IN A MALARIA ENDEMIC AREA IN RARIEDA SUBCOUNTY, WESTERN KENYA**

Brian L. Seda<sup>1</sup>, Oliver Towett<sup>1</sup>, Victoria Seffren<sup>2</sup>, Daniel P. McDermott<sup>3</sup>, Jonathan Schultz<sup>4</sup>, Feiko ter Kuile<sup>5</sup>, Sarah G. Staedke<sup>3</sup>, Simon Kariuki<sup>1</sup>, Julie R. Gutman<sup>2</sup>

<sup>1</sup>KEMRI/CGHR, Kisumu, Kenya, <sup>2</sup>CDC, Atlanta, GA, United States, <sup>3</sup>LSTM, Liverpool, United Kingdom, <sup>4</sup>US Centers for Disease Control and Prevention, Kisumu, Kenya

2:45 p.m.

7602

**RISK FACTORS FOR ASYMPTOMATIC P. FALCIPARUM INFECTION IN THE DRY SEASON, AND RELATIONSHIP WITH CLINICAL MALARIA RISK IN THE SUBSEQUENT TRANSMISSION SEASON AMONG CHILDREN IN WESTERN PROVINCE, ZAMBIA**

Ruth A. Ashton<sup>1</sup>, Chama Chishya<sup>2</sup>, Kochelani Saili<sup>3</sup>, Handrinah Banda<sup>2</sup>, John Chulu<sup>2</sup>, Chanda Chitoshi<sup>2</sup>, Annie Arzen<sup>4</sup>, Erica Orange<sup>4</sup>, John Miller<sup>5</sup>, Kafula Silumbe<sup>5</sup>, Busiku Hamainza<sup>6</sup>, Megan Littrell<sup>7</sup>, Joshua Yukich<sup>1</sup>, Thomas Eisele<sup>1</sup>

<sup>1</sup>Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States, <sup>2</sup>PATH, Kaoma, Zambia, <sup>3</sup>Macha Research Trust, Choma, Zambia, <sup>4</sup>PATH, Seattle, WA, United States, <sup>5</sup>PATH, Lusaka, Zambia, <sup>6</sup>National Malaria Elimination Centre, Lusaka, Zambia, <sup>7</sup>PATH, Washington, DC, United States

3 p.m.

7603

**HUMAN MALARIA IN THE ATLANTIC FOREST OF BRAZIL IS MOSTLY CAUSED BY PLASMODIUM SIMIUM**

Nathalia Ramme Medeiros de Albuquerque, Marcelo Urbano Ferreira  
University of Sao Paulo, Sao Paulo, Brazil

3:15 p.m.

7604

**THE IMPACT OF FIRST-TRIMESTER PLASMODIUM FALCIPARUM MALARIA INFECTIONS ON MATERNAL, PREGNANCY AND INFANT OUTCOMES IN SUB-SAHARAN AFRICA: A SYSTEMATIC REVIEW AND INDIVIDUAL PARTICIPANT DATA META-ANALYSIS**

Anna Maria van Eijk<sup>1</sup>, Myriam el Gaaloul<sup>2</sup>, Jenifer Akoth Otieno<sup>3</sup>, Eleanor Ochodo<sup>3</sup>, Abel Kakuru<sup>4</sup>, Richard Kajubi<sup>4</sup>, Valérie Briand<sup>5</sup>, Manfred Accrombessi<sup>6</sup>, Nicaise Ndam<sup>7</sup>, Gilles Cottrell<sup>8</sup>, Henrik Friis<sup>9</sup>, Pernille Kaestel<sup>9</sup>, Seth Adu-Afarwuah<sup>10</sup>, Kathryn Dewey<sup>11</sup>, Daniel Minja<sup>12</sup>, Line Hjort<sup>13</sup>, Christentze Schmiegelow<sup>9</sup>, Holger Unger<sup>14</sup>, Feiko O. Ter Kuile<sup>1</sup>, Hill Jenny<sup>1</sup>, **Stephanie Dellicour<sup>1</sup>**

<sup>1</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>2</sup>Medicines for Malaria Venture, Geneva, Switzerland, <sup>3</sup>Kenya Medical Research Institute, Kisumu, Kenya, <sup>4</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>5</sup>IRD, Inserm, Université de Bordeaux, IDLIC team, Bordeaux, France, <sup>6</sup>Clinical Research Institute of Benin, Abomey-Calavi, Benin, <sup>7</sup>Université de Paris, MERIT, IRD, Paris, France, <sup>8</sup>Université de Paris, IRD, MERIT, Paris, France, <sup>9</sup>University of Copenhagen, Copenhagen, Denmark, <sup>10</sup>University of Ghana, Accra, Ghana, <sup>11</sup>Institute for Global Nutrition, University of California, Davis, CA, United States, <sup>12</sup>National Institute for Medical Research, Tanga, United Republic of Tanzania, <sup>13</sup>Copenhagen University Hospital, Copenhagen, Denmark, <sup>14</sup>Charles Darwin University, Darwin, Australia

**Symposium 01**

**Results from the PAASIM Study- A Matched Cohort Study on Urban Water Supply Improvements and Infant Enteric Pathogen Infection, Gut Microbiome Development and Child Health in Mozambique**

Convention Center - Room 395/396 (3rd Floor)  
Friday, November 15, 1:45 p.m. - 3:30 p.m.

In this symposium, speakers will present new findings on the primary exposure and health outcomes from the PAASIM study (Pesquisa Sobre o Acesso à Água e a Saúde Infantil em Moçambique - Research on Access to Water and Children's Health in Mozambique), a prospective matched cohort study designed to examine the impact of a city-wide, World Bank-funded water system improvements on drinking water quality and child health. The PAASIM study followed 548 mother-child dyads in a low-income area of Beira, Mozambique from late pregnancy through 12 months of age. Our analyses compare (1) participants living in sub-neighborhoods that received improvements to the piped water network to those living in sub-neighborhoods that did not receive improvements and (2) participants with household water connections to those without household water connections. We will present if and how improvements to the piped water network impacted pre-defined primary outcome measures of (1) enteric pathogen infections, (2) gut microbiome composition, and (3) drinking water quality and access. To answer these questions, we draw from a rich longitudinal dataset with rigorous measures of exposure and novel objective measures, including gut microbiome composition using 16S rRNA gene amplicon sequencing and molecular detection of a suite of enteric pathogens using the TaqMan Array Card assay. In addition to the new results reporting on primary outcomes of the study, we will also describe approaches to assessing multidimensional measures of water quality and access. This is the first impact evaluation of a large-scale urban water system intervention on child health outcomes. The research from the PAASIM study presented in this symposium

Friday  
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addresses the knowledge gap about the health impact of provision of a piped water network and household connections in low-income, urban settings. The study design allows for examination of both neighborhood and household-level effects of water supply improvements, and we employ rigorous measures of exposure and novel and objective outcome measures. #ChildHealth #Epidemiology #FieldStudies #Genomics #InfectiousDisease

**CHAIR**

Karen Levy  
*University of Washington, Seattle, WA, United States*

Matthew Freeman  
*Emory University, Atlanta, GA, United States*

**1:45 p.m.**  
**INTRODUCTION**

**1:55 p.m.**  
**OVERVIEW OF THE PAASIM STUDY: DESIGN, RATIONALE, AND CHALLENGES AND THE ASSOCIATIONS BETWEEN THE PROVISION OF AN IMPROVED PIPED WATER NETWORK AND SECONDARY OUTCOMES (DIARRHEA, GROWTH, AND MORTALITY) AMONG INFANTS IN MOZAMBIQUE**

Matthew Freeman  
*Emory University, Atlanta, GA, United States*

**2:20 p.m.**  
**RESULTS FROM THE PAASIM STUDY ON PROVISION OF AN IMPROVED PIPED WATER NETWORK AND HOUSEHOLD WATER QUALITY EXPOSURE MEASUREMENTS**

Joshua V. Garn  
*University of Nevada Reno, Reno, NV, United States*

**2:35 p.m.**  
**RESULTS FROM THE PAASIM STUDY ON PROVISION OF AN IMPROVED PIPED WATER NETWORK AND ENTERIC PATHOGEN INFECTIONS IN 12-MONTH OLD CHILDREN**

Karen Levy  
*University of Washington, Seattle, WA, United States*

**2:50 p.m.**  
**ASSOCIATIONS BETWEEN THE PROVISION OF AN IMPROVED PIPED WATER NETWORK AND GUT MICROBIOTA COMPOSITION AMONG INFANTS IN MOZAMBIQUE**

Courtney Victor  
*Emory University, Atlanta, GA, United States*

**3:05 p.m.**  
**PROVISION OF AN IMPROVED PIPED WATER NETWORK AND PARASITE INFECTIONS AMONG INFANTS IN MOZAMBIQUE**

Rassul Nalá  
*Instituto Nacional de Saude, Vila de Marracuene, Mozambique*

**Special Event**

**New Orleans Tour: A Walk through the History of New Orleans and Intersections with Tropical Medicine and Public Health**

*Limited to attendees who signed up at Tulane Exhibit Booth*  
**Friday, November 15, 2:30 p.m. - 4:30 p.m.**

The city of New Orleans is a landscape imprinted with the waves of epidemics that in response produced the first school of public health and first school of tropical medicine in the United States. New Orleans' culture and its geography shaped these epidemics and the epidemics in turn shaped the city's culture and economy. Stop by the Tulane booth in the Exhibit Hall to sign up for a walk to see some key sites of the city, the yellow fever mortuary chapel, the birth places of American music, the slave market, the front door of the French Quarter and the Mississippi River's edge which evokes the physical and social contexts that brought yellow fever, cholera, and malaria to the city.

**Career Chats: Navigating Career Paths in Global Health – Session 1**

*Convention Center - Room 346/347 (3rd Floor)*  
**Friday, November 15, 3 p.m. - 4 p.m.**

This session aims to introduce trainees to the diverse and breadth of opportunities from pursuing careers in global health through a panel discussion. The remarkable panelists are ASTMH members who have made accomplishments in scientific and clinical research globally, represent diverse fields within the global health sphere as well as championing tropical medicine both nationally and internationally. Panelists will share insights from their remarkable journeys in global health, discuss opportunities and challenges that come with working in global health (i.e., navigating career pathways, funding sources, overcoming obstacles, navigating academic, cultural, socio-economic factors etc), how they transitioned career pathways and discuss their institutional global health portfolio. This session will help in furthering trainees' progress and help increase the visibility of various pathways in global health, and how to navigate future career paths advancement at the global stage. Furthermore, trainees will gain advice from internationally renowned global health champions on their perspectives working on tropical medicine in various capacities around the world. Overall, it is a remarkable session that will provide trainees with opportunities to network and learn directly from international researchers and experts in various disciplines within global health.

**CHAIR**

Winter Okoth  
*Rutgers, State University of New Jersey, New Brunswick, NJ, United States*

Rachel Elizabeth Lange  
*Wadsworth Center, New York State Department of Health, Slingerlands, NY, United States*

**PANELISTS**

Mark Kortepeter  
*Uniformed Services University of the Health Sciences, Bethesda, MD, United States*

Natasha Hochberg  
*Novartis Institutes for Biomedical Research, Cambridge, MA, United States*

Bhupendra Tripathi  
*Bill & Melinda Gates Foundation, New Delhi, India*

Terrie Taylor  
*Michigan State University, East Lansing, MI, United States*

## Exhibit Hall Open

Convention Center - Hall J (1st Floor)

Friday, November 15, 3:15 p.m. - 4:15 p.m.

## Coffee Break

Convention Center - Hall J (1st Floor)

Friday, November 15, 3:30 p.m. - 4 p.m.

## Poster Session B Dismantle

Convention Center - Hall I-1 (1st Floor)

Friday, November 15, 4 p.m. - 6:15 p.m.



## Symposium 92

### From Birds to Cows to Humans: Avian Influenza - A Pandemic Waiting to Happen?

Convention Center - Hall I-2 (1st Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

The recent emergence of highly pathogenic avian influenza (H5N1) with spillover from poultry and bovine species into humans raises critical concerns for pandemic potential. The goal of this symposium on avian influenza is to bring together experts to discuss current events and critical aspects of the disease. We will feature comprehensive talks on virology, detailing the virus's structure and evolution, and animal infection and transmission risks, emphasizing how the virus spreads among avian populations and potential spillover to other species. Human clinical features will also be discussed, highlighting symptoms and treatment options for infected individuals. Epidemiology and risk factors for infection will be examined to identify vulnerable populations and patterns of outbreaks. Finally, the symposium will address pandemic preparedness and response, focusing on strategies to mitigate and manage potential global health threats posed by avian influenza.

The symposium will begin with three background talks followed by a keynote speech by Dr. Paul Friedrichs on the United States avian influenza pandemic preparedness plan. We will then have a moderated panel session with all the speakers.

#EmergingDiseaseThreats #InfectiousDisease #Epidemiology  
#ClinicalResearch #FieldStudies

#### CHAIR

David Hamer

Boston University, Boston, MA, United States

Kristy Murray

Emory University, Atlanta, GA, United States

#### 4 p.m.

#### INTRODUCTION

#### 4:10 p.m.

#### AVIAN INFLUENZA VIROLOGY

Mohammed Ziaur Rahman

icddr,b, Dhaka, Bangladesh

#### 4:30 p.m.

#### USING A ONE HEALTH APPROACH TO DETECT ZOOONOTIC RESPIRATORY VIRUS THREATS

Gregory C. Grey

Departments of Internal Medicine (Infectious Diseases), Microbiology and Immunology, and Global Health University of Texas Medical Branch, Galveston, TX, United States

#### 4:50 p.m.

#### H5N1 AVIAN INFLUENZA CROSS SPECIES TRANSMISSION TO HUMANS - EPIDEMIOLOGY AND CLINICAL MANIFESTATIONS

Nahid Bhadelia

Boston University Center on Emerging Infectious Diseases, Boston, MA, United States

#### 5:10 p.m.

#### IS THE UNITED STATES READY FOR AN AVIAN INFLUENZA PANDEMIC?

Major General Paul Friedrichs

The White House, Washington, DC, United States

#### 5:30 p.m.

#### PANEL DISCUSSION

## Scientific Session 93

### Ectoparasite-Borne Diseases II

Convention Center - Room 343/344 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

#InfectiousDisease #EmergingDiseaseThreats  
#EcologicalStudies #PopulationSurveillance

#### CHAIR

Lidia Gual Gonzalez

University of South Carolina, Columbia, SC, United States

Rhoel R. Dinglasan

University of Florida Emerging Pathogens Institute, Gainesville, FL, United States

#### 4 p.m.

7605

#### RISK FACTORS FOR SPOTTED FEVER GROUP RICKETTSIOSES IN KILIMANJARO REGION, TANZANIA

Thomas R. Bowhay<sup>1</sup>, Matthew P. Rubach<sup>2</sup>, Angelo J. F. Mendes<sup>3</sup>, William L. Nicholson<sup>4</sup>, Jamie L. Pernicario<sup>4</sup>, Michael J. Maze<sup>5</sup>, Jo E. B. Halliday<sup>3</sup>, Ganga S. Moorthy<sup>2</sup>, Kathryn J. Allan<sup>3</sup>, Blandina T. Mmbaga<sup>6</sup>, Wilbrod Saganda<sup>7</sup>, Bingileki F. Lwezaula<sup>7</sup>, Rudovick R. Kazwala<sup>8</sup>, Sarah Cleaveland<sup>3</sup>, Katrina J. Sharples<sup>1</sup>, Venance P. Maro<sup>5</sup>, John A. Crump<sup>1</sup>  
<sup>1</sup>University of Otago, Dunedin, New Zealand, <sup>2</sup>Duke University School of Medicine, Durham, NC, United States, <sup>3</sup>University of Glasgow, Glasgow, United Kingdom, <sup>4</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>5</sup>University of Otago, Christchurch, New Zealand, <sup>6</sup>Kilimanjaro Christian Medical University College, Moshi, United Republic of Tanzania, <sup>7</sup>Mawenzi Regional Referral Hospital, Moshi, United Republic of Tanzania, <sup>8</sup>Sokoine University of Agriculture, Morogoro, United Republic of Tanzania

#### 4:15 p.m.

7606

#### EMERGENCE OF TICK-BORNE SPOTTED FEVER GROUP RICKETTSIA IN NORTH, CENTRAL AND SOUTH AMERICA: HIGHLIGHTING THE NEED FOR ATTENTION

Lidia Gual Gonzalez<sup>1</sup>, Kyndall Dye-Braummuller<sup>1</sup>, Marvin Stanley Rodriguez Aquino<sup>2</sup>, Omar Cantillo Barraza<sup>3</sup>, Melissa S. Nolan<sup>1</sup>

<sup>1</sup>University of South Carolina, Columbia, SC, United States, <sup>2</sup>Universidad de El Salvador, San Salvador, El Salvador, <sup>3</sup>Universidad de Antioquia, Medellin, Colombia

4:30 p.m.

7607

### TICK-BORNE CRIMEAN-CONGO HEMORRHAGIC FEVER IN WEST CAMEROON: CIRCULATION AND RISK FACTORS AMONG CATTLE BREEDERS

Fredy Brice Neng Simo<sup>1</sup>, Urmes Chantale Sobjio Teagho<sup>1</sup>, Serika Marshall Atako<sup>1</sup>, Brice Tiwa Lontsi<sup>1</sup>, Brice Vincent Ayissi Owona<sup>1</sup>, Maurice Demanou<sup>2</sup>, Charles Sinclair Wondji<sup>3</sup>, Basile B. Kamgang<sup>3</sup>, Felicity Jane Burt<sup>4</sup>, Sadie J. Ryan<sup>5</sup>, Nigel Aminakeh Makoah<sup>4</sup>, Rhoel R. Dinglasan<sup>6</sup>, Paul Fewou Moundipa<sup>1</sup>

<sup>1</sup>Department of Biochemistry, University of Yaounde 1, Yaounde, Cameroon, <sup>2</sup>Yellow Fever Regional Laboratory Coordinator for Africa, Libreville, Gabon, <sup>3</sup>Centre for Research in Infectious Disease, Yaounde, Cameroon, <sup>4</sup>Division of Virology, Faculty of Health Science, University of Free State, Bloemfontein, South Africa, <sup>5</sup>Department of Geography, University of Florida, Gainesville, FL, United States, <sup>6</sup>Department of Infectious Diseases & Immunology, College of Veterinary Medicine, Gainesville, FL, United States

4:45 p.m.

7608

### XENOSURVEILLANCE OF TICKBORNE PATHOGENS VECTORED BY METASTRIATE TICKS ALONGSIDE THE VIRGINIA-NORTH CAROLINA BORDER

Rhoel R. Dinglasan<sup>1</sup>, Jacob Anderson<sup>2</sup>, Jeffrey Gruntmeir<sup>1</sup>, Wayne Hynes<sup>3</sup>, Sadie J. Ryan<sup>4</sup>, Heather Coatsworth<sup>1</sup>, Sandra Gaff<sup>2</sup>, Holly Gaff<sup>3</sup>

<sup>1</sup>University of Florida Emerging Pathogens Institute, Gainesville, FL, United States, <sup>2</sup>Mobility Health, Mason, OH, United States, <sup>3</sup>Old Dominion University, Norfolk, VA, United States, <sup>4</sup>University of Florida, Gainesville, FL, United States

5 p.m.

7609

### THE EFFECTS OF IVERMECTIN MASS DRUG ADMINISTRATION DESIGNED FOR MALARIA ON TUNGIASIS IN KWALE, KENYA: A CLUSTER-RANDOMISED CONTROLLED TRIAL

Joanna Furnival-Adams<sup>1</sup>, Lynne Elson<sup>2</sup>, Rachel Otuko<sup>2</sup>, Almudena Sanz<sup>1</sup>, Eldo Elobolobo<sup>3</sup>, Mercy Kariuki<sup>2</sup>, Vegovito Vegove<sup>4</sup>, Shadrack Mramba<sup>2</sup>, Aurelia Brazeal<sup>2</sup>, Mwanajuma Ngama<sup>2</sup>, Allan Matano<sup>2</sup>, Paula Ruiz-Castillo<sup>1</sup>, Starford Mitora<sup>2</sup>, Lydia Kasiwa<sup>2</sup>, Caroline Jones<sup>2</sup>, Truphena Nafula<sup>2</sup>, Regina Rabinovich<sup>1</sup>, Joseph Mwangangi<sup>1</sup>, Marta Maia<sup>2</sup>, Carlos Chaccour<sup>1</sup>

<sup>1</sup>Barcelona Institute for Global Health, Barcelona, Spain, <sup>2</sup>Kenya Medical Research Institute, Kilifi, Kenya, <sup>3</sup>DataBrew, Toronto, ON, Canada, <sup>4</sup>Centro de Investigação em Saúde de Manhiça (CISM), Manhica, Mozambique

5:15 p.m.

7610

### DETECTION OF A POTENTIALLY NOVEL TICK-BORNE VIRUS CLOSELY RELATED TO GUERTU VIRUS FROM AMBLYOMMA GEMMA TICKS AND ITS PREVALENCE IN HUMAN POPULATIONS FROM ISIOLO COUNTY, KENYA

Hellen Koka<sup>1</sup>, Solomon Langat<sup>1</sup>, Samuel Oyola<sup>2</sup>, Faith Cherop<sup>3</sup>, Gilbert Rotich<sup>3</sup>, James Mutisya<sup>1</sup>, Victor Ofula<sup>1</sup>, Konongoi Limbaso<sup>1</sup>, Juliette R. Ongus<sup>4</sup>, Joel Lutomiah<sup>1</sup>, Rosemary Sang<sup>3</sup>

<sup>1</sup>Kenya Medical Research Institute, Nairobi, Kenya, <sup>2</sup>International Livestock Research Institute, Nairobi, Kenya, <sup>3</sup>International Centre of Insect Physiology and Ecology, Nairobi, Kenya, <sup>4</sup>Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

5:30 p.m.

7611

### CROSS-SECTIONAL ANALYSIS OF SEROLOGIC RESPONSE TO ARTHROPOD-BORNE AND HEMORRHAGIC FEVER VIRUSES IN GHANAIAN LIVESTOCK HERDERS IN MILITARY AND CIVILIAN SETTINGS

Keersten Ricks<sup>1</sup>, Stephanie Monticelli<sup>1</sup>, Seth O. Addo<sup>2</sup>, Tamara Clements<sup>1</sup>, Mba-Tihssommah Mosore<sup>2</sup>, Ronald E. Bentli<sup>2</sup>, Janice Tagoe<sup>2</sup>, Clara Yeboah<sup>2</sup>, Eric Behene<sup>2</sup>, William Asiedu<sup>3</sup>, Daniel L. Mingle<sup>3</sup>, Shirley C. Nimo-Paintsil<sup>4</sup>, Samuel K. Dadzie<sup>2</sup>, Terrel Sanders<sup>4</sup>, Andrew G. Letizia<sup>4</sup>, Randal Schoepp<sup>1</sup>

<sup>1</sup>Diagnostic Systems Division, United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States, <sup>2</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana, <sup>3</sup>Public Health Division, Ghanaian Armed Forces, Accra, Ghana, <sup>4</sup>United States Naval Medical Research Unit EURAFCENT Ghana Detachment, Accra, Ghana

## Symposium 94

### Solving the Supply Shortage: Present and Future Prospects for Cholera Vaccines

Convention Center - Room 345 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

This Symposium will focus on the current state and future landscape of cholera vaccines. Since 2022 the Global Cholera Vaccine Stockpile has not been able to meet the demand due to the unprecedented surge in cholera outbreaks globally. This series of presentations will begin with the Global Task Force on Cholera Control (GTFCC) summarizing the current global cholera situation and discussing the challenges in managing the extraordinary supply and demand crisis. Subsequent scientific presentations will include recent data on four new cholera vaccines in development that seek to expand the supply and add to the tools available for cholera control. Presentations will include the recent results of the Phase 3 Trial of Euvichol-S, a simplified formulation of the inactivated Whole Cell Oral Cholera Vaccine (OCV). Euvichol-S, contains two components and was developed to simplify the OCV manufacturing process and expand production capacity. Euvichol-S, recently registered in Korea and WHO pre-qualified in April 2024, is expected to immediately help reduce the gap between the current OCV supply and demand toward achieving the WHO goal for ending cholera by 2030. As transformative as OCV has been for cholera control, new "next generation" cholera vaccines with different attributes are needed for sustainable cholera control. Additional presentations will include the Phase 1 trial results of PanChol a genetically engineered rapid-acting live attenuated Oral Cholera Vaccine, and the Phase 1 trial results of a Cholera Conjugate Vaccine (CCV) based on the immunodominant protective antigen of cholera, the O-specific polysaccharide (OSP) component of LPS, linked to a carrier protein to generate T cell dependent responses. This injected vaccine could overcome the limitations of developing effective and durable immune responses in young children seen with oral antigens. Finally, the development plan of a novel oral capsule vaccine, DuoChol, that combines inactivated whole cell bacteria and recombinant cholera toxin B will be presented including the results of country workshops in South Asia and Sub-Saharan Africa to assess feasibility, cost and policy implications of a capsule vaccine. This highly thermostable and light weight vaccine is expected to have efficacy similar to Dukoral but significantly reduce delivery costs and challenges. A phase 1 trial is expected in early 2025. #Vaccinology, #Elimination, #InfectiousDisease

#### CHAIR

Julia A. Lynch  
International Vaccine Institute, Seoul, Republic of Korea

Edward T. Ryan  
Massachusetts Gen Hosp-Harvard, Boston, MA, United States

4 p.m.

#### INTRODUCTION

4:10 p.m.

### SUPPLY AND DEMAND CHALLENGES OF THE CHOLERA VACCINE STOCKPILE

Malika Bouhenia  
World Health Organization, Geneva, Switzerland

4:30 p.m.

### RESULTS OF THE PHASE 3 TRIAL OF EUVICHOL-S, A SIMPLIFIED FORMULATION OF THE INACTIVATED WHOLE CELL ORAL CHOLERA VACCINE

Ram Hari Chapagain  
Kanti Children's Hospital, Kathmandu, Nepal

4:50 p.m.

### RESULTS OF THE PHASE 1 TRIAL OF PANCHOL, A RAPID-ACTING LIVE ATTENUATED ORAL CHOLERA VACCINE

Matthew Waldor  
Brigham and Woman's Hospital, Boston, MA, United States

5:10 p.m.

### RESULTS OF THE PHASE 1 TRIAL OF A CHOLERA CONJUGATE VACCINE

Edward T. Ryan  
Massachusetts Gen Hosp-Harvard, Boston, MA, United States

5:30 p.m.

### DUOCHOL- AN ENCAPSULATED THERMOSTABLE ORAL CHOLERA VACCINE (OCV) - DEVELOPMENT PLAN AND USER ACCEPTANCE EVALUATION

Naveena A. D'Cor  
International Vaccine Institute (IVI), Seoul, Republic of Korea

## Scientific Session 95

### Mosquitoes- Molecular Biology, Population Genetics and Genomics

Convention Center - Room 352 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

#Evolution #Genetics #Genomics #MolecularBiology

#### CHAIR

Igor Sharakhov  
Virginia Tech, Blacksburg, VA

Luciano V. Cosme  
Yale University, New Haven, CT, United States

4 p.m.

7612

### GENOME-WIDE ASSOCIATION STUDIES UNVEIL SIGNATURES OF SELECTIVE SWEEPS ASSOCIATED TO INSECTICIDE RESISTANCE EVOLUTION IN *ANOPHELES FUNESTUS* IN FOUR ECO-GEOGRAPHICAL SETTINGS ACROSS CAMEROON

Mahamat Gadji<sup>1</sup>, Kengne-Ouafu Jonas A<sup>1</sup>, Magellan Tchouakui<sup>1</sup>, Wondji Murielle J<sup>1</sup>, Mugenzi Leon<sup>2</sup>, Jack Hearn<sup>3</sup>, Boyomo Onana<sup>4</sup>, Wondji Charles S<sup>5</sup>  
<sup>1</sup>Centre for Research in Infectious Diseases (CRID), Yaounde, Cameroon, <sup>2</sup>Syngenta, Basel, Switzerland, <sup>3</sup>Scotland's Rural College (SRUC), Inverness, United Kingdom, <sup>4</sup>University of Yaounde I, Yaounde, Cameroon, <sup>5</sup>Centre for Research in Infectious Diseases (CRID), ODZA Small market, Cameroon

4:15 p.m.

7613

### DEFINING THE ROLE OF JUVENILE HORMONE III FOR *ANOPHELES GAMBIAE* REPRODUCTION AND *PLASMODIUM* TRANSMISSION

Emre Aksoy<sup>1</sup>, Shifan Wang<sup>1</sup>, Naresh Singh<sup>1</sup>, Robert W. Shaw<sup>2</sup>, Flaminia Catteruccia<sup>2</sup>  
<sup>1</sup>Harvard T.H. Chan School of Public Health, Boston, MA, United States, <sup>2</sup>Harvard T.H. Chan School of Public Health/Howard Hughes Medical Institute, Boston, MA, United States

4:30 p.m.

7614

### *Aedes aegypti* POPULATION GENOMICS UNCOVERS EXTENSIVE CONTEMPORARY MIGRATION AND INCREASED DENGUE RISK

Seth N. Redmond<sup>1</sup>, Dario Balcazar<sup>2</sup>, Henry Youd<sup>3</sup>, Andrea Gloria-Soria<sup>4</sup>, David Weetman<sup>3</sup>, Jacob Crawford<sup>5</sup>  
<sup>1</sup>Yale School of Public Health, New Haven, CT, United States, <sup>2</sup>Yale University, New Haven, CT, United States, <sup>3</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>4</sup>The Connecticut Agricultural Research Center, New Haven, CT, United States, <sup>5</sup>Verily Life Sciences, South San Francisco, CA, United States

4:45 p.m.

7615

### SEARCH FOR POSSIBLE LOCI UNDER POSITIVE SELECTION IN EXOMES OF INVASIVE *ANOPHELES STEPHENSI* LARVAE IN ETHIOPIA

Isuru Gunarathna<sup>1</sup>, Jeanne Samake<sup>1</sup>, Dejene Getachew<sup>2</sup>, Solomon Yared<sup>3</sup>, Audrey Lenhart<sup>4</sup>, Sarah Zohdy<sup>4</sup>, Tamar E. Carter<sup>1</sup>  
<sup>1</sup>Baylor University, Waco, TX, United States, <sup>2</sup>Adama Science and Technology University, Āsasa, Ethiopia, <sup>3</sup>Jigjiga University, Jijiga, Ethiopia, <sup>4</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States

5 p.m.

7616

### GENETIC INSIGHTS INTO DIAPAUSE ADAPTATION OF *Aedes albopictus* IN TEMPERATE CLIMATES: A GENOME-WIDE ASSOCIATION STUDY

Luciano V. Cosme<sup>1</sup>, Margaret Corley<sup>1</sup>, Jiangnan Shen<sup>1</sup>, Hongyu Zhao<sup>1</sup>, Alexandra Mushegian<sup>2</sup>, Sarah Marzec<sup>2</sup>, Peter Armbruster<sup>2</sup>, Adalgisa Caccone<sup>1</sup>  
<sup>1</sup>Yale University, New Haven, CT, United States, <sup>2</sup>Georgetown University, Washington, DC, United States

5:15 p.m.

7617

### POPULATION GENOMICS OF EMERGENT *ANOPHELES STEPHENSI* IN THE HORN OF AFRICA: GENOMIC DIVERSITY, POPULATION STRUCTURE AND INSECTICIDE RESISTANCE.

Tristan P.W. Dennis<sup>1</sup>, Elfatih Malik<sup>2</sup>, Jihad Eltaher<sup>3</sup>, Mujahid Abdin<sup>1</sup>, Ahmed Mahmoud<sup>4</sup>, Eba A. Simma<sup>5</sup>, Endalew Zedane<sup>5</sup>, Adane Eyasu<sup>5</sup>, Alemayehu Dagne<sup>5</sup>, Biniam Lukas<sup>5</sup>, Temesgen Ashine<sup>6</sup>, Yehenev Asmamaw<sup>6</sup>, Nigatu Negash<sup>5</sup>, Abena Kochora<sup>6</sup>, Muluken Assefa<sup>6</sup>, Patricia Pignatelli<sup>1</sup>, Faisal Ashraf<sup>1</sup>, Ashwaq Alnazawi<sup>7</sup>, Bouh Abdi<sup>8</sup>, Endalamaw Gadisa<sup>6</sup>, Delenasaw Yewhalaw<sup>6</sup>, Hmooda T. Kafy<sup>9</sup>, Alison Reynolds<sup>1</sup>, Anne L. Wilson<sup>1</sup>, Martin J. Donnelly<sup>1</sup>, David Weetman<sup>1</sup>  
<sup>1</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>2</sup>University of Khartoum, Khartoum, Sudan, <sup>3</sup>SMART Centre, Sennar, Sudan, <sup>4</sup>Federal Ministry of Health, Khartoum, Sudan, <sup>5</sup>Jimma University, Jimma, Ethiopia, <sup>6</sup>Armauer Hansen Research Institute, Addis Ababa, Ethiopia, <sup>7</sup>Public Health, Department of Vector Control, Jeddah, Saudi Arabia, <sup>8</sup>United Nations Development Programme, Djibouti, Djibouti, <sup>9</sup>Federal Ministry of Health (Consultant), Khartoum, Sudan

5:30 p.m.

7618

### DEVELOPMENTAL DYNAMICS OF CHROMOSOME-LEVEL 3D GENOME ARCHITECTURE IN *ANOPHELES COLUZZII*

Igor Sharakhov<sup>1</sup>, Varvara Lukyanchikova<sup>1</sup>, Ilya Brusentsov<sup>2</sup><sup>1</sup>Virginia Tech, Blacksburg, VA, United States, <sup>2</sup>Institute of Cytology and Genetics, Novosibirsk, Russian Federation

## Symposium 96

### American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP) Symposium II: Trager, Trainees and Take-Off!

Convention Center - Room 353 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

ACMCIP has bestowed the William Trager Award for Basic Parasitology since 2015. The award recognizes a fundamental breakthrough in molecular, cellular, or immunoparasitology. The Trager & Trainee Awardees Symposium exists to celebrate the present excellence, as well as highlight the bright future of molecular, cellular, and immunoparasitology research. This symposium will highlight the scientific work of the Trager awardee, along with the work of trainee and up-and-coming investigators in ACMCIP-related research. These include an ACMCIP Young Investigator awardee who works in parasitology and the ACMCIP Trainee 3-minute thesis competition winners. #Trainee #EarlyCareer #Immunology #CellBiology #MolecularBiology

#### CHAIR

Scott E. Lindner

Pennsylvania State University, University Park, PA, United States

4 p.m.

### INTRODUCTION OF WILLIAM TRAGER AWARD FOR BASIC PARASITOLOGY RECIPIENT

Dyann Wirth

Harvard T.H. Chan School of Public Health, Boston, MA, United States

4:05 p.m.

### WILLIAM TRAGER AWARD FOR BASIC PARASITOLOGY: SCALABLE FUNCTIONAL ANALYSIS OF AN APICOMPLEXAN GENOME

Sebastian Lourido

MIT/Whitehead Institute, Boston, MA, United States

4:30 p.m.

### INTRODUCTION OF 3-MINUTE THESIS WINNERS

Scott E. Lindner

Pennsylvania State University, University Park, PA, United States

4:35 p.m.

### 3MINUTE THESIS: EFFECTS OF MODERATE MALNUTRITION DURING PREGNANCY ON NEONATAL IMMUNITY TO MALARIA: A TOM & JERRY TALE

Robert Onjiko

Appalachian State University, Boone, NC, United States

4:40 p.m.

### 3MINUTE THESIS: UNDERSTANDING THE ROLE OF GENETIC DIVERSITY IN THE MALARIA VACCINE CANDIDATE PFRH5

Alyssa Agarwal

Yale School of Public Health, New Haven, CT, United States

4:45 p.m.

### 3MINUTE THESIS: PREDICTIVE IMMUNOINFORMATICS REVEAL PROMISING SAFETY AND ANTI-ONCHOCERCIASIS PROTECTIVE IMMUNE RESPONSE PROFILES TO VACCINE CANDIDATES (OVRAL-2 AND OV-103) IN ANTICIPATION OF PHASE I CLINICAL TRIALS

Derrick N. Nebangwa

University of Buea, Buea, Cameroon

4:50 p.m.

### INTRODUCTION OF TAKE-OFF AWARD IN PARASITOLOGY RESEARCH RECIPIENT

Phillip Scott

University of Pennsylvania, Philadelphia, PA, United States

4:55 p.m.

### TAKE-OFF AWARD IN PARASITOLOGY RESEARCH: HYPOXIA AND T CELLS IN CUTANEOUS LEISHMANIASIS

Fernanda O. Novais

Ohio State University, Columbus, OH, United States

5:05 p.m.

### ANNUAL BUSINESS MEETING

Amanda Lukens

Broad Institute, Cambridge, MA, United States

5:25 p.m.

### NETWORKING RECEPTION

## Symposium 97

### Understanding Bat Virus Spillovers to Inform Pandemic Prevention: From Evidence to Policy

Convention Center - Room 354/355 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

In the wake of the COVID-19 pandemic, significant global attention has been directed toward reducing the risk and impact of future pandemics. Large investments are being made to develop vaccines and therapeutics for rapid deployment. In addition, progress has been made in proposing and implementing frameworks for One Health surveillance systems, designed to monitor transmission of pathogens in humans, livestock and wildlife to enable fast outbreak detection. It is also important to understand the interphases and divers of zoonotic spillover and also target these as part of prevention. These are all important goals, but they do not directly address primary pandemic prevention. Our understanding of how to best prevent spillovers – the sparks that starts every pandemic – remains inadequate. There are many good reasons that spillover detection and prevention has received less attention than other pandemic mitigation efforts. There is no clear consensus about the best way to identify spillovers, and regardless of the method proposed, finding spillovers can take

considerable resources. However, if we can find spillovers, we can study them, and identify both the proximal and distal causes, leading to possibilities for prevention. Many of the pathogens that pose the highest risk for spillover into humans and other animals are viruses that originate in bats – including Ebola, Marburg, Nipah, Hendra, and SARS-like coronaviruses. Numerous mysteries remain about how and why these viruses continue to spillover, and to address this we must first understand what is known about them and consider what we can do to learn more. The Lancet launched a new commission in the fall of 2023 on prevention of viral spillover, bringing together scientists with a wide range of experience to consider what should be done about the threat of viral spillover and how policy can be used to mitigate risk. This symposium will bring together speakers working to better understand and prevent viral spillover, including late breaking efforts to understand what is currently known about bat virus spillovers, field studies using serologic cohorts to uncover spillover pathways, and global efforts to catalyze viral spillover prevention through research and policy. During the panel discussion, speakers and the audience will engage in conversations about the barriers to action for prevention of pandemics at the source and charting a pathway forward. #EmergingDiseaseThreats #InfectiousDisease #Epidemiology #EcologicalStudies #FieldStudies

#### CHAIR

Emily S. Gurley  
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

#### 4 p.m. INTRODUCTION

#### 4:10 p.m. THE BAT VIRUS SPILLOVER EVIDENCE COMPENDIUM (BAT-COM): WHAT WE KNOW, AND DON'T KNOW, ABOUT THE MOST IMPORTANT BAT ZOOSES

Clif McKee  
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

#### 4:30 p.m. USING SEROLOGIC COHORTS TO UNCOVER BAT VIRUS SPILLOVERS INTO PERI-DOMESTIC ANIMALS AND LIVESTOCK IN BANGLADESH

Ausraful Islam  
icddr,b, Dhaka, Bangladesh

#### 4:50 p.m. THE LANCET/PPATS COMMISSION ON PREVENTION OF VIRAL SPILLOVER

Raina Plowright  
Cornell University, Ithaca, NY, United States

#### 5:10 p.m. THE ROLE OF COORDINATED GLOBAL EFFORTS IN PREVENTING VIRAL SPILLOVER

Wanda Markotter  
University of Pretoria, Pretoria, South Africa

## Meet the Professors Session 98

### Meet the Professors: Challenges in Diagnosis and Management of Clinical Tropical Medicine

Convention Center - Room 356 (3rd Floor)  
Friday, November 15, 4 p.m. - 5:45 p.m.

Meet the Professors sessions are valuable learning experiences for trainees and practicing clinicians to hear about clinical reasoning from leaders in the field. In this session, Dr. Yansouni will demonstrate the challenges and considerations of using laboratory results, and Dr. Showler will discuss complications resulting from treatment of parasitic infections.

#### SESSION ORGANIZER

Daniel Leung  
University of Utah, Salt Lake City, UT, United States

#### SESSION CHAIR

Aisha Khatib  
University of Toronto, Toronto, ON, Canada

#### PRESENTATION #1

Adrienne Showler  
Georgetown University Hospital, Washington, DC, United States

#### PRESENTATION #2

Cedric P. Yansouni  
McGill University, Montreal, QC, Canada

## Scientific Session 99

### Measures for Control and Elimination of Neglected Tropical Diseases II

Convention Center - Room 357 (3rd Floor)  
Friday, November 15, 4 p.m. - 5:45 p.m.

#Epidemiology #Elimination #InfectiousDisease #Diagnostics

#### CHAIR

Teshome Gebre Kanno  
International Trachoma Initiative, The Task Force for Global Health, Addis Ababa, Ethiopia

María Díaz de León Derby  
University of California, Berkeley, Berkeley, CA, United States

#### 4 p.m.

7619

#### TOWARDS THE DEVELOPMENT OF A RAPID URINE-BASED DIAGNOSIS OF BURULI ULCER USING COMPUTATIONAL METHODS

Erica A. Akanko<sup>1</sup>, Clement Agoni<sup>2</sup>, Samuel K. Kwofie<sup>3</sup>, Michael D. Wilson<sup>1</sup>  
<sup>1</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana, <sup>2</sup>University of KwaZulu Natal, Durban, South Africa, <sup>3</sup>Department of Biomedical Engineering, University of Ghana, Accra, Ghana



4:15 p.m.

7620

### EVALUATING VECTOR CONTROL STRATEGIES FOR DENGUE: A MODELLING ASSESSMENT OF ALTERNATIVE APPROACHES

**Maile B. Thayer**, Kristyna Rysava, Forrest Jones, Sarah Kada, Laura E. Adams, Ryan Hemme, Gabriela Paz-Bailey, Michael A. Johansson  
*Centers for Disease Control and Prevention, San Juan, Puerto Rico*

4:30 p.m.

7621

### EVALUATING A PRACTICAL PERSON-CENTRED HEALTH SYSTEMS INTERVENTION TO ADVANCE JUSTICE AND INCLUSION FOR PERSONS AFFECTED BY SKIN NTDs IN LIBERIA

**Emerson Rogers**<sup>1</sup>, Rosalind McCollum<sup>2</sup>, Tia Akpan<sup>3</sup>, Carrie Barrett<sup>2</sup>, Hannah Berrian<sup>4</sup>, Shahreen Chowdhury<sup>2</sup>, India Hotop<sup>2</sup>, Jerry Kollie<sup>4</sup>, Karsor Kollie<sup>1</sup>, Julie Irving<sup>2</sup>, Colleen Parker<sup>1</sup>, Maneesh Phillip<sup>5</sup>, Joanna Raven<sup>2</sup>, Maaiki Seekles<sup>2</sup>, John Solunta Smith Jr.<sup>4</sup>, Wede Tate<sup>4</sup>, Sally Theobald<sup>2</sup>, Rachael Thomson<sup>2</sup>, Anna Wickenden<sup>5</sup>, Zeela Zaizay<sup>6</sup>, Laura Dean<sup>2</sup>

<sup>1</sup>Ministry of Health, Monrovia, Liberia, <sup>2</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>3</sup>American Leprosy Missions (ALM), Greenville, SC, United States, <sup>4</sup>UL-PIRE Africa Center, Monrovia, Liberia, <sup>5</sup>Effect Hope, Ontario, ON, Canada, <sup>6</sup>Actions Transforming Lives (ACT), Monrovia, Liberia

4:45 p.m.

7622

### SPATIOTEMPORAL EVALUATION OF THE 2016-2022 MASS DRUG ADMINISTRATION FOR LYMPHATIC FILARIASIS IN KENYA: TOWARDS IDENTIFYING NEVER TREATED POPULATIONS

**Robert O. Ofwete**<sup>1</sup>, Michael O. Ofire<sup>1</sup>, Wyckliff Omondi<sup>2</sup>, Irene Chami<sup>3</sup>, Paul Kibati<sup>2</sup>, Ivy Sempele<sup>4</sup>

<sup>1</sup>Amref Health Africa, Nairobi, Kenya, <sup>2</sup>Ministry of Health, Nairobi, Kenya, <sup>3</sup>END Fund, Nairobi, Kenya, <sup>4</sup>END Fund, New York, NY, United States

5 p.m.

7623

### USE OF THE COMMUNITY-DIRECTED TREATMENT WITH IVERMECTIN PLATFORM TO ESTIMATE LYMPHATIC FILARIASIS MORBIDITY IN THE CO-ENDEMIC HEALTH DISTRICTS

**Carine Fokam**<sup>1</sup>, Clarisse Ebene<sup>2</sup>, Georges NKO'Ayissi<sup>3</sup>, Pierre Nbandah<sup>1</sup>, Benoit Dembele<sup>4</sup>, Ernest Mensah<sup>5</sup>, Patricia Houck<sup>6</sup>, Yaobi Zhang<sup>6</sup>, Steven D. Reid<sup>6</sup>, Angela Weaver<sup>6</sup>

<sup>1</sup>Helen Keller International, Yaounde, Cameroon, <sup>2</sup>Ministry of Public Health, PNLO, New York, NY, United States, <sup>3</sup>Ministry of Public Health, NTD Coordination Unit, Yaounde, Cameroon, <sup>4</sup>Helen Keller International, Office for Africa, Dakar, Senegal, <sup>5</sup>FHI 360, Office for Africa, Accra, Ghana, <sup>6</sup>Helen Keller International, New York, NY, United States

5:15 p.m.

7624

### NTDScope: A MULTIMODAL PORTABLE MICROSCOPE FOR DISEASE DIAGNOSIS

**María Díaz de León Derby**<sup>1</sup>, Zaina L. Moussa<sup>1</sup>, Carlos F. Ng<sup>1</sup>, Joana P. Cabrera<sup>1</sup>, Dipayan Banik<sup>2</sup>, Charles B. Delahunty<sup>2</sup>, Linda Djune Yemeli<sup>3</sup>, Victor Pahl<sup>4</sup>, Saskia D. Davi<sup>5</sup>, Jaime Garcia-Villena<sup>6</sup>, Elena Dacal<sup>6</sup>, David Bermejo-Peláez<sup>6</sup>, Daniel Cuadrado<sup>6</sup>, Miguel Luengo-Oroz<sup>6</sup>, Isaac I. Bogoch<sup>7</sup>, Rella Zoleko Manego<sup>8</sup>, Michael Ramharter<sup>9</sup>, Hugues C. Nana Djeunga<sup>3</sup>, Joseph Kamgno<sup>3</sup>, Matthew D. Keller<sup>2</sup>, Anne-Laure Le Ny<sup>2</sup>, Neil A. Switz<sup>9</sup>, Daniel H. Friedman<sup>1</sup>, Michael V. D'Ambrosio<sup>1</sup>, Daniel A. Fletcher<sup>1</sup>

<sup>1</sup>University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>Global Health Labs, Bellevue, WA, United States, <sup>3</sup>Higher Institute for Scientific and Medical Research (ISM), Yaounde, Cameroon, <sup>4</sup>Bernhard-Nocht Institute of Tropical Medicine, Centre de Recherches Médicales de Lambaréné (CERMEL), Hamburg, Germany, <sup>5</sup>Center for Tropical Medicine Bernhard Nocht Institute for Tropical Medicine & I Dept. of Medicine University Medical Center, Hamburg, Germany, <sup>6</sup>Spotlab, Madrid, Spain, <sup>7</sup>University Health Network (UHN) University of Toronto, Toronto, ON, Canada, <sup>8</sup>Centre de Recherches Médicales de Lambaréné (CERMEL), Lambaréné, Gabon, <sup>9</sup>San José State University, San José, CA, United States

5:30 p.m.

7625

### EVALUATING TRACHOMA TRENDS IN THE AMHARA REGION, ETHIOPIA: INSIGHTS FROM THE MOST RECENT 163 POPULATION-BASED SURVEYS, 2015-2023

**Eshetu Sata**<sup>1</sup>, Tania A. Gonzalez<sup>2</sup>, Zebene Ayele<sup>1</sup>, Fikre Seife<sup>3</sup>, Mohammed F. Shaka<sup>1</sup>, Ambahun Chernet<sup>1</sup>, Nicholas A. Presley<sup>2</sup>, Demelash Gessese<sup>1</sup>, Ayalew Shiferaw<sup>1</sup>, Kimberly A. Jensen<sup>2</sup>, Gizachew Yismaw<sup>4</sup>, Taye Zeru<sup>4</sup>, Berhanu Melak<sup>1</sup>, Fetene Mihretu<sup>1</sup>, Zerihun Tadesse<sup>1</sup>, E. Kelly Callahan<sup>2</sup>, Scott D. Nash<sup>2</sup>

<sup>1</sup>The Carter Center, Addis Ababa, Ethiopia, <sup>2</sup>The Carter Center, Atlanta, GA, United States, <sup>3</sup>Ministry of Health, Addis Ababa, Ethiopia, <sup>4</sup>Amhara Public Health Institute, Bahir Dar, Ethiopia

## Symposium 100

### Innovative Local Solutions and Novel Data Use Toward Last Mile Efforts in Eliminating Neglected Tropical Diseases

Convention Center - Room 388/389 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

Around the world, countries strive to eliminate or control diseases such as Lymphatic Filariasis (LF), Trachoma, Onchocerciasis, Schistosomiasis (SCH) and Soil Transmitted Helminths (STH). Countries endemic for these diseases collect routine monitoring and outcome data for their Mass Drug Administration (MDA) campaigns and Disease Specific Assessment (DSA) surveys. However, as national programs approach elimination, they are finding traditional monitoring and evaluation insufficient to understand why some areas do not meet elimination thresholds. Efforts required to move these areas toward elimination are often referred to as the 'Last Mile'. This session presents diverse examples of how governments and their partners leverage novel approaches to solve Last Mile challenges. The first talk presents the ESPEN IU Planner, an innovative solution to monitor funding availability for MDA and survey activities at the implementing unit level. The tool uses data from the WHO Joint application package while also allowing implementing partners (IPs) and donors to input their support. The tool aims to monitor potential funding gaps and facilitate coordination across governments, partners and donors. The second presentation outlines the use of Ripple Effects Mapping to generate qualitative evidence to understand progress toward trachoma elimination in the last remaining endemic districts in Uganda. The method was selected to better assess the influence of a gender equity and social inclusion activity on behaviour change. The third speaker will share experiences using Virtual Direct Observed Therapy (VDOT) to address known MDA challenges in Haiti. The VDOT approach was selected to address reasons reported by those refusing treatment in previous MDA campaigns. The fourth speaker will share lessons from Sierra Leone with persistent challenges in rural hotspot districts. The national NTD program shifted from district to sub-district-level coverage analysis across 14 districts, integrated with the use of a supervisor's coverage tool during MDA. This innovative data collection and analysis significantly enhanced program implementation, resulting in a reduction of hotspot districts from six to just one. The final speaker will present an analysis of MDA Never Treated (NT) Populations in six West African countries. The NT populations are speculated to be a potential reservoir

of ongoing infection and so are analysed in terms of their characteristics to better target future MDAs. Sampled villages with high proportions of NT populations are plotted on a map to see if they are geographically clustered in inaccessible, insecure or border areas. Data on both Never Treated and SCH infection are used to test if NT populations are a potential reservoir of ongoing transmission. #Elimination #InfectiousDisease #Prevention

#### CHAIR

Whitney Goldman  
RTI International, Durham, NC, United States

Diana Stukel  
FHI360, Washington, DC, United States

#### 4 p.m.

##### INTRODUCTION

#### 4:10 p.m.

##### A DIGITAL PLATFORM FOR MONITORING THE IMPLEMENTATION OF PC-NTD INTERVENTIONS: THE ESPEN IU PLANNER

Jorge Cano  
WHO-AFRO/ESPEN, Brazzaville, Republic of the Congo

#### 4:30 p.m.

##### USING RIPPLE EFFECTS MAPPING TO EVALUATE HOW A COMMUNITY-BASED INTERVENTION STRATEGY HAS CONTRIBUTED TO PROGRESS TOWARDS TRACHOMA ELIMINATION IN "LAST MILE" DISTRICTS IN UGANDA

Emmanuel Ssegawa  
WI-HER, LLC, Vienna, VA, United States

#### 4:50 p.m.

##### LEVERAGING VIRTUAL DIRECT OBSERVED THERAPY TO STRENGTHEN MASS DRUG ADMINISTRATION COMPLIANCE IN HAITI

Alain Javel  
RTI International, Durham, NC, United States

#### 5:10 p.m.

##### SUB-DISTRICT MDA DATA COLLECTION AND ANALYSIS INTEGRATED WITH THE SUPERVISORS' COVERAGE TOOL FOR IMPROVED PROGRAM IMPLEMENTATION

Victoria Turay  
Helen Keller International, Freetown, Sierra Leone

#### 5:30 p.m.

##### UNRAVELLING THE MYSTERY OF NEVER TREATED POPULATIONS: AN INVESTIGATION USING RESULTS FROM SURVEYS ACROSS SIX WEST AFRICAN COUNTRIES

Diana Stukel  
FHI360, New York, NY, United States

## Scientific Session 101

### Malaria: Vaccines and Immunotherapeutics

Convention Center - Room 391/392 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

#Vaccinology #Immunology #HostResponse  
#TranslationalScience #InfectiousDisease

#### CHAIR

Mariama Nicole Pouye  
Institut Pasteur Dakar, Dakar, Senegal

Matthew Laurens  
University of Maryland School of Medicine, Baltimore, MD, United States

#### 4 p.m.

### 7626

##### MULTISTAGE PROTECTIVE ANTI-CELTOS MONOCLONAL ANTIBODIES WITH CROSS-SPECIES STERILE PROTECTION AGAINST MALARIA

Wai Kwan Tang<sup>1</sup>, Nichole D. Salinas<sup>1</sup>, Surendra Kumar Kolli<sup>2</sup>, Shulin Xu<sup>2</sup>, Darya Urusova<sup>2</sup>, Hirdeh Kumar<sup>1</sup>, John R. Jimah<sup>1</sup>, Pradeep Annamalai Subramani<sup>2</sup>, Madison S. Ogbondah<sup>2</sup>, Samantha J. Barnes<sup>2</sup>, John H. Adams<sup>2</sup>, Niraj H. Tolia<sup>1</sup>  
<sup>1</sup>National Institutes of Health, Bethesda, MD, United States, <sup>2</sup>University of South Florida, Tampa, FL, United States

#### 4:15 p.m.

### 7627

##### EX VIVO RESPONSES OF PLASMODIUM FALCIPARUM CLINICAL ISOLATES TO MABS DIRECTED AGAINST PFRH5, PFCYRPA AND PFRIPR

Mariama N. Pouye<sup>1</sup>, Laly G. Thiam<sup>1</sup>, Aboubacar Ba<sup>1</sup>, Noemi Guerra<sup>2</sup>, Kelly Hagadorn<sup>2</sup>, Barney Williams<sup>3</sup>, Kirsty McHugh<sup>3</sup>, Dimitra Pipini<sup>3</sup>, Seynabou D. Sene<sup>1</sup>, Alioune Wade<sup>1</sup>, Alassane Mbengue<sup>1</sup>, Alan Cowman<sup>4</sup>, Simon J. Draper<sup>3</sup>, Amy K. Bei<sup>2</sup>  
<sup>1</sup>G4-Malaria Experimental Genetic Approaches & Vaccines, Pôle Immunopathologie et Maladies Infectieuses, Institut Pasteur de Dakar, Dakar, Senegal, <sup>2</sup>Department of Epidemiology of Microbial Diseases, Yale School of Public Health, New Haven, CT, United States, <sup>3</sup>Department of Biochemistry, University of Oxford, Oxford, United Kingdom, <sup>4</sup>The Walter and Eliza Hall Institute of Medical Research, Parkville, Victoria, Australia

#### 4:30 p.m.

### 7628

##### PROTECTION OF INDONESIAN SOLDIERS AGAINST HIGHLY VARIANT PLASMODIUM FALCIPARUM INFECTION IN PAPUA PROVINCE, INDONESIA, BY TWO PFSPZ VACCINES

Emi J. Nelwan<sup>1</sup>, Thomas L. Richie<sup>2</sup>, Krisin Chand<sup>3</sup>, Khoriah Indrihutami<sup>3</sup>, Agus Rachmat<sup>3</sup>, Mei-Chun Chen<sup>2</sup>, Decy Subekti<sup>3</sup>, Rizka Fahmia<sup>3</sup>, Mutia Rahardjani<sup>3</sup>, Fitri Wulandari<sup>3</sup>, Lenny L. Ekawati<sup>3</sup>, Marillyn M. Tamburian<sup>3</sup>, Tooba Murshedkar<sup>2</sup>, Yonas Abebe<sup>2</sup>, Natasha KC<sup>2</sup>, Eric R. James<sup>2</sup>, Diana Perez<sup>2</sup>, Peter F. Billingsley<sup>2</sup>, Iqbal RF Elyazar<sup>3</sup>, Sky T. Chen<sup>4</sup>, Chloe Lin<sup>4</sup>, Yogi Ertanto<sup>5</sup>, Waras Budiman<sup>6</sup>, Joana C. Silva<sup>7</sup>, B. Kim Lee Sim<sup>2</sup>, I. Madi Mardika<sup>8</sup>, Rintis Noviyanti<sup>9</sup>, Amin Soebandrio<sup>1</sup>, J. Kevin Baird<sup>3</sup>  
<sup>1</sup>Faculty of Medicine, University of Indonesia, Jakarta, Indonesia, <sup>2</sup>Sanaria Inc., Rockville, MD, United States, <sup>3</sup>Oxford University Clinical Research Unit Indonesia, Jakarta, Indonesia, <sup>4</sup>StatPlus Inc., Taipei, Taiwan, <sup>5</sup>Biology Vaccine Institute, Bandung, Indonesia, <sup>6</sup>Muhammadiyah University, Surabaya, Indonesia, <sup>7</sup>Institute for Genome Sciences, University of Maryland School of Medicine, Baltimore, MD, United States, <sup>8</sup>Gotot Soebroto Army Hospital, Jakarta, Indonesia, <sup>9</sup>EXEINS Health Initiative, Jakarta, Indonesia

#### 4:45 p.m.

### 7629

##### RH5.1/MATRIX-M™: EFFICACY OF A STANDALONE BLOOD-STAGE VACCINE AGAINST CLINICAL P. FALCIPARUM MALARIA IN 5-17 MONTH OLD CHILDREN: A PHASE 2B RANDOMIZED TRIAL IN BURKINA FASO

Hamtandi Magloire Natama<sup>1</sup>, Jo Salk<sup>2</sup>, Athanase Somé<sup>1</sup>, Seyi Soremekun<sup>2</sup>, Salou Diallo<sup>1</sup>, ousmane Traore<sup>1</sup>, Toussaint Rouamba<sup>1</sup>, Florence Ouedraogo<sup>1</sup>, Edouard Ouedraogo<sup>1</sup>, Carine Sonia Daboné<sup>1</sup>, Nadine Koné<sup>1</sup>, Z. Mickael John Compaore<sup>1</sup>, Miguel Kafando<sup>1</sup>, Massa dit Achille Bonko<sup>1</sup>, Fabe Konaté<sup>1</sup>, Hermann Sorgho<sup>1</sup>, Carolyn M Nielsen<sup>2</sup>, Dimitra Pipini<sup>2</sup>, Ababacar Diouf<sup>3</sup>, Llyod D W King<sup>1</sup>, Umesh Shaligram<sup>4</sup>, Carole A Long<sup>3</sup>, Kazutoyo Miura<sup>3</sup>, Jee-Sun Cho<sup>2</sup>, Alison Lawrie<sup>2</sup>, Katherine Skinner<sup>2</sup>, Rachel Roberts<sup>2</sup>, John Bradley<sup>5</sup>, Sarah Silk<sup>2</sup>, Simon J Draper<sup>2</sup>, Angela M Minassian<sup>2</sup>, Halidou Tinto<sup>1</sup>  
<sup>1</sup>Institut de Recherche en Sciences de la Santé, Ouagadougou, Burkina Faso, <sup>2</sup>University of Oxford, Oxford, United Kingdom, <sup>3</sup>National Institute of Health, Rockville, MI, United States, <sup>4</sup>Serum Institute of India, Pune, India, <sup>5</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

5 p.m.

7630

**DEVELOPMENT OF A GLOBAL RESEARCH AGENDA TO GUIDE THE OPERATIONALIZATION AND SCALE-UP OF MALARIA VACCINES**

Samuel Afari-Asiedu<sup>1</sup>, Thomas Gyan<sup>1</sup>, Annie Arnzen<sup>2</sup>, Abraham Hodgson<sup>1</sup>, Kim Lindblade<sup>2</sup>, Cornelius Debpuur<sup>1</sup>, **Kwaku Poku Asante<sup>1</sup>**, Mary J. Hamel<sup>3</sup>, Lindsey Wu<sup>3</sup>, Stephen Sosler<sup>4</sup>, Josea Rono<sup>4</sup>, Rafiq Okine<sup>3</sup>, Eliane Furrer<sup>3</sup>, John Francis<sup>3</sup>, Samantha Herrera<sup>2</sup>

<sup>1</sup>Kintampo Health Research Centre, Research and Development Division, Ghana Health Service, Kintampo, Ghana, <sup>2</sup>PMI Insights, PATH, Washington, DC, United States, <sup>3</sup>World Health Organization, Geneva, Switzerland, <sup>4</sup>Gavi, the Vaccine Alliance, Geneva, Switzerland

5:15 p.m.

7631

**MALARIA VACCINE IN BURKINA FASO: SUCCESSES AND CHALLENGES OF THE FIRST TWO MONTHS**

**NOMWENDE CHRISTELLE NEYA/OUEDRAOGO<sup>1</sup>**, René Didace BAKOUAN<sup>1</sup>, Inès DA<sup>2</sup>

<sup>1</sup>MINISTÈRE DE LA SANTÉ ET DE L'HYGIÈNE PUBLIQUE, OUAGADOUGOU, Burkina Faso, <sup>2</sup>JHPIEGO/Burkina Faso, OUAGADOUGOU, Burkina Faso

5:30 p.m.

**Lightning Talks**

(Lightning Talks are two-minute talks to highlight abstracts assigned to poster presentations.)

8070

**STRAIN-TRANSCENDING ANTI-AMA1 HUMAN MONOCLONAL ANTIBODIES NEUTRALIZE MALARIA PARASITES INDEPENDENT OF DIRECT RON2L RECEPTOR BLOCKADE**

**Palak N. Patel<sup>1</sup>**, Ababacar Diouf<sup>1</sup>, Thayne H. Dickey<sup>1</sup>, Wai Kwan Tang<sup>1</sup>, Christine S. Hopp<sup>2</sup>, Boubacar Traore<sup>3</sup>, Carole A. Long<sup>1</sup>, Kazutoyo Miura<sup>1</sup>, Peter D. Crompton<sup>1</sup>, Niraj H. Tolia<sup>1</sup>

<sup>1</sup>National Institutes of Health, Bethesda, MD, United States, <sup>2</sup>Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>3</sup>University of Sciences, Techniques and Technologies of Bamako, Bamako, Mali

8071

**PRE-CLINICAL STUDY ON VIRAL-VECTORED P. FALCIPARUM MULTISTAGE VACCINE EFFECTIVE BOTH FOR PROTECTION AND TRANSMISSION-BLOCKADE IN RHESUS PRIMATES**

**Yutaro Yamamoto<sup>1</sup>**, Naho Shinmura<sup>1</sup>, Wakaba Kanamura<sup>1</sup>, Yuna Sato<sup>1</sup>, Ammar Abdurrahman Hasyim<sup>1</sup>, Kartika Hardianti Zainal<sup>1</sup>, Takuto Katayama<sup>1</sup>, Sora Niwa<sup>1</sup>, Manaka Ono<sup>1</sup>, Hibiki Naruse<sup>1</sup>, Yuma Asaki<sup>1</sup>, Iyori Mitsuhiro<sup>2</sup>, Hiroaki Mizukami<sup>3</sup>, Hisatoshi Shida<sup>4</sup>, Tomoyuki Miura<sup>4</sup>, Shigeto Yoshida<sup>1</sup>

<sup>1</sup>Kanazawa University, Kanazawa city, Japan, <sup>2</sup>Musashino University, Tokyo, Japan, <sup>3</sup>Jichi Medical University, Shimono, Japan, <sup>4</sup>Kyoto University, Kyoto, Japan

8076

**GENOTYPIC INFECTION ENDPOINT ANALYSIS TO UNDERSTAND EFFICACY AND ESCAPE POTENTIAL OF THE MALARIA MONOCLONAL ANTIBODY CIS43LS**

**Philipp Schwabl<sup>1</sup>**, Amadou Niangaly<sup>2</sup>, Jorge-Eduardo Amaya-Romero<sup>1</sup>, Katrina Kelley<sup>1</sup>, Gail Potter<sup>3</sup>, Kassoum Kayentao<sup>2</sup>, Peter D. Crompton<sup>3</sup>, Daniel E. Neafsey<sup>1</sup>

<sup>1</sup>Harvard University, Boston, MA, United States, <sup>2</sup>University of Bamako, Bamako, Mali, <sup>3</sup>NIH, Rockville, MD, United States

8072

**R21/MATRIX-M™ PHASE III TRIAL: FURTHER FOLLOW-UP AND ASSESSMENT OF AN ADDITIONAL BOOSTER DOSE**

Alassane Dicko<sup>1</sup>, Mainga Hamaluba<sup>2</sup>, Ally Olotu<sup>3</sup>, Halidou Tinto<sup>4</sup>, Jean-Bosco Ouédraogo<sup>5</sup>, **Mehreen S. Datto<sup>6</sup>**, Emma Beaumont<sup>7</sup>, John Bradley<sup>7</sup>, Sandesh Bharati<sup>8</sup>, Prasad S. Kulkarni<sup>8</sup>, Umesh Shaligram<sup>8</sup>, Adrian V S Hill<sup>6</sup>, R21/Matrix-M Phase III Trial Group<sup>9</sup>

<sup>1</sup>Malaria Research and Training Centre, Department of Epidemiology of Parasitic Diseases, Faculty of Medicine, Pharmacy and Dentistry, University of Sciences, Techniques, and Technologies of Bamako, Bamako, Mali, <sup>2</sup>Kenya Medical Research Institute Centre for Geographical Medicine Research—Coast (KEMRI-CGMRC), Kilifi, Kenya, <sup>3</sup>Ifakara Health Institute, Bagamoyo Research and Training Centre, Bagamoyo, United Republic of Tanzania, <sup>4</sup>Unité de Recherche Clinique de Nanoro, Institut de Recherche en Sciences de la Santé, Nanoro, Burkina Faso, <sup>5</sup>Institut des Sciences et Techniques (INSTech), Bobo-Dioulasso, Burkina Faso, <sup>6</sup>Jenner Institute, University of Oxford, Oxford, United Kingdom, <sup>7</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>8</sup>Serum Institute of India Pvt. Ltd, Pune, India

8075

**OFF-TARGET ANTIBODY RESPONSES TO BLOOD STAGE ANTIGENS ARE ASSOCIATED WITH CROSS-REACTIVE ANTIBODIES TO THE MAJOR AND MINOR REPEATS OF THE PLASMODIUM FALCIPARUM CIRCUMSPOROZOITE PROTEIN IN AFRICAN CHILDREN PARTICIPATING IN THE RTS,S VACCINE TRIALS**

Luis M. Molinos-Albert<sup>1</sup>, Didac Macia<sup>2</sup>, Elisa Fuentes<sup>1</sup>, Chenjerai Jairoce<sup>3</sup>, Maximilian Mpina<sup>4</sup>, David Dosoo<sup>5</sup>, Alfons Jimenez<sup>1</sup>, Marta Vidal<sup>1</sup>, Ruth Aguilar<sup>1</sup>, Ross L. Coppel<sup>6</sup>, Ben Gyan<sup>5</sup>, Claudia Daubenberger<sup>7</sup>, Joe J. Campo<sup>8</sup>, Gemma Moncunill<sup>1</sup>, **Carlota Dobaño<sup>1</sup>**

<sup>1</sup>ISGlobal, Barcelona, Spain, <sup>2</sup>CIBER de Enfermedades Infecciosas, Barcelona, Spain, <sup>3</sup>Centro de Investigação em Saúde de Manhiça (CISM), Manhiça, Mozambique, <sup>4</sup>Ifakara Health Institute, Bagamoyo Research and Training Centre, Bagamoyo, United Republic of Tanzania, <sup>5</sup>Kintampo Health Research Centre, Kintampo, Ghana, <sup>6</sup>Infection and Immunity Program, Monash Biomedicine Discovery Institute, Department of Microbiology, Monash University, Melbourne, Australia, <sup>7</sup>Swiss Tropical and Public Health Institute, Basel, Switzerland, <sup>8</sup>Antigen Discovery, Inc (ADI), Irvine, CA, United States

**Scientific Session 102****Malaria Epidemiology II: Challenges, Threats, and Solutions**

Convention Center - Room 393/394 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

**#Elimination #ClimateChange #SocialScience  
#EmergingDiseaseThreats**

**CHAIR**

Peter D. McElroy  
CDC, Atlanta, GA, United States

Kristin Banek

Institute for Global Health and Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

4 p.m.

7632

**IMPACT OF PREVENTION, DIAGNOSTIC AND TREATMENT OF SIMPLE MALARIA CASES BY COMMUNITY HEALTH WORKERS SUPERVISED BY MOBILE NURSES IN RURAL COMMUNITIES IN BURKINA FASO**

**Mahamadou BARRO<sup>1</sup>**, Frédéric NIKIEMA<sup>2</sup>, Fabrice SOME<sup>2</sup>, Serge SOMDA<sup>3</sup>, Florence FOURNET<sup>4</sup>, Alphonsine KOFFI<sup>5</sup>, Jean GAUDART<sup>6</sup>, Cédric PENNETIER<sup>4</sup>, Roch DABIRE<sup>2</sup>

<sup>1</sup>Aix Marseille Univ, IRD, INSERM, SESSTIM, ISSPAM, 13005 Marseille, France and Institut de Recherche en Science de la Santé, IRSS, Bobo Dioulasso, Burkina Faso, <sup>2</sup>Institut de Recherche en Science de la Santé, IRSS, Bobo Dioulasso, Burkina Faso, <sup>3</sup>Unité de Formation et de Recherche en Sciences Exactes Appliquées, Université NAZI-BONI, Bobo Dioulasso,

Burkina Faso, <sup>4</sup>MIVEGEC, IRD, CNRS, Université de Montpellier, Montpellier, France, <sup>5</sup>Institut Pierre Richet (IPR), Institut National de Santé Publique (INSP), Bouaké, Côte D'Ivoire, <sup>6</sup>Aix Marseille Univ, IRD, INSERM, SESSTIM, ISSPAM, 13005 Marseille, France and AP-HM, Hop La Timone, BioSTIC, Biostatistic and ICT unit, 13005 Marseille, France, Marseille, France

4:15 p.m.

7633

### DIFFERENTIAL IMPACT OF INSECTICIDE TREATED NETS AGAINST MALARIA: A META-ANALYSIS AND MODELLING STUDY OF CLUSTER-RANDOMIZED CONTROLLED TRIALS IN AFRICA

Dominic P. Dee<sup>1</sup>, Joseph Biggs<sup>2</sup>, Joseph D. Challenger<sup>1</sup>, Isaac J. Stopard<sup>1</sup>, Ellie Sherrard-Smith<sup>1</sup>, Jackie Cook<sup>2</sup>, Thomas S. Churcher<sup>1</sup>

<sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

4:30 p.m.

7634

### REAL-LIFE PLASMODIUM VIVAX MALARIA IN CAMBODIA: A UNIQUE STUDY DESIGN TO CHARACTERIZE IN VIVO RELAPSES

Dynang Seng<sup>1</sup>, Virak Eng<sup>1</sup>, Sitha Sin<sup>1</sup>, Sokleap Heng<sup>1</sup>, Agnes Orban<sup>1</sup>, Malen Ea<sup>1</sup>, Sophy Chy<sup>1</sup>, Nimol Khim<sup>1</sup>, Benoit Witkowski<sup>1</sup>, Claude Flamand<sup>2</sup>, Dysoley Lek<sup>3</sup>, David Serre<sup>4</sup>, Jean Popovici<sup>5</sup>

<sup>1</sup>Malaria Research Unit, Institut Pasteur du Cambodge, Phnom Penh, Cambodia, <sup>2</sup>Epidemiology Unit, Institut Pasteur du Cambodge, Phnom Penh, Cambodia, <sup>3</sup>National Center for Parasitology, Entomology and Malaria Control, Phnom Penh, Cambodia, <sup>4</sup>University of Maryland, Baltimore, MD, United States, <sup>5</sup>Malaria Research Unit, Institut Pasteur du Cambodge, Phnom Penh, Cambodia ; Infectious Disease Epidemiology and Analytics, Institut Pasteur, Paris, France

4:45 p.m.

7635

### MALARIA CONTROL AND VACCINATION IN THE CONTEXT OF TROPICAL CYCLONES

Benjamin Rice<sup>1</sup>, Estelle Raobson<sup>2</sup>, Sylviane Miharisoa<sup>3</sup>, Joseph Lewinski<sup>4</sup>, Amy Wesolowski<sup>5</sup>, C. Jessica E. Metcalf<sup>1</sup>

<sup>1</sup>Princeton University, Princeton, NJ, United States, <sup>2</sup>University of Antananarivo, Antananarivo, Madagascar, <sup>3</sup>Institut Pasteur de Madagascar, Antananarivo, Madagascar, <sup>4</sup>Catholic Relief Services, Baltimore, MD, United States, <sup>5</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

5 p.m.

7636

### EMPATHY AND SHARED COMPASSION IN MALARIA CARE: A RAPID ETHNOGRAPHIC STUDY OF PROVIDER EMOTIONAL RESPONSE IN UGANDA

Anna Passaniti<sup>1</sup>, Leonard Bufumbo<sup>2</sup>, Suruchi Sood<sup>1</sup>, Pallen Mugabe<sup>2</sup>, Musa Kimbowa<sup>2</sup>, Elli Leontsini<sup>3</sup>, Jane Alaii<sup>4</sup>, Pearl Kobusingye<sup>2</sup>, Arzum Ciloglu<sup>1</sup>, Glory Mkandawire<sup>2</sup>, Joel Kisubi<sup>5</sup>, Sheila Nyakwezi<sup>6</sup>, Jimmy Opigo<sup>6</sup>, Sharminah Kawuma<sup>7</sup>, Richard Kabanda<sup>7</sup>, Judith Nalukwago<sup>2</sup>

<sup>1</sup>Johns Hopkins University Center for Communication Programs, Baltimore, MD, United States, <sup>2</sup>Johns Hopkins University Center for Communication Programs, Kampala, Uganda, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>4</sup>Simba Educational Consultants, Kampala, Uganda, <sup>5</sup>US President's Malaria Initiative, USAID, Kampala, Uganda, Kampala, Uganda, <sup>6</sup>National Malaria Control Division, Ministry of Health, Kampala, Uganda, Kampala, Uganda, <sup>7</sup>Department of Health Promotion, Education and Communication, Ministry of Health, Kampala, Uganda, Kampala, Uganda

5:15 p.m.

7637

### TREATMENT-SEEKING BEHAVIOR FOR FEVER IN KINSHASA, DRC: A LONGITUDINAL STUDY

Kristin Banek<sup>1</sup>, Samuel J. White<sup>1</sup>, Melchior Mwandagaliwa Kashamuka<sup>2</sup>, Joseph Losoma Atibu<sup>2</sup>, Georges Emo Mahilu<sup>2</sup>, Joseph A. Bala<sup>2</sup>, Georges Kihuma<sup>2</sup>, Marthe Nkalani<sup>2</sup>, Tommy Nseka Mambulu<sup>2</sup>, Jonathan B. Parr<sup>1</sup>, Jonathan J. Juliano<sup>1</sup>, Antoinette Kitoto Tshetu<sup>2</sup>

<sup>1</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, <sup>2</sup>Ecole de Santé Publique, University of Kinshasa, Kinshasa, Democratic Republic of the Congo

5:30 p.m.

7638

### MAINTAINING POWER IN MALARIA CLUSTER RANDOMIZED TRIALS USING INNOVATIVE DESIGNS TO MITIGATE THE IMPACT OF HETEROGENEITY

Joseph Biggs<sup>1</sup>, Joseph D. Challenger<sup>2</sup>, Dominic P. Dee<sup>2</sup>, Thomas S. Churcher<sup>2</sup>, Jackie Cook<sup>1</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Imperial College London, London, United Kingdom

## Symposium 103

### Building Sustainable and Resilient Health System in the Context of Public Health Crisis and Insecurity: Lessons Learned from National NTD and HIV/AIDS Programs in Four African Countries

Convention Center - Room 395/396 (3rd Floor)

Friday, November 15, 4 p.m. - 5:45 p.m.

Over the past years, the West and Central African region has recorded unprecedented shocks including infectious disease outbreaks, insecurity, armed conflicts, and political unrest. According to the UNHCR 2022 report, over 11.2 million people in West and Central Africa were forcibly displaced and stateless, of which 7.8 million were internally displaced and 1.6 million were refugees and asylum-seekers who require humanitarian assistance. This significant demographic migration has resulted in the increased number of Hard-to-Reach Populations (HRP). In areas with high density of HRP, access to health care interventions can be challenging as these vulnerable groups are often missed by interventions delivered throughout the health system. For instance, insurgent activities in the northern provinces of Cameroon and the Sahelian region of Burkina Faso, Niger, and Mali have disrupted mass drug administration (MDA) and surveillance activities in many districts. This situation has threatened the progress made by NTDs programs to control and elimination of NTDs. Despite these challenges, NTD Programs have managed to adapt plans to continue to serve their communities and reach the control and elimination milestones. For example, the WHO has validated Mali as having eliminated trachoma as a public health problem. Senegal and Niger have interrupted onchocerciasis transmission and Cameroon has rolled out trachoma impact surveys in insecure areas in its Far North region. The COVID-19 pandemic has increased disruption to the delivery of public health interventions for several national programs in Africa, highlighting the need for resilient African health systems. In Senegal, the HIV program outlined the elimination of mother-to-child transmission

Friday  
November 15

(MTC) in its strategic plan. In 2017, 57% of the regions in Senegal had reached a level of MTC rate below the threshold of 3% (programmatic goal); in 2020, with the occurrence of COVID-19, the number of regions below the threshold of 3% decreased to 40%. Several mitigation plans were developed by the HIV program, and this has led to further reduction of MTC rate at the national level with only 3 regions (21%) recording a MTC rate higher than 3% in 2022. This symposium will aim to discuss strategies and innovative approaches developed by national NTDs and HIV/AIDS programs to mitigate the effect of unexpected threats such as infectious disease outbreaks, disruptive socio-political environment, and insecurity on public health interventions. Presenters will discuss how sustainability approach and the operationalization of cross sectorial approaches is contributing to enhancing contribution of other government agencies and national stakeholders to sustaining program gains in context of uncertainty and resource constraints. #Elimination #FieldStudies #InfectiousDisease #SocialScience

#### CHAIR

Justin Tine  
FHI360, Accra, Ghana

Aimee Desrochers  
Helen Keller, Glasgow, United Kingdom

#### 4 p.m. INTRODUCTION

#### 4:10 p.m. INTRODUCTORY SESSION - DISEASE OUTBREAKS AND INSECURITY IN WEST AND CENTRAL AFRICA: OVERVIEW OF THE LANDSCAPE AND CHALLENGES FOR DELIVERY OF PUBLIC HEALTH INTERVENTIONS

Justin Tine  
FHI360, Accra, Ghana

#### 4:20 p.m. IMPLEMENTATION OF TRACHOMA SURVEYS IN SECURITY-COMPROMISED DISTRICTS IN NORTHERN CAMEROON

Florine Keumeni  
Helen Keller Intl, Yaounde, Cameroon

#### 4:35 p.m. LEVERAGING COMMUNITY HEALTH PLATFORM AND "NDEYE DICKE" (MOTHER MENTOR) STRATEGY TO INCREASE PROGRAM COVERAGE IN DISRUPTIVE CONTEXT

Cheikh Tidiane Ndour  
Ministry of health and social Action, Dakar, Senegal

#### 4:50 p.m. ENHANCED EQUITY TO ACCESS TO TRACHOMA PREVENTION THROUGH IMPLEMENTATION OF MDA IN REFUGEES' CAMPS

Sita Hamadou  
Helen Keller Intl, Niamey, Niger

#### 5:05 p.m. COMMUNITY DRIVEN APPROACHES APPLYING COMMUNITY DIALOGUES TO UNDERSTAND HESITANCY TO TAKE NTD PREVENTATIVE MEDICINES AND ENHANCE TREATMENT COVERAGE IN POST EBOLA AND COVID-19 SETTING

Gandi Kallon  
Helen Keller Intl, Freetown, Sierra Leone

### Special Session 104

#### Establishing Careers Internationally

Convention Center - Room 390 (3rd Floor)  
Friday, November 15, 4 p.m. - 5:45 p.m.

This is a networking and strategy meeting tailored towards students and early career professionals working in medicine, research and other scientific endeavors. This session will discuss the particular needs of those from low- and middle-income countries who have trained abroad in technologically-advanced countries and want to plan for a move back to their home countries. Ideally suited to participants from sub-Saharan and North Africa, Latin America and relevant Asian countries. Effective strategies for planning a return trip home will be discussed. Participants are expected to help move the discussion along as this is an opportunity to share and learn from one another. The session will feature a speaker and discussion facilitator and participants will have the opportunity to discuss ideas in small groups led by scientists who have successfully repatriated to LMIC countries.

#### CHAIR

Yazoume Ye  
CESMEL Health, Bowie, MD, United States

#### Break

Friday, November 15, 5:45 p.m. - 6:15 p.m.

### Special Session 105

#### Speed-Networking with the Experts

Convention Center - Room 383/384/385 (3rd Floor)  
Friday, November 15, 6:15 p.m. - 8 p.m.

**Please note that this meeting is limited to those who pre-registered for the event.**

The annual Speed-Networking session is organized by the Trainee Membership Committee and the five ASTMH subgroups: ASTMH Committee on Global Health (ACGH), the American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH/Clinical Group), the American Committee of Medical Entomology (ACME), the American Committee on Arthropod-Borne and Zoonotic Viruses (ACAV) and the American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP). The session is designed to facilitate interactions between senior scientists, physicians and trainees in an informal setting in order to provide an array of important information on possible career paths in tropical medicine. During this session, students and young

career scientists will have an opportunity to briefly meet experts who represent each of the subgroup fields, including scientists in global health, clinicians, epidemiologists, entomologists and basic research scientists. Experts will have a broad range of career experiences working in international posts, policy, federal government, and the military, among others. Experts will share information with students about their career choices, trajectories, challenges along the way, and how they see their work fitting into the larger tropical medicine arena. Students in this session will be designated to a subgroup to match their interests and current educational paths.

#### **CHAIR**

Rachel Lange

*SUNY at Albany School of Public Health, Albany, NY, United States*

Teresia Njoroge

*Indiana University, Indianapolis, IN, United States*

Winter Okoth

*Rutgers, State University of New Jersey, New Brunswick, NJ, United States*

Claudia Rohr

*Medical College of Wisconsin, Milwaukee, WI, United States*

Daniel Sprague

*Medical University of South Carolina, Charleston, SC, United States*

Hannah Steinberg

*University of Illinois Chicago, Chicago, IL, United States*

Akilah Stewart

*Indiana University School of Medicine, South Bend, IN, United States*

Hendrik Sy

*Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY, United States*

Camila C. Tompkins

*Arizona State University, Tempe, AZ, United States*

## **Sponsored Symposium**

### **Professor Dominic Kwiatkowski - Science and Legacy**

#### **Sponsored by the Bill & Melinda Gates Foundation**

*Convention Center - Room 388/389 (3rd Floor)*

**Friday, November 15, 6:15 p.m. - 8 p.m.**

See page 55 for information.

## **Saturday, November 16**

### **Registration**

*Convention Center - Lobby J (1st Floor)*

**Saturday, November 16, 7 a.m. - 5 p.m.**

### **Speaker Ready Room (Closed 1 p.m. - 2 p.m.)**

*Convention Center - Room 387 (3rd Floor)*

**Saturday, November 16, 7 a.m. - 5 p.m.**

### **TropStop -Student/Trainee Lounge**

*Convention Center - Room 346/347 (3rd Floor)*

**Saturday, November 16, 7 a.m. - 5 p.m.**

This casual setting, designed with students, trainees and residents in mind (coffee, internet), is your place for a break from the fast pace of the meeting and relax with colleagues and friends. Check out the Career Chats, held in the TropStop. This will be your opportunity to meet professionals in the fields of tropical medicine and global health who will share their personal career paths and answer your questions about the various bumps and forks in the road.

### **Meeting Sign-Up Room**

*Hilton - Norwich Room and Windsor Room (3rd Floor)*

**Saturday, November 16, 7 a.m. - 7 p.m.**

### **Nursing Mothers Room**

*Convention Center - Office I120 and Office J121 (1st Floor)*

**Saturday, November 16, 7 a.m. - 7 p.m.**

### **Prayer Room**

*Convention Center - Room 342 (3rd Floor)*

**Saturday, November 16, 7 a.m. - 7 p.m.**

### **ASTMH Presidents Meeting**

*Convention Center - Room 399 (3rd Floor)*

**Saturday, November 16, 7 a.m. - 8 a.m.**

### **Diploma Course Certification Committee Meeting**

*Hilton - Marlborough B (2nd Floor)*

**Saturday, November 16, 7 a.m. - 8 a.m.**

### **Scientific Program Committee Meeting**

*Convention Center - Room 397/398/399 (3rd Floor)*

**Saturday, November 16, 7 a.m. - 8 a.m.**

### **Press Room**

*Convention Center - Room 340 (3rd Floor)*

**Saturday, November 16, 7:45 a.m. - 5 p.m.**

## New Orleans Tour. A Walk through the History of New Orleans and Intersections with Tropical Medicine and Public Health

Limited to attendees who signed up at Tulane Exhibit Booth  
Saturday, November 16, 8 a.m. - 10 a.m.

The city of New Orleans is a landscape imprinted with the waves of epidemics that in response produced the first school of public health and first school of tropical medicine in the United States. New Orleans' culture and its geography shaped these epidemics and the epidemics in turn shaped the city's culture and economy. Stop by the Tulane booth in the Exhibit Hall to sign up for a walk to see some key sites of the city, the yellow fever mortuary chapel, the birth places of American music, the slave market, the front door of the French Quarter and the Mississippi River's edge which evokes the physical and social contexts that brought yellow fever, cholera, and malaria to the city.



## Unprecedented Dengue Outbreaks in the Americas and Exemplary Responses to the Growing Challenge

Convention Center - Hall I-2 (1st Floor)  
Saturday, November 16, 8 a.m. - 9:45 a.m.

Dengue is the most common arboviral disease globally, with reported case numbers increasing ten-fold from 2000-2019 and burden predicted to continue growing. Dengue epidemics pose a serious challenge in endemic countries, where case numbers can rapidly escalate and overwhelm health systems. Early disease detection through epidemiological surveillance and laboratory testing, as well as appropriate clinical management capacity, can improve response and reduce the risk of death but efforts are often limited. In the Americas region, >4.5 million cases and >2,200 preventable deaths were reported in 2023, the highest number on record. Enhancing countries' epidemiologic and laboratory workforce and using data modernization to facilitate information dissemination at the national and subnational level is key to strengthening surveillance and promoting more timely and effective responses to dengue transmission. This symposium will call attention to the growing dengue trends and unprecedented outbreaks in the Americas, the efforts to strengthen arbovirus surveillance and innovative approaches implemented by countries to face the growing threat. The symposium will include five presentations. The first talk will describe a health information platform for the Americas (PLISA) developed by the Pan-American Health Organization (PAHO) with the objective of strengthening regional arbovirus surveillance through improvements in data quality and analytics. The second talk will be on dengue in Brazil and the country's success in preventing dengue deaths. Brazil has long been a focal point in the battle against dengue fever, accounting for more than 75% of dengue cases in the region. This talk will highlight Brazil's remarkable success in preventing dengue-related deaths, despite facing challenges such as the 2023 epidemic. The third talk will be on seeing dengue in unusual places

at unusual times in Peru and will explore the evolving landscape of dengue transmission. The next talk will describe how climate is influencing dengue trends, from a modeling approach. Using sophisticated modeling approaches, experts will elucidate how changes in temperature and other environmental variables have influenced dengue trends over the past decade. We will close the symposium by describing the emergence of new genotypes and dengue lineages in the Americas. By unraveling the genetic diversity of dengue viruses, attendees will gain valuable insights into the dynamics of dengue transmission and the potential implications for vaccine development and control strategies. #ClimateChange #EmergingDiseaseThreats #Epidemiology #InfectiousDisease #Modeling #Prevention

### CHAIR

Gabriela Paz Bailey  
Centers for Disease Control and Prevention (CDC), San Juan, PR, United States

Thais dos Santos  
Pan American Health Organization (PAHO), Washington, DC, United States

### 8 a.m. INTRODUCTION

#### 8:10 a.m. DENGUE TRENDS IN THE AMERICAS, PLISA AND THE BENEFITS OF A TAILORED SURVEILLANCE APPROACH

Thai Dos Santos  
Pan American Health Organization (PAHO), Washinton, DC, United States

#### 8:30 a.m. DENGUE IN BRAZIL AND THE COUNTRY'S IN SUCCESS PREVENTING DENGUE DEATHS

Livia Carla Vinhal Frutuoso  
Ministerio de Salud de Brasil, Brasilia, Brazil

#### 8:50 a.m. SEEING DENGUE IN UNUSUAL PLACES AT UNUSUAL TIMES IN PERU

César V. Munayco  
General Direction of Epidemiology, Lima, Peru

#### 9:10 a.m. HOW IS CLIMATE INFLUENCING DENGUE TRENDS, A MODELING APPROACH

Rachel Lowe  
Barcelona Supercomputing Center (BSC), Barcelona, Spain



## CDC Yellow Book Travel Medicine Update

Convention Center - Room 343/344 (3rd Floor)  
Saturday, November 16, 8 a.m. - 9:45 a.m.

The CDC Yellow Book Health Information for International Travel is published every two years as a resource for health professionals providing care to international travelers. The CDC Yellow Book compiles the US government's most current travel health guidelines, including pre-travel vaccine recommendations, destination-specific health advice, and easy-to-reference maps, tables, and charts. The first presentation will feature the Yellow

Book editor-in-chief, who will discuss recent changes and updates to the field of travel medicine. Next, three CDC-based subject matter experts will each review and provide updates about an important topic in travel medicine: leishmaniasis, vaccines for Japanese encephalitis and other travel-related arboviral diseases, and typhoid and paratyphoid fever. #Prevention #EmergingDiseaseThreats #InfectiousDisease

#### CHAIR

Eric S. Halsey  
CDC, Atlanta, GA, United States

Rebecca J. Chancey  
CDC, Atlanta, GA, United States

8 a.m.

#### INTRODUCTION

8:10 a.m.

#### CDC TRAVEL MEDICINE UPDATE

Eric S. Halsey  
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:35 a.m.

#### LEISHMANIASIS: REVIEW AND UPDATE

Rebecca J. Chancey  
Centers for Disease Control and Prevention, Atlanta, GA, United States

9 a.m.

#### JAPANESE ENCEPHALITIS VACCINE AND OTHER ARBOVIRAL VACCINES: REVIEW AND UPDATE

Susan Hills  
Centers for Disease Control and Prevention, Fort Collins, CO, United States

9:25 a.m.

#### TYPHOID AND PARATYPHOID FEVER: REVIEW AND UPDATE

Louise C. Francois Watkins  
Centers for Disease Control and Prevention, Atlanta, GA, United States

## Scientific Session 108

### Global Health: Improved Health Care Service Delivery and Health Systems Strengthening

Convention Center - Room 345 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

#ChildHealth #PopulationSurveillance #Elimination

#### CHAIR

Sajid Bashir Soofi  
Aga Khan University, Karachi, Pakistan

Clive Brown  
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

7639

#### INNOVATING MALARIA PROGRAM COMPLIANCE FOR SCALABILITY USING AUTOMATION AND AI

Elizabeth Kathure  
Maisha Meds, Kisumu, Kenya

8:15 a.m.

7640

#### STRENGTHENING THE FRONTLINE DURING PUBLIC HEALTH EMERGENCIES: THE ROLE OF INSTITUTIONAL AND SOCIAL SUPPORT FOR HEALTHCARE WORKERS IN LOW-INCOME SETTINGS

Ifeolu John David  
University of Michigan, Ann Arbor, MI, United States

8:30 a.m.

7641

#### COMPARING IMPLEMENTATION OUTCOMES AFTER AZITHROMYCIN MASS DRUG ADMINISTRATION TO CHILDREN 1-11 VS 1-59 MONTHS OLD FOR CHILD SURVIVAL IN A CLUSTER-RANDOMIZED TRIAL IN NIGER

Ahmed M. Arzinka<sup>1</sup>, Ramatou Maliki<sup>1</sup>, Abdou Amza<sup>2</sup>, Karamba Alio<sup>1</sup>, Nasser Galo<sup>1</sup>, Bawa Aichatou<sup>1</sup>, Diallo Beidi<sup>1</sup>, Laminou Maliki Haroun<sup>1</sup>, Farissatou Oumarou<sup>1</sup>, Elodie Lebas<sup>3</sup>, Brittany Peterson<sup>3</sup>, Carolyn Brandt<sup>3</sup>, Emily Colby<sup>3</sup>, William Nguyen<sup>3</sup>, Zijun Liu<sup>3</sup>, Benjamin F. Arnold<sup>3</sup>, Thomas L. Lietman<sup>3</sup>, Meagan C. Fitzpatrick<sup>4</sup>, Kieran O'Brien<sup>3</sup>  
<sup>1</sup>Centre de Recherche et Interventions en Santé Publique, Birni N'Gaoure, Niger; <sup>2</sup>Programme Nationale de Santé Oculaire, Niamey, Niger; <sup>3</sup>Francis I. Proctor Foundation, University of California, San Francisco, San Francisco, CA, United States; <sup>4</sup>Center for Vaccine Development and Global Health, University of Maryland School of Medicine, Baltimore, MD, United States

8:45 a.m.

7642

#### IMPROVED ACCESS TO COMMUNITY-LEVEL DATA IN MADAGASCAR'S NATIONAL HEALTH INFORMATION SYSTEM FOLLOWING SUPPORT TO DISTRICT HEALTH TEAMS, 2019 - 2023

Elgiraud Ramarosaiaky<sup>1</sup>, Elmard Rabotovaosolo<sup>1</sup>, Cedric Yambabariye<sup>1</sup>, Aishling Thurow<sup>2</sup>, Maya Gershtenson<sup>2</sup>, Serge Raharison<sup>1</sup>, Laurent Kapesa<sup>3</sup>, Solofo Razakamiadana<sup>3</sup>, Anna Bowen<sup>4</sup>, Lova Avotra Ralijaona<sup>3</sup>, Azzah Al-rashid<sup>5</sup>, Solange Razakandretsa<sup>6</sup>  
<sup>1</sup>ACCESS Program, Management Sciences for Health, Antananarivo, Madagascar; <sup>2</sup>Management Sciences for Health, United States, Arlington, VA, United States; <sup>3</sup>U.S. President's Malaria Initiative, United States Agency for International Development, Antananarivo, Madagascar; <sup>4</sup>U.S. President's Malaria Initiative, U.S. Centers for Disease Control and Prevention, Antananarivo, Madagascar; <sup>5</sup>United States Agency for International Development, Antananarivo, Madagascar; <sup>6</sup>Ministry of Public Health, Antananarivo, Madagascar

9 a.m.

7643

#### ROUTINE CHILDHOOD IMMUNIZATION COVERAGE AMONGST HOSPITALIZED CHILDREN: A QUALITY IMPROVEMENT INITIATIVE

Pierre-Philippe Piché-Renaud, Caitlyn Hui, Adria Rose, Louise Ing, Jessica Florio, Aalia Jahurali, Elahe Karimi-Shahrbabak, Shaun K. Morris  
The Hospital for Sick Children, Toronto, ON, Canada

9:15 a.m.

7644

#### REPRODUCIBILITY OF A SMARTPHONE-BASED VISUAL ACUITY TEST (PEEK ACUITY) IN PERUVIAN SCHOOLCHILDREN

Evelyn del Rosario Munayco Pantoja<sup>1</sup>, Jeremy Keenan<sup>2</sup>, Andres Lescano<sup>1</sup>  
<sup>1</sup>Emerge, Emerging Diseases and Climate Change Research Unit, School of Public Health and Administration, Universidad Peruana Cayetano Heredia, Lima, Peru; <sup>2</sup>University of California, San Francisco, CA, United States

Saturday  
November 16



9:30 a.m.

7645

### CRITICAL REFLECTIONS ON COSTING PUBLIC HEALTH INTERVENTIONS IN RESOURCE-CONSTRAINED IMPLEMENTATION SETTINGS: CONSIDERATIONS AND RECOMMENDATIONS

Yesim Tozan<sup>1</sup>, Tyler Y. Headley<sup>2</sup>, Sooyoung Kim<sup>3</sup>, Ariadna Capasso<sup>4</sup>, Joshua Kiyingi<sup>5</sup>, Vincent Ssentumbwe<sup>6</sup>, Josephine Nabayinda<sup>5</sup>, Flavia Namuwonge<sup>5</sup>, Edward Nsubuga<sup>5</sup>, Rashida Namirembe<sup>6</sup>, Proscovia Nabunya<sup>5</sup>, Ozge Sensoy Bahar<sup>5</sup>, Larissa Jennings Mayo-Wilson<sup>7</sup>, Susan S. Witte<sup>8</sup>, Fred M. Ssewamala<sup>5</sup>

<sup>1</sup>New York University School of Global Public Health, Department of Global and Environmental Health, New York, NY, United States, <sup>2</sup>New York University Abu Dhabi, Abu Dhabi, United Arab Emirates, <sup>3</sup>New York University School of Global Public Health, Department of Public Health Policy and Management, New York, NY, United States, <sup>4</sup>New York University School of Global Public Health, Department of Social and Behavioral Sciences, New York, NY, United States, <sup>5</sup>Brown School, Washington University in St. Louis, Saint Louis, MN, United States, <sup>6</sup>International Center for Child Health and Development, Brown School, Washington University in Saint Louis, Saint Louis, MN, United States, <sup>7</sup>School of Global Public Health, University of North Carolina, Chapel Hill, NC, United States, <sup>8</sup>Columbia University School of Social Work, New York, NY, United States

## Symposium 109

### Socio-Ecological Approaches to Mitigating Risk for Tick-Borne Diseases

Convention Center - Room 352 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

Zoonotic diseases are inherently eco-social processes where risk is maximized by a convergence of high hazard (abundance of the pathogen/vector), human behavior driving exposure, and compound vulnerabilities. While this framework is often used to address zoonotic emergence of directly-transmitted viruses, application to tick-borne zoonoses has lagged. Tick-borne disease 'risk' is often measured simply as the density of infected ticks in the environment or the distribution of (underreported) case counts. It is imperative that research shifts toward One Health surveillance and intervention strategies to curb the continuous increase in incidence of tick-borne diseases, with more than 400K cases a year of Lyme disease alone in North America. We present research on novel surveillance and intervention frameworks and methods to understand and model tick-borne disease dynamics in a One Health perspective. Because tick-borne diseases occur at the intersection of human health, wildlife, land use and natural resource management, there are particular challenges to risk mitigation, adaptation, prevention and control. Research presented here tackle these challenges using integrated approaches to risk modeling/mapping including multi-criteria decision analysis and participatory mapping; spatially explicit modeling of human movement and exposure behavior including the uptake and impact of preventative behaviors; collaborative modeling and policy games; and choice experiments to understand willingness to pay for different tick control approaches on private and publicly owned land. All researchers highlight the importance to identify operational tick control strategies and health promotion adapted to diverse eco-social contexts and under conditions of high uncertainty, to maximize the impact of limited resources at the nexus of human and environmental health. #EcologicalStudies #EmergingDiseaseThreats #InfectiousDisease #Modeling #SocialScience

### CHAIR

Maria A. Diuk-Wasser  
Columbia University, New York, NY, United States

Jean Tsao  
Michigan State University, East Lansing, MI, United States

### 8 a.m. INTRODUCTION

#### 8:10 a.m. BRINGING BACK THE HUMAN DIMENSION IN TICK-BORNE DISEASES RISK ASSESSMENT AND MANAGEMENT

Catherine Bouchard  
Public Health Agency of Canada, National Microbiology Laboratory and University of Montreal, Montreal, QC, Canada

#### 8:30 a.m. PREFERENCE HETEROGENEITY FOR TICK CONTROL STRATEGIES UNDER CONDITIONS OF SCIENTIFIC UNCERTAINTY

Allie Gardner  
University of Maine, Orono, ME, United States

#### 8:50 a.m. STAKEHOLDER INVOLVEMENT IN FOREST MANAGEMENT PRACTICES TARGETING LYME DISEASE PREVENTION

Andres M. Urcuqui Bustamante  
University of Illinois, Chicago, IL, United States

#### 9:10 a.m. REVEALING RISKY ENVIRONMENTS: MODELING HUMAN-TICK ENCOUNTERS USING A SMARTPHONE APPLICATION AND AGENT-BASED MODELS IN URBAN LANDSCAPES

Pilar Fernandez  
Washington State University, Pullman, WA, United States

#### 9:30 a.m. EVER-SHIFTING RISK: EXPLORING WHERE, HOW, AND WHY PEOPLE ARE EXPOSED TO TICK-BORNE PATHOGENS ACROSS URBAN GRADIENTS

Maria A. Diuk-Wasser  
Columbia University, New York, NY, United States

## Symposium 110

### Public Health Under Threat - A Protracted Sociopolitical Crisis in Haiti

Convention Center - Room 353 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

Haiti had achieved many important advancements in global public health over the past two decades - excellent HIV program, important work on filariasis elimination, reduction in malaria, and control of cholera for a two-year period after a long and impactful cholera outbreak. Many of these programs offered to serve as models for public health progress in a challenging environment, even despite a major earthquake in 2010 and other external shocks. However, since 2019 a protracted socio-political crisis in the country has crippled many health care and preventive health services. The culmination of this in many ways is expressed in the re-emergence of cholera in 2022 after 2 years of quiescence

with almost 80,000 cases reported since Oct 2022. The impact of the multi-faceted sociopolitical crisis - which predated Covid19 pandemic - has been devastating to health. This symposium seeks to i) share data, ii) discuss progress (despite the challenges) and setbacks (because of the challenges) to both infectious and non-communicable disease control and prevention in Haiti and to iii) foster exchange with panelists, ASTMH members/annual meeting attendees on generalizable approaches and solutions. We will bring experts on healthcare and public health from Haiti, complemented by speakers from CDC Atlanta and Pan American Health Organization (both CDC and PAHO reps have lived experience in Haiti) to present, with co-moderators. Presentations will focus on the epidemiology of disease in Haiti (infectious diseases - cholera, diphtheria, covid19, and non-infectious diseases - cardiovascular disease, diabetes) and program interventions and outcomes during the conflict/crisis. Participants will hear from Haitians working to support healthcare delivery, public health programs and research and from public health officials from PAHO and CDC. #EmergingDiseaseThreats #Epidemiology #FieldStudies #InfectiousDisease #PopulationSurveillance

#### CHAIR

Louise Ivers  
Harvard Global Health Institute, Cambridge, MA, United States

Ralph Ternier  
Zanmi Lasante, Port-au-Prince, Haiti

#### 8 a.m.

##### INTRODUCTION

#### 8:10 a.m.

##### HIV PROGRAMS IN HAITI - SUCCESS THREATENED BY SOCIOPOLITICAL CRISIS

Vanessa Rouzier  
GHESKIO, Port-au-Prince, Haiti

#### 8:35 a.m.

##### INFECTIOUS DISEASES OUTBREAKS AND RESPONSE 2020-2024 - CHOLERA, DIPHTHERIA, COVID19

Katilla Pierre  
Haiti Ministry of Health, Port-au-Prince, Haiti

#### 8:50 a.m.

##### PRIORITY INFECTIOUS DISEASES OUTBREAKS IN HAITI 2010-2024

Michael Melchior  
Centers for Disease Control and Prevention, Atlanta, GA, United States

#### 9:05 a.m.

##### PUBLIC HEALTH IN HAITI - CHOLERA AND THE IMPORTANCE OF HAITI FOR REGIONAL HEALTH OF THE AMERICAS

Mauricio Cerpa  
Pan American Health Organization, Cartagena, Colombia

## Scientific Session 111

### Bacteriology: Other Bacterial Infections

Convention Center - Room 354/355 (3rd Floor)  
Saturday, November 16, 8 a.m. - 9:45 a.m.

This session does not carry CME credit.

#Diagnostics #PopulationSurveillance #Pathogenesis  
#Epidemiology #InfectiousDisease

#### CHAIR

Joseph M. Vinetz  
Yale School of Medicine, New Haven, CT, United States

Liya Sesay Getachew  
Emory University, Atlanta, GA, United States

#### 8 a.m.

7646

##### FROM MAPPING TO NEAR TRACHOMA ELIMINATION IN UNDER A DECADE: RESULTS FROM TRACHOMA PREVALENCE SURVEYS IN COTE D'IVOIRE FROM 2015-2023

N'goran N. Dje<sup>1</sup>, Adam D. Mama<sup>1</sup>, Bovari H. Anoma<sup>1</sup>, Ange E. Aba<sup>2</sup>, Virginie Ettiegne-Traore<sup>3</sup>, Boubacar M. Dicko<sup>4</sup>, Konan Nguessan<sup>5</sup>, Regina H. N'goran<sup>1</sup>, Laurence AM Dje<sup>1</sup>, Landry T. N'guessan<sup>1</sup>, Victor B. Yepri<sup>1</sup>, Emma Harding-Esch<sup>6</sup>, Clara R. Burgert-Brucker<sup>7</sup>, Sarah Boyd<sup>8</sup>, Ana Bakhtiari<sup>8</sup>, Cristina Jimenez<sup>9</sup>, Michaela Kelly<sup>9</sup>, Paul Courtright<sup>10</sup>, Anthony W. Solomon<sup>11</sup>, Stephanie L. Palmer<sup>2</sup>  
<sup>1</sup>Programme National de Lutte contre les Maladies Tropicales Négligées à Chimiothérapie Préventive, Abidjan, Côte D'Ivoire, <sup>2</sup>FHI 360, Washington, DC, United States, <sup>3</sup>FHI 360 Cote d'Ivoire, Abidjan, Côte D'Ivoire, <sup>4</sup>Sightsavers, Abidjan, Côte D'Ivoire, <sup>5</sup>FHI 360, Sightsavers, Abidjan, Côte D'Ivoire, <sup>6</sup>Clinical Research Department, London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>7</sup>RTI International, Washington, DC, United States, <sup>8</sup>International Trachoma Initiative, Decatur, GA, United States, <sup>9</sup>Sightsavers, Hayward Health, United Kingdom, <sup>10</sup>University of Cape Town, Cape Town, South Africa, <sup>11</sup>Department of Control of Neglected Tropical Diseases, World Health Organization, Geneva, Switzerland

#### 8:15 a.m.

7647

##### CHARACTERIZING THE BURDEN OF SCRUB TYPHUS IN NEPALESE CHILDREN: A NOVEL SCHOOL-BASED SEROSURVEILLANCE APPROACH

Shiva R. Naga<sup>1</sup>, Sabin Bikram Shahi<sup>1</sup>, Sarira Goshain<sup>1</sup>, Mamata Maharjan<sup>1</sup>, Nishan Katuwal<sup>1</sup>, Rajeev Shrestha<sup>1</sup>, Jason R. Andrews<sup>2</sup>, Dipesh Tamrakar<sup>1</sup>, Kristen Aiemyjoy<sup>3</sup>  
<sup>1</sup>Dhulikhel Hospital, Kathmandu University Hospital, Kavrepalanchowk, Nepal, <sup>2</sup>Stanford University School of Medicine, California, CA, United States, <sup>3</sup>University of California Davis School of Medicine, California, CA, United States

#### 8:30 a.m.

7648

##### THE LEPTOSPIRA-SECRETED EXOTOXIN THAT MEDIATES LEPTOSPIROSIS PATHOGENESIS

Joseph M. Vinetz, Reetika Chaurasia, Jordan Pober, Richard Pierce  
Yale School of Medicine, New Haven, CT, United States

#### 8:45 a.m.

7649

##### MENINGITIS SCREENING IN YOUNG INFANTS BASED ON A NOVEL NON-INVASIVE TRANSFONTANELLAR DEVICE: INITIAL PERFORMANCE RESULTS

Sara Ajanovic Andelic<sup>1</sup>, Beatrice Jobst<sup>2</sup>, Javier Jiménez<sup>2</sup>, Rita Quesada<sup>2</sup>, Fabiao Santos<sup>2</sup>, Francesc Carandell<sup>2</sup>, Manuela Lopez-Azorin<sup>3</sup>, Eva Valverde<sup>4</sup>, Marta Ybarra<sup>4</sup>, M. Carmen Bravo<sup>4</sup>, Paula Petrone<sup>1</sup>, Hassan Sial<sup>1</sup>, David Muñoz<sup>5</sup>, Thais Agut<sup>5</sup>, Barbara Salas<sup>5</sup>, Nuria Carreras<sup>5</sup>, Ana Alarcón<sup>6</sup>, Martín Iriondo<sup>6</sup>, Carles Luaces<sup>5</sup>, Muhammad Sidat<sup>7</sup>, Mastalina Zandamela<sup>8</sup>, Paula Rodrigues<sup>9</sup>, Dulce Graça<sup>9</sup>, Sebastiao Ngovene<sup>9</sup>, Justina Bramugy<sup>8</sup>, Anelsio Cossa<sup>8</sup>, Campos Mucasse<sup>8</sup>, W. Chris Buck<sup>10</sup>, Alberto Ibáñez<sup>11</sup>, Montserrat Parrilla<sup>11</sup>, Luis Elvira<sup>12</sup>, Cristina Calvo<sup>13</sup>, Adelina Pellicer<sup>4</sup>, Fernando Cabañas<sup>3</sup>, Quique Bassat<sup>1</sup>

<sup>1</sup>Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain, <sup>2</sup>Kriba, Barcelona, Spain, <sup>3</sup>Quiron Salud Madrid, Madrid, Spain, <sup>4</sup>Hospital La Paz Institute for Health Research, Madrid, Spain, <sup>5</sup>Hospital Universitari Sant Joan de Déu, Barcelona, Spain, <sup>6</sup>Hospital La Paz Institute for Health Research, Barcelona, Spain, <sup>7</sup>Universidade Eduardo Mondlane, Maputo, Mozambique, <sup>8</sup>Centro de Investigação em Saúde de Manhiça (CISM), Manhiça, Mozambique, <sup>9</sup>Hospital Central de Maputo, Maputo, Mozambique, <sup>10</sup>University of California Los Angeles David Geffen School of Medicine, Los Angeles, CA, United States, <sup>11</sup>Instituto de Tecnologías Físicas y de la Información (CSIC), Madrid, Spain, <sup>12</sup>Instituto de Tecnologías Físicas y de la Información (CSIC), Madrid, Spain, <sup>13</sup>La Paz University Hospital, Madrid, Spain

9 a.m.

7650

### GAPS BETWEEN INFECTIOUS AGENTS DETECTED VS ATTRIBUTED IN THE CAUSAL CHAIN OF MORTALITY AMONG STILLBIRTHS AND NEONATAL DEATHS IN BANGLADESH

**Arpita Shyama Deb<sup>1</sup>**, Zahidul Islam<sup>1</sup>, Afruna Rahman<sup>1</sup>, Afsana Afrin<sup>1</sup>, Mohammad Zahid Hossain<sup>1</sup>, Shammi Akter<sup>1</sup>, Kazi Munisul Islam<sup>1</sup>, Shams El Arifeen<sup>1</sup>, Mustafizur Rahman<sup>1</sup>, Emily S. Gurley<sup>2</sup>, Muntasir Alam<sup>1</sup>

<sup>1</sup>icddr, Dhaka, Bangladesh, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

9:15 a.m.

7651

### IMASOY: A MULTI-CENTRE, RANDOMIZED, CONTROLLED, NON-INFERIORITY TRIAL OF 10-DAY CIPROFLOXACIN ALONE VS. 3-DAY AMINOGLYCOSIDE FOLLOWED BY 7-DAY CIPROFLOXACIN IN MADAGASCAR

Rindra Vatosoa Randremanana<sup>1</sup>, Mihaja Raberahona<sup>2</sup>, Josephine Bourner<sup>3</sup>, Minoarisoa Vatosoa Rajerison<sup>1</sup>, Ravaka Vatosoa Randriamparany<sup>1</sup>, Tsinjo Vatosoa Rasoanaivo<sup>1</sup>, Lisy Hanitra Razananaivo<sup>1</sup>, Gabriella Zadoririna<sup>1</sup>, Theodora Mayouya-Gamana<sup>1</sup>, Reziky Tiandraza Mangahasimbola<sup>1</sup>, Tansy Edwards<sup>4</sup>, Elise Pesonel<sup>3</sup>, Rivonitina Andry Rakotoarivelo<sup>5</sup>, Mamy Jean de Dieu Randria<sup>2</sup>, Peter W. Horby<sup>3</sup>, **Piero L. Olliaro<sup>3</sup>**

<sup>1</sup>Institut Pasteur de Madagascar, Antananarivo, Madagascar, <sup>2</sup>CHU Joseph Raseta Befelatanana, Antananarivo, Madagascar, <sup>3</sup>University of Oxford, Oxford, United Kingdom, <sup>4</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>5</sup>CHU Tambohobe, Fianarantsoa, Madagascar

9:30 a.m.

7652

### ASSOCIATION OF PARASITIC COINFECTION AND WATER, SANITATION, AND HYGIENE (WASH) WITH CLINICAL CASES OF LEPROSY IN ADDIS ABABA ETHIOPIA

**Liya Sisay Getachew<sup>1</sup>**, Elleni Zeleke<sup>2</sup>, Lawrence Dela Cruz<sup>1</sup>, Aemon Fissaha<sup>3</sup>, Hatem Mohamed<sup>1</sup>, Yosef Wubshet<sup>4</sup>, Ytbarek Gebremedhin<sup>3</sup>, Biruk Debebe<sup>3</sup>, Shimelis Nigusse<sup>3</sup>, Kidist Bobosha<sup>2</sup>, Jessica K. Fairley<sup>1</sup>

<sup>1</sup>Emory University, Atlanta, GA, United States, <sup>2</sup>Armaur Hansen Research Institute, Addis Ababa, Ethiopia, <sup>3</sup>All Africa Leprosy Rehabilitation and Training Center (ALERT), Addis Ababa, Ethiopia, <sup>4</sup>Addis Ababa University, Addis Ababa, Ethiopia

## Scientific Session 112

### American Committee of Molecular Cellular and Immunoparasitology (ACMCIP): Parasite Cellular Immunology

Convention Center - Room 356 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

Supported with funding from the Burroughs Wellcome Fund

#InfectiousDisease #CellBiology #Immunology  
#HostResponse #Pathogenesis

### CHAIR

Pedro Gazzinelli-Guimaraes

George Washington University, Washington DC, United States

Sarah Ewald

University of Virginia, Charlottesville, VA, United States

8 a.m.

8437

### GENE-EDITING IN STRONGYLOIDES RATTI REVEALS THE NATURE OF HELMINTH SPECIFIC T CELLS

**Fungai Musaigwa<sup>1</sup>**, Olufemi Akinkuotu<sup>1</sup>, Hannah Dobson<sup>2</sup>, Annabel Ferguson<sup>1</sup>, Adriana Stephenson<sup>1</sup>, Ulrich Femoe<sup>1</sup>, Li-Yin Hung<sup>1</sup>, Parvathi Annamalai<sup>1</sup>, Juan Inclan Rico<sup>1</sup>, Heather Rossi<sup>1</sup>, De'Broski R. Herbert<sup>1</sup>

<sup>1</sup>Department of Pathobiology, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA, United States, <sup>2</sup>Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, United States

8:15 a.m.

8438

### MRGPRA3 NEURONS DRIVE CUTANEOUS IMMUNITY AGAINST HELMINTHS THROUGH SELECTIVE CONTROL OF MYELOID CYTOKINES

**Juan Inclan Rico<sup>1</sup>**, Camila M. Napuri, Li-Yin Hung, De'Broski R. Herbert

University of Pennsylvania, Philadelphia, PA, United States

8:30 a.m.

7653

### THE BALANCE BETWEEN GASDERMIN D AND STING SIGNALING SHAPES THE SEVERITY OF SCHISTOSOME IMMUNOPATHOLOGY

**Parisa Kalantari<sup>1</sup>**, Ilana Shecter<sup>2</sup>, Jacob Hopkins<sup>2</sup>, Yoelkys Morales<sup>2</sup>, Bijan Harandi<sup>2</sup>, shruti Sharma<sup>2</sup>, Miguel J. Stadecker<sup>2</sup>

<sup>1</sup>Pennsylvania State University, University Park, PA, United States, <sup>2</sup>Tufts University School of Medicine, Boston, MA, United States

(ACMCIP Abstract)

8:45 a.m.

7654

### INOS IS NECESSARY FOR GBP-MEDIATED T. GONDII CLEARANCE IN MURINE MACROPHAGES VIA VACUOLE NITRATION AND INTRAVACUOLAR NETWORK COLLAPSE

Sarah Ewald

University of Virginia, Charlottesville, VA, United States

(ACMCIP Abstract)

9 a.m.

7655

### ACTIVITY OF A FILARIAL ASNRS ON INTERLEUKIN 8 G PROTEIN COUPLED RECEPTORS

**Michael A. Kron<sup>1</sup>**, Hailey A. Bock, John McCorvy

Medical College of Wisconsin, Milwaukee, WI, United States

9:15 a.m.

7656

### MONOCYTE-ASTROCYTE NETWORKS REGULATE CYTOKINE AND MATRIX METALLOPROTEINASE SECRETION INDUCED BY NEUROCYSTICERCOSIS ANTIGENS

**Luz M. Toribio Salazar<sup>1</sup>**, Deborah Chong<sup>2</sup>, Javier A. Bustos<sup>1</sup>, Hector Garcia<sup>1</sup>, Jon S. Friedland<sup>2</sup>

<sup>1</sup>UNIVERSIDAD PERUANA CAYETANO HEREDIA, Lima, Peru, <sup>2</sup>St George's University of London, London, United Kingdom

(ACMCIP Abstract)

9:30 a.m.

7657

## EOSINOPHIL ACTIVATION AND RECRUITMENT IN THE CSF INFLAMMATORY CASCADE IN UNTREATED SUBARACHNOID NEUROCYSTICERCOSIS

Emily E. Miltenberger, Janitzio Guzmán, Thomas B. Nutman, Elise M. O'Connell  
National Institute of Allergy and Infectious Diseases, Laboratory of Parasitic Diseases,  
Bethesda, MD, United States

(ACMCIP Abstract)

## Symposium 113

### Innovative Tools for the Control of NTDs. How to Achieve Impact Through Access Beyond Drug Donations

Convention Center - Room 357 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

**This session does not carry CME credit.**

The efforts for the control and elimination of Neglected Tropical Diseases (NTDs) have evolved with an overall success towards control and elimination goals with the available and often imperfect tools in terms of the diagnostic and therapeutic performance. Uneven progress has prompted the identification of areas in need of improvements through investments in new candidates to further advance the achievements of Mass Drug Administration (MDA) campaigns in endemic countries. Innovations that have completed pivotal trials and have completed or are going through the final stages of regulatory approval will be discussed in this Symposium; they include a pediatric formulation of praziquantel, an oro-dispersible tablet that co-formulates albendazole and ivermectin and the FDA approved moxidectin. The opportunities created by these drugs for facilitating treatment of pediatric populations, overcoming the poor response of *Trichuris trichiura* to benzimidazole regimens, incorporating *Strongyloides stercoralis* to Soil transmitted helminth (STH) control activities and redefining goals for onchocerciasis elimination, also highlight the need for a renewed discussion and agreements to generate access to target populations with these innovations that will be outside the current donation paradigm on which the WHO strategy has been built. The new WHO Roadmap for NTDs emphasizes country ownership as part of the goals established by WHO for the control of NTDs which includes country investment in NTD programs however this support is limited and may not include the use of new drugs that will need to be procured. Further discussion and preparation with the donor community and endemic countries is required so that new products can be quickly scaled up to achieve program goals and achieve the 2030 targets. Data on safety and efficacy of pediatric praziquantel, albendazole/ivermectin co-formulation and moxidectin will be shown with focus on the trials that supported the submission to regulatory agencies for the particular indications, complemented with pharmacokinetic data, implementations scenarios, potential new indications and remaining challenges for the control of schistosomiasis, STH and onchocerciasis. Special attention to these innovations in pediatric populations and in the opportunities for changes in the expectations for disease control and elimination will also be

discussed. The session will include a donor panel to discuss the potential, opportunities and barriers to the introduction and scale up of these and other new tools. #Therapeutics; #ClinicalResearch; #Elimination; #FieldStudies; #InfectiousDisease

#### CHAIR

Alejandro J. Krolewiecki  
Mundo Sano, Buenos Aires, Argentina

Stella Kepha  
KEMRI, Nairobi, Kenya

8 a.m.

#### INTRODUCTION

8:10 a.m.

#### WHEN MORE IS NEEDED: MOXIDECTIN A NEW TOOL TO COMPLEMENT IVERMECTIN'S ACHIEVEMENTS TO ELIMINATE ONCHOCERCIASIS

Sally Kinrade  
Medicines Development for Global Health, Melbourne, Australia

8:30 a.m.

#### PEDIATRIC PRAZIQUANTEL. INSIGHTS FROM A PIVOTAL TRIAL FOR THE TREATMENT OF SCHISTOSOMIASIS.

Maurice R. Odier  
KEMRI, Kisumu, Kenya

8:45 a.m.

#### AN ALBENDAZOLE-IVERMECTIN TABLET CO-FORMULATION. SAFETY, EFFICACY AND THE REGULATORY PATH AGAINST STH BEYOND THE PIVOTAL TRIAL

Alejandro J. Krolewiecki  
Mundo Sano, Ciudad Autónoma de Buenos Aires, Argentina

9 a.m.

#### PANEL DISCUSSION WITH DONORS AND STAKEHOLDERS ON THE ACCESS OF NEW TOOLS FOR THE CONTROL OF NTDs

Julie Jacobson  
Bridges to Development, Seattle, WA, United States

#### PANELISTS

Christy L. Hanson  
Bill & Melinda Gates Foundation, Seattle, WA, United States

Hayato Urabe  
GHIT Fund, Tokyo, Japan

Carol Karutu  
The END Fund, Nairobi, Kenya

Emily Wainwright  
U.S. Agency for International Development, Washington, DC, United States

## Scientific Session 114

### Nematodes

Convention Center - Room 383/384/385 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

#Prevention #Epidemiology #InfectiousDisease  
#ClinicalResearch

Saturday  
November 16

## CHAIR

Ayman A. El-Badry  
Cairo University, Cairo, Egypt

Makedonka Mitreva  
Washington University School of Medicine, St. Louis, MO, United States

8 a.m.

7658

### SPECTRAL FLOW CYTOMETRY ANALYSIS OF FECAL MICROBIOTA FROM *TRICHURIS TRICHIURA* INFECTED HUMANS AND NON-HUMAN PRIMATES

Harris R. Droghini<sup>1</sup>, Octavio Mondragon Palomino<sup>1</sup>, Phil J. Cooper<sup>2</sup>, Jason M. Brenchley<sup>1</sup>, Thomas B. Nutman<sup>1</sup>, P'ng Loke<sup>1</sup>

<sup>1</sup>National Institutes of Health, Bethesda, MD, United States, <sup>2</sup>Universidad Internacional del Ecuador, Quito, Ecuador

(ACMCIP Abstract)

8:15 a.m.

7659

### ASCARIASIS, TRICHURIASIS AND INTESTINAL HOOKWORM INFECTIONS - CLINICAL PRESENTATION AND ASSOCIATION WITH INTERNATIONAL TRAVEL

Elena Marie Crecelius<sup>1</sup>, Patrick Hickey<sup>2</sup>, Alison Helfrich<sup>2</sup>

<sup>1</sup>Walter Reed National Military Medical Center, Bethesda, MD, United States, <sup>2</sup>Uniformed Services University of the Health Sciences, Bethesda, MD, United States

(ACMCIP Abstract)

8:30 a.m.

7660

### NOVEL RECOMBINANT ANTIGEN-BASED LATERAL FLOW TESTS FOR THE DETECTION OF *STRONGYLOIDES STERCORALIS* INFECTION AND CONCORDANCE WITH *STRONGY DETECT*<sup>TM</sup> ELISAS

Robertine Lontuo Fogang, Thomas Nutman

National Institutes of Health, Rockville, MD, United States

(ACMCIP Abstract)

8:45 a.m.

7661

### PREVALENCE AND INTENSITY OF SOIL-TRANSMITTED HELMINTH INFECTIONS ACROSS RIVERS STATE NIGERIA FOLLOWING SEVEN YEARS OF DEWORMING-EVIDENCE FROM PROGRAM EVALUATION

Temitope Michael Ogunbi<sup>1</sup>, Ifeanyiwa Chime<sup>1</sup>, Jerry Mbaka<sup>1</sup>, Kate McCracken<sup>2</sup>, Mark Minnery<sup>2</sup>, Ayoola Adegbile<sup>1</sup>, Anam Abdulla<sup>2</sup>, Rodgers Curtis<sup>2</sup>, Ima Umah<sup>3</sup>, Fatai Oyediran<sup>3</sup>, Toochi Ohajii<sup>1</sup>, Ima Chima<sup>1</sup>

<sup>1</sup>Evidence Action, Abuja, Nigeria, <sup>2</sup>Evidence Action, Washington DC, WA, United States, <sup>3</sup>Nigeria Federal Ministry of Health, Abuja, Nigeria

(ACMCIP Abstract)

9 a.m.

7662

### TH1, TH2, AND TH17 CYTOKINE RESPONSE IN IMMUNOSUPPRESSED PATIENTS INFECTED WITH *STRONGYLOIDES STERCORALIS* IN NORTH INDIA

Abhishek Mewara<sup>1</sup>, Nikita Sharma<sup>1</sup>, Vignesh Pandiarajan<sup>1</sup>, Gaurav Prakash<sup>1</sup>, Varun Dhir<sup>1</sup>, Sahajal Dhoooria<sup>1</sup>, Simran Kaur<sup>1</sup>, Surjit Singh<sup>1</sup>, Ritesh Agarwal<sup>1</sup>, Richard Bradbury<sup>2</sup>

<sup>1</sup>Postgraduate Institute of Medical Education and Research, Chandigarh, India, <sup>2</sup>School of Public Health and Tropical Medicine, James Cook University, Townsville, Australia

(ACMCIP Abstract)

9:15 a.m.

7663

### THE IMPACT OF INTEGRATING DEWORMING WITH EYE HEALTH IN SCHOOL TO IMPROVE THE LIVES OF SCHOOL AGE CHILDREN AND TEACHERS: A PILOT PROJECT FOR THE CONTROL OF SOIL TRANSMITTED (STH) HELMINTHIASIS AND VISION IMPROVEMENT IN IN HIGHLY ENDEMIC COUNTIES FOR STH IN LIBERIA 2018-2022

Anthony Kerkula K. Bettee<sup>1</sup>, Mulbah Howard<sup>2</sup>, Precious Z. Cooper ZC Bettee<sup>1</sup>

<sup>1</sup>Ministry of Health, Monrovia, Liberia, <sup>2</sup>Sightsavers, Monrovia, Liberia

(ACMCIP Abstract)

9:30 a.m.

7664

### HELMINTHS, MALARIA CO- INFECTION AND ASSOCIATED INDUCEMENT OF ANAEMIA, IRON AND FOLATE DEFICIENCIES IN CHILDREN

Opoku Bempah<sup>1</sup>, Kwasi Baako Antwi<sup>2</sup>, Kingsley Badu<sup>2</sup>

<sup>1</sup>Kumasi Technical University, Kumasi, Ghana, <sup>2</sup>Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

(ACMCIP Abstract)

## Symposium 115

### Evaluating the Case for Loiasis as a Neglected Tropical Disease

Convention Center - Room 388/389 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

Loiasis, or infection with the "African eye worm," *Loa loa*, has long been recognized as a significant clinical problem among infected individuals, but has been underappreciated in the global health community. Increased international attention came to loiasis following serious adverse reactions (including encephalopathy and death) among heavily infected individuals following ivermectin treatment administered as preventive chemotherapy in onchocerciasis (river blindness) and lymphatic filariasis (LF) control programs. Interest in solving the "loiasis problem" as an obstacle to onchocerciasis elimination has led to new clinical and diagnostic tools for loiasis, but to date these have had little effect on the individuals suffering from loiasis in endemic areas. WHO classification as a neglected tropical disease (NTD) may increase awareness of loiasis by the international donors and research communities. There is mounting evidence for previously unappreciated, chronic negative health consequences of loiasis, with neurologic, renal, and cardiovascular detriments, and it is becoming increasingly clear that loiasis meets WHO criteria for classification as a neglected tropical disease. Speakers for this symposium will be loiasis experts that live or have extensively worked in endemic areas. They will review the clinical and public health challenges caused by loiasis, advances in loiasis mapping and diagnostic strategies, and will make recommendations for or against recognition of loiasis as a NTD by WHO. #Elimination #Epidemiology #PopulationSurveillance #Prevention

## CHAIR

Philip J. Budge  
Washington University in St. Louis, St. Louis, MO, United States

Joseph Kamgno  
University of Yaounde, Yaounde, Cameroon

**8 a.m.**  
**INTRODUCTION**

**8:10 a.m.**  
**BRIEF REVIEW OF EPIDEMIOLOGY, MAPPING, AND EFFECT OF LOIASIS ON NTD ELIMINATION**

Hugues Nana-Djuenga  
*University of Yaoundé 1, Yaoundé, Cameroon*

**8:30 a.m.**  
**CURRENT AND DEVELOPING DIAGNOSTIC STRATEGIES FOR LOIASIS**

Linda Djune-Yemeli  
*University of Yaoundé 1, Yaoundé, Cameroon*

**8:45 a.m.**  
**CLINICAL IMPACT OF LOIASIS IN ENDEMIC AREAS**

Cédric Chesnais  
*Institut de Recherche pour le Développement, Montpellier, France*

**9 a.m.**  
**IMPACT OF LOA LOA INFECTION ON IMMUNOLOGY AND COINFECTION WITH OTHER PATHOGENS**

Jean Paul Akue  
*International Center of Medical Research, Franceville, Gabon*

**9:15 a.m.**  
**IMPACT OF LOA LOA INFECTION ON IMMUNOLOGY AND COINFECTION WITH OTHER PATHOGENS**

Roland Dieki  
*Parasitologie, Centre International de Recherches Médicales de Franceville (CIRMF), Franceville, Gabon*

**9:30 a.m.**  
**WHO CRITERIA AND PROCESS FOR NTD DESIGNATION**

Didier K. Bakajika  
*WHO/AFRO, Brazzaville, Republic of the Congo*

## Symposium 116

### Implementing Perennial Malaria Chemoprevention across Africa: Converging to Consensus?

*Convention Center - Room 391/392 (3rd Floor)*  
**Saturday, November 16, 8 a.m. - 9:45 a.m.**

Perennial malaria chemoprevention (PMC) is the administration of a full treatment course of an antimalarial medicine at predefined intervals, regardless of whether the child is infected with malaria, to prevent illness in moderate to high perennial malaria transmission settings. The goal of PMC is to protect young children by establishing preventive antimalarial drug concentrations in the blood that clear existing infections and prevent new ones during the age of greatest risk of severe malaria. In 2022 the World Health Organization (WHO) expanded its recommendation for Intermittent Preventive Treatment in infants (IPTi) to Perennial Malaria Chemoprevention for “infants and young children at high risk of severe malaria living in areas with moderate-to-high malaria transmission in sub-Saharan Africa”.

The updated recommendation no longer limits the intervention specifically to infants and reflects the malaria transmission settings in which the intervention should be considered. The recommendation further states that the Expanded Program on Immunization (EPI) platform remains important for delivering PMC, though other methods of delivery can be explored to optimize access to PMC and integration with other health interventions. These changes encouraged National Malaria Programs to consider adding PMC to their national malaria control strategies and provided flexibility in PMC delivery regarding dosing, contact points, and age. Speakers will present findings from 7 countries from across Africa highlighting recent operational research studies and lessons learned from implementation focusing on acceptability, uptake, data management and reporting, and the concomitant roll-out of PMC and the malaria vaccine. The co-chairs will lead a moderated discussion on the key lessons and best practices coming from countries, offering considerations to other countries contemplating implementing PMC. #ChildHealth #FieldStudies #Prevention #InfectiousDisease #Pediatrics

#### CHAIR

Charlotte E. Eddis  
*PSI, Abidjan, Côte D'Ivoire*

Dorothy Achu  
*WHO AFRO, Brazzaville, Republic of the Congo*

**8 a.m.**  
**INTRODUCTION**

**8:10 a.m.**  
**PIONEERING PMC IN SIERRA LEONE**

Augustin Fombah  
*Ministry of Health, Freetown, Sierra Leone*

**8:35 a.m.**  
**INTERIM FINDINGS FROM THE PLUS PROJECT EVALUATIONS IN BENIN, CAMEROON, COTE D'IVOIRE AND MOZAMBIQUE**

Charlotte E. Eddis  
*PSI, Abidjan, Côte D'Ivoire*

**8:50 a.m.**  
**ACCEPTABILITY OF PMC BY CAREGIVERS AND HEALTH WORKERS: EVIDENCE FROM THE DRC**

Eric S. Mukomena  
*National Malaria Control Program, Ministry of Health, Kinshasa, Democratic Republic of the Congo*

**9:05 a.m.**  
**PMC DATA MANAGEMENT AND REPORTING: THE NIGERIAN EXAMPLE**

Godwin Ntadom  
*National Malaria Elimination Program, Abuja, Nigeria*

**9:20 a.m.**  
**ROLLING OUT PMC AND THE MALARIA VACCINE CONCOMITANTLY: EXPERIENCE FROM SOA IN CAMEROON**

Junior Voundi  
*National Malaria Control Program, Yaounde, Cameroon*

## Symposium 117

### Improving the Diagnosis and Management of Severe Malaria

Convention Center - Room 393/394 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

Malaria still kills over half a million children each year. Although vector control, chemoprevention, artemisinin-combination therapies, and better access to treatment have reduced malaria morbidity and mortality, there still are millions of children hospitalized each year because of severe malaria. Severe malarial anemia is a major indication for pediatric blood transfusion in sub-Saharan Africa, representing a substantial drain on the limited transfusion resources. Improving the diagnosis, treatment, and management of patients with suspected severe malaria will have considerable impact in terms of saving lives and optimizing resource allocation in resource-poor settings. In November 2023, the Global Malaria Program at the World Health Organization (WHO) organized a 2-day workshop aiming to update their guidance on severe malaria. In preparation for this workshop, WHO commissioned a systematic review of the published literature since 2014 (the date of the last meeting on severe malaria guidelines), which was carried out by the World Wide Antimalarial Resistance Network coordinated by James Watson. This literature review identified key areas where updates to the current guidance is needed, and also areas where there are important knowledge gaps. During the 2-day workshop, key aspects which needed updating of the WHO Practical Handbook on severe malaria were identified. This led to consensus around pooled analyses of available data which would help inform guideline updates. This symposium will provide an overview of the key findings from the systematic review, changes to the WHO Practical Handbook, as well as presenting important new research findings concerning pre-referral treatment, evidence-based management (notably around transfusion), diagnosis, pathophysiology and adjuvant therapies, and post-discharge management. The symposium will review current consensus on appropriate treatment and management as well as presenting new findings. This will include (i) preliminary results and ongoing studies from a large platform trial of severe malaria in African children; (ii) the utility of a point-of-care diagnostic test for plasma PfHRP2 (more accurate diagnosis of severe malaria); (iii) results from an individual patient data meta-analysis of over 35,000 patients enrolled in large clinical trials to determine optimal prognostic triage algorithms; (iv) updates on the deployment of rectal artesunate suppositories and post-discharge malaria chemoprevention in Africa. The selected talks will summarize key updates and research gaps regarding the diagnosis, treatment and post-discharge management of severe malaria, leaving sufficient time for a moderated discussion on the significance and public health relevance of the findings. #ClinicalResearch #Therapeutics #InfectiousDisease #Pathogenesis

#### CHAIR

James A. Watson  
Oxford University Clinical Research Unit, Ho Chi Minh, Vietnam

Elizabeth George  
University College London, London, United Kingdom

#### 8 a.m. INTRODUCTION

#### 8:10 a.m. MANAGEMENT OF PATIENTS WITH SEVERE MALARIA AND THE NEED FOR RANDOMIZED TRIALS IN AFRICA

Elizabeth George  
University College London, London, United Kingdom

#### 8:35 a.m. IMPROVING THE DIAGNOSIS AND TRIAGE OF PATIENTS WITH SUSPECTED SEVERE MALARIA

James A. Watson  
Oxford University Clinical Research Unit, Ho Chi Minh City, Vietnam

#### 8:50 a.m. POST-DISCHARGE MALARIA CHEMOPREVENTION: FROM POLICY TO PRACTICE

Kamija Phiri  
University of Malawi, Blantyre, Malawi

#### 9:05 a.m. PRE-REFERRAL TREATMENT FOR SEVERE MALARIA

Nick White  
Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand

#### 9:20 a.m. PATHOPHYSIOLOGY OF SEVERE MALARIA: UPDATES

Arjen Dondorp  
Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand

### Symposium 118

### Subarachnoid and Intraventricular Neurocysticercosis: What our Patients have Taught Us

Convention Center - Room 395/396 (3rd Floor)

Saturday, November 16, 8 a.m. - 9:45 a.m.

Neurocysticercosis (NCC) is the most common helminthic infection of the central nervous system caused by the larval stage of the pork tapeworm, *Taenia solium*. The clinical manifestations are pleomorphic and dependent on location, stage of parasite and burden of disease. Extraparenchymal disease is associated with a high mortality, mainly due to intracranial hypertension, if not managed appropriately. During this symposium experts in the field will share their clinical experience and approach to this complex disease. #HostResponse #InfectiousDisease #Pathogenesis

#### CHAIR

Christina M. Coyle  
Albert Einstein College of Medicine, Bronx, NY, United States

Hector H. Garcia  
Universidad Peruana Cayetano Heredia, Lima, Peru

#### 8 a.m. INTRODUCTION

**8:10 a.m.**  
**THE NATURAL HISTORY OF SUBARACHNOID DISEASE: A THIRTY YEAR EXPERIENCE**

Theodore E. Nash  
*National Institutes of Health, Bethesda, MD, United States*

**8:30 a.m.**  
**ANTIPARASITIC TREATMENT OF SUBARACHNOID DISEASE: WHAT'S THE DATA?**

Hector H. Garcia  
*Universidad Peruana Cayetano Heredia, Lima, Peru*

**8:50 a.m.**  
**INTRAVENTRICULAR DISEASE: A TRICKY TOPIC**

Clinton White  
*The University of Texas Medical Branch Galveston, Galveston, TX, United States*

**9:10 a.m.**  
**LESSONS FROM THE BEDSIDE: A PANEL DISCUSSION**

Christina M. Coyle  
*Albert Einstein College of Medicine, Bronx, NY, United States*

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**Exhibit Hall Open**

*Convention Center - Hall J (1st Floor)*  
**Saturday, November 16, 9:30 a.m. - 10:30 a.m.**

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**Coffee Break**

*Convention Center - Hall J (1st Floor)*  
**Saturday, November 16, 9:45 a.m. - 10:15 a.m.**

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**Poster Session C Set-Up**

*Convention Center - Hall I-1 (1st Floor)*  
**Saturday, November 16, 9:45 a.m. - 10:15 a.m.**

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**Poster Session C Viewing**

*Convention Center - Hall I-1 (1st Floor)*  
**Saturday, November 16, 10:15 a.m. - 11 a.m.**



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**Plenary Session 119**

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**Plenary Session IV: President's Address**

*Convention Center - Hall I-2 (1st Floor)*  
**Saturday, November 16, 10:15 a.m. - 11 a.m.**

**10:15 a.m.**  
**INTRODUCTION**

Johanna Daily  
*Albert Einstein College of Medicine, Bronx, NY, United States*

**10:30 a.m.**  
**PRESIDENT'S ADDRESS: RENDERING THE FUTURE OF GLOBAL HEALTH AMIDST REVERBERATIONS FROM THE PAST: A CALL TO COMMUNITY**



**Linnie Golightly, MD**

Associate Professor in Medicine, Microbiology and Immunology and Associate Dean of Diversity and Inclusion  
Weill Cornell Medicine, New York, NY, United States

Linnie Golightly, MD, is President of the American Society of Tropical Medicine and Hygiene (ASTMH) and an Associate Professor in Medicine, Microbiology and Immunology and Associate Dean of Diversity and Inclusion at Weill Cornell Medicine (WCM). As Associate Dean of Diversity and Inclusion at WCM, she directs programs to enhance community and career pathways and to foster a diverse environment. She previously served as Director of Minority Recruitment for the Harvard Combined Infectious Disease Training Program. Dr. Golightly's research focuses on infectious diseases endemic to low- and middle-income countries (LMIC), with an emphasis on malaria, as well as factors effecting the retention of women and underrepresented minorities, and citizens of LMIC in academic careers. She obtained her infectious disease training at the Harvard Combined Infectious Disease Training Program (Beth Israel Hospital, Brigham & Women's Hospital, and Dana-Farber Cancer Institute) and post-doctoral research training in molecular parasitology at the Harvard School of Public Health. She is active in teaching and training, having served as Infectious Disease Fellowship Program Director, Director of the infectious disease medical school module and the Ben Kean Course in Tropical Medicine at WCM, for which she received a teaching award. She has lectured and trained undergraduates, medical students, and fellows both from the U.S. and abroad, including those from Haiti, Ghana, Brazil, Israel, Qatar, and Europe. She is a member of the National Medical Association's (NMA) Council on International Affairs and has served on several ASTMH committees including the Ben H. Kean Travel Fellowship, the Committee on Global Health, and the Nominating Committee. Raised in the Midwest, she received her Bachelor's degree in Biology from Wayne State University and medical degree from WCM in New York City.

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**Exhibit Hall Open**

*Convention Center - Hall J (1st Floor)*  
**Saturday, November 16, 11 a.m. - 12:15 p.m.**



## Poster Session 120

### Poster Session C

Convention Center - Hall I-1 (1st Floor)

Saturday, November 16, 11 a.m. - 12:45 p.m.

### Poster Session C Directory

Global Health - Information/Communication/Technologies Solutions in Global Health including Modeling: 7665- 7678  
 Global Health – Other: 7679- 7708  
 Global Health - Planetary Health including Climate Change: 7709- 7718  
 Global Health - Security/Emerging Infection Preparedness, Surveillance and Response(s): 7719- 7738  
 Mosquitoes - Biology and Genetics of Insecticide Resistance: 7739- 7752  
 Mosquitoes - Biology, Physiology and Immunity: 7753- 7762  
 Mosquitoes - Bionomics, Behavior and Surveillance: 7763- 7775  
 Mosquitoes - Epidemiology and Vector Control: 7776- 7806  
 Mosquitoes - Molecular Biology, Population Genetics and Genomics: 7807- 7817  
 Viruses - Emerging Viral Diseases: 7818- 7833  
 Viruses – Epidemiology: 7834- 7853  
 Viruses - Field and ecological studies of viruses, including surveillance and spillover risk and emergence: 7854- 7865  
 Viruses – Immunology: 7866- 7880  
 Viruses - Vaccine Clinical Trials: 7881- 7896  
 Malaria - Antimalarial Resistance and Chemotherapy: 7897- 7918  
 Malaria - Diagnosis - Challenges and Innovations: 7919- 7931  
 Malaria – Elimination: 7932- 7946  
 Malaria – Epidemiology: 7947- 7977  
 Malaria - Genetics, Genomics and Evolution: 7978- 7991  
 Malaria – Immunology: 7992- 8004  
 Malaria – Pathogenesis: 8005- 8017  
 Malaria – Prevention: 8018- 8044  
 Malaria – Surveillance and Data Utilization: 8045- 8069  
 Malaria - Vaccines and Immunotherapeutics: 8070- 8089  
 Bacteriology - Enteric Infections: 8090- 8104  
 Bacteriology - Other Bacterial Infections: 8105- 8118  
 Bacteriology - Systemic Infections: 8119- 8127  
 Bacteriology – Trachoma: 8128- 8134  
 Clinical Tropical Medicine: 8135- 8160  
 Helminths – Nematodes – Filariasis (Molecular Biology and Immunology): 8161- 8165  
 Helminths – Nematodes – Filariasis (Other): 8166- 8170  
 Helminths – Nematodes – Filariasis (Treatment and Morbidity Management): 8171- 8177  
 Kinetoplastida and Other Protozoa - Invasion, Cellular and Molecular Biology (Including Leishmania and Trypanosomes): 8178- 8179  
 Kinetoplastida and Other Protozoa - Treatment, Drug Delivery, Drug Repurposing and Drug Discovery (Including Leishmania and Trypanosomes): 8180- 8193  
 Kinetoplastida and Other Protozoa - Vaccines (Including Leishmania and Trypanosomes): 8194- 8197  
 Measures for Control and Elimination of Neglected Tropical Diseases (NTDs): 8198- 8220  
 One Health: The Interconnection between People, Animals, Plants and Their Shared Environment: 8221- 8234  
 Pneumonia, Respiratory Infections and Tuberculosis: 8235- 8251

Schistosomiasis and Other Trematodes – Epidemiology and Control: 8252- 8262

Schistosomiasis and Other Trematodes – Immunology, Pathology, Cellular and Molecular Biology: 8263- 8272

Water, Sanitation, Hygiene and Environmental Health: 8273- 8287

## Global Health - Information/ Communication/Technologies Solutions in Global Health including Modeling

7665

### EVALUATION OF ACCESSIBILITY TO ELECTRONIC MEDICAL RECORDS FOR CLINICAL RESEARCH IN KAMPHAENG PHET PROVINCE, THAILAND

Soontorn Pinpaiboon<sup>1</sup>, Chinanat Puangsaijai<sup>1</sup>, Surachai Kaewhiran<sup>1</sup>, Rattiya Wannawong<sup>2</sup>, Kathryn Anderson<sup>3</sup>, Aaron Farmer<sup>2</sup>, Darunee Buddhari<sup>2</sup>  
<sup>1</sup>Kampaheng Phet hospital, Muang Kamphaeng Phet, Thailand, <sup>2</sup>Department of Virology, WRAIR-AFRIMS, Bangkok, Thailand, <sup>3</sup>SUNY Upstate Medical University, Syracuse, NY, United States

7666

### UNDERSTANDING THE SHORTCOMINGS AND GOOD PRACTICES FROM THE ROUTINE DATA QUALITY ASSESSMENT FOR INFORMED PUBLIC HEALTH DECISION-MAKING IN GUINEA IN 2023

Mohamed Saran Conde<sup>1</sup>, Fatoumata Battouly Diallo<sup>1</sup>, Mamadou Dian Sow<sup>2</sup>, Abdoul Karim Nabé<sup>2</sup>, Datolo Koné<sup>3</sup>, Soua Goumou<sup>1</sup>, Elizabeth Fitch<sup>4</sup>, Jean Yves Mukamba<sup>5</sup>, Agossa Charles Lebon LAWSON<sup>1</sup>, Suzanne Van Hulle<sup>6</sup>, Abdourahmane Diallo<sup>7</sup>, Aissatou Bobo Bah<sup>1</sup>, Souleymane Diakité<sup>2</sup>, Chrestien Yameni<sup>8</sup>, Alioune Camara<sup>7</sup>  
<sup>1</sup>Catholic Relief Services, Conakry, Guinea, <sup>2</sup>Office of Strategy and Development of the Ministry of Health, Conakry, Guinea, <sup>3</sup>Research Triangle Institute, Conakry, Guinea, <sup>4</sup>Research Triangle Institute, Baltimore, MD, United States, <sup>5</sup>Catholic Relief Services, Kinshasa, Democratic Republic of the Congo, <sup>6</sup>Catholic Relief Services, Baltimore, MD, United States, <sup>7</sup>National Malaria Control Program, Guinea, Conakry, Guinea, <sup>8</sup>Catholic Relief Services, Dakar, Senegal

7667

### MONITORING THE IMPLEMENTATION OF COMMUNITY HEALTH STRATEGY ACTIVITIES IN FOUR HEALTH REGIONS OF GUINEA THROUGH THE COMMUNITY HEALTH WORKERS TRACKER

Soua Gomou<sup>1</sup>, Fatoumata Battouly Diallo<sup>1</sup>, Mohamed Saran Conde<sup>1</sup>, Aly Iouiss Kamano<sup>1</sup>, Saa Bobo Leno<sup>1</sup>, Moriba Haba<sup>1</sup>, Lawson Agossa Charles Lebon<sup>1</sup>, Abdourahmane Diallo<sup>2</sup>, Alioune Camara<sup>2</sup>, Jean yves Mukamba<sup>3</sup>, Chrestien Yameni<sup>4</sup>, felicien Randriamanantenasoa<sup>1</sup>, Suzanne Vanhulle<sup>5</sup>  
<sup>1</sup>Catholic Relief Services, Conakry, Guinea, <sup>2</sup>National Malaria Control Program, Conakry, Guinea, <sup>3</sup>Catholic Relief Services, Kinshasa, Democratic Republic of the Congo, <sup>4</sup>Catholic Relief Services, Dakar, Senegal, <sup>5</sup>Catholic Relief Services, Baltimore, MD, United States

7668

### UNLOCKING SUPPLY CHAIN EFFICIENCY: DEMONSTRATION OF AN OPEN-SOURCE DYNAMIC ROUTE OPTIMIZATION TOOL

Eileen Patten  
 GHSC-PSM (IBM), Washington, DC, United States

7669

### USING THE SUPPLY CHAIN INFORMATION SYSTEM MATURITY MODEL TO IMPROVE SYSTEM CAPABILITY FOR OPERATION

Jean Miller  
 Chemonics International, Washington DC, DC, United States

7670

## ENHANCING THE QUALITY OF MALARIA SURVEILLANCE THROUGH INTERACTIVE DASHBOARD ACROSS BENUE STATE HEALTH FACILITIES, 2023

**Iorwuese Hycienth Sesugh<sup>1</sup>**, Gloria Oyemi Sillo<sup>1</sup>, Olayemi Abimbola<sup>2</sup>, Justice Adaji<sup>2</sup>, Uchenna Nwokenna<sup>2</sup>, Uwem Udoh<sup>1</sup>, Sule Agatha<sup>1</sup>, Abutu Abraham<sup>1</sup>, Akawa Terkura<sup>3</sup>, Abanyi J. Liambbee<sup>4</sup>, Rudi Thetard<sup>5</sup>, Arja Huestis<sup>5</sup>, Thomas Hall<sup>5</sup>, Grace Nwankwo<sup>6</sup>, Erkwagh Dagba<sup>6</sup>, Veronica Momoh<sup>6</sup>, Jules Mihigo<sup>6</sup>, Chukwu Okoronkwo<sup>7</sup>, Nnenna Ogbulafor<sup>7</sup>, Godwin Ntadom<sup>7</sup>

<sup>1</sup>United States President's Malaria Initiative for States, Management Sciences for Health, Benue, Nigeria, <sup>2</sup>United States President's Malaria Initiative for States, Management Sciences for Health, Abuja, Nigeria, <sup>3</sup>Ministry of Health and Human Services, Department of Planning, Research and Statistics, Health Management Information Systems, Benue, Nigeria, <sup>4</sup>Ministry of Health and Human Services, State Malaria Elimination Program, Benue, Nigeria, <sup>5</sup>Management Sciences for Health, Arlington, VA, United States, <sup>6</sup>United States Agency for International Development, United States President's Malaria Initiative, Abuja, Nigeria, <sup>7</sup>National Malaria Elimination Programme, Abuja, Nigeria

7671

## ESTABLISHING A VIRUS ECOLOGY DATA HUB FOR MODELING VIRUS DISEASE DYNAMICS

**Irene K. Akunda<sup>1</sup>**, David Simons<sup>2</sup>, James M. Hassell<sup>3</sup>, Joseph Kamau<sup>4</sup>, Stephanie N. Seifert<sup>1</sup>

<sup>1</sup>Washington State University, Pullman, WA, United States, <sup>2</sup>The Pennsylvania State University, State College, PA, United States, <sup>3</sup>Smithsonian's National Zoo & Conservation Biology Institute, Washington, DC, DC, United States, <sup>4</sup>Kenya Institute of Primate Research, Nairobi, Kenya

7672

## PARENTS' MOTIVATIONS AND EXPECTATIONS SEEKING PEDIATRIC CARE FROM AN INFORMAL PROVIDER ("VILLAGE DOCTOR") IN BANGLADESH

**Jane Putnam<sup>1</sup>**, Jyoti Bhushan Das<sup>2</sup>, Zahid Hasan Khan<sup>2</sup>, Olivia Hanson<sup>1</sup>, Sarah Dallas<sup>1</sup>, Mohammad Ashraful Amin<sup>2</sup>, Ishtiakul Islam Khan<sup>2</sup>, Md. Taufiqul Islam<sup>2</sup>, Mohammad Saeed Munim<sup>2</sup>, Ridwan Mostafa Shihab<sup>2</sup>, Debashish Biswas<sup>2</sup>, Firdausi Qadri<sup>2</sup>, Melissa H. Watt<sup>1</sup>, Eric Nelson<sup>3</sup>, Ashraful Islam Khan<sup>2</sup>, Daniel Leung<sup>1</sup>

<sup>1</sup>University of Utah, Salt Lake City, UT, United States, <sup>2</sup>International Center for Diarrhoeal Disease Research, Dhaka, Bangladesh, <sup>3</sup>University of Florida, Gainesville, FL, United States

7673

## FEASIBILITY AND ACCEPTABILITY OF AN ELECTRONIC DATA CAPTURE SYSTEM FOR A PHASE 2 CLINICAL TRIAL IN RURAL LIBERIA

**Alexandre Dyer<sup>1</sup>**, Nicole Fetcho<sup>1</sup>, Cooper W. Sannah<sup>2</sup>, Dormu S. Kolli<sup>2</sup>, Gary J. Weil<sup>1</sup>, Peter U. Fischer<sup>1</sup>, Patrick Kpanyen<sup>2</sup>

<sup>1</sup>Washington University, St. Louis, MO, United States, <sup>2</sup>National Public Health Institute of Liberia, Monrovia, Liberia

7674

## ESTABLISHING AN EVIDENCE STANDARD FOR DETERMINING CAUSE OF DEATHS IN ADULTS USING MINIMALLY INVASIVE TISSUE SAMPLING: EFFORTS OF THE GLOBAL MITS SURVEILLANCE ALLIANCE

**Ryan G. Wagner<sup>1</sup>**, Manoj Das<sup>2</sup>, Zokwane L. Mondlane<sup>1</sup>, Edwin Walong<sup>3</sup>, Jones Opoku-Mensah<sup>4</sup>, Samuel Harrison<sup>4</sup>, Grace Manu<sup>4</sup>, Norman Goco<sup>5</sup>, Dianna Blau<sup>6</sup>, Tia Paganelli<sup>6</sup>, Luiz Fernando Ferraz da Silva<sup>7</sup>

<sup>1</sup>MRC/Wits Agincourt Research Unit, Parktown, South Africa, <sup>2</sup>International Clinical Epidemiology Network New Delhi, New Delhi, India, <sup>3</sup>University of Nairobi, Nairobi, Kenya, <sup>4</sup>Kintampo Health Research Centre, Kintampo, Ghana, <sup>5</sup>RTI International, Research Triangle Park, NC, United States, <sup>6</sup>U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>7</sup>University Sao Paulo, Sao Paulo, Brazil

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## COVID-19 AWARENESS AND BEHAVIOR CHANGE AMONG RECENTLY PREGNANT WOMEN: FINDINGS FROM A HOUSEHOLD SURVEY IN BENIN

**Liyu Teklemicheal<sup>1</sup>**, Julie Buekens<sup>1</sup>, Julie Niemczura<sup>1</sup>, Aurore Ogouyemi-Hounto<sup>2</sup>, Manzidatou Alao<sup>3</sup>, Catherine Dentinger<sup>4</sup>, Ahmed Saadani Hassani<sup>5</sup>, Alexandre Binazon<sup>3</sup>, Faustin Onikpo<sup>3</sup>, Katherine Wolf<sup>6</sup>, Houetohossou Camille<sup>7</sup>, Julie R. Gutman<sup>8</sup>

<sup>1</sup>U.S. President's Malaria Initiative Impact Malaria project, MCD Global Health, Silver Spring, MD, United States, <sup>2</sup>Unité de Parasitologie/Faculté des Sciences de la Santé /Université d'Abomey Calavi, Cotonou, Benin, <sup>3</sup>U.S. President's Malaria Initiative Impact Malaria project, MCD Global Health, Cotonou, Benin, <sup>4</sup>U.S. President's Malaria Initiative, Malaria Branch, CDC, Atlanta, GA, United States, <sup>5</sup>U.S. President's Malaria Initiative, CDC, Cotonou, Benin, <sup>6</sup>U.S. President's Malaria Initiative Impact Malaria project, Jhpiego, Baltimore, MD, United States, <sup>7</sup>Ministry of Health, Cotonou, Benin, <sup>8</sup>Malaria Branch, CDC, Atlanta, GA, United States

7676

## SYSTEM THINKING IN THE CONTROL AND ELIMINATION OF NEGLECTED TROPICAL DISEASES IN MADAGASCAR

**Louise Kathini Makau-Barasa**, Elisabeth Leaning, Moses Aderogba, Eugene Ruberanziza, Kelly Zongo

The END Fund, New York, NY, United States

7677

## MODELLING THE EFFECT OF SEASONAL MALARIA CHEMOPREVENTION ON THE TRANSMISSION DYNAMICS OF MALARIA IN ZAMFARA STATE, NORTHWEST NIGERIA

**Debra U. Okeh<sup>1</sup>**, Afeez Abidemi<sup>2</sup>, Emmanuel A. Bakare<sup>2</sup>, Samson O. Olagbami<sup>2</sup>, Godswill U. Ogbonnaya<sup>1</sup>, Godwin O. Okafor<sup>1</sup>, Kingsley Metu<sup>1</sup>, Ugochukwu U. Onyeonoro<sup>1</sup>, Azubuike K. Onyebuchi<sup>1</sup>, Victor O. Ameh<sup>3</sup>, Emmanuel Shekarau<sup>3</sup>, Augustine U. Akubue<sup>4</sup>, Amos K. Langat<sup>5</sup>, Perpetua O. Nnemelu<sup>6</sup>, Idowu Olasupo<sup>2</sup>

<sup>1</sup>Federal Medical Centre Umuahia, Abia, Nigeria, <sup>2</sup>International Centre for Applied Mathematical Modelling and Data Analytics, Federal University Oye, Ekiti, Nigeria, <sup>3</sup>National Malaria Elimination Programme, Abuja, Nigeria, <sup>4</sup>Central Washington College, Enugu, Nigeria, <sup>5</sup>Pan African University Institute for Basic Sciences Technology and Innovation, Nairobi, Kenya, <sup>6</sup>Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria

7678

## INNOVATIONS IN MALARIA CAMPAIGNS IN MOZAMBIQUE: FROM DIGITALIZATION TO EVALUATION

**Mariana Da Silva<sup>1</sup>**, Gerito Augusto<sup>2</sup>, Julia Montaña López<sup>2</sup>, Bernardo García Espinosa<sup>3</sup>, Bradley Didier<sup>3</sup>, Baltazar Candrinho<sup>1</sup>

<sup>1</sup>National Malaria Control Program, Maputo, Mozambique, <sup>2</sup>World Vision, Maputo, Mozambique, <sup>3</sup>Clinton Health Access Initiative, Boston, MA, United States

## Global Health - Other

7679

## FREQUENCY OF HOUSEHOLD VISITS IN DEMOGRAPHIC SURVEILLANCE SYSTEM IN BANGLADESH AFFECTS ESTIMATES OF PERINATAL MORTALITY

**Qazi Sadeq-ur Rahman<sup>1</sup>**, Mohammad Zahid Hossain<sup>1</sup>, Abu Md. Saleheen<sup>1</sup>, A.K.M. Tanvir Hossain<sup>1</sup>, Md. Atique Iqbal Chowdhury<sup>1</sup>, Sanwarul Bari<sup>1</sup>, Emily Gurley<sup>2</sup>, Shams El Arifeen<sup>1</sup>

<sup>1</sup>International Centre for Diarrhoeal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh, <sup>2</sup>John Hopkins University, Baltimore, MD, United States

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## HPV SCREENING IN LOW-RESOURCE SETTINGS: A COMPARISON OF SELF-COLLECTED VAGINAL SWABS TRANSPORTED WITH AND WITHOUT VIRAL TRANSPORT MEDIUM

Rita Székely, **Debashish Das**, Jessica Markby, Xiao Hui Sem, Berra Erkosar, Sonjelle Shilton, Mikashmi Kohli, Angela Muriuki

FIND, Geneva, Switzerland

7681

### UNDERSTANDING CARE SEEKING PATTERNS FOR ANTENATAL CARE IN WESTERN KENYA

Julie R. Gutman<sup>1</sup>, Wycliffe Odongo<sup>1</sup>, Oliver Towett<sup>2</sup>, Daniel McDermott<sup>3</sup>, Kizito Obiet<sup>2</sup>, Brian Seda<sup>2</sup>, Fredrick Omiti<sup>2</sup>, Victoria Seffren<sup>1</sup>, Sarah G. Staedke<sup>4</sup>, Simon Kariuki<sup>2</sup>  
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### DESIGNING BETTER DENGUE TRIALS: UNDERSTANDING ATTITUDES, EXPERIENCES, AND EXPECTATIONS OF PATIENTS IN THREE ASIAN COUNTRIES

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### COMPREHENSIVE REVIEW ON THE USE OF ORAL CHOLERA VACCINE (OCV) IN ETHIOPIA: 2019 TO 2023

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### COVERAGE OF TWO-DOSES OF PRE-EMPTIVE ORAL CHOLERA VACCINE (OCV) MASS VACCINATION CAMPAIGN IN CHOLERA HIGH PRIORITY HOTSPOTS IN SHASHEMENE TOWN AND WOREDA, WEST ARSI ZONE, OROMIA REGION, ETHIOPIA

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### HEALTHCARE SEEKING BEHAVIOR AND KNOWLEDGE ASSOCIATED WITH CHOLERA AND DIARRHEAL ILLNESSES AMONG POPULATIONS LIVING IN CHOLERA ENDEMIC AND HOTSPOTS IN SHASHEMENE TOWN AND SHASHEMENE WOREDA, ETHIOPIA

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### DISSECTING WATER, SANITATION, AND HYGIENE (WASH) RISK FACTORS FOR CHOLERA AND GEOSPATIAL MAPPING OF WASH STATUS AND ITS ASSOCIATION WITH CHOLERA ATTACK RATE IN SHASHEMENE TOWN AND WOREDA, OROMIA REGION, ETHIOPIA

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### FACTORS ASSOCIATED TO GESTATIONAL WEIGHT GAIN TRAJECTORIES OF PREGNANT WOMEN LIVING IN A LIMITED RESOURCES SETTINGS IN SOUTHERN BENIN, WEST AFRICA

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### CAUSES OF MATERNAL MORTALITY IN RURAL BANGLADESH: ANALYSIS OF VERBAL AUTOPSY DATA OF CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE (CHAMPS) BANGLADESH

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### COMPARISON OF KNOWLEDGE, ATTITUDES AND PERCEPTIONS ON COVID-19 VACCINES HESITANCY BETWEEN RURAL AND URBAN COMMUNITIES IN DEMOCRATIC REPUBLIC OF CONGO

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## GRIEVING AND ITS IMPLICATIONS IN A RURAL SOUTH AFRICAN COMMUNITY: A QUALITATIVE EXPLORATIVE STUDY

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## NAVIGATING MATERNAL HEALTH CHALLENGES IN BANGLADESH: AN ANALYSIS OF PREGNANCY COMPLICATIONS AND CARE-SEEKING BEHAVIORS USING NATIONALLY REPRESENTATIVE SURVEYS

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**ENTERIC INFECTIONS, DIARRHEA AND INFLAMMATION IN CHILDREN DURING THE FIRST YEAR OF LIFE IN THE CITY OF EL ALTO IN BOLIVIA**

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**CLIMATE CHANGE, ECOSYSTEM SERVICES, AND COLLECTIVE ACTION IN THE ENVIRONMENT IN COSTA RICA: COMMUNITY ENGAGEMENT IN MITIGATION AND ADAPTATION**Timothy De Ver Dye<sup>1</sup>, Esteban Avendaño Fernández<sup>1</sup>, Carmen DiMare Hering<sup>2</sup>, Juan I. Barrios Arce<sup>3</sup>, José G. Pérez Ramos<sup>1</sup>, Freddy Piedra Salazar<sup>4</sup>, Lisette Alcántara Sanchez<sup>1</sup><sup>1</sup>University of Rochester School of Medicine and Dentistry, Rochester, NY, United States, <sup>2</sup>Universidad Latina de Costa Rica, San Jose, Costa Rica, <sup>3</sup>Universitat de Barcelona, Barcelona, Spain, <sup>4</sup>Independent Consultant, San Jose, Costa Rica

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**CO-PRODUCING AN EARLY WARNING PLATFORM TO FORECAST OUTBREAKS OF CLIMATE-SENSITIVE INFECTIOUS DISEASES**Chloe Fletcher<sup>1</sup>, Martín Lotto Batista<sup>1</sup>, Alba Llabrés-Brustenga<sup>1</sup>, Daniela Lührsen<sup>1</sup>, Bruno M. Carvalho<sup>1</sup>, Gabriela Müller<sup>2</sup>, Andrea Gómez<sup>2</sup>, Soledad López<sup>2</sup>, Paloma M. Carcamo<sup>3</sup>, Gabriel Carrasco-Escobar<sup>3</sup>, Juan D. Umaña<sup>4</sup>, Mauricio Santos-Vega<sup>4</sup>, Renata Gracie<sup>5</sup>, Diego Ricardo Xavier<sup>5</sup>, Christovam Barcellos<sup>5</sup>, Leslie Rollock<sup>6</sup>, Avel R. Diaz<sup>7</sup>, Sadie J. Ryan<sup>8</sup>, Anna M. Stewart-Ibarra<sup>9</sup>, Mercy Borbor-Cordova<sup>10</sup>, Rachel Lowe<sup>11</sup><sup>1</sup>Barcelona Supercomputing Center, Barcelona, Spain, <sup>2</sup>National Council for Scientific & Technical Research, Sante Fe, Argentina, <sup>3</sup>Health Innovation Laboratory, Institute of Tropical Medicine "Alexander von Humboldt", Universidad Peruana Cayetano Heredia, San Martin de Porres, Peru, <sup>4</sup>Research Group in Mathematical & Computational Biology, Universidad de los Andes, Bogotá, Colombia, <sup>5</sup>Institute of Scientific & Technological Communication & Information in Health, Fundação Oswaldo Cruz, Rio de Janeiro, Brazil, <sup>6</sup>Ministry of Health & Wellness, Saint Michael, Barbados, <sup>7</sup>International Research Institute for Climate & Society, Palisades, NY, United States, <sup>8</sup>Department of Geography, University of Florida, Gainesville, FL, United States, <sup>9</sup>Inter-American Institute For Global Change Research, Montevideo, Uruguay, <sup>10</sup>Faculty of Maritime Engineering & Marine Sciences, Escuela Superior Politécnica del Litoral, Guayaquil, Ecuador, <sup>11</sup>Catalan Institution for Research & Advanced Studies, Barcelona, Spain

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**THE BURDEN OF LEPTOSPIROSIS IN PERU, 2006-2022: THE INFLUENCE OF REGION-SPECIFIC METEOROLOGICAL FACTORS AND GENDER-SPECIFIC DISPARITIES IN OUTCOMES**Paloma M. Carcamo<sup>1</sup>, Gabriel Carrasco-Escobar<sup>2</sup>, Margaret L. Lind<sup>1</sup>, Albert I. Ko<sup>1</sup><sup>1</sup>Yale University, New Haven, CT, United States, <sup>2</sup>Universidad Peruana Cayetano Heredia, Lima, Peru

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**ASSOCIATIONS BETWEEN ENVIRONMENTAL TEMPERATURE, RAINFALL, STILLBIRTH, AND NEONATAL MORTALITY IN THE DEMOCRATIC REPUBLIC OF THE CONGO**Carrie J. Ngongo<sup>1</sup>, Donal Bisanzio<sup>1</sup>, Brian Hutchinson<sup>1</sup>, Karl Angendu Baki<sup>2</sup>, Pierre Akilimali<sup>2</sup><sup>1</sup>RTI International, Research Triangle Park, NC, United States, <sup>2</sup>Institut National de Sante Publique, Kinshasa, Democratic Republic of the Congo

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**UNDERSTANDING ASSOCIATIONS BETWEEN ENVIRONMENTAL TEMPERATURE, RAINFALL, AND NEWBORN HEALTH OUTCOMES IN SENEGAL**Carrie J. Ngongo<sup>1</sup>, Donal Bisanzio<sup>1</sup>, Abdou Gueye<sup>2</sup>, Gabriella Corrigan<sup>1</sup>, Algaye Ngom<sup>2</sup>, Mamoudou Aw<sup>2</sup>, Cheikh Gassama<sup>2</sup>, Tidiane Gadiaga<sup>3</sup><sup>1</sup>RTI International, Research Triangle Park, NC, United States, <sup>2</sup>RTI International, Dakar, Senegal, <sup>3</sup>Ministère de la Santé et de L'Action Sociale, Dakar, Senegal

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**ENHANCING BRICK KILN EFFICIENCY IN BANGLADESH: A CRUCIAL STEP TOWARDS AIR POLLUTION REDUCTION IN SOUTH ASIA**

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**TIME SERIES ANALYSIS OF CLIMATE AND ALL-CAUSE MORTALITY PATTERNS IN UGANDA**

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### A RETROSPECTIVE ANALYSIS OF CHRONIC KIDNEY DISEASE OF UNKNOWN ETIOLOGY (CKDU) AT A SINGLE-CENTER UNIVERSITY HOSPITAL SYSTEM IN THE STATE OF FLORIDA, USA

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### MIDWIVES A VITAL CLIMATE SOLUTION

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## Global Health - Security/Emerging Infection Preparedness, Surveillance and Response(s)

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### CHARACTERIZING LASSA FEVER INCIDENCE IN SOUTHERN NIGERIA

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### STRENGTHENING ROUTINE SURVEILLANCE SYSTEMS FOR VACCINE SAFETY IN THE DISTRICTS IN MALAWI: CHALLENGES, MITIGATION MEASURES, AND LESSONS LEARNED FROM ACTIVE HOSPITAL-BASED SENTINEL SITE SURVEILLANCE PROGRAM

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**JUSTINE SAMANTHA BATETA**, MUGAHI RICHARD, NTEGE CHARLES  
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**Silvia D'Arcangelo**<sup>1</sup>, Abbie Bown<sup>1</sup>, Angela Sweed<sup>1</sup>, Matthew Catton<sup>1</sup>, Klara Haluzova<sup>1</sup>, Hermione Conti-Frith<sup>1</sup>, Daniel Bailey<sup>1</sup>, Jacob Terrey<sup>1</sup>, Ella Fisher<sup>1</sup>, Ruth Elderfield<sup>1</sup>, David Jackson<sup>2</sup>, Marian Killip<sup>2</sup>, Kathryn Ryan<sup>1</sup>, Alastair Handley<sup>1</sup>, Yper Hall<sup>1</sup>, Susan Fotheringham<sup>1</sup>, Richard Vipond<sup>1</sup>  
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**Vivian Kwaghe**<sup>1</sup>, Cyril Erameh<sup>2</sup>, Jay Samuels<sup>3</sup>, Lauren Courtney<sup>4</sup>, Jean Kim<sup>4</sup>, Claire Quiner<sup>4</sup>, Ephraim Ogbaini<sup>2</sup>, Osas Edeawe<sup>2</sup>, Nankpah Vongdip<sup>1</sup>, Philippe Chebu<sup>3</sup>, Adamu Ephraim<sup>4</sup>, Kat Asman<sup>4</sup>, Victoria Orok<sup>1</sup>, Oladimeji Matthew<sup>1</sup>, Onyia J. Ejike<sup>1</sup>, Ikponmwoosa Odia<sup>2</sup>, Femi Owolagba<sup>3</sup>, Eke Ofuche<sup>3</sup>, Emmanuel Oga<sup>4</sup>  
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### TRANSCRIPTIONAL AND GENOMIC SIGNATURES ASSOCIATED WITH CHLORFENAPYR RESISTANCE IN THE PRIMARY AFRICAN MALARIA VECTOR ANOPHELES GAMBIAE

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### WHOLE TRANSCRIPTOME SEQUENCING EXPOSES DISTINCT INSECTICIDE RESISTANCE MECHANISMS IN ANOPHELES ARABIENSIS OF VARYING AGES FROM MWAGAGALA, TANZANIA

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### INSECTICIDE RESISTANCE STATUS OF Aedes Aegypti IN THE URBAN AREA OF BAMAKO IN THE CONTEXT OF A DENGUE EPIDEMIC

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### REDUCED EFFICACY OF PBO-LLINS AGAINST MALARIA VECTORS IN WEBUYE, BUNGOMA COUNTY, WESTERN KENYA

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### WHOLE GENOME SEQUENCE ANALYSIS OF POPULATION DYNAMICS AND INSECTICIDE RESISTANCE MARKERS IN ANOPHELES MELAS FROM THE BIJAGÓS ARCHIPELAGO, GUINEA-BISSAU

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### INSECTICIDE RESISTANCE IN *ANOPHELES GAMBIAE* COMPLEX IN ONDO AND ANAMBRA STATES OF NIGERIA

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### METABOLIC BASIS OF PYRETHROID RESISTANCE IN *AEDES AEGYPTI*

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### INSECTICIDE CONTACT EFFECTIVENESS OF ULV FOGGING ACROSS A HETEROGENEOUS PHYSICAL AND FITNESS LANDSCAPE

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**Tales V. Pascini**, Peter F. Billingsley, Grace Jennings, Ehud Inbar, Dimitri Koutzoumis, Eric James, Urvashi Ray, Sumana Chakravarty, Lixin Gao, MingLin Li, Jeremy Guth, B. Kim Lee Sim, Stephen L. Hoffman

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### IMMUNOMETABOLIC CROSSTALK IN *AEDES FLUVIATILIS* *WOLBACHIA PIPIENTIS* SYMBIOSIS

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## FACTORS ASSOCIATED WITH INSECTICIDE-TREATED NET OWNERSHIP BEFORE A MASS DISTRIBUTION CAMPAIGN IN ANAMBRA STATE, NIGERIA

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## LQAS: A METHOD TO MONITOR LLINS AFTER HIGHLY TARGETED DISTRIBUTIONS IN ELIMINATION SETTINGS

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## MALARIA VECTOR POPULATION DYNAMICS AND PLASMODIUM TRANSMISSION IN PENKAMICHEL, WESTERN HIGHLANDS OF CAMEROON

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## THE ROCKIES AND HIGH PLAINS VECTOR-BORNE DISEASES CENTER (RAHP VEC)

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## RETHINKING LLIN QUANTIFICATION METHODS FOR ENHANCED MALARIA CONTROL: INSIGHTS FROM CENTRAL AMERICA

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## REGIONAL VARIABILITY IN THE RELATIONSHIP BETWEEN PRECIPITATION AND DENGUE INCIDENCE IN BRAZIL: INSIGHTS FROM BIWEEKLY TIME SERIES ANALYSIS

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## SPATIALLY REFINED ESTIMATES OF THE RISK OF WEST NILE VIRUS

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## HIGH-THROUGHPUT SCREENING OF BIO-INSECTICIDES AGAINST MOSQUITO VECTORS

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## DEVELOPMENT AND EVALUATION OF PCR-BASED DETECTION OF WMEI IN Aedes Aegypti EGGS FOR USE IN LARGE SCALE MONITORING OF WOLBACHIA-BASED INTERVENTIONS FOR ARBOVIRAL DISEASES

Elisabeth Nelson<sup>1</sup>, Thiago N. Pereira<sup>2</sup>, Carolina Camillo<sup>3</sup>, Thiago Rodrigues da Costa<sup>4</sup>, Derek A.T. Cummings<sup>5</sup>, Mauro M. Teixeira<sup>6</sup>, Albert I. Ko<sup>1</sup>, Luciano A. Moreira<sup>2</sup>

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## EFFECTS OF BIOLOGICAL CONTROL OF MOSQUITO LARVAE: A META-ANALYSIS

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## STAKEHOLDER-INFORMED DEVELOPMENT OF MICROSPORIDIA MBITA BASED MALARIA CONTROL INTERVENTION

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## IDENTIFICATION OF DENGUE HOTSPOTS IN ENDEMIC REGIONS OF PERU. A SPATIAL ANALYSIS

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## ASSESSING THE RESIDUAL EFFICACY OF PYRIPROXYFEN-BASED LARVICIDES FOR THE CONTROL OF THE INVASIVE MALARIA VECTOR ANOPHELES STEPHENSI IN ETHIOPIA

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## TREND MALARIA PREVALENCE AND ASSOCIATED RISK FACTORS AMONG SCHOOL CHILDREN IN MAINLAND TANZANIA, BETWEEN 2015 AND 2023; A MULTILEVEL ANALYSIS OF SCHOOL MALARIA AND PARASITE SURVEYS

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## Mosquitoes - Molecular Biology, Population Genetics and Genomics

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## POPULATION GENOMICS OF AN INVASIVE MOSQUITO VECTOR, Aedes Aegypti, IN SOUTHERN NEVADA

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## CHARACTERIZING EPITOPE SEQUENCE-INDEPENDENT DISRUPTION OF IMMUNOGENICITY IN NOVEL PLASMODIUM FALCIPARUM ANTIGENS IDENTIFIED THROUGH WHOLE GENOME SIEVE ANALYSIS

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Abdoulaye Kane DIA<sup>1</sup>, Pauline Naudion<sup>2</sup>, Noshine Mohammad<sup>2</sup>, Pierre Yves Boëlle<sup>3</sup>, Abdoulaye Konaté<sup>4</sup>, Lassana Konaté<sup>4</sup>, El Hadji Amadou Niang<sup>4</sup>, Renaud Piarroux<sup>2</sup>, Xavier Tannier<sup>2</sup>, Cécile Nabet<sup>2</sup>

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## CRYOPRESERVATION OF ANOPHELES STEPHENSI EGGS: GENOTYPIC CONSERVATION AFTER LONG TERM CRYOSTORAGE AND GENERATION OF A STRAIN-SPECIFIC MARKERS

Ehud Inbar<sup>1</sup>, Tales Vicari Pascini Pascini<sup>1</sup>, Ashton T. Belew<sup>2</sup>, Najib M. el-Sayed<sup>2</sup>, Igor Sharakhov<sup>3</sup>, B. Kim Lee Sim<sup>1</sup>, Jeremy Guth<sup>1</sup>, Stephen L. Hoffman<sup>1</sup>, Eric R. James<sup>1</sup>, Peter F. Billingsley<sup>1</sup>

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**GENE DRIVE PERFORMANCE IN SMALL CAGE POPULATIONS OF THE YELLOW FEVER MOSQUITO, *Aedes aegypti***

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**EFFECT OF ANTICOAGULANT TREATED BLOOD ON GENE EXPRESSION OF *Aedes aegypti* MOSQUITOES**

Alyssa Schwinn, Arley Calle-Tobon, Eric Dumonteil, Samuel Jameson, Berlin Londono-Renteria  
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**EXPLORING THE VIROME OF THE WEST NILE VIRUS VECTOR *Culex tarsalis***

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**TOTAL RNA SEQUENCING TO IDENTIFY MOLECULAR MARKERS OF BACTERIA AND FUNGI IN *Anopheles darlingi***

Paola Muñoz-Laiton, Juan C. Hernández-Valencia, Stefani Piedrahita, Juan C. Gómez-Herrera, Margarita M. Correa  
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**HI-C PROXIMITY LIGATION APPROACH IDENTIFIED CHROMOSOMAL REARRANGEMENTS IN *Culex pipiens* MOSQUITOES**

Yifan Feng<sup>1</sup>, Varvara Lukyanchikova<sup>1</sup>, Jiangtao Liang<sup>1</sup>, Dimitriy A. Karagodin<sup>2</sup>, Ilya I. Brusentsov<sup>2</sup>, Megan L. Fritz<sup>3</sup>, Maria V. Sharakhova<sup>1</sup>  
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**THE MICROBIOTA OF *Anopheles* AND *Aedes* MOSQUITOES IN FRENCH GUIANA: INVESTIGATING MICROBIAL COMMUNITIES AND THEIR RELATIONSHIP WITH ENVIRONMENTAL FACTORS**

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**CHROMOSOMAL DIMORPHISM OF THE LEFT ARM OF CHROMOSOME IN *Anopheles quadrimaculatus* IS ASSOCIATED WITH MULTIPLE OVERLAPPING CHROMOSOMAL INVERSIONS**

Ankita Sindhania<sup>1</sup>, Miroslav Nurridinov<sup>2</sup>, Varvara Lukyanchikova<sup>1</sup>, Jiangtao Liang<sup>1</sup>, Chujia Chen<sup>1</sup>, Zhijian Tu<sup>1</sup>, Igor Sharakhov<sup>1</sup>, Maria Sharakhova<sup>1</sup>  
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**EXPANDING TOOLBOX FOR ODOR-BASED TSETSE FLY CONTROL IN EAST AFRICA**

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**Viruses - Emerging Viral Diseases**

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Wondemeneh M. Tebeje<sup>1</sup>, Solomon K. Getahun<sup>1</sup>, Bezabih K. Tilahun<sup>1</sup>, Yibeyin M. Melis<sup>1</sup>, Araya G. Hagos<sup>2</sup>, Chalachw S. Gebeyehu<sup>1</sup>, Fitsum B. Endeshaw<sup>3</sup>, Hiwot A. Hailu<sup>1</sup>, Mesfin W. Getaneh<sup>1</sup>, Aduugna W. Woyessa<sup>1</sup>, Chad L. Cross<sup>4</sup>, Louisa A. Messenger<sup>5</sup>  
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**SEROPREVALENCE OF DENGUE IN SENEGAL**

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**PRECLINICAL EVALUATION OF LIVE-ATTENUATED, REARRANGED V4020 VACCINE FOR VENEZUELAN EQUINE ENCEPHALITIS**

Peter Pushko<sup>1</sup>, Joseph Mattapallil<sup>2</sup>, Igor Lukashevich<sup>3</sup>, Dylan M. Johnson<sup>4</sup>, David Saunders<sup>2</sup>, Irina Tretyakova<sup>1</sup>, Donghoon Chung<sup>3</sup>  
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**EVALUATING THE EFFICACY AND CORRELATES OF PROTECTION OF AN INSECT-SPECIFIC FLAVIVIRUS VECTORED ZIKA VACCINE**

Albert Jonathan Auguste<sup>1</sup>, Danielle Porier<sup>1</sup>, Manette Tanelus<sup>1</sup>, Dawn I. Auguste<sup>1</sup>, Awadalkareem Adam<sup>2</sup>, Irving C. Allen<sup>3</sup>, Tian Wang<sup>2</sup>  
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**BIOLOGICAL AND MOLECULAR PROPERTIES OF A SYLVATIC YELLOW FEVER PLAQUE SIZES VARIANTS ISOLATED FROM A HUMAN PATIENT IN BRAZIL DURING THE 2017-18 OUTBREAK**

Leticia Trindade Almeida<sup>1</sup>, Andreza Parreiras Gonçalves<sup>1</sup>, Maria Fernanda Alves Souza e Silva<sup>1</sup>, Thais Bárbara de Souza Silva<sup>1</sup>, Thais Alkifeles Costa<sup>2</sup>, Betânia Paiva Drumond<sup>2</sup>, Andréa Teixeira de Carvalho<sup>1</sup>, Pedro Augusto Alves<sup>1</sup>  
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**A COMMERCIAL SEROLOGIC ASSAY (ELISA) FOR DETECTION OF ZIKA VIRUS IGG ANTIBODIES WITH MINIMAL CROSS-REACTIVITY**

Santosh George<sup>1</sup>, Vashti Irani<sup>1</sup>, Gabrielle Farulla-Bastian<sup>1</sup>, Hetali Shah<sup>1</sup>, Jeremy Schonhorn<sup>1</sup>, Alexandra Rockstroh<sup>2</sup>, Sebastian Ulbert<sup>2</sup>, Rachel Martinelli<sup>3</sup>, Graham Simmons<sup>4</sup>, Mars Stone<sup>4</sup>, Michael Busch<sup>3</sup>, Andrew Levin<sup>1</sup>  
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Saturday  
November 16

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### DEVELOPMENT OF A LATERAL FLOW DEVICE FOR DETECTING ANTI-MPXV SPECIFIC ANTIBODIES AS A MECHANISM TO CONDUCT SEROSURVEILLANCE AND TARGET AT-RISK INDIVIDUALS FOR VACCINATION

Ashley Otter<sup>1</sup>, Scott Jones<sup>1</sup>, Sian Faustini<sup>2</sup>, Toby Jones<sup>1</sup>, Jennifer Heaney<sup>2</sup>, Alex Richter<sup>2</sup>  
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### CLINICAL AND EPIDEMIOLOGICAL CHARACTERISTICS OF AIRCREW INFECTIOUS WITH MPOX DURING TRAVEL, UNITED STATES, MAY 10 - SEPTEMBER 30, 2022

Sheila C. Roy, Kristin C. Delea, Alida M. Gertz, Sundari R. Mase, Francisco Alvarado-Ramy, Clive Brown, Shannon Gearhart  
 US Centers for Disease Control and Prevention, Atlanta, GA, United States

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### COMPARISON OF EBOV GP IGG ANTIBODY REACTIVITY; RESULTS FROM TWO ASSAYS: FANG AND A MAGPIX-BASED MULTIPLEX ASSAY IN THE DEMOCRATIC REPUBLIC OF THE CONGO

Sydney Merritt<sup>1</sup>, Megan Halbrook<sup>1</sup>, Olivia A. Smith<sup>2</sup>, Nicole A. Hoff<sup>1</sup>, Jean Paul Kompany<sup>3</sup>, Merly Tambu<sup>3</sup>, Skylar A. Martin<sup>1</sup>, Teri Ann Wong<sup>2</sup>, Amie Jarra<sup>4</sup>, Angelica L. Barrall<sup>1</sup>, Kamy Musene<sup>1</sup>, Michael Beia<sup>3</sup>, Prabha Chandrasekaran<sup>4</sup>, Irina Maljkovic Berry<sup>4</sup>, Jean Jacques Muyembe-Tamfum<sup>3</sup>, Didine Kaba<sup>3</sup>, Placide Mbala-Kingebeni<sup>3</sup>, Axel T. Lehrer<sup>2</sup>, Anne W. Rimoin<sup>1</sup>  
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### EXPLORING THE IMPACT OF RANDOMIZED CONTROLLED TRIALS EVALUATING COVID-19 THERAPEUTICS ON CLINICAL PRACTICE GUIDELINES

Shermarke Hassan, Prabin Dahal, James Watson, Fiona Caldwell, Farhad Shokraneh, Philippe Guérin  
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### BEYOND EBOLA VIRUS AND LASSA VIRUS IN GUINEA: MNGS UNMASKS A SPECTRUM OF VIRAL PATHOGENS IN SAMPLES OF PATIENTS WITH HEMORRHAGIC FEVER COLLECTED DURING EPIDEMICS AND SURVEILLANCE ACTIVITIES

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### VARIABILITY OF REPORTABLE DATA BASED ON CALCULATION OF CHIKUNGUNYA VIRUS NEUTRALIZING ANTIBODY TITERS

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### FOUR YEARS LATER: STABILITY OF THE COVID-19 SEROLOGY CONTROL PANEL DRIED TUBE SPECIMENS

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### IMPACT OF VACCINATION STRATEGIES FOR HEALTH-CARE WORKERS AGAINST MERS-COV: REACTIVE STRATEGIES OUTPERFORM PROACTIVE STRATEGIES

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### TYPE OF VACCINE RECEIVED AND CLINICAL SEVERITY IN PATIENTS WITH TWO DOSES OF COVID-19 IMMUNIZATION

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Juana del Valle Mendoza<sup>1</sup>, Hugh Watson<sup>2</sup>, Yordi Tarazona-Castro<sup>1</sup>, SeungHwan Lee<sup>3</sup>, Sang Chun Ji<sup>3</sup>, Wilmer Silva-Caso<sup>1</sup>, Miguel A. Aguilar-Luis<sup>1</sup>  
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Alejandra Ingunza<sup>1</sup>, Luis M. Franchi<sup>1</sup>, Rubelio Cornejo<sup>1</sup>, Ana I. Gil<sup>1</sup>, Lucie Ecker<sup>1</sup>, Eddie Bartlett<sup>2</sup>, Anna Montmayeur<sup>2</sup>, Jan Vinjé<sup>2</sup>, Claudio F. Lanata<sup>1</sup>

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## A SYSTEMATIC REVIEW OF FINE SCALE ESTIMATES FOR CHIKUNGUNYA MODELING IN THE CARIBBEAN: THE MISSING IMPACT OF HUMAN MOVEMENT ON TRANSMISSION RISK

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## EVIDENCE FOR THE DRIVERS OF INFANT DENGUE RISK FROM SURVEILLANCE DATA IN BRAZIL

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### MOLECULAR TYPING OF NON POLIO ENTEROVIRUS ISOLATED FROM STOOL SAMPLES AS PART OF THE EPIDEMIOLOGICAL SURVEILLANCE OF ACUTE FLACCID PARALYSIS IN RD CONGO

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### IMPROVING DIAGNOSIS AND MANAGEMENT OF VIRAL INFECTIONS AMONG UGANDAN CHILDREN UNDERGOING CANCER CHEMOTHERAPY THROUGH USE OF NEXT-GENERATION METAGENOMIC SEQUENCING

Kristen Bastug<sup>1</sup>, Benigna Namara<sup>2</sup>, Olivia Toles<sup>1</sup>, Svatava Merkle<sup>3</sup>, Alison Woods<sup>1</sup>, Wilber Bwambale<sup>1</sup>, Joyce Kambugu<sup>4</sup>, Beth Thielen<sup>1</sup>

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### SEROPREVALENCE OF SARS-COV-2 AMONG YOUNG ADULTS: A CROSS-SECTIONAL ANALYSIS OF INFECTION AND VACCINATION

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### SARS-COV-2 ANTIBODIES SEROPREVALENCE AFTER CORONAVAC IMMUNIZATION IN GUARAMIRANGA, NORTHEAST BRAZIL, 2021-2022

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### SURVEILLANCE OF SARS-COV-2 BASED ON SANGER SEQUENCING OF THE SPIKE GENE ALLOWED THE DETECTION AND TRACKING OF VARIANTS IN BOLIVIA FROM 2020 TO 2023

Belén C. Choque-Pardo<sup>1</sup>, Sonia Jimenez-Pacohuanca<sup>1</sup>, Leonarda Acha Alarcón<sup>2</sup>, Alejandra Torrez<sup>1</sup>, Julia Barreta<sup>1</sup>, Volga Iñiguez<sup>1</sup>

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### DETECTION OF DENGUE AND METAGENOMIC ANALYSIS OF Aedes Aegypti VIROME IN KISUMU, KENYA

Tabitha Wanjiru Ng'ang'a<sup>1</sup>, Solomon Langat<sup>2</sup>, Wallace Bulimo<sup>2</sup>, Johnson Kinyua<sup>3</sup>, Nicholas Odemba<sup>4</sup>, Santos Yalwala<sup>1</sup>, Jaree Johnson<sup>5</sup>, Elly Ojwang<sup>1</sup>, Timothy Egbo<sup>1</sup>, Eric Garges<sup>1</sup>, Fredrick Eyase<sup>1</sup>

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### UNDERSTANDING HUMAN-ANIMAL-TICK INTERACTION AND RISK FACTORS WHICH LEAD TO THE EXPOSURE TO CRIMEAN CONGO HAEMORRHAGIC FEVER VIRUS (CCHFV) IN UGANDA: A MULTIDISCIPLINARY STUDY

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### DEVELOPMENT OF A RT-LAMP ASSAY FOR LA CROSSE VIRUS

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### ISOLATION OF LA CROSSE VIRUS FROM Aedes triseriatus (DIPTERA: CULICIDAE) IN WESTERN NORTH CAROLINA

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### CMV INFECTION AND SHEDDING IN PREGNANT WOMEN, CHILDREN, AND INFANTS IN SIERRA LEONE

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### SPATIOTEMPORAL FORECASTING OF NIPAH VIRUS SPILLOVER RISK IN BANGLADESH, 2007-2023

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### VIRAL SURVEILLANCE IN CAVE-DWELLING BATS FROM KAPCHORWA DISTRICT IN EASTERN UGANDA REVEALS DETECTION OF MULTIPLE CORONAVIRUSES, PARAMYXOVIRUSES, AND RHABDOVIRUSES

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### ROLE OF MULTIPLEXED IMMUNOASSAYS TO DETERMINE IMPACT OF NON-SPECIFIC BINDING ON IMMUNOASSAYS: IMPLICATIONS OF "STICKY SERA" IN DISEASE SEROSURVEILLANCE IN THE DEMOCRATIC REPUBLIC OF THE CONGO

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### SEROPOSITIVITY TO BOVINE CORONAVIRUS IN DAIRY WORKERS AND COMMUNITY DWELLERS: RESULTS OF A PILOT STUDY

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### EVALUATION OF AMINO ACID DETERMINANTS OF DIFFERENTIAL SERUM NEUTRALIZATION BETWEEN DIVERGENT AND EPIDEMIC DENGUE TYPE 1

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### SEROLOGICAL EVIDENCE OF EMERGING HENIPAVIRUSES AND PARAMYXOVIRUSES IN PTEROPODID BATS IN THE PHILIPPINES

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### INTERROGATING THE ECOLOGY OF NO-KNOWN VECTOR FLAVIVIRUSES THROUGH *IN VITRO* VALIDATION OF MODEL-BASED HOST-VECTOR-VIRUS PREDICTIONS

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## Viruses - Immunology

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### PLASMA IGM ANTIBODIES CONTRIBUTE TO VIRUS NEUTRALIZATION IN EARLY IMMUNE RESPONSES TO SECONDARY DENGUE VIRUS INFECTIONS

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### INCREASED FREQUENCY OF ANTIGEN-SPECIFIC CD4+ T CELL RESPONSES FOLLOWING VACCINATION WITH ORAL LIVE ATTENUATED POLIO VACCINES

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### DISTINCT CELLULAR IMMUNE RESPONSES ARE ASSOCIATED WITH PATHOGENESIS, DISEASE PROGRESSION, AND LATE-RELAPSING HEPATITIS IN YELLOW FEVER PATIENTS

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### FLAVIVIRUS ANTIGENIC CARTOGRAPHY OF PREEXISTING NEUTRALIZING ANTIBODIES IN A PEDIATRIC COHORT IN MERIDA, MEXICO, A HYPERENDEMIC AREA FOR ARBOVIRUSES

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**CHARACTERIZATION OF NLRP3 INFLAMMASOME ACTIVATION IN HUMAN MONOCYTES AND MACROPHAGES INFECTED WITH OROPOUCHE VIRUS**

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**VIRUS SPECIFIC T CELL RESPONSES IN A CONTROLLED HUMAN ZIKA CHALLENGE MODEL**

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**IMPACT OF DENGUE VIRUS INFECTION ON COMPLEMENT ACTIVATION AND REGULATION**

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**PREMATURE HIGH LEVELS OF ANTIBODY-DEPENDENT COMPLEMENT ACTIVATION IS ASSOCIATED WITH SEVERE DISEASE IN SECONDARY DENV3 INFECTIONS**

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**ASSESSING THE ANTIBODY RESPONSE AND SOLUBLE MEDIATOR PROFILES INDUCED BY WILD-TYPE AND VACCINE STRAINS OF THE YELLOW FEVER VIRUS: LESSONS FROM THE 2016-2018 OUTBREAK IN BRAZIL**

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**BREAKTHROUGH INFECTION ENHANCES SARS-COV-2 SPECIFIC T CELL RESPONSES AND GENERATES NOVEL EPITOPE SPECIFICITIES**

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**DENGUE ADAPTIVE IMMUNE RESPONSES AND HLA DIVERSITY IN A PUERTO RICAN COHORT**

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**PROTEOMIC DECONVOLUTION OF CIRCULATING ANTIBODY REPERTOIRES ELICITED BY SECONDARY DENV INFECTION**

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**ANALYZING THE IMMUNOGENICITY PROFILE OF ARIPO-ZIKA**

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**DESIGNING DENGUE VIRUS 2 (DV2) SUBUNIT VACCINE USING A STRUCTURE-GUIDED APPROACH TO REFOCUS NEUTRALIZING ANTIBODIES (NAB) TO POTENT, QUATERNARY NAB EPITOPES OF DV2**

Devina J. Thiono, Thanh T.N. Phan, Demetrios Samaras, Shaomin Tian, Lawrence J. Forsberg, Ruby P. Shah, Lucas Laszacs, Brian Kuhlman, Aravinda de Silva  
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**TOOLS FOR ANALYZING THE IMMUNE RESPONSE TO VIRUS INFECTION AND VACCINES**

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**Viruses - Vaccine Clinical Trials**

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**IMMUNOGENICITY OF COVID-19 MRNA, VIRAL VECTOR, AND INACTIVATED VIRUS VACCINES REGIMENS**

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**ASSESSING THE INFLUENCE OF ASSUMPTIONS ON VACCINE EFFICACY AGAINST ASYMPTOMATIC DENGUE CASES ON IMPACT OF DENGUE VACCINATION STRATEGIES: A MODELING STUDY**

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### PHASE 1 TRIAL TO MODEL PRIMARY, SECONDARY, AND TERTIARY DENGUE INFECTION USING A MONOVALENT VACCINE

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### EVALUATION OF T-CELL RESPONSES TO TETRAVALENT DENGUE VACCINE TAK-003 BY AGE GROUP

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### A NON-INFERIORITY TRIAL COMPARING TWO VACCINES (RABIX-VC VS. RABIPUR) FOR RABIES AMONG ADULTS IN DHAKA, BANGLADESH

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### BARRIERS AND FACILITATORS OF YELLOW FEVER VACCINE UPTAKE AMONG CHILDREN AGED 12-23 MONTHS IN WEST POKOT SUB-COUNTY, WEST POKOT COUNTY, KENYA

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### SAFETY AND TOLERABILITY OF A VSV-BASED LASSA FEVER VACCINE (RVSVΔG-LASV-GPC) IN HEALTHY ADULTS: UPDATES OF A FIRST-IN HUMAN, PLACEBO-CONTROLLED DOSE ESCALATION AND DOSE EXPANSION TRIAL (IAVI C102)

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### INFORMING LASSA FEVER VACCINE TRIAL IMPLEMENTATION THROUGH COMMUNITY ENGAGEMENT

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### ASSESSING IMMUNOGENICITY OF VACCINES AGAINST FILOVIRUSES: CHALLENGES AND PROSPECTS

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### DENGUE VIRUS GENETIC DIVERSITY IN SAMPLES FROM PARTICIPANTS ENROLLED IN THE BUTANTAN-DENGUE VACCINE PHASE 3 TRIAL IN BRAZIL

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### CHIKUNGUNYA: ONGOING DOSE-RESPONSE, SAFETY, AND IMMUNOGENICITY PHASE 2 TRIAL OF SINGLE-DOSE LIVE-ATTENUATED VACCINE (VLA1553) IN CHILDREN AGED 1 TO 11 YEARS

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### PRECLINICAL IMMUNOGENICITY AND EFFICACY OF A VESICULAR STOMATITIS VIRUS-BASED SUDAN VIRUS VACCINE AND AN UPDATE ON ITS PERFORMANCE IN A PHASE 1 CLINICAL TRIAL

Nina Malkevich<sup>1</sup>, Christopher Cooper<sup>1</sup>, Gavin Morrow<sup>1</sup>, Arianna Marini<sup>2</sup>, Marija Zarić<sup>2</sup>, Gretchen Meller<sup>1</sup>, Y. Choi<sup>1</sup>, K. Peregrina<sup>1</sup>, A. Wilson<sup>1</sup>, L. Zhou<sup>1</sup>, Thomas Postler<sup>1</sup>, F. Hou<sup>1</sup>, S. Li<sup>1</sup>, K. Dai<sup>1</sup>, Alexey Karpov<sup>1</sup>, Eddy Sayeed<sup>1</sup>, Vince Philipponis<sup>1</sup>, Pat Fast<sup>1</sup>, Dhurata Dono<sup>1</sup>, Jane Halpern<sup>1</sup>, Allison Kennedy<sup>1</sup>, Harriet Park<sup>1</sup>, Andrew Kiliansky<sup>1</sup>, Krystle Agans<sup>3</sup>, Victoria Borisevich<sup>3</sup>, Courtney Woolsey<sup>3</sup>, Robert Cross<sup>3</sup>, Thomas Giesbert<sup>3</sup>, Daniel Deer<sup>3</sup>, Mark Feinberg<sup>1</sup>, Christopher Parks<sup>1</sup>, Swati Gupta<sup>1</sup>

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### SAFETY AND IMMUNOGENICITY OF MRNA ZIKA VIRUS VACCINE: RESULT FROM PHASE 2 TRIAL OF MRNA-1893

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### CHIKUNGUNYA VIRUS-LIKE PARTICLE VACCINE INDUCES CROSS-NEUTRALIZING ANTIBODIES AGAINST ALL THREE CHIKUNGUNYA GENOTYPES AND OTHER ALPHAVIRUSES

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### CHARACTERIZATION OF IMMUNE RESPONSES TO THE RVSΔG-LASV-GPC VACCINE CANDIDATE IN HEALTHY ADULTS

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### CONSISTENCY OF IMMUNOGENICITY AND SAFETY IN THREE CONSECUTIVE LOTS OF A TETRAVALENT DENGUE VACCINE CANDIDATE (BUTANTAN DV): A RANDOMIZED PLACEBO CONTROLLED TRIAL IN DENGUE NAIVE BRAZILIAN ADULTS

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## Malaria - Antimalarial Resistance and Chemotherapy

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### ANTIMALARIAL ACTIVITY OF COMMONLY USED HERBAL PRODUCTS IN GHANA: DECIPHERING THE UNACCOUNTED DRUG PRESSURE ON *PLASMODIUM* PARASITES

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### ASSESSMENT OF ANTIMALARIAL RESISTANCE AND ASSOCIATED MARKERS IN GAMBIAN *P. FALCIPARUM* CLINICAL ISOLATES

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### LESSONS LEARNED FROM MALARIA DRUG EFFICACY STUDIES IN EQUATORIAL GUINEA

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### EX VIVO ANTIMALARIAL DRUG SUSCEPTIBILITIES AND MOLECULAR MARKERS OF DRUG RESISTANCE IN UGANDA

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### TRNA REPROGRAMMING AS A FEATURE OF ARTEMISININ RESISTANCE IN *PLASMODIUM FALCIPARUM*

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### EMERGENCE OF QUADRUPLE MUTATIONS IN *PLASMODIUM FALCIPARUM* DIHYDROFOLATE REDUCTASE ENZYME IN NORTHWESTERN TANZANIA

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### PFCRT MUTATIONS CAN MEDIATE PIPERAQUINE RESISTANCE ON SELECT AFRICAN HAPLOTYPES IN *P. FALCIPARUM* PARASITES WITH A MINOR FITNESS COST

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## EXPANDING ANTIMALARIAL RESISTANCE SURVEILLANCE: AN INTEGRATED GENOMIC AND PHENOTYPIC APPROACH

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## REDUCED PEROXIDATION OF *PLASMODIUM FALCIPARUM*-INFECTED RED BLOOD CELLS AS A MAJOR MECHANISM BY WHICH ARTEMISININ-RESISTANT PARASITES ESCAPE SPLENIC RETENTION

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## EX VIVO SUSCEPTIBILITIES TO NEW ANTIMALARIALS UNDER DEVELOPMENT AND ASSOCIATIONS WITH GENOTYPES IN *P. FALCIPARUM* ISOLATES FROM BURKINA FASO

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## ARTEMISININ-BASED COMBINATION TREATMENT FAILURE IN TRAVELERS RETURNING FROM SUB-SAHARAN AFRICA WITH *P. FALCIPARUM* MALARIA- A SYSTEMATIC REVIEW

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## LUMEFANTRINE PERFORMANCE IN AFRICA - A REVIEW OF LITERATURE

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## THERAPEUTIC EFFICACY OF ARTEMETHER-LUMEFANTRINE, DIHYDROARTEMISININ-PIPERAQUINE, AND ARTESUNATE-AMODIAQUINE FOR THE TREATMENT OF UNCOMPLICATED *FALCIPARUM* MALARIA IN MAINLAND TANZANIA, 2023

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## PPPRELI: A NOVEL MOLECULAR MEDIATOR OF RESISTANCE TO *PLASMODIUM FALCIPARUM* SERINE HYDROLASE INHIBITORS

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## MAPPING THE RESISTANCE DETERMINANTS OF SMALL PEPTIDE-LIKE MOLECULES AGAINST *PLASMODIUM FALCIPARUM* PARASITES

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## SELECTION AND CHARACTERIZATION OF AN ELQ-596 RESISTANT CLONE OF *PLASMODIUM FALCIPARUM*

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## POST ARTESUNATE DELAYED HEMOLYSIS IN PEDIATRIC PATIENTS IN THE UNITED STATES

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## NEXT GENERATION 3-BIARYL-ELQS FOR LONG DURATION PROTECTION AGAINST MALARIA

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**CHEMOGENOMIC PROFILING OF POOLED *PLASMODIUM FALCIPARUM* MUTANTS FOR DRUG ANNOTATION**Justin Gibbons<sup>1</sup>, Camilla Valente Pires<sup>1</sup>, Murrel Saldanha<sup>1</sup>, Thomas D. Otto<sup>2</sup>, Julian C. Rayner<sup>3</sup>, John H. Adams<sup>1</sup><sup>1</sup>University of South Florida, Tampa, FL, United States, <sup>2</sup>University of Glasgow, Glasgow, United Kingdom, <sup>3</sup>University of Cambridge, Cambridge, United Kingdom

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**SYSTEMATIC REVIEW OF BIOGEOGRAPHIC PATTERNS OF *P. FALCIPARUM* DRUG RESISTANCE DYNAMICS**

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**PROFILING OF DRUG RESPONSES AND ANTIMALARIAL DRUG RESISTANCE MARKERS IN *P. FALCIPARUM* CLONES FROM A GHANAIA DHA-SELECTED CLINICAL ISOLATE**

Bridget Adikah, Silas Yeboah, Jersley Chirawurah, Elizabeth Akrong, Gordon Awandare, Lucas Amenga-Etego, Yaw Aniweh

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**Malaria - Diagnosis - Challenges and Innovations**

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**EVALUATION OF HISTIDINE-RICH PROTEIN 2-BASED RAPID DIAGNOSTIC TESTS FOR MALARIA DIAGNOSIS AND PREVALENCE OF *PFHRP2*/*PFHRP3* DELETIONS IN UGANDA, 2021-2023**Kisakye Diana Kabbale<sup>1</sup>, Bienvenue Nsengimaana<sup>1</sup>, Francis D. Semakuba<sup>1</sup>, Brian Assimwe<sup>1</sup>, Kylie Hilton<sup>2</sup>, Caroline Mwubaha<sup>1</sup>, Innocent Wiringilimaana<sup>1</sup>, Thomas Katairo<sup>1</sup>, Shahiid Kiyaga<sup>1</sup>, Monica Mbabazi<sup>1</sup>, Stephen Tukwasibwe<sup>1</sup>, Sam L. Nsoba<sup>1</sup>, Victor Asua<sup>1</sup>, Moses Kanya<sup>1</sup>, Grant Dorsey<sup>3</sup>, Melissa Conrad<sup>3</sup>, Bryan Greenhouse<sup>3</sup>, Isaac Ssewanyana<sup>1</sup>, Jessica Briggs<sup>3</sup><sup>1</sup>Infectious Disease Research Collaboration, Kampala, Uganda, <sup>2</sup>University of California, Berkeley, CA, United States, <sup>3</sup>University of California, San Francisco, CA, United States

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**EVALUATION OF A QUANTITATIVE DRIED BLOOD SPOT PLATFORM FOR MALARIA PARASITE DETECTION, SEQUENCING, AND HOST RESPONSE PROFILING**Jeremiah D. Miller<sup>1</sup>, Imonikhe Kennedy Kio<sup>2</sup>, Christian T. Happi<sup>2</sup>, Timothy J. Garrett<sup>1</sup>, Rhoel R. Dinglasan<sup>1</sup><sup>1</sup>University of Florida, Gainesville, FL, United States, <sup>2</sup>African Center of Excellence in Genomics for Infectious Diseases, Redeemer's University, Ede, Nigeria

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**FIELD EVALUATION OF THE NOVEL ONE STEP MALARIA PF AND PF/PV RAPID DIAGNOSTIC TESTS AND THE PROPORTION OF *HRP-2* GENE DELETION IDENTIFIED ON SAMPLES COLLECTED IN THE PWANI REGION, TANZANIA**

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**AVAILABILITY AND APPROPRIATENESS OF MALARIA MANAGEMENT SERVICES AT DRUG SHOPS IN TWO HIGH-BURDEN REGIONS IN UGANDA**Arthur Mpimbaza<sup>1</sup>, Edward Mugwanyana<sup>2</sup>, Angela Kateemu<sup>2</sup>, Anne Katahoire<sup>1</sup>, Amy Casella<sup>3</sup>, Nancy Brady<sup>3</sup>, Benjamin Binagwa<sup>2</sup><sup>1</sup>USAID/PMI Uganda Malaria Reduction Activity; Child Health and Development Centre, College of Health Sciences, Makerere University, Kampala, Uganda, <sup>2</sup>USAID/PMI Uganda Malaria Reduction Activity; JSI, Kampala, Uganda, <sup>3</sup>USAID/PMI Uganda Malaria Reduction Activity; JSI, Boston, MA, United States

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**LONGITUDINAL SURVEILLANCE OF *PFHRP2/3* DELETIONS TO SUPPORT FUTURE ANTIGEN-BASED MALARIA DIAGNOSTICS IN KENYA**Regina J. Kandie<sup>1</sup>, Beatrice Machini<sup>1</sup>, Joy Gakenia<sup>1</sup>, John Kabuagi<sup>1</sup>, Rosebella Kiplagat<sup>2</sup>, Sammy Gatigwa<sup>3</sup>, Hosea Akala<sup>4</sup>, Isabella Oyier<sup>5</sup>, Bernard Ogutu<sup>6</sup>, Robert Mwaura<sup>1</sup><sup>1</sup>National Malaria control program, Ministry of Health, Nairobi, Kenya, <sup>2</sup>National Public Health Laboratories, Ministry of Health, Nairobi, Kenya, <sup>3</sup>Kenya Medical Training college, Nairobi, Kenya, <sup>4</sup>Kenya Medical Research Institute, Ministry of Health, Nairobi, Kenya, <sup>5</sup>Kenya Medical Research institute, Ministry of Health, Nairobi, Kenya, <sup>6</sup>Kenya Medical Research Institute, Ministry of Health, Nairobi, Kenya

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**THE PREVALENCE OF *PLASMODIUM OVALE* AMONG SYMPTOMATIC INDIVIDUALS FROM THE EASTERN REGION OF GHANA**Vera Appiah-Kubi<sup>1</sup>, Godwin Woode<sup>1</sup>, Reinhard Kobbie Danku<sup>1</sup>, Fred Gbadago<sup>2</sup>, Gordon A. Awandare<sup>1</sup>, Lucas N. Amenga-Etego<sup>1</sup>, Yaw Aniweh<sup>1</sup><sup>1</sup>West African Centre for Cell Biology of Infectious Pathogen, Accra, Ghana, <sup>2</sup>Suhum Government Hospital, Ghana Health Service, Suhum, Ghana

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**MALARIA DIAGNOSIS IN URBAN AREAS USING LOOP MEDIATED ISOTHERMAL AMPLIFICATION**Victor Edem Koru<sup>1</sup>, Francis Dzabeng<sup>1</sup>, Anna Beltrame<sup>2</sup>, Clinton Osei<sup>1</sup>, Charles Mensah<sup>1</sup>, Sarah Ashitei<sup>1</sup>, Felix Ansah<sup>1</sup>, keziah Malm<sup>3</sup>, Yaw Aniweh<sup>1</sup>, Gordon Awandare<sup>1</sup>, Lucas Amenga-Etego<sup>1</sup>, Gillian Stressman<sup>2</sup><sup>1</sup>West African Center for Cell Biology of Infectious Pathogens, Accra, Ghana, <sup>2</sup>University of South Florida, Gainesville, FL, United States, <sup>3</sup>Ghana Health Service, Accra, Ghana

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**THE ADDITIVE VALUE OF PARAMAX-3™ PAN/PV/PF MALARIA RAPID DIAGNOSTIC TEST USE FOR IMPROVING *P. VIVAX* MALARIA DETECTION IN MAEVATANANA, MADAGASCAR**

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**CONTRIBUTION OF THE OTSS+ SUPERVISION APPROACH IN IMPROVING THE QUALITY OF MICROSCOPIC MALARIA DIAGNOSIS IN CÔTE D'IVOIRE, 2022-2023**Serge Brice Assi<sup>1</sup>, Melly Aissatou Traore<sup>2</sup>, Jean Louis Assa<sup>2</sup>, Mamadou Silue<sup>2</sup>, Eric Akkatia<sup>2</sup>, Mamadou Toure<sup>2</sup>, Mea Antoine Tanoh<sup>1</sup>, Collette Yah Epe Kokrasset<sup>1</sup>, Patricia L. Yepassis-Zembrou<sup>3</sup>, Pascal Zinzindohoue<sup>4</sup>, Blaise Kouadio<sup>4</sup><sup>1</sup>Côte d'Ivoire National Malaria Control Program, Abidjan, Côte D'Ivoire, <sup>2</sup>Population Services International Côte d'Ivoire, Abidjan, Côte D'Ivoire, <sup>3</sup>U.S. President's Malaria Initiative, Centers for Disease Control and Prevention, Abidjan, Côte D'Ivoire, <sup>4</sup>U.S. President's Malaria Initiative, U.S. Agency for International Development, Abidjan, Côte D'Ivoire

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### AI-ASSISTED SOFTWARE FOR RAPID AND ACCURATE BLOOD SMEAR ANALYSIS OF RODENT MALARIA MODEL

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### PERFORMANCE OF RAPID DIAGNOSTIC TESTS, MICROSCOPY, AND REAL-TIME PCR FOR THE DETECTION OF MALARIA INFECTIONS AMONG ASYMPTOMATIC INDIVIDUALS FROM VILLAGES WITH CONFIRMED ARTEMISININ PARTIAL RESISTANCE IN NORTH-WESTERN TANZANIA

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### MOLECULAR EXAMINATION OF FALSE NEGATIVE HISTIDINE-RICH PROTEIN 2 (HRP2)-BASED RAPID DIAGNOSTIC TESTS (RDTs) FOR MALARIA IN DIORO, MALI

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### HISTIDINE-RICH PROTEIN (HRP) 2-BASED RDT FALSE-NEGATIVES AND PLASMODIUM FALCIPARUM HRP 2 AND 3 GENE DELETIONS IN LOW, SEASONAL AND INTENSE PERENNIAL TRANSMISSION ZONES IN CAMEROON

Tobias Obejumo Apinjoh<sup>1</sup>, Livinus N. Tangi<sup>1</sup>, Eniyou C. Oriero<sup>2</sup>, Sainabou Drammeh<sup>2</sup>

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### EVIDENCE-BASED CLINICAL TRIAL DESIGN: A MODELLING STUDY OF THE PLASMODIUM VIVAX SEROLOGICAL TESTING AND TREATMENT IN ETHIOPIA AND MADAGASCAR (PVSTATEM) CLUSTER-RANDOMIZED TRIAL

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### UNTARGETED RNA SEQUENCING ANALYSIS OF BLOOD SAMPLES REVEALS NO PFHRP2/3 DELETION IN FALSE NEGATIVE RDTs IN SENEGAL

AITA SENE<sup>1</sup>, Zoë C. Levine<sup>2</sup>, Winnie Mkandawire<sup>2</sup>, Awa B. Deme<sup>1</sup>, Mamadou A. Diallo<sup>1</sup>, Bassirou Ngom<sup>1</sup>, Djiby Sow<sup>1</sup>, Tolla Ndiaye<sup>1</sup>, Mouhamadou Sy<sup>1</sup>, Amy GAYE<sup>1</sup>, Younouss Diedhiou<sup>1</sup>, Aida S. Badiane<sup>1</sup>, Mouhamadou Ndiaye<sup>1</sup>, Ngayo Sy<sup>3</sup>, Doudou Sene<sup>4</sup>, Pardis Sabeti<sup>2</sup>, Daouda Ndiaye<sup>1</sup>, Katherine J. Siddle<sup>2</sup>

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### MALARIA MASS DRUG ADMINISTRATION WITH DIHYDROARTEMISININE PIPERAQUINE (DHAPQ) IN TWO DIFFERENT SETTINGS OF MALARIA TRANSMISSION IN MALI

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### PROGRESS IN THE FIGHT AGAINST MALARIA USING COMMUNITY-BASED CASE MANAGEMENT IN THE DISTRICT OF VANGAINDRANO, MADAGASCAR, 2023

Hery Harimanitra Andriamanjato<sup>1</sup>, Andritahina Razafiarjaona<sup>1</sup>, Omega Raobela<sup>2</sup>, Anna Bowen<sup>3</sup>, Albert Rasolofomanana<sup>1</sup>, Zonarivelo Hery Mamy Razafindrada<sup>2</sup>, Feno Manitra Rakotoarimanana<sup>1</sup>, Jean Pierre Rakotovo<sup>1</sup>

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### INCREASING ACCESS TO QUALITY MALARIA SERVICES THROUGH ON-THE-JOB CAPACITY BUILDING OF FRONT-LINE HEALTH WORKERS: LESSONS FROM HEALTH FACILITY MONITORING VISITS IN THREE SOUTHERN NIGERIAN STATES

Chinwe Nweze<sup>1</sup>, Augustine Firima<sup>1</sup>, Arja Huestis<sup>2</sup>, Olayem Abimbola<sup>3</sup>, Aderonke Omokhapue<sup>3</sup>, Atuanya Ogugua<sup>4</sup>, Uchenna Nwokenna<sup>3</sup>, Olatayo Abikoye<sup>3</sup>, IniAbasi Nglass<sup>3</sup>, Rudi Thetard<sup>2</sup>, Thomas Hall<sup>2</sup>, John Orok<sup>5</sup>, Grace Nwankwo<sup>6</sup>, Erkwagh Dagba<sup>6</sup>, Veronica Momoh<sup>6</sup>, Jules Mihigo<sup>6</sup>, Chukwu Okoronkwo<sup>7</sup>, Nnenna Ogbulafor<sup>7</sup>, Godwin Ntadom<sup>7</sup>

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### ESTABLISHMENT OF MALARIA ELIMINATION CONSORTIUM (MEC) STRATEGIC PLANNING AND EXECUTION TO ELIMINATE MALARIA FROM PAKISTAN BY 2035

Javeria Samad, Najia Ghanchi, Momin Kazi, Farah Qamar, M Asim Beg  
Aga Khan University, Karachi, Pakistan



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### ACHIEVING ZERO INDIGENOUS MALARIA CASES, SUB-NATIONAL MALARIA ELIMINATION VERIFICATION IN KING CETSHWAYO DISTRICT, SOUTH AFRICA. A FIRST IN SUB-SAHARAN AFRICA

**Ednah Ramokone Baloyi**<sup>1</sup>, Sadiq K. Wanjala<sup>2</sup>, Bongani E. Simelane<sup>3</sup>, Nompumelelo Z. Mdletshe<sup>3</sup>, Tshikae B. Power<sup>3</sup>, Ziyanda Fekema<sup>4</sup>, Mabatho Mogadime<sup>1</sup>, Bridget M. Shandukani<sup>1</sup>, Babongile Mhlongo<sup>3</sup>

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### ASSESSING THE POTENTIAL OF USING DIHYDROARTEMISININ PIPERAQUINE FOR MALARIA MASS DRUG ADMINISTRATION IN AN ENDEMIC AREA OF GHANA

**Ignatius Cheng Ndong**<sup>1</sup>, Chuo Ennestine Chu<sup>1</sup>, Collins Stephen AHORLU<sup>1</sup>, Alfred Amambua-Ngwa<sup>2</sup>

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### EVALUATION OF EXTERNAL QUALITY ASSURANCE EFFORTS ON MALARIA DIAGNOSIS IN FOUR NIGERIAN STATES (2021-2023)

**Abiodun Ojo**<sup>1</sup>, Oyetunde Oyebami<sup>2</sup>, IniAbasi Nglass<sup>1</sup>, Uchenna Nwokenna<sup>1</sup>, Oluwatobiloba Akerele<sup>3</sup>, Olayemi Abimbola<sup>1</sup>, Augustine Firima<sup>3</sup>, Methodius Okouzi<sup>4</sup>, Olatayo Abikoye<sup>1</sup>, Justice Adaji<sup>1</sup>, Simone Ijjeze<sup>5</sup>, Arja Huestis<sup>6</sup>, Rudi Thetard<sup>6</sup>, Thomas Hall<sup>6</sup>, Samuel Anitte<sup>7</sup>, Grace Nwankwo<sup>8</sup>, Erkwagh Dagba<sup>8</sup>, Veronica Momoh<sup>8</sup>, Jules Mihigo<sup>8</sup>, Chukwu Okoronkwo<sup>5</sup>, Nnenna Ogbulafor<sup>5</sup>, Godwin Ntadom<sup>5</sup>

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### SILENT CIRCULATION OF PLASMODIUM VIVAX: FIRST ASYMPTOMATIC MALARIA CASE POST MALARIA ELIMINATION IN ARGENTINA

**María J. Dantur-Juri**<sup>1</sup>, Jonathan Liria Zalazar<sup>2</sup>, Virginie Rougeron<sup>3</sup>, Fanny Degrugillier<sup>4</sup>, Maria C. Montero<sup>5</sup>, Mario Zaidenberg<sup>5</sup>, Paul Duque-Padilla<sup>6</sup>, Juan C. Navarro<sup>7</sup>

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### IMPROVING MALARIA CASE MANAGEMENT QUALITY BY REDUCING IRRATIONAL USE OF ANTIMALARIALS: A SYSTEMS THINKING APPROACH IN FOUR SOUTHERN STATES (AKWA IBOM, CROSS RIVER, EBONYI, AND OYO) IN NIGERIA

**Augustine Firima**<sup>1</sup>, Chinwe Nweze<sup>1</sup>, Tochukwu Nwokwu<sup>2</sup>, Jay Thomas<sup>3</sup>, Kenekchukwu Ugbene<sup>1</sup>, IniAbasi Nglass<sup>4</sup>, Olatayo Abikoye<sup>4</sup>, Abiodun Ojo<sup>4</sup>, Uchenna Nwokenna<sup>4</sup>, Thomas Hall<sup>5</sup>, Rudi Thetard<sup>5</sup>, Arja Huestis<sup>5</sup>, Lawrence Nwankwo<sup>6</sup>, John Orok<sup>7</sup>, Veronica Momoh<sup>8</sup>, Jules Mihigo<sup>8</sup>, Erkwagh Dagba<sup>8</sup>, Cassandra Elagbaje<sup>8</sup>, Grace Nwankwo<sup>8</sup>, Chukwu Okoronkwo<sup>9</sup>, Nnenna Ogbulafor<sup>9</sup>, Godwin Ntadom<sup>9</sup>

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### MEASURING ZERO INDIGENOUS MALARIA CASES THROUGH A SUB-CLASSIFICATION ALGORITHM, LESSONS FROM DEVELOPMENT, TRIALLING AND IMPLEMENTATION

**Babongile Mhlongo**<sup>1</sup>, Sadiq Kuto Wanjala<sup>2</sup>, Bongani E. Simelane<sup>1</sup>, Nompumelelo Z. Mdletshe<sup>1</sup>, Lindelewe Mabika<sup>1</sup>, Bridget M. Shandukani<sup>3</sup>, Jaishree Raman<sup>4</sup>, Ednah R. Baloyi<sup>5</sup>

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### EPIDEMIOLOGICAL, VECTOR BIONOMICS AND PARASITOLOGICAL DYNAMICS IMPENDING MALARIA ELIMINATION IN A HOLOENDEMIC REGION OF ZAMBIA

**Modest Mulenga**<sup>1</sup>, Mike Chaponda<sup>2</sup>, Mbanga Muleba<sup>2</sup>, Jean-Bertin Kabuya<sup>2</sup>, William Moss<sup>3</sup>, ICEMR Southern Africa --<sup>4</sup>

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### CONTRIBUTOR OF COMMUNITY HEALTH WORKERS TO MALARIA HEALTH SERVICE DELIVERY IN RWANDA

**Jean M. Harerimana**<sup>1</sup>, Michee Kabera<sup>2</sup>, Jean Mangala<sup>2</sup>, Marcel Manariyo<sup>1</sup>, Lolade Oseni<sup>3</sup>, Katherine Wolf<sup>3</sup>, Noella Umulisa<sup>1</sup>, Marie Rose Kayirangwa<sup>1</sup>, Aimable Mbituyumuremyi<sup>2</sup>, Jean Niyonzima<sup>2</sup>

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### ELIMINATING MALARIA FROM INDIA THROUGH STRATEGIC PLANNING & PRAGMATIC APPROACHES

**Dr Roop Kumari**<sup>1</sup>, Dr Tanu Jain<sup>2</sup>

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#### GROUND ZERO EPICENTER OF MALARIA IN PAKISTAN: THATTA, SINDH

Huma Syed Hussain, Farah N. Qamar, Mohammad A. Beg  
Aga Khan University Hospital, Karachi, Pakistan

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#### DISTINCT HISTOPATHOLOGIC PROFILES OF PLACENTAL MALARIA HAVE DIFFERENT ASSOCIATIONS WITH BIRTH OUTCOMES

Michelle E. Roh<sup>1</sup>, Johnnie Ategeka<sup>2</sup>, Anju Ranjit<sup>3</sup>, Abel Kakuru<sup>2</sup>, Jimmy Kizza<sup>2</sup>, Harriet Adrama<sup>2</sup>, Miriam Nakalembe<sup>4</sup>, Stephanie L. Gaw<sup>3</sup>, Philip J. Rosenthal<sup>3</sup>, Moses R. Kanya<sup>4</sup>, Grant Dorsey<sup>3</sup>

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#### CROSS SECTIONAL SURVEY ASSESSING PREVALENCE AND PREDICTORS OF MALARIA PARASITAEMIA AMONG CHILDREN UNDER 13 YEARS IN KARAMOJA REGION, UGANDA

ANTHONY NUWA<sup>1</sup>, Chukwudi A. Nnaji<sup>2</sup>, Musa Odongo<sup>1</sup>, Geoffrey Beinomugisha<sup>1</sup>, Kevin N. Baker<sup>2</sup>, Tonny Kyagulanyi<sup>1</sup>, Godfrey Magumba<sup>1</sup>, Jane I. Nabakooza<sup>3</sup>, Christian Rassi<sup>4</sup>, David S. Odong<sup>1</sup>, Katherine Theiss-Nyland<sup>2</sup>, JohnBaptist Bwanika<sup>1</sup>, Richard Kajubi<sup>1</sup>, Damian Rutazaana<sup>1</sup>, James K. Tibenderana<sup>2</sup>, Jimmy Opigo<sup>5</sup>

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#### EPIDEMIOLOGY AND STATISTICAL MODELLING OF VIVAX AND FALCIPARUM MALARIA CASES IN MANDOTO, MADAGASCAR

Eliharintsoa Rajaonarimirana<sup>1</sup>, Chris Drakeley<sup>2</sup>, Malalalana Rajesy<sup>3</sup>, Rindra Vatosoa Randremanana<sup>1</sup>, Michael White<sup>4</sup>

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### 7951

#### ASSOCIATION BETWEEN MALARIA INFECTION AND UNDER-NUTRITION IN CHILDREN AGED 6-59 MONTHS IN KISUMU COUNTY, KENYA

Redemptah Yeda<sup>1</sup>, Charles Okello<sup>1</sup>, Edwin Mwakio<sup>1</sup>, Agnes Cheruiyot<sup>1</sup>, Jackline Juma<sup>1</sup>, Risper Maisiba<sup>1</sup>, Raphael Okoth<sup>1</sup>, Maureen Mwaloo<sup>1</sup>, Farid Abdi<sup>1</sup>, Benjamin Opot<sup>1</sup>, Dennis Juma<sup>1</sup>, Timothy Egbo<sup>2</sup>, Hosea Akala<sup>1</sup>

<sup>1</sup>Kenya Medical Research Institute, Kisumu, Kenya, <sup>2</sup>Walter Reed Army Institute of Research, Kisumu, Kenya

#### QUANTIFYING THE LAGGED EFFECTS OF CLIMATE VARIABLES ON MALARIA RISK: A CASE STUDY IN IGANGA-MAYUGE HEALTH AND DEMOGRAPHIC SURVEILLANCE SYSTEM SITE IN UGANDA

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#### SEASONAL MALARIA AMONG SCHOOL-AGED CHILDREN IN SIX WESTERN CONFLICT-AFFECTED BORDER PROVINCES IN THAILAND

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#### EXPLORATORY MODELLING OF THE INFLUENCE OF CLIMATE ON MALARIA TRANSMISSION

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#### CHARACTERIZING THE TRANSMISSION RESERVOIR OF PLASMODIUM FALCIPARUM

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#### PATIENT REPORT VERSUS PROVIDER REPORT, A POST-MODERN ANALYSIS OF MRDT TESTING AND DRUG DISPENSING DATA FROM A TRIAL IN THE PRIVATE RETAIL MEDICINE SECTOR IN WESTERN KENYA

Tabitha Chepkwony<sup>1</sup>, Mark Amunga<sup>1</sup>, Emmah Kimachas<sup>1</sup>, Joseph Kipkoech<sup>1</sup>, Emily Robie<sup>2</sup>, Aggrey Wekesa<sup>3</sup>, David Arthur<sup>2</sup>, Elizabeth L. Turner<sup>2</sup>, John A. Gallis<sup>2</sup>, Lucy Abel<sup>1</sup>, George Ambani<sup>1</sup>, Theodoor Visser<sup>4</sup>, Aaron Woolsey<sup>4</sup>, Diana Menya<sup>5</sup>, Jeremiah Laktabai<sup>6</sup>, Wendy Prudhomme-O'Meara<sup>2</sup>

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**HIDDEN RESERVOIRS OF *P. VIVAX* INFECTIONS IN DUFFY-NEGATIVE POPULATIONS FROM CENTRAL AFRICA**

**CHEIKH Cambel Dieng**<sup>1</sup>, Regan Schroeder<sup>1</sup>, Canelle Kipayko<sup>1</sup>, Zidedine Woyou Nematchoua<sup>2</sup>, Doris Bennen Tabi<sup>2</sup>, Ayukenchengamma Bate<sup>2</sup>, Teh Rene Ning<sup>2</sup>, Calvin Bisong Ebai<sup>3</sup>, Irene N. Sumbele<sup>2</sup>, Helen Klmbi<sup>3</sup>, Eugenia Lo<sup>1</sup>  
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**COMPARISON OF BAYESIAN OPTIMIZATION FRAMEWORKS FOR PARAMETER CALIBRATION IN AN AGENT-BASED MODEL OF MALARIA TRANSMISSION**

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**DESIGNING CLUSTER RANDOMIZED TRIALS FOR MALARIA: INSIGHTS FROM MATHEMATICAL MODELLING**

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**PREDICTING MALARIA PARASITEMIA IN MALI USING *PLASMODIUM* DEGREE-DAY**

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**RELATIONSHIPS OF INTERMITTENT PREVENTIVE THERAPY AND INSECTICIDE-TREATED BED NETS TO RISK OF MALARIA DURING PREGNANCY IN MAFERINYAH, GUINEA**

**Abdoul Habib Beavogui**<sup>1</sup>, David Cook<sup>2</sup>, Daouda Camara<sup>1</sup>, Michel KOROPOGUI<sup>1</sup>, Moussa SIDIBE<sup>1</sup>, Aye Diallo<sup>3</sup>, Patrick Duffy<sup>4</sup>, Yai Alamou Justin Doritchamou<sup>4</sup>  
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**EXPLORING THE IMPACT OF *SCHISTOSOMA HAEMATOBIIUM* INFECTION ON THE EXPANSION OF THE HUMAN RESERVOIR FOR *PLASMODIUM FALCIPARUM* IN GHANA**

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**BURDEN OF MALARIA IN THE KINSHASA PROVINCE, DEMOCRATIC REPUBLIC OF CONGO**

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**UNDERSTANDING MALARIA TREATMENT PATRONAGE: INSIGHTS FROM URBAN INFORMAL HEALTHCARE PROVIDERS IN NIGERIA**

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**MALARIA TEST POSITIVITY RATES AND ASSOCIATED FACTORS IN KINSHASA PROVINCE, DRC**

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**TEMPORAL TRENDS IN THE PREVALENCE OF *PLASMODIUM* SPECIES ACROSS REGIONS OF VARYING MALARIA BURDEN IN MAINLAND TANZANIA FROM 2021 TO 2023**

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### A PRELIMINARY ANALYSIS OF DELAYED TREATMENT FOR SEVERE MALARIA DISEASE AT SUSSUNDENGA-SEDE HEALTH CENTER

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### IMPACT OF DIFFERENT TIMINGS OF THE FOURTH DOSE OF RTS,S MALARIA VACCINE IN PERENNIAL SETTINGS: A MODELLING STUDY

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### MANAGEMENT OF UNCOMPLICATED MALARIA IN RURAL AND URBAN AREAS IN THE DEMOCRATIC REPUBLIC OF CONGO

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### MANAGEMENT AND OUTCOMES SEVERE MALARIA IN HEALTH FACILITIES IN THE DEMOCRATIC REPUBLIC OF CONGO

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### FACTORS ASSOCIATED WITH MALARIA TRANSMISSION IN BENIN - A RETROSPECTIVE STUDY OF DATA COLLECTED BETWEEN 2017 AND 2021

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### UNDERSTANDING THE IMPACT OF HOUSEHOLD WEALTH INDEX ON MALARIA RISK BY SETTLEMENT TYPE USING THE WET SEASON DATA FROM IBADAN

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### FACTORS ASSOCIATED WITH THE PREVALENCE OF SUBMICROSCOPIC *PLASMODIUM* SPP. INFECTIONS IN NATIVE COMMUNITIES OF THE RIO SANTIAGO DISTRICT, AMAZONAS-PERU

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### COMPARING CHANGES IN MALARIA TRANSMISSION USING THE MOLECULAR FORCE OF INFECTION VERSUS INCIDENCE DURING A MALARIA RESURGENCE IN TORORO, UGANDA

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### PREVALENCE AND EPIDEMIOLOGICAL CHARACTERISTICS OF ASYMPTOMATIC MALARIA IN SUCRE, VENEZUELA: A CROSS-SECTIONAL STUDY

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### EVOLUTION OF PREVENTIVE AND CURATIVE BEHAVIORS, VITAL AND PARASITOLOGICAL PARAMETERS OVER THE COURSE OF EPISODES OF MALARIA IN CHILDREN LIVING IN LIBREVILLE, GABON

**Luice AJ James<sup>1</sup>**, Lucien D. Dahourou<sup>2</sup>, Noé P. M'bondoukwé<sup>1</sup>, Caroline Yonaba<sup>3</sup>, Bertrand MEDA<sup>2</sup>, Sodiomon B. SIRIMA<sup>4</sup>, Denise P. MAWILI MBOUMBA<sup>1</sup>, Marielle K. Bouyou Akotet<sup>1</sup>

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### IMPACT OF COVID-19 ON MALARIA: CLINICAL CHANGES BEFORE AND DURING THE COVID-19 PANDEMIC, A RETROSPECTIVE STUDY IN A REFERENCE CENTER

**Volatiana Andriananja**, Etienne Rakotomijoro, Johary Andriamizaka, Andry Elody Christophe, Rado Lazasoa Andrianasolo, Mamy Jean de Dieu Randria  
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## Malaria - Genetics, Genomics and Evolution

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### SIMPLEGEN: A MODELING APPROACH (DE)COUPLING EPIDEMIOLOGY AND GENOMICS TO INFORM MALARIA SURVEILLANCE

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(ACMCIP Abstract)

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### DISENTANGLING PLASMODIUM FALCIPARUM GENETIC RELATEDNESS NETWORKS TO STUDY MALARIA TRANSMISSION PATTERNS ACROSS SENEGAL

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### A PLASMODIUM VIVAX STRAIN THAT EXPRESSES FLUORESCENT PROTEINS THROUGHOUT THE LIFE-CYCLE

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(ACMCIP Abstract)

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### SIMPLSEQ + CI: A HIGHLY-SENSITIVE MALARIA MULTIPLEXED AMPLICON SEQUENCING PROTOCOL AND CLOUD-BASED BIOINFORMATIC WORKFLOW WITH CONTAMINATION DETECTION FOR INTERVENTION STUDIES

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(ACMCIP Abstract)

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### EVOLUTION OF MOLECULAR MARKERS OF ANTIMALARIAL DRUG RESISTANCE IN UGANDA, 1999-2022

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(ACMCIP Abstract)

7983

### ASSESSMENT OF GENETIC DIVERSITY OF PLASMODIUM FALCIPARUM PF230 GENE AS A POTENTIAL CANDIDATE FOR MALARIA VACCINE DEVELOPMENT

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(ACMCIP Abstract)

7984

### EVIDENCE FOR SUSTAINED LOCAL TRANSMISSION IN A LOW TRANSMISSION SETTING IN SOUTHERN ZAMBIA: EXAMINING PARASITE GENOTYPE RELATEDNESS USING AN AMPLICON PANEL

Anne C. Martin<sup>1</sup>, Jessica Schue<sup>2</sup>, Jacob M. Sadler<sup>3</sup>, Kevin Kariuki Wamae<sup>4</sup>, Abebe Fola<sup>5</sup>, Alfred Simkin<sup>5</sup>, Jeffrey A. Bailey<sup>5</sup>, Japhet Matoba<sup>6</sup>, Michael Musonda<sup>6</sup>, Douglas E. Norris<sup>7</sup>, Edgar Simulundu<sup>6</sup>, Sophie Berube<sup>1</sup>, Amy Wesolowski<sup>1</sup>, Jonathan J. Juliano<sup>3</sup>, William J. Moss<sup>1</sup>

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(ACMCIP Abstract)

7985

### HLA G 01:05N NULL ALLELE FREQUENCY IN NEWBORN IN BENIN POPULATIONS AND HLA-G EXPRESSION

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(ACMCIP Abstract)

7986

### UNRAVELING THE GENETIC DIVERSITY AND TRANSMISSION NETWORKS OF P.FALCIPARUM IN SOUTHWESTERN UGANDA: A LOW TRANSMISSION SETTING

Monica MM Mbabazi<sup>1</sup>, Shahiid Kiyaga<sup>1</sup>, Thomas Katairo<sup>1</sup>, Diana Kisakye<sup>1</sup>, Victor Asau<sup>1</sup>, Stephen Tukwasibwe<sup>1</sup>, Samuel L.Nsoba<sup>1</sup>, Isaac Ssewanyana<sup>2</sup>, Moses R.Kamya<sup>1</sup>, Bryan Greenhouse<sup>3</sup>, Jessica Briggs<sup>3</sup>

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(ACMCIP Abstract)

7987

**FIKK GENE EXPRESSION SPECIFIC TO SEVERE MALARIAL SYNDROMES IN MALIAN CHILDREN**

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(ACMCIP Abstract)

7988

**SNP-SLICE RESOLVES MIXED INFECTIONS: SIMULTANEOUSLY UNVEILING STRAIN HAPLOTYPES AND LINKING THEM TO HOSTS**

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(ACMCIP Abstract)

7989

**RELATIONSHIP BETWEEN SEASONAL MALARIA CHEMOPREVENTION AND GUT MICROBIOME DIVERSITY IN BURKINA FASO**

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(ACMCIP Abstract)

7990

**BENCHMARKING THE PERFORMANCE OF POPULATION-LEVEL SEQUENCE FREQUENCY ESTIMATION TOOLS IN MALARIA RESEARCH AND PUBLIC HEALTH**

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(ACMCIP Abstract)

7991

**LEVERAGING DENSELY SAMPLED MALARIA CASES AND PARASITE GENETICS TO INFER TRANSMISSION NETWORK STRUCTURE**

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(ACMCIP Abstract)

**Malaria - Immunology**

7992

**DIFFERENCES IN INNATE CELLULAR IMMUNE RESPONSES DISTINGUISH PROTECTED FROM NOT PROTECTED INDIVIDUALS IN A PFPSPZ VACCINE TRIAL**

**LW Preston Church**<sup>1</sup>, Stephen De Rosa<sup>1</sup>, Allie Donlan<sup>1</sup>, Elizabeth R. Duke<sup>1</sup>, Dianna E.B. Hergott<sup>2</sup>, Gift Nwanne<sup>1</sup>, B. Kim Lee Sim<sup>3</sup>, Thomas L. Richie<sup>3</sup>, Evan W. Newell<sup>1</sup>, Stephen L. Hoffman<sup>3</sup>, James G. Kublin<sup>1</sup>

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(ACMCIP Abstract)

7993

**TRANSMIGRATION OF MATERNAL MONOCYTES AND FETAL MACROPHAGES IN RESPONSE TO ACTIVE VERSUS PAST PLACENTAL MALARIA AND ASSOCIATIONS WITH BIRTH WEIGHT**

**Nida Ozarslan**<sup>1</sup>, Johnnie Ategeka<sup>2</sup>, Corina Mong<sup>1</sup>, Christine Blauvelt<sup>1</sup>, Jimmy Kizza<sup>2</sup>, Abel Kakuru<sup>2</sup>, Moses R. Kamya<sup>2</sup>, Philip J. Rosenthal<sup>1</sup>, Prasanna Jagannathan<sup>3</sup>, Grant Dorsey<sup>1</sup>, Stephanie L. Gaw<sup>1</sup>

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(ACMCIP Abstract)

7994

**PROTECTIVE EFFICACY OF P. VIVAX PRE-ERYTHROCYTIC ANTIGENS PVSSP3 AND PVSPECT1**

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(ACMCIP Abstract)

7995

**COMPREHENSIVE CHARACTERIZATION OF PLASMODIUM VIVAX ANTIGENS USING HIGH-DENSITY PEPTIDE ARRAY**

**Rosita Asawa**<sup>1</sup>, Kieran Tebben<sup>1</sup>, Brittany Hazzard<sup>1</sup>, Andrea Berry<sup>1</sup>, Jean Popovici<sup>2</sup>, David Serre<sup>1</sup>

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(ACMCIP Abstract)

7996

**SPATIAL HOSPITAL BASED SEROPREVALENCE AND RISK OF INFECTION FROM PLASMODIUM VIVAX AND OTHER PLASMODIUM SPECIES USING MULTIPLEX QUANTITATIVE SUSPENSION ARRAY ASSAY IN CAMEROON**

**Innocent M. Ali**<sup>1</sup>, Eva Keming Mai<sup>2</sup>, Darlin Bean N. Kaunda<sup>1</sup>, Pacome Valery Kom Tchuenkam<sup>1</sup>, Giresse Nino Lemogo<sup>1</sup>, Mariama Mbouh<sup>1</sup>, Arsene Z. Dombou<sup>1</sup>, Ruth Aguilar<sup>3</sup>, Gustave Simo<sup>1</sup>, Chris Drakeley<sup>4</sup>, Carlota DOBANO<sup>5</sup>

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(ACMCIP Abstract)

7997

### ASSESSING HUMAN ANTIBODY RESPONSES TO THE *PLASMODIUM FALCIPARUM* RH5-CYRPA-RIPR INVASION COMPLEX; QUANTIFICATION OF RESPONSES TO THREE BLOOD-STAGE TARGET ANTIGENS

**Dimitra Pipini**<sup>1</sup>, Jordan R. Barrett<sup>1</sup>, Barnabas G. Williams<sup>1</sup>, Lloyd D. W. King<sup>1</sup>, Ababacar Diouf<sup>2</sup>, Jo Salkeld<sup>1</sup>, Lorraine A. Soisson<sup>3</sup>, Randall S. MacGill<sup>4</sup>, Cecilia Carnrot<sup>5</sup>, Katherine Skinner<sup>1</sup>, Rachel E. Cowan<sup>1</sup>, Jee-Sun Cho<sup>1</sup>, Carole A. Long<sup>2</sup>, Carolyn M. Nielsen<sup>1</sup>, Angela M. Minassian<sup>1</sup>, Kazutoyo Miura<sup>2</sup>, Simon J. Draper<sup>1</sup>, Sarah E. Silk<sup>1</sup>  
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(ACMCIP Abstract)

7998

### IL-15 COMPLEX ENHANCES T RESIDENT MEMORY FORMATION AND FUNCTION FOLLOWING GENETICALLY ATTENUATED *PLASMODIUM* VACCINATION IN MICE

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(ACMCIP Abstract)

7999

### UNDERSTANDING THE IMPACT OF LOW, MEDIUM AND HIGH MALARIA PRE-EXPOSURE STATUS ON SARS COV-2 -SPECIFIC ANTIBODY PROFILES AND FUNCTIONALITY IN TANZANIAN INDIVIDUALS

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(ACMCIP Abstract)

8000

### ELUCIDATING THE KINETICS AND DYNAMICS OF GROWTH-INHIBITORY IMMUNE RESPONSES TO *PLASMODIUM FALCIPARUM* STRAINS

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(ACMCIP Abstract)

8001

### LONGITUDINAL RESPONSES IN THE TISSUES AND BLOOD OF NON-HUMAN PRIMATES DURING IMMUNIZATION WITH WHOLE *PLASMODIUM* SPOROZOITES

Gregory Boggy<sup>1</sup>, Rowland Osii<sup>1</sup>, Melanie Shears<sup>2</sup>, David Morrow<sup>1</sup>, Maya Aleshnick<sup>1</sup>, Payton Kirtley<sup>1</sup>, Derek Haumpy<sup>1</sup>, Julie Mitchell<sup>1</sup>, Jack Schell<sup>1</sup>, Roxanne Beebe<sup>1</sup>, Miranda Fischer<sup>1</sup>, Sean Murphy<sup>2</sup>, Jeremy Smedley<sup>1</sup>, Scott Hansen<sup>1</sup>, Benjamin Bimber<sup>1</sup>, **Brandon Wilder**<sup>1</sup>  
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(ACMCIP Abstract)

8002

### TREATING CEREBRAL MALARIA IN AFRICAN CHILDREN, TRANSLATING MECHANISTIC INSIGHTS TO BEDSIDE RESULTS

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(ACMCIP Abstract)

8003

### THE PUTATIVE RECEPTOR BINDING REGION IS THE IMMUNODOMINANT REGION OF *PLASMODIUM MALARIAE* RETICULOCYTE BINDING PROTEIN 1A

**Harry Danwonno**<sup>1</sup>, Daniel Dosoo<sup>1</sup>, Richmond Boateng<sup>1</sup>, Peter Okutu<sup>1</sup>, Nelson Edu<sup>1</sup>, Kwadwo Kusi<sup>2</sup>, Gordon Awandare<sup>1</sup>, Yaw Aniwah<sup>1</sup>  
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(ACMCIP Abstract)

8004

### CHARACTERIZATION OF COINFECTION WITH SOIL TRANSMITTED HELMINTHS CAUSED BY *PLASMODIUM VIVAX* BASED ON CITOKINE BALANCE IN A CHILD POPULATION FROM AN ENDEMIC AREA OF COLOMBIA

**Mayra Raciny**<sup>1</sup>, Maria Fernanda Yasnot Acosta<sup>1</sup>, Ana Rodriguez Fernandez<sup>2</sup>  
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(ACMCIP Abstract)

## Malaria - Pathogenesis

8005

### *PLASMODIUM* INFECTION AND ANTIBIOTIC USE DURING SEVERE MALARIA INDUCE GUT BACTERIA DYSBIOSIS THAT INCREASES THE RISK OF MORTALITY IN CHILDREN

**Olivia J. Bednarski**<sup>1</sup>, Ruth Namazzi<sup>2</sup>, Robert O. Opoka<sup>3</sup>, Chandy C. John<sup>1</sup>, Andrea L. Conroy<sup>1</sup>, Nathan W. Schmidt<sup>1</sup>  
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(ACMCIP Abstract)

8006

### VAR2CSA EXPRESSION IN CEREBRAL MALARIA IN MALIAN AND MALAWIAN CHILDREN

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(ACMCIP Abstract)

8007

### CIRCULATING PLATELET-LEUKOCYTE AGGREGATES CORRELATE WITH THROMBOCYTOPENIA AND DEATH IN PEDIATRIC CEREBRAL MALARIA

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(ACMCIP Abstract)

8008

### INVESTIGATING THE ROLE OF HOST C1QBP IN *PLASMODIUM FALCIPARUM* INFECTED ERYTHROCYTE BINDING TO HUMAN BRAIN MICROVASCULAR ENDOTHELIAL CELLS

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(ACMCIP Abstract)

8009

### CHILDREN WITH CEREBRAL MALARIA LACK IMMUNITY TO SPECIFIC RIFIN AND STEVOR ANTIGENS

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(ACMCIP Abstract)

8010

### DECIPHERING THE HOST RESPONSE TO *P. FALCIPARUM* BY PLASMA PROTEOMICS

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(ACMCIP Abstract)

8011

### HYPERPARASITAEMIA: A CONSISTENT PRESENTATION IN *P. FALCIPARUM* MALARIA IN THE UK SINCE COVID

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(ACMCIP Abstract)

8012

### *PLASMODIUM FALCIPARUM* ESTABLISHES CHRONIC INFECTIONS THROUGH HIGH *VAR* GENE EXPRESSION SWITCHING RATE

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(ACMCIP Abstract)

8013

### TRANSCRIPTIONAL ANALYSIS OF DIFFERENTIALLY EXPRESSED GENES AND PATHWAYS IN THE DEVELOPMENT OF SEVERE MALARIA

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(ACMCIP Abstract)

8014

### UNDERSTANDING HOW VARIABILITY IN CULTURE TECHNIQUE IMPACTS THE LEVEL OF OXYGEN TENSION IN *PLASMODIUM FALCIPARUM* IN VITRO STUDIES

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(ACMCIP Abstract)

8015

### IMPACTS OF CONCURRENT SEVERE MALARIA AND ENTERIC INFECTION ON CHILD HEALTH OUTCOMES

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(ACMCIP Abstract)

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### THE IMPACT OF *FALCIPARUM* MALARIA INFECTION ON THE BRAIN: NEW FINDINGS FROM AN INDIAN COHORT

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(ACMCIP Abstract)

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### ROLE OF *PLASMODIUM FALCIPARUM* HEMOZOIN-ASSOCIATED PROTEINS IN THE PATHOGENESIS OF CEREBRAL MALARIA

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(ACMCIP Abstract)

## Malaria - Prevention

8018

### PHARMACOKINETIC AND PHARMACODYNAMIC MODELING OF MONTHLY TAFENOQUINE IN HEALTHY VIETNAMESE VOLUNTEERS FOR MALARIA PROPHYLAXIS AND ELIMINATION

Song H. Le<sup>1</sup>, The T. Nguyen<sup>1</sup>, Thu M. Nguyen<sup>2</sup>, Long K. Tran<sup>2</sup>, Huy C. Nguyen<sup>3</sup>, Andrew G. Letizia<sup>3</sup>, John S. Brooks<sup>3</sup>, Michael J. Gregory<sup>3</sup>, Geoffrey W. Birrell<sup>4</sup>, Karin Van Breda<sup>4</sup>, Dennis Shanks<sup>4</sup>, Michael D. Edstein<sup>4</sup>, Joel Tarning<sup>5</sup>  
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### THE EFFECT OF ADDITIONAL DOSES OF SULFADOXINE-PYRIMETHAMINE ADMINISTERED AS PMC ON HEMOGLOBIN LEVELS AMONG CHILDREN IN A MALARIA ENDEMIC AREA OF CAMEROON

**Michaela Gross**<sup>1</sup>, Jonna M. Mosoff<sup>2</sup>, Albertine Lele<sup>3</sup>, Mercy Tah-Monunde<sup>3</sup>, James Sinsai<sup>3</sup>, Alba McGirr<sup>2</sup>, Carine Nfor<sup>3</sup>, Sham La<sup>2</sup>, Roland Gosling<sup>2</sup>, Wilfred F. Mbacham<sup>4</sup>, Akindeh M. Nji<sup>3</sup>, R Matthew Chico<sup>2</sup>, Gillian Stresman<sup>1</sup>  
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### COMMUNITY ACCEPTANCE OF A NOVEL MALARIA INTERVENTION, ATSB STATIONS, IN THE CONTEXT OF THE ATSB ZAMBIA PHASE III TRIAL

**Erica Orange**<sup>1</sup>, Annie Arzen<sup>1</sup>, Chuma Muluma<sup>2</sup>, Situmbeko Akalambili<sup>2</sup>, Titus Tobolo<sup>2</sup>, Frank Ndalama<sup>2</sup>, Chama Chishya<sup>2</sup>, Kochelani Sali<sup>3</sup>, Ruth A. Ashton<sup>4</sup>, Thomas P. Eisele<sup>4</sup>, Joshua Yukich<sup>4</sup>, Irene Kyomuhandi<sup>5</sup>, John Miller<sup>2</sup>, Kafula Silumbe<sup>2</sup>, Javan Chanda<sup>2</sup>, Busiku Hamainza<sup>6</sup>, Joseph Wagman<sup>7</sup>, Laurence Slutsker<sup>8</sup>, Thomas R. Burkot<sup>9</sup>, Megan Littrell<sup>7</sup>  
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### SEASONAL MALARIA CHEMOPREVENTION (SMC) ELIGIBILITY ANALYSIS AND IMPACT EVALUATION USING MATHEMATICAL MODELING TO GUIDE DECISIONS ON THE IMPLEMENTATION OF SMC IN GUINEA

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### ASSESSMENT OF THE MALARIA SCORECARD'S IMPACT ON HEALTH OUTCOME THROUGH HOME-BASED MANAGEMENT IN RWANDA

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### IMPACT OF THE DISCONTINUATION OF UNIVERSAL IRS IN MAPUTO PROVINCE DURING THE 2020-2021 SEASON

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### EVALUATION OF A PILOT IMPLEMENTATION OF INTERMITTENT PREVENTIVE TREATMENT WITH DIHYDROARTEMISININ-PIPERAQUINE TO PREVENT ADVERSE BIRTH OUTCOMES IN PAPUA, INDONESIA

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### FACTORS ASSOCIATED WITH LOW INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY (IPTP) COVERAGES IN LOW PERFORMING HEALTH FACILITIES IN GHANA 2023

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### HEALTH PROVIDERS ON-SITE TRAINING APPROACH IN IMPROVING THE QUALITY OF MALARIA SERVICES DELIVERY IN COTE D'IVOIRE, 2023

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### EQUITY AND COVERAGE ANALYSIS OF POPULATION-BASED HEALTH PROGRAMS: A COMPARATIVE STUDY OF SEASONAL MALARIA CHEMOPREVENTION, INSECTICIDE-TREATED NET DISTRIBUTION STRATEGIES, AND THE ESSENTIAL PROGRAM ON IMMUNIZATION IN AFRICAN COUNTRIES

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### PREVENTING MALARIA AMONGST CONFLICT-AFFECTED COMMUNITIES IN CAMEROON SOUTH-WEST AND LITTORAL REGIONS

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### ZAMBIA 2023 ITN DISTRIBUTION CAMPAIGN DIGITALIZATION EXPERIENCES: LESSONS LEARNED AND BEST PRACTICES

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### COST AND COST-EFFECTIVENESS OF ATTRACTIVE TARGETED SUGAR BAITS (ATSB): CLUSTER RANDOMIZED CONTROL TRIALS (CRCT) IN ZAMBIA, KENYA, AND MALI

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### MALARIA, ANEMIA, MALNUTRITION IN PREGNANCY: PREVALENCE AND ASSOCIATED FACTORS, HIGH MALARIA TRANSMISSION AREA MALI

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### AN OBSERVATIONAL STUDY EVALUATING THE EPIDEMIOLOGICAL AND ENTOMOLOGICAL IMPACTS OF PIPERONYL BUTOXIDE INSECTICIDE-TREATED NETS COMPARED TO A COMBINATION OF INDOOR RESIDUAL SPRAYING PLUS STANDARD PYRETHROID-ONLY ITNS IN AMHARA REGION, ETHIOPIA, 2019-2022

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### INTRODUCING HAMMOCK NETS AND BEDNETS IN INDIGENOUS AND VULNERABLE COMMUNITIES OF PANAMÁ

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### THE IMPACT OF ROUTINE DISTRIBUTION AND USE OF ITN TO REDUCE MALARIA IN PREGNANCY AND FOR CHILDREN UNDER 5 YEARS

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### USING NATIONAL SURVEY DATA TO LEARN IMPACT OF INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY ON BIRTH WEIGHT IN NIGERIA

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### DECENTRALIZING MALARIA CASE MANAGEMENT SERVICES IN EQUATORIAL GUINEA: A CAPACITY BUILDING APPROACH AT THE DISTRICT LEVEL

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### EFFECT OF INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN SCHOOLCHILDREN ON ANEMIA THROUGH REDUCTION OF MALARIA INFECTIONS AND CLINICAL MALARIA EPISODES: MEDIATION ANALYSIS

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### CHANGES IN IPTP UTILIZATION MEASURED AN ANNUAL CROSS-SECTIONAL HOUSEHOLD SURVEY WITHIN PROGRAM AREAS OF THE ISDELL: FLOWERS CROSS BORDER MALARIA INITIATIVE IN ZAMBIA

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### LEVERAGING HOUSEHOLD VISITS DURING INDOOR RESIDUAL SPRAYING TO IDENTIFY PREGNANT WOMEN AND INCREASE AWARENESS OF ANTENATAL CARE AND IPTP ADHERENCE ON BIKO ISLAND, EQUATORIAL GUINEA

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### POTENTIAL POPULATION IMPACT OF SCALING UP SEASONAL MALARIA CHEMOPREVENTION IN EAST AND SOUTHERN AFRICA: A MODELLING STUDY

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### WHAT HAPPENS WHEN CHEMOPREVENTION OF SEASONAL MALARIA IS STOPPED: EXPERIENCE IN THE SOUTHERN SENEGALESE REGION OF SÉDHIU

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### CONTRIBUTION TO THE IMPROVEMENT OF SMC SUPERVISION BASED ON REAL-TIME ANALYSIS OF DISAGGREGATED DATA FOR DECISION MAKING

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### USE OF ALTERNATIVE LLIN DISTRIBUTION CHANNELS TO IMPROVE HOUSEHOLD OWNERSHIP AND USE OF LLINS

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### MALARIA IN PREGNANCY

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## Malaria – Surveillance and Data Utilization

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### THE SOCIO-DEMOGRAPHIC PREDICTORS OF INSECTICIDE-TREATED BED NET UTILIZATION FOR PROTECTION AGAINST MALARIA BY ASYMPTOMATIC INDIVIDUALS FROM RURAL COMMUNITIES ACROSS FIVE REGIONS IN MAINLAND TANZANIA

**Gervas A. Chacha**<sup>1</sup>, Misago D. Seth<sup>1</sup>, Rashid A. Madebe<sup>1</sup>, Daniel A. Petro<sup>2</sup>, Daniel P. Challe<sup>3</sup>, Filbert Francis<sup>3</sup>, Salehe S. Mandai<sup>1</sup>, Angelina J. Kisambale<sup>1</sup>, Rule Budodo<sup>1</sup>, Ramadhan Moshi<sup>1</sup>, Ruth B. Mbwambo<sup>1</sup>, Dativa Pereus<sup>1</sup>, Catherine Bakari<sup>1</sup>, Sijenuu Aaron<sup>4</sup>, Daniel Mbwambo<sup>4</sup>, Samwel Lazar<sup>4</sup>, Ntuli Kapologwe<sup>5</sup>, Celine I. Mandara<sup>1</sup>, Deus S. Ishengoma<sup>1</sup>

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### BENEFITS OF INCLUSIVE INNOVATION IN THE DEVELOPMENT OF A DECENTRALIZED ROUTINE DATA QUALITY AUDIT (RDQA) IMPLEMENTATION MODEL IN THE DEMOCRATIC REPUBLIC OF CONGO (DRC)

**Jicko Bondole**<sup>1</sup>, Aline Nkulu<sup>1</sup>, Jimmy Anzolo<sup>1</sup>, Rova Ratsimandisa<sup>1</sup>, Michael Hainsworth<sup>2</sup>, Arantxa Roca Feltrer<sup>3</sup>, Hyacinthe Kaseya<sup>4</sup>, Alain Bokota<sup>4</sup>, Ghislain Kikunda<sup>4</sup>, Andre Kaseba<sup>4</sup>, Eric Mukomena<sup>4</sup>

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### ASSESSING THE FEASIBILITY OF USING A MULTIPLEX SEROLOGICAL ASSAY TO CONDUCT SEROSURVEILLANCE FOR MALARIA EXPOSURE

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### EVIDENCE OF P. VIVAX IN NORTHERN KENYA, AN EMERGING MALARIA CONTROL THREAT; AN INCIDENCE REPORT FROM THE OUTCOME OF THE MID-2023 EPIDEMIC RESPONSE AND FOLLOW UP SURVEY

**Francis T. Kimani**, Kelvin Thiong, o  
KEMRI, Nairobi, Kenya

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### SOUTH-SOUTH EXCHANGE - USE OF A COLLABORATIVE CAPACITY STRENGTHENING MODEL FOR COUNTRIES APPROACHING MALARIA ELIMINATION

**Elizabeth V. Burroughs**<sup>1</sup>, Hannah M. Edwards<sup>1</sup>, Lieven Vernaeve<sup>2</sup>, Elizabeth Berryman<sup>1</sup>, Médoune Ndiop<sup>3</sup>, Wahjib Mohammed<sup>4</sup>, Balthazar Candrinho<sup>5</sup>, Arantxa Roca-Feltrer<sup>6</sup>

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## BENIN'S MALARIA SURVEILLANCE SYSTEM: INNOVATIONS TO PURSUE AND WEAKNESSES TO IMPROVE

Achille Couao-Zotti<sup>1</sup>, Koffi Emmanuel YOVO<sup>2</sup>, Julien Aïssan<sup>1</sup>, William Houndjo<sup>1</sup>, Macoumba Toure<sup>3</sup>, Lundi-Anne Omam<sup>2</sup>, Didier Agossadou<sup>2</sup>, Rock Aikpon<sup>1</sup>, Thibaud de Chevigny<sup>3</sup>, Olajumoke Adekeye<sup>2</sup>, Cyriaque Afoukou<sup>1</sup>, Achille Batonon<sup>1</sup>

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## BED NET USE, MISUSE, AND MISCONCEPTION: A COMMUNITY-BASED CROSS-SECTIONAL STUDY IN FIVE REGIONS OF MAINLAND TANZANIA

Ruth Boniface Mbwambo<sup>1</sup>, Filbert Francis<sup>1</sup>, Daniel Challe<sup>1</sup>, Misago D. Seth<sup>1</sup>, Rashid A. Madebe<sup>1</sup>, Rule Budodo<sup>1</sup>, Angelina J. Kisambale<sup>1</sup>, Gervas A. Chacha<sup>1</sup>, Ramadhan Moshi<sup>1</sup>, Salehe S. Mandai<sup>1</sup>, Dativa Pereus<sup>1</sup>, Catherine Bakari<sup>1</sup>, Sijenuu Aaron<sup>2</sup>, Daniel Mbwambo<sup>2</sup>, Abdallah Lusasi<sup>2</sup>, Stella Kajange<sup>3</sup>, Samwel Lazaro<sup>2</sup>, Ntuli Kapologwe<sup>3</sup>, Celine I. Mandara<sup>1</sup>, Deusdedith S. Ishengoma<sup>1</sup>

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## QUANTIFY THE TREND IN MALARIA INCIDENCE AT HEALTH DISTRICT LEVEL AND IDENTIFY THE FACTORS ASSOCIATED WITH THIS INCIDENCE IN BURKINA FASO FROM 2016-2022 USING ROUTINE CASES DATA

Ousmane Oumou DIALLO<sup>1</sup>, Ambroise Ouédraogo<sup>2</sup>, Sebastian Rodriguez<sup>1</sup>, Oumar Billa<sup>1</sup>, Jean Pascal Sandwidji<sup>2</sup>, Jean Baptiste Ouedraougou<sup>2</sup>, Aissata Barry<sup>2</sup>, Beatriz Galatas<sup>3</sup>, Noelle Samia<sup>1</sup>, Jaline Gerardin<sup>4</sup>, Sidzabda C. B. Kompaoré<sup>2</sup>

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## FEASIBILITY OF USING GEOGRAPHIC INFORMATION SYSTEMS (GIS) TO FACILITATE POPULATION-PROPORTIONATE HOUSEHOLD SAMPLING OF ADMINISTRATIVE UNITS IN NORTHERN UGANDA, A CASE STUDY

Elizabeth R. Zhang<sup>1</sup>, Frida Aryemo<sup>2</sup>, Natasha Turyasingura<sup>1</sup>, Melody Deblasio<sup>3</sup>, Christopher Nyeko<sup>2</sup>, Sandra Ajolorwo<sup>2</sup>, Vivian Nakiwu<sup>2</sup>, Amy Bei<sup>1</sup>, Sunil Parikh<sup>1</sup>, Richard Echodu<sup>4</sup>

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## DEVELOPING A ROADMAP FOR THE IMPLEMENTATION OF MALARIA GENOMIC SURVEILLANCE IN AFRICA

Abdoulaye Djimde<sup>1</sup>, Alfred Amambua-Ngwa<sup>2</sup>, Anita Ghansah<sup>3</sup>, Collet Dandara<sup>4</sup>, Charles Wondji<sup>5</sup>, Isabella Oyier<sup>6</sup>, Francis F. Chikuse<sup>7</sup>, Nyasha Sithole<sup>7</sup>, Aquillah Kanzi<sup>8</sup>, Olivo Miotto<sup>9</sup>, Victoria Simpson<sup>10</sup>, Sofonias Tessema<sup>7</sup>

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## DRUG PHENOTYPE ASSESSMENT TO VALIDATE DRUG RESISTANCE MARKERS CHANGING AMONG NATURAL SENEGALESE *PLASMODIUM FALCIPARUM* ISOLATES

Yaye Die Ndiaye<sup>1</sup>, Katelyn Vendrely Brenneman<sup>2</sup>, Wesley Wong<sup>2</sup>, Imran Ullah<sup>2</sup>, Stephen Schaffner<sup>3</sup>, Abdoulaye Tine<sup>1</sup>, Mouhammad Sy<sup>1</sup>, Tolla Ndiaye<sup>1</sup>, Amy Gaye<sup>1</sup>, Mame Fama Ndiaye<sup>1</sup>, Mariama Touré<sup>1</sup>, Nogaye Gadiaga<sup>1</sup>, Aita Séné<sup>1</sup>, Awa Bineta Deme<sup>1</sup>, Baba Dieye<sup>1</sup>, Mamadou Samb Yade<sup>1</sup>, Younouss Diehdiou<sup>1</sup>, Daba Zoumatrou<sup>1</sup>, Fatou Ba Fall<sup>4</sup>, Doudou Séné<sup>5</sup>, Medoune Ndiop<sup>4</sup>, Ibrahima Diallo<sup>5</sup>, Jules François Gomis<sup>1</sup>, Aida Sadikh Badiane<sup>1</sup>, Mamadou Alpha Diallo<sup>1</sup>, Ibrahima Mbaye Ndiaye<sup>1</sup>, Bronwyn MacInnis<sup>6</sup>, Sarah Volkman<sup>2</sup>, Daouda Ndiaye<sup>1</sup>, Dyann Wirth<sup>2</sup>

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## DEVELOPING AN OPEN SOURCE, FREE, AND GENERALIZABLE SAMPLE AND DATA MANAGEMENT SYSTEM TO ENABLE SCALABLE AND SUSTAINABLE GENOMIC SURVEILLANCE IN SENEGAL

Katherine DeRuff<sup>1</sup>, Bassirou Ngom<sup>2</sup>, Jules Gomis<sup>2</sup>, Elizabeth Curtis<sup>1</sup>, Anna Y. Burkhard<sup>3</sup>, Kairon Shao<sup>3</sup>, Mariama Touré<sup>2</sup>, Mouhamad Sy<sup>2</sup>, Mamadou Alpha Diallo<sup>2</sup>, Yaye Die Ndiaye<sup>2</sup>, Chérif Younouss El Amin Lath Diouf<sup>2</sup>, Younouss Diehdiou<sup>2</sup>, Katherine Battle<sup>4</sup>, Jonathan Livny<sup>1</sup>, Dyann Wirth<sup>2</sup>, Daouda Ndiaye<sup>2</sup>, Sarah Volkman<sup>3</sup>, Bronwyn MacInnis<sup>1</sup>

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## IMPACT OF A REWARD SYSTEM AND CONSISTENT FEEDBACK ON REPORTING RATE AND TIMELINESS IN OGUN STATE, SOUTHWEST NIGERIA

Ralph Enushai<sup>1</sup>, Oluwatosin Olotu<sup>1</sup>, Frederick Ifjeh<sup>1</sup>, Chinedu J. Chukwu<sup>2</sup>, Isaac Adejo<sup>2</sup>, Tomisin Abimbola<sup>2</sup>, Serah N. Nweke<sup>3</sup>, Victoria Erinle<sup>2</sup>, Dozie Ezechukwu<sup>2</sup>, Thomas Hall<sup>4</sup>, Frank Oronsaye<sup>5</sup>, Sonachi S. Ezeiru<sup>5</sup>, Cyril Ademu<sup>6</sup>, Chukwu Okoronkwo<sup>6</sup>, Godwin N. Ntadam<sup>6</sup>, Olugbenga A. Mokuolu<sup>7</sup>, James Ssekitooleko<sup>8</sup>

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## ENHANCING WEEKLY EPIDEMIOLOGICAL SURVEILLANCE DATA COMPLETENESS ACROSS KARAMOJA REGION OF UGANDA: A QUALITY IMPROVEMENT APPROACH

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## SOCIODEMOGRAPHIC STUDIES AND THE SPATIAL DISTRIBUTION OF MALARIA EPISODES IN DANGASSA, KATI DISTRICT FROM 2014 TO 2016

Oumar Thiero<sup>1</sup>, Aissata Massambou Sacko<sup>2</sup>, Kola Cisse<sup>2</sup>, Soumba Keita<sup>3</sup>, Seydou Doumbia<sup>3</sup>

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### IMPROVING MALARIA EPIDEMIC SURVEILLANCE IN UGANDA'S WEST NILE REGION THROUGH HEALTH WORKER CAPACITY STRENGTHENING AND REUSABLE MALARIA SURVEILLANCE CHARTS

**Felix Manano**<sup>1</sup>, Robert Abiriga<sup>1</sup>, Angela Kateemu<sup>1</sup>, Richard Ongom Opio<sup>1</sup>, Felix Omania<sup>1</sup>, Immaculate Mujawimana<sup>2</sup>, Edward Mugwanya<sup>1</sup>, Ronald Kimuli<sup>3</sup>, Amy Casella<sup>4</sup>, Aliza Hasham<sup>4</sup>, Benjamin Binagwa<sup>1</sup>, Nancy Brady<sup>4</sup>  
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### INTEGRATION OF COMMUNITY DATA WITH ROUTINE HEALTH FACILITY DATA TO GENERATE INSIGHTS INTO MALARIA EPIDEMIOLOGY AND SERVICE DELIVERY IN BUIKWE DISTRICT IN UGANDA

**Ruth N. Kigozi**<sup>1</sup>, John Baptist Bawnika<sup>1</sup>, Stella Bakeera<sup>1</sup>, Rutayisire Medi<sup>2</sup>, Solomon Muhumuza<sup>2</sup>, Anthony Nuwa<sup>1</sup>, Emily Goodwin<sup>1</sup>, Godfrey Magumba<sup>1</sup>, Hanna Edwards<sup>3</sup>  
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### DIGITALIZATION THROUGH DHIS2 TRACKER PROGRAMS AT HOUSEHOLD AND INDIVIDUAL LEVELS FOR 2023 SEASONAL MALARIA CHEMOPREVENTION CAMPAIGNS IN CÔTE D'IVOIRE

**Alexis Serge Aimain**<sup>1</sup>, Luigi Nuñez<sup>2</sup>, Amadou Donapoho Soro<sup>3</sup>, Eric Akkati<sup>3</sup>, Melly Aissatou Traore<sup>3</sup>, Yao Koffi<sup>3</sup>, Mea Antoine Tanoh<sup>1</sup>, Collette Yah Epse Kokrasset<sup>1</sup>, Patricia L. Yepassis-Zembrou<sup>4</sup>, Pascal Zinzindohoue<sup>5</sup>, Blaise Kouadio<sup>5</sup>, Melaine Tape<sup>5</sup>  
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### STREAMLINING THE MEDICINE REGISTRATION SYSTEM TO IMPROVE ACCESS TO QUALITY MALARIA COMMODITIES IN MADAGASCAR, 2018 - 2024

**Jean René Randriasamimanana**<sup>1</sup>, Fanja Rakotomanana<sup>2</sup>, Hoby Sitraka Ravelomampianina<sup>2</sup>, Soafara Andrianome<sup>3</sup>, Antonia Stéphanie Rakotoniaina<sup>1</sup>, Aline Mukerabirori<sup>1</sup>, Aishling Thurow<sup>4</sup>, Jane Briggs<sup>4</sup>, Thomas Hall<sup>4</sup>, Luz Razafimbelo<sup>1</sup>, Laurent Kapesa<sup>5</sup>  
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### ESTABLISHING ROBUST, OPEN, ACCESSIBLE BIOINFORMATICS TOOLS FOR MALARIA GENOMIC DATA ANALYSIS AND REPORTING, IMPLEMENTED IN THE TERRA CLOUD-BASED ANALYSIS PLATFORM

Jonathan T. Smith<sup>1</sup>, Stephen Schaffner<sup>1</sup>, Bassirou Ngom<sup>2</sup>, Wesley Wong<sup>3</sup>, Christine Loreth<sup>1</sup>, Katherine DeRuff<sup>1</sup>, Elizabeth Curtis<sup>1</sup>, Shadi Zaheri<sup>1</sup>, Jorge-Eduardo Amaya-Romero<sup>3</sup>, Angela Early<sup>1</sup>, Daniel Park<sup>1</sup>, Dyann Wirth<sup>3</sup>, Daouda Ndiaye<sup>2</sup>, Kiran Garimella<sup>1</sup>, **Bronwyn MacInnis**<sup>1</sup>  
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### COMPARATIVE ANALYSIS OF INDIVIDUAL-BASED MALARIA MODELS: CHARACTERIZING MODEL BEHAVIOR FOR ENHANCED CONFIDENCE IN MODEL-INFORMED DECISION MAKING

**Manuela Runge**<sup>1</sup>, Ricky Richter<sup>1</sup>, Narimane Nekkab<sup>2</sup>, Aurélien Cavelan<sup>2</sup>, Tom Brewer<sup>3</sup>, Peter Winskill<sup>3</sup>, Melissa Penny<sup>4</sup>, Jaline Gerardin<sup>1</sup>  
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### EVALUATING SUB-NATIONAL TAILORING OF MALARIA INTERVENTIONS

**Adam Bennett**<sup>1</sup>, Peder Digre<sup>1</sup>, Hana Bilak<sup>2</sup>, Hannah Slater<sup>1</sup>, John Miller<sup>3</sup>  
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### RAPID MOLECULAR MONITORING OF KELCH13 OF PLASMODIUM FALCIPARUM SHOWS LOW DIVERSITY AND LACK OF ARTEMISININ RESISTANCE-ASSOCIATED MUTATIONS ON BIKO ISLAND, EQUATORIAL GUINEA

**Thomas C. Stabler**<sup>1</sup>, Salome Hosch<sup>1</sup>, Elizabeth Nyakarungu<sup>2</sup>, Johanna Giger<sup>1</sup>, David S. Galick<sup>2</sup>, Carlos A. Guerra<sup>3</sup>, Guillermo A. Garcia<sup>3</sup>, Tobias Schindler<sup>4</sup>, Joana C. Silva<sup>5</sup>, Claudia Daubenberger<sup>1</sup>  
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### ASSESSMENT OF QUALITÉ OF MALARIA CASE MANAGEMENT AND PREVENTION USING MICROSTRATIFICATION METHOD

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### ADVANCING EARLY WARNING SYSTEMS FOR MALARIA, PROGRESS, CHALLENGES, AND FUTURE DIRECTIONS

**Donnie Mategula**<sup>1</sup>, Judy Gichuki<sup>2</sup>, Karen Barnes<sup>3</sup>, Emanuele Giorgi<sup>4</sup>, Dianne Jannette Terlouw<sup>1</sup>  
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## Malaria - Vaccines and Immunotherapeutics

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### STRAIN-TRANSCENDING ANTI-AMA1 HUMAN MONOCLONAL ANTIBODIES NEUTRALIZE MALARIA PARASITES INDEPENDENT OF DIRECT RON2L RECEPTOR BLOCKADE

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### PRE-CLINICAL STUDY ON VIRAL-VECTORED *P. FALCIPARUM* MULTISTAGE VACCINE EFFECTIVE BOTH FOR PROTECTION AND TRANSMISSION-BLOCKADE IN RHESUS PRIMATES

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### R21/MATRIX-M™ PHASE III TRIAL: FURTHER FOLLOW-UP AND ASSESSMENT OF AN ADDITIONAL BOOSTER DOSE

Alassane Dicko<sup>1</sup>, Mainga Hamaluba<sup>2</sup>, Ally Olotu<sup>3</sup>, Halidou Tinto<sup>4</sup>, Jean-Bosco Ouédraogo<sup>5</sup>, Mehreen S. Dattoo<sup>6</sup>, Emma Beaumont<sup>7</sup>, John Bradley<sup>7</sup>, Sandesh Bharati<sup>8</sup>, Prasad S. Kulkarni<sup>9</sup>, Umesh Shaligram<sup>8</sup>, Adrian V S Hill<sup>6</sup>, R21/Matrix-M Phase III Trial Group<sup>9</sup>

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### STRUCTURE GUIDED DESIGN OF A MRNA VACCINE TARGETING APICAL MEMBRANE ANTIGEN 1 IN *P. FALCIPARUM*

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### SAFETY OF THE RTS,S/AS01<sub>E</sub> MALARIA VACCINE ONE YEAR AFTER THE PRIMARY VACCINATION IN REAL-LIFE SETTINGS IN THREE SUB-SAHARAN AFRICAN COUNTRIES: INTERIM RESULTS

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### OFF-TARGET ANTIBODY RESPONSES TO BLOOD STAGE ANTIGENS ARE ASSOCIATED WITH CROSS-REACTIVE ANTIBODIES TO THE MAJOR AND MINOR REPEATS OF THE *PLASMODIUM FALCIPARUM* CIRCUMSPOROZOITE PROTEIN IN AFRICAN CHILDREN PARTICIPATING IN THE RTS,S VACCINE TRIALS

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### GENOTYPIC INFECTION ENDPOINT ANALYSIS TO UNDERSTAND EFFICACY AND ESCAPE POTENTIAL OF THE MALARIA MONOCLONAL ANTIBODY CIS43LS

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### COMPARATIVE IMMUNOGENICITY OF THE R21/MATRIX-M MALARIA VACCINE ACROSS AGE GROUPS AND GEOGRAPHIES

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### R21/MATRIX-M MALARIA VACCINE PHASE 3 CLINICAL TRIAL IMMUNOGENICITY

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### A CONJUGATED PFS230D1 VACCINE INDUCES ANTIBODIES THAT DIRECTLY PREVENT FERTILIZATION AND COMPLEMENT ENHANCES NEUTRALIZATION

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### FORCED DEGRADATION STUDIES WITH CONJUGATED PFS230D1-EPA DRUG PRODUCT PROVIDE A BASIS FOR EVALUATING ACCELERATED STABILITY

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### DESIGN, CHARACTERIZATION, AND EFFICACY OF TWO UNIQUE MRNA-BASED BLOOD-STAGE MALARIA VACCINES

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### INTRODUCTION OF MALARIA VACCINE IN BURKINA FASO: LESSONS LEARNED

Mwinmalo Ines Evelynne Da<sup>1</sup>, Rene Didace Bakouan<sup>2</sup>, Anissa Sidibe<sup>3</sup>, Christelle Neya<sup>2</sup>, Soumeiya Ouangraoua<sup>1</sup>, Francine Ouedraogo<sup>1</sup>, Edward Kenyi<sup>3</sup>, Gladys Tetteh<sup>3</sup>, Meg Sreevatsava<sup>4</sup>, Ousmane Badolo<sup>1</sup>, Christopher Morgan<sup>3</sup>

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### FUNCTIONAL EFFICACY OF NANOPARTICLE CONJUGATED P. VIVAX CIRCUMSPOROZOITE PROTEIN SUBDOMAIN VACCINE

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### DIRECT SKIN FEEDING ASSAY IN MALARIA TRANSMISSION BLOCKING VACCINE STUDIES - STANDARDIZATION, SAFETY, TOLERANCE, AND SCALABILITY FOR USE IN PHASE 2 AND PHASE 3 CLINICAL TRIALS

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### COMPARABILITY OF THE STANDARD MEMBRANE FEEDING ASSAY (SMFA) ACROSS DIFFERENT VACCINE STUDIES, STUDY SITES, AND TIME

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### IMMUNOGENICITY OF A PLASMODIUM VIVAX BLOOD STAGE NANOPARTICLE VACCINE

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### NOVEL ASSAY PREDICTS STANDARD MEMBRANE FEEDING RESULTS FOR MALARIA TRANSMISSION BLOCKING VACCINE PFS230D1-EPA/AS01

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### ABUNDANT NON-NEUTRALIZING, SYNERGIZING IGG LINEAGES PLAY A CRUCIAL PROTECTIVE ROLE IN MALARIA-NAÏVE UNITED KINGDOM ADULTS VACCINATED WITH BLOOD-STAGE VACCINE CANDIDATE RH5.1/AS01<sub>B</sub>

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### ELICITATION OF POTENT LIVER-STAGE IMMUNITY BY NANOPARTICLE IMMUNOGENS DISPLAYING P. FALCIPARUM CSP-DERIVED ANTIGENS

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### EFFECTIVENESS OF PYRETHROID-PIPERONYL BUTOXIDE NETS VERSUS STANDARD PYRETHROID-ONLY NETS IN PREVENTING MALARIA IN CHILDREN UNDER 10 YEARS LIVING IN KISANTU HEALTH ZONE, DEMOCRATIC REPUBLIC OF THE CONGO: A QUASI-EXPERIMENTAL STUDY

## Bacteriology - Enteric Infections

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### ASSESSMENT OF THE BURDEN AND RISK OF TYPHOID FEVER USING AVAILABLE DATA TO INFORM VACCINE INTRODUCTION IN RWANDA

Zimy Wansaula<sup>1</sup>, Yesser Sebeh<sup>2</sup>, Rosette Nahimana<sup>3</sup>, Helene Balisanga<sup>4</sup>, Axel P. Karamage<sup>4</sup>, Alain Zimulinda<sup>5</sup>, Edson Rwagasore<sup>4</sup>, Katrin Sadigh<sup>1</sup>, Matthew Mikoleit<sup>1</sup>, Musa Y. Hindiyeh<sup>6</sup>, Carol Tevi-Benissan<sup>6</sup>, Jenny Walldorf<sup>6</sup>, Anna A. Minta<sup>6</sup>, Adwoa Bentsi-Enchill<sup>6</sup>, Lucy B. Nagle<sup>1</sup>

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**AEROMONAS HYDROPHILA AS A CAUSE OF ACUTE DIARRHEA FROM WESTERN AND COASTAL REGIONS IN KENYA**

Janet Ndonge, Mary Kirui, Erick Kipkirui, Ronald Kirera, Nancy Kipkemoi, Margaret Koech, Kirti Tiwari, Elizabeth Odundo  
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**PHENOTYPIC RESISTANCE OF CIPROFLOXACIN AND AZITHROMYCIN RESISTANT CAMPYLOBACTER SP. ISOLATES FROM PERU TO AN EXTENDED PANEL OF ANTIBIOTICS**

Katia Manzanares Villanueva<sup>1</sup>, Francesca Schiaffino<sup>2</sup>, Lucero Romaina Cachique<sup>1</sup>, Maribel Paredes Olortegui<sup>1</sup>, Pablo Penataro Yori<sup>3</sup>, Evangelos Mourkas<sup>4</sup>, Ben Pascoe<sup>4</sup>, Kerry K. Cooper<sup>5</sup>, Craig T. Parker<sup>6</sup>, Margaret Kosek<sup>3</sup>  
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**APPLICATION OF THE RAPID DIAGNOSTIC TEST BASED ON LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (RLDT) FOR SHIGELLA AND ENTEROTOXIGENIC ESCHERICHIA COLI (ETEC) DETECTION IN CHILDHOOD DIARRHEA IN BURKINA FASO**

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**ASSOCIATION OF THE HUNGER SEASON AND MALNUTRITION WITH DIARRHEA ETIOLOGY AND POOR OUTCOMES AMONG CHILDREN HOSPITALIZED WITH DIARRHEA IN HAYDOM, TANZANIA**

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**RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY ON THE EFFICACY AND SAFETY OF CAMPETEC HYPERIMMUNE BOVINE COLOSTRUM (HBC) FOR THE PREVENTION OF CAMPYLOBACTER-MEDIATED DIARRHEAL DISEASES**

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**GENOMIC SURVEILLANCE OF ANTIMICROBIAL RESISTANCE IN CHILDREN WITH DIARRHEA AT A COMMUNITY-LEVEL HEALTH FACILITY IN MALI**

Antoine Dara, Hinda Doucoure, Boi Kone, Bintou Diarra, Lassina Timbine, Mamadou Tekete, Abdoulaye Djimde  
 Pathogens genomics Diversity Network Africa, Bamako, Mali

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**INTESTINAL MICROBIOME AND IMPLICATIONS ON MATERNAL HEALTH AND BIRTH OUTCOMES**

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**ISOLATION AND GENOMIC CHARACTERIZATION OF CAMPYLOBACTER SPECIES AND IDENTIFICATION OF ANTIBIOTIC RESISTANT ESCHERICHIA COLI AND KLEBSIELLA PNEUMONIA FROM ZIMBABWE**

Marya Carmolli<sup>1</sup>, Elizabeth Ross Colgate<sup>1</sup>, Korin Eckstrom<sup>1</sup>, Beth D. Kirkpatrick<sup>1</sup>, Lisa Langhaug<sup>2</sup>, Benjamin Lee<sup>1</sup>, Kuda Mutasa<sup>2</sup>, Robert Ntozini<sup>2</sup>, Andrew Prendergast<sup>2</sup>, Naume Tavengwa<sup>2</sup>, Matthew J. Wargo<sup>1</sup>  
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**PATHOGENS CAUSING DIARRHEA IN CHILDREN UNDER FIVE AMONG A VACCINATED POPULATION IN COASTAL GHANA**

Delia Akosua Benewah Bando<sup>1</sup>, Ernest Kenu<sup>1</sup>, Mawuli Dzodzomenyo<sup>1</sup>, Francis Dennis<sup>2</sup>, Duah Dwomoh<sup>1</sup>, Edwin Andrew Afari<sup>1</sup>, George Armah<sup>3</sup>  
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**USING A VACCINATION REGISTER TO MINIMIZE THE RISK OF MISCLASSIFICATION OF CHOLERA VACCINATION STATUS IN THE DEMOCRATIC REPUBLIC OF THE CONGO**

Espoir Bwenge Malembaka<sup>1</sup>, Patrick Musole Bugeme<sup>1</sup>, Chloe Hutchins<sup>2</sup>, Jules Jackson<sup>1</sup>, Pengcheng Fang<sup>1</sup>, Jaime Muftini Saidi<sup>3</sup>, Jean-Marie Chirhonda<sup>4</sup>, Joël Mashauri Zigashane<sup>4</sup>, Faraja Masembe<sup>4</sup>, Delphin Rukakiza<sup>5</sup>, John Kazana<sup>6</sup>, Laddys Bodiongo Landu<sup>7</sup>, Jackie Knee<sup>2</sup>, Andrew S. Azman<sup>1</sup>  
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**USING CLINICAL PREDICTION TO IDENTIFY CHOLERA IN SEVERELY DEHYDRATED CHILDREN WITH DIARRHEA**

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### SHIGELLA SPECIFIC DIARRHEAL BURDEN OVER A DECADE IN THE GAMBIA

**Bakary Conteh**<sup>1</sup>, Hannah Atlas<sup>2</sup>, Helen Powell<sup>3</sup>, Erika Feutz<sup>2</sup>, Sean R. Galagan<sup>2</sup>, Henry Badji<sup>1</sup>, Mehrab Karim<sup>1</sup>, Alhagie Manneh<sup>1</sup>, Musa Jallow<sup>1</sup>, Ramatoulie Jawara<sup>1</sup>, Belali Keita<sup>1</sup>, Bubacarr E. Ceesay<sup>1</sup>, Sheikh Jarju<sup>1</sup>, Abdoulie M.J. Jabang<sup>1</sup>, Samba Juma Jallow<sup>1</sup>, Ousman Secka<sup>1</sup>, Martin Antonio<sup>1</sup>, Sharon M. Tennant<sup>3</sup>, Milagritos D. Tapia<sup>4</sup>, Umberto D'Alessandro<sup>1</sup>, Patricia B. Pavlinac<sup>2</sup>, Karen L. Kotloff<sup>3</sup>, M. Jahangir Hossain<sup>1</sup>

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### ENTERIC PATHOGEN PREVALENCE, INCIDENCE AND CLEARANCE RATES, AND SHEDDING INTENSITY IN URBAN KENYAN INFANTS FROM MOLECULAR TESTING OF SEQUENTIAL FECAL SAMPLES

**Daniel K. Sewell**<sup>1</sup>, Fanta Gutema<sup>1</sup>, Sheillah Simiyu<sup>2</sup>, Phylis Busienei<sup>2</sup>, Collins Ouma<sup>3</sup>, Christine Amond<sup>2</sup>, John Agira<sup>2</sup>, Bonplace Okoth<sup>2</sup>, Marsha Marsha<sup>3</sup>, Jairus Abuom<sup>3</sup>, Alexis Kapanka<sup>1</sup>, Blessing Mberu<sup>2</sup>, Daniel Kakou<sup>1</sup>, Kelly Baker<sup>1</sup>

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### ASSEMBLY AND PERFORMANCE OF A CHOLERA RAPID DIAGNOSTIC TEST PROTOTYPE THAT DETECTS BOTH VIBRIO CHOLERA AND BACTERIOPHAGE

Md. Abu Sayeed<sup>1</sup>, Imrul K. Nabil<sup>2</sup>, Piyash Protik<sup>2</sup>, Karen Kelly<sup>1</sup>, Yasmin A. Begum<sup>2</sup>, Taufiqur R. Bhuiyan<sup>2</sup>, Firdausi Qadri<sup>2</sup>, Ashrafur I. Khan<sup>2</sup>, **Eric J. Nelson**<sup>1</sup>

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## Bacteriology - Other Bacterial Infections

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### INTEGRATION OF ANTIMICROBIAL RESISTANCE DIAGNOSTICS IN BOKÉ REGIONAL HOSPITAL LABORATORY: GUINEA, JULY-DECEMBER 2023.

**Siba Michel GROVOGUI**<sup>1</sup>, Julie Rae SINCLAIR<sup>1</sup>, Boubacar Ibrahima DIALLO<sup>1</sup>, Danielle T. BARRADAS<sup>1</sup>, Varough DEYDE<sup>2</sup>

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### INITIAL ISOLATION AND WHOLE GENOME SEQUENCING OF CORYNEBACTERIUM HINDLERAE IN ISIOLO, KENYA

**Bryson B. Kimemia**<sup>1</sup>, Lillian Musila<sup>1</sup>, Solomon Langat<sup>2</sup>, Erick Odoyo<sup>1</sup>, Stephanie Cinkovich<sup>3</sup>, Samoel Khamadi<sup>2</sup>, Jaree Johnson<sup>4</sup>, Elly H. Ojwang<sup>5</sup>, Timothy E. Egbo<sup>5</sup>, Eric C. Garges<sup>5</sup>, Fredrick L. Eyase<sup>1</sup>

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### DIAGNOSTIC PERFORMANCE OF ANTIGEN F1-BASED RAPID DIAGNOSTIC TEST AT THE BEDSIDE ON-SITE AND AT REFERENCE LABORATORY FOR BUBONIC PLAGUE IN HIGH ENDEMIC SETTINGS IN MADAGASCAR

**Mihaja Raberahona**<sup>1</sup>, Minoarisoa Rajerison<sup>2</sup>, Rindra Vatosoa Randremanana<sup>2</sup>, Josephine Bourner<sup>3</sup>, Ravaka Randriamparany<sup>2</sup>, Tsinjo Rasoanaivo<sup>2</sup>, Lisy Hanitra Razanaivo<sup>2</sup>, Gabriella Zadonirina<sup>2</sup>, Theodora Mayouya-Gamana<sup>2</sup>, Reziky Tiandraza Mangahasimbola<sup>2</sup>, Tansy Edwards<sup>4</sup>, Elise Pesonel<sup>3</sup>, Rivonitina Andry Rakotoarivelo<sup>5</sup>, Mamy Jean de Dieu Randria<sup>1</sup>, Peter W. Horby<sup>3</sup>, Piero L. Olliaro<sup>3</sup>

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### VARIATIONS IN NASOPHARYNGEAL MICROBIOTA ACCORDING TO COVID-19 SEVERITY STATES

Hugo Carrillo-Ng<sup>1</sup>, Juana del Valle-Mendoza<sup>2</sup>, Ronald Aquino-Ortega<sup>2</sup>, Wilmer Silva-Caso<sup>2</sup>, Carmen Tinco-Valdez<sup>2</sup>, Yordi Tarazona-Castro<sup>1</sup>, **Miguel A. Aguilar-Luis**<sup>2</sup>

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### MOLECULAR DIAGNOSIS OF SHIGELLA SPP. IN CHILDREN WITHOUT CLINICAL SYMPTOMS IN A RURAL AND URBAN AREA OF NORTHERN PERU

**Miguel A. Aguilar-Luis**<sup>1</sup>, Ronald Rodriguez-Alfaro<sup>1</sup>, Yimi Arnaldo Rosa-Mori<sup>1</sup>, Juana del Valle-Mendoza<sup>1</sup>, Ronald Aquino-Ortega<sup>1</sup>, Wilmer Silva-Caso<sup>1</sup>, Jorge Bazan-Mayra<sup>2</sup>, Carmen Tinco-Valdez<sup>3</sup>, Yordi Tarazona-Castro<sup>3</sup>

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### A MULTIPLEX REAL-TIME PCR ASSAY FOR DETECTION OF THE FOUR MAIN CAUSES OF BACTERIAL MENINGITIS

**Simon Tiemélé Laurent Amoikon**<sup>1</sup>, Kanny Diallo<sup>1</sup>, Firmin Kouassi Missa<sup>1</sup>, Jérémie Kolotioloman Tuo<sup>1</sup>, Odile B. Harrison<sup>2</sup>, Martin CJ Maiden<sup>3</sup>

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### EFFICACY OF MACOZINONE AND SUTEZOLID AGAINST MYCOBACTERIUM LEPRAE

**Vino T. Cheriyan**, Nashone Ray, Vilma Marks, Patrick Kyle Andrews, Linda B. Adams, Ramanuj Lahiri

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### DETECTING NOVEL MECHANISMS OF CARBAPENEM RESISTANCE: AN INNOVATIVE SCREENING SYSTEM IN LIMA, PERU

**Grace Tan**<sup>1</sup>, George Lawson<sup>1</sup>, Omar Romero Rodriguez<sup>2</sup>, Diego Taquiri Diaz<sup>2</sup>, Lucero Mascaro Rivera<sup>2</sup>, Lucero Merino Castaneda<sup>2</sup>, Candy Leon Palomino<sup>2</sup>, Alice Osmaston<sup>1</sup>, Luis Alvarado Ruis<sup>3</sup>, Patricia Sheen Cortavarria<sup>2</sup>, Mirko Zimic Peralta<sup>2</sup>, James Hatcher<sup>1</sup>, Ioannis Baltas<sup>1</sup>, Robert H. Gilman<sup>4</sup>, Monica Pajuelo Travezaño<sup>2</sup>, Louis Grandjean<sup>1</sup>

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### EXPLORING POTENTIAL ASSOCIATION BETWEEN LOW BODY MASS INDEX AND MID-UPPER ARM CIRCUMFERENCE WITH LEPROSY: A CASE-CONTROL STUDY IN ADDIS ABABA, ETHIOPIA

Lawrence Dela Cruz<sup>1</sup>, Elleni Zeleke<sup>2</sup>, Hatem Mohamed<sup>1</sup>, Yosef Wubshet<sup>3</sup>, Liya Sesay Getachew<sup>1</sup>, Aemon Fissaha<sup>4</sup>, Biruk Debebe<sup>4</sup>, Ytbarek Gebremedhin<sup>4</sup>, Jessica K. Fairley<sup>1</sup>, Kidist Bobosha<sup>2</sup>, Shimelis Nigusse<sup>4</sup>

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### SEROPOSITIVITY TO IGG ANTIBODY OF RICKETTSIA SPP. IN A ENDEMIC AREA OF SOUTHEAST MEXICO

Edgar Villarreal-Jimenez<sup>1</sup>, Nina Mendez-Dominguez<sup>1</sup>, Audey Arnal<sup>2</sup>, Fernando Puerto-Manzano<sup>3</sup>, Henry Noh-Pech<sup>3</sup>, Karla Dzul-Rosado<sup>3</sup>

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### EVALUATION OF AN ELECTRICITY-INDEPENDENT METHOD FOR IS2404 LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) DIAGNOSIS OF BURULI ULCER IN RESOURCE LIMITED SETTING

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### POOR WASH, UNDERNUTRITION, AND FOOD INSECURITY IS ASSOCIATED WITH ANTI-PGL1 POSITIVITY, MARKER OF LEPROSY INFECTION, IN ADDIS ABABA, ETHIOPIA

Hatem Mohamed<sup>1</sup>, Liya Sisay Getachew<sup>1</sup>, Elleni Zeleke<sup>2</sup>, Lawrence Dela Cruz<sup>1</sup>, Ytbarek Gebremedhin<sup>3</sup>, Biruk Debebe<sup>3</sup>, Yosef Wubshet<sup>4</sup>, Aemon Fissaha<sup>3</sup>, Shimelis Nigusse<sup>3</sup>, Jessica K. Fairley<sup>1</sup>, Kidist Bobosha<sup>2</sup>

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### EPIDEMIOLOGICAL FACTORS ASSOCIATED WITH MYCOBACTERIUM LEPRAE SEROPOSITIVITY AND HISTORY OF HANSEN'S DISEASE IN A HIGHLY ENDEMIC AREA OF MINAS GERAIS, BRAZIL

Audra Bass<sup>1</sup>, Heloíne M. Leite<sup>2</sup>, Pedro HF Marçal<sup>3</sup>, Lorena B.P. Oliveira<sup>4</sup>, Marcos D.S. Pinheiro<sup>2</sup>, José A. Ferreira<sup>5</sup>, Julie Clennon<sup>1</sup>, Thomas R. Ziegler<sup>1</sup>, Jeffrey M. Collins<sup>1</sup>, Lance A. Waller<sup>1</sup>, Lucia A. O. Fraga<sup>2</sup>, Jessica K. Fairley<sup>1</sup>

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### SEASONALITY AND ENVIRONMENTAL ASSOCIATION OF MELIOIDOSIS IN NORTHERN VIETNAM

Morgan C. Metrailler<sup>1</sup>, Quyen Tran Thi Li<sup>2</sup>, Treenate Jiranantasak<sup>1</sup>, Andrew Bluhm<sup>1</sup>, Tan Luong<sup>1</sup>, Khang Pham<sup>3</sup>, Ha Thi Thu Hoang<sup>3</sup>, Hoa Minh Luong<sup>3</sup>, Ngoc Bich Do<sup>3</sup>, Hai Thanh Pham<sup>3</sup>, Michael H. Norris<sup>4</sup>, Trung Thanh Trinh<sup>2</sup>, Jason K. Blackburn<sup>1</sup>

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## Bacteriology - Systemic Infections

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### ECOLOGY AND EPIDEMIOLOGY OF SARCINA TROGLODYTAE, A NOVEL BACTERIUM ASSOCIATED WITH A LETHAL DISEASE IN CHIMPANZEES (PAN TROGLODYTES) IN SIERRA LEONE

Emily Dunay<sup>1</sup>, Ismail Hirji<sup>2</sup>, Leah A. Owens<sup>1</sup>, Gregory A. Barrett-Wilt<sup>1</sup>, Konkofa Marah<sup>2</sup>, Naomi Anderson<sup>2</sup>, Maria Ruiz<sup>3</sup>, Rebeca Atencia<sup>3</sup>, Johanna R. Eifenbein<sup>1</sup>, Tony L. Goldberg<sup>1</sup>

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### OUTCOME AND PREDICTORS OF MORTALITY AMONG NEWBORNS WITH SEPSIS IN FOUR HEALTH FACILITIES IN MALI A COHORT STUDY

Fatoumata Bintou TRAORE<sup>1</sup>, Cheick Sidya SIDIBE<sup>2</sup>, Alhassane DIALLO<sup>3</sup>, Sidikiba SIDIBE<sup>4</sup>, Biennu Salim CAMARA<sup>4</sup>, El Hadj Marouf DIALLO<sup>5</sup>, Alexandre DELAMOU<sup>5</sup>, Hamadoun SANGHO<sup>6</sup>

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### INFLUENCE OF HIV INFECTION ON COMMON BACTERIA CAUSING SEPSIS AND ASSOCIATED SUSCEPTIBILITY PATTERNS IN CHILDREN AT A PEDIATRIC HOSPITAL IN ZAMBIA

Jonathan Gwasupika

Tropical Diseases Research Centre, Ndola, Zambia

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### AUSTRIAN SYNDROM : A RARE CASE REPORT

KAMENA MWANA-YILE HASSAN<sup>1</sup>, Samia EJJEBLI<sup>2</sup>, Hanane BADI<sup>1</sup>, Jean Claude BUCUMI<sup>1</sup>, Kamal EL Filali MARHOUM<sup>1</sup>

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### WHOLE GENOME SEQUENCING OF EXTENSIVELY DRUG-RESISTANT ENTEROBACTER HORMAECHEI CLINICAL ISOLATES FROM A SECONDARY HOSPITAL IN MOROCCO WITH HSV AND NDM CARBAPENEMASE GENES

Ahmed BELMOUDEN<sup>1</sup>, Fatima MOUSTAOU<sup>1</sup>, Mohamed AGHROUCH<sup>2</sup>, Youssef IDAGHDOUR<sup>3</sup>, Zohra LEMKHENTE<sup>1</sup>, Maryama BARHOINE<sup>1</sup>, Fatima BOUBRIK<sup>1</sup>

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### SUCCESSFUL APPLICATIONS OF PHAGE THERAPY TO OVERCOME MULTIDRUG RESISTANT BACTERIAL INFECTIONS

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### BURKHOLDERIA PSEUDOMALLEI: A NEGLECTED 'NEGLECTED TROPICAL DISEASE'?

Ashleigh Hale

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### GENOTYPIC AND PHENOTYPIC PROFILES OF ANTIMICROBIAL RESISTANCE IN PATHOGENIC BACTERIA ISOLATED FROM SEPTICEMIC PATIENTS IN WESTERN KENYA

Joseph Khamisi Kaingu<sup>1</sup>, James Nonoh<sup>2</sup>, Carolyne Kifude<sup>3</sup>, Kimita Gathii<sup>3</sup>, Amos Onditi<sup>3</sup>, Kirti Tiwari<sup>3</sup>, John Waitumbi<sup>3</sup><sup>1</sup>WRAIR-AFRICA/Maseno University, Kisumu, Kenya, <sup>2</sup>Maseno University, Kisumu, Kenya, <sup>3</sup>WRAIR-AFRICA, Kisumu, Kenya

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### INFORMING ECOLOGICAL NICHE MODELS OF *BACILLUS ANTHRACIS* WITH CONSTRAINED DIVERSITY INDICES AND PHYLOGENIES FOR TEXAS AND VIETNAM

Jason K. Blackburn<sup>1</sup>, Morgan A. Walker<sup>1</sup>, Morgan C. Metrailler<sup>1</sup>, Tan Luong<sup>1</sup>, Treenate Jiranantasak<sup>1</sup>, Andrew P. Bluhm<sup>1</sup>, Thi Thu H. Ha Hoang<sup>2</sup>, Van Khang Pham<sup>2</sup>, Ted L. Hadfield<sup>1</sup>, Diansy Zincke<sup>3</sup>, Martin E. Hugh-Jones<sup>4</sup>, Michael H. Norris<sup>5</sup>, Jose Miguel Ponciano<sup>1</sup><sup>1</sup>Emerging Pathogens Institute, Gainesville, FL, United States, <sup>2</sup>National Institute of Hygiene and Epidemiology, Hanoi, Vietnam, <sup>3</sup>UF ICBR, Gainesville, FL, United States, <sup>4</sup>Louisiana State University, Baton Rouge, LA, United States, <sup>5</sup>University of Hawaii at Manoa, Honolulu, HI, United States

## Bacteriology - Trachoma

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### SEROEPIDEMIOLOGY OF TRACHOMA IN A LOW PREVALENCE REGION RECEIVING ANNUAL MASS AZITHROMYCIN DISTRIBUTION IN MARADI, NIGER

Abdou Amza<sup>1</sup>, Boubacar Kadri<sup>2</sup>, Beido Nassirou<sup>2</sup>, Ahmed Arzika<sup>3</sup>, Elisabeth Gebreegiabher<sup>4</sup>, Huiyu Hu<sup>4</sup>, Lina Zhong<sup>4</sup>, Cindi Chen<sup>4</sup>, Danny Yu<sup>4</sup>, Thomas Abraham<sup>4</sup>, YuHeng Liu<sup>4</sup>, Thuy Doan<sup>4</sup>, Benjamin F. Arnold<sup>4</sup>, Thomas M. Lietman<sup>4</sup>, Catherine Oldenburg<sup>4</sup><sup>1</sup>Programme National de Sante Oculaire, Niamey, Niger, <sup>2</sup>Programme National de Santé Oculaire, Niamey, Niger, <sup>3</sup>Centre de Recherche et d'Intervention en Santé Publique, Niamey, Niger, <sup>4</sup>University of California, San Francisco, San Francisco, CA, United States

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### THE RE-EMERGENCE OF TRACHOMA INFECTION AMONG CHILDREN IN KONGWA DISTRICT, TANZANIA, POSES A THREAT TO YEARS OF PROGRESS

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### THE ROLE OF ANTIBODY DATA FOR IMPROVED UNDERSTANDING OF RECRUDESCENT ACTIVE TRACHOMA IN NEBBI DISTRICT OF UGANDA

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### SOCIAL-ECONOMIC AND CULTURAL PRACTICES INFLUENCING TRACHOMA TRANSMISSION AMONG RESIDENTS IN NORTHERN KENYA

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### RESULTS FROM TRACHOMA PREVALENCE SURVEYS IN SENEGAL AS IT NEARS ELIMINATION

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### INTER-LABORATORY VALIDATION OF A MULTIPLEX BEAD ASSAY USING A CHIMERIC MONOCLONAL ANTIBODY AGAINST PGP3

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### A NOVEL BEHAVIOR APPROACH TO SUPPORT ELIMINATION OF TRACHOMA IN NOMADIC POPULATIONS

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## Clinical Tropical Medicine

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### PATHWAYS TO PROGRESS: ENHANCING INFECTIOUS DISEASE DETECTION IN THE PERUVIAN AMAZON

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### DEVELOPMENT, IMPLEMENTATION, AND CLINICAL VALIDATION OF AN ISOTHERMAL CAS12A BASED QUANTITATIVE ASSAY FOR CONGENITAL CYTOMEGALOVIRUS VIRAL LOAD DETERMINATION

**Karissa Chao**<sup>1</sup>, Monika L. Dietrich<sup>1</sup>, Jon Arizti Sanz<sup>2</sup>, Sameed Siddiqui<sup>2</sup>, Pardis Sabeti<sup>2</sup>, Robert F. Garry<sup>1</sup>  
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### SCARCE FOLLOW UP AFTER A LATE DIAGNOSIS: A SURVEY OF KEY STEPS IN CLINICAL CARE AMONG PATIENTS WITH CHRONIC TRYPANOSOMA CRUZI INFECTION IN BOGOTÁ, COLOMBIA

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### COMPLICATED SPINAL CYSTIC ECHINOCOCCOSIS SUCCESSFULLY TREATED WITH SURGERY: 10-YEAR FOLLOW-UP

**Gian Luca D'Alessandro**<sup>1</sup>, Tommaso Manciuoli<sup>2</sup>, Sofia Frattola<sup>1</sup>, Ambra Vola<sup>3</sup>, Raffaella Lissandrin<sup>4</sup>, Enrico Brunetti<sup>4</sup>, Fabrizio Cuzzocrea<sup>5</sup>  
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### HIGH PREVALENCE OF UNDIAGNOSED ACUTE FEBRILE ILLNESS IN THE PERUVIAN AMAZON

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### MALARIA RETINOPATHY IS ASSOCIATED WITH WORSE LONG-TERM COGNITION IN UGANDAN CHILDREN WITH SEVERE MALARIAL ANEMIA

**Kagan A. Mellencamp**<sup>1</sup>, Ruth Namazzi<sup>2</sup>, Caitlin Bond<sup>1</sup>, Robert O. Opoka<sup>2</sup>, Andrea L. Conroy<sup>1</sup>, Paul Bangirana<sup>2</sup>, Chandy C. John<sup>1</sup>  
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### SAFETY, IMMUNOGENICITY AND EFFICACY OF THE SHIGELLA VACCINE - A SYSTEMATIC REVIEW

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### CLINICO-EPIDEMIOLOGICAL STUDY OF SNAKEBITE: AN AUDIT OF THIRTEEN YEARS DATA FROM A COMMUNITY-BASED TREATMENT CENTRE OF EASTERN NEPAL

**Srista Manandhar**<sup>1</sup>, Sunit Chhetri<sup>1</sup>, **Arun Gautam**<sup>1</sup>, Rohan Basnet<sup>1</sup>, Urza Bhattarai<sup>1</sup>, Madhav Bhusal<sup>2</sup>, Sanjib Kumar Sharma<sup>1</sup>  
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### IDENTIFYING ADDITIONAL RISK FACTORS FOR DEVELOPING CHRONIC KIDNEY DISEASE

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### DISCORDANCE BETWEEN IMMUNIZATION HISTORY AND SEROLOGIC IMMUNITY TO VACCINE-PREVENTABLE INFECTIONS AMONG ASYLUM SEEKERS IN THE US

**Christian Olivo-Freites**<sup>1</sup>, Patricia Miguez-Arosemena<sup>2</sup>, Cristina Olivo-Freites<sup>3</sup>, Deborah Edelman<sup>2</sup>, Kayla Leschly<sup>1</sup>, Jayme Leschly<sup>1</sup>, Amir M. Mohareb<sup>4</sup>  
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### STRENGTHENING INTEGRATED COMMUNITY CASE MANAGEMENT COMMODITY AVAILABILITY IN UGANDA

**PETER PA ANYUMIZA**<sup>1</sup>, Phellister PN Nakamya<sup>1</sup>, Rebecca Babirye<sup>1</sup>, Geoffrey Nuwamanya<sup>1</sup>, Samantha Herrera<sup>2</sup>, Catherine Maiteki Sebuguzi<sup>3</sup>, Maureen Amutuhaire<sup>3</sup>, Jimmy Opigo<sup>3</sup>  
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### THE PREDICTIVE VALUE OF SIRS AND Q-SOFA SCORES AS MEASURES OF SEPSIS SEVERITY AMONG PATIENTS IN A PRIVATE HOSPITAL IN LAGOS, NIGERIA: RESULTS FROM THE R JOLAD SEPSIS STUDY

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**CLINICAL PRESENTATION OF ACUTE ARBOVIRAL INFECTIONS DURING THE 2023 OUTBREAK IN THE TIRS PROJECT COHORT**

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**ASSESSMENT OF HOME BASED RAPID DIAGNOSTIC TESTING UPTAKE TOWARDS INCREASING COMMUNITY-BASED ACCESS TO CARE IN KENYA, SOUTH AFRICA, AND ZAMBIA**

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**HIGH-RISK APOL1 VARIANTS ARE ASSOCIATED WITH REDUCED LONG-TERM SURVIVAL FOLLOWING SEVERE MALARIA**

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**POSTMORTEM CHARACTERIZATION OF GASTROSCHISIS ASSOCIATED UNDER-5 DEATHS IN MOZAMBIQUE: INSIGHTS FROM CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE (CHAMPS)**

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**IMPORTANCE OF CLINICAL EXPERTISE IN DIAGNOSIS OF LEPROSY AND AMERICAN CUTANEOUS LEISHMANIASIS: INSIGHTS FROM CLINICAL PROFILES IN EASTERN MINAS GERAIS, BRAZIL**

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**RENIN RELEASE IS ASSOCIATED WITH ACUTE KIDNEY INJURY AND PREDICTS MORTALITY IN CHILDREN WITH SEVERE MALARIA**

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**SEVERE AND FATAL LASSA FEVER - OBSERVATIONS IN 19 ICU PATIENTS TREATED IN NIGERIA**

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**ASSOCIATION OF DENGUE VIRUS SEROTYPES AND THE CLINICAL SEVERITY OR MORTALITY IN TAIWAN'S LARGEST DENGUE OUTBREAK**

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**SEPSIS ENDOTYPES IDENTIFIED BY HOST GENE EXPRESSION ACROSS GLOBAL COHORTS**

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**INTEGRATED SEROLOGICAL SURVEILLANCE FOR MULTIPLE INFECTIOUS DISEASES IN VANUATU**

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**OVERCOMING DIAGNOSTIC CHALLENGES WITH ACUTE FEBRILE ILLNESS IN NIGERIA: WHAT CAN WE LEARN FROM THE SAFIAN STUDY?**

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**A CASE OF PRE-EXTENSIVELY DRUG-RESISTANT TUBERCULOSIS IN KWAZULU-NATAL, SOUTH AFRICA**

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**IMPLEMENTING NEUROCOGNITIVE ASSESSMENT TOOLS - A PILOT STUDY COMPARING NEUROCOGNITIVE FUNCTION OF EBOLA SURVIVORS WITH NON-INFECTED CONTROLS IN SIERRA LEONE**

Emily J. Engel<sup>1</sup>, Nell G. Bond<sup>1</sup>, Tucker Challay<sup>2</sup>, Doris A. Fofanah<sup>2</sup>, Ibrahim Sumah<sup>2</sup>, Robert J. Samuels<sup>2</sup>, Alex C. Birdsill<sup>1</sup>, John S. Schieffelin<sup>1</sup>  
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**DISCREPANCY ANALYSIS BY USING DATA QUALITY ASSESSMENT AT COMMUNITY LEVEL IN RWANDA**

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**Helminths – Nematodes – Filariasis (Molecular Biology and Immunology)**

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**MOLECULAR DETECTION AND SEQUENCING OF GENES ENCODING THE PREDICTED AMIDASE, NADH UBIQUINONE OXIDOREDUCTASE AND SODIUM NEUROTRANSMITTER SYMPORTER ENZYMES IN ONCHOCERCA VOLVULUS PARASITE**

Anabel Acheampong<sup>1</sup>, Kenneth Bentum Otabil<sup>1</sup>, John Asiedu Larbi<sup>2</sup>, Prince Nyarko<sup>2</sup>, Prince-Charles Kudzordzi<sup>2</sup>, Godbless Owusu Adjei<sup>1</sup>, Paulina Pokua Oduro<sup>1</sup>  
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**INFECTION STAGE L3 OF LOA LOA AS POTENTIAL TARGET FOR PROTECTIVE IMMUNITY**

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**INFLAMMATION AND FIBRINOLYSIS IN LOIASIS PATIENTS BEFORE AND AFTER IVERMECTIN TREATMENT: POTENTIAL MECHANISM UNDER POST-IVERMECTIN SEVERE ADVERSE EVENTS**

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**IMPACT OF THE FILARIAL INFECTIONS O. VOLVULUS, L. LOA AND M. PERSTANS ON THE METABOLIC PROFILE OF LEAN, OVERWEIGHT AND OBESE INDIVIDUALS IN CAMEROON (FIMMIP)**

Benjamin Lenz<sup>1</sup>, Anita Obi Bate Ebob<sup>2</sup>, Fanny Fri Fombad<sup>2</sup>, Amuam Andrew Beng<sup>2</sup>, Manuel Ritter<sup>1</sup>, Indulekha Karunakaran<sup>1</sup>, Narcisse Victor Tchamatchoua Gandj<sup>2</sup>, Lucy Cho Nchang<sup>2</sup>, Jayagopi Surendar<sup>1</sup>, Chang Wang<sup>1</sup>, Ute Klarmann-Schulz<sup>1</sup>, Arcangelo Ricchiuto<sup>1</sup>, Janina M. Kuehlwein<sup>1</sup>, Ambe Marius Ngwa<sup>2</sup>, Tatiana Djikeussi Katcho<sup>2</sup>, Achim Hoerauf<sup>1</sup>, Samuel Wanji<sup>2</sup>, Marc P. Hübner<sup>1</sup>  
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**DOXYCYCLINE TREATMENT REDUCES IMMUNE ACTIVATION OF CD4+ T CELLS AS WELL AS CLINICAL SIGNS OF INFLAMMATION IN PATIENTS WITH FILARIAL LYMPHEDEMA IN TANZANIA**

Anja Feichtner<sup>1</sup>, Sacha Horn<sup>1</sup>, Abdallah Ngenya<sup>2</sup>, Max Demetrius<sup>2</sup>, Winifrida John<sup>2</sup>, Ndekya Urio<sup>2</sup>, Jubin Osei-Mensa<sup>3</sup>, Ute Klarmann-Schulz<sup>4</sup>, Janina Kuehlwein<sup>4</sup>, Manuel Ritter<sup>4</sup>, Achim Hoerauf<sup>4</sup>, Michael Hoelscher<sup>1</sup>, Linda Batsa Debrah<sup>3</sup>, Alexander Debrah<sup>3</sup>, Upendo Mwingira<sup>2</sup>, Akili Kalinga<sup>5</sup>, Inge Kroidl<sup>1</sup>  
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**Helminths – Nematodes – Filariasis (Other)**

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**EVALUATION OF THE BIOLOGICAL ACTIVITY OF CHEMICAL CONSTITUENTS FROM THE STEMBARK OF KIGELIA AFRICANA, A CAMEROONIAN MEDICINAL PLANT, AGAINST ONCHOCERCA OCHENGI PARASITES**

Ghansenyuy Salome Yuwong<sup>1</sup>, Yemback Piere<sup>1</sup>, Eyong Kenneth Oben<sup>1</sup>, Gabriel Ngosong Folefoc<sup>1</sup>, Fidelis Cho Ngwa<sup>2</sup>  
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**EVALUATION OF SLASH AND CLEAR COMMUNITY-DIRECTED ONCHOCERCIASIS VECTOR CONTROL INTERVENTION IN THE TROPICAL RAINFOREST OF LIBERIA**

Dawn Blackburn<sup>1</sup>, Elizabeth M. Wendt<sup>1</sup>, Sonnie Z. Gbewo<sup>2</sup>, Larry Gee<sup>2</sup>, Ben Masiira<sup>3</sup>, Andrew Abbott<sup>1</sup>, Paul Cantey<sup>1</sup>, Thomson L. Lakwo<sup>3</sup>, Karsor K. Kollie<sup>2</sup>  
<sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>2</sup>Department of Health Services, Ministry of Health-Liberia, Monrovia, Liberia, <sup>3</sup>African Field Epidemiology Network (AFENET), Kampala, Uganda

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**PARASITOLOGICAL INDICATORS SUGGESTS THAT ONCHOCERCIASIS MIGHT LIKELY NEVER BEEN ELIMINATED IN THE YABASSI HEALTH DISTRICT (LITTORAL REGION, CAMEROON) USING IVERMECTIN SOLELY: URGENT NEED OF COMPLEMENTARY INTERVENTIONS**

Laurentine Sumo<sup>1</sup>, Gabriella S. Ondoua Nganjou<sup>2</sup>, Narcisse Nzune Toche<sup>2</sup>, Louis-Rolph Bamou Heumou<sup>2</sup>, Arnaud Efon Ekangouo<sup>2</sup>, Linda Djune Yemeli<sup>2</sup>, Yannick Emalio<sup>2</sup>, Jean Bopda<sup>2</sup>, Jeanne C. Sondi Dissake<sup>2</sup>, André Domche<sup>2</sup>, Shannon M. Hedtke<sup>3</sup>, Warwick N. Grant<sup>3</sup>, Flobert Njiokou<sup>4</sup>, Joseph Kamgno<sup>2</sup>, Hugues C. Nana Djeunga<sup>2</sup>  
<sup>1</sup>University of Ebolowa, Ebolowa, Cameroon, <sup>2</sup>Higher Institute for Scientific and Medical Research (ISM), Yaoundé, Cameroon, <sup>3</sup>La Trobe University, Melbourne, Australia, <sup>4</sup>University of Yaoundé I, Yaoundé, Cameroon

Saturday  
November 16

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### REBOUND IN PREVALENCE AND INTENSITY OF ONCHOCERCA VOLVULUS INFECTION FIVE YEARS AFTER CESSATION OF ALTERNATIVE TREATMENT STRATEGIES IN THE MASSANGAM HEALTH DISTRICT, WEST REGION, CAMEROON: NEED FOR COORDINATED AND SUSTAINED EFFORTS

Gabriella Sandrine Ondoua Nganjou<sup>1</sup>, Laurentine Sumo<sup>2</sup>, Narcisse Nzune Toche<sup>3</sup>, Arnauld Efon Ekangouo<sup>3</sup>, Linda Djune Yemeli<sup>3</sup>, Yannick Emalio<sup>4</sup>, Jean Bopda<sup>4</sup>, Jeanne Crescence Sondi Dissake<sup>1</sup>, André Domche<sup>1</sup>, Ivana Youmbi Kammogne<sup>1</sup>, Shannon Hedtke<sup>5</sup>, Warwick Grant<sup>5</sup>, Flobert Njiokou<sup>1</sup>, Joseph Kamgno<sup>6</sup>, Hugues Clotaire Nana Djeunga<sup>4</sup>

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### ADMINISTRATION OF THE SUPERVISOR'S COVERAGE TOOL TO ASSESS THERAPEUTIC COVERAGES OF MASS DRUG ADMINISTRATION FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES IN 3 LGAS OF AKWA IBOM STATE, NIGERIA

Aliyu Mohammed<sup>1</sup>, Kingsley C. Azu<sup>1</sup>, Salisu Ahmad<sup>1</sup>, Unyime Ekpoudia<sup>1</sup>, Louise Makau-Barasa<sup>2</sup>, Ellie Leaning<sup>2</sup>

<sup>1</sup>Hellen Keller International, Abuja, Nigeria, <sup>2</sup>The END Fund, New York, NY, United States

## Helminths – Nematodes – Filariasis (Treatment and Morbidity Management)

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### MANAGEMENT PRACTICES AND THEIR ASSOCIATED FACTORS AMONG LYMPHOEDEMA PATIENTS ATTENDING LYMPHOEDEMA CLINICS IN SELECTED ENDEMIC DISTRICTS FOR LYMPHATIC FILARIASIS IN SRI LANKA

Sithija S. Perera<sup>1</sup>, Nipuni K. Shilpewarage<sup>2</sup>, Indeewarie E. Gunaratna<sup>2</sup>

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(ACMCIP Abstract)

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### ADAPTIVE BASKET TRIAL TO ASSESS THE EFFICACY AND SAFETY OF OXFENDAZOLE AS PAN-NEMATODE CANDIDATE IN ONCHOCERCIASIS, LOIASIS, MANSONELLOSIS AND TRICHURIASIS PATIENTS

Marc P. Hübner<sup>1</sup>, Sonja Zehetmayer<sup>2</sup>, Jennifer Keiser<sup>3</sup>, Ghyslain Mombo-Ngoma<sup>4</sup>, Dieudonne Mumba Ngoyi<sup>5</sup>, Michael Ramharter<sup>6</sup>, Samuel Wanji<sup>7</sup>, Marta Bofill Roig<sup>2</sup>, Fabrice Lotola Mougeni<sup>2</sup>, Annina S. Schnoz<sup>2</sup>, Rella Zoleko Manego<sup>4</sup>, Lidwine Badjina<sup>6</sup>, Benjamin Lenz<sup>1</sup>, Alexander Kazakov<sup>1</sup>, Ivan Scandale<sup>6</sup>, Frederic Monnot<sup>8</sup>, Achim Hoerauf<sup>1</sup>, Martin Posch<sup>2</sup>, Sabine Specht<sup>8</sup>

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(ACMCIP Abstract)

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### RESULTS OF STOP TREATMENT ASSESSMENTS FOR ONCHOCERCIASIS IN SEVEN DISTRICTS OF LOWER MADI MID NORTH FOCUS, UGANDA

Annet T. Khainza<sup>1</sup>, David W. Oguttu<sup>2</sup>, Lauri Bernard<sup>3</sup>, Edridah Tukahebwa Muheki<sup>1</sup>, Edson Byamukama<sup>1</sup>, Christine Nahabwe<sup>2</sup>, Monica Ngabirano<sup>2</sup>, Alfred Mubangizi<sup>2</sup>, Thomas R. Ummasch<sup>4</sup>, Frank O. Richards<sup>3</sup>, Gregory S. Noland<sup>3</sup>

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(ACMCIP Abstract)

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### BARRIERS TO MORBIDITY MANAGEMENT AND DISABILITY PREVENTION (MMDP) CARE IN BENISHANGUL GUMUZ REGION, ETHIOPIA

Wasihun E. Toli<sup>1</sup>, Belete Mammo<sup>1</sup>, Shambel Belete<sup>1</sup>, Abebual Yilak<sup>1</sup>, Alyssa R. Lindrose<sup>2</sup>, Elizabeth Sutherland<sup>3</sup>, Misbah Noor<sup>3</sup>, Fikre Seife<sup>4</sup>, Merga Mekonnen<sup>4</sup>, Meagan Meekins<sup>3</sup>, Biruck Kebede<sup>1</sup>, Tibebe Alemayehu<sup>3</sup>, Molly Brady<sup>5</sup>

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(ACMCIP Abstract)

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### PROGRAMMATIC IMPLEMENTATION OF THE TRIPLE DRUG MASS DRUG ADMINISTRATION FOR LYMPHATIC FILARIASIS ELIMINATION IN HAITI

Farah-Nelhy M. Momprevil<sup>1</sup>, Marc-Aurele Telfort<sup>1</sup>, Mérilien Jean-Baptiste<sup>1</sup>, Lali Chania<sup>2</sup>, Katina Sommers<sup>2</sup>, Wedsanley Jean Philippe<sup>3</sup>, Tara Brant<sup>4</sup>, Jennifer Akamboe<sup>4</sup>, Emily Dodd<sup>4</sup>, Jamal Choice<sup>4</sup>, Caitlin M. Worrell<sup>4</sup>, Mary Kamb<sup>4</sup>, Andreas M. Nshala<sup>4</sup>

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(ACMCIP Abstract)

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### THE HEALTH AND WELLNESS IMPACT OF HOPE GROUPS FOR PEOPLE WITH LYMPHATIC FILARIASIS IN EBONYI STATE, NIGERIA: PATIENT DATA AT BASELINE

Abel Eigege<sup>1</sup>, Jenna E. Coalson<sup>2</sup>, Christopher Nwuzor<sup>1</sup>, Samuel Ifeanyi-chukwu<sup>1</sup>, Bulus Mancha<sup>1</sup>, Lindsay Rakers<sup>2</sup>, Emily Griswold<sup>2</sup>, Emmanuel Miri<sup>1</sup>, Gregory S. Noland<sup>2</sup>, Hyacinth Ebenyi<sup>3</sup>, Ifeanyi Nwofoke<sup>3</sup>, Ngaji Ogaji<sup>3</sup>, Edwin Okpani<sup>3</sup>, David Nweke<sup>4</sup>, Martha Nwiboko<sup>5</sup>

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(ACMCIP Abstract)

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### MASS SURGERY WEEKS FOR TREATMENT OF HYDROCELE DUE TO LYMPHATIC FILARIASIS IN PLATEAU AND NASARAWA STATES, CENTRAL NIGERIA, 2020 - 2021

Abel Eigege<sup>1</sup>, Nuhu K. Dakum<sup>2</sup>, Christian Agbo<sup>2</sup>, Henry Embu<sup>2</sup>, Sumi Benjamin Garkuwa<sup>3</sup>, Bulus S. Mancha<sup>1</sup>, Samuel Audu Kwarsen<sup>3</sup>, Mafwalal Bunah Masok<sup>3</sup>, Philemon Dagwa<sup>3</sup>, Ibrahim Adamu<sup>4</sup>, Jacob Danboyi<sup>4</sup>, Emmanuel Davies<sup>5</sup>, Nseobong Akpan<sup>5</sup>, John Umaru<sup>1</sup>, Lindsay Rakers<sup>5</sup>, Emily Griswold<sup>6</sup>, Frank O. Richards<sup>5</sup>, Gregory S. Noland<sup>6</sup>, Emmanuel S. Miri<sup>1</sup>

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(ACMCIP Abstract)

## Kinetoplastida and Other Protozoa - Invasion, Cellular and Molecular Biology (Including *Leishmania* and Trypanosomes)

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### DETERMINING THE FUNCTION OF AN APICOPLAST-LOCALIZED GTPASE IN *TOXOPLASMA GONDII*

Michael B. Griffith, Victoria L. Robinson, Aoife T. Heaslip  
University of Connecticut, Storrs, CT, United States

(ACMCIP Abstract)

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### COMPARISON OF CARDIAC FIBROSIS CAUSED BY *TRYPANOSOMA CRUZI* IN THE CHRONIC PHASE IN *IN VIVO* MODELS OF MICE (BALB/C, SWISS), AND *CAVIA PORCELLUS*

JOSSELYN K. VACA<sup>1</sup>, Carlos Javier Neyra Palacios<sup>1</sup>, Edith M. Málaga Machaca<sup>1</sup>, MANUELA R. Verástegui<sup>2</sup>, Solange B. Custodio<sup>1</sup>, Robert B. Gilman<sup>1</sup>  
<sup>1</sup>Universidad Peruana Cayetano Heredia, LIMA, Peru, <sup>2</sup>Universidad Peruana Cayetano Heredia, Lima, Peru

(ACMCIP Abstract)

## Kinetoplastida and Other Protozoa - Treatment, Drug Delivery, Drug Repurposing and Drug Discovery (Including *Leishmania* and Trypanosomes)

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### SUCCESSFUL REPURPOSING OF FDA-APPROVED DRUGS AGAINST *LEISHMANIA* PARASITES PREVIOUSLY PREDICTED THROUGH A MACHINE LEARNING APPROACH

Rafah Oualha, Yosser Zina Abdelkrim, Ikram Guizani, Emna Harigua-Souiaï\*  
Institut Pasteur of Tunis, Tunis, Tunisia

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### CONSIDERATION OF FEXINIDAZOLE AS A NOVEL TREATMENT OPTION FOR RHODESIENSE-HUMAN AFRICAN TRYPANOSOMIASIS

Rebecca J. Chancey  
CDC, Atlanta, GA, United States

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### CLINICAL PRESENTATION AND MANAGEMENT OF CUTANEOUS LEISHMANIASIS AMONG NEWLY ARRIVED AFGHAN EVACUEE CHILDREN

Alexandra Linn<sup>1</sup>, Lauren Palladino<sup>2</sup>, Alexandra Vinograd<sup>2</sup>, Rachel Martin-Blais<sup>3</sup>  
<sup>1</sup>Beth Israel Deaconess Medical Center/Boston Children's Hospital, Boston, MA, United States, <sup>2</sup>Children's Hospital of Philadelphia, Philadelphia, PA, United States, <sup>3</sup>Nationwide Children's Hospital, Columbus, OH, United States

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### TARGET-BASED 6-5 FUSED RING HETEROCYCLIC SCAFFOLDS DISPLAY BROAD ANTIPARASITIC POTENCY *IN VITRO*

Boniface Pone Kamdem<sup>1</sup>, Darline Dize<sup>1</sup>, Mariscal Brice Tchatat Tali<sup>1</sup>, Cyrille Armel Njanpa Ngansop<sup>1</sup>, Rodrigue Keumoe<sup>1</sup>, Eugénie Aimée Madiesse Kemgne<sup>1</sup>, Lauve Rachel Tchokouaha Yamthe<sup>2</sup>, Patrick Valere Tsouh Fokou<sup>3</sup>, Katsura Hata<sup>4</sup>, Fabrice Fekam Boyom<sup>1</sup>

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### IMMUNOMODULATION EFFECT OF HOOKWORM PROTEINS ON CHRONIC CHAGASIC LIVER MODELS

Maria Jose Villar, Cristina Poveda, Bin Zhan, Kathryn M. Jones  
Baylor College of Medicine, Houston, TX, United States

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### IMPROVED TREATMENT OUTCOME FOLLOWING THE USE OF A WOUND DRESSINGS IN CUTANEOUS LEISHMANIASIS LESIONS

Camila I. De Oliveira<sup>1</sup>, Pedro Borba<sup>1</sup>, Jamile Lago<sup>1</sup>, Thainã Lago<sup>1</sup>, Mariana Araújo-Pereira<sup>1</sup>, Artur Queiroz<sup>1</sup>, Hermene Barud<sup>2</sup>, Lucas Carvalho<sup>1</sup>, Paulo Machado<sup>3</sup>, Edgar Carvalho<sup>1</sup>

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### IMPROVING THE LEISHMANICIDAL ACTIVITY OF MILTEFOSINE USING SPRAYABLE DRESSINGS BASED ON NANOFIBERS OF PVP/TETRONIC®/CYCLODEXTRINS

Zeinab Dirany<sup>1</sup>, Paolo Ginatta<sup>2</sup>, Javier González-Benito<sup>3</sup>, Gustavo González-Gaitano<sup>1</sup>, Paul Nguema<sup>2</sup>

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### A VALID 96-WELL-PLATE-ENZYMATIC ASSAY FOR *LEISHMANIA* METHYLTHIOADENOSINE PHOSPHORYLASE MTAP PROTEIN, A CANDIDATE DRUG TARGET

Yosser Zina Abdelkrim<sup>1</sup>, Isleme Khalfaoui<sup>2</sup>, Mourad Barhoumi<sup>2</sup>, Sonia Abbess<sup>2</sup>, Thouraya Mejri<sup>2</sup>, Abid Hela<sup>2</sup>, Emna Harigua-Souiaï<sup>2</sup>, Ikram Guizani<sup>2</sup>

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### OPTIMIZING THE MULTI-FACETED PIPELINE OF AI-BASED DRUG DISCOVERY AGAINST INFECTIOUS DISEASES

Ons Masmoudi, Emna Harigua-Souiaï  
Laboratory of Molecular Epidemiology and Experimental Pathology, Institut Pasteur de Tunis, Université de Tunis El Manar, Tunis, Tunisia



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### FEXINIDAZOLE IN PATIENTS WITH HUMAN AFRICAN TRYPANOSOMIASIS DUE TO *TRYPANOSOMA BRUCEI RHODESIENSE*, TOWARDS AN ARSENIC FREE FIRST LINE THERAPY

Olaf Valverde Mordt<sup>1</sup>, Westain Tizgo Nyirenda<sup>2</sup>, Anthony Eriatu<sup>3</sup>, Marshal Lemerani<sup>4</sup>, Charles Wamboga<sup>5</sup>, Elisabeth Baudin<sup>6</sup>, Deolinda Alves<sup>1</sup>, Enoch Matovu<sup>7</sup>

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### IN VITRO EVALUATION OF THE ANTI AMOEBIC ACTIVITY OF BENZOTHAZOLE BT3 AGAINST *ENTAMOEBIA HISTOLYTICA*

Maritza Velásquez-Torres<sup>1</sup>, José G. Trujillo-Ferrara<sup>2</sup>, Aldo A. Reséndiz-Albor<sup>3</sup>, Ivonne M. Arciniega-Martínez<sup>2</sup>, Nadia M. Pérez-Vielma<sup>4</sup>, Rosa A. Jarillo-Luna<sup>5</sup>, Judith Pacheco-Yepez<sup>1</sup>

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### FACTORS ASSOCIATED WITH RELAPSE IN VISCERAL LEISHMANIASIS: AN INDIVIDUAL PATIENT DATA META-ANALYSIS USING THE INFECTIOUS DISEASES DATA OBSERVATORY DATA PLATFORM

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### LEVERAGING ML AND DL MODELS FOR DRUG REPURPOSING: A SUCCESSFUL CASE STUDY ON *LEISHMANIA* PARASITES

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### EVALUATION OF TCNMT OF NOVEL IN-SILICO INHIBITORS AGAINST *TRYPANOSOMA CRUZI* N-MYRISTOYLTRANSFERASE

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## Kinetoplastida and Other Protozoa - Vaccines (Including *Leishmania* and Trypanosomes)

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### HEAT SHOCK PROTEIN TCJ2: A NOVEL MRNA VACCINE CANDIDATE FOR CHAGAS DISEASE IDENTIFIED THROUGH IMMUNOPEPTIDOMICS

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### IMMUNOTHERAPY WITH TSA-1 C4 COMBINED WITH BZN INDUCES DIVERGENT IMMUNE RESPONSE BUT CONFERS PROTECTION AGAINST *TRYPANOSOMA CRUZI* INFECTION

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### VALIDATION OF *TRYPANOSOMA CRUZI* MULTI-EPI TOPE RECOMBINANT PROTEIN IN INDIVIDUALS WITH HLA-A\*02 ALLELE AS A HUMAN CHAGAS DISEASE VACCINE CANDIDATE

Christian Teh-Poot<sup>1</sup>, Andrea Alfaro-Chacón<sup>1</sup>, Landy Pech-Pisté<sup>1</sup>, Miguel Rosado-Vallado<sup>1</sup>, Asojo Oluwatoyin Ajibola<sup>2</sup>, Liliana Villanueva-Lizama<sup>1</sup>, Eric Dumonteil<sup>3</sup>, Julio Cruz-Chan<sup>1</sup>

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### IMPACT OF MALNUTRITION ON THE EFFICACY OF LMCEN-/- VACCINE

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## Measures for Control and Elimination of Neglected Tropical Diseases (NTDs)

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### FACTORS AFFECTING COMMUNITY DIRECTED INTERVENTION VOLUNTEERS' PERFORMANCE IN ONCHOCERCIASIS AND LYMPHATIC FILARIASIS ELIMINATION PROGRAMS, ETHIOPIA

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### IMPACT OF MASS DRUG ADMINISTRATION FOR LYMPHATIC FILARIASIS AND YAWS ELIMINATION ON ATTENDANCES FOR SKIN DISEASE IN RURAL HEALTH CENTERS IN WEST NEW BRITAIN PROVINCE, PAPUA NEW GUINEA

Simon Westby<sup>1</sup>, Joycelyn Salo<sup>1</sup>, Wendy Houine<sup>2</sup>, Joseph Nale<sup>2</sup>, Jastina Kakul<sup>2</sup>, Grace Michael<sup>1</sup>, Julie Jacobson<sup>3</sup>, Moses Laman<sup>1</sup>, Christopher L. King<sup>4</sup>

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### EMPOWERING YOUTH AGAINST LYMPHATIC FILARIASIS: A GAME-CHANGING APPROACH TO URBAN DRUG COMPLIANCE

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### PARTICIPATORY ACTION RESEARCH TO ENHANCE EQUITABLE HEALTH SEEKING FOR PERSONS AFFECTED BY SKIN NTDS IN LIBERIA

Hannah Berrian<sup>1</sup>, Rosalind McCollum<sup>2</sup>, Emerson Rogers<sup>3</sup>, Shahreen Chowdhury<sup>2</sup>, India Hotopf<sup>2</sup>, Wede Tate<sup>1</sup>, Jerry Kollie<sup>1</sup>, Colleen Parker<sup>3</sup>, John Solunta Smith Jr.<sup>1</sup>, Karsor Kollie<sup>3</sup>, Zeela Zaizay<sup>4</sup>, Lucas Sempe<sup>5</sup>, Maaikie Seekles<sup>2</sup>, Tia Akpan<sup>6</sup>, Anna Wickenden<sup>7</sup>, Maneesh Phillip<sup>7</sup>, Sally Theobald<sup>2</sup>, Laura Dean<sup>2</sup>

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### THREE GEOSPATIAL APPROACHES OFFER INSIGHTS INTO PLANNING EFFECTIVE MDAS FOR NTDS IN WEST AFRICA

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### ROLES OF COMMUNITY DRUG DISTRIBUTORS FOLLOWING THE HALT OF MASS DRUG ADMINISTRATION FOR ONCHOCERCIASIS IN UGANDA

Stella Neema<sup>1</sup>, John Bosco Asimwe<sup>1</sup>, Edridah Muheki Tukahebwa<sup>2</sup>, Harriet Sengendo<sup>3</sup>, Annet T. Khainza<sup>2</sup>, Lauri Bernard<sup>3</sup>, Gregory S. Noland<sup>3</sup>, Jenna E. Coalson<sup>3</sup>

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### EFFECT OF MOBILE POPULATIONS ON STOPPING MDA FOR LYMPHATIC FILARIASIS/ONCHOCERCIASIS IN CROSS RIVER STATE

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### ELIMINATING ONCHOCERCIASIS IN NIGERIA: SUCCESSES, FAILURES, AND LEARNINGS FROM CROSS RIVER STATE

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### LEAVING NO ONE BEHIND: STRENGTHENING MASS DRUG ADMINISTRATION CAMPAIGNS AGAINST NEGLECTED TROPICAL DISEASES THROUGH THE IMPLEMENTATION OF SUPERVISOR COVERAGE TOOL IN ANGOLA

Cecilia de Almeida<sup>1</sup>, Elsa P. Mendes<sup>1</sup>, José Franco Martins<sup>2</sup>, Luis Lufunda<sup>3</sup>, Xavier Badia Rius<sup>4</sup>, Ana Direito<sup>3</sup>, Teresa Nobrega<sup>3</sup>, Ercilio Jive<sup>3</sup>

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### HYPERENDEMICITY OF SOIL-TRANSMITTED INFECTIONS IN CHILDREN OF THE HONDURAS TROPICAL RAINFOREST

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### COMMUNITY LEADERS ACTION GROUP: A SOCIAL CATALYST TO INCREASE MASS DRUG ADMINISTRATION COVERAGE AND COMMUNITY SUPPORT FOR COMMUNITY-DIRECTED DISTRIBUTORS

Emmanuel Emukah<sup>1</sup>, Adamu Sallau<sup>2</sup>, Lazarus Nweke<sup>2</sup>, Raymond Ogieva<sup>1</sup>, Ross Hegtvedt<sup>3</sup>, Marquita McMichael<sup>3</sup>, Ileana Resendez<sup>3</sup>, Lindsay Rakers<sup>3</sup>, Emily Griswold<sup>3</sup>, Jenna E. Coalson<sup>3</sup>, Emmanuel Miri<sup>4</sup>, Ifeoma Otiji<sup>5</sup>, Owen Eguasa<sup>6</sup>, Efeomon Eseigbe<sup>6</sup>, Happy Poko<sup>6</sup>, Solomon Adlamo<sup>4</sup>, Izebhuwa Blessing Ikponmwo<sup>1</sup>, Samuel Ifeanyichukwu<sup>2</sup>, Egeonu Attamah-Isiani<sup>2</sup>, Emalee Martin<sup>3</sup>, Chukwuemeka Makata<sup>7</sup>, Fatai Oyediran<sup>7</sup>, Frank O. Richards, Jr.<sup>3</sup>, Gregory S. Noland<sup>3</sup>

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### A PROGRAMMATIC OVERVIEW OF THE GULF SOUTH VECTOR EDUCATIONAL CENTERS FOR TRAINING, OUTREACH, AND RESOURCES (VECTOR) COLLABORATIVE

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### OSELTAMIVIR, A NON-METRONIDAZOLE CLASS OF COMPOUND, AFFECTS RAFT ASSEMBLY, VESICLE BIOGENESIS, AND HOST-PARASITE INTERACTIONS BY GIARDIA

Breanna Pence<sup>1</sup>, Julio Rangel<sup>1</sup>, Harrison VanKoten<sup>2</sup>, James Klinkenberg<sup>2</sup>, Steven Patterson<sup>2</sup>, Siddhartha Das<sup>1</sup>

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### TRUST IN THE HEALTHCARE SYSTEM AND NATIONAL CONTROL PROGRAMMES IN A RURAL SETTING IN CAMEROON: AN ECONOMIC EXPERIMENT

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### ENHANCING COMMUNITY LEADER ENGAGEMENT IN THE FIGHT AGAINST NTDs IN CAMEROON: UNDERSTANDING KEY DETERMINANTS

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### INTEGRATION OF HYGIENE MEASURES FOR LYMPHEDEMA MANAGEMENT INTO COMMUNITY HEALTH CENTERS' MINIMAL PACKAGE OF ACTIVITIES IN TWO RURAL SETTINGS, MALI

Moussa Sangare<sup>1</sup>, Yaya Ibrahim Coulibaly<sup>2</sup>, Abdoul Fatao Diabate<sup>3</sup>, Diadje Tanapo<sup>3</sup>, Sekou Oumarou Thera<sup>3</sup>, Oumar Coulibaly<sup>3</sup>, Housseini Dolo<sup>3</sup>, Siaka Yamoussa Coulibaly<sup>3</sup>, Salif Seriba Doumbia<sup>3</sup>, Fatoumata Traore<sup>4</sup>, Binta Sall<sup>3</sup>, Mahamoud Mahamadou Koureichi<sup>3</sup>, Michel Emmanuel Coulibaly<sup>3</sup>, Lamine Soumaoro<sup>3</sup>, Abdallah Amadou Diallo<sup>3</sup>, Seydou Doumbia<sup>3</sup>, Alison Krentel<sup>5</sup>, Thomas B Nutman<sup>6</sup>

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## 8214

### LEVERAGING FULL GEOGRAPHICAL COVERAGE APPROACH TO TRACHOMATOUS TRICHIASIS CASE FINDING AND MANAGEMENT WITH CATARACT TO SUSTAIN SERVICES IN TANZANIA

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### THE INFLUENCE OF RUMORS AND MISINFORMATION ON ONCHOCERCIASIS ELIMINATION - EVIDENCE FROM CROSS BORDER REGION OF MALI

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### THE THERAPEUTIC EFFICACY OF ALBENDAZOLE AND IVERMECTIN AGAINST SOIL-TRANSMITTED HELMINTH INFECTIONS IN RWANDA

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### UNDERSTANDING PERCEPTIONS OF SCHISTOSOMIASIS AND ITS CONTROL AMONG HIGHLY ENDEMIC LAKESHORE COMMUNITIES IN MAYUGE; UGANDA

Lazaaro Mujumbusi<sup>1</sup>, Lucy Pickering<sup>2</sup>, Edith Nalwadda<sup>1</sup>, Sande Slivesteri<sup>1</sup>, Agnes Ssali<sup>1</sup>, Mary Nanzala<sup>3</sup>, Keila Meginnis<sup>2</sup>, Janet Seeley<sup>4</sup>, Poppy H. L Lambertson<sup>2</sup>

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### OUTBREAK OF *PLASMODIUM VIVAX* INFECTION IN A NATIVE COMMUNITY OF CONDORCANQUI PROVINCE, AMAZONAS, PERU IN 2023

Miguel Bernal<sup>1</sup>, Deybi J. Huamán Maicelo<sup>2</sup>, Milagros L. García Cordova<sup>2</sup>, Milagros Saavedra-Samillán<sup>2</sup>, Stella M. Chenet<sup>2</sup>

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### GEOSPATIAL MODELLING TO PREDICT SOIL-TRANSMITTED HELMINTH RISK IN SCHOOLCHILDREN IN DAK LAK PROVINCE, VIETNAM

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### ACCEPTABILITY OF INTEGRATED NEGLECTED TROPICAL DISEASES SURVEYS AND MASS DRUG ADMINISTRATION IN VANUATU

Md S. Islam<sup>1</sup>, Elizabeth Nguyen<sup>2</sup>, Fasihah Taleo<sup>3</sup>, Gladymar P. Chacon<sup>2</sup>, Prudence Rymill<sup>4</sup>, Mackline Katenga<sup>4</sup>, Stephanie Tabe<sup>4</sup>, Denny Manvoi<sup>5</sup>, Clare Dyer<sup>2</sup>, David Kennedy<sup>2</sup>, Linda Peter<sup>5</sup>, Julie Jacobson<sup>6</sup>, John Kaldor<sup>2</sup>, Susana Vaz Nery<sup>2</sup>

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# One Health: The Interconnection between People, Animals, Plants and Their Shared Environment

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## PILOTING INTEGRATION OF HUMAN, ANIMAL AND ENVIRONMENTAL ANTIMICROBIAL RESISTANCE (AMR) SURVEILLANCE TO MONITOR ESBL-PRODUCING *E. COLI* USING A ONE HEALTH APPROACH IN BANGLADESH

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## MOLECULAR CHARACTERIZATION OF EXTENDED SPECTRUM BETA LACTAMASE PRODUCING ESCHERICHIA COLI AMONG CHILDREN AND FARM ANIMALS IN AGOGO, ASANTE AKIM MUNICIPAL, GHANA

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**Bertin Kipre Guede**, Valerie Carole Gbonon, Anatole Abale Toty, Fernique Konan Kouadio, Félicité Beudjé, Safiatou Teninba Mariko, Bertin Konan Tiekoura, Nathalie Aya Guessennd-Kouadio, Mireille Carmen Dosso-Bretin  
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**Ariful Islam**<sup>1</sup>, Mohammad Enayet Hossain<sup>2</sup>, Emama Amin<sup>1</sup>, Shariful Islam<sup>1</sup>, Md Arif Khan<sup>1</sup>, Abdullah Al-Mamun<sup>1</sup>, Sarah Munro<sup>3</sup>, Tahmina Shirin<sup>4</sup>, Mohammed Ziaur Rahman<sup>2</sup>, Marcel Klaassen<sup>5</sup>, Jonathan H Epstein<sup>3</sup>

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## SEROPREVALENCE OF BACTERIAL ZOOONOSSES IN A BIODIVERSITY HOTSPOT: A CROSS-SECTIONAL STUDY FROM MEGHALAYA, INDIA

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## DETECTION OF *TRYPANOSOMA LEWISI* FROM *RATTUS RATTUS* AND *RATTUS NORVEGICUS* IN TOLIARA, ON THE SOUTHWESTERN COAST OF MADAGASCAR

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## DESCRIPTIVE ANALYSIS OF ZOOONOSSES ACQUIRED BY TRAVELERS RETURNING TO CANADA FROM 2013-2023

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## BABOON-HUMAN CONFLICT, COEXISTENCE AND COMMON BABOON MICROBIOME IN AL-BAHA REGION, SAUDI ARABIA

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Irina Diekmann<sup>1</sup>, Taniawati Supali<sup>2</sup>, Balbir Singh<sup>3</sup>, Paul CS Divis<sup>3</sup>, Peter U. Fischer<sup>1</sup>  
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### COMMUNITY PRACTICES CONTRIBUTING TO MAGNITUDE AND RECURRENCE OF ANTHRAX OUTBREAK IN MURANG'A COUNTY IN KENYA, FEBRUARY 2024

Jane A. Eregae, Matheka M. Matheka, Owiny M. Maurice, Odhiambo F. Fredrick  
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Cecilia A. Banho<sup>1</sup>, Beatriz C. Marques<sup>1</sup>, Lívia Sacchetto<sup>1</sup>, Maisa C. P. Parra<sup>1</sup>, Maria C. Elias<sup>2</sup>, Sandra C. Sampaio<sup>2</sup>, Marta Giovanetti<sup>3</sup>, Fernando R. Spilki<sup>4</sup>, Benjamin M. Althouse<sup>5</sup>, Nikos Vasilakis<sup>6</sup>, Maurício L. Nogueira<sup>1</sup>  
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Carlos Alonso Flores Bancayan, Kiara Beatriz Aricoche del Campo, Mirko Zimic Peralta, Patricia Sheen Cortavarria  
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Mayra R. Ochoa<sup>1</sup>, Bia Peña<sup>1</sup>, Omar Flores<sup>1</sup>, Ana I. Gil<sup>1</sup>, Rubelio Cornejo<sup>1</sup>, Lucie Ecker<sup>1</sup>, Leigh M. Howard<sup>2</sup>, Carlos G. Grijalva<sup>3</sup>, Claudio F. Lanata<sup>4</sup>  
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Paula P. Carballo-Jimenez<sup>1</sup>, Sumona Datta<sup>1</sup>, Rosario Montoya<sup>2</sup>, Eric S. Ramos<sup>3</sup>, Luz Quevedo Cruz<sup>1</sup>, Matthew J. Saunders<sup>1</sup>, Carlton A. Evans<sup>1</sup>  
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Freyda Mannering<sup>1</sup>, Dylan Allen<sup>1</sup>, Bochra Tourki<sup>2</sup>, Thomas Keller<sup>1</sup>, Jose Herazo-Maya<sup>2</sup>, Iset Vera<sup>1</sup>, Kami Kim<sup>1</sup>  
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### REDUCTIONS IN THE DETECTION OF POTENTIAL RESPIRATORY PATHOGENS DURING SARS-COV-2 PANDEMIC LOCKDOWN: EVIDENCE FROM TWO COHORT STUDIES IN LIMA, PERÚ

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### RISK FACTORS FOR ILLNESS SEVERITY AMONG HOSPITALIZED CHILDREN <5 YEARS IN PERU, 2017-2018

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### OUT-OF-SEASON RESPIRATORY VIRUS INFECTIONS DURING THE PANDEMIC PERIOD OF SARS-COV-2 TRANSMISSION IN BRAZIL

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### VIRAL ETIOLOGY AND EPIDEMIOLOGIC INVESTIGATION OF PATIENTS WITH SEVERE ACUTE RESPIRATORY ILLNESS IN GHANA, JANUARY 2021-MAY 2022

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### INCIDENCE OF ACUTE RESPIRATORY ILLNESSES IN CHILDREN IN A PERIURBAN COMMUNITY OF LIMA, PERU

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### TUBERCULOSIS: MEN DIE MORE

Luz Quevedo Cruz<sup>1</sup>, Matthew Saunders<sup>2</sup>, Paula P. Carballo-Jimenez<sup>2</sup>, Rosario Montoya<sup>2</sup>, Maribel Rivero<sup>2</sup>, Jonathan Gomez<sup>2</sup>, Pilar Tapia<sup>2</sup>, Maria Haro<sup>2</sup>, Jessica Franco<sup>2</sup>, Rosario Sosa<sup>2</sup>, Carlton A. Evans<sup>3</sup>, Sumona Datta<sup>2</sup>

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### INCIDENCE OF SARS-COV-2 INFECTION IN A COMMUNITY COHORT IN PONCE, PUERTO RICO

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### ASSOCIATION OF PRE-EXISTING ANTIBODY RESPONSES AND THE RISK OF SARS-COV-2 INFECTION IN A HIGHLY EXPOSED BRAZILIAN COHORT DURING THE OMICRON BQ.1 EPIDEMIC WAVE

Mariam O. Fofana<sup>1</sup>, Juan Pablo Aguilar Ticona<sup>2</sup>, Nivison Nery Jr<sup>1</sup>, M. Catherine Muenker<sup>1</sup>, Joseph Q. Lu<sup>3</sup>, Homegnon Antonin Ferreol Bah<sup>2</sup>, Emilia Andrade Belitardo<sup>2</sup>, Jaqueline Silva<sup>2</sup>, Gabriel Ribeiro dos Santos<sup>1</sup>, Renato Victoriano<sup>2</sup>, Ricardo Khouri<sup>2</sup>, Stephen Thomas<sup>3</sup>, Adam Waickman<sup>3</sup>, Federico Costa<sup>4</sup>, Mitermayer G. Reis<sup>2</sup>, Derek A.T. Cummings<sup>5</sup>, Albert I. Ko<sup>1</sup>

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## Schistosomiasis and Other Trematodes – Epidemiology and Control

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### BIOMARKER DISCOVERY AND ASSAY DEVELOPMENT TO DETECT ANTIBODIES TO SCHISTOSOMA HAEMATOBIMUM

Yong Wang, Maurice Royal, Sylvia Ossai, Maria Ulke, Kimberly M. Won, Sukwan Handali, William E. Secor  
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### UNDERSTANDING THE IMPACT OF SCHISTOSOMA HAEMATOBIMUM INFECTION AMONG GAMBIAN SCHOOL-AGED CHILDREN: EPIDEMIOLOGICAL AND IMMUNOLOGICAL INSIGHTS

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**PREVALENCE AND CHARACTERIZATION OF HEPATIC FIBROSIS AND PORTAL HYPERTENSION AMONG INDIVIDUALS LIVING IN AN S. JAPONICUM ENDEMIC REGION OF THE PHILIPPINES**

Mario A. Jiz<sup>1</sup>, Ralph Aniceto<sup>1</sup>, Hannah Wu<sup>2</sup>, Jonathan D. Kurtis<sup>2</sup>, Veronica Tallo<sup>1</sup>, Andreas Neumayr<sup>3</sup>, Christoph Hatz<sup>3</sup>, Jennifer Friedman<sup>2</sup>, Joachim Richter<sup>4</sup>

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**FEMALE GENITAL SCHISTOSOMIASIS (FGS) KNOWLEDGE GAPS AND NEEDS IN SUB-SAHARAN AFRICA: ANALYSIS AND REVIEW OF ACTION PLANS GENERATED FROM A PEER-TO-PEER EDUCATION METHOD**

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**PREVALENCE AND INFECTION INTENSITIES OF SCHISTOSOMA MANSONI IN VILLAGES DESIGNATED PERSISTENT HOTSPOTS AND NON-PERSISTENT HOTSPOTS IN WESTERN KENYA**

PETER RARIEYA OLILAH<sup>1</sup>, Susan Musembi<sup>2</sup>, Winka Le Clec'h<sup>3</sup>, Timothy J. Anderson<sup>3</sup>, Frédéric D. Chevalier<sup>3</sup>, Eric Ndombi<sup>1</sup>

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**A FRAMEWORK FOR UNDERSTANDING AND ADDRESSING BIOLOGICAL AND OPERATIONAL HOTSPOTS IN SCHISTOSOMIASIS CONTROL**

Rivka M. Lim<sup>1</sup>, Thomas M. Arme<sup>2</sup>, Amy B. Pedersen<sup>1</sup>, Joanne P. Webster<sup>3</sup>, Poppy HL Lamberton<sup>2</sup>

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**THE IMPACT OF EXTREME RAINFALL EVENTS ON SCHISTOSOMIASIS TRANSMISSION IN COMMUNITIES LIVING AROUND MANOMBO SPECIAL RESERVE, MADAGASCAR**

Laura Braun<sup>1</sup>, Herizo Randrianandrasana<sup>2</sup>, Nina Finley<sup>3</sup>, Andry Tsirimanana<sup>4</sup>, Mandrantso Rasamoelina<sup>5</sup>, Sakib Burza<sup>6</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Health In Harmony, Farafangana, Madagascar, <sup>3</sup>Health in Harmony, Portland, OR, United States, <sup>4</sup>Health in Harmony, Farafangana, Madagascar, <sup>5</sup>Centre d'Infectiologie Charles Merieux, Antananarivo, Madagascar, <sup>6</sup>Health In Harmony, Portland, OR, United States

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**A PUBLIC DATABASE CATALOGING GEOGRAPHICAL, SEQUENCE AND FUNCTIONAL VARIATION IN TRPM<sub>p20</sub>, A CANDIDATE LOCUS FOR PRAZIQUANTEL RESISTANCE.**

Claudia Rohr, Sang-Kyu Park, Jonathan Marchant  
Medical College of Wisconsin, Milwaukee, WI, United States

8260

**DETECTION OF NEORICKETTSIA SPP. IN SUSCEPTIBLE OR RESISTANT FASCIOLA HEPATICA OBTAINED FROM NATURALLY INFECTED CATTLE IN CUSCO, PERU**

CAROL ALEXANDRA CASTRO<sup>1</sup>, Martha Vanessa Fernandez- Baca<sup>1</sup>, Rodrigo Alejandro Ore<sup>1</sup>, Maria Luisa Morales<sup>1</sup>, Miguel M. Cabada<sup>2</sup>

<sup>1</sup>Sede Cusco - Instituto de Medicina Tropical Alexander von Humboldt - UPOCH, Cusco, Peru, <sup>2</sup>Infectious Diseases Division, Internal Medicine Department, University of Texas Medical Branch, Galveston Texas USA., Cusco, Peru

8261

**COMMUNITY PREFERENCES FOR INTERVENTIONS TO REDUCE HUMAN TO SNAIL TRANSMISSION OF SCHISTOSOMIASIS IN MAYUGE DISTRICT UGANDA**

Moses Arinaitwe<sup>1</sup>, Sande Silvesteri<sup>2</sup>, Lazaaro Mujumbusi<sup>2</sup>, Lucy Pickering<sup>3</sup>, Edith Nalwadda<sup>2</sup>, Agnes Ssali<sup>2</sup>, Keila Meginnis<sup>4</sup>, Poppy H L Lamberton<sup>5</sup>, Janet Seeley Seeley<sup>2</sup>

<sup>1</sup>Vector Borne and Neglected Tropical Diseases Division, Kampala, Uganda, <sup>2</sup>Medical Research Council/Uganda Virus Research Institute and London School of Hygiene & Tropical Medicine Uganda Research Unit, Entebbe, Uganda., Entebbe, Uganda, <sup>3</sup>School of Social & Political Sciences, University of Glasgow, UK, Glasgow, United Kingdom, <sup>4</sup>School of Biodiversity, One Health, and Veterinary Medicine, University of Glasgow, UK, Glasgow, United Kingdom, <sup>5</sup>University of Glasgow, UK, Glasgow, United Kingdom

8262

**UNRAVELLING THE TRUE IMPACT OF SCHISTOSOMIASIS: REDEFINING THE WHO ELIMINATION AS A PUBLIC HEALTH PROBLEM TARGET**

Derick Osakunor<sup>1</sup>, Sergi Alonso<sup>1</sup>, Sandra Jumbe<sup>2</sup>, Poppy Lamberton<sup>1</sup>

<sup>1</sup>University of Glasgow, Glasgow, United Kingdom, <sup>2</sup>Queen Mary University of London, London, United Kingdom

**Schistosomiasis and Other Trematodes – Immunology, Pathology, Cellular and Molecular Biology**

8263

**MAPPING AND VALIDATION OF MICROSATELLITE MARKERS FOR SCHISTOSOMA HAEMATOBIIUM: INSIGHTS FROM POOLED SAMPLES IN SENEGAL AND GABON**

Kathleen Maria Kuesters<sup>1</sup>, Souleymane Doucouré<sup>2</sup>, Lady Charlene Kouna<sup>3</sup>, Sandrine Lydie Oyegue-Liabagui<sup>3</sup>, Jean-Bernard Lekana-Douki<sup>3</sup>, Bruno Senghor<sup>2</sup>, Cheikh Sokhna<sup>2</sup>, Doudou Sow<sup>4</sup>, Ronald E. Blanton<sup>1</sup>

<sup>1</sup>Tulane University, New Orleans, LA, United States, <sup>2</sup>Campus International IRD-UCAD de Hann, Dakar, Senegal, <sup>3</sup>Centre Interdisciplinaire de Recherches Médicales de Franceville, Franceville, Gabon, <sup>4</sup>Université Gaston Berger, Saint-Louis, Senegal

(ACMCIP Abstract)

8264

**EFFECT OF SCHISTOSOMA MANSONI INFECTION ON GUT MICROBIOTA IN PRE-SCHOOL AGED CHILDREN IN ALBERTINE REGION, UGANDA**

Andrew Edieli<sup>1</sup>, John Kelvin Mugerwa<sup>1</sup>, Gloria Oduru<sup>1</sup>, Jacent Nassuuna<sup>1</sup>, Hannah W. Wu<sup>2</sup>, Susannah Colt<sup>2</sup>, Emily L. Webb<sup>3</sup>, Jennifer F. Friedman<sup>2</sup>, Patrice Akusa Mawa<sup>1</sup>, Amaya L. Bustinduy<sup>3</sup>, Martin Holland<sup>3</sup>

<sup>1</sup>MRC/UVRI & LSHTM Uganda Research Unit, Entebbe, Uganda, <sup>2</sup>Rhode Island Hospital, Center for International Health Research, Providence, RI, United States, <sup>3</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

(ACMCIP Abstract)

8265

### CHARACTERIZATION AND FUNCTIONAL ANALYSIS OF THE MICROBIOTA OF THE INTERMEDIATE HOSTS OF SCHISTOSOMES

Peter McCann<sup>1</sup>, Julainne Megaw<sup>1</sup>, Cinzia Cantacessi<sup>2</sup>, Karen Siu-Ting<sup>1</sup>, Geoffrey Gobert<sup>1</sup>  
<sup>1</sup>Queen's University Belfast, Belfast, United Kingdom, <sup>2</sup>University of Cambridge, Cambridge, United Kingdom

(ACMCIP Abstract)

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### DNA METHYLATION PROFILES IN UROTHELIAL BLADDER CANCER TISSUES AND CHILDREN WITH SCHISTOSOMIASIS FROM EGGUA, OGUN STATE NIGERIA

Chiaka I. Anumudu<sup>1</sup>, Cephas A. Akpabio<sup>2</sup>, Rachel P. Ebu<sup>2</sup>, Oluwaseun E. Fatunla<sup>3</sup>, Henrietta O. Awobode<sup>4</sup>  
<sup>1</sup>Cellular Parasitology Programme Department of Zoology, University of Ibadan, Ibadan, Nigeria, <sup>2</sup>University of Ibadan, Ibadan, Nigeria, <sup>3</sup>Department of Pathology, University College Hospital, Ibadan, Nigeria, <sup>4</sup>Department of Zoology, University of Ibadan, Ibadan, Nigeria

(ACMCIP Abstract)

8267

### DEEP HUMORAL PROFILING COUPLED WITH MACHINE LEARNING REVEALS NOVEL DIAGNOSTIC AND MORBIDITY BIOMARKERS FOR SCHISTOSOMIASIS PATHOPHYSIOLOGY

Pedro Marcal<sup>1</sup>, Maurice R. Odier<sup>2</sup>, E. A. Kavere<sup>3</sup>, R. Kiplimo<sup>3</sup>, A. Eleveld<sup>3</sup>, A. Mwaki<sup>3</sup>, Sukwan Handali<sup>4</sup>, William E. Secor<sup>4</sup>, Aniruddh Sarkar<sup>1</sup>  
<sup>1</sup>Georgia Institute of Technology, Atlanta, GA, United States, <sup>2</sup>Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, <sup>3</sup>Safe Water and AIDS Project, Kisumu, Kenya, <sup>4</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States

(ACMCIP Abstract)

8268

### THE ROLE OF INTESTINAL MORBIDITY IN THE PATHOGENESIS OF ANEMIA AMONG YOUNG CHILDREN FROM LAKE ALBERT, UGANDA WITH S. MANSONI INFECTION

Susannah Colt<sup>1</sup>, Andrew Edielu<sup>2</sup>, Gloria Kakoba Ayebazibwe<sup>3</sup>, Rachael Nakyesege<sup>3</sup>, Hannah Wu<sup>1</sup>, Kanika Men<sup>1</sup>, Elise Kurtis<sup>1</sup>, Patrice Mawa<sup>3</sup>, Emily Webb<sup>2</sup>, Amaya Bustinduy<sup>2</sup>, Jennifer Friedman<sup>1</sup>  
<sup>1</sup>Center for International Health Research, RI Hospital and Alpert Medical School of Brown University, Providence, RI, United States, <sup>2</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>3</sup>Medical Research Council-London School of Hygiene & Tropical Medicine Research Unit, Entebbe, Uganda

(ACMCIP Abstract)

8269

### SCHISTOSOMIASIS JAPONICUM INFECTION IN THE PHILIPPINES: LOW PREVALENCE AMONG CHILDREN AGED 1-4 YEARS AND CORRELATION BETWEEN HELMINTH BURDEN AND INTESTINE INFLAMMATION

Ralph Aniceto<sup>1</sup>, Jennifer Friedman<sup>2</sup>, Hannah Wu<sup>3</sup>, Mario Antonio Jiz<sup>1</sup>, Veronica Tallo<sup>1</sup>, Marianne Joy Sagliba<sup>1</sup>, Marianne Joy Sagliba<sup>1</sup>, Amabelle Joy Moreno<sup>1</sup>  
<sup>1</sup>Research Institute for Tropical Medicine, Muntinlupa, Philippines, <sup>2</sup>Browne University, Providence, RI, United States, <sup>3</sup>Browne University, Providence, RI, United States

(ACMCIP Abstract)

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### SCHISTOSOMA MANSONI INFECTION IN THE SNAIL BIOMPHALARIA GLABRATA, IS ASSOCIATED WITH EXPRESSION PERTURBATION OF CARBONIC ANHYDRASE, THE HIV TRANS-ACTIVATOR OF TRANSCRIPTION, AND TELOMERASE

Gabriela Lewis, Simone Parn, Matty Knight  
 University of the District of Columbia, Washington, DC, United States

(ACMCIP Abstract)

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### TROGOCYTOSIS: A POTENT MECHANISM FOR HOST RESISTANCE TO SCHISTOSOMIASIS

Jia Shen  
 Sun Yat-Sen University, Guangzhou, China

(ACMCIP Abstract)

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### THE INTERACTION OF HOP, STRESS PROTEINS, AND PIWI IN THE MECHANISM OF CANALIZATION UNDERSCORES THE SUSCEPTIBILITY OF BIOMPHALARIA GLABRATA TO SCHISTOSOMA MANSONI INFECTION

Oumsalama Elhelu<sup>1</sup>, Matty Knight<sup>2</sup>, Clarence Lee<sup>1</sup>  
<sup>1</sup>Howard University, Washington, DC, United States, <sup>2</sup>University of the District of Columbia, Washington, DC, United States

(ACMCIP Abstract)

## Water, Sanitation, Hygiene and Environmental Health

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### COMMUNITY AND INDIVIDUAL PREFERENCES FOR A NEW WATER INFRASTRUCTURE FOR NON-DRINKING ACTIVITIES IN A SCHISTOSOMIASIS ENDEMIC AREA

Raheema Chunara<sup>1</sup>, Lazaaro Mujumbusi<sup>2</sup>, Edith Nalwadda<sup>3</sup>, Moses Arinaitwe<sup>4</sup>, Lucy Pickering<sup>1</sup>, Michael Templeton<sup>5</sup>, Poppy Lambertson<sup>1</sup>  
<sup>1</sup>University of Glasgow, Glasgow, United Kingdom, <sup>2</sup>Medical Research Council/Uganda Virus Research Institute & London School of Hygiene & Tropical Medicine Uganda Research Unit Uganda, Entebbe, Uganda, <sup>3</sup>Medical Research Council / Uganda Virus Research Institute | MRC/UVRI, Entebbe, Uganda, <sup>4</sup>Ministry of Health, Kampala, Uganda, <sup>5</sup>Faculty of Engineering, Department of Civil and Environmental Engineering, Imperial College London, London, United Kingdom

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### ASSOCIATIONS BETWEEN INDICATORS OF WATER, SANITATION AND HYGIENE (WASH) AND MALARIA RISK: A STUDY OF URBAN SETTLEMENTS IN NIGERIA

Gift Wilfred Enang<sup>1</sup>, Ifeoma D. Ozodiegwu<sup>1</sup>, Bamgboye Eniola<sup>1</sup>, Laurette Mhlanga<sup>1</sup>, Yusuf Jamiu<sup>1</sup>, Ikeoluwapo Ajayi<sup>2</sup>  
<sup>1</sup>Loyola University Chicago, Maywood, IL, United States, <sup>2</sup>University of Ibadan, Ibadan, Nigeria

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### ASSOCIATIONS BETWEEN MICRONUTRIENT STATUS, HORMONES, AND IMMUNE STATUS DURING PREGNANCY AND CHILD GROWTH IN RURAL BANGLADESH

Belinda Chen<sup>1</sup>, Chih-Hsien Lin<sup>1</sup>, Andrew Mertens<sup>1</sup>, Sophia T. Tan<sup>2</sup>, Farheen Jamshed<sup>1</sup>, Diego Figueroa<sup>1</sup>, Caitlin Hemlock<sup>3</sup>, Zachary Butzin-Dozier<sup>1</sup>, Lia C. H. Fernald<sup>1</sup>, Christine P. Stewart<sup>4</sup>, Alan E. Hubbard<sup>1</sup>, Md. Ziaur Rahman<sup>5</sup>, Shahjahan Ali<sup>6</sup>, Benjamin F. Arnold<sup>7</sup>, Firdaus S. Dhabha<sup>8</sup>, Douglas Granger<sup>9</sup>, Mahbubur Rahman<sup>10</sup>, Stephen P. Luby<sup>2</sup>, Jack Colford<sup>1</sup>, Audrie Lin<sup>1</sup>  
<sup>1</sup>UC Berkeley School of Public Health, Berkeley, CA, United States, <sup>2</sup>Division of Infectious Diseases and Geographic Medicine, Stanford University, Stanford, CA, United States, <sup>3</sup>Department of Environmental and Occupational Health Sciences, University of Washington, Seattle, WA, United States, <sup>4</sup>University of California Davis, Institute for Global Nutrition, Davis, CA, United States, <sup>5</sup>University of California, Santa Cruz, Department of Microbiology and Environmental Toxicology, Santa Cruz, CA, United States, <sup>6</sup>Department of Epidemiology, Colorado School of Public Health, University of Colorado, Denver, CO, United States, <sup>7</sup>Francis I. Proctor Foundation, University of California San Francisco, San Francisco, CA, United States, <sup>8</sup>Department of Psychiatry & Behavioral Sciences, Department of Microbiology and Immunology, Sylvester Comprehensive Cancer Center, Miller School of Medicine, University of Miami, Miami, FL, United States, <sup>9</sup>Institute for Interdisciplinary Salivary Bioscience Research, University of California, Irvine, Irvine, CA, United States, <sup>10</sup>Environmental Health and WASH, Health System and Population Studies Division, International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, <sup>11</sup>Department of Environmental and Occupational Health Sciences, University of Washington, Santa Cruz, CA, United States



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**WEATHER AND SEASON PREDICTORS OF INFANT DIARRHEAL ILLNESS AND HOUSEHOLD STORED WATER CONTAMINATION IN CLIMATE-VULNERABLE, URBAN, COASTAL MOZAMBIQUE**

Rebecca Kann

*University of Washington, Seattle, WA, United States*

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**PROCESS EVALUATION FOR THE DELIVERY OF A WATER, SANITATION AND HYGIENE MOBILE HEALTH PROGRAM IN THE DEMOCRATIC REPUBLIC OF THE CONGO: RANDOMIZED CONTROLLED TRIAL OF THE PREVENTIVE INTERVENTION FOR CHOLERA FOR 7 DAYS (PICHAT7) PROGRAM**Presence Sanvura<sup>1</sup>, Kelly Endres<sup>2</sup>, Jean-Claude Rusanga<sup>1</sup>, Lucien Bisimwa<sup>1</sup>, Jamie Perin<sup>2</sup>, Camille Williams<sup>2</sup>, Cirhuza Cikomola<sup>1</sup>, Justin Bengehya<sup>3</sup>, Ghislain Maheshe<sup>1</sup>, Alain Mwishingo<sup>1</sup>, Christine Marie George<sup>2</sup><sup>1</sup>Catholic University of Bukavu, Bukavu, Democratic Republic of the Congo, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>3</sup>Bureau de l'Information Sanitaire, Surveillance Epidémiologique et Recherche Scientifique, Division Provinciale de la Santé Sud Kivu, Bukavu, Democratic Republic of the Congo

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**SYSTEMATIC REVIEW OF THE ASSOCIATION BETWEEN COLIFORM BACTERIA IN DRINKING WATER AND DIARRHEA**Amber Jacobsen<sup>1</sup>, Sara dos Santos Almeida<sup>2</sup>, Peter Jensen<sup>2</sup><sup>1</sup>University of South Carolina School of Medicine Greenville, Greenville, SC, United States, <sup>2</sup>University of Copenhagen, Copenhagen, Denmark

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**UNIVERSITY STUDENT AWARENESS OF INTESTINAL PARASITES AND PREVENTIVE BEHAVIOR IN EASTERN SAUDI ARABIA**Sarah A. Alshuhaib<sup>1</sup>, Maryam M. Alnasser<sup>1</sup>, Mehwish Hussain<sup>1</sup>, Ayman A. El-Badry<sup>2</sup><sup>1</sup>College of Public Health, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia, <sup>2</sup>Cairo University Kasr Al-Ainy Faculty of Medicine, Egypt & Imam Abdulrahman Bin Faisal University, Saudi Arabia, Cairo, Egypt - Dammam, Saudi Arabia -, Egypt

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**INFLUENCE OF MATERNAL AND CHILD FUT2 SECRETOR STATUS ON GROWTH AND ON THE EFFICACY OF WATER, SANITATION, HANDWASHING, AND NUTRITION INTERVENTIONS ON ENVIRONMENTAL ENTERIC DYSFUNCTION IN RURAL BANGLADESH**Ronit Gupta<sup>1</sup>, Andrew N. Mertens<sup>2</sup>, Akram Ullah<sup>3</sup>, Tahmeed Ahmed<sup>4</sup>, Rashidul Haque<sup>3</sup>, Mamun Kabir<sup>3</sup>, Mondar M. M. Ahmed<sup>3</sup>, Mustafa Mahfuz<sup>4</sup>, Shahjahan Ali<sup>5</sup>, Mohammad Alauddin<sup>6</sup>, Md. Ziaur Rahman<sup>7</sup>, Jessica Grembi<sup>8</sup>, Abul K. Shoab<sup>9</sup>, Mahbubur Rahman<sup>9</sup>, Leanne Unicomb<sup>9</sup>, Benjamin F. Arnold<sup>10</sup>, Syeda L. Famida<sup>3</sup>, Salma Akther<sup>3</sup>, Md. Saheen Hossen<sup>3</sup>, Palash Mutsuddi<sup>3</sup>, Alan E. Hubbard<sup>11</sup>, Christine P. Stewart<sup>12</sup>, John M. Colford Jr.<sup>11</sup>, Stephen P. Luby<sup>8</sup>, Audrie Lin<sup>7</sup><sup>1</sup>Department of Biostatistics, T.H. Chan School of Public Health, Harvard University, Boston, MA, United States, <sup>2</sup>Division of Epidemiology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>3</sup>Infectious Diseases Division, International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>4</sup>Nutrition Research Division, International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>5</sup>Department of Epidemiology, Colorado School of Public Health, University of Colorado, Denver, CO, United States, <sup>6</sup>Department of Chemistry, Wagner College, Staten Island, NY, United States, <sup>7</sup>Department of Microbiology and Environmental Toxicology, University of California, Santa Cruz, Santa Cruz, CA, United States, <sup>8</sup>Division of Infectious Diseases and Geographic Medicine, Stanford University, Stanford, CA, United States, <sup>9</sup>Health System and Population Studies Division, International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, <sup>10</sup>Francis I. Proctor Foundation, University of California, San Francisco, San Francisco, CA, United States, <sup>11</sup>Division of Epidemiology and Biostatistics, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>12</sup>Department of Nutrition, University of California, Davis, Davis, CA, United States

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**USE OF SOLAR DISINFECTION WITH ALUMINUM TO IMPROVE WATER QUALITY IN RURAL AREAS OF THE NORTHERN ANDES OF PERU**Jesús Rascón<sup>1</sup>, Fátima Burgos<sup>1</sup>, Lily del Pilar Juárez-Contreras<sup>2</sup>, Oscar Gamarra-Torres<sup>2</sup><sup>1</sup>Instituto de Investigación de Enfermedades Tropicales, Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas (UNTRM), Chachapoyas, Peru, <sup>2</sup>Instituto de Investigación para el Desarrollo Sustentable de Ceja de Selva (INDES-CES), Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas (UNTRM), Chachapoyas, Peru

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**SEVEN YEARS OF EXPOSURE TO A HIGHLY FECAL CONTAMINATED ENVIRONMENT: A STUDY IN 24 INFORMAL SETTLEMENTS IN THE ASIA-PACIFIC REGION**Yussi Marlene Palacios Delgado<sup>1</sup>, Maghfira Saidfuddaolah<sup>2</sup>, Vina Waqa<sup>3</sup>, S. Fiona Barker<sup>1</sup>, Rebekah Henry<sup>1</sup>, Brandon Winfrey<sup>1</sup>, Karin Leder<sup>1</sup><sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>Hasanuddin University, Makassar, Indonesia, <sup>3</sup>Fiji National University, Suva, Fiji

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**MATERNAL ESTRADIOL DURING EARLY GESTATION IS ASSOCIATED WITH CHILD DEVELOPMENT IN RURAL BANGLADESH**

Nicol Hernandez, Arlene Tan

*WASH Benefit Trials, Santa Cruz, CA, United States*

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**MONITORING ANTIBIOTIC RESISTANCE GENES ACROSS NEW ORLEANS RIVER AND LAKE WATERS**

Claire E. Schwarze, Jessica M. Blanton, Ronald E. Blanton

*Tulane University, New Orleans, LA, United States*

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**DETECTION OF SALMONELLA TYPHI AND *BLA*<sub>CTX-M</sub> GENES IN DRINKING WATER, WASTEWATER, AND ENVIRONMENTAL BIOFILMS IN SINDH PROVINCE, PAKISTAN**Ayesha Tajammul<sup>1</sup>, Scott Benson<sup>2</sup>, Jamil Ahmed<sup>3</sup>, Jim VanDerslice<sup>2</sup>, Windy Tanner<sup>4</sup><sup>1</sup>U.S. Pakistan Center for Advanced Studies in Water, Mehran University of Engineering and Technology, Jamshoro, Pakistan, <sup>2</sup>University of Utah, Salt Lake City, UT, United States, <sup>3</sup>Rashid Latif Khan University Medical College, Lahore, Pakistan, <sup>4</sup>Yale University, New Haven, CT, United States

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**THE INTERPLAY AMONG GLUCOSYL CERAMIDE TRANSFERASE AND ENCYSTATION-SPECIFIC PROTEINS IS IMPORTANT FOR DRIVING THE PROCESS OF CYST FORMATION BY AN ANCIENT PROTOZOAN, *GIARDIA LAMBLIA***

Julio H. Rangel, Breanna C. Pence, Siddhartha Das

*The University of Texas at El Paso, El Paso, TX, United States*

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**HIGH BURDEN OF ENTERIC PATHOGEN INFECTION IN MOTHER-CHILD PAIRS AND WASH INDICATORS IN RURAL AND PERI-URBAN COMMUNITIES OF BOLIVIA**Cynthia Copeticóna-Callejas, Alejandra Gabriela Torrez Mamani, Belen Claudia Choque Pardo, Sonia Guadalupe Jiménez Pacoahuanca, Volga Ana Iñiguez Rojas  
*Instituto de Biología Molecular y Biotecnología, La Paz, Plurinational State of Bolivia*

## Late-Breaker Abstract Session 122

### Late-Breakers in Malaria

Convention Center - Room 391/392 (3rd Floor)  
Saturday, November 16, 11:15 a.m. - 12:30 p.m.

**This session does not carry CME credit.**

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. See the Meeting App or Late-Breaker Abstract Presentation Schedule booklet (available online) for the presentation schedule.

#### CHAIR

Angela M. Early  
Broad Institute of MIT and Harvard, Cambridge, MA, United States

Maisha Khair Nima  
University of Notre Dame, Notre Dame, IN, United States

## Meet the Professors Session 123

### Meet the Professors: Dilemmas in Clinical Tropical Medicine, Cases from Peru

Convention Center - Room 388/389 (3rd Floor)  
Saturday, November 16, 11:15 a.m. - 12:30 p.m.

Meet the Professors sessions are valuable learning experiences for trainees and practicing clinicians to hear about clinical reasoning from leaders in the field. In this session, Drs. Seas and Montes will present challenging and instructive clinical tropical medicine cases from Peru.

#### SESSION ORGANIZER

Daniel Leung  
University of Utah, Salt Lake City, UT, United States

#### SESSION CHAIR

Carolina de la Flor  
Universidad Peruana Cayetano Heredia, Lima, Peru

#### PRESENTATION #1

Carlos Seas  
Universidad Peruana Cayetano Heredia, Lima, Peru

#### PRESENTATION #2

Martin Montes  
Universidad Peruana Cayetano Heredia, Lima, Peru

## Late-Breaker Abstract Session 124

### Late-Breakers in Virology

Convention Center - Room 383/384/385 (3rd Floor)  
Saturday, November 16, 11:15 a.m. - 12:30 p.m.

**This session does not carry CME credit.**

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. See the Meeting App or Late-Breaker Abstract Presentation Schedule booklet (available online) for the presentation schedule.

#### CHAIR

Sandra Laurence Lopez-Verges  
Gorgas Memorial Institute for Health Studies, Panama, Panama

Jaime A. Cardona-Ospina  
School of Public Health, University of California, Berkeley, Berkeley, CA, United States

### Clinical Group (ACCTMTH) Past Presidents Meeting

Hilton - Marlborough A (2nd Floor)  
Saturday, November 16, 11:15 a.m. - 12:30 p.m.

### Poster Session C Viewing

Convention Center - Hall I-1 (1st Floor)  
Saturday, November 16, 12:45 p.m. - 3 p.m.

## Symposium 125

### Smallpox to a Global Mpox Outbreak: How Did We Get Here and How Do We Regain Control?

Convention Center - Hall I-2 (1st Floor)  
Saturday, November 16, 12:45 p.m. - 2:30 p.m.

Mpox is a zoonotic viral disease endemic in parts of Africa caused by monkeypox virus, a member of the Orthopox genus, which includes variola virus, the cause of smallpox. Two clades of monkeypox virus are recognized, found in Central and East (Clade I) and West (Clade II) Africa. Following first discovery in 1958 from infected monkeys being used for laboratory research (and hence the misnomer, since small mammals, rather than monkeys, are now thought to be the natural reservoir), sporadic human cases were reported across Central and West Africa throughout the 1970s, a pattern thought to reflect the increase in immunological susceptibility among persons born after the eradication of smallpox and the 1980 global cessation of smallpox vaccination, which also protects against mpox. Cases steadily increased in Central Africa over recent decades, with relatively little global attention until 2022, when circulation of a newly recognized sub-clade and mode of spread, primarily involving men who have sex with men (MSM) in high-income countries, resulted in a global epidemic, prompting the World Health Organization (WHO) to declare a Public Health Emergency of International Concern (PHEIC). Transmission was subsequently curbed in many areas of the world, but in the last year significant increases of cases and emergence of another new sub-clade in various countries in Central and East Africa have prompted a second WHO PHEIC

declaration, as well as declaration of a Public Health Emergency of Continental Security by the Africa Centers for Disease Control and Prevention. In this symposium, a panel of experts will discuss the transition from smallpox eradication to sporadic cases of mpox in Africa and then to a global outbreak, and strategies and challenges to combat this new situation.

**CHAIR**

Daniel G. Bausch  
London School of Hygiene & Tropical Medicine, London, United Kingdom

Anne W. Rimoin  
UCLA, Los Angeles, CA, United States

**12:45 p.m.**

**PANELISTS**

Emmanuel Agogo  
*FIND, Geneva, Switzerland*

Christina Hutson  
*Centers for Disease Control and Prevention, Atlanta, GA, United States*

Rosamund Lewis  
*World Health Organization, Geneva, Switzerland*

Jean-Jacques Muyembe Tamfum  
*National Institute for Biomedical Research, Kinshasa, Democratic Republic of the Congo*

**Symposium 126**

**Mosquito Larval Biology and Control**

*Convention Center - Room 343/344 (3rd Floor)*

**Saturday, November 16, 12:45 p.m. - 2:30 p.m.**

Mosquito larvae are surprisingly complex organisms that have adapted to colonizing a variety of different aquatic environments, from temporary to permanent, clean to highly polluted, rural and urban, large and small water bodies, including even puddles or small water-filled containers. Larval source management (LSM) is routinely used for control of Aedes and Culex mosquitoes in control programs worldwide. As insecticide resistance to many commonly used insecticides develops, the discovery of new larvicides, ideally those with no impact on non-target organisms, will be critical to the future success of larval control programs and the prevention of arboviral diseases. Furthermore, although many malaria programs in Africa include larval source management (LSM) in their national strategic plans, the implementation of this vector control strategy for control of Anopheles mosquitoes has been limited. However, LSM is recognized as a key control tool for the invasive urban malaria vector, Anopheles stephensi, which has been identified in an increasing number of African countries, prompting interest in the pursuit of new LSM initiatives for malaria vector control in Africa. Here, we will discuss the biology and control of mosquito larvae, reviewing both opportunities for and barriers to LSM for Aedes, Culex, and Anopheles mosquitoes. #Prevention, #Molecular Biology, #Translational Science, #Field Studies, #Climate Change

**CHAIR**

Molly Duman Scheel  
*Indiana University School of Medicine, South Bend, IN, United States*

Kristin Michel  
*Kansas State University, Manhattan, KS, United States*

**12:45 p.m.**  
**INTRODUCTION**

**12:55 p.m.**  
**YEAST RNAI LARVICIDES FOR MOSQUITO CONTROL**

Molly Duman Scheel  
*Indiana University School of Medicine, South Bend, IN, United States*

**1:05 p.m.**  
**LARVAL SOURCE MANAGEMENT OPPORTUNITIES AND CHALLENGES**

David Malone  
*Gates Foundation, Seattle, WA, United States*

**1:15 p.m.**  
**LARVAL SOURCE MANAGEMENT FOR MALARIA: PAST, PRESENT, AND FUTURE DIRECTIONS**

Sarah Zohdy  
*U.S. President's Malaria Initiative, Centers for Disease Control, Atlanta, GA, United States*

**1:25 p.m.**  
**EXECUTING EFFECTIVE LARVAL SOURCE MANAGEMENT IN GHANA**

Otubea Ansah  
*National Malaria Control Programme, Ghana Health Service, Accra, Ghana*

**1:35 p.m.**  
**ALARMING AND UNEXPECTED LARVICIDE RESISTANCE IN CULEX PIPIENS IN A WNV HOTSPOT**

Lyric Bartholomay  
*Midwest Center of Excellence for Vector-Borne Disease, Madison, WI, United States*

**1:45 p.m.**  
**BURNING QUESTIONS: WOOD BIOCHAR'S ROLE IN AEADES AEGYPTI OVIPOSITION AND DEVELOPMENT**

Geoff Attardo  
*University of California, Davis, Davis, CA, United States*

**1:55 p.m.**  
**MANIPULATING THE LARVAL MICROBIOME FOR MOSQUITO AND MOSQUITO-BORNE DISEASE CONTROL**

Kerri Coon  
*University of Wisconsin, Madison, Madison, WI, United States*

**2:05 p.m.**  
**MOSQUITO-FUNGAL INTERACTIONS AND THEIR POTENTIAL FOR LARVAL CONTROL**

Molly Duman Scheel  
*Indiana University School of Medicine, South Bend, IN, United States*

## Session 127

### ASTMH Annual Business Meeting

Convention Center - Room 345 (3rd Floor)

Saturday, November 16, 12:45 p.m. - 1:45 p.m.

Open to all attendees! Come learn about the work ASTMH is doing on your behalf.

#### CHAIR

Kent E. Kester

CEPI, Washington, DC, United States

Jamie Bay Nishi

American Society of Tropical Medicine and Hygiene, Arlington, VA, United States

## Scientific Session 128

### Clinical Tropical Medicine: Neglected Tropical Diseases

Convention Center - Room 352 (3rd Floor)

Saturday, November 16, 12:45 p.m. - 2:30 p.m.

This session does not carry CME credit.

#InfectiousDisease #Epidemiology  
#PopulationSurveillance #Modeling

#### CHAIR

Samuel Akech

KEMRI/Wellcome Trust Research Programme, Nairobi, Kenya

Owain Donnelly

Hospital for Tropical Diseases, University College London Hospitals (UCLH) NHS Foundation Trust, London, United Kingdom

12:45 p.m.

8288

### FLORENCE- A SMARTPHONE COPILOT BASED ON LARGE AI MULTIMODAL MODELS- : TEST IN CÔTE D'IVOIRE IN PATIENTS WITH SUSPECTED SKIN NEGLECTED TROPICAL DISEASES

Elena Dacal<sup>1</sup>, Iago Veiras<sup>1</sup>, Oscar Darias<sup>1</sup>, Jaime García-Villena<sup>1</sup>, Alvaro López-Caro<sup>1</sup>, Alejandro Angulo<sup>1</sup>, Labiya Toure<sup>2</sup>, Ange Théodore Yao Kouakou<sup>2</sup>, Aboa Paul Koffi<sup>2</sup>, Christian R. Johnson<sup>3</sup>, Emma Saéz-López<sup>4</sup>, Israel Cruz<sup>5</sup>, Miguel Luengo-Oroz<sup>1</sup>

<sup>1</sup>Spotlab, Madrid, Spain, <sup>2</sup>Programme National de Lutte contre l'Ulcère de Buruli, Divô, Côte D'Ivoire, <sup>3</sup>Fondation Raoul Follereau, Paris, France. University of Abomey-Calavi, Abomey-Calavi, Benin, <sup>4</sup>Department of Microbiology, Paediatrics, Radiology and Public Health, Faculty of Medicine, University of Zaragoza, Zaragoza, Spain. Spanish Network for Research on Respiratory Diseases (CIBERES), Carlos III Health Institute, Madrid, Spain, Zaragoza, Spain, <sup>5</sup>National School of Public Health, CIBERINFEC, Instituto de Salud Carlos III, Spain, Madrid, Spain

1 p.m.

8289

### DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF PATIENTS WITH CHROMOBLASTOMYCOSIS AND EUMYCETOMA IN EIGHT MEDICAL CENTERS, UNITED STATES

Dallas J. Smith<sup>1</sup>, Vaisak Nair<sup>2</sup>, Drashti Shah<sup>3</sup>, George R. Thompson<sup>4</sup>, Ilan S. Schwartz<sup>5</sup>, Harrison White<sup>6</sup>, Kaya L. Curtis<sup>6</sup>, Poonam Sharma<sup>7</sup>, William P. Daley<sup>7</sup>, Robert T. Brodell<sup>7</sup>, Rachel McMullen<sup>8</sup>, Kaitlin Benedict<sup>1</sup>, Jeremy A. W. Gold<sup>1</sup>, Samantha Williams<sup>1</sup>, Shari R. Lipner<sup>6</sup>, Avrom S. Caplan<sup>8</sup>, Eva Rawlings Parker<sup>9</sup>, Peter G. Pappas<sup>3</sup>, Paschalis Vergidis<sup>2</sup>  
<sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>2</sup>Mayo Clinic, Rochester, MN, United States, <sup>3</sup>University of Alabama at Birmingham School of Medicine, Birmingham, AL, United States, <sup>4</sup>University of California Davis Medical Center, Sacramento,

CA, United States, <sup>5</sup>Duke University School of Medicine, Durham, NC, United States, <sup>6</sup>Weill Cornell Medicine, New York, NY, United States, <sup>7</sup>University of Mississippi Medical Center, Jackson, MS, United States, <sup>8</sup>NYU Grossman School of Medicine, New York, NY, United States, <sup>9</sup>Vanderbilt University Medical Center, Nashville, TN, United States

1:15 p.m.

8290

### TALAROMYCOSIS IN THE UNITED STATES: AN ANALYSIS OF COMMERCIAL HEALTH INSURANCE CLAIMS AND MEDICAID DATABASES, 2016 TO 2022

Kaitlin Benedict<sup>1</sup>, Dallas J. Smith<sup>1</sup>, Jeremy A. W. Gold<sup>1</sup>, Thuy Le<sup>2</sup>

<sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>2</sup>Duke University School of Medicine, Durham, NC, United States

1:30 p.m.

8291

### IMPORTED LEISHMANIASIS IN THE UNITED KINGDOM: CASE DATA AND OUTCOMES FROM A NATIONAL MULTIDISCIPLINARY TEAM MEETING

Owain Donnelly<sup>1</sup>, Ciara Mahon<sup>1</sup>, Rachel Southern-Thomas<sup>1</sup>, Simran Goyal<sup>1</sup>, Adam T. Gray<sup>1</sup>, Mark S. Bailey<sup>2</sup>, Jonathan Joseph<sup>3</sup>, Peter L. Chiodini<sup>4</sup>, June Minton<sup>1</sup>, Naomi F. Walker<sup>5</sup>, Sarah Eisen<sup>6</sup>, Laura Nabarro<sup>1</sup>, Stephen L. Walker<sup>1</sup>, Anna Checkley<sup>1</sup>

<sup>1</sup>Hospital for Tropical Diseases, University College London Hospitals (UCLH) NHS Foundation Trust, London, United Kingdom, <sup>2</sup>Academic Department of Military Medicine, Royal Centre for Defence Medicine, Birmingham, United Kingdom, <sup>3</sup>Department of Rhinology, Royal National ENT and Eastman Dental Hospital, UCLH, London, United Kingdom, <sup>4</sup>Department of Clinical Parasitology, UCLH, London, United Kingdom, <sup>5</sup>Tropical and Infectious Diseases Unit, Liverpool University Hospitals NHS Foundation Trust, London, United Kingdom, <sup>6</sup>Department of Paediatrics, UCLH, London, United Kingdom

1:45 p.m.

8292

### CUTANEOUS LEISHMANIASIS IN NORTHERN SYRIA: A ONE YEAR DESCRIPTIVE ANALYSIS OF EPIDEMIOLOGICAL AND CLINICAL DATA

Ayla Alkharat<sup>1</sup>, Owen Bicknell<sup>2</sup>, Basel Abdelal<sup>2</sup>, Mouhannad Abdulkader<sup>2</sup>, Sergio Lopes<sup>1</sup>, Sara Estechea-Querol<sup>1</sup>

<sup>1</sup>The MENTOR Initiative, Haywards Heath, United Kingdom, <sup>2</sup>The MENTOR Initiative, Gazientep, Syrian Arab Republic

2 p.m.

8293

### PEERING INTO THE CRYSTAL BALL - PREDICTING OUTCOMES IN VISCERAL LEISHMANIASIS

James P. Wilson<sup>1</sup>, Forhad Chowdhury<sup>1</sup>, Shermarke Hassan<sup>1</sup>, Eli Harriss<sup>1</sup>, Fabiana Alves<sup>2</sup>, Ahmed Musa<sup>3</sup>, Prabin Dahal<sup>1</sup>, Kasia Stepniowska<sup>1</sup>, Philippe J. Guérin<sup>1</sup>

<sup>1</sup>University of Oxford, Oxford, United Kingdom, <sup>2</sup>Drugs for Neglected Diseases initiative, Geneva, Switzerland, <sup>3</sup>University of Khartoum, Khartoum, Sudan

2:15 p.m.

8294

### EPIDEMIOLOGY, HEALTH-SEEKING BEHAVIORS AND TRADITIONAL PRACTICES RELATED TO SNAKEBITES IN RURAL AND TRIBAL COMMUNITIES IN SOUTHERN INDIA

Rohan Michael Ramesh<sup>1</sup>, Ravikar Ralph<sup>1</sup>, Mohan Jambugulam<sup>1</sup>, Arpitha Anbu Deborah<sup>1</sup>, Kumudha Aruldas<sup>1</sup>, Sushil Mathew John<sup>1</sup>, Judd L. Watson<sup>2</sup>, Anand Zachariah<sup>1</sup>, Sitara S.R Ajjampur<sup>1</sup>

<sup>1</sup>Christian Medical College Vellore, Vellore, India, <sup>2</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

## Scientific Session 129

### Mosquitoes- Bionomics, Behavior and Surveillance

Convention Center - Room 353 (3rd Floor)

Saturday, November 16, 12:45 p.m. - 2:30 p.m.

#EcologicalStudies #Genomics #FieldStudies

#### CHAIR

Shirley C. Nimo-Paintsil

United States Naval Medical Research Unit-EURAFCENT, Accra, Ghana

Beatrice Helena Schildknecht

SwissTPH, Allschwil, Switzerland

12:45 p.m.

8295

#### SEASONAL TRANSITION OF ANOPHELES STEPHENSI AND AEDES AEGYPTI LARVAL HABITAT SUPERPRODUCTIVITY IN KEBRIDEHAR, ETHIOPIA

Solomon Yared<sup>1</sup>, Dereje Dengela<sup>2</sup>, Peter Mumba<sup>3</sup>, Sheleme Chibsa<sup>3</sup>, Seth Irish<sup>4</sup>, Melissa Yoshimizu<sup>5</sup>, Sarah Zohdy<sup>6</sup>, Meshesha Balkew<sup>2</sup>, Gonzalo M. Vazquez-Prokopec<sup>7</sup>  
<sup>1</sup>Jigjiga University, Jigjiga, Ethiopia, <sup>2</sup>PMI Evolve Project, Abt Global, Addis Ababa, Ethiopia, <sup>3</sup>U.S. President's Malaria Initiative, USAID, Addis Ababa, Ethiopia, <sup>4</sup>(at time of work) U.S. President's Malaria Initiative, Entomology Branch, U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>5</sup>U.S. President's Malaria Initiative, USAID, Washington, DC, United States, <sup>6</sup>U.S. President's Malaria Initiative, Entomology Branch, U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>7</sup>Emory University, Atlanta, GA, United States

1 p.m.

8296

#### A FOCUSED CASE-RESPONSE APPROACH TO MALARIA VECTOR SURVEILLANCE IN AREAS OF UNSTABLE TRANSMISSION

Sungano Mharakurwa<sup>1</sup>, Tanatswa X. Gara-Mundere<sup>1</sup>, Trust Nyakunu<sup>1</sup>, Brenda Makonyere<sup>1</sup>, Tariro Chikava<sup>1</sup>, Natasha Mbwana<sup>1</sup>, Charmaine Matimba<sup>1</sup>, Nobert Mudare<sup>1</sup>, Shungu Munyati<sup>2</sup>, Lovemore Gwanzura<sup>3</sup>  
<sup>1</sup>Africa University, Mutare, Zimbabwe, <sup>2</sup>Biomedical Research and Training Institute, Mutare, Zimbabwe, <sup>3</sup>Biomedical Research and Training Institute, Harare, Zimbabwe

1:15 p.m.

8297

#### DOES IVERMECTIN IMPAIR ANOPHELES ATTRACTIVENESS TOWARD TREATED HOSTS UNDER FIELDS AND LABORATORY CONDITIONS?

Lamidi Zela<sup>1</sup>, Sié Hermann Pooda<sup>2</sup>, Angélique Porciani<sup>3</sup>, André Barambaya Sagna<sup>4</sup>, Malik Bandaogo<sup>1</sup>, A. N. Ramzy Kambou<sup>1</sup>, Anyirekun Fabrice Somé<sup>5</sup>, Christophe Roberge<sup>6</sup>, Adrien M.G. Belem<sup>7</sup>, Roch K. Dabiré<sup>5</sup>, Karine Mouline<sup>3</sup>  
<sup>1</sup>Centre International de Recherche-Développement sur L'Élevage en zone Subhumide, Bobo Dioulasso, Burkina Faso, <sup>2</sup>Université Ouezzin COULIBALY, Dédougou, Burkina Faso, <sup>3</sup>Institut de Recherche pour le Développement, Montpellier, France, <sup>4</sup>Institut de Recherche pour le Développement, Bobo Dioulasso, Burkina Faso, <sup>5</sup>Institut de Recherche en Sciences de la Santé, Bobo Dioulasso, Burkina Faso, <sup>6</sup>MEDINCELL, Jacou, France, <sup>7</sup>Université Nazi Boni, Bobo Dioulasso, Burkina Faso

1:30 p.m.

8298

#### COMPARING ANOPHELES BEHAVIOR WITH INTERCEPTOR® G2'S DUAL VS SINGLE ACTIVE INGREDIENTS: 3D VIDEO TRACKING ANALYSIS

Beatrice Helena Schildknecht, Pie Mueller  
SwissTPH, Allschwil, Switzerland

1:45 p.m.

8299

#### VECTORCAM - A NOVEL AI-POWERED DIGITAL TOOL FOR AUTOMATED MORPHOLOGICAL IDENTIFICATION OF MOSQUITO SPECIES, SEX, AND ABDOMINAL STATUS BY VILLAGE HEALTH TEAMS IN UGANDA: A RANDOMIZED CONTROLLED TRIAL

Sunny Patel<sup>1</sup>, Marina Rincon Torroella<sup>1</sup>, Deming (Remus) Li<sup>1</sup>, Atul Antony Zacharias<sup>1</sup>, Parthvi Mehta<sup>1</sup>, Shreya Raman<sup>1</sup>, Kyle Cooper<sup>1</sup>, David Onanyang<sup>2</sup>, James Kaweesa<sup>2</sup>, Kigongo Siriman<sup>2</sup>, Jovan Batte<sup>2</sup>, Neil Lobo<sup>3</sup>, Douglas Norris<sup>4</sup>, Catherine Maiteki<sup>5</sup>, Jimmy Opigo<sup>5</sup>, Peter Waiswa<sup>6</sup>, Soumyadipta Acharya<sup>1</sup>  
<sup>1</sup>Johns Hopkins University, Baltimore, MD, United States, <sup>2</sup>Vector Borne and Neglected Tropical Diseases Control Division, Ministry of Health, Kampala, Uganda, <sup>3</sup>University of Notre Dame, South Bend, IN, United States, <sup>4</sup>Johns Hopkins University, School of Public Health, Baltimore, MD, United States, <sup>5</sup>National Malaria Control Division, Ministry of Health, Kampala, Uganda, <sup>6</sup>Makerere University School of Public Health, Kampala, Uganda

2 p.m.

8300

#### GENOMIC EVALUATION REVEALS A STRONG POPULATION STRUCTURE OF ANOPHELES FUNESTUS COLLECTED IN COAST AND LAKE MALARIA ENDEMIC REGION IN KENYA

Brian Polo<sup>1</sup>, Sylvia Milanoi<sup>1</sup>, Diana Omoke<sup>1</sup>, Cynthia Awuor<sup>1</sup>, Duncan Onguru<sup>2</sup>, Sanjay Nagi<sup>3</sup>, Alistair Miles<sup>4</sup>, Mara Lawniczak<sup>5</sup>, Eric Ochomo<sup>1</sup>  
<sup>1</sup>Kenya Medical Research Institute, Kisumu, Kenya, <sup>2</sup>Jaramogi Odinga Oginga University Science and Technology, Kisumu, Kenya, <sup>3</sup>Department of Vector Biology, Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>4</sup>Wellcome Sanger Genomic Surveillance Unit, Wellcome Sanger Institute, Hinxton, Cambridge, United Kingdom, <sup>5</sup>Wellcome Sanger Institute, Cambridge, United Kingdom

2:15 p.m.

8301

#### EFFECT OF ECOLOGICAL ZONES AND CLIMATIC CONDITIONS ON MOSQUITO DIVERSITY IN GHANA: A LONGITUDINAL STUDY FROM 2017 - 2022

Eric Behene<sup>1</sup>, Seth O. Addo<sup>1</sup>, Ronald E. Bentil<sup>1</sup>, Mba-Tihssommah Mosore<sup>1</sup>, Reham A. Tageldin<sup>2</sup>, Patrick Obuam<sup>3</sup>, Sandra A. Kwarteng<sup>3</sup>, Dorcas Atibilla<sup>4</sup>, Bernice Baako<sup>5</sup>, Victor Asoala<sup>5</sup>, Ellis Owusu-Dabo<sup>3</sup>, Naiki Attram<sup>6</sup>, Shirley C. Nimo-Paintsil<sup>6</sup>, Terrel Sanders<sup>6</sup>, Andrew G. Letizia<sup>6</sup>, Samuel K. Dadzie<sup>1</sup>, James F. Harwood<sup>7</sup>  
<sup>1</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana, <sup>2</sup>United States Naval Medical Research Unit EURAFCENT Cairo Detachment, Cairo, Egypt, <sup>3</sup>Kwame Nkrumah University of Science and Technology, School of Public Health, Kumasi, Ghana, <sup>4</sup>Kintampo Health Research Center, Bono East Region, Kintampo, Ghana, <sup>5</sup>Navrongo Health Research Center, Upper East Region, Navrongo, Ghana, <sup>6</sup>United States Naval Medical Research Unit EURAFCENT Ghana Detachment, Accra, Ghana, <sup>7</sup>United States Naval Medical Research Unit EURAFCENT, Sigonella, Italy

## Symposium 130

### Cooperation in Caring for Patients with Cystic Echinococcosis: International Experience from Referral Centers

Convention Center - Room 354/355 (3rd Floor)  
Saturday, November 16, 12:45 p.m. - 2:30 p.m.

This symposium will present an overview of the interdisciplinary approach to difficult and unusual cases of cystic echinococcosis, a neglected tropical disease. Clinicians from referral centers from different countries will discuss treatment of CE patients seen in their practice, particularly those with puzzling and confusing presentations, in an attempt to clarify the basic tenets of clinical management of CE. #ClinicalResearch #InfectiousDiseases #Therapeutics

#### CHAIR

Enrico Brunetti  
University of Pavia, San Matteo Hospital Foundation, Pavia, Italy

Christina Coyle  
Albert Einstein College of Medicine, Jacobi Medical Center, New York, NY, United States

#### 12:45 p.m. INTRODUCTION

#### 12:55 p.m. CYSTIC ECHINOCOCCOSIS AND DIFFERENTIAL DIAGNOSIS WITH ALVEOLAR ECHINOCOCCOSIS - EXPERIENCE FROM A REFERRAL CENTER IN GERMANY

Marija Stojkovic  
Department of Infectious Diseases and Tropical Medicine, Heidelberg University Hospital, Heidelberg, Germany

#### 1:10 p.m. PERCUTANEOUS TREATMENTS AND SURGERY FOR CE. WHERE DO WE DRAW THE LINE?

Okan Akhan  
Hacettepe University - Bayindir Söğütözü Hospital, Ankara, Turkey

#### 1:30 p.m. CYSTIC ECHINOCOCCOSIS IN THE PERUVIAN HIGHLAND - HURDLES AND PERSPECTIVES

Miguel M. Cabada  
UTMB, Houston, TX, United States

#### 1:55 p.m. CYSTIC ECHINOCOCCOSIS IN NEW YORK CITY

Christina Coyle  
Albert Einstein College of Medicine - Jacobi Medical Center, New York, NY, United States

## Symposium 131

### Post-Viral Sequelae in Ebolavirus Infections: The Complicated Road to Recovery

Convention Center - Room 356 (3rd Floor)  
Saturday, November 16, 12:45 p.m. - 2:30 p.m.

Long-term post-viral sequelae are a serious consequence following recovery from acute disease. This is particularly evident in the context of filovirus infections—such as Ebolavirus disease (EVD)—with post-Ebola syndrome (PES) being well documented in a growing cohort of survivors. Filoviral infections continue to emerge in sub-Saharan Africa as evidenced by recent outbreaks of Zaire Ebolavirus (EBOV) in the Democratic Republic of Congo, and the Sudan Ebolavirus (SUDV) in Uganda. With the continued emergence of EVD and improvement in specific treatments, a large cohort of nearly 20,000 EVD survivors now exists globally. PES has been well recognized and is described variably as a constellation of symptoms and physical exam findings. Among these varied signs and symptoms, specific presentations of PES exist with yet undescribed driving mechanisms. Major long-term signs and symptoms include musculoskeletal manifestations and recent studies show significant presentation of cardiopulmonary and neurocognitive deficits in EVD survivors. Despite active ongoing studies, long-term clinical sequelae in EVD survivors of SUDV infection have not been well described to date. While PES has been well noted, many questions surrounding the pathophysiology remain. What drives EVD survivors to present with particular PES phenotypes? As filoviruses continue to emerge, and EVD survivor numbers grow, it is imperative that we understand the long-term complications associated with survival from severe acute filoviral infections. Here we bring together a diverse group of speakers to discuss breakthroughs and key remaining questions in sequelae following recovery from EVD. #ClinicalResearch #Immunology #InfectiousDisease #Pathogenesis #TranslationalScience

#### CHAIR

Nell G. Bond  
Tulane University School of Medicine, New Orleans, LA, United States

Robert J. Samuels  
Kenema Government Hospital, Kenema, Sierra Leone

#### 12:45 p.m. INTRODUCTION

#### 12:55 p.m. LONG EBOLAVIRUS SUDV SYNDROME: TWO YEARS LATER

Haruna Muwonge  
Makerere University, Kampala, Uganda

#### 1:10 p.m. EBOV LONG-TERM SEQUELAE AMONG A COHORT OF LIBERIAN EVD SURVIVORS

David Wohl  
University of North Carolina, Chapel Hill, NC, United States

**1:25 p.m.****REDUCED NEUROCOGNITIVE FUNCTION IN EVD SURVIVORS EITHER YEARS AFTER ACUTE INFECTION**

Nell G. Bond

*Tulane University SOM, New Orleans, LA, United States***1:40 p.m.****CHRONIC CARDIOPULMONARY DYSFUNCTION ASSOCIATED WITH POST-EBOLA SYNDROME**

Samuel Ficencic

*Tulane School of Medicine, New Orleans, LA, United States***Symposium 132****Mass Drug Administration of Ivermectin for Onchocerciasis Elimination: Can We Stop Sooner?***Convention Center - Room 357 (3rd Floor)***Saturday, November 16, 12:45 p.m. - 2:30 p.m.**

Onchocerciasis is caused by *Onchocerca volvulus*, a filarial nematode that is transmitted by *Simulium* species (black flies) that breed in fast flowing rivers and streams. Infection can cause skin and eye disease, including blindness. The 2017 Global Burden of Disease Study estimated that 20.9 million people are infected with *O. volvulus*, 14.6 million have skin disease, and 1.15 million have vision loss, with most of the burden in Africa. The World Health Organization (WHO) has targeted onchocerciasis for elimination. The key strategy for onchocerciasis elimination is mass drug administration (MDA) with ivermectin, which suppresses the production of microfilariae in the skin. With repeated MDA, microfilariae levels are kept low and over time typically reduces the parasite load in the community. Great progress has been made towards elimination and in 2019 more than 150 million people were treated with ivermectin. Many areas in Africa have been under MDA for more than a decade and may have interrupted transmission of the parasite. In areas where interruption of transmission is demonstrated, MDA can be stopped. WHO guidelines recommend that MDA should be stopped if the Ov16 seroprevalence in children below 10 years of age is < 0.1% at the upper bound of the 95% confidence interval and the prevalence of O150 PCR (Poolscreen) positivity is <1/1000 (<0.1%) in parous black flies or <1/2000 (0.05%) in all black flies. However, modeling suggests that the seroprevalence threshold may be too low and that a threshold of 2% may also indicate interruption of transmission. Additionally, the current Ov16 tests have limitations that make it very difficult to accurately measure a <0.1% seroprevalence. To evaluate the 2% serological threshold, national onchocerciasis programs from the Ministries of Health of Benin, Ghana, Malawi, and Tanzania with the support of the US Centers for Disease Control and Prevention, The Task Force for Global Health, and African Field Epidemiology Network are conducting operational research in areas that have been under MDA for many years and are thought to have interrupted transmission. These studies will determine the baseline O150 prevalence in black flies and the OV16 seroprevalence in children 5-9 years of age, and if they meet the current WHO entomological criteria for stopping and the seroprevalence in children is less than 2%, then MDA will be stopped, and the areas monitored for recrudescence.

In this symposium we will present the initial results from the countries involved and the diagnostic challenges encountered during the studies. The presentations will address sampling and laboratory methodologies, serology and entomology results, diagnostic challenges and solutions, and next steps. #Elimination #Epidemiology #InfectiousDisease

**CHAIR**

Andrew Abbott

*US Centers for Disease Control and Prevention, Atlanta, GA, United States*

Joseph Kwadwo Opare

*Neglected Tropical Diseases Program, Ghana Health Service, Accra, Ghana***12:45 p.m.****INTRODUCTION****12:55 p.m.****EVALUATING THE SERO-PREVALENCE THRESHOLD FOR STOPPING ONCHOCERCIASIS MASS DRUG ADMINISTRATION: EXPERIENCES IN MALAWI**

Laston Sitima

*Ministry of Health, Lilongwe, Malawi***1:15 p.m.****EVALUATION OF THE SEROPREVALENCE THRESHOLD FOR STOPPING THE MASS DRUG ADMINISTRATION FOR ONCHOCERCIASIS: EXPERIENCES IN BENIN**

N'Deye Marie Adama Bassabi

*Programme National de Lutte contre les Maladies Transmissibles du Bénin, Cotonou, Benin***1:35 p.m.****ESTABLISHING SERO-PREVALENCE THRESHOLD FOR STOPPING ONCHOCERCIASIS MASS DRUG ADMINISTRATION: EXPERIENCES AND PROGRESSES MADE SO FAR IN TANZANIA.**

Akili Kalinga

*National Institute for Medical Research, Dar Es Salaam, United Republic of Tanzania***1:50 p.m.****MASS DRUG ADMINISTRATION OF IVERMECTIN FOR ONCHOCERCIASIS ELIMINATION: CAN WE STOP SOONER IN GHANA?**

Joseph Kwadwo Opare

*Neglected Tropical Diseases Program, Ghana Health Service, Accra, Ghana***2:10 p.m.****FIELD EVALUATION OF NEW DIAGNOSTIC TOOLS FOR ONCHOCERCIASIS TO STOP MASS DRUG ADMINISTRATION**

Jessica Prince-Guerra

*US Centers for Disease Control and Prevention, Atlanta, GA, United States*

## Scientific Session 133

### Viruses - Epidemiology

Convention Center - Room 383/384/385 (3rd Floor)

Saturday, November 16, 12:45 p.m. - 2:30 p.m.

#Epidemiology #InfectiousDisease

#### CHAIR

Mariam Fofana

Yale School of Public Health, New Haven, CT, United States

Matthew Aliota

University of Minnesota, Minneapolis, MN, United States

12:45 p.m.

#### PRESENTATION BY BURROUGHS WELLCOME FUND-ASTMH FELLOWSHIP RECIPIENT

12:45 p.m.

8302

#### USING A VARIANT-SPECIFIC, ELECTROCHEMILUMINESCENCE MULTIPLEX SERONEUTRALIZATION ASSAY TO DELINEATE TRANSMISSION DYNAMICS OF SARS-COV-2 AS THE PANDEMIC TRANSITIONED TO ENDEMICITY

**Mariam O. Fofana**<sup>1</sup>, Juan Pablo Aguilar Ticona<sup>2</sup>, M. Catherine Muenker<sup>1</sup>, Joseph Lu<sup>3</sup>, Nivison Nery Jr<sup>1</sup>, Homegnon Antonin Ferreol Bah<sup>2</sup>, Emilia Andrade Belitardo<sup>2</sup>, Jaqueline Silva<sup>2</sup>, Gabriel Ribeiro dos Santos<sup>1</sup>, Renato Victoriano<sup>2</sup>, Ricardo Khouri<sup>2</sup>, Federico Costa<sup>4</sup>, Stephen Thomas<sup>3</sup>, Adam Waickman<sup>3</sup>, Mitermayer G. Reis<sup>2</sup>, Albert I. Ko<sup>1</sup>, Derek A.T. Cummings<sup>5</sup>

<sup>1</sup>Yale School of Public Health, New Haven, CT, United States, <sup>2</sup>Instituto Goncalo Moniz (Fiocruz Bahia), Salvador, Brazil, <sup>3</sup>SUNY Upstate Medical University, Syracuse, NY, United States, <sup>4</sup>Universidade Federal da Bahia, Salvador, Brazil, <sup>5</sup>University of Florida, Gainesville, FL, United States

1 p.m.

8303

#### RETHINKING DENGUE PROTECTIVE IMMUNITY: MULTIPLE REPEAT SYMPTOMATIC INFECTIONS IN A SINGLE TRANSMISSION SEASON

**Lisbeth Cantarero**<sup>1</sup>, Miguel Plazaola<sup>1</sup>, Jose G. Juarez<sup>1</sup>, Karla Gonzalez<sup>1</sup>, Reinaldo Mercado-Hernandez<sup>2</sup>, Sandra Bos<sup>2</sup>, Eva Harris<sup>2</sup>, Angel Balmaseda<sup>1</sup>

<sup>1</sup>Sustainable Science Institute, Managua, Nicaragua, <sup>2</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

1:15 p.m.

8304

#### INAPPARENT PRIMARY DENGUE VIRUS INFECTIONS REVEAL HIDDEN SEROTYPE-SPECIFIC EPIDEMIOLOGICAL PATTERNS AND SPECTRUM OF INFECTION OUTCOME: A COHORT STUDY IN NICARAGUA

**Jose V. Zambrana**<sup>1</sup>, Sandra Bos<sup>2</sup>, Elias Duarte<sup>2</sup>, Aaron L. Graber<sup>2</sup>, Julia Huffaker<sup>2</sup>, Carlos Montenegro<sup>3</sup>, Lakshmanane Premkumar<sup>4</sup>, Aubree Gordon<sup>1</sup>, Angel Balmaseda<sup>5</sup>, Eva Harris<sup>2</sup>

<sup>1</sup>Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, MI, United States, <sup>2</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, <sup>3</sup>Sustainable Sciences Institute, Managua, Nicaragua, <sup>4</sup>Department of Microbiology and Immunology, University of North Carolina School of Medicine, Chapel Hill, NC, United States, <sup>5</sup>Laboratorio Nacional de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

1:30 p.m.

8305

#### UNVEILING THE DYNAMICS OF DENGUE VIRUS TRANSMISSION ACROSS A GRADIENT OF URBANICITY IN THREE COUNTRIES: INSIGHTS FROM PARALLEL LONGITUDINAL COHORT STUDIES IN ECUADOR, NICARAGUA, AND SRI LANKA

**Paulina E. Andrade Proano**<sup>1</sup>, Lisbeth Cantarero<sup>2</sup>, Chandima Jeewandara<sup>3</sup>, Sandra Vivero<sup>4</sup>, Victoria Nipaz<sup>4</sup>, William Cevallos<sup>4</sup>, Miguel Plazaola<sup>2</sup>, Juan Carlos Mercado<sup>2</sup>, Luis Cisneros<sup>2</sup>, Gabriel Trueba<sup>5</sup>, Shyrar Tanussiya Ramu<sup>3</sup>, Saubhagya Danasekara<sup>3</sup>, Madushika Dissanayake<sup>3</sup>, Lahiru Perera<sup>3</sup>, Maneshka Karunananda<sup>3</sup>, José G. Juárez<sup>2</sup>, Joseph N.S. Eisenberg<sup>6</sup>, Neelika Malavige<sup>3</sup>, Angel Balmaseda<sup>2</sup>, Josefina Coloma<sup>7</sup>, Eva Harris<sup>7</sup>

<sup>1</sup>Universidad San Francisco de Quito, Quito, Ecuador, <sup>2</sup>Sustainable Sciences Institute, Managua, Nicaragua, <sup>3</sup>Department of Immunology and Molecular Medicine, University of Sri Jayawardenepura, Colombo, Sri Lanka, <sup>4</sup>Centro de Biomedicina, Universidad Central, Quito, Ecuador, <sup>5</sup>Instituto de Microbiología, Universidad San Francisco de Quito, Quito, Ecuador, <sup>6</sup>Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, MI, United States, <sup>7</sup>Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

1:45 p.m.

8306

#### RESPIRATORY SYNCYTIAL VIRUS (RSV) EPIDEMIOLOGY AND CLINICAL CHARACTERISTICS OF HOSPITALIZED CHILDREN < 2 YEARS OF AGE DURING THE SARS-COV-2 PANDEMIC (OCTOBER 2020-JANUARY 2023) AT KENEMA GOVERNMENT HOSPITAL, SIERRA LEONE

**FODAY UMARO TURAY**<sup>1</sup>, Troy Moon<sup>1</sup>, Gustavo Amorim<sup>2</sup>, Robert J. Samuels<sup>3</sup>, John S. Schieffelin<sup>1</sup>

<sup>1</sup>Tulane University, New Orleans, LA, United States, <sup>2</sup>Vanderbilt Institute for Global Health, Vanderbilt University, Nashville, TN, United States, <sup>3</sup>College of Medicine and Allied Health Sciences, University of Sierra Leone, Free Town, Sierra Leone

2 p.m.

8307

#### EPIDEMIOLOGICAL CHARACTERISTICS AND HOSPITAL OUTCOMES OF HOSPITALIZED LASSA FEVER CASES DURING THE 2022-2023 OUTBREAK IN LIBERIA

**Emmanuel Dwalu**<sup>1</sup>, Hannock Tweya<sup>2</sup>, Mher Beglaryan<sup>3</sup>, Chukwuma D. Umeokonkwo<sup>4</sup>, Ralph W. Jetoh<sup>1</sup>, Bode I. Shobayo<sup>1</sup>, Fahn M. Tarweh<sup>1</sup>, Philip Owiti<sup>5</sup>, Pryanka Relan<sup>6</sup>, Shermarke Hassan<sup>7</sup>, George W. Goteh<sup>8</sup>, Darius B. Lehyen<sup>8</sup>, Louis Ako-Egbe<sup>9</sup>, Ibrahim F. Kamara<sup>10</sup>, Godwin E. Akpan<sup>11</sup>, Peter Adewuyi<sup>11</sup>, Patrick N. Kpanyen<sup>1</sup>, Benjamin T. Vonhm<sup>1</sup>, Julius S M Gilayeneh<sup>1</sup>

<sup>1</sup>National Public Health Institute of Liberia, Monrovia, Liberia, <sup>2</sup>International Training and Education Center for Health (I-TECH), Lilongwe, Malawi, <sup>3</sup>Tuberculosis Research and Prevention Centre, Yerevan 0014, Armenia, <sup>4</sup>African Field Epidemiology Network, Lugogo House, Lugogo By-Pass, Kampala, Uganda, <sup>5</sup>Ministry of Health Republic of Kenya, Nairobi, Kenya, <sup>6</sup>WHO Health Emergencies Programme, World Health Organization, Geneva, Switzerland, <sup>7</sup>Infectious Diseases Data Observatory, University of Oxford, Oxford, United Kingdom, <sup>8</sup>Ministry of Health, Monrovia, Liberia, <sup>9</sup>World Health Organization Liberia Country Office, Monrovia, Liberia, <sup>10</sup>World Health Organization Country Office, Freetown, Sierra Leone, <sup>11</sup>African Field Epidemiology Network, Monrovia, Liberia

2:15 p.m.

8308

#### INCIDENCE OF LASSA FEVER DISEASE AND LASSA VIRUS INFECTION IN FIVE WEST AFRICAN COUNTRIES: A PROSPECTIVE, MULTI-SITE, COHORT STUDY (THE ENABLE LASSA RESEARCH PROGRAM)

**Anton Camacho**<sup>1</sup>, The ENABLE Consortium<sup>2</sup>

<sup>1</sup>Epicentre, Paris, France, <sup>2</sup>Coalition for Epidemic Preparedness Innovations (CEPI), Oslo, Norway



## Scientific Session 134

### Global Health: Use of Modeling, AI and Other Advanced Methods to Study Disease Epidemiology and Impact of Climate Change on Global Health

Convention Center - Room 388/389 (3rd Floor)  
Saturday, November 16, 12:45 p.m. - 2:30 p.m.

#ClimateChange #Modeling #InfectiousDisease  
#Epidemiology

#### CHAIR

Caterina A. Fanello  
University of Oxford, Oxford, United Kingdom

Chloe Fletcher  
Barcelona Supercomputing Center, Barcelona, Spain

12:45 p.m.

8309

#### THE COMPOUND EFFECTS OF CLIMATIC EXTREMES ON DENGUE RISK IN THE CARIBBEAN: A PREDICTION MODEL FRAMEWORK USING LONG- AND SHORT-LAG INTERACTIONS

Chloe Fletcher<sup>1</sup>, Tilly Alcanya<sup>2</sup>, Leslie Rollock<sup>3</sup>, Cédric J. Van Meerbeeck<sup>4</sup>, Laura-Lee Boodram<sup>5</sup>, Tia Browne<sup>6</sup>, Sabu Best<sup>6</sup>, Roché Mahon<sup>4</sup>, Adrian Trotman<sup>4</sup>, Avriel R. Diaz<sup>7</sup>, Willy Dunbar<sup>8</sup>, Catherine A. Lippi<sup>9</sup>, Sadie J. Ryan<sup>9</sup>, Felipe J. Colón-González<sup>10</sup>, Anna M. Stewart-Ibarra<sup>11</sup>, Rachel Lowe<sup>12</sup>

<sup>1</sup>Barcelona Supercomputing Center, Barcelona, Spain, <sup>2</sup>Centre on Climate Change & Planetary Health and Centre for Mathematical Modelling of Infectious Diseases, London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>3</sup>Ministry of Health & Wellness, Saint Michael, Barbados, <sup>4</sup>Caribbean Institute for Meteorology and Hydrology, Saint James, Barbados, <sup>5</sup>The Caribbean Public Health Agency, Port of Spain, Trinidad and Tobago, <sup>6</sup>Barbados Meteorological Services, Christ Church, Barbados, <sup>7</sup>International Research Institute for Climate & Society, Palisades, NY, United States, <sup>8</sup>National Collaborating Centre for Healthy Public Policy, Montreal, QC, Canada, <sup>9</sup>Department of Geography, University of Florida, Gainesville, FL, United States, <sup>10</sup>Wellcome Trust, Data for Science and Health, London, United Kingdom, <sup>11</sup>Inter-American Institute For Global Change Research, Montevideo, Uruguay, <sup>12</sup>Catalan Institution for Research & Advanced Studies, Barcelona, Spain

1 p.m.

8310

#### MASSIVE GLOBAL IMPACTS OF CLIMATE CHANGE ON DENGUE TRANSMISSION

Erin Mordecai<sup>1</sup>, Marissa Childs<sup>2</sup>, Kelsey Lyberger<sup>1</sup>, Mallory Harris<sup>1</sup>

<sup>1</sup>Stanford University, Stanford, CA, United States, <sup>2</sup>Harvard University, Cambridge, MA, United States

1:15 p.m.

8311

#### MAPPING THE GLOBAL ENVIRONMENTAL SUITABILITY FOR SCRUB TYPHUS

Qian Wang<sup>1</sup>, Tian Ma<sup>2</sup>, Fangyu Ding<sup>2</sup>, Nicholas Day<sup>1</sup>, Benn Sartorius<sup>3</sup>, Richard Maude<sup>1</sup>

<sup>1</sup>MORU, Bangkok, Thailand, <sup>2</sup>Chinese Academy of Sciences, Beijing, China, <sup>3</sup>University of Oxford, Oxford, United Kingdom

1:30 p.m.

8312

#### HETEROGENOUS SPATIO-TEMPORAL DISTRIBUTION OF COVID 19 PANDEMIC PROGRESSION IN PERU

Kassandra Lizzeth Ascuña-Durand<sup>1</sup>, Diego Villa<sup>1</sup>, Coralith García<sup>2</sup>, Gabriel Carrasco-Escobar<sup>1</sup>

<sup>1</sup>Health Innovation Laboratory, Universidad Peruana Cayetano Heredia, Peru, Lima, Peru, <sup>2</sup>Instituto de Medicina Tropical Alexander von Humboldt, Universidad Peruana Cayetano Heredia, Peru, Lima, Peru

1:45 p.m.

8313

#### ASSESSING THE IMPACT OF CLIMATE CHANGE ON VECTOR BEHAVIOR AND VECTOR CONTROL STRATEGIES

Emma L. Fairbanks<sup>1</sup>, Janet M. Daly<sup>2</sup>, Michael J. Tildesley<sup>1</sup>

<sup>1</sup>University of Warwick, Coventry, United Kingdom, <sup>2</sup>University of Nottingham, Nottingham, United Kingdom

2 p.m.

8314

#### PRESSURE-TESTING AND PROTOTYPING AI TOOLS FOR ENHANCED QUALITATIVE DATA ANALYSIS IN GLOBAL HEALTH: A CASE STUDY ON DRC VACCINATION SURVEYS

Roy Burstein, Joshua L. Proctor

Bill & Melinda Gates Foundation, Seattle, WA, United States

2:15 p.m.

8315

#### AN AI ASSISTANT TO SUPPORT DISEASE MODEL BUILDING, SIMULATION, AND ANALYSIS: ACCELERATING MODELING RESEARCH AND DEVELOPMENT IN RESOURCE-CONSTRAINED SETTINGS

Joshua L. Proctor, Guillaume Chabot-Couture

Bill & Melinda Gates Foundation, Seattle, WA, United States

## Symposium 135

### Reaching for Elimination: Critical Challenges in Targeting Transmission in Malaria-Endemic Settings

Convention Center - Room 391/392 (3rd Floor)

Saturday, November 16, 12:45 p.m. - 2:30 p.m.

Decades of malaria control measures have yielded significant declines in clinical disease globally. However, a substantial burden persists. In regions where malaria control has been successful, the focus must shift from control to elimination. Consequently, interventions targeting transmission become crucial, especially in areas where this is a new priority. Key questions remain about how to best design and allocate interventions that efficiently decrease transmission. Quantifying the transmission reservoir and identifying and assessing new approaches to decrease transmission carry distinct challenges in both low and high-burden settings. Notably, transmission-focused interventions in areas of historically high, but now decreasing, burden have received limited attention. Diverse approaches are needed to address heterogeneity in transmission reservoirs and the key drivers of ongoing transmission. The interdisciplinary symposium features expert speakers covering epidemiology, vaccine trials, entomology, and public policy. The speakers will draw on their own experiences to demonstrate novel approaches to overcoming these challenges and share their visions for the implementation and evaluation of new interventions. The areas of focus include epidemiology, vaccine trials, entomology, and public policy. The first two speakers, Drs. Buchwald and Ochomo, will focus on the complexities of characterizing ongoing transmission and the key factors defining the distribution and burden of transmission from epidemiologic and entomologic perspectives. Our third speaker, Dr. Sagara, an expert designing transmission-blocking vaccines, will talk about the challenges of designing and evaluating interventions

to decrease transmission. The last panelist, Dr. Cohee, will take a broad view on how we can use ongoing research to inform large-scale interventions and malaria control policy. At the conclusion of the panelist presentations, the symposium chairs will lead a discussion about the next steps in tackling residual malaria transmission in malaria-endemic countries. #Epidemiology #FieldStudies #InfectiousDiseases #Modelling #Vaccinology

#### **CHAIR**

Miriam K. Laufer  
*Center for Vaccine Development and Global Health, University of Maryland School of Medicine, Baltimore, MD, United States*

Issaka Sagara  
*Malaria Research and Training Center (MRTC), University of Sciences, Techniques and Technologies of Bamako (USTTB), Bamako, Mali*

#### **12:45 p.m.** **INTRODUCTION**

#### **12:55 p.m.** **CHARACTERIZING AND QUANTIFYING THE PLASMODIUM FALCIPARUM TRANSMISSION RESERVOIR**

Andrea G. Buchwald  
*Center for Vaccine Development and Global Health, University of Maryland School of Medicine, Baltimore, MD, United States*

#### **1:20 p.m.** **VECTOR BEHAVIORS THAT IMPACT TRANSMISSION**

Eric Ochomo  
*KEMRI Center for Global Health Research, Kisumu, Kenya*

#### **1:45 p.m.** **DESIGNING INTERVENTIONS TO TARGET TRANSMISSION**

Issaka Sagara  
*Malaria Research and Training Center (MRTC), University of Sciences, Techniques and Technologies of Bamako (USTTB), Bamako, Mali*

#### **2:10 p.m.** **MOVING FROM RESEARCH TO POLICY TO PROGRAM**

Lauren M. Cohee  
*Liverpool School of Tropical Medicine, Liverpool, United Kingdom*

## **Symposium 136**

### **Vaccines for Malaria Elimination in Asia and Africa**

*Convention Center - Room 393/394 (3rd Floor)*  
**Saturday, November 16, 12:45 p.m. - 2:30 p.m.**

The development of malaria vaccines has targeted mainly infants as children under 5 are those at higher risk of severe malaria and death. The World Health Organization recently approved 2 new malaria vaccines, RTS,S and R21 to be used in children from 5 month of age. Both RTS,S and R21 are pre-erythrocytic vaccines as they target the stage of the malaria parasite that is injected by infected mosquitoes into humans. Therefore, if administered to the whole population, they could decrease transmission by reducing the proportion of successful infections by the vector. Mathematical models suggest that mass vaccination with a pre-erythrocytic vaccine may substantially reduce population-level malaria transmission. However, mass vaccination for malaria control has never been evaluated. In our symposium groups, from Africa and

Asia we will present planned and ongoing studies to vaccinate the entire population of villages to assess the impact on transmission. #ClinicalResearch #Elimination #FieldStudies #InfectiousDisease #Vaccinology

#### **CHAIR**

Lorenz von Seidlein  
*Mahidol-Oxford Tropical Medicine Research Unit (MORU), Bangkok, Thailand*

Umberto D'Alessandro  
*MRC, Fajara, Gambia*

#### **12:45 p.m.** **INTRODUCTION**

#### **12:55 p.m.** **EVALUATING THE BROADER USE OF R21/MATRIX-M TO AID MALARIA ELIMINATION: WHAT IS THE EXPECTED BENEFIT OF EXTENDING VACCINATION BEYOND YOUNG CHILDREN?**

Hillary Topazian  
*Imperial College London, London, United Kingdom*

#### **1:10 p.m.** **SEASONAL R21/MM MASS VACCINATION FOR MALARIA ELIMINATION IN BURKINA FASO AND THE GAMBIA**

Maglore Hamtandi Natama  
*Clinical Research Unit Nanoro, IRSS, CNRST, Burkina Faso, Ouagadougou, Burkina Faso*

#### **1:25 p.m.** **SEASONAL R21/MM MASS VACCINATION FOR MALARIA ELIMINATION IN BURKINA FASO AND THE GAMBIA – PART 2**

Edgar Diniba Dabira  
*MRC Unit The Gambia at LSHTM, Fajara, Georgia*

#### **1:40 p.m.** **A COMBINED MASS VACCINATION AND DRUG ADMINISTRATION IN BANGLADESH**

Abul Faiz  
*Devcare Foundation, Dhaka, Bangladesh*

#### **1:55 p.m.** **COMMUNITY ENGAGEMENT FOR MASS VACCINATIONS WITH THE MALARIA VACCINE R21/MATRIX M**

Fatou Jaiteh  
*MRC Unit The Gambia at LSHTM, Fajara, Gambia*

## **Symposium 137**

### **Advances in Chagas Disease Diagnostic Assays and Testing Strategies**

*Convention Center - Room 395/396 (3rd Floor)*  
**Saturday, November 16, 12:45 p.m. - 2:30 p.m.**

Globally, more than 6 million people are living with Chagas disease, a neglected tropical disease caused by the protozoan parasite *Trypanosoma cruzi*. Most people with Chagas disease are initially infected while living in rural Latin America via exposure to contaminated fecal material of the Triatomine vector, though migration and population shifts have led to a growing recognition of affected individuals outside of highly endemic regions. While most people with Chagas disease will remain asymptomatic lifelong, approximately 20-30% will develop Chagas

cardiomyopathy and 10% will develop gastrointestinal disease. It is critical to screen at-risk individuals as early in life as possible to diagnose Chagas disease while treatment is most effective and before the onset of end-organ disease. However, modeling studies indicate that only a small percentage of people with Chagas disease have been identified through diagnostic testing, leaving most undiagnosed. Chagas disease screening and diagnostic strategies currently available to clinicians have significant limitations, including the lack of a gold standard test and the need for multiple assays to confirm the diagnosis. Another major gap in the management of people with Chagas disease is the lack of a "test of cure," limiting our ability to assess the patient's response to anti-trypanosomal therapy in a timely manner. This symposium will focus on recent advances in *T. cruzi* detection assays and testing strategies and how these tools can be applied to enhance our approach to the diagnosis of people with Chagas disease and assessment of anti-trypanosomal treatment efficacy. #Diagnostics #ClinicalResearch #InfectiousDisease

#### **CHAIR**

Daniel L. Bourque  
Boston University Chobanian and Avedisian School of Medicine, Boston, MA, United States

Eva Clark  
Baylor College of Medicine, Houston, TX, United States

#### **12:45 p.m. INTRODUCTION**

#### **12:55 p.m. APPLICATION OF MULTICRUZI AND OTHER *T. CRUZI* ASSAYS TO CLINICAL PRACTICE SETTINGS AND DIAGNOSTIC ADVANCES SUPPORTED BY DNDI.**

Maria Jesus Pinazo  
Drugs for Neglected Diseases initiative (DNDI), Rio de Janeiro, Brazil

#### **1:15 p.m. NOVEL ANTIGEN DISCOVERY FOR IMPROVING SEROLOGICAL DIAGNOSIS OF CHAGAS DISEASE**

Jeffrey Whitman  
University of California, San Francisco, San Francisco, CA, United States

#### **1:35 p.m. BRIDGING LAB DISCOVERIES TO POINT-OF-CARE SOLUTIONS: VALIDATING LAMP FOR EARLY DIAGNOSIS OF CONGENITAL CHAGAS DISEASE IN PUBLIC HEALTH MATERNITIES**

Alejandro Schijman  
Ingebi - Conicet, Buenos Aires, Argentina

#### **1:55 p.m. APTAMER-BASED BIOMARKER DETECTION ASSAYS FOR *T. CRUZI* ANTIGENS AND MONITORING POST-ANTITRYPANOSOMAL TREATMENT**

Andrea Teixeira-Carvalho  
René Rachou Institute – Oswaldo Cruz Foundation – FIOCRUZ, Belo Horizonte, Brazil

## **Career Chats: Navigating Career Paths in Global Health – Session 2**

*Convention Center - Room 346/347 (3rd Floor)*  
**Saturday, November 16, 2 p.m. – 3 p.m.**

This session aims to introduce trainees to the diverse and breadth of opportunities from pursuing careers in global health through a panel discussion. The remarkable panelists are ASTMH members who have made accomplishments in scientific and clinical research globally, represent diverse fields within the global health sphere as well as championing tropical medicine both nationally and internationally. Panelists will share insights from their remarkable journeys in global health, discuss opportunities and challenges that come with working in global health (i.e., navigating career pathways, funding sources, overcoming obstacles, navigating academic, cultural, socio-economic factors etc), how they transitioned career pathways and discuss their institutional global health portfolio. This session will help in furthering trainees' progress and help increase the visibility of various pathways in global health, and how to navigate future career paths advancement at the global stage. Furthermore, trainees will gain advice from internationally renowned global health champions on their perspectives working on tropical medicine in various capacities around the world. Overall, it is a remarkable session that will provide trainees with opportunities to network and learn directly from international researchers and experts in various disciplines within global health.

#### **CHAIR**

Winter Okoth  
Rutgers, State University of New Jersey, New Brunswick, NJ, United States

Hannah Steinberg  
University of Illinois Chicago, Chicago, IL, United States

#### **PANELISTS**

Pauline N. Mwinzi  
World Health Organization Regional Office for Africa, Brazzaville, Republic of the Congo

Daniel Perlman  
Rotary International, Carbondale, CO, United States

Johanna Daily  
Albert Einstein College of Medicine, Bronx, NY, United States

Simon Agolory  
National Center for Emerging and Zoonotic Infectious Diseases, Atlanta, GA, United States

#### **Break**

**Saturday, November 16, 2:30 p.m. - 3 p.m.**

#### **Poster Session C Dismantle**

*Convention Center - Hall I-1 (1st Floor)*  
**Saturday, November 16, 3 p.m. - 5:15 p.m.**



## Symposium 138

### Systems Immunology of Tropical Diseases: Harnessing Omics and AI for Global Health

Convention Center - Hall I-2 (1st Floor)

Saturday, November 16, 3 p.m. - 4:45 p.m.

This symposium is dedicated to bringing together researchers from diverse backgrounds, and with a specific focus on early career researchers, to explore and discuss the cutting-edge intersection of systems immunology, omics technologies, and artificial intelligence (AI) and machine learning (ML) techniques, aiming to revolutionize our approach to understanding, preventing, and treating tropical diseases including Neglected Tropical Diseases (NTDs). Tropical diseases, often overlooked and underfunded, continue to burden millions worldwide, exacerbating global health disparities. Systems immunology offers a promising pathway to unravel the complex immunological interactions and mechanisms underlying these diseases. By leveraging high-throughput omics technologies—including genomics, proteomics, transcriptomics, glycomics and metabolomics—researchers can now generate vast amounts of data, offering unprecedented insights into the immune system’s dynamics. The symposium will showcase research where AI and ML approaches play a pivotal role in deciphering these complex datasets, leading to novel mechanistic insights, biomarker identification, diagnostic development, vaccine development, and therapeutic interventions. Our sessions will cover a broad spectrum of topics, including the application of systems approaches in Malaria, Tuberculosis and Neglected Tropical Diseases (NTDs) including Leprosy, Schistosomiasis and Onchocerciasis. Our selected speakers, experts in their respective fields, will share their latest findings and insights, highlighting the potential of these technologies to transform global health. This is expected to be a first-of-its-kind systems immunology symposium at ASTMH, focused on innovations in both computational and experimental systems immunology. Ample interaction time will be kept aside to provide opportunity for discussion with attendees on how systems immunology approaches can push innovation in the tropical disease spaces including in NTDs. #Diagnostics #HostResponse #Immunology #Modeling #MNCH #Vaccinology

#### CHAIR

Aniruddh Sarkar  
*Georgia Institute of Technology and Emory University School of Medicine, Atlanta, GA, United States*

Jishnu Das  
*University of Pittsburgh, Pittsburgh, PA, United States*

#### 3 p.m. INTRODUCTION

#### 3:10 p.m. DEVELOPING A MULTIVARIATE PREDICTION MODEL OF ANTIBODY FEATURES ASSOCIATED WITH PROTECTION OF MALARIA-INFECTED PREGNANT WOMEN FROM PLACENTAL MALARIA

Amy Chung  
*The Peter Doherty Institute for Infection and Immunity, The University of Melbourne, Melbourne, Australia*

#### 3:40 p.m. ANTIBODY-OMICS FOR BIOMARKER DISCOVERY AND POINT-OF-CARE DIAGNOSTICS FOR NEGLECTED TROPICAL DISEASES

Aniruddh Sarkar  
*Georgia Institute of Technology, Atlanta, GA, United States*

#### 3:55 p.m. ANTIBODY-BASED SIGNATURE ASSOCIATED WITH LATENT AND ACTIVE PEDIATRIC TUBERCULOSIS

Nadege Nziza  
*Ragon Institute of MGH, MIT and Harvard University, Cambridge, MA, United States*

#### 4:10 p.m. USING INTERPRETABLE MACHINE LEARNING TO INFER IMMUNOMODULATORY PHENOTYPES IN INFECTIOUS DISEASE

Jishnu Das  
*University of Pittsburgh, Pittsburgh, PA, United States*

## Symposium 139

### Remembering Karl M. Johnson - A Leader in Tropical Virology

Convention Center - Room 343/344 (3rd Floor)

Saturday, November 16, 3 p.m. - 4:45 p.m.

**THIS SESSION DOES NOT CARRY CME CREDIT.**

Karl M. Johnson, MD, is an American virologist known for discovering Machupo virus and Hantaan virus. He is credited with seminal work on viral hemorrhagic fever and for naming the Ebola virus, and he served as ASTMH President in 1984. Access to the video at [https://www.youtube.com/watch?v=YJ\\_vJBLBoyl](https://www.youtube.com/watch?v=YJ_vJBLBoyl)

#### CHAIR

Thomas P. Monath  
*Quigley BioPharma LLC, Bolton, MA, United States*

Jessica Spengler  
*Centers for Disease Control, Atlanta, GA, United States*

#### 3 p.m. INTRODUCTION AND BRIEF SUMMARY OF KARL JOHNSON’S CAREER

Thomas P. Monath  
*Quigley BioPharma LLC, Bolton, MA, United States*

Saturday  
November 16

**3:20 p.m.****PRODUCTION OF THE WORKERS IN TROPICAL MEDICINE VIDEO: KARL JOHNSON**

Claire Panosian Dunavan  
David Geffen School of Medicine at UCLA, Los Angeles, CA, United States

**3:25 p.m.****KARL M. JOHNSON, MD: LIFE AND LEGEND OF A LEADER IN TROPICAL VIROLOGY - VIDEO**

Access the video at [https://www.youtube.com/watch?v=YJL\\_vJBLBoyl](https://www.youtube.com/watch?v=YJL_vJBLBoyl)

**4:15 p.m.****IMPACT OF KARL JOHNSON'S WORK IN VIROLOGY**

Daniel G. Bausch  
London School of Hygiene & Tropical Medicine, London, United Kingdom

**4:30 p.m.****QUESTIONS AND ANSWERS**

Jessica Spengler  
Centers for Disease Control, Atlanta, GA, United States

Thomas P. Monath  
Quigley BioPharma LLC, Bolton, MA, United States

**Scientific Session 140****One Health I: The Interconnection between People, Animals, Plants and Their Shared Environment**

Convention Center - Room 345 (3rd Floor)  
Saturday, November 16, 3 p.m. - 4:45 p.m.

#Prevention #PopulationSurveillance  
#TranslationalScience #EmergingDiseaseThreats  
#Elimination

**CHAIR**

Koya Allen  
Booz Allen Hamilton, Baden-Wuerttemberg, Germany

Kelly K. Baker  
State University of New York at Buffalo, Buffalo, NY, United States

**3 p.m.****8316****THE MOST FORETOLD HUMAN RABIES CASE IN LATIN AMERICA VIEWED UNDER THE ONE HEALTH APPROACH**

Ricardo Castillo-Neyra<sup>1</sup>, Lizzie Ortiz-Cam<sup>2</sup>, Elvis W. Diaz<sup>2</sup>, Sherrie Xie<sup>1</sup>, Jorge Cañari<sup>2</sup>, Valerie Paz-Soldán<sup>3</sup>, Sergio E. Recuenco<sup>4</sup>  
<sup>1</sup>University of Pennsylvania, Philadelphia, PA, United States, <sup>2</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>3</sup>Tulane University, New Orleans, LA, United States, <sup>4</sup>Universidad Nacional Mayor de San Marcos, Lima, Peru

**3:15 p.m.****8317****ONE HEALTH SURVEILLANCE APPROACH ILLUMINATES SILENT SLEEPING SICKNESS TRANSMISSION HOTSPOTS IN HAMLETS OF OYO STATE, NIGERIA**

Rolayo Toyin Emmanuel<sup>1</sup>, Yahaya A. Umar<sup>2</sup>, Philip A. Vantsawa<sup>2</sup>, Deborah M. Dibal<sup>2</sup>, Kelly Zongo<sup>3</sup>, Olaleye O. Olusola<sup>4</sup>, Temitope O. Popoola<sup>4</sup>  
<sup>1</sup>Nigerian Institute for Trypanosomiasis and Onchocerciasis Research, Kaduna, Nigeria, <sup>2</sup>Department of Biological Sciences, Faculty of Science, Nigerian Defence Academy, Kaduna, Nigeria, <sup>3</sup>The END Fund, New York, NY, United States, <sup>4</sup>Nigerian Institute for Trypanosomiasis and Onchocerciasis Research, Ibadan, Nigeria

**3:30 p.m.****8318****MORPHOLOGICAL AND MOLECULAR IDENTIFICATION OF B. MALAYI AND OTHER FILARIAL SPECIES IN ANIMALS FROM BELITUNG, INDONESIA: IMPLICATIONS FOR LYMPHATIC FILARIASIS ELIMINATION**

Irina Diekmann<sup>1</sup>, Kerstin Fischer<sup>1</sup>, Taniawati Supali<sup>2</sup>, Peter Fischer<sup>1</sup>  
<sup>1</sup>Infectious Diseases Division, Department of Medicine, Washington University School of Medicine, St. Louis, MO, United States, <sup>2</sup>Department of Parasitology, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia

**3:45 p.m.****8319****PAN-CANADIAN RESPONSE TO HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI) A(H5N1): BENEFITS AND CHALLENGES OF A ONE HEALTH APPROACH**

Peter A. Buck<sup>1</sup>, Clarice Lulai-Angi<sup>2</sup>, Cynthia Pekarik<sup>3</sup>, Yohannes Berhane<sup>4</sup>, Jennifer Provencher<sup>5</sup>, Erin Leonard<sup>6</sup>, Jolene Giacinti<sup>5</sup>, Andrea Osborn<sup>7</sup>, Amole Khadilkar<sup>8</sup>, Nicole Atchessi<sup>1</sup>, Trevor Thompson<sup>3</sup>, Michael Brown<sup>3</sup>, Cathy Furness<sup>9</sup>, HPAI One Health Fed-Prov-Terr-Indigenous WorkGroup<sup>10</sup>  
<sup>1</sup>Public Health Agency of Canada, Ottawa, ON, Canada, <sup>2</sup>Canadian Food Inspection Agency, Ottawa, ON, Canada, <sup>3</sup>Environment and Climate Change Canada, Gatineau, QC, Canada, <sup>4</sup>Canadian Food Inspection Agency, Winnipeg, MB, Canada, <sup>5</sup>Environment and Climate Change Canada, Ottawa, ON, Canada, <sup>6</sup>Public Health Agency of Canada, Halifax, NS, Canada, <sup>7</sup>Canadian Food Inspection Agency, Parksville, BC, Canada, <sup>8</sup>Indigenous Services Canada, Ottawa, ON, Canada, <sup>9</sup>Canadian Food Inspection Agency, Guelph, ON, Canada

**4 p.m.****8320****A ONE HEALTH APPROACH IN DETECTION OF INFECTIOUS DISEASES IN NORTHERN GHANA**

Deborah Narworte<sup>1</sup>, Bernice Baako<sup>1</sup>, John Zing<sup>1</sup>, Felix Nenyewodey<sup>1</sup>, Seth Offei Addo<sup>2</sup>, Stephen Kantum Adageba<sup>1</sup>, Simon Bawa<sup>1</sup>, Michael Bandasua Kaburise<sup>1</sup>, Francis Broni<sup>1</sup>, Cornelius Debpuur<sup>1</sup>, Ali Moro<sup>1</sup>, Jane Ansah-Owusu<sup>2</sup>, Samuel Dadzie<sup>3</sup>, Victor Asoala<sup>1</sup>, Patrick Odum Ansah<sup>1</sup>, Zahra Parker<sup>4</sup>, Abdulwasii Bolaji Tiamiyu<sup>5</sup>, Edward Akinwale<sup>5</sup>, Kara Lombardi<sup>6</sup>, Leigh Anne Eller<sup>6</sup>, Erica Broach<sup>6</sup>, Anastasia Zuppe<sup>6</sup>, Tshedal Mebrahtu<sup>6</sup>, Qun Li<sup>6</sup>, Jillian Chambers<sup>6</sup>, Nicole Dear<sup>6</sup>, Ana Manzano-Wight<sup>6</sup>, Jenny Lay<sup>6</sup>, Terrel Sanders<sup>7</sup>, Robert Hontz<sup>7</sup>, David B. Pecor<sup>8</sup>, Cynthia L. Tucker<sup>8</sup>, Sherri Daye<sup>9</sup>, Hee Kim<sup>9</sup>, Yvonne-Marie Linton<sup>10</sup>, Thierry Lamare Assedi Njatou Fouapon<sup>11</sup>, Melanie D. McCauley<sup>6</sup>  
<sup>1</sup>Navrongo Health Research Centre, Navrongo, Ghana, <sup>2</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana, <sup>3</sup>Noguchi Memorial Institute for Medical, Accra, Ghana, <sup>4</sup>Henry Jackson Foundation, Lagos, Nigeria, <sup>5</sup>HJF Medical Research International (HJFMRI), Abuja, Nigeria, <sup>6</sup>Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD, United States, <sup>7</sup>U.S. Naval Medical Research Unit-EURAFCENT, Accra, Ghana, <sup>8</sup>Walter Reed Biosystematics Unit (WRBU), Smithsonian Museum Support Center, Suitland, MD, United States, <sup>9</sup>One Health Branch, CIDR, Walter Reed Army Institute of Research, Silver Spring, MD, United States, <sup>10</sup>Walter Reed Biosystematics Unit (WRBU), Smithsonian Museum Support Center, Suitland, MD, United States, <sup>11</sup>One Health Branch, CIDR, Walter Reed Army Institute of Research, Silver Spring, MD, United States

4:15 p.m.

8321

**THE ONE HEALTH INITIATIVE FOR ZOOONOTIC DISEASE RESPONSE IN EASTERN UGANDA. OPPORTUNITIES AND AREAS FOR IMPROVEMENT**

Richard Ssekitooleko<sup>1</sup>, Herbert Isabirye<sup>2</sup>, Benjamin Fuller<sup>3</sup>, Margaret R Lawrence<sup>3</sup>, Solome Okware<sup>1</sup>, Annet Alenyo<sup>1</sup>, Immaculate Atuhaire<sup>1</sup>, Andrew Bakainaga<sup>1</sup>, Elizabeth Mgamb<sup>1</sup>, Yonas Tegegn Woldemariam<sup>1</sup>, Christopher C. Moore<sup>3</sup>

<sup>1</sup>World Health Organization, Kampala, Uganda, <sup>2</sup>Infectious Disease Institute and the National Public Health Emergency Operations Center, Kampala, Uganda, <sup>3</sup>University Of Virginia, Charlottesville, VA, United States

4:30 p.m.

8322

**A ONE HEALTH APPROACH TO PREVENTION, DETECTION, AND RESPONSE TO CRIMEAN-CONGO HEMORRHAGIC FEVER IN THE KURDISTAN REGION OF IRAQ**

Bejan A. Dizayee<sup>1</sup>, Aso H. Kareem<sup>2</sup>, Lauren N. Miller<sup>3</sup>, Erin Sorrell M. Sorrell<sup>4</sup>, Claire J. Standley<sup>3</sup>

<sup>1</sup>Central Veterinary Laboratory, Ministry of Agriculture, Kurdistan Region, Erbil, Iraq, <sup>2</sup>Ministry of Health, Kurdistan Region, Erbil, Iraq, <sup>3</sup>Georgetown University, Washington, DC, United States, <sup>4</sup>Johns Hopkins University, Baltimore, MD, United States

**Symposium 141**

**Malaria in Children and Adolescents with Sickle Cell Anemia; A Growing High Risk and Morbidity Group**

Convention Center - Room 352 (3rd Floor)

Saturday, November 16, 3 p.m. - 4:45 p.m.

There is an epidemiological overlap between malaria and sickle cell trait and disease. Sickle cell anemia (SCA) and malaria are both highly prevalent in Africa. The objective of this symposium is to draw attention to the growing burden and severe consequences of malaria in children and adolescents with sickle cell anaemia. It will highlight the burden, management, and ongoing studies of prevention of the disease in this high-risk, high morbidity and mortality group of vulnerable patients. Sickle Cell Anemia (SCA) is the most common haemoglobinopathy worldwide; over 400,000 babies are born with the disease annually, and today, over 7 million live with the disease; 80% of them in sub-Sahara Africa Affected children suffer from chronic ill health, poor growth, and are prone to repeated infections, including malaria and progressive organ damage, which together cause poor quality of life, missed school days, neurocognitive deficits, and premature death. Only 30-45% of these children reach their 5th birthday. Indeed, in highly affected countries, SCA is estimated to account for 5-16% of all under 5 years mortality. Malaria is leading precipitant of the acute SCA complications many times resulting in severe morbidity or even death. In countries such as Uganda, the incidence of malaria is up to 1.2 per child-year and close to 50% present with severe malaria. Malaria also causes over 20% of deaths in these children. #ClinicalResearch #Pediatrics #InfectiousDiseases #Prevention #Pathogenesis

**CHAIR**

Richard Idro  
Makerere University, Kampala, Uganda

Chandy John  
Indiana University, Indianapolis, IN, United States

3 p.m.

**INTRODUCTION**

3:10 p.m.

**MALARIA PREVENTION STRATEGIES IN CHILDREN AND ADOLESCENTS WITH SCA**

Jane Achan  
Malaria Control Programme, Kampala, Uganda

3:30 p.m.

**SICKLE CELL ANEMIA AND MALARIA IN AFRICA: BURDEN, PATHOGENESIS AND OUTCOMES**

Ruth Namazzi  
Makerere University, Kampala, Uganda

3:50 p.m.

**PREVENTION OF MALARIA IN SICKLE CELL ANAEMIA; RECENT AND ONGOING CLINICAL TRIALS**

Richard Idro  
Makerere University, Kampala, Uganda

4:10 p.m.

**DISCUSSION : NEXT STEPS**

Chandy John  
Indiana University, Indianapolis, IN, United States

**Scientific Session 142**

**Mosquitoes- Epidemiology and Vector Control I**

Convention Center - Room 353 (3rd Floor)

Saturday, November 16, 3 p.m. - 4:45 p.m.

#FieldStudies #Modeling #Prevention

**CHAIR**

Idriss Nasser Ngangue Siewe  
University of Douala / OCEAC, Yaounde, Cameroon

Penelope A. Hancock  
MRC Centre for Global Infectious Disease Analysis, Imperial College London, London, United Kingdom

3 p.m.

8323

**FIRST PILOT RELEASE OF X-RAY STERILIZED MALE Aedes Aegypti TO CONTROL INVASIVE MOSQUITOES IN SOUTHERN CALIFORNIA: STRATEGY, LESSONS LEARNT AND THE WAY FORWARD**

Solomon K. Birhanie, Michelle Q. Brown  
West Valley Mosquito and Vector Control District, Ontario, CA, United States

3:15 p.m.

8324

**CHANGING PARASITE SPECIES DYNAMICS AND SPECIES-SPECIFIC ASSOCIATIONS OBSERVED BETWEEN ANOPHELES AND PLASMODIUM GENERA IN SOUTHWEST BURKINA FASO**

Paula Lado<sup>1</sup>, Lyndsey I. Gray<sup>1</sup>, Emmanuel Sougue<sup>2</sup>, Anna-Sophia Leon<sup>1</sup>, Molly Ring<sup>1</sup>, Greg Pugh<sup>1</sup>, Jenna Randall<sup>1</sup>, Elizabeth Hemming-Schroeder<sup>1</sup>, Hannah Sproch<sup>3</sup>, A. Fabrice Some<sup>2</sup>, Roch K. Dabire<sup>2</sup>, Sunil Parikh<sup>3</sup>, Brian D. Foy<sup>1</sup>

<sup>1</sup>Colorado State University, Fort Collins, CO, United States, <sup>2</sup>IRSS, Bobo Dioulasso, Burkina Faso, <sup>3</sup>Yale School of Public Health, New Haven, CT, United States

Saturday  
November 16

3:30 p.m.

8325

### EVALUATION OF HUMAN EXPOSURE TO MALARIA VECTORS USING AN IMMUNO-EPIDEMIOLOGICAL BIOMARKER (ANOPHELES-GSG6-P1 SALIVARY PEPTIDES) IN FOUR RURAL AREAS IN CAMEROON

Idriss Nasser NGANGUE SIEWE<sup>1</sup>, Paulette NDJEUNIA MBIKOP<sup>2</sup>, André SAGNA BAREMBAYE<sup>3</sup>, Jean Arthur MBIDA MBIDA<sup>4</sup>, Christophe ANTONIO-NKONDJIO<sup>5</sup>, Franck REMOUE<sup>6</sup>, Athanase BADOLO<sup>7</sup>

<sup>1</sup>University of Douala / OCEAC, Yaounde, Cameroon, <sup>2</sup>University of Yaounde I / OCEAC, Yaounde, Cameroon, <sup>3</sup>MIVEGEC, University of Montpellier, CNRS, IRD, BoBo Dioulasso, Burkina Faso, <sup>4</sup>University of Douala, Douala, Cameroon, <sup>5</sup>OCEAC, Yaounde, Cameroon, <sup>6</sup>MIVEGEC, University of Montpellier, CNRS, IRD, Montpellier, France, <sup>7</sup>JOSEPH KI-ZERBO University, Ouagadougou, Burkina Faso

3:45 p.m.

8326

### ASSESSING INSECTICIDE TREATED NETS PERFORMANCE WITH BIOMARKER OF ANOPHELES GAMBIAE S.L GSG6-P1 SALIVARY PEPTIDE ANTIGEN: A LONGITUDINAL STUDY IN MALI

Ibrahim Traore<sup>1</sup>, Moussa BM CISSE<sup>1</sup>, Alou Yacouba Sangare<sup>1</sup>, Mariam S. Sangare<sup>1</sup>, Aldiana K. Maiga<sup>1</sup>, Lazenii Konate<sup>1</sup>, Yacouba Dansoko<sup>1</sup>, Amadou Diakite<sup>1</sup>, Tidiani Sinayoko<sup>1</sup>, Alice Dembele<sup>1</sup>, Jean Marie Sanou<sup>1</sup>, Mamadou Sow<sup>1</sup>, Abdourhamane Dicko<sup>2</sup>, François D. Traore<sup>3</sup>, Franck Remoue<sup>3</sup>, Ousmane A. Koita<sup>1</sup>

<sup>1</sup>Laboratoire de Biologie Moléculaire Appliquée, Bamako, Mali, <sup>2</sup>National Malaria Control Program, Bamako, Mali, <sup>3</sup>Institut de Recherche pour le Développement, Montpellier, France

4 p.m.

8327

### CHARACTERIZATION OF LARVAL HABITATS TO ASSESS THE FEASIBILITY OF LARVAL SOURCE MANAGEMENT AS A SUPPLEMENTARY INTERVENTION IN A HIGH MALARIA TRANSMISSION AREA IN NIGERIA AND A LOW MALARIA TRANSMISSION AREA OF ZAMBIA - OPERATIONALIZING THE WORLD HEALTH ORGANIZATION'S THE FEW, THE FIXED. AND THE FINDABLE

Mohamed N. Bayoh<sup>1</sup>, Adedayo Oduola<sup>2</sup>, Petrus Inyama<sup>2</sup>, Kelvin Mwenya<sup>1</sup>, Matthias Sikaala<sup>1</sup>, Lazarus Samdi<sup>2</sup>, Brian Chirwa<sup>1</sup>, Alex Chilabi<sup>3</sup>, Reuben Zulu<sup>3</sup>, Ifeanyi Okeke<sup>2</sup>, Godwin Ntadom<sup>4</sup>, Mary Esemá<sup>4</sup>, Muhamad A. Bunza<sup>5</sup>, Enerst Mulenga<sup>1</sup>, Grace Yina<sup>2</sup>, Christina Riley<sup>6</sup>, Lilia Gerberg<sup>7</sup>, Jules Mihigo<sup>8</sup>, Melissa Yoshimizu<sup>7</sup>, Allison Belemvire<sup>7</sup>, Paul Psychas<sup>9</sup>, Daniel Impoinvil<sup>10</sup>, Meghan Tammara<sup>11</sup>, Kelley Ambrose<sup>11</sup>, Kerri-Ann Guyah<sup>11</sup>, Bradley Longman<sup>11</sup>, Aklilu Seyoum<sup>11</sup>

<sup>1</sup>PMI Evolve Project - Abt Global, Lusaka, Zambia, <sup>2</sup>PMI Evolve Project - Abt Global, Abuja, Nigeria, <sup>3</sup>National Malaria Elimination Program, Lusaka, Zambia, <sup>4</sup>National Malaria Elimination Program, Abuja, Nigeria, <sup>5</sup>Federal University, Birnin-Kebbi, Nigeria, <sup>6</sup>Akros, Lusaka, Zambia, <sup>7</sup>U.S. President's Malaria Initiative, USAID, Washington, DC, United States, <sup>8</sup>U.S. President's Malaria Initiative, USAID, Abuja, Nigeria, <sup>9</sup>U.S. President's Malaria Initiative, U.S. Centers for Disease Control and Prevention, Lusaka, Zambia, <sup>10</sup>U.S. President's Malaria Initiative, Malaria Branch, U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>11</sup>PMI Evolve Project - Abt Global, Rockville, MD, United States

4:15 p.m.

8328

### MODELS TO INFORM THE DESIGN OF FIELD TRIALS OF NOVEL GENE DRIVE INTERVENTIONS TO SUPPRESS MALARIA VECTOR POPULATIONS

Penelope A. Hancock<sup>1</sup>, Ace North<sup>2</sup>, Tin-Yu J. Hui<sup>3</sup>, Adrian W. Leach<sup>1</sup>, Andrew McKemey<sup>1</sup>, Azize Millogo<sup>3</sup>, John Connolly<sup>1</sup>, Patric Epopa<sup>3</sup>, Franck adama Yao<sup>3</sup>

<sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>University of Oxford, Oxford, United Kingdom, <sup>3</sup>Institute de Recherche en Sciences de la Sante, Bobo Dialasso, Burkina Faso

4:30 p.m.

8329

### DEVELOPMENT OF SIT FOR Aedes albopictus CONTROL IN CHINA: A PRELIMINARY FIELD STUDY

ZHANG DONGJING

Sun Yat-sen University, Guangzhou, China

## Scientific Session 143

### Schistosomiasis I: Immunology, Pathology, Molecular Biology, Diagnostics, and Treatment

Convention Center - Room 354/355 (3rd Floor)

Saturday, November 16, 3 p.m. - 4:45 p.m.

#Diagnostics #HostResponse #Pathogenesis

#### CHAIR

Tom Pennance

Western University of Health Sciences COMP-NW, Lebanon, OR, United States

Adebayo Molehin

Midwestern University, Glendale, AZ, United States

3 p.m.

8330

### A CLINICAL SCORE TO SCREEN CHILDREN IN NEED FOR CHRONIC FASCIOLIASIS TESTING IN CUSCO - PERU

Karen Mozo Velazco<sup>1</sup>, Maria L. Morales<sup>1</sup>, Martha Pilar Lopez<sup>1</sup>, Benicia Baca - Turpo<sup>1</sup>, Eulogia Arque<sup>1</sup>, Miguel M. Cabada<sup>2</sup>

<sup>1</sup>Instituto de Medicina Tropical Alexander von Humboldt - Universidad Peruana Cayetano Heredia, Peru, CUSCO, Peru, <sup>2</sup>University of Texas Medical Branch, Infectious Diseases Division, Galveston, TX, United States

3:15 p.m.

8331

### DIAGNOSTIC ACCURACY OF COLPOSCOPY FOR FEMALE GENITAL SCHISTOSOMIASIS SCREENING AT PRIMARY LEVEL OF CARE

Pia Rausche<sup>1</sup>, Jean-Marc Kutz<sup>1</sup>, Paule Donven<sup>1</sup>, Sonya Ratefarihoa<sup>2</sup>, Olivette Totofotsy<sup>2</sup>, Diavolana Andrianarimanana-Koecher<sup>2</sup>, Tahinamandranto Rasamoelina<sup>3</sup>, Rivo S. Rakotomalala<sup>2</sup>, Zoly Rakotomalala<sup>2</sup>, Bodo S. Randrianasolo<sup>4</sup>, Irina Kislaya<sup>1</sup>, Jürgen May<sup>1</sup>, Valentina Marchese<sup>1</sup>, Rivo A. Rakotoarivelo<sup>5</sup>, Daniela Fusco<sup>1</sup>

<sup>1</sup>Department of Infectious Diseases Epidemiology, Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>2</sup>Centre Hospitalier Universitaire Androva, Mahajanga, Madagascar, <sup>3</sup>Centre Infectiologie Charles Mérieux, Antananarivo, Madagascar, <sup>4</sup>Association K'OLO VANONA, Antananarivo, Madagascar, <sup>5</sup>Department of Infectious Diseases, University of Fianarantsoa Andrainjato, Fianarantsoa, Madagascar

3:30 p.m.

8332

### TRANSCRIPTOMICS OF THE AFRICAN FRESHWATER SNAIL VECTOR BIOMPHALARIA SUDANICA S.L. REVEALS CANDIDATE LOCI FOR SCHISTOSOME RESISTANCE

Tom Pennance<sup>1</sup>, Javier Calvelo<sup>2</sup>, Jacob A. Tennesen<sup>3</sup>, Eric S. Loker<sup>4</sup>, Lijun Lu<sup>4</sup>, Johannie M. Spaan<sup>1</sup>, Andrés Iriarte<sup>2</sup>, Maurice R. Odier<sup>5</sup>, Michelle L. Steinauer<sup>1</sup>

<sup>1</sup>Western University of Health Sciences COMP-NW, Lebanon, OR, United States, <sup>2</sup>Universidad de la República, Montevideo, Uruguay, <sup>3</sup>Harvard T.H. Chan School of Public Health, Boston, MA, United States, <sup>4</sup>University of New Mexico, Albuquerque, NM, United States, <sup>5</sup>Kenya Medical Research Institute (KEMRI), Kisumu, Kenya

(ACMCIP Abstract)

3:45 p.m.

8333

### AUTOMATED DIAGNOSIS OF SCHISTOSOMA HAEMATOBIIUM WITH ARTIFICIAL INTELLIGENCE ON HANDHELD DIGITAL MICROSCOPES IN RURAL CÔTE D'IVOIRE

María Díaz de León Derby<sup>\*1</sup>, Elena Dacal<sup>\*2</sup>, Daniel Cuadrado<sup>\*2</sup>, Jean Coulibaly<sup>\*3</sup>, Jaime García-Villena<sup>2</sup>, Carla Caballero<sup>2</sup>, Lin Lin<sup>2</sup>, David Bermejo-Peláez<sup>2</sup>, Miguel Luengo-Oroz<sup>2</sup>, Daniel Fletcher<sup>1</sup>, Karla Fisher<sup>4</sup>, Jason Andrews<sup>5</sup>, Kigbafore Silue<sup>3</sup>, Isaac Bogoch<sup>4</sup>

<sup>1</sup>University of California, Berkeley, Berkeley, CA, United States, <sup>2</sup>SpotLab, Madrid, Spain, <sup>3</sup>Université Félix Houphouët-Boigny, Abidjan, Côte D'Ivoire, <sup>4</sup>Toronto General Hospital, Toronto, ON, Canada, <sup>5</sup>Stanford University, Palo Alto, CA, United States

4 p.m.

8334

**CHARACTERIZATION AND PROCESS DEVELOPMENT OF A SCHISTOSOMA HAEMATOBIIUM SERINE PROTEASE INHIBITOR (SHSERPIN-P46): A NEXT GENERATION VACCINE FOR UROGENITAL SCHISTOSOMIASIS**

Adebayo Molehin<sup>1</sup>, Brooke Hall<sup>1</sup>, Leah Sanford<sup>1</sup>, Christine Lee<sup>1</sup>, Sean Gray<sup>2</sup>, Darrick Carter<sup>2</sup>, Karleen King<sup>1</sup>

<sup>1</sup>Midwestern University, Glendale, AZ, United States, <sup>2</sup>PAI Lifesciences Inc, Seattle, WA, United States

(ACMCIP Abstract)

4:15 p.m.

8335

**MULTIPLE ROUNDS OF PRAZIQUANTEL TREATMENTS OF SCHISTOSOMA MANSONI HOSTS (MICE AND HUMANS) GRADUALLY RENDER THEM LESS SUSCEPTIBLE TO REINFECTION**

Etienne Soh Bayeck<sup>1</sup>, Bernard Zambo<sup>2</sup>, Leonel Meyo Kamguia<sup>2</sup>, Mireille Kameni<sup>2</sup>, Brice Owona Ayissi<sup>1</sup>, Justin Komgwep Nono<sup>2</sup>

<sup>1</sup>University of Yaounde 1, Yaounde, Cameroon, <sup>2</sup>Institute of Medical Research and Medicinal Plant Studies, Yaounde, Cameroon

(ACMCIP Abstract)

4:30 p.m.

8336

**EMPOWER: ENRICHMENT METAGENOMIC PROFILING FOR WOMEN'S REPRODUCTIVE HEALTH**

Jennifer Fitzpatrick<sup>1</sup>, Rebecca Rockett<sup>2</sup>, Juliana Gill<sup>3</sup>, Rhoda Ndubani<sup>1</sup>, Kwitaka Maluzi<sup>1</sup>, Barry Kosloff<sup>4</sup>, Kwame Shanaube<sup>1</sup>, Cristina Tato<sup>5</sup>, Amaya Bustinduy<sup>5</sup>, Helen Ayles<sup>1</sup>, Tanya Golubchik<sup>2</sup>

<sup>1</sup>Zambart, Lusaka, Zambia, <sup>2</sup>University of Sydney, Sydney, Australia, <sup>3</sup>Chan-Zuckerberg Biohub, San Francisco, CA, United States, <sup>4</sup>Longhorn Vaccines & Diagnostics, Bethesda, MD, United States, <sup>5</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

**Symposium 144**

**Tackling Persistent and Recrudescence Transmission of NTDs: A Growing End-Game Challenge for Elimination of Trachoma, Lymphatic Filariasis and Eradication of Guinea Worm Disease**

Convention Center - Room 356 (3rd Floor)

Saturday, November 16, 3 p.m. - 4:45 p.m.

As per the NTD Roadmap, the World Health Organization (WHO) and partners aim to attain global elimination of at least one NTD in endemic countries by 2030. However, persistent and recrudescence transmission is an emerging endgame challenge and is likely to affect country-level and global-level elimination targets. For example, globally, 14 countries have persistent and recrudescence active trachoma affecting 16% and 9% of evaluation units, respectively. As a result, the WHO and partners convened an informal technical consultation in 2021 that provided guidance on technical definitions, gaps in evidence, and proposed programmatic enhancements to tackle persistent and recrudescence active trachoma. Based on the informal consultation, strategies around modified mass drug administration (MDA) and enhanced monitoring were proposed which have subsequently been taken on board by country programs. While there are no formal definitions for persistent

or recrudescence scenarios for other NTDs, similar phenomena have been documented. For example, foci of persistent lymphatic filariasis (LF) transmission have been documented in Ghana and Sri-Lanka, while recrudescence LF has been reported in Indonesia. Guinea worm eradication programs have now been in place for over three decades in Ethiopia and South Sudan, suggesting persistent disease transmission in prevailing, yet shrinking foci. Additionally, Chad and Mali previously reported interrupted transmission but have subsequently experienced recurrence of Guinea worm disease (GWD), suggesting potential recrudescence, amongst other possible scenarios. This symposium will start by reviewing the epidemiology, risk factors, and potential game-changing interventions of persistent and recrudescence active trachoma. The approach used to categorize trachoma as persistent or recrudescence evaluation units will then be expanded to characterize persistent and recrudescence characteristics of LF, describe risk factors contributing to on-going transmission of LF and propose novel and enhanced interventions. The symposium will apply a similar framework to describe transmission, risk factors, and game-changing interventions related to GWD. At the country level, the symposium will present programmatic examples on the epidemiology, challenges, and lessons learned from over two decades of monitoring persistent/recrudescence trachoma using ocular chlamydia testing in the Amhara Region of Ethiopia and enhanced interventions implemented as a result. In addition, the Uganda program will also exemplify persistent/recrudescence endgame challenges for trachoma and explore the risk of LF recrudescence and evidence-based approaches for prioritizing where to detect signals of LF recrudescence post-validation. #Elimination #Epidemiology #InfectiousDisease #Prevention

**CHAIR**

Jeremiah M. Ngondi  
RTI International, Kenya, Kenya

Scott D. Nash  
The Carter Center, Atlanta, GA, United States

3 p.m.

**INTRODUCTION**

3:10 p.m.

**PERSISTENT AND RECRUDESCENT ACTIVE TRACHOMA AS A THREAT TO GLOBAL ELIMINATION: EPIDEMIOLOGY, RISK FACTORS AND ENHANCED INTERVENTION STRATEGIES**

Kristen Renneker  
The Task Force for Global Health, Decatur, GA, United States

3:25 p.m.

**PERSISTENT AND RECRUDESCENT LF: OPERATIONAL DEFINITIONS, RISK FACTORS, GLOBAL PROGRAM IMPLICATIONS AND ENHANCED INTERVENTIONS**

Jonathan D. King  
WHO, Genève, Switzerland

Saturday  
November 16



**3:40 p.m.**  
**ENHANCED STRATEGIES TO INVESTIGATE PERSISTENT AND RECRUDESCENT TRACHOMA TRANSMISSION: LESSONS LEARNED FROM A DECADE OF OCULAR CHLAMYDIA TESTING IN THE AMHARA REGION OF ETHIOPIA**

Scott D. Nash  
*The Carter Center, Atlanta, GA, United States*

**3:55 p.m.**  
**PROGRAMMATIC ENHANCEMENTS TO INVESTIGATE AND ADDRESS PERSISTENT AND RECRUDESCENT TRACHOMA AND LF IN UGANDA**

Rapheal Opon  
*Ministry of Health, Kampala, Uganda*

**4:15 p.m.**  
**ENHANCED SURVEILLANCE AND INTERVENTIONS TO ADDRESS PERSISTENT/ RECRUDESCENCE TRANSMISSION: LESSONS LEARNED FROM GLOBAL GUINEA WORM ERADICATION PROGRAM**

Samuel Makoy Yibi Logora  
*Ministry of Health, Juba, South Sudan*



**Engaging Scientists as Advocates Globally, Regionally, Nationally and Subnationally – Advocacy Session**

*Convention Center - Room 357 (3rd Floor)*  
**Saturday, November 16, 3 p.m. - 4:45 p.m.**

Every day, research, program, funding, and policy decisions are being made at global, regional, national and subnational levels. Whether you realize it or not, you are directly or indirectly impacted by these decisions. How, when and where should scientists use their voices as advocates to speak up for continued investment in science for health? This session will bring together scientists and advocates to share experiences using our voices in policy settings from Washington to Nairobi to Geneva and best practices in advocacy communications.

**CHAIR**  
 Jamie Bay Nishi  
*American Society of Tropical Medicine and Hygiene, Arlington, VA, United States*

**3 p.m.**  
**INTRODUCTION**

**3:05 p.m.**  
**ASTMH PRESIDENT TOUCHPOINTS TO POLICY AND ADVOCACY**

Linnie Golightly  
*Weill Cornell Medical College, New York, NY, United States*

**3:25 p.m.**  
**ENGAGING THE US CONGRESS IN SUPPORT OF GLOBAL HEALTH RESEARCH FUNDING**

Jodie Curtis  
*Venable LLP, Washington, DC, United States*

**3:45 p.m.**  
**ENGAGING THE US CONGRESS IN SUPPORT OF GLOBAL HEALTH RESEARCH FUNDING**

Margaret McDonnell  
*United to Beat Malaria, UN Foundation, Washington, DC, United States*

**4:05 p.m.**  
**ENGAGING GLOBALLY, REGIONALLY, NATIONALLY AND SUBNATIONALLY**

Jamie Bay Nishi  
*American Society of Tropical Medicine and Hygiene, Arlington, VA, United States*

**4:25 p.m.**  
**ENGAGING GLOBALLY, REGIONALLY, NATIONALLY AND SUBNATIONALLY**

Olivia Ngou  
*Impact Sante Afrique, Yaoundé, Cameroon*

Sarthak Das  
*Singapore, Singapore*

**4:35 p.m.**  
**TIPS AND TOOLS FOR EFFECTIVE SCIENCE ADVOCACY COMMUNICATION**

Gideon Hertz  
*Burness, Bethesda, MD, United States*

**Symposium 146**

**Minimally Invasive Tissue Sampling: A Tool for Public Health Preparedness**

*Convention Center - Room 383/384/385 (3rd Floor)*  
**Saturday, November 16, 3 p.m. - 4:45 p.m.**

High-quality mortality data is a fundamental component of global health security and pandemic preparedness. Accurate mortality surveillance requires coherent and context-specific national strategies that are integrated into the public health infrastructure and are aligned with cultural priorities. Robust and effective mortality surveillance systems must include strategies and tools sensitive enough to safely and efficiently recognize cases not identified through routine diagnostics, including detection and identification of pathogens of unknown origin as part of outbreak investigations, while simultaneously aligning with available resources as part of routine mortality surveillance. Minimally invasive tissue sampling (MITS), a pathology-based postmortem examination method which improves accuracy of cause of death determination and identification of causal pathogens, is being increasingly used globally in mortality surveillance and research, particularly in resource-constrained settings. In contrast to complete diagnostic autopsy, MITS is more acceptable to communities, requires fewer resources and can be used in facilities with minimal infrastructure, such as rural mortuaries and lightly customized vehicles. MITS can be performed effectively by non-pathologist health care professionals, making it a promising component of mortality surveillance. Using targeted methods to rapidly identify infectious pathogens, MITS is a safe and efficient strategy for contributing to public health

preparedness. Due to the limited production of aerosols, using only enhanced personal-protective equipment (PPE) MITS has been used to investigate cause of death in cases of known infectious agents in settings without more sophisticated resources such as biosafety level (BSL)-3 laboratories and negative-pressure autopsy rooms. This symposium will consist of four case-studies that highlight examples and offer practical guidance for employing MITS as a strategy to contribute to robust and responsive public health preparedness by: 1) describing MITS' contribution in strengthening the maternal and perinatal death surveillance and response (MPDSR), underscoring context specific adaptations and stakeholder engagement in Nepal, 2) presenting organizational and community level strategies being used to integrate MITS as a complement to sample-based mortality systems in Zambia, 3) describing how MITS was instrumental in the rapid identification of infectious pathogens, emphasizing the role government and community collaboration and communication as part of an outbreak investigation in a rural boarding school in Kenya, and 4) outlining context-specific guidance and procedures for using MITS in outbreak investigations by CDC with a focus on ensuring biosafety #MNCH, #InfectiousDisease, #Pediatrics #PopulationSurveillance, #EmergingDiseaseThreats

#### **CHAIR**

Christina (Tia) Paganelli  
*RTI International, Durham, NC, United States*

Victor Akelo  
*CDC, Kisumu, Kenya*

#### **3 p.m.**

##### **INTRODUCTION**

#### **3:10 p.m.**

##### **MINIMALLY INVASIVE TISSUE SAMPLING TO SUPPORT MATERNAL AND PERINATAL DEATH SURVEILLANCE AND RESPONSE**

Nuwadatta Subedi  
*Gandaki Medical College and Research Center, Pokhara, Nepal*

#### **3:25 p.m.**

##### **ENHANCING PUBLIC HEALTH PREPAREDNESS THROUGH POPULATION-REPRESENTATIVE MORTALITY SURVEILLANCE**

Stephen Chanda  
*Zambia National Public Health Institute, Lusaka, Zambia*

#### **3:40 p.m.**

##### **PRACTICAL INVESTIGATION OF A DISEASE OUTBREAK IN A RURAL COMMUNITY USING MINIMALLY INVASIVE TISSUE SAMPLING**

Edwin Walong  
*Nairobi School of Medicine/Kenyatta National Hospital, Nairobi, Kenya*

#### **3:55 p.m.**

##### **DISEASE OUTBREAK INVESTIGATIONS USING MINIMALLY INVASIVE TISSUE SAMPLING: PAST EXPERIENCES AND FUTURE DIRECTIONS**

Jana Ritter  
*United States Centers for Disease Control and Prevention, Atlanta, GA, United States*

## **Symposium 147**

### **What it Truly Takes to Build Health System Resilience in an Era of Global Environmental Change: A Case Study of Madagascar**

*Convention Center - Room 388/389 (3rd Floor)*

**Saturday, November 16, 3 p.m. - 4:45 p.m.**

Madagascar, an island country in which 90% of plants and 85% of animals are endemic species, is also home to one of the first famines attributed to global warming. Madagascar has experienced increasingly frequent extreme weather events resulting in damaged infrastructure, population displacement, rising rates of malnutrition, and a shifting burden of infectious disease. Given the environmental, ecological, and human health vulnerabilities in Madagascar, the country is uniquely positioned to identify innovative solutions for persistent challenges and share transferable lessons on planetary health. We present a case study that outlines Madagascar's multi-sectoral approach to building resilience. We will describe how organizations from various sectors are using community leadership, data from diverse sources, research methods that draw from across scientific disciplines, and collaborative partnerships to respond to a changing climate. Leaders from across Madagascar will share their experience in adapting their activities to meet local needs. We will review the ways in which "resilience" is defined by different sectors, and advocate for eliminating ideological silos in favor of cross-sector collaboration for maximum impact and sustainability. The panel will feature representatives from organizations working across Madagascar: a) The Ministry of Public Health will present on a national strategy for resilient health systems and meeting the country's needs in response to ongoing climate challenges: drought-related malnutrition, infrastructure destruction by cyclones, and infectious disease outbreaks; b) A community health worker will provide insight into climate events and community priorities; c) Charles Merieux Center of Infectious Disease, Madagascar's leading public health laboratory and a research center, will present on the role of diagnostics and infectious disease research in system design for a changing climate; d) Pivot, an NGO with a decade of experience working with the government to establish a model system of healthcare based on the integration of science and service delivery, will present on the response to local climate events and community health analytics to identify changing disease burden; e) Blue Ventures, a marine conservation organization, will share how they have used fisheries as a point of entry for engaging in building health systems resilience. The facilitator will pose questions to panelists and audience members on the risks and opportunities of health systems strengthening in a time of climate crisis; the challenges of nimble, right-sized data collection; and integrating research with clinical care to generate useful evidence for local and national stakeholders. #FieldStudies #MNCH #InfectiousDisease

#### **CHAIR**

Matthew Bonds  
*Harvard Medical School, Boston, MA, United States*

Laura Cordier  
*Pivot, Ranomafana, Madagascar*

**3 p.m.**  
**INTRODUCTION****3:10 p.m.**  
**BUILDING A RESILIENT NATIONAL HEALTH SYSTEM**

Zely Arivelo Randriamanantany  
*Madagascar Ministry of Public Health, Antananarivo, Madagascar*

**3:25 p.m.**  
**INFECTIOUS DISEASE RESEARCH AND PLANETARY HEALTH IN MADAGASCAR**

Luc Samison  
*Centre d'Infectiologie Charles Mérieux, Antananarivo, Madagascar*

**3:40 p.m.**  
**ENGAGING COMMUNITIES IN RESPONDING TO CLIMATE EVENTS**

Fety Randrianarivelo  
*Madagascar Ministry of Public Health, Ranomafana, Madagascar*

**3:55 p.m.**  
**BUILDING HEALTH SYSTEM RESILIENCE THROUGH FISHERIES**

Edith Ngunjiri  
*Blue Ventures, Antananarivo, Madagascar*

**4:10 p.m.**  
**HEALTH SYSTEMS STRENGTHENING IN THE FACE OF A CHANGING CLIMATE**

Benedicte Razafinjato  
*Pivot, Ranomafana, Madagascar*

**Symposium 148****Spatial Repellents to Prevent Dengue and Malaria: Evidence and Policy Updates**

*Convention Center - Room 391/392 (3rd Floor)*  
**Saturday, November 16, 3 p.m. - 4:45 p.m.**

Long available for commercial use, spatial repellents are an underrecognized product class for malaria vector control currently under evaluation by the World Health Organization (WHO). These are products that can be hung up to diffuse active ingredients, commonly insecticides, to reduce contact between humans and mosquitoes. Evidence on safety, efficacy, and user acceptability continues to support the entry of spatial repellents into the malaria and dengue vector control arsenal in the near future, and it is time for this product class to enter the mainstream radar of important vector control tools that can offer protection from mosquito-borne disease. This is a symposium on spatial repellents to reduce mosquito-borne disease. Here we cover the history of spatial repellent research and where we are today, focusing on the active ingredients available and those in the pipeline, evidence from entomology semi-field and field studies, epidemiological evidence from two large scale trials in Mali and Kenya, implementation science findings on user acceptability and delivery, and current WHO policy status on this product class. Our first speaker, Nicole Achee, will provide an overview of spatial repellent history, active ingredients in use today, and research priorities required to support their potential and continued widescale rollout. How has

the evidence base been growing, where are we today? Which use case scenarios are under consideration and, looking ahead, what more do we need to know? Our second speaker, Daniel Msellemu, will present results from the meta-analysis 'Volatile pyrethroids against mosquitoes,' as well as interim findings from a Cochrane review on epidemiological studies of spatial repellents to prevent malaria. Our third speaker, Eric Ochomo, will present an evaluation of the protective efficacy of a spatial repellent to reduce malaria incidence in children in western Kenya compared to placebo: outcomes from a cluster-randomized double-blinded control trial. These findings are critical to the WHO prequalification pathway for spatial repellents. Our fourth speaker, Dr. Issaka Sagara, will present an evaluation of the protective efficacy of a spatial repellent to reduce malaria incidence in children in Mali compared to placebo: outcomes from a cluster-randomized double-blinded control trial. These findings are also critical to the WHO prequalification pathway for spatial repellents. Our final speaker, Dr. Dyna Doum will present on the delivery and uptake of spatial repellent devices to forest populations in Cambodia, describing the uptake, challenge, and lessons learned from delivering spatial repellent devices in Cambodia to over 2,000 individuals. #InfectiousDisease #Epidemiology #TranslationalScience #Prevention #Elimination

**CHAIR**

Ingrid Chen  
*University of California, San Francisco, San Francisco, CA, United States*

Nicole L. Achee  
*University of Notre Dame, Notre Dame, IN, United States*

**3 p.m.**  
**INTRODUCTION****3:10 p.m.**  
**SPATIAL REPELLENTS: FROM ACTIVE INGREDIENT DISCOVERY TO POLICY AND ROLLOUT EVALUATIONS**

Nicole L. Achee  
*University of Notre Dame, Notre Dame, IN, United States*

**3:25 p.m.**  
**META-ANALYSIS OF ENTOMOLOGICAL EVIDENCE BASE FOR SPATIAL REPELLENTS**

Daniel F. Msellemu  
*Ifakara Health Institute, Dar es Salaam, United Republic of Tanzania*

**3:40 p.m.**  
**EVALUATION OF THE PROTECTIVE EFFICACY OF A SPATIAL REPELLENT TO REDUCE MALARIA INCIDENCE IN CHILDREN IN WESTERN KENYA COMPARED TO PLACEBO: OUTCOMES FROM A CLUSTER-RANDOMIZED DOUBLE-BLINDED CONTROL TRIAL**

Eric Ochomo  
*Kenya Medical Research Institute, Kisumu, Kenya*

**3:55 p.m.**  
**EVALUATION OF THE PROTECTIVE EFFICACY OF A SPATIAL REPELLENT TO REDUCE MALARIA INCIDENCE IN CHILDREN IN MALI COMPARED TO PLACEBO: OUTCOMES FROM A CLUSTER-RANDOMIZED DOUBLE-BLINDED CONTROL TRIAL**

Issaka Sagara  
*Malaria Research and Training Center (MRTC), University of Sciences, Techniques and Technologies of Bamako (USTTB), Bamako, Mali*

**4:10 p.m.**

**DELIVERY AND UPTAKE OF SPATIAL REPELLENT DEVICES TO FOREST POPULATIONS IN CAMBODIA: AN IMPLEMENTATION RESEARCH STUDY**

Dyna Doum

*Health Forefront Organization, Phnom Penh, Cambodia*

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## Symposium 149

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### Reaching the Last Mile: Innovations and Implementation Approaches to Ensure Community-Based Malaria Care for All

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*Convention Center - Room 393/394 (3rd Floor)*

**Saturday, November 16, 3 p.m. - 4:45 p.m.**

Limited access to care and delayed care seeking remain significant barriers to controlling malaria. Despite renewed focus on community health worker (CHW) programs, access to and use of malaria services, especially for remote populations, remain low. This symposium will present results from recent community case management innovations designed to improve access to timely malaria services in several countries in sub-Saharan Africa. Presentations will include results from cluster-randomized trials, pilot projects, and scale-up of expanded CHW services through the routine health system, plus a modeling application to optimize CHW placement. First, we will hear new results from a recently completed trial in three districts in Malawi of the expansion of malaria community case management (mCCM) to community members of all ages. Our speaker from Madagascar will then discuss the implementation of age-expanded mCCM in southeast Madagascar through the routine health system, explaining how findings from a similar study in Madagascar informed the implementation approach, and how community intermittent preventive treatment of malaria in pregnancy (c-IPtP) services were successfully added without over burdening CHWs. The second community-based innovation will cover proactive approaches whereby CHWs visit households at periodic intervals to test for and treat malaria (ProCCM in Mali and Zambia). In Mali, proactive visits were part of a comprehensive pilot of malaria services that included a strengthened CHW network and reinforced primary care services, a package that helped reduce child mortality in a setting of conflict and displaced populations. The speaker will present the latest findings on the (limited) added benefits of proactive visits on top of a comprehensive package of strengthened malaria services, with an aim towards helping donors and policymakers understand the best use of limited resources when scaling-up community services. Similarly, implications of a recent ProCCM trial in Zambia, where the benefits of proactive malaria sweeps in a setting of high mCCM coverage were modest, will be discussed. Finally, we will hear from a modeler who will present work done in collaboration with the Cameroon Ministry of Health to understand optimal geographic expansion of CHW networks. The model targets areas with higher malaria burden, child mortality, and displaced populations, and the speaker will explain how to adapt it across different settings. All presenters will

discuss logistical challenges and lessons learned during trial and program implementation, as well as how their findings can inform policy and program decisions in malaria-endemic countries. We will close with a panel discussion and Q&A, allowing ample time for discussion and idea sharing. #ChildHealth #FieldStudies #MNCH

#### CHAIR

Laura C. Steinhardt

*CDC, Atlanta, GA, United States*

**3 p.m.**

#### INTRODUCTION

**3:05 p.m.**

#### EXPANDING MALARIA COMMUNITY CASE MANAGEMENT (MCCM) TO ALL AGES IN THREE DISTRICTS OF MALAWI: KEY RESULTS FROM A CLUSTER-RANDOMIZED TRIAL

Tinashe Tizifa

*TRUE, Blantyre, Malawi*

**3:20 p.m.**

#### FROM CONTROLLED TRIAL TO POLICY EXPANSION: KEY LEARNINGS FROM IMPLEMENTING AGE-EXPANDED MCCM AND COMMUNITY IPTP THROUGH THE ROUTINE HEALTH SYSTEM IN MADAGASCAR

Andritahina Razafiarjoana

*MCGL (Jpiego), Antananarivo, Madagascar*

**3:35 p.m.**

#### THE ADDED VALUE OF PROACTIVE CHW VISITS AS PART OF A COMPREHENSIVE PRIMARY CARE PACKAGE IN MALI

Kassoum Kayentao

*MUSO, Bamako, Mali*

**3:50 p.m.**

#### ARE PROACTIVE VISITS REALLY NEEDED IN ZAMBIA? UNDERSTANDING PROCCM RESULTS IN A SETTING OF HIGH COVERAGE OF ROUTINE MCCM

Bupe Kabamba

*PATH PAMO Project, Lusaka, Zambia*

**4:05 p.m.**

#### MODELING APPROACHES TO OPTIMIZE GEOGRAPHIC EXPANSION OF CHW ACTIVITIES IN CAMEROON

Justin Millar

*PATH Insights, Seattle, WA, United States*

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## Symposium 150

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### New Perspectives on Human Autochthonous Chagas Disease in the United States and Mexico

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*Convention Center - Room 395/396 (3rd Floor)*

**Saturday, November 16, 3 p.m. - 4:45 p.m.**

This session presents research and insights on autochthonous Chagas disease, including vector and host species, in different regions of the United States and Mexico. 1. Gabriel L. Hamer (Texas A&M University) will discuss mechanisms of *T. cruzi* spill-over from triatomines to humans, presenting study results

of where triatomines occur in the U.S. using a community science program, what triatomines feed on using bloodmeal metabarcoding, and experiments exploring triatomine feeding and defecation behavior related to risk of human exposure to *T. cruzi*.

2. Claudia Herrera (Tulane University) will explore questions about the current distribution of parasite DTUs. Our team detected a previously unreported *T. cruzi* DTU circulating among triatomine vectors and rodents from rural and urban areas in New Orleans. A high prevalence of *T. cruzi* in local mammals suggest active peri(domestic) transmission of *T. cruzi* in urban and rural areas in Louisiana.

3. Paula Stigler Granados (San Diego State University) will describe research on distribution of triatomines on U.S. military installations and risks posed to active duty service members and military working dogs. Triatomine surveillance conducted on U.S. military bases near the U.S. Mexico border highlights the need to use a One Health multi-disciplinary approach.

4. Norman L. Beatty (University of Florida) and a multidisciplinary research team have found a wide distribution of triatomines invading human dwellings in Florida, a potential new *Triatoma* species, and high rates of *T. cruzi* infection in triatomines and mammals. They have unearthed the first known autochthonous Florida canine Chagas in the state.

5. Melissa Nolan, (University of South Carolina) will discuss research on autochthonous human transmission dynamics across the Southern United States, including California, Arizona, Texas and South Carolina. Multi-year investigations have unearthed unique transmission dynamics resulting in locally acquired human infection.

6. Carlos Ibarra (Centro de Investigaciones de Estudios Avanzados del Instituto Politecnico Nacional, Merida, Mexico) will provide a perspective from Mexico, where all phylogenetic variants of *Trypanosoma cruzi* have been detected and which hosts diverse vector and host species. This diversity and ongoing environmental changes adds complexity to the dynamics of *T. cruzi* transmission. New research is providing insight on these complex processes. #InfectiousDisease, #EcologicalStudies, #FieldStudies, #MolecularBiology

**CHAIR**

Claudia P. Herrera  
Tulane University, New Orleans, Louisiana- USA, LA, United States

Davidson H. Hamer  
Boston University School of Medicine, Boston, MA, United States

**3 p.m.**  
**INTRODUCTION**

**3:10 p.m.**  
**THE MYTH ABOUT TRIATOMINES WITHOUT CHAGAS**

Gabriel L. Hamer  
Texas A&M University Department of Entomology, College Station, TX, United States

**3:25 p.m.**  
**GENETIC DIVERSITY OF *TRYPANOSOMA CRUZI* INFECTION IN SOUTHERN LOUISIANA AND IMPLICATIONS FOR PARASITE TRANSMISSION NETWORK**

Claudia P. Herrera  
Tulane University, School of Public Health and Tropical Medicine, New Orleans, LA, United States

**3:40 p.m.**  
**CHAGAS DISEASE IN THE U.S. MILITARY AND ITS IMPLICATIONS FOR NATIONAL SECURITY**

Paula Stigler-Granados  
San Diego State University, School of Public Health, San Diego, CA, United States

**3:55 p.m.**  
**ONE HEALTH TEAM SCIENCE APPROACH TO CONFRONTING AUTOCHTHONOUS CHAGAS IN THE STATE OF FLORIDA**

Norman L. Beatty  
University of Florida, Division of Infectious Diseases and Global Medicine, Gainesville, FL, United States

**4:10 p.m.**  
**AUTOCHTHONOUS HUMAN TRANSMISSION IN THE USA: EPIDEMIOLOGIC RISK FACTORS VARY BY GEOGRAPHIC ORIGIN**

Melissa S. Nolan  
University of South Carolina, Columbia, SC, United States

**4:25 p.m.**  
**THE BIO-ECO DIVERSITY OF THE MEXICAN LANDSCAPE: UNRAVELING THE DYNAMICS OF *T. CRUZI* TRANSMISSION**

Carlos Ibarra-Cerdeña  
Human Ecology Department, Center for Research and Advanced Studies of the National Polytechnic Institute, Merida, Mexico

**New Orleans Tour. A Walk through the History of New Orleans and Intersections with Tropical Medicine and Public Health**

*Limited to attendees who signed up at Tulane Exhibit Booth*  
**Saturday, November 16, 2:30 p.m. - 4:30 p.m.**

The city of New Orleans is a landscape imprinted with the waves of epidemics that in response produced the first school of public health and first school of tropical medicine in the United States. New Orleans' culture and its geography shaped these epidemics and the epidemics in turn shaped the city's culture and economy. Stop by the Tulane booth in the Exhibit Hall to sign up for a walk to see some key sites of the city, the yellow fever mortuary chapel, the birth places of American music, the slave market, the front door of the French Quarter and the Mississippi River's edge which evokes the physical and social contexts that brought yellow fever, cholera, and malaria to the city.

**Break**

**Saturday, November 16, 4:45 p.m. - 5:15 p.m.**

**Special Session 164**

**ASTMH Committee on Global Health (ACGH) Networking and Lightning Presentations**

Convention Center - Room 398 (3rd Floor)  
**Saturday, November 16, 5 p.m. - 6:30 p.m.**

Please join ACGH members for an early-evening social that brings together members of the subgroup, stimulates opportunities for networking, and gives trainees an opportunity to present their research in 3-minute presentations. Light snacks.

## CHAIR

Jennifer A. Downs  
Weill-Cornell Medical College, New York, NY, United States



### Global Collaboration on Determining Best Practices in the Evaluation and Management of Suspect Viral Hemorrhagic Fever (VHF) Cases

Convention Center - Hall I-2 (1st Floor)  
Saturday, November 16, 5:15 p.m. - 7 p.m.

Public health agencies and health care facilities confront unique challenges when faced with ill travelers returning from VHF-affected regions, whether they are healthcare workers responding to an outbreak or tourists. It is often difficult to convince administrators and/or funders that the expense and complexity of preparing for these low probability but high-risk events is worthy, until an event happens closer to home. Events during the 2014-2015 West African outbreak revealed these gaps in preparation. Definition of suspect case may be challenging. Emergency medical vehicles may not be found to transport suspect VHF cases. Health care facilities with the capacity to isolate, evaluate and manage a suspect VHF case may not be readily available. Transport of specimens and identification of a laboratory with testing capabilities may also be difficult. Public health agencies and health care facilities alike are focusing on strengthening preparedness and response processes and would benefit from learning from others' experiences and working collaboratively towards solutions to common challenges. This symposium will convene a panel of speakers representing governmental health agencies, academic centers, and health care institutions of eight countries. Country-specific information about healthcare infrastructure and processes related to VHF preparedness and response will be presented in brief to provide important context. A clinical scenario will be created as a platform for panelists to detail how a VHF suspect case would be evaluated and managed in their respective countries, and to highlight the unique challenges that such a scenario would pose. Specifically, the clinical scenario would describe a critically ill adult traveler with no known risk factors, returning from a country endemic for a VHF, who presents to a health care facility. Discussion will center on how evaluation and management would differ if the traveler were a child. Countries endemic for specific VHFs and not others (e.g., Nigeria in which Lassa fever is endemic but not Ebola virus disease) can offer unique perspectives. To engage the audience in the discussion and provide an avenue for additional input and perspectives from others, we will pose live polling questions to the audience, relevant to the key discussion points. In the final segment of the symposium, we will outline best practices related to the evaluation and management of suspect VHF cases. This discussion will be based on the lessons learned from each panelist and the perspectives shared by audience members. Audience members will be asked to submit their questions and comments on cards to be integrated into the discussion as appropriate. #Epidemiology #EmergingDiseaseThreats #InfectiousDisease #Prevention

## CHAIR

Mary J. Choi  
Centers for Disease Control and Prevention, Atlanta, GA, United States

Frédérique Jacquerioz Bausch  
Center for Viral Emerging Diseases, Hôpitaux Universitaires de Genève, Geneva, Switzerland

5:15 p.m.  
INTRODUCTION

5:25 p.m.  
GLOBAL COLLABORATION ON DETERMINING BEST PRACTICES IN THE EVALUATION AND MANAGEMENT OF SUSPECT VIRAL HEMORRHAGIC FEVER (VHF) CASES

Fatima Saleh  
Nigeria Centre for Disease Control and Prevention, Abuja, Nigeria

5:40 p.m.  
GLOBAL COLLABORATION ON DETERMINING BEST PRACTICES IN THE EVALUATION AND MANAGEMENT OF SUSPECT VIRAL HEMORRHAGIC FEVER (VHF) CASES

Emilio Hornsey  
UK Health Security Agency, London, United Kingdom

5:55 p.m.  
GLOBAL COLLABORATION ON DETERMINING BEST PRACTICES IN THE EVALUATION AND MANAGEMENT OF SUSPECT VIRAL HEMORRHAGIC FEVER (VHF) CASES

Erika Vlieghe  
Antwerp University Hospital, Institute of Tropical Medicine, Antwerp, Belgium

6:10 p.m.  
GLOBAL COLLABORATION ON DETERMINING BEST PRACTICES IN THE EVALUATION AND MANAGEMENT OF SUSPECT VIRAL HEMORRHAGIC FEVER (VHF) CASES

Jacqueline Weyer  
Centre for Emerging Zoonotic and Parasitic Diseases, National Institute for Communicable Diseases of the National Health Laboratory Service, Johannesburg, South Africa

6:25 p.m.  
GLOBAL COLLABORATION ON DETERMINING BEST PRACTICES IN THE EVALUATION AND MANAGEMENT OF SUSPECT VIRAL HEMORRHAGIC FEVER (VHF) CASES

James E. Strong  
Public Health Canada, Manitoba, Canada



### Film Screening and Discussion: "Accidental Host - The Story of Rat Lungworm Disease"

Convention Center - Room 343/344 (3rd Floor)  
Saturday, November 16, 5:15 p.m. - 6:30 p.m.

**THIS SESSION DOES NOT CARRY CME CREDIT.**

"Accidental Host - The Story of Rat Lungworm Disease" is a 53-minute medical documentary about *Angiostrongylus cantonensis*, a neuro-invasive foodborne parasite that now thrives in tropical areas of six continents. Shot in Hawaii, Florida, and California and currently airing and streaming on PBS, the film features multiple patient stories and interviews with experts

Saturday  
November 16

while depicting a disease that is often unknown to physicians as well as travelers and residents at risk. Additional themes include the fascinating history, life cycle, and ecology of the globalizing nematode and its unique impact on Hawaii. "Accidental Host" was produced by Claire Panosian Dunavan, a past president of the American Society of Tropical Medicine and Hygiene, along with a team of veteran, award-winning filmmakers. For more about the film, or to watch a 3-minute trailer, please visit [www.ratlungwormfilm.com](http://www.ratlungwormfilm.com)

#### CHAIR

Claire Panosian Dunavan  
UCLA David Geffen School of Medicine, Los Angeles, CA, United States

#### 5:15 p.m.

##### INTRODUCTION

Claire Panosian Dunavan  
UCLA David Geffen School of Medicine, Los Angeles, CA, United States

#### 5:20 p.m.

##### "ACCIDENTAL HOST - THE STORY OF RAT LUNGWORM DISEASE"

#### 6:15 p.m.

##### DISCUSSION AND AUDIENCE Q&A

## Scientific Session 153

### One Health II: The Interconnection between People, Animals, Plants and Their Shared Environment

Convention Center - Room 345 (3rd Floor)

Saturday, November 16, 5:15 p.m. - 7 p.m.

#FieldStudies #EcologicalStudies #InfectiousDisease  
#Epidemiology #SocialStudies

#### CHAIR

Jade Benjamin-Chung  
Stanford University, Stanford, CA, United States

Daniel Olson  
University of Colorado, Denver, CO, United States

#### 5:15 p.m.

### 8337

#### SEROPREVALENCE AGAINST MULTIPLE VIRUSES AT HUMAN ANIMAL INTERFACE IN BUKAVU, DEMOCRATIC REPUBLIC OF CONGO

Junior Bulabula-Penge<sup>1</sup>, Antoine Nkuba-Ndaye<sup>1</sup>, Chasinga Buharanyi<sup>2</sup>, Ayagirwe Basengere<sup>3</sup>, David Lupande-Muenebintu<sup>4</sup>, Daniel Mukadi-Bamuleka<sup>5</sup>, Esperance Tsiwedi Tsilabia<sup>5</sup>, Noella Mukanya Mulopo<sup>5</sup>, Louis Glénat<sup>6</sup>, Frédéric LeMarcis<sup>7</sup>, Eric Delaporte<sup>8</sup>, Almudena Mari Saez<sup>6</sup>, Martine Peeters<sup>6</sup>, Steve Ahuka-Mundeke<sup>1</sup>

<sup>1</sup>National Institute of Biomedical Research (INRB), Kinshasa, Democratic Republic of the Congo, <sup>2</sup>Hôpital Panzi, Bukavu, Democratic Republic of the Congo, <sup>3</sup>Université Evangélique d'Afrique, Bukavu, Democratic Republic of the Congo, <sup>4</sup>Hôpital Provincial Général de Bukavu, Bukavu, Democratic Republic of the Congo, <sup>5</sup>Rodolphe Mérieux INRB-Goma Laboratory, Goma, Democratic Republic of the Congo, <sup>6</sup>TransVIHMI, Université de Montpellier, Institut de Recherche pour le Développement, INSERM, Montpellier, France, <sup>7</sup>TransVIHMI, Université de Montpellier, Institut de Recherche pour le Développement, INSERM, Montpellier, France, <sup>8</sup>TransVIHMI, Université de Montpellier, Institut de Recherche pour le Développement, INSERM, M, France

#### 5:30 p.m.

### 8338

#### EXPOSURE TO MAYARO VIRUS IN THE IN THE PERUVIAN AMAZON

Amy C. Morrison<sup>1</sup>, Adam J. Moore<sup>2</sup>, Daniel Strebow<sup>3</sup>, Whitney Weber<sup>3</sup>, Zachary Strebow<sup>3</sup>, Mariana Leguia<sup>4</sup>, Jhonny Cordova<sup>5</sup>, Jennifer E. Rios Lopez<sup>5</sup>, S. Alfonso Vizcarra<sup>4</sup>, Alejandra Garcia-Glaessner<sup>4</sup>, Breno Muñoz-Saavedra<sup>4</sup>, Diana Juárez<sup>4</sup>, Patricia Barrera<sup>4</sup>, Gabriela Salmon-Mulanovich<sup>4</sup>, Tatiana Quevedo<sup>6</sup>, Carlos Calvo-Mac<sup>6</sup>, Marcela M. Uhart<sup>7</sup>, Nicole R. Gardner<sup>7</sup>, Christine K. Johnson<sup>7</sup>, Christopher M. Barker<sup>1</sup>, Lark L. Coffey<sup>1</sup>

<sup>1</sup>Dept. of Pathology, Microbiology, and Immunology, School of Veterinary Medicine, University of California, Davis, Davis, CA, United States, <sup>2</sup>University of California, Davis, Davis, CA, United States, <sup>3</sup>Vaccine & Gene Therapy Institute, Oregon Health & Science University, Beaverton, OR, United States, <sup>4</sup>Laboratorio de Genómica, Pontificia Universidad Católica del Perú, Lima, Peru, <sup>5</sup>Asociación Benéfica Prisma, Lima, Peru, <sup>6</sup>Asociación Benéfica Prisma, Lima, Peru, <sup>7</sup>One Health Institute, School of Veterinary Medicine, University of California, Davis, Davis, CA, United States

#### 5:45 p.m.

### 8339

#### RISK FACTORS FOR ACUTE Q FEVER IN KILIMANJARO, TANZANIA: A PROSPECTIVE OBSERVATIONAL FEBRILE ILLNESS SURVEILLANCE STUDY

Matthew Rubach<sup>1</sup>, Thomas Bowhay<sup>2</sup>, William Nicholson<sup>3</sup>, Jamie Perniciaro<sup>3</sup>, Deng Madut<sup>1</sup>, Ganga Moorthy<sup>1</sup>, Holly Biggs<sup>1</sup>, Michael Maze<sup>4</sup>, Jo Halliday<sup>5</sup>, Kathryn Allan<sup>5</sup>, Angelo Mendes<sup>5</sup>, Blandina Mmbaga<sup>6</sup>, Wilbrod Saganda<sup>7</sup>, Bingileki Lwezaula<sup>7</sup>, Sarah Cleaveland<sup>5</sup>, Venance Maro<sup>6</sup>, John A. Crump<sup>1</sup>

<sup>1</sup>Duke University, Durham, NC, United States, <sup>2</sup>University of Otago, Dunedin, New Zealand, <sup>3</sup>US Centers for Disease Control & Prevention, Atlanta, GA, United States, <sup>4</sup>University of Otago, Christchurch, New Zealand, <sup>5</sup>University of Glasgow, Glasgow, United Kingdom, <sup>6</sup>Kilimanjaro Christian Medical Centre, Moshi, United Republic of Tanzania, <sup>7</sup>Ministry of Health, Moshi, United Republic of Tanzania

#### 6 p.m.

### 8340

#### BAT HUNTING PRACTICES AND HEALTH RISKS: INSIGHTS FROM A BANGLADESHI BAT-HUNTING COMMUNITY

Abdul Khaleque Md. Dawlat Khan<sup>1</sup>, Farhana Begum<sup>2</sup>

<sup>1</sup>Institute of Epidemiology, Disease Control and Research (IEDCR), Dhaka, Bangladesh, <sup>2</sup>University of Dhaka, Dhaka, Bangladesh

#### 6:15 p.m.

### 8341

#### MICROBIOMES AND RESISTOMES IN HOUSEHOLD ENVIRONMENTS WITH DOMESTIC ANIMAL COHABITATION: A STUDY IN RURAL BANGLADESH

Jade Benjamin-Chung<sup>1</sup>, Gabriella Barratt Heitmann<sup>1</sup>, Kalani Ratnasiri<sup>1</sup>, Sumaiya Tazin<sup>2</sup>, Claire Anderson<sup>1</sup>, Suhi Hanif<sup>1</sup>, Afsana Yeamin<sup>3</sup>, Abul Kasham Shoab<sup>3</sup>, Farjana Jahan<sup>3</sup>, Md. Sakib Hossain<sup>3</sup>, Zahid Hayat Mahmud<sup>3</sup>, Mohammad Jubair<sup>3</sup>, Mustafizur Rahman<sup>3</sup>, Mahbubur Rahman<sup>3</sup>, Ayse Ercumen<sup>2</sup>

<sup>1</sup>Stanford University, Stanford, CA, United States, <sup>2</sup>North Carolina State University, Raleigh, NC, United States, <sup>3</sup>icddr, Dhaka, Bangladesh

#### 6:30 p.m.

### 8342

#### ASSESSING ANIMAL FECAL CONTAMINATION IN FLOORS AND HAND SAMPLES FROM HOUSEHOLDS IN NORTHWESTERN COASTAL ECUADOR

Viviana A. Alban<sup>1</sup>, Kelsey J. Jesser<sup>1</sup>, Caitlin Hemlock<sup>1</sup>, Aldo Lobos<sup>2</sup>, Joseph Eisenberg<sup>3</sup>, Gwenth Lee<sup>4</sup>, Gabriel Trueba<sup>5</sup>, Valerie J. Harwood<sup>2</sup>, Karen Levy<sup>1</sup>

<sup>1</sup>University of Washington, Seattle, WA, United States, <sup>2</sup>University of South Florida, Tampa, FL, United States, <sup>3</sup>University of Michigan, Ann Arbor, MI, United States, <sup>4</sup>Rutgers University, New Brunswick, NJ, United States, <sup>5</sup>Universidad San Francis, Quito, Ecuador

6:45 p.m.

8343

**DISCOVERY OF NEW SPECIES OF WILD MAMMALS AS POTENTIAL RESERVOIRS IN AMAZONIA OF COXIELLA BURNETII, THE AGENT OF Q FEVER**

Loïc Epelboin<sup>1</sup>, Damien Donato<sup>2</sup>, Edith Guilloton<sup>1</sup>, Salma Omar<sup>1</sup>, Mona Saout<sup>3</sup>, Olivier Duron<sup>4</sup>, Alizée Raptapopulo<sup>5</sup>, Aurelie Couesnon<sup>5</sup>, Elodie Rousset<sup>5</sup>, Benoit De Thoisy<sup>2</sup>, Anne Lavergne<sup>2</sup>

<sup>1</sup>Centre Hospitalier de Cayenne, Cayenne, French Guiana, <sup>2</sup>Institut Pasteur in French Guiana, Cayenne, French Guiana, <sup>3</sup>Université de Guyane, Cayenne, French Guiana, <sup>4</sup>University of Montpellier, CNRS, IRD, Montpellier, France, <sup>5</sup>ANSES (French Agency for Food, Environmental and Occupational Health and Safety), Sophia-Antipolis, France

**Scientific Session 154**

**American Committee of Molecular Cellular and Immunoparasitology (ACMCIP): Antiparasitic Drugs - From Target Identification to Clinical Trials**

Convention Center - Room 352 (3rd Floor)

Saturday, November 16, 5:15 p.m. - 7 p.m.

Supported with funding from the Burroughs Wellcome Fund

#Therapeutics #TranslationalScience #CellBiology #InfectiousDisease

**CHAIR**

Daniel Sprague  
Medical University of South Carolina, Charleston, SC, United States

Claudia Rohr  
Medical College of Wisconsin, Milwaukee, WI, United States

5:15 p.m.

8439

**IN VIVO SCREEN REVEALS PLASMODIUM FALCIPARUM TARGETS FOR MOSQUITO-BASED MALARIA INTERVENTION**

Alexandra Probst<sup>1</sup>, Douglas Paton<sup>2</sup>, Federico Appetecchia<sup>2</sup>, Selina Bopp<sup>2</sup>, Tasneem Rinvee<sup>2</sup>, Sovitj Pou<sup>3</sup>, Rolf Winter<sup>3</sup>, Esrah Du<sup>2</sup>, Sabrina Yahiya<sup>4</sup>, Charles Vidoudez<sup>5</sup>, Naresh Singh<sup>2</sup>, Janneth Rodrigues<sup>5</sup>, Pablo Castañeda-Casado<sup>6</sup>, Chiara Tammaro<sup>2</sup>, Daisy Chen<sup>7</sup>, Karla Godinez Macias<sup>7</sup>, Giovanna Poce<sup>8</sup>, Aaron Nilsen<sup>3</sup>, Elizabeth Winzeler<sup>7</sup>, Jake Baum<sup>9</sup>, Jeremy Burrows<sup>10</sup>, Michael Riscoe<sup>9</sup>, Dyann Wirth<sup>2</sup>, Flaminia Catteruccia<sup>2</sup>

<sup>1</sup>Immunology and Infectious Diseases, <sup>1</sup>Harvard. T. H. Chan School of Public Health, Boston, MA, United States, <sup>2</sup>Portland VA Medical Center, Portland, OR, United States, <sup>3</sup>Department of Life Sciences, Imperial College London, London, United Kingdom, <sup>4</sup>Harvard Center for Mass Spectrometry, Cambridge, MA, United States, <sup>5</sup>Tres Cantos Open Lab Foundation, GlaxoSmithKline, Tres Cantos, Spain, <sup>6</sup>Department of Pediatrics, School of Medicine, University of California, San Diego, San Diego, CA, United States, <sup>7</sup>Department of Chemistry and Pharmaceutical Technologies, Sapienza University of Rome, Rome, Italy, <sup>8</sup>School of Biomedical Sciences, University of New South Wales, Sydney, Australia, <sup>9</sup>Medicines for Malaria Ventures, Meyrin, Switzerland

5:30 p.m.

8344

**TRANSPOSON MUTAGENESIS OF PLASMODIUM KNOWLESII REVEALS DETERMINANTS OF ANTIMALARIAL SUSCEPTIBILITY**

Brendan Elsworth<sup>1</sup>, Sida Ye<sup>2</sup>, Sheena Dass<sup>3</sup>, Jacob T. Tennessen<sup>3</sup>, Basil T. Thommen<sup>3</sup>, Aditya S. Paul<sup>3</sup>, Marc-Jan Gubbels<sup>4</sup>, Kourosh Zarringhalam<sup>5</sup>, Manoj T. Duraisingh<sup>3</sup>

<sup>1</sup>Food and Drug Administration, Silver Spring, MD, United States, <sup>2</sup>University of Massachusetts, Boston, MA, United States, <sup>3</sup>Harvard T.H. Chan School of Public Health, Boston, MA, United States, <sup>4</sup>Boston College, Boston, MA, United States, <sup>5</sup>University of Massachusetts Boston, Boston, MA, United States

(ACMCIP Abstract)

5:45 p.m.

8345

**IMPROVING CESTOCIDES THROUGH TARGET-BASED DESIGN**

Daniel J. Sprague<sup>1</sup>, Sang-Kyu Park<sup>2</sup>, Jonathan S. Marchant<sup>2</sup>

<sup>1</sup>Medical University of South Carolina, Charleston, SC, United States, <sup>2</sup>Medical College of Wisconsin, Milwaukee, WI, United States

(ACMCIP Abstract)

6 p.m.

8346

**DISCOVERY AND OPTIMIZATION OF ANTHELMINTIC CANDIDATES FOR SOIL TRANSMITTED HELMINTHS**

Mostafa A. Elfawal<sup>1</sup>, Emily Goetz<sup>1</sup>, You-Mie Kim<sup>1</sup>, Paulina Chen<sup>1</sup>, Leonard Barasa<sup>2</sup>, Sergey Savinov<sup>3</sup>, Paul R. Thompson<sup>2</sup>, Raffi Aroian<sup>1</sup>

<sup>1</sup>Program in Molecular Medicine, UMass Chan Medical School, Worcester, MA, United States, <sup>2</sup>Department of Chemical Biology, UMass Chan Medical School, Worcester, MA, United States, <sup>3</sup>GALY Co, Boston, MA, United States

(ACMCIP Abstract)

6:15 p.m.

8347

**INVESTIGATING THE MECHANISM OF ACTION FOR THE AMOEBICIDAL AGENT NITROXOLINE AGAINST BALAMUTHIA MANDRILLARIS**

Kaitlin Marquis<sup>1</sup>, Natasha Spottiswoode<sup>2</sup>, Angela Detweiler<sup>1</sup>, Samuel Lord<sup>2</sup>, Norma Neff<sup>1</sup>, Dyché Mullins<sup>2</sup>, Julia Haston<sup>3</sup>, Heather Stone<sup>4</sup>, Joseph DeRisi<sup>5</sup>

<sup>1</sup>Chan Zuckerberg Biohub, San Francisco, CA, United States, <sup>2</sup>University of California San Francisco, San Francisco, CA, United States, <sup>3</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>4</sup>US Food and Drug Administration, Silver Spring, MD, United States, <sup>5</sup>Chan Zuckerberg Biohub and University of California San Francisco, San Francisco, CA, United States

(ACMCIP Abstract)

6:30 p.m.

8348

**GLUCOSE IN - LACTATE OUT: GLUCOSE AND LACTATE TRANSPORT IN SCHISTOSOMA MANSONI**

David L. Williams<sup>1</sup>, Sammy Y. Aboagye<sup>1</sup>, Pavel A. Petukhov<sup>2</sup>

<sup>1</sup>Rush University Medical Center, Chicago, IL, United States, <sup>2</sup>University of Illinois, Chicago, Chicago, IL, United States

(ACMCIP Abstract)

6:45 p.m.

8349

**INDIVIDUAL-LEVEL EFFICACY OF ALBENDAZOLE AND FIXED-DOSE FORMULATION OF IVERMECTIN/ALB (FDC) AGAINST T. TRICHIURA AND HOOKWORMS IN ETHIOPIA, KENYA AND MOZAMBIQUE. PER PROTOCOL ANALYSIS OF THE ALIVE CLINICAL TRIAL**

Pedro E. Fleitas<sup>1</sup>, Stella Kepha<sup>2</sup>, Woyneshet Gelaye<sup>3</sup>, Augusto Messa Jr.<sup>4</sup>, Javier Gandasegui<sup>1</sup>, Lisette van Lieshout<sup>5</sup>, Jaime Algorta<sup>6</sup>, Áuria de Jesus<sup>4</sup>, Valdemiro Novela<sup>4</sup>, Inácio Mandomando<sup>4</sup>, Charles Mwandawiro<sup>2</sup>, Wendemagegn Enbiale<sup>3</sup>, Paula Petrone<sup>1</sup>, Jose Muñoz<sup>1</sup>, Alejandro J. Krolewiecki<sup>7</sup>

<sup>1</sup>Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain, <sup>2</sup>Eastern and Southern Africa Centre of International Parasite Control, Kenya Medical Research Institute, Nairobi, Kenya, Nairobi, Kenya, <sup>3</sup>Bahir Dar University, College of Medicine and Health Sciences, Bahir Dar, Ethiopia, <sup>4</sup>Centro de Investigação em Saúde de Manhiça (CISM), Maputo, Mozambique, <sup>5</sup>Leiden University Center for Infectious Diseases, Leiden, Netherlands, <sup>6</sup>Departamento Investigación clínica, Laboratorios Liconsa (InsudPharma group), Madrid, Spain, <sup>7</sup>Universidad Nacional de Salta, Instituto de Investigaciones de Enfermedades Tropicales/CONICET, Oran, Argentina

(ACMCIP Abstract)

Saturday  
November 16



## Scientific Session 155

### Mosquitoes- Epidemiology and Vector Control II

Convention Center - Room 353 (3rd Floor)

Saturday, November 16, 5:15 p.m. - 7 p.m.

*This session does not carry CME credit.*

#FieldStudies #Prevention #Epidemiology

#### CHAIR

Duncan Athinya

Vestergaard Frandsen (EA) Limited, Nairobi, Kenya

Nancy Stephen Matowo

London School of Hygiene & Tropical Medicine, London, United Kingdom

5:15 p.m.

8350

#### A MULTI-COUNTRY COMMUNITY EVALUATION OF THE LONG-TERM PERFORMANCE OF PERMANET 3.0, A LONG-LASTING PYRETHROID-PBO NET

Duncan K. Athinya<sup>1</sup>, Patrick K. Tungu<sup>2</sup>, Samuel K. Dadzie<sup>3</sup>, Raghavendra Kamaraju<sup>4</sup>, Maurice Ombok<sup>5</sup>, John E. Gimnig<sup>6</sup>, Melinda Hadi<sup>7</sup>

<sup>1</sup>Vestergaard Frandsen (EA) Limited, Nairobi, Kenya, <sup>2</sup>Muheza College of Health and Allied Sciences, Muheza, United Republic of Tanzania, <sup>3</sup>Noguchi Memorial Institute for Medical Research, University of Ghana, Accra, Ghana, <sup>4</sup>National Institute of Malaria Research (Indian Council of Medical Research), New Delhi, India, <sup>5</sup>Kenya Medical Research Institute, Kisumu, Kenya, <sup>6</sup>Centers for Disease Control and Prevention, Division of Parasitic Diseases and Malaria, Atlanta, GA, United States, <sup>7</sup>Vestergaard Sàrl, Lausanne, Switzerland

5:30 p.m.

8351

#### RANDOM CONTROLLED TRIALS AND BEYOND - RESULTS FROM THE FIRST MULTI-COUNTRY STUDY OF THE EFFECTIVENESS OF SPATIAL REPELLENTS TO CONTROL VECTOR BORNE DISEASES AMONGST FORCED DISPLACED POPULATIONS IN CONFLICT AFFECTED AREAS OF N. SYRIA, YEMEN AND N. NIGERIA, 2019 - 2024

Richard James Allan<sup>1</sup>, Ramona Scherrer<sup>1</sup>, Sara Estechea Querol<sup>1</sup>, Laura Paris<sup>1</sup>, Olivia Wetherill<sup>1</sup>, David Weetman<sup>2</sup>, Sergio Lopes<sup>1</sup>

<sup>1</sup>The MENTOR Initiative, Haywards Heath, United Kingdom, <sup>2</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom

5:45 p.m.

8352

#### HOUSE MODIFICATIONS USING INSECTICIDE TREATED SCREENING OF EAVE AND WINDOW AS VECTOR CONTROL TOOL: EVIDENCE FROM A SEMI-FIELD SYSTEM IN TANZANIA AND SIMULATED EPIDEMIOLOGICAL IMPACT

Olukayode Ganiu Odufuwa<sup>1</sup>, Richard Sheppard<sup>2</sup>, Safina Ngonyani<sup>1</sup>, Ahmadi Mpelepele<sup>1</sup>, Dickson Kobe<sup>1</sup>, Agathus Njohole<sup>1</sup>, Jason Moore<sup>1</sup>, Justin Lusoli<sup>1</sup>, Joseph Muganga<sup>1</sup>, Rune Bosselmann<sup>3</sup>, Ole Skovmand<sup>4</sup>, Zawadi Mageni Mboma<sup>1</sup>, Emmanuel Mbuba<sup>1</sup>, Rose Philipo<sup>1</sup>, Jennifer Stevenson<sup>1</sup>, Ellie Sherrard-Smith<sup>2</sup>, John Bradley<sup>5</sup>, Sarah Moore<sup>1</sup>

<sup>1</sup>Ifakara Health Institute, Bagamoyo, United Republic of Tanzania, <sup>2</sup>Imperial College, London, United Kingdom, <sup>3</sup>Vegro Aps, Copenhagen, Denmark, <sup>4</sup>MCC47, Montpellier, France, <sup>5</sup>London School of Hygiene & Tropical Medicine (LSHTM), London, United Kingdom

6 p.m.

8353

#### ENTOMOLOGICAL EFFECTS OF ATTRACTIVE TARGETED SUGAR BAIT STATION DEPLOYMENT IN WESTERN ZAMBIA: VECTOR SURVEILLANCE FINDINGS FROM A TWO-ARM CLUSTER RANDOMIZED PHASE III TRIAL

Javan Chanda<sup>1</sup>, Joseph Wagman<sup>2</sup>, Benjamin Chanda<sup>3</sup>, Kochelani Saili<sup>3</sup>, Erica Orange<sup>4</sup>, Patricia Mambo<sup>3</sup>, Rayford Muyabe<sup>3</sup>, Tresford Kaniki<sup>3</sup>, Mwansa Mwenya<sup>3</sup>, Mirabelle Ng'andu<sup>3</sup>, John Miller<sup>1</sup>, Annie Arnzen<sup>4</sup>, Kafula Silumbe<sup>1</sup>, Gift Mwaanga<sup>5</sup>, Limonty Simubali<sup>6</sup>, Edgar Simulundu<sup>5</sup>, Mulenga Mwenda<sup>1</sup>, Busiku Hamainza<sup>6</sup>, Ruth A. Ashton<sup>7</sup>, Thomas P. Eisele<sup>7</sup>, Angela Harris<sup>8</sup>, Joshua Yukich<sup>7</sup>, Laurence Slutsker<sup>9</sup>, Thomas Burkot<sup>10</sup>, Megan Littrell<sup>2</sup>

<sup>1</sup>PATH, Lusaka, Zambia, <sup>2</sup>PATH, Washington, DC, United States, <sup>3</sup>PATH, Kaoma, Zambia, <sup>4</sup>PATH, Seattle, WA, United States, <sup>5</sup>Macha Research Trust, Choma, Zambia, <sup>6</sup>National Malaria Elimination Centre, Lusaka, Zambia, <sup>7</sup>Centre for Applied Malaria Research and Evaluation, Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States, <sup>8</sup>Innovative Vector Control Consortium, Liverpool, United Kingdom, <sup>9</sup>Independent Consultant, Atlanta, GA, United States, <sup>10</sup>Australian Institute of Tropical Health and Medicine, Cairns, Australia

6:15 p.m.

8354

#### FIELD TRIAL RESULTS OF A VOLATILE PYRETHROID SPATIAL REPELLENT USING A TRANSFLUTHRIN ACTIVE INGREDIENT AS A CONTROL INTERVENTION FOR OUTDOOR-BITING ANOPHELES MOSQUITOES

Tim Burton<sup>1</sup>, Limonty Simubali<sup>2</sup>, Lewis Kabinga<sup>2</sup>, Lepa Syahrani<sup>3</sup>, Dendi H. Permana<sup>3</sup>, Ismail E. Rozi<sup>3</sup>, Jennifer Stevenson<sup>2</sup>, Monicah Mburu<sup>2</sup>, Edgar Simulundu<sup>2</sup>, Puji Asih<sup>3</sup>, Din Syafruddin<sup>3</sup>, Neil Lobo<sup>1</sup>

<sup>1</sup>University of Notre Dame, Notre Dame, IN, United States, <sup>2</sup>Macha Research Trust, Macha, Zambia, <sup>3</sup>Eijkman Research Center for Molecular Biology, National Research and Innovation Agency (BRIN), Cibinong, Indonesia

6:30 p.m.

8355

#### FINAL YEAR RESULTS FROM A FOUR-ARM CLUSTER-RANDOMIZED TRIAL IN TANZANIA COMPARING THE EFFECTIVENESS OF THREE TYPES OF LONG-LASTING INSECTICIDAL NETS (LLINS) - PYRIPROXYFEN-PYRETHROID, CHLORFENAPYR-PYRETHROID, AND PIPERONYL BUTOXIDE-PYRETHROID - VERSUS A PYRETHROID-ONLY LLIN, AGAINST MALARIA

Nancy Matowo<sup>1</sup>, Jacklin F. Moshia<sup>2</sup>, Manisha A. Kulkarni<sup>3</sup>, Eliud Lukole<sup>4</sup>, Jacklin Martin<sup>4</sup>, Alphaxard Manjurano<sup>4</sup>, Immo Kleinschmidt<sup>1</sup>, Naomi Serbantez<sup>5</sup>, Mark Rowland<sup>1</sup>, Franklin Moshia<sup>6</sup>, Natacha Protopopoff<sup>1</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>National Institute for Medical Research, Mwanza Medical Research Centre, Mwanza, United Republic of Tanzania, <sup>3</sup>School of Epidemiology and Public Health, University of Ottawa, Canada, United Kingdom, <sup>4</sup>National Institute for Medical Research, Mwanza, United Republic of Tanzania, <sup>5</sup>PMI-USAID, Dar es Salaam, United Republic of Tanzania, <sup>6</sup>Department of Parasitology, Kilimanjaro Christian Medical University College, Moshi, United Republic of Tanzania

6:45 p.m.

8356

#### A CLUSTER-RANDOMIZED CONTROLLED PHASE III EVALUATION OF 3D WINDOW DOUBLE SCREEN (3D-WDS) IN REDUCING MALARIA TRANSMISSION WHEN COMBINED WITH PYRETHROID-TREATED LONG-LASTING INSECTICIDAL NETS IN NORTHEASTERN TANZANIA

Subam Kathet<sup>1</sup>, Victor Mwingira<sup>2</sup>, Frank S. Magogo<sup>2</sup>, Veneranda M. Bwana<sup>2</sup>, Hanna Granroth-Wilding<sup>1</sup>, Patrick Tungu<sup>2</sup>, Tomi Hakala<sup>3</sup>, Markku Honkala<sup>3</sup>, Mikko Aalto<sup>4</sup>, William N. Kisinza<sup>2</sup>, Seppo Meri<sup>1</sup>, Ayman Khattab<sup>1</sup>

<sup>1</sup>University of Helsinki, Helsinki, Finland, <sup>2</sup>National Institute for Medical Research, Muheza, United Republic of Tanzania, <sup>3</sup>Tampere University of Technology, Tampere, Finland, <sup>4</sup>East Africa University, Bosaso, Somalia

## Scientific Session 156

### Clinical Tropical Medicine: Malaria and Fevers

Convention Center - Room 354/355 (3rd Floor)

Saturday, November 16, 5:15 p.m. - 7 p.m.

This session does not carry CME credit.

#InfectiousDisease #ClinicalResearch #Diagnostics  
#TranslationalScience

#### CHAIR

Johanna Daily

Albert Einstein College of Medicine, Bronx, NY, United States

Daniel Camprubí Ferrer

ISGlobal/Hospital Clínic Barcelona, Barcelona, Spain

5:15 p.m.

8357

#### ARTIFICIAL INTELLIGENCE LEVERAGING A VISION FOUNDATION MODEL FOR RECOGNITION OF MULTIPLE BLOOD PARASITES IN MICROSCOPY IMAGES

David Bermejo-Peláez<sup>1</sup>, Lin Lin<sup>2</sup>, Lucía Pastor<sup>1</sup>, Roberto Mancebo-Martin<sup>1</sup>, Ramon Vallés-López<sup>1</sup>, Elena Dacal<sup>1</sup>, Claudia Carmona<sup>3</sup>, Victor Anton Berenguer<sup>4</sup>, Alexandra Martín Ramírez<sup>5</sup>, Maria Flores-Chaves<sup>5</sup>, Ana Valeria Soriano<sup>6</sup>, Fabiola Gonzales<sup>6</sup>, Mary Cruz Torrico<sup>6</sup>, Daniel Illanes<sup>6</sup>, Jose Miguel Rubio<sup>7</sup>, Miguel Luengo-Oroz<sup>1</sup>

<sup>1</sup>Spotlab, Madrid, Spain, <sup>2</sup>Spotlab & Universidad Politécnica de Madrid & CIBERBBN, Madrid, Spain, <sup>3</sup>National Microbiology Centre (Instituto de Salud Carlos III), Madrid, Spain, <sup>4</sup>Microbiology Service (Hospital Universitario Severo Ochoa) & National Microbiology Centre (Instituto de Salud Carlos III), Madrid, Spain, <sup>5</sup>National Microbiology Centre (Instituto de Salud Carlos III) & Fundación Mundo Sano, Madrid, Spain, <sup>6</sup>Universidad Mayor de San Simón, Cochabamba, Plurinational State of Bolivia, <sup>7</sup>National Microbiology Centre (Instituto de Salud Carlos III) & CIBERINFEC, Madrid, Spain

5:30 p.m.

8358

#### EVALUATING THE ACCURACY OF CLINICAL MALARIA DIAGNOSES USING TAQMAN® ARRAY CARD MOLECULAR DETECTION IN NIGERIA

Emmanuel Oga<sup>1</sup>, Claire Quiner<sup>1</sup>, Jean Kim<sup>1</sup>, Cyril Erameh<sup>2</sup>, Vivian Kwaghe<sup>3</sup>, Philippe Chebu<sup>4</sup>, Lauren Courtney<sup>1</sup>, Kat Asman<sup>1</sup>, Osas Edeawe<sup>2</sup>, Ephraim Ogbaini<sup>2</sup>, Nankpah Vongdip<sup>3</sup>, Victoria Orok<sup>3</sup>, Oladimeji Matthew<sup>3</sup>, Onyia Ejike<sup>3</sup>, Ikponmwosa Odi<sup>2</sup>, Blessed Okira<sup>3</sup>, Jacqueline Agbukor<sup>2</sup>, Julius Imoyera<sup>2</sup>, Adamu Ephraim<sup>1</sup>, Jay Samuels<sup>4</sup>

<sup>1</sup>RTI International, Research Triangle Park, NC, United States, <sup>2</sup>Irrua Specialist Teaching Hospital, Irrua, Nigeria, <sup>3</sup>University of Abuja Teaching Hospital, Abuja, Nigeria, <sup>4</sup>APIN Public Health Initiatives, Abuja, Nigeria

5:45 p.m.

8359

#### SOLUBLE TRIGGERING RECEPTOR EXPRESSED ON MYELOID CELLS 1 (STREM-1) TO RISK-STRATIFY PEDIATRIC AND ADULT PATIENTS WITH FEBRILE ILLNESS IN SOUTHERN MOZAMBIQUE

Núria Balanza<sup>1</sup>, Bárbara Baro<sup>1</sup>, Sara Ajanovic<sup>1</sup>, Zumilda Boca<sup>2</sup>, Justina Bramugy<sup>2</sup>, Anelasio Cossa<sup>2</sup>, Elizabeth JA Fitchett<sup>3</sup>, Heidi Hopkins<sup>3</sup>, David Mabey<sup>3</sup>, Tegwen Marlais<sup>3</sup>, Hridesh Mishra<sup>4</sup>, Campos Mucasse<sup>2</sup>, Marta Valente<sup>1</sup>, Andrea M. Weckman<sup>4</sup>, Shunmay Yeung<sup>3</sup>, Kathleen Zhong<sup>4</sup>, Kevin C. Kain<sup>4</sup>, Quique Bassat<sup>1</sup>

<sup>1</sup>ISGlobal, Barcelona, Spain, <sup>2</sup>Centro de Investigação em Saúde de Manhiça, Maputo, Mozambique, <sup>3</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>4</sup>University Health Network, Toronto, ON, Canada

6 p.m.

8360

#### COULD WE USE CONVENTIONAL MALARIA RDT TO IDENTIFY SEVERE MALARIA IN TRAVELERS?

Daniel Camprubí Ferrer, Julia Pedreira, Leire Balerdi-Sarasola, Guillermo Villanueva, Qiuyue Yang, Paula Petrone, Jose Muñoz, Claudio Parolo  
ISGlobal / Hospital Clínic Barcelona, Barcelona, Spain

6:15 p.m.

8361

#### ADMISSION POINT-OF-CARE TESTING FOR THE CLINICAL CARE OF CHILDREN WITH CEREBRAL MALARIA

Geoffrey Guenther<sup>1</sup>, David Wichman<sup>2</sup>, Nthambose M. Simango<sup>3</sup>, Mengxin Yu<sup>4</sup>, Olivia D. Findorff<sup>5</sup>, Nathaniel O. Amoah<sup>2</sup>, Rohini Dasan<sup>2</sup>, Karl B. Seydel<sup>6</sup>, Douglas G. Postels<sup>7</sup>, Nicole F. O'Brien<sup>8</sup>

<sup>1</sup>Boston Children's Hospital, Boston, MA, United States, <sup>2</sup>The George Washington University School of Medicine and Health Sciences, Washington, DC, United States, <sup>3</sup>Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>4</sup>The Wharton School of the University of Pennsylvania, Philadelphia, PA, United States, <sup>5</sup>University of Virginia College of Arts and Sciences, Charlottesville, VA, United States, <sup>6</sup>Michigan State University College of Osteopathic Medicine, East Lansing, MI, United States, <sup>7</sup>Children's National Hospital / The George Washington University School of Medicine and Health Sciences, Washington, DC, United States, <sup>8</sup>Nationwide Children's Hospital / The Ohio State University College of Medicine, Columbus, OH, United States

6:30 p.m.

8362

#### FLUID BOLUS RESUSCITATION INCREASES MORTALITY IN MALAWIAN CHILDREN WITH CEREBRAL MALARIA

Meredith G. Sherman<sup>1</sup>, Pallavi Dwivedi<sup>2</sup>, Ronke Olowojesiku<sup>3</sup>, Rami Imam<sup>4</sup>, Kennedy M. Chastang<sup>5</sup>, Eduardo A. Trujillo Rivera<sup>2</sup>, James E. Bost<sup>2</sup>, Amina M. Mukadam<sup>6</sup>, Alice Liomba<sup>7</sup>, Karl B. Seydel<sup>8</sup>, Douglas G. Postels<sup>9</sup>

<sup>1</sup>Global Health Initiative, Children's National Hospital, Washington, DC, United States, <sup>2</sup>Division of Biostatistics and Study Methodology, Children's National Hospital, Washington, DC, United States, <sup>3</sup>Department of General and Community Pediatrics, Children's National Hospital, Washington, DC, United States, <sup>4</sup>The George Washington University School of Medicine, Washington, DC, United States, <sup>5</sup>Howard University, Washington, DC, United States, <sup>6</sup>University of Washington, Seattle, WA, United States, <sup>7</sup>Blantyre Malaria Project, Blantyre, Malawi, <sup>8</sup>Department of Internal Medicine, College of Osteopathic Medicine, Michigan State University, East Lansing, MI, United States, <sup>9</sup>Division of Neurology, Children's National Hospital, Washington, DC, United States

6:45 p.m.

8363

#### DEREGULATED IL-10 EXPRESSING T CELLS IN CHILDREN WITH ACUTE PLASMODIUM FALCIPARUM MALARIA: IMPLICATIONS FOR ETIOLOGY OF BURKITT LYMPHOMA

Bonface Ariera<sup>1</sup>, sidney ogolla ogolla<sup>1</sup>, ROSEMARY RORCHFORD<sup>2</sup>

<sup>1</sup>Kenya Medical Research Institute-Kenya, Kisumu, Kenya, <sup>2</sup>University of Colorado, Anschutz medical campus, DENVER, CO, United States

## Scientific Session 157

### Viruses - Transmission Biology, Pathogenesis and Animal Models

Convention Center - Room 356 (3rd Floor)

Saturday, November 16, 5:15 p.m. - 7 p.m.

#Pathogenesis #InfectiousDisease

#### CHAIR

Katie Anders

World Mosquito Program, Monash University, Melbourne - Clayton, Australia

Declan Pigeaud

Pathology, University of Texas Medical Branch, Galveston, TX, United States

5:15 p.m.

8364

#### LONG-TERM DURABILITY AND PUBLIC HEALTH IMPACT OF WMEL *WOLBACHIA* DEPLOYMENTS FOR *Aedes*-BORNE DISEASE CONTROL IN NITERÓI, BRAZIL

Katie Anders<sup>1</sup>, Luciano Moreira<sup>2</sup>, Gabriel Sylvestre Ribeiro<sup>2</sup>, Thais Riback<sup>2</sup>, Diogo Chalegre<sup>2</sup>, Cameron P. Simmons<sup>1</sup>, Peter A. Ryan<sup>1</sup>, Scott L. O'Neill<sup>1</sup>

<sup>1</sup>World Mosquito Program, Monash University, Melbourne - Clayton, Australia, <sup>2</sup>World Mosquito Program, Fiocruz, Rio de Janeiro, Brazil

5:30 p.m.

8365

#### INTERACTIONS BETWEEN TEMPERATURE, VIRUS STRAIN, AND DOSE INFLUENCE EXTRINSIC INCUBATION PERIOD AND COMPETENCE OF *Culex pipiens* FOR WEST NILE VIRUS

Elyse M. Banker, Rachel L. Fay, Laura Munn, Anne F. Payne, Alexander T. Ciota  
New York State, Wadsworth Center, Slingerlands, NY, United States

5:45 p.m.

8366

#### PATHOGENESIS AND TRANSMISSION OF SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME VIRUS IN EXPERIMENTALLY INFECTED ANIMALS

Jeffrey M. Marano<sup>1</sup>, Angela Bosco-Lauth<sup>1</sup>, Airm E. Hartwig<sup>1</sup>, Stephanie M. Porter<sup>2</sup>, Nicole M. Nemeth<sup>3</sup>, Marissa Quilici<sup>1</sup>

<sup>1</sup>Colorado State, Fort Collins, CO, United States, <sup>2</sup>United States Department of Agriculture - Animal & Plant Health Inspection Service, Fort Collins, CO, United States, <sup>3</sup>University of Georgia, Athens, GA, United States

6 p.m.

8367

#### HIGH MOUSE PATHOGENESIS ASSOCIATED WITH A NEW YORK POWASSAN VIRUS LINEAGE II ISOLATE

Samantha J. Courtney<sup>1</sup>, Rebekah J. McMinn<sup>1</sup>, Chasity E. Trammell<sup>1</sup>, Anna C. Fagre<sup>1</sup>, Allison C. Vilander<sup>1</sup>, Sam R. Telford<sup>2</sup>, Gregory D. Ebel<sup>1</sup>

<sup>1</sup>Colorado State University, Fort Collins, CO, United States, <sup>2</sup>Tufts University, North Grafton, MA, United States

6:15 p.m.

8368

#### COLLABORATIVE CROSS MICE AS A NEW MODEL FOR IDENTIFYING IMMUNE CORRELATES OF PROTECTION FROM NEUROINVASIVE ST. LOUIS ENCEPHALITIS VIRUS DISEASE

Manuel Arturo Flores Rodriguez, Lark L. Coffey

University of California, Davis, Davis, CA, United States

6:30 p.m.

8369

#### FEASIBILITY OF TRACKING NIPAH VIRUS-INDUCED BRAIN CHANGES AND LESION DETECTION USING 0.05T MRI AND RADIOMICS

Sairam Geethanath<sup>1</sup>, Kunal Aggarwal<sup>2</sup>, Ivan E. Oiyee<sup>1</sup>, Yu Cong<sup>3</sup>, Naveen Anaswara<sup>4</sup>, Emily S. Gurley<sup>4</sup>, Venkatesh Mani<sup>3</sup>, Claudia Calcagno<sup>3</sup>, Michael R. Holbrook<sup>3</sup>

<sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, United States, <sup>2</sup>Technical University Munich, Munich, Germany, <sup>3</sup>National Institute of Allergy and Infectious Diseases, Ft. Detrick, MD, United States, <sup>4</sup>Johns Hopkins University School of Public Health, Baltimore, MD, United States

6:45 p.m.

8370

#### HENDRA VIRUS GENOTYPE 2 LACKS SEVERE PATHOGENIC HALLMARKS OF PROTOTYPE HENDRA VIRUS INFECTION IN AFRICAN GREEN MONKEYS

Declan Pigeaud<sup>1</sup>, Karla Fenton<sup>1</sup>, Courtney Woolsey<sup>1</sup>, Robert Cross<sup>1</sup>, Christopher Broder<sup>2</sup>, Thomas Geisbert<sup>1</sup>

<sup>1</sup>University of Texas Medical Branch, Galveston, TX, United States, <sup>2</sup>Uniformed Services University of the Health Sciences, Bethesda, MD, United States

## Symposium 158

### The Devil is in the Details: Strategies for the Integrated Delivery of Neglected Tropical Disease Services within Primary Health Care and National Systems

Convention Center - Room 357 (3rd Floor)

Saturday, November 16, 5:15 p.m. - 7 p.m.

The first WHO Roadmap on Neglected Tropical Diseases (NTDs) published in 2012, reflected the new approach at that time of coordinating programmatic efforts to control or eliminate ancient diseases, impacting the most marginalized of people. This drove the rapid scale up of mass drug administrations (MDA), reaching over a billion people a year by the year 2020, with disease elimination now validated in 19 countries for lymphatic filariasis and 15 for trachoma. As a result, many new cases of blindness, disability, and severe disfigurement, that have hampered growth and development in resource limited settings for centuries, have been prevented. But gaps remain: many NTDs cannot be targeted with limited rounds of MDA and new diagnostics and surveillance methods are required to strengthen elimination. The most recent WHO roadmap, endorsed by member states in 2020, has responded to this by promoting a fundamental shift in strategy - away from vertical programming and towards NTD services that are integrated into health systems, including primary and tertiary care, preventative services, and beyond the health sector. This has created momentum and is offering an opportunity for experimentation. Research is needed to improve our understanding of the biology, epidemiology and pathology of some of these long ignored diseases and to drive innovation in diagnostics and treatment. Ultimate success also hinges on context specific technical decisions on what to integrate where, when, and how, with due attention to the political process. Implementation science research is therefore also needed to test integration interventions, measure outcomes, and carefully document the context, barriers

and enablers. This symposium provides examples, from across four world regions, of early adopters. All talks analyze the shift from disease focused programming towards more comprehensive integrated service delivery. They present outcomes to date and highlight gaps in current scientific knowledge. The first two talks present on lessons learned from the integration of skin NTDs in Vanuatu and of NTDs targeted by preventive chemotherapy in Uganda and Tanzania. They will speak of strengthening the capacity of health workers, integrating into supply chains and information systems, and working at the finance and policy level. The third talk explores a new policy being implemented in the Philippines to manage several NTDs through a comprehensive primary health care package that includes the elimination of 13 diseases, including NTDs, malaria, and several vaccine preventable diseases. The final talk presents PAHO's initiative to eliminate 30+ communicable diseases and related conditions by 2030, including and going beyond NTDs. #Elimination #InfectiousDisease #SocialScience #TranslationalScience

#### **CHAIR**

Margaret Baker  
*Georgetown University, Washington, DC, United States*

Emily Wainwright  
*U.S. Agency for International Development Bureau for Global Health/Office of Infectious Diseases, Washington, DC, United States*

#### **5:15 p.m. INTRODUCTION**

#### **5:35 p.m. MOVING TOWARDS INTEGRATED DELIVERY OF SERVICES TO ADDRESS SKIN DISEASES IN THE REPUBLIC OF VANUATU**

Fasihah Taleo  
*World Health Organization, Port Vila, Vanuatu*

#### **5:55 p.m. INTEGRATING PREVENTATIVE CHEMOTHERAPY NTDs INTO NATIONAL HEALTH SYSTEMS: EXPERIENCES FROM UGANDA AND TANZANIA**

Andrew P. Kyambadde  
*RTI International, Washington, United States*

#### **6:15 p.m. INTEGRATING NTDs, MALARIA, AND OTHER DISEASES THROUGH A COMPREHENSIVE PRIMARY HEALTH CARE APPROACH IN THE PHILIPPINES**

Raffy A. Deray  
*Department of Health, Manila, Philippines*

#### **6:35 p.m. ELIMINATION OF 30+ COMMUNICABLE DISEASES AND RELATED CONDITIONS BY 2030 - A MULTI-COUNTRY AND MULTI-DISEASE PERSPECTIVE FROM THE AMERICAS REGION**

Martha I. Saboyá  
*Pan American Health Organization, Washington, DC, United States*

## **Symposium 159**

### **Revolutionizing Healthcare: The Impact of Artificial Intelligence on Neglected Tropical Diseases**

*Convention Center - Room 383/384/385 (3rd Floor)*  
**Saturday, November 16, 5:15 p.m. - 7 p.m.**

Although artificial intelligence (AI) has been available for some time, it has garnered significant interest recently for improving accuracy and effective management of neglected tropical diseases (NTDs). Increasingly AI is being recognized for its potential to optimize NTD diagnostic sensitivity, which is particularly pertinent in the context of declaring elimination. This session aims to present an overview of the current research into AI studies that have been conducted for NTD diagnostics, which are vulnerable to human error resulting in poor sensitivity and reproducibility. AI, or use support of AI, can address some shortcomings in diagnostic accuracy. There are limitations to AI, however, including affordability, large datasets needed to optimize techniques, and scalability. In this symposium, we present proof-of-concept for AI in NTDs, including trachoma, soil-transmitted helminths (STH) and schistosomiasis, onchocerciasis, skin NTDs, and dengue. As trachoma prevalence significantly decreases, it has become difficult to train health workers to detect cases due to their rarity. To address this, a novel image-recognition based smartphone app has been developed to improve trachoma (TT) screening by taking an image of an individual's eyelid and the app indicates whether the individual may have TT. The app has been tested in three countries, with an accuracy of over 95%. Similarly, photographic imaging has been used for the detection of STH and intestinal schistosomiasis eggs in Kato-Katz using an AI-based digital pathology scanner. Like trachoma, years of mass drug administration has resulted in a significant reduction in STH and intestinal schistosomiasis, as a result Kato Katz has poor sensitivity in low-intensity settings. The AI Kato Katz scanner has been tested in four countries, with an average precision of 96.1%. To evaluate the success of novel drugs or regimens against onchocerciasis, worm nodules must be removed from patients and analysed. Like Kato Katz, this process is time-consuming and depends on the experience of the laboratory technician. The University Hospital Bonn has developed an AI system that automatically evaluates *Onchocerca volvulus* worm nodule samples that could overcome limitations with human graders. Skin NTDs are a group of diseases that manifest symptoms on the skin, including leprosy, Buruli ulcer, mycetoma, and scabies. The diagnosis of skin diseases depends in large, though not exclusively, on visual inspection. The diagnosis of these diseases is amendable to AI approaches whereby machine learning is trained using skin images through the eSkinHealth app. Finally, statistical and machine learning approaches were explored simultaneously for differentiating tropical infections including Dengue and Malaria.

#### **CHAIR**

Anna E. Phillips  
*FHI360, Washington, DC, United States*

Rie Roselyne Yotsu  
*Nagasaki University, Nagasaki-shi, Japan*

**5:15 p.m.**  
**INTRODUCTION**

**5:25 p.m.**  
**USING ARTIFICIAL INTELLIGENCE-BASED DIGITAL PATHOLOGY FOR THE DETECTION OF SOIL-TRANSMITTED HELMINTHS AND INTESTINAL SCHISTOSOMIASIS**

Peter Kenneth Ward  
*University of Technology Sydney, Uppsala, Sweden*

**5:45 p.m.**  
**ARTIFICIAL INTELLIGENCE IN THE EVALUATION OF ONCHOCERCA VOLVULUS WORM NODULES**

Professor Achim Hoerauf  
*Bonn University Medical Center, Bonn, Germany*

**6:05 p.m.**  
**ARTIFICIAL INTELLIGENCE FOR SKIN NEGLECTED TROPICAL DISEASES (SKIN NTDs) – THE CURRENT STATE OF THE ART AND THE CHALLENGES**

Rie Roselyne Yotsu  
*Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States*

**6:25 p.m.**  
**A NOVEL IMAGE-RECOGNITION BASED SMARTPHONE APPLICATION TO IMPROVE TRACHOMA SCREENING**

Emily Gower  
*University of North Carolina, Chapel Hill, NC, United States*

**6:45 p.m.**  
**USING BIOMETRIC FINGERPRINTING TO TRACK COMPLIANCE TO TREATMENT**

Ewnetu F. Liyew  
*Ethiopian Public Health Institute, Addis Ababa, Ethiopia*



## Symposium 160

### The Economics of Global Health R&D: Can We Find a Balance Between Financial Sustainability and Equitable Access?

*Convention Center - Room 388/389 (3rd Floor)*  
**Saturday, November 16, 5:15 p.m. - 7 p.m.**

From novel vaccine platforms to full genome sequencing and gene therapies, recent decades have seen stunning technical advances in the health sciences. However, deep divides persist with regards to access to the fruits of these amazing advances, both across countries and regions and often even between demographic groups in the same country or city. Many if not all pharmaceutical products have been partially supported, at some stage, by governments or other public resources, typically through competitive grants and contracts. In most cases the final pharmaceutical is then produced and distributed primarily by private sector partners, at prices generally set by them, often protected for a time by intellectual property law. However, access to the final products is often not equitably distributed, prompting increasing criticism of this process, and calls to revisit private sector products and the profits fueled in part by public funds. On the other hand, defenders of this process point to the scientific

innovation that public funding and its economic incentives bring. In this symposium, a panel of experts will discuss the economics of research and the complex financial gauntlet that must be traversed to bring technological advances to the forefront and make them equitably available. #ClinicalResearch #InfectiousDisease #Diagnostics #Therapeutics #Vaccinology

#### CHAIR

Daniel Bausch  
*London School of Hygiene & Tropical Medicine, London, United Kingdom*

Cristina Cassetti  
*NIH/NIAID, Rockville, MD, United States*

**5:15 p.m.**  
**INTRODUCTION**

**5:25 p.m.**  
**CAN GLOBAL VACCINE EQUITY BE BALANCED WITH THE NEEDS FOR INCENTIVES FOR VACCINE DEVELOPMENT?**

Mark Jit  
*New York University School of Global Public Health, New York, NY, United States*

**5:50 p.m.**  
**LICENSING TECHNOLOGIES FOR PUBLIC HEALTH – THE NIH EXPERIENCE**

Tara Kirby  
*National Institutes of Health, Bethesda, MD, United States*

**6:10 p.m.**  
**AN INDUSTRY PERSPECTIVE**

Kent Kester  
*Coalition for Epidemic Preparedness Innovations, Washington, DC, United States*

**6:30 p.m.**  
**ENSURING EQUITABLE ACCESS – REFLECTIONS FROM MSF'S 25 YEARS ON THE FRONT LINES**

Mihir Mankad  
*MSF-USA, New York, NY, United States*

## Symposium 161

### Generating Durable Protective Immunity with Malaria Vaccines

*Convention Center - Room 391/392 (3rd Floor)*  
**Saturday, November 16, 5:15 p.m. - 7 p.m.**

A major impediment to malaria elimination remains relatively low vaccine efficacy and duration of protection for both RTS,S and R21 vaccines. Although the hypothesis that prior malaria exposure contributes to poor vaccine immunogenicity is supported by multiple studies, direct evidence of the causal mechanisms remains elusive. While vaccine mediated protection can be improved by combining vaccination with other control measures such as seasonal malaria chemoprevention, limited durability of protection remains a major risk for a post-intervention "rebound" in symptomatic or severe disease, or a resurgence of malaria if there is a breakdown or disruption in vaccination programs or other control measures. Therefore, it is important that we establish the extent to which immune regulatory networks that protect against

disease are maintained within the immune cells of people living in malaria endemic areas, and whether these functional patterns can be modified to improve anti-parasitic immune responses without increasing the risk of developing severe disease. Recent advances in our understanding of dynamics of T cell subset population structures, such as the relationships between memory T cells with stem cell-like properties, and those with various effector functions, will be key to making these advances. Analysis of samples from well-defined longitudinal studies conducted in malaria endemic areas, placebo-controlled clinical trials assessing the impact of seasonal or perennial malarial chemoprevention on immune regulatory or vaccine-induced responses, and CHMI studies in malaria naïve and exposed individuals, provide new opportunities. Multimodal analysis of these samples using single cell RNA sequencing and single cell assay for transposase-accessible chromatin with sequencing is allowing evaluation of immune cell responses at high resolution *ex vivo* and identify inflammatory and regulatory genes. Such approaches can also identify molecular targets for host-directed strategies aimed at improving both the efficacy and duration of immune responses. In depth immunological analysis from vaccination trials will also lead to new strategies to increase efficacy and longevity. For example, in some studies delayed fractional dosing has higher efficacy than monthly vaccination. The continued application of emerging technologies to human malaria research provides opportunities for the discovery of new strategies to target and overcome malaria driven immunoregulatory networks that prevent development of durable protection from malaria vaccination. These opportunities will be discussed in the proposed symposium. #Immunology, #InfectiousDisease, #HostResponse, #Vaccinology, #ClinicalResearch

#### CHAIR

Christian Engwerda  
*QIMR Berghofer, Brisbane, Australia*

Michelle Boyle  
*Burnet Institute, Melbourne, Australia*

#### 5:15 p.m. INTRODUCTION

#### 5:25 p.m. LONGEVITY OF RTS,S IMMUNE RESPONSES IN AFRICAN CHILDREN AND DETERMINANTS OF DURABILITY

Gemma Moncunill  
*ISGlobal Barcelona Institute for Global Health Hospital Clínic - Universitat de Barcelona, Barcelona, Spain*

#### 5:40 p.m. UNDERSTANDING HOW HOW SEMI-IMMUNE INDIVIDUALS CONTROL MALARIA PARASITE GROWTH AND THE ASSOCIATED INFLAMMATION.

Francis Ndungu  
*KEMRI Wellcome Trust Research Program, Kilifi, Kenya*

#### 5:55 p.m. HOST-DIRECTED TREATMENTS TO IMPROVE ANTI-PARASITIC IMMUNE RESPONSES

Michelle Boyle  
*Burnet Institute, Melbourne, Australia*

#### 6:10 p.m. NEW INSIGHTS INTO REGULATORY RESPONSES INDUCED BY REPEATED *PLASMODIUM* INFECTIONS IN CHILDREN

Prasanna Jagannathan  
*Stanford University, Palo Alto, CA, United States*

#### 6:25 p.m. THE HUMAN ADAPTIVE IMMUNE RESPONSE TO *PLASMODIUM FALCIPARUM* CIRCUMSPOROZOITE PROTEIN

Hedda Wardemann  
*Division of B Cell Immunology at the German Cancer Research Center & Bill & Melinda Gates Foundation, Heidelberg, Germany*

## Symposium 162

### Artemisinin Resistance Response in Africa: Integrating Molecular Surveillance and Mathematical Modeling to Mitigate Emerging Risk and Impact on Malaria Burden Reduction

*Convention Center - Room 393/394 (3rd Floor)*  
**Saturday, November 16, 5:15 p.m. - 7 p.m.**

The evolution of artemisinin resistance (ART-R) in Africa threatens to reverse the gains in malaria control made in the last 25 years. Artemisinin resistance has now emerged independently in multiple countries in eastern Africa. De novo emergence of WHO validated markers of ART-R were first identified in Rwanda in 2014. Since 2014, artemisinin resistance has been observed in 6 countries in Africa and, more concerningly, the evidence from longitudinal molecular surveys in these countries suggests that it is rapidly spreading. While phenotypic evidence of treatment failure is still limited, the increasing reports of validated ART-R mutations are alarming. Unlike the emergence of artemisinin resistance in South-East Asia, our understanding of the genetic determinants of artemisinin resistance and our ability to sequence and map the spread of resistance are significantly greater. With this greater insight comes the ability to map both the emergence and spread of ART-R in Africa, but equally importantly the ability to design interventions and leverage innovative tools to slow the spread of resistance. This symposium will explore the current state of ART-R in Africa, the specific challenges faced by hotspot countries, the use of mathematical modelling and the broader implications for malaria control efforts. The session will begin with an overview of the current distribution of ART-R in Africa, highlighting the regions most affected and the molecular markers that signal the presence of resistance. Country-specific insights will shed light on the unique challenges and developments in Ethiopia, Uganda, and other regions, offering a comprehensive picture of the resistance landscape. In addition to surveillance, the symposium will focus on the role of mathematical modelling in guiding response strategies. By combining genomic data with control program expertise, the

modelling efforts aim to identify effective drug strategies and policies to slow the spread of resistance. Innovative tools, such as novel point-of-care diagnostics, will be discussed for their potential to extend the useful lifespan of antimalarial drugs. The symposium will conclude with a dynamic panel discussion and a closing call to action, where experts will discuss the emerging risks, impacts, and mitigation strategies for ART-R in Africa. The panel will also explore how genomic surveillance data can be used by National Malaria Control Programs (NMCPs) and other governmental organizations to inform decision-making and policy implementation. #Genomics #Modeling #PopulationSurveillance #Resistance #Evolution

#### CHAIR

Issiaka Soulama  
*Institut de Recherche en Sciences de la Sante, Ouagadougou, Burkina Faso*

Oliver J. Watson  
*Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom*

#### 5:15 p.m. INTRODUCTION

#### 5:25 p.m. CURRENT UNDERSTANDING OF ARTEMISININ RESISTANCE (ART-R) IN AFRICA

Jeff Bailey  
*Brown University, Providence, RI, United States*

#### 5:30 p.m. IMPACT OF HRP2/3 DELETION AND ANOPHELES STEPHENSI ON ART-R IN ETHIOPIA

Bokretsion Gidey  
*Ethiopian Public Health Institute, Addis Ababa, Ethiopia*

#### 5:35 p.m. EXPLORING PARTNER DRUG RESISTANCE WITH EX VIVO AND IN VITRO STUDIES IN UGANDA

Melissa Conrad  
*University of California, San Francisco, San Francisco, CA, United States*

#### 5:45 p.m. PMI COUNTRY STRATEGIES OF SURVEILLANCE AND TES UNDER PARMA

Awa Deme  
*PARMA, CIGASS, UCAD, Dakar, Senegal*

#### 5:55 p.m. GENOMIC SURVEILLANCE AND EVOLUTION OF ARTEMISININ DRUG RESISTANCE IN WEST AFRICA

Alfred Amambua-Ngwa  
*Medical Research Council Unit The Gambia, Banjul, Gambia*

#### 6 p.m. CONTEXTUALIZING HOW MATHEMATICAL MODELLING CAN GUIDE THE RESPONSE TO RESISTANCE BUT INTEGRATING THE OUTPUTS OF MOLECULAR SURVEILLANCE EFFORTS

Maciej F. Boni  
*Temple University, Philadelphia, PA, United States*

#### 6:05 p.m. MODELLING THE IMPACT OF NOVEL POINT-OF-CARE RESISTANCE DIAGNOSTICS ON THE SPREAD OF ANTIMALARIAL RESISTANCE

Lucy Okell  
*Imperial College London, London, United Kingdom*

#### 6:15 p.m. MAPPING THE RISK AND SPREAD OF ANTIMALARIAL RESISTANCE IN AFRICA

Oliver J. Watson  
*Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom*

#### 6:25 p.m. PANEL: CONTROL PROGRAM STRATEGIES FOR OVERCOMING ANTIMALARIAL DRUG RESISTANCE

Corine K. Karema  
*Infectious Diseases Prevention and Control, University of Global Health Equity, Kigali, Rwanda*

#### 6:35 p.m. PANEL: CONTROL PROGRAM STRATEGIES FOR OVERCOMING ANTIMALARIAL DRUG RESISTANCE

Dyann Wirth  
*Harvard T.H. Chan School of Public Health, Boston, MA, United States*

#### 6:45 p.m. PANEL: CONTROL PROGRAM STRATEGIES FOR OVERCOMING ANTIMALARIAL DRUG RESISTANCE

Didier Menard  
*Institut Pasteur, Paris, France*

#### 6:55 p.m. OPTIMIZING STRATEGIES TO LIMIT OR PREVENT ART-R EMERGENCE AND SPREAD IN AFRICA

Deus Ishengoma  
*National Institute of Medical Research, Dar es Salaam, United Republic of Tanzania*

## Symposium 163

### Outlook for Vaccination and Global Elimination of Leishmaniasis

*Convention Center - Room 395/396 (3rd Floor)*

**Saturday, November 16, 5:15 p.m. - 7 p.m.**

***This session does not carry CME credit.***

Leishmaniasis is a neglected tropical disease caused by infection with *Leishmania* parasites transmitted via the bite of an infected sand fly. The different clinical presentations of leishmaniasis range from cutaneous leishmaniasis (CL), leading to skin ulceration and physical disfigurement, to visceral leishmaniasis (VL), resulting in fatal systemic infection if not treated. Over a billion people worldwide live in areas endemic for leishmaniasis, with over 600,000 cases of CL and 50,000 cases of VL each year. Although progress has been made in reducing VL in South Asia through the VL elimination program, there are numerous new outbreaks worldwide, including Chad, Senegal, Tanzania, Ethiopia, Brazil, Nepal, Somalia, and Sudan. To make progress towards the global

elimination of leishmaniasis, new tools are required, including a safe and effective vaccine and better surveillance. The majority of patients with leishmaniasis develop long-term protective immunity after cure, indicating that development of an effective human vaccine against leishmaniasis is achievable, particularly using a live attenuated vaccine strategy. Because of the sporadic nature of VL outbreaks, we propose that vaccine efficacy studies can be performed using a Controlled Human Infection Model (CHIM) and in field studies using the leishmanin skin test (LST) as a biomarker of protective cellular immunity. Moreover, the LST is needed to enhance surveillance that will better define the epidemiology of VL in countries with ongoing and new outbreaks. This symposium will present the current challenges to VL elimination, the advancement of the LmCen-/- live attenuated vaccine toward human trials, the reintroduction of the LST into the field, and the planned integration of these efforts in the near future to support the elimination of visceral leishmaniasis as a major global public health problem. #EmergingDiseaseThreats #Elimination #InfectiousDisease #Vaccinology #TranslationalScience

#### **CHAIR**

Shinjiro Hamano  
*Department of Parasitology, Institute of Tropical Medicine (NEKKEN), Nagasaki University, Nagasaki, Japan*

Kawsar Talaat  
*John Hopkins University, School of Public Health, Baltimore, MD, United States*

#### **5:15 p.m.** **INTRODUCTION**

#### **5:25 p.m.** **VL ELIMINATION AND THE NEED FOR VACCINES AND BETTER SURVEILLANCE**

Greg Matlashewski  
*McGill University, Montreal, QC, Canada*

#### **5:45 p.m.** **FIELD STUDIES OF LST FOR LEISHMANIA SURVEILLANCE AND VACCINE TRIALS**

Ahmed Musa  
*Institute of Endemic Diseases, University of Khartoum, Khartoum, Sudan*

#### **6:05 p.m.** **GMP PRODUCTION OF THE LMCEN-/- LIVE ATTENUATED VACCINE AND THE LEISHMANIN ANTIGEN**

Sanjay Singh  
*Gennova Biopharmaceutical Ltd., Hinjawadi, Pune, India*

#### **6:25 p.m.** **CONTROLLED HUMAN INFECTION MODELS FOR LEISHMANIASIS**

Shaden Kamhawi  
*National Institutes of Health, National Institute of Allergy and Infectious Diseases, Rockville, MD, United States*

#### **6:45 p.m.** **THE REGULATORY PATHWAY FOR PARASITIC VACCINES**

Peter Weina  
*OVR, CBER, FDA, Silver Spring, MD, United States*

## **Special Session 164**

### **ASTMH Committee on Global Health (ACGH) Networking and Lightning Presentations**

*Convention Center - Room 398 (3rd Floor)*  
**Saturday, November 16, 5 p.m. - 6:30 p.m.**

Please join ACGH members for an early-evening social that brings together members of the subgroup, stimulates opportunities for networking, and gives trainees an opportunity to present their research in 3-minute presentations. Light snacks provided with one free drink for the first 50 ACGH members to arrive. Light snacks provided with one free drink for the first 50 ACGH members to arrive.

#### **CHAIR**

Jennifer A. Downs  
*Weill-Cornell Medical College, New York, NY, United States*

### **Ben Kean Fellowship Reception - By Invitation Only**

*Hilton - Fulton (3rd Floor)*  
**Saturday, November 16, 6 p.m. - 7 p.m.**



## Sunday, November 17

### Registration

Convention Center - Lobby I (1st Floor)  
 Sunday, November 17, 7 a.m. - 10:30 a.m.

### Speaker Ready Room

Convention Center - Room 387 (3rd Floor)  
 Sunday, November 17, 7 a.m. - Noon

### Meeting Sign-Up Room

Hilton – Norwich Room and Windsor Room (3rd Floor)  
 Sunday, November 17, 7 a.m. – 1:15 p.m.

### Nursing Mothers Room

Convention Center – Office I120 and Office J121 (1st Floor)  
 Sunday, November 17, 7 a.m. – 1:15 p.m.

### Prayer Room

Convention Center - Room 342 (3rd Floor)  
 Sunday, November 17, 7 a.m. – 1:15 p.m.



## Symposium 165

### Reaching and Sustaining Elimination: Global Guidance and Regional Best Practices on Malaria Elimination and the Prevention of Re-establishment (PoR)

Convention Center - Hall I-2 (1st Floor)  
 Sunday, November 17, 8 a.m. - 9:45 a.m.

The global fight against malaria has led to marked progress towards the long-term goal of malaria eradication, or complete interruption of malaria transmission throughout the world. To date, the WHO has certified a total of 43 countries and one territory as malaria-free and another three countries have achieved the milestone of zero indigenous cases. Until malaria eradication, resurgence remains a threat post-elimination. Despite the risk, countries that have achieved elimination have largely maintained their malaria-free status – a study in 2010 showed that 50 of the 99 historical malaria elimination programs that successfully achieved malaria elimination, only four had experienced resurgence and two of these four were able to eliminate malaria once again. A key component in this success has been strong prevention of re-establishment (POR) programs which are not only a requirement for WHO malaria-free certification but also a critical prerequisite to sustaining subnational and national elimination, and eventually achieving malaria eradication. The Greater Mekong Sub-region (GMS) in Southeast Asia has achieved impressive progress towards malaria elimination over the last decade with cases declining by 70% since 2013. In 2023, Cambodia and Lao PDR reached historical low level of malaria transmission in each

country, reporting 1,384, and 805 cases, respectively. As these countries near elimination, planning for POR has begun to prepare for WHO malaria-free certification and to sustain gains made over the last decade. On the other hand, Thailand, which was targeted by WHO as one of the countries for elimination by 2025 has seen cases increase sharply over the past two years, largely in areas on the border with Myanmar. This increase has stress tested the program’s roll out of their POR guidelines and despite the setbacks, has generated several key lessons learned for POR. This symposium will convene representatives from the WHO and three national malaria control programs (NMCPs) in the GMS to share updated global guidelines and recent regional progress on POR. To start, the WHO Global Malaria Program (GMP) will introduce the latest global POR guidelines and their relevance to country elimination programs and malaria-free certification. Cambodia will present their process for developing their newly created POR guidelines. Lao PDR will then share their experience responding to a malaria outbreak in elimination area in 2023. To conclude, Thailand will discuss the challenges they have faced as a leader in the region on designing and implementing POR in the context of the recent rise in cases on the border. #Elimination #Epidemiology #InfectiousDisease

#### CHAIR

Elkhan Gasimov  
 World Health Organization, Geneva, Switzerland

Yang Hu  
 Clinton Health Access Initiative, Phnom Penh, Cambodia

#### 8 a.m. INTRODUCTION

#### 8:10 a.m. NEW WHO GLOBAL PREVENTION OF RE-ESTABLISHMENT (POR) GUIDELINES

Elkhan Gasimov  
 World Health Organization, Geneva, Switzerland

#### 8:30 a.m. CAMBODIA: LOCALIZING GLOBAL GUIDANCE TO COUNTRY CONTEXT

Siv Sovannaroth  
 National Center for Parasitology, Entomology, and Malaria Control, Phnom Penh, Cambodia

#### 8:50 a.m. THAILAND: LESSONS LEARNED FROM SUBNATIONAL POR IMPLEMENTATION

Rungrawee Tipmontree  
 Division of Vector Borne Diseases, DDC, MoPH, Thailand, Bangkok, Thailand

#### 9:10 a.m. LAO PDR: RESPONDING TO OUTBREAKS IN ELIMINATION AREAS

Vonethalom Thongpaseuth  
 Center of Malariaology, Parasitology and Entomology, Laos, Vientiane, Lao People's Democratic Republic

## Scientific Session 166

### Bacteriology: Other Enteric Infections

Convention Center - Room 343/344 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

#InfectiousDisease #Diagnostics #Therapeutics  
#ClinicalResearch #Epidemiology

#### CHAIR

Jackie Knee

London School of Hygiene & Tropical Medicine, London, United Kingdom

Stuart Torres Ayala

Universidad San Francisco de Quito, Quito, Ecuador

8 a.m.

8371

#### EVALUATION OF *IN SILICO* SHIGELLA SEROTYPING TOOLS USING A GLOBAL SHIGELLA COLLECTION

Xiaoliang Ba, Charlotte E. Chong, Fahad Khokhar, Mark A. Holmes, Kate S. Baker  
University of Cambridge, Cambridge, United Kingdom

8:15 a.m.

8372

#### IDENTIFYING OPTIMAL ENDPOINT DEFINITIONS TO MINIMIZE OUTCOME MISCLASSIFICATION IN UPCOMING SHIGELLA VACCINE TRIALS

Maria Garcia Quesada<sup>1</sup>, Benjamin A. Lopman<sup>1</sup>, Patricia B. Pavlinac<sup>2</sup>, James A. Platts-Mills<sup>3</sup>, Lance A. Waller<sup>1</sup>, Elizabeth T. Rogawski McQuade<sup>1</sup>

<sup>1</sup>Emory Rollins School of Public Health, Atlanta, GA, United States, <sup>2</sup>University of Washington, Seattle, WA, United States, <sup>3</sup>University of Virginia, Charlottesville, VA, United States

8:30 a.m.

8373

#### MULTIPLEX PCR DETECTION OF ENTERIC PATHOGENS IN A COMMUNITY-BASED BIRTH COHORT IN ECUADOR: A COMPARISON OF XTAG-GPP AND TAQMAN ARRAY CARD ASSAYS

Stuart Torres Ayala<sup>1</sup>, Lesly Simbaña Vivanco<sup>1</sup>, Nikolina Eve Walas<sup>2</sup>, Kelsey Jesser<sup>3</sup>, Nicolette A. Zhou<sup>3</sup>, Christine S. Fagnant-Sperati<sup>3</sup>, Hadley Burroughs<sup>4</sup>, Gwenyth O. Lee<sup>5</sup>, Joseph N.S. Eisenberg<sup>6</sup>, Karen Levy<sup>3</sup>, Gabriel Trueba<sup>1</sup>, Benjamin F. Arnold<sup>4</sup>

<sup>1</sup>Microbiology Institute, Universidad San Francisco de Quito, Quito, Ecuador, <sup>2</sup>Department of Environmental Health, School of Public Health, University of California Berkeley, Berkeley, CA, United States, <sup>3</sup>Department of Environmental & Occupational Health Sciences, University of Washington, Seattle, WA, United States, <sup>4</sup>Francis I. Proctor Foundation, University of California San Francisco, San Francisco, CA, United States, <sup>5</sup>Rutgers Global Health Institute, Rutgers, the State University of New Jersey, New Brunswick, NJ, United States, <sup>6</sup>Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, MI, United States

8:45 a.m.

8374

#### OPTIMAL AZITHROMYCIN TREATMENT RULES FOR CHILDREN WITH WATERY DIARRHEA IN THE ANTIBIOTICS FOR CHILDREN WITH SEVERE DIARRHEA (ABCD) TRIAL

Sara S. Kim<sup>1</sup>, Allison Codi<sup>2</sup>, James Platts-Mills<sup>3</sup>, Patricia B. Pavlinac<sup>4</sup>, Karim Manji<sup>5</sup>, Christopher R. Sudfeld<sup>6</sup>, Queen Dube<sup>7</sup>, Naor Bar-Zeev<sup>8</sup>, Karen Kotloff<sup>9</sup>, Samba O. Sow<sup>10</sup>, Sunil Sazawal<sup>11</sup>, Benson O. Singa<sup>12</sup>, Farah Qamar<sup>13</sup>, Judd Walson<sup>4</sup>, Ayesha De Costa<sup>14</sup>, David Benkeser<sup>2</sup>, Elizabeth T. Rogawski McQuade<sup>1</sup>

<sup>1</sup>Department of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, GA, United States, <sup>2</sup>Department of Biostatistics, Rollins School of Public Health, Emory University, Atlanta, GA, United States, <sup>3</sup>Division of Infectious Diseases and International Health, Department of Medicine, University of Virginia, Charlottesville, VA, United States, <sup>4</sup>Department of Global Health, Department of Epidemiology, University of Washington,

Seattle, WA, United States, <sup>5</sup>Department of Pediatrics and Child Health, Muhimbili University of Health and Allied Sciences, Dar es Salaam, United Republic of Tanzania, <sup>6</sup>Department of Global Health and Population, Harvard T.H. Chan School of Public Health, Boston, MA, United States, <sup>7</sup>Department of Pediatrics, Queen Elizabeth Central Hospital, Blantyre, Malawi, <sup>8</sup>International Vaccine Access Center, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>9</sup>Department of Pediatrics, Department of Medicine, Center for Vaccine Development and Global Health, University of Maryland School of Medicine, Baltimore, MD, United States, <sup>10</sup>Centre pour le Développement des Vaccins, Bamako, Mali, <sup>11</sup>Center for Public Health Kinetics, New Delhi, India, <sup>12</sup>Kenya Medical Research Institute, Nairobi, Kenya, <sup>13</sup>Department of Pediatrics and Child Health, Aga Khan University, Karachi, Pakistan, <sup>14</sup>Department of Maternal, Child, and Adolescent Health and Aging, World Health Organization, Geneva, Switzerland

9 a.m.

8375

#### ENTERIC PATHOGEN DETECTION AMONG CHILDREN DISCHARGED FROM OUTPATIENT TREATMENT FOR SEVERE ACUTE MALNUTRITION AND ASSOCIATIONS WITH SUBSEQUENT RELAPSE IN SOUTH SUDAN

Jackie Knee<sup>1</sup>, Lauren D'Mello-Guyett<sup>1</sup>, Lynn Grignard<sup>1</sup>, Alesha Myers<sup>1</sup>, Sarah King<sup>2</sup>, John Agong<sup>3</sup>, Lino Deng<sup>3</sup>, Mesfin Gose<sup>3</sup>, Jackson Lwate Hasan<sup>3</sup>, Nancy Grace Lamaka<sup>3</sup>, Anastasia Marshak<sup>4</sup>, Dimple Save<sup>3</sup>, Indi Trehan<sup>5</sup>, Khamisa Ayoub<sup>6</sup>, Heather Stobaugh<sup>2</sup>, Oliver Cumming<sup>1</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Action Against Hunger USA, New York, NY, United States, <sup>3</sup>Action Against Hunger South Sudan, Juba, South Sudan, <sup>4</sup>Tufts University, Boston, MA, United States, <sup>5</sup>University of Washington, Seattle, WA, United States, <sup>6</sup>Ministry of Health for the Republic of South Sudan, Juba, South Sudan

9:15 a.m.

8376

#### HIGH LEVELS OF GUT BIFIDOBACTERIUM ASSOCIATED WITH INTESTINAL INFLAMMATION AND FECAL METABOLITES IN CHILDREN IN RURAL BANGLADESH

Jessica A. Grembi<sup>1</sup>, Elizabeth Costello<sup>1</sup>, Brian C. DeFelice<sup>2</sup>, Anna Robaczewska<sup>1</sup>, Audrie Lin<sup>3</sup>, Md. Ziaur Rahman<sup>3</sup>, Shahjahan Ali<sup>4</sup>, Md. Zahir Hussain<sup>5</sup>, Rashidul Haque<sup>6</sup>, Mahbubur Rahman<sup>6</sup>, Leanne Unicomb<sup>6</sup>, Stephen Luby<sup>1</sup>, Susan P. Holmes<sup>1</sup>, David Relman<sup>1</sup>

<sup>1</sup>Stanford University, Stanford, CA, United States, <sup>2</sup>Chan Zuckerberg BioHub, San Francisco, CA, United States, <sup>3</sup>University of California, Santa Cruz, Santa Cruz, CA, United States, <sup>4</sup>University of Colorado, Denver, CO, United States, <sup>5</sup>University of Pittsburgh, Pittsburgh, PA, United States, <sup>6</sup>International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

9:30 a.m.

8377

#### NEONATAL ACQUISITION OF ESBL-PRODUCING ENTEROBACTERIALES IN MADAGASCAR AND CAMBODIA

Anne-Lise Beaumont<sup>1</sup>, Agathe de Lauzanne<sup>2</sup>, Mamitiana Alain Noah Rabenandrasana<sup>3</sup>, Norohasina Fanja Randriamanga<sup>3</sup>, Sandrine Bernabeu<sup>4</sup>, Alexis Criscuolo<sup>5</sup>, Perlinot Herindrainy<sup>3</sup>, Didier Guillemot<sup>1</sup>, Jean-Marc Collard<sup>3</sup>, Long Pring<sup>2</sup>, Laurence Borand<sup>2</sup>, Elsa Kermovant-Duchemin<sup>6</sup>, Muriel Vray<sup>1</sup>, Tania Crucitti<sup>3</sup>, Bich-Tram Huynh<sup>1</sup>

<sup>1</sup>Institut Pasteur, Université de Versailles-Saint Quentin, INSERM, Paris, France, <sup>2</sup>Institut Pasteur du Cambodge, Phnom Penh, Cambodia, Phnom Penh, Cambodia, <sup>3</sup>Institut Pasteur de Madagascar, Antananarivo, Madagascar, <sup>4</sup>Assistance Publique - Hôpitaux de Paris, Le Kremlin-Bicêtre, France, Paris, France, <sup>5</sup>Institut Pasteur, Paris, France, <sup>6</sup>Assistance Publique - Hôpitaux de Paris, Hôpital Necker-Enfants malades, Paris, France, <sup>7</sup>Institut Pasteur du Sénégal, Dakar, Senegal



## Symposium 167

### Contemporary Ethical Issues in Tropical Medicine: Content for Research Training from Peru and Mozambique

Convention Center - Room 345 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

Successful biomedical research and international collaboration require strong and well-staffed research support systems and an institutional infrastructure grounded in ethical best practices. While the research environment has matured significantly in low- and middle-income countries (LMICs) like Peru and Mozambique, research ethics training and oversight capacity still has room for improvement. Efforts are underway in many LMICs to close recognized gaps and reinforce sustainable systems that ensure locally led research ethics review as well as forums for LMICs to contribute to global ethical discourse. Investigators and research institutions in LMICs confront many of the same challenging ethical issues faced in high-resource settings, and face similar needs for education in research ethics education. These challenges include assuring research integrity in publications, obtaining meaningful informed consent in contexts of imbalanced power dynamics, and equitable conduct of clinical trials. Recognizing the need to address these challenges, LMIC-based educational programs, such as the NIH Fogarty International Center's International Research Ethics Education and Curriculum Development R25 program, have provided opportunities to reinforce research ethics education and expertise in LMIC institutions. In this symposium, faculty involved in the design and implementation of R25 programs in Mozambique and Peru will share examples of challenges they have faced in research ethics, insights on stakeholder's perceptions of needed research ethics training, and comments about both the benefits and limitations of research ethics education programs in LMIC settings.

#ClinicalResearch #FieldStudies #SocialScience

#### CHAIR

Richard A. Oberhelman

*Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States*

Theresa Ochoa

*Instituto de Medicina Tropical Alexander von Humboldt; Universidad Peruana Cayetano Heredia, Lima, Peru*

#### 8 a.m.

##### INTRODUCTION

#### 8:10 a.m.

### LESSONS FROM THE COVID-19 PANDEMIC AND STAKEHOLDER'S PERCEPTIONS OF RESEARCH ETHICS TRAINING NEEDS IN PERU

Cynthia S. Hurtado

*Universidad Peruana Cayetano Heredia, Lima, Peru*

#### 8:35 a.m.

### THE PAPER TRAIL: NAVIGATING THE COMPLEX LANDSCAPE OF AUTHORSHIP AND PAPER MILLS IN GLOBAL HEALTH

Valerie Paz-Soldan

*Tulane School of Public Health and Tropical Medicine—Health Office for Latin America, Lima, Peru*

#### 8:50 a.m.

### ETHICAL LESSONS LEARNED DURING THE COVID-19 PANDEMIC IN MOZAMBIQUE

Esperança Sevene

*University Eduardo Mondlane, Maputo, Mozambique*

#### 9:05 a.m.

### VACCINE INDUCED SEROPOSITIVITY FOLLOWING HIV VACCINE STUDIES IN MOZAMBIQUE. IMPLICATIONS FOR INFORMED CONSENT IN A HIGH HIV BURDEN COUNTRY

D. Troy Moon

*Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States*

#### 9:20 a.m.

### THE NIH FOGARTY INTERNATIONAL CENTER'S R25 PROGRAM IN INTERNATIONAL RESEARCH ETHICS EDUCATION AND CURRICULAR DEVELOPMENT: GOALS AND LESSONS

Elizabeth Heitman

*University of Texas Southwestern Medical Center, Dallas, TX, United States*

## Scientific Session 168

### Kinetoplastida and Other Opportunistic and Anaerobic Protozoa: Genomics, Proteomics and Metabolomics, Molecular Therapeutic Targets, Treatment, Drug Delivery, Drug Repurposing and Drug Discovery

Convention Center - Room 352 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

*This session does not carry CME credit.*

#InfectiousDisease #Therapeutics #FieldStudies

#### CHAIR

Byron Arana

*Drugs for Neglected Diseases Initiative, Geneva, Switzerland*

Louisa Messenger

*University of Nevada, Las Vegas, Las Vegas, NV*

#### 8 a.m.

### 8378

### EFFICACY AND SAFETY OF THERMOTHERAPY IN COMBINATION WITH MILTEFOSINE IN COMPARISON TO MILTEFOSINE MONOTHERAPY FOR THE TREATMENT OF CUTANEOUS LEISHMANIASIS IN THE AMERICAS: A PHASE III, OPEN LABEL, MULTICENTER, RANDOMIZED TRIAL

Joelle Rode<sup>1</sup>, Juan Pascalle<sup>2</sup>, Alejandro Llanos-Cuentas<sup>3</sup>, Marcia Hueb<sup>4</sup>, Jaime Soto<sup>5</sup>, Glaucia Cota<sup>6</sup>, Paulo Machado<sup>7</sup>, Marina Boni<sup>1</sup>, Bethania Blum<sup>1</sup>, **Byron Arana**<sup>8</sup>

<sup>1</sup>Drugs for Neglected Diseases Initiative, Rio de Janeiro, Brazil, <sup>2</sup>Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama, Panama, <sup>3</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>4</sup>Julio Muller University Hospital, Cuiaba, Brazil, <sup>5</sup>Fundación Nacional de Dermatología, Santa Cruz de la Sierra, Plurinational State of Bolivia, <sup>6</sup>Instituto René Rachou, Belo Horizonte, Brazil, <sup>7</sup>Federal University of Bahia, Salvador Bahia, Brazil, <sup>8</sup>Drugs for Neglected Diseases Initiative, Geneva, Switzerland

8:15 a.m.

8379

**FIRST-IN-HUMAN, RANDOMIZED, DOUBLE BLIND CLINICAL TRIAL OF LXE408 FOR KINETOPLASTID DISEASES**

**Natasha Hochberg**<sup>1</sup>, Li Ruobing<sup>2</sup>, Amanda Nguyen<sup>1</sup>, Christopher Breen<sup>3</sup>, Jean Lecot<sup>4</sup>, Andrea de Soyers<sup>5</sup>, Linda Armstrong<sup>3</sup>, Thierry Diagana<sup>6</sup>, Peter Pertel<sup>1</sup>, Megan Barton<sup>1</sup>, Florencia Segal<sup>1</sup>, Srinivasa Rao<sup>6</sup>

<sup>1</sup>Novartis Global Health, BioMedical Research, Cambridge, MA, United States, <sup>2</sup>Novartis Global Health, BioMedical Research, Shanghai, China, <sup>3</sup>Novartis Global Health, BioMedical Research, East Hannover, NJ, United States, <sup>4</sup>Novartis Global Health, Analytics-Global Medical Affairs, Basel, Switzerland, <sup>5</sup>Novartis Global Health, BioMedical Research, Basel, Switzerland, <sup>6</sup>Novartis Global Health, BioMedical Research, Emeryville, CA, United States

8:30 a.m.

8380

**TOPICAL APPLICATION OF AC2-26, AN ANNEXIN A1 PEPTIDOMIMETIC, REDUCES LESIONS AND IMPROVES IMMUNE RESPONSES IN A MURINE MODEL OF LEISHMANIA AMAZONENSIS INFECTION**

**Liliane M. dos Santos**, Tiago Nery, Gisele Goulart, Ana Paula Fernandes  
Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

8:45 a.m.

8381

**SEVERE ANAEMIA AND HAEMOGLOBIN TRAJECTORY FOLLOWING TREATMENT OF VISCERAL LEISHMANIASIS: AN INDIVIDUAL PATIENT DATA META-ANALYSIS USING THE INFECTIOUS DISEASES DATA OBSERVATORY DATA PLATFORM**

**Prabin Dahal**<sup>1</sup>, Abdalla Munir<sup>2</sup>, Rishikesh Kumar<sup>3</sup>, Sauman Singh-Phulgenda<sup>1</sup>, Niyamat Ali Siddiqui<sup>3</sup>, James Wilson<sup>1</sup>, Gemma Buck<sup>1</sup>, Caitlin Naylor<sup>1</sup>, Matthew Brack<sup>1</sup>, Manju Rahi<sup>4</sup>, Paritosh Malaviya<sup>5</sup>, Monique Wasunna<sup>6</sup>, Francois Chappuis<sup>7</sup>, Koert Ritmeijer<sup>8</sup>, Carlos Costa<sup>9</sup>, Gustavo Romero<sup>10</sup>, Vassiliki Syriopoulou<sup>11</sup>, Fabiana Alves<sup>12</sup>, Kasia Stepniewska<sup>1</sup>, Krishna Pandey<sup>3</sup>, Ahmed Musa<sup>13</sup>, Philippe J. Guerin<sup>1</sup>

<sup>1</sup>University of Oxford, Oxford, United Kingdom, <sup>2</sup>Infectious Diseases Data Observatory (IDDO), Oxford, United Kingdom, <sup>3</sup>ICMR - Rajendra Memorial Research Institute of Medical Sciences (RMRIMS), Patna, India, <sup>4</sup>Indian Council of Medical Research (ICMR), New Delhi, India, <sup>5</sup>Infectious Disease Research Laboratory, Department of Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India, <sup>6</sup>Drugs for Neglected Diseases initiative, Nairobi, Kenya, <sup>7</sup>Division of Tropical and Humanitarian Medicine, Geneva University Hospitals, Geneva, Switzerland, <sup>8</sup>Médecins Sans Frontières, Amsterdam, Netherlands, <sup>9</sup>Department of Community Medicine, Federal University of Piauí, Piauí, Brazil, <sup>10</sup>Center for Tropical Medicine, University of Brasilia, Brasilia, Brazil, <sup>11</sup>Infectious Diseases and Chemotherapy Research Laboratory, Medical School, National and Kapodistrian University of Athens, Athens, Greece, <sup>12</sup>Drugs for Neglected Diseases initiative, Geneva, Switzerland, <sup>13</sup>Institute of Endemic Diseases, University of Khartoum, Khartoum, Sudan

9 a.m.

8382

**EFFICACY OF SHORT-COURSE TREATMENT FOR PREVENTION OF CONGENITAL TRANSMISSION OF CHAGAS DISEASE: A RETROSPECTIVE COHORT STUDY**

Moscatelli Guillermo, Samanta Moroni, Juan Carlos Ramirez, Belen Warszatska, Fernanda Lascano, Nicolas Gonzalez, Andres Rabinovich, **Jaime ALTCHER**  
Hospital de Niños R. Gutierrez, Buenos Aires, Argentina

9:15 a.m.

8383

**IMPACT OF ASCARIDOLE ON METABOLIC BIOENERGETICS IN LEISHMANIASIS**

**Deblina Sarkar**, Sritama De Sarkar, Deep Goswami, Chaitali Karmakar, Prof. Mitali Chatterjee  
IPGME&R, Kolkata, Kolkata, India

9:30 a.m.

8384

**INVOLVING PATIENTS IN DRUG DEVELOPMENT FOR NEGLECTED TROPICAL DISEASES (NTDS): A QUALITATIVE STUDY EXPLORING AND INCORPORATING PREFERENCES OF PATIENTS WITH CUTANEOUS LEISHMANIASIS INTO TARGET PRODUCT PROFILE DEVELOPMENT**

**Maria del Mar Castro**<sup>1</sup>, **Astrid C. Erber**<sup>2</sup>, Byron Arana<sup>3</sup>, Glauca Cota<sup>4</sup>, Claudia Denkinge<sup>5</sup>, Nicole Harrison<sup>6</sup>, Julia Kutyl<sup>6</sup>, Liliana López-Carvajal<sup>7</sup>, Emma Plugge<sup>8</sup>, Julia Walochnik<sup>9</sup>, Piero Olliaro<sup>10</sup>

<sup>1</sup>Centro Internacional de Entrenamiento de Investigaciones Médicas (CIDEIM), Cali, Colombia, <sup>2</sup>Department of Epidemiology, Center for Public Health, Medical University of Vienna, Vienna, Austria, <sup>3</sup>Drugs for Neglected Diseases initiative (DNDi), Geneva, Switzerland, <sup>4</sup>Instituto René Rachou (IRR), Fundação Oswaldo Cruz (FIOCRUZ), Minas Gerais, Brazil, <sup>5</sup>Center of Infectious Diseases, Heidelberg University Hospital, Heidelberg, Germany, <sup>6</sup>Division of Infectious Diseases and Tropical Medicine, Department of Medicine I, Medical University of Vienna, Vienna, Austria, <sup>7</sup>Programa de Estudio y Control de Enfermedades Tropicales (PECET), Universidad de Antioquia, Medellín, Colombia, <sup>8</sup>Primary Care, Population Sciences and Medical Education, University of Southampton, Southampton, United Kingdom, <sup>9</sup>Institute of Specific Prophylaxis and Tropical Medicine, Center for Pathophysiology, Infectiology and Immunology, Medical University of Vienna, Vienna, Austria, <sup>10</sup>International Severe Acute Respiratory and Emerging Infection Consortium, Pandemic Sciences Institute, University of Oxford, Oxford, United Kingdom

**Symposium 169**

**Novel Approaches for the Radical Cure of Vivax Malaria: High Dose Short Course Primaquine and Tafenoquine**

Convention Center - Room 353 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

*Plasmodium vivax* causes between 4 and 11 million cases of malaria annually and represents an increasing proportion of malaria in > 40 countries co-endemic for *P. falciparum* and *P. vivax*. The radical cure of *P. vivax* requires treatment of both the blood stage, which causes acute symptoms, and the dormant liver stage (hypnozoites), which reactivate and cause relapses weeks to months later. Relapsing vivax malaria results in a cumulative risk of anaemia and is associated with direct and indirect morbidity and the potential for further transmission. For the last 60-70 years, *P. vivax* radical cure has relied on chloroquine (for the blood stage) and primaquine (for the liver stage). Primaquine has been used at a low total dose (3.5mg/kg) over 14-days to reduce the risk of drug induced haemolysis in patients who are G6PD deficient; this regimens effectiveness is confounded by poor adherence. Higher total doses of primaquine have been shown to be more efficacious. The therapeutic options for *P. vivax* are rapidly changing with the availability of tafenoquine, shorter course (higher daily dose) primaquine regimens, and the development of point-of-care tests for G6PD activity. Shorter course primaquine regimens are hypothesized to improve adherence, but data to support this has been lacking. Our pragmatic randomized controlled trial (960 patients, 4 countries) provides crucial data on the effectiveness and safety of high dose short course primaquine when unsupervised and compares this to the low dose 14-day treatment regimen. We will also present comparative effectiveness and safety data for single dose tafenoquine. We will also present highly anticipated data on the efficacy of tafenoquine with two different Artemisinin Combination Therapies (ACTs). Previous

Sunday  
November 17

studies of tafenoquine and ACTs have shown poor antirelapse efficacy which has been attributed to a drug-drug interaction, but alternative explanations have also been proposed. Data presented will provide important information on the comparative efficacy of both primaquine and tafenoquine when administered with ACT (DHA-Piperaquine or pyronaridine-artesunate) versus chloroquine. We will provide insights from qualitative research in Cambodia and Ethiopia to inform the design of effective, feasible and acceptable implementation strategies for new radical cure treatment strategies, including G6PD testing and early clinical review. New interventions must be cost-effective, both for local health services and for the global effort towards malaria elimination. In the final talk a cost-effectiveness analysis will be presented. The talks represent as yet unpublished data and will allow time for a panel discussion of the proposed strategies and the challenges of delivering radical cure. #ClinicalResearch, #Elimination #InfectiousDisease #Therapeutics #TranslationalScience

#### CHAIR

Kamala Thriemer  
Menzies School of Health Research, Darwin, Australia

Lek Dysoley  
National Center for Parasitology, Entomology and Malaria Control, Phnom Phen, Cambodia

#### 8 a.m. INTRODUCTION

#### 8:10 a.m. EFFECTIVENESS OF UNSUPERVISED HIGH DOSE SHORT COURSE PRIMAQUINE AND TAFENOQUINE

Tamiru T. Degaga  
Arba Minch University, Arba Minch, Ethiopia

#### 8:20 a.m. SAFETY OF UNSUPERVISED HIGH DOSE SHORT COURSE PRIMAQUINE AND TAFENOQUINE

Najia Ghanchi  
Aga Khan University, Karachi, Pakistan

#### 8:30 a.m. TAFENOQUINE AND ACTS – EVIDENCE FROM INDONESIA AND CAMBODIA

Ayodhia Pitaloka Pasaribu  
Universitas Sumatera Utara, Medan, Indonesia

#### 8:40 a.m. INFORMING IMPLEMENTATION STRATEGIES FOR THE SAFE PROVISION OF HIGH DOSE SHORT COURSE PRIMAQUINE AND TAFENOQUINE

Sarah Cassidy-Seyoum  
Menzies School of Health Research, Darwin, Australia

#### 8:55 a.m. THE COST-EFFECTIVENESS OF HIGH DOSE SHORT COURSE PRIMAQUINE AND TAFENOQUINE

Angela A. Devine  
University of Melbourne, Melbourne, Australia

## Scientific Session 170

### American Committee of Molecular Cellular and Immunoparasitology (ACMCIP): Parasite Vaccine Development

Convention Center - Room 354/355 (3rd Floor)  
Sunday, November 17, 8 a.m. - 9:45 a.m.

Supported with funding from the Burroughs Wellcome Fund

#ClinicalResearch #Vaccinology #TranslationalScience  
#Immunology #InfectiousDisease

#### CHAIR

Nathan Schmidt  
Indiana University School of Medicine, Indianapolis, IN, United States

Thalia Pacheco-Fernandez  
Food and Drug Administration, Silver Spring, MD, United States

#### 8 a.m. 8385

#### DEVELOPMENT OF NOVEL HOOKWORM MRNA VACCINE CANDIDATES BY ALTERING THE INTRACELLULAR TRAFFICKING OF *NECATOR AMERICANUS* GST-1 ANTIGEN

Athos Silva de Oliveira<sup>1</sup>, Leroy Versteeg<sup>1</sup>, Neima Briggs<sup>2</sup>, Rakesh Adhikari<sup>1</sup>, Maria Jose Villar<sup>1</sup>, Peter Hotez<sup>1</sup>, Maria Elena Bottazzi<sup>1</sup>, Jeroen Pollet<sup>1</sup>

<sup>1</sup>Texas Children's Hospital Center for Vaccine Development & Department of Pediatrics, National School of Tropical Medicine, Baylor College of Medicine, Houston, TX, United States, <sup>2</sup>Departments of Immunobiology and Internal Medicine, Yale University, New Haven, CT, United States

(ACMCIP Abstract)

#### 8:15 a.m. 8386

#### CONTROL OF HOOKWORMS USING *BACILLUS THURINGIENSIS* CRY PROTEINS AND VACCINES

Qian Ding<sup>1</sup>, Hanchen Li<sup>1</sup>, Kelly A. Flanagan<sup>1</sup>, Duy Hoang<sup>1</sup>, Nicholas R. Cazeault<sup>1</sup>, Florentina Rus<sup>1</sup>, Ernesto Soto<sup>1</sup>, Erich M. Schwartz<sup>2</sup>, Jane Homan<sup>3</sup>, Wenbin Tuo<sup>4</sup>, Gary R. Ostroff<sup>1</sup>, Raffi V. Aroian<sup>1</sup>

<sup>1</sup>Umass Chan Medical School, Worcester, MA, United States, <sup>2</sup>Cornell University, Ithaca, NY, United States, <sup>3</sup>ioGenetics LLC, Madison, WI, United States, <sup>4</sup>United States Department of Agriculture, Beltsville, MD, United States

(ACMCIP Abstract)

#### 8:30 a.m. 8387

#### *OPISTHORCHIS VIVERRINI* ANTI-CANCER VACCINE TARGETING THE LIVER FLUKE HOST-PARASITE INTERFACE

Michael J. Smout<sup>1</sup>, Sujitra Chaipayadet<sup>2</sup>, Wannaporn Ittiprasert<sup>3</sup>, Sutas Suttiaprapa<sup>2</sup>, Paul J. Brindley<sup>3</sup>, Thewarach Laha<sup>2</sup>, Alex Loukas<sup>1</sup>

<sup>1</sup>James Cook University, Cairns, Australia, <sup>2</sup>Khon Kaen University, Khon Kaen, Thailand, <sup>3</sup>George Washington University, Washington DC, DC, United States

(ACMCIP Abstract)

#### 8:45 a.m. 8388

#### A LIVE-ATTENUATED *LEISHMANIA* VACCINE SHAPES THE CELLULAR RESPONSE IN THE BONE MARROW

Thalia Pacheco-Fernandez, Nazli Azodi, Spyros Karaiskos, Laura Klenow, Hannah Markle, Luis DaSilva-Pereira, Luis Santana-Quintero, Alexander Murray, Hira Nakhasi, Sreenivas Gannavaram

Food and Drug Administration, Silver Spring, MD, United States

(ACMCIP Abstract)

9 a.m.

8389

**SEROLOGICAL, CELLULAR, AND BLOOD TRANSCRIPTOMIC RESPONSES TO A RECOMBINANT ONCHOCERCIASIS VACCINE IN CATTLE NATURALLY EXPOSED TO ONCHOCERCA OCHENGI**

**Ben Makepeace**<sup>1</sup>, John Graham-Brown<sup>1</sup>, Tessa R. Walsh<sup>1</sup>, Lisa Luu<sup>1</sup>, Germanus Soh Bah<sup>2</sup>, Ndoode Herman Okah-Nnane<sup>2</sup>, David D. Ekale<sup>2</sup>, Rene B. Ayiseh<sup>3</sup>, David Abraham<sup>4</sup>, Darrick Carter<sup>5</sup>, Sean Gray<sup>5</sup>, Godwin Nchinda<sup>6</sup>, Vincent Tanya<sup>2</sup>, Sara Lustigman<sup>7</sup>  
<sup>1</sup>University of Liverpool, Liverpool, United Kingdom, <sup>2</sup>L'Institut de Recherche Agricole Pour le Développement, Ngaoundéré, Cameroon, <sup>3</sup>University of Buea, Buea, Cameroon, <sup>4</sup>Thomas Jefferson University, Philadelphia, PA, United States, <sup>5</sup>PAI Life Sciences, Seattle, WA, United States, <sup>6</sup>Centre International de Référence "Chantal Biya", Yaounde, Cameroon, <sup>7</sup>New York Blood Center, New York, NY, United States

9:15 a.m.

8390

**A PHASE I/II STUDY OF THE SAFETY, IMMUNOGENICITY, AND EFFICACY OF SM-TSP-2/ALYDROGEL WITH OR WITHOUT AP 10-701 FOR INTESTINAL SCHISTOSOMIASIS IN HEALTHY UGANDAN ADULTS**

**Chrispus M. Bakunda**<sup>1</sup>, Betty Mwesigwa<sup>1</sup>, Grace Mirembe<sup>1</sup>, Jacqueline Namugabo<sup>1</sup>, Hilda Mutebe<sup>1</sup>, Immaculate Nakabuye<sup>1</sup>, Douglas Makumbi<sup>1</sup>, Amir Wamala<sup>1</sup>, Allan Tindikahwa<sup>1</sup>, Lara Hoeweler<sup>2</sup>, Proscovia Naluyima<sup>1</sup>, Laura Vasquez<sup>2</sup>, Maria Elena Bottazzi<sup>3</sup>, Peter J. Hotez<sup>3</sup>, Elissa Malkin<sup>2</sup>, Jeffrey M. Bethony<sup>2</sup>, David J. Diemert<sup>2</sup>, Hannah Kibuuka<sup>1</sup>  
<sup>1</sup>Makerere University Walter Reed Project, Kampala, Uganda, <sup>2</sup>George Washington University, Washington, DC, United States, <sup>3</sup>Baylor College of Medicine, Houston, TX, United States

(ACMCIP Abstract)

9:30 a.m.

8391

**THE ANTI-CIRCUMSPOROZOITE ANTIBODY RESPONSE OF CHILDREN TO SEASONAL VACCINATION WITH THE RTS,S/AS01<sub>E</sub> MALARIA VACCINE OVER FIVE YEARS OF FOLLOW-UP (4 BOOSTER DOSES)**

**M Sanni Ali**<sup>1</sup>, Lisa Stockdale<sup>2</sup>, Issaka Sagara<sup>3</sup>, Issaka Zongo<sup>4</sup>, Rakiswendé Serge Yerbanga<sup>4</sup>, Almahamoudou Mahamar<sup>3</sup>, Frédéric Nikiéma<sup>4</sup>, Amadou Tapily<sup>3</sup>, Frédéric Sompougou<sup>4</sup>, Modibo Diarra<sup>3</sup>, Duncan Bellamy<sup>2</sup>, Katie Ewer<sup>2</sup>, Charles Zoungrana<sup>4</sup>, Djibrilla Issiaka<sup>3</sup>, Alassane Haro<sup>4</sup>, Koualy Sanogo<sup>3</sup>, Abdoul-Aziz Sienou<sup>4</sup>, Mahamadou Kaya<sup>3</sup>, Seydou Traore<sup>3</sup>, Ismaila Thera<sup>3</sup>, Kalifa Diarra<sup>3</sup>, Amagana Dolo<sup>3</sup>, Paul Snell<sup>1</sup>, Opokua Ofori-Anyinam<sup>5</sup>, Chris Ockenhouse<sup>6</sup>, Cynthia Lee<sup>6</sup>, Halidou Tinto<sup>4</sup>, Abdoulaye Djimde<sup>3</sup>, Jean-Bosco Ouedraogo<sup>4</sup>, Alassane Dicko<sup>3</sup>, Daniel Chandramohan<sup>1</sup>, Brian Greenwood<sup>1</sup>  
<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>Jenner Institute, University of Oxford, Oxford, United Kingdom, <sup>3</sup>The Malaria Research and Training Center, University of Sciences, Techniques and Technologies, Bamako, Mali, <sup>4</sup>Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, <sup>5</sup>GSK, Wavre, Belgium, <sup>6</sup>PATH, Seattle, WA, United States

(ACMCIP Abstract)

**Scientific Session 171**

**Mosquitoes-Biology, Physiology and Immunity**

Convention Center - Room 356 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

#Immunology #HostResponse #ClimateChange

**CHAIR**

Alexandra Francian  
University of New Mexico, Albuquerque, NM, United States

Maria Luisa Simoes  
Institute of Tropical Medicine Antwerp, Antwerp, Belgium

8 a.m.

8392

**EFFECTS OF HUMIDITY AND TEMPERATURE VARIATIONS ON ANOPHELES GENETIC TARGET CANDIDATES FOR MALARIA CONTROL**

Thais Lemos-Silva, **Maria Luisa Simoes**  
Institute of Tropical Medicine Antwerp, Antwerp, Belgium

8:15 a.m.

8393

**TNF SIGNALING ACTIVATES CELLULAR IMMUNITY TO PROMOTE MALARIA PARASITE KILLING IN ANOPHELES GAMBIAE**

George-Rafael Samantsidis, Hyeogsun Kwon, Megan Rogers, Catherine Fonder, **Ryan C. Smith**  
Iowa State University, Ames, IA, United States

8:30 a.m.

8394

**PIXEL INTENSITY OF WING PHOTOS USED TO PREDICT AGE OF ANOPHELES GAMBIAE SENSU LATO CAUGHT DURING THE RIMDAMAL II CLINICAL TRIAL**

**Greg Pugh**<sup>1</sup>, Emmanuel Sougué<sup>2</sup>, Ryan Yoe<sup>1</sup>, Lyndsey I. Gray<sup>1</sup>, Blue Hephaestus<sup>3</sup>, Anthony Somé<sup>2</sup>, A. Fabrice Somé<sup>2</sup>, Bryce Assay<sup>3</sup>, Roch K. Dabiré<sup>2</sup>, Sunil Parikh<sup>4</sup>, Brian D. Foy<sup>1</sup>  
<sup>1</sup>Colorado State University, Fort Collins, CO, United States, <sup>2</sup>Institute de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, <sup>3</sup>Viden Technologies, Laramie, WY, United States, <sup>4</sup>Yale School of Public Health, New Haven, CT, United States

8:45 a.m.

8395

**EXPLOITING MOSQUITO SALIVARY PROTEINS TO DEVELOP VECTOR-TARGETED VACCINES FOR MALARIA AND ARBOVIRUSES**

**Alexandra Francian**<sup>1</sup>, Aidan Leyba<sup>2</sup>, Yewel Flores-Garcia<sup>3</sup>, Robert Taylor<sup>4</sup>, Justin Baca<sup>4</sup>, Pavan Muttli<sup>2</sup>, Fidel Zavala<sup>3</sup>, Bryce Chackerian<sup>1</sup>  
<sup>1</sup>University of New Mexico School of Medicine, Albuquerque, NM, United States, <sup>2</sup>University of New Mexico College of Pharmacy, Albuquerque, NM, United States, <sup>3</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>4</sup>University of New Mexico, Albuquerque, NM, United States

9 a.m.

8396

**PLASMODIUM FALCIPARUM INFECTION IN THE HUMAN HOST AND THE VECTOR INFLUENCE NATURAL ANOPHELINE BITING BEHAVIOR AND PARASITE TRANSMISSION**

**Christine F. Markwalter**<sup>1</sup>, Zena Lapp<sup>1</sup>, Lucy Abel<sup>2</sup>, Emmah Kimachas<sup>2</sup>, Evans Omollo<sup>3</sup>, Elizabeth Freedman<sup>1</sup>, Tabitha Chepkwony<sup>2</sup>, Mark Amunga<sup>2</sup>, Tyler McCormick<sup>4</sup>, Sophie Bérubé<sup>5</sup>, Judith N. Mangeni<sup>6</sup>, Amy Wesolowski<sup>5</sup>, Andrew A. Obala<sup>6</sup>, Steve M. Taylor<sup>1</sup>, Wendy P. O'Meara<sup>1</sup>  
<sup>1</sup>Duke University, Durham, NC, United States, <sup>2</sup>Academic Model Providing Access to Healthcare, Eldoret, Kenya, <sup>3</sup>Duke Global Inc, Nairobi, Kenya, <sup>4</sup>University of Washington, Seattle, WA, United States, <sup>5</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>6</sup>Moi University, Eldoret, Kenya

Sunday  
November 17

9:15 a.m.

8397

### LANDSCAPES OF INFECTION: REDEFINING THERMAL SUITABILITY OF URBAN MALARIA TRANSMISSION BY THE INVASIVE MOSQUITO SPECIES *ANOPHELES STEPHENSI* IN THE CONTEXT OF RELATIVE HUMIDITY

Courtney Murdock<sup>1</sup>, Joel Brown<sup>1</sup>, Britny Johnson<sup>1</sup>, Paul Huxley<sup>2</sup>, Leah Johnson<sup>2</sup>, Brandon Hollingsworth<sup>1</sup>, Michael Wimberly<sup>3</sup>, Mercedes Pascual<sup>4</sup>, Rajendra Baharia<sup>5</sup>, Ajeet Mohanty<sup>6</sup>, Rajesh Sharma<sup>7</sup>, Sachin Sharma<sup>8</sup>, Keshav Vaishnav<sup>9</sup>, Vijay Kohli<sup>7</sup>, Vikas Desai<sup>10</sup>

<sup>1</sup>Cornell University, Ithaca, NY, United States, <sup>2</sup>Virginia Tech, Blacksburg, VA, United States, <sup>3</sup>University of Oklahoma, Norma, OK, United States, <sup>4</sup>New York University, New York City, NY, United States, <sup>5</sup>National Institute for Malaria Research, Nadiad, India, <sup>6</sup>National Institute for Malaria Research, Goa, India, <sup>7</sup>Ahmedabad Municipal Corporation, Ahmedabad, India, <sup>8</sup>Cornell In India & National Institutes for Malaria, Delhi, India, <sup>9</sup>Surat Municipal Corporation, Surat, India, <sup>10</sup>Urban Health And Climate Resilience Centre Of Excellence, Surat, India

9:30 a.m.

8398

### ANGIOGENESIS AND CHRONIC EXPOSURE TO *ANOPHELES* SALIVARY PROTEINS

Olayinka M. Olajiga<sup>1</sup>, Arley Calle<sup>1</sup>, Samuel B. Jameson<sup>1</sup>, Brendan H. Carter<sup>1</sup>, Dawn M. Wesson<sup>1</sup>, Eric Calvo<sup>2</sup>, Jennifer Manuzak<sup>3</sup>, Berlin Londono-Renteria<sup>1</sup>

<sup>1</sup>Department of Tropical Medicine and Infectious Disease, School of Public Health and Tropical Medicine, New Orleans, LA, United States, <sup>2</sup>Laboratory of Malaria and Vector Research National Institutes of Health (NIH/NIAID), Rockville, MD, United States, <sup>3</sup>Department of Microbiology and Immunology, School of Medicine, Tulane University of New Orleans, New Orleans, LA, United States

## Symposium 172

### What's New? Exploring Emerging Technologies and Innovative Strategies in Advancing Skin NTD Integration

Convention Center - Room 357 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

Many of the 21 diseases on the WHO NTD list primarily result in skin disease – including leprosy, cutaneous leishmaniasis, scabies, yaws, Buruli ulcer, and mycetoma among others. These diseases result in considerable suffering, stigma and financial hardship for patients and affected communities. Worldwide, skin diseases are amongst the five largest contributors to disability adjusted life years lost to ill-health. However, despite this considerable burden of disease and the impact of these conditions, there has been relatively little attention paid to skin NTDs in contrast to those NTD primarily controlled via mass drug administration. In June 2022, the WHO released a pivotal guidance, titled “Ending the neglect to attain the Sustainable Development Goals: A strategic framework for integrated control and management of skin-related neglected tropical diseases”. Moving away from traditional disease-specific approaches, it is anticipated that synergies will be identified and integrated building on this shared feature, where possible, to achieve a greater health impact. The symposium is dedicated to exploring the transformative potential of emerging technologies and innovative strategies in addressing the challenges posed by skin NTDs. As individual diseases, they often face unique obstacles, such as a relatively limited patient population and the necessity for resource-intensive and time-consuming individualized treatments, hindering efficient disease control efforts. This has also led to a lack of interests for technological

advancements, and most yet do not have point-of-care diagnostic tools or have relied on the same medications for years. Following the WHO's strategic framework for skin NTD integration, we are currently at an important juncture. The integration approach not only fosters new possibilities and synergies across multiple skin NTDs, but also serves as a catalyst for the development of novel technologies and strategies. Given the daily advancements in technology, it is imperative to extend their application to the field of skin NTDs. Consequently, we can narrow the gaps in diagnostic capabilities, expand access to quality care, and empower frontline health workers with the tools and resources to effectively combat skin NTDs. This symposium will feature presentations by leading researchers, clinicians, and policymakers in the field, addressing advancements in molecular diagnostics, artificial intelligence (AI), teledermatology, and new models of care delivery. Concluding with a call to action, we urge further commitment to innovation for skin NTD control. At the end of the symposium, the audience will be equipped with knowledge on a state-of-the-art update highlighting the progress made in this emerging field. #Diagnostics #ClinicalResearch #FieldStudies #InfectiousDisease #Prevention

#### CHAIR

Rie Yotsu

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Sundeep C. Vedithi

University of Cambridge, Cambridge, United Kingdom

8 a.m.

#### INTRODUCTION

8:10 a.m.

#### ADVANCING POINT OF CARE MOLECULAR DIAGNOSTICS FOR SKIN NEGLECTED TROPICAL DISEASES

Sundeep C. Vedithi

Department of Medicine, University of Cambridge, Cambridge, United Kingdom

8:30 a.m.

#### WHO ARTIFICIAL INTELLIGENCE (AI) PROJECT FOR SKIN NTDS IN KENYA

José Antonio Ruiz-Postigo

World Health Organization (WHO), Geneva, Switzerland

8:50 a.m.

#### BRIDGING GAPS: TELEDERMATOLOGY'S ROLE IN SKIN NTD DIAGNOSIS AND CAPACITY BUILDING IN CÔTE D'IVOIRE

Aubin Koffi Yao

Hope Commission International, Abidjan, Côte D'Ivoire

9:10 a.m.

#### NEW MODELS OF CARE DELIVERY FOR SKIN NTDS IN GHANA AND ETHIOPIA

Michael Marks

London School of Hygiene & Tropical Medicine, London, United Kingdom

9:30 a.m.

#### CALL FOR ACTION FOR ADAPTING EMERGING TECHNOLOGIES FOR SKIN NTD INTEGRATION

Rie Yotsu

Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

## Scientific Session 173

### Viruses – Therapeutic, Antiviral Drugs, and Vaccine Clinical Trials

Convention Center - Room 383/384/385 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

This session does not carry CME credit.

#Therapeutics #Vaccinology

#### CHAIR

Chasity Elizabeth Trammell  
Colorado State University, Fort Collins, CO, United States

Anna P. Durbin  
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

8 a.m.

8399

#### USING ANCESTRAL SEQUENCE RECONSTRUCTION FOR GENERATION OF BROAD-SPECTRUM VACCINE PLATFORMS AGAINST TICK-BORNE FLAVIVIRUSES

Chasity E. Trammell, Brian J. Geiss, Gregory D. Ebel  
Colorado State University, Fort Collins, CO, United States

8:15 a.m.

8400

#### PRECLINICAL DEVELOPMENT OF AN ORALLY AVAILABLE NS4B INHIBITOR FOR YELLOW FEVER

Fuxuan Wang<sup>1</sup>, Sumangala Darsandhari<sup>1</sup>, Biplav Shrestha<sup>1</sup>, Abbie Wight<sup>2</sup>, Justin Julander<sup>3</sup>, Brett Eaton<sup>4</sup>, Michael Murphy<sup>4</sup>, Yu Cong<sup>4</sup>, Manu Anantpadma<sup>4</sup>, Elena Postnikova<sup>4</sup>, Michael Holbrook<sup>4</sup>, Zhengyuan Jiang<sup>1</sup>, Yusheng Wu<sup>1</sup>, David Renner<sup>1</sup>, Jason Clementon<sup>1</sup>, Weihong Zhang<sup>1</sup>, Yanming Du<sup>1</sup>, Ju-Tao Guo<sup>1</sup>, **Jinhong Chang<sup>1</sup>**  
<sup>1</sup>Baruch S. Blumberg Institute, Doylestown, PA, United States, <sup>2</sup>Utah State University, Logan, UT, United States, <sup>3</sup>Utah State University, Logan, UT, United States, <sup>4</sup>NIAID, Fort Detrick, MD, United States

8:30 a.m.

8401

#### B CELL RESPONSES TO A ZIKA PURIFIED INACTIVATED VACCINE ARE SHAPED BY PREVIOUS IMMUNIZATION WITH JAPANESE ENCEPHALITIS AND YELLOW FEVER VACCINES

Samantha Townsley<sup>1</sup>, Vincent Dussupt<sup>1</sup>, Lauren Smith<sup>1</sup>, Rafael De La Barrera<sup>1</sup>, Mélanie Merbah<sup>1</sup>, Bonnie Slike<sup>1</sup>, Yifan Li<sup>1</sup>, Annika Schmid<sup>1</sup>, Hélène Fradin Kirshner<sup>2</sup>, Lauren Yum<sup>1</sup>, Robert Clifford<sup>1</sup>, Letzibeth Mendez-Rivera<sup>1</sup>, Sam Lieberman<sup>1</sup>, Gautam Kundu<sup>1</sup>, Aviva Geretz<sup>1</sup>, Rasmi Thomas<sup>1</sup>, Kevin Wiehe<sup>2</sup>, Morgane Rolland<sup>1</sup>, Gregory Gromowski<sup>1</sup>, Nelson Michael<sup>1</sup>, Natalie Collins<sup>1</sup>, **Shelly Krebs<sup>1</sup>**  
<sup>1</sup>Walter Reed Army Institute of Research, Silver Spring, MD, United States, <sup>2</sup>Human Vaccine Institute, Duke University, Durham, NC, United States

8:45 a.m.

8402

#### DEVELOPMENT OF A CONTROLLED ZIKA HUMAN INFECTION MODEL (CHIM)

Anna P. Durbin<sup>1</sup>, Ruby Pritchett<sup>1</sup>, Rachel Hampton<sup>1</sup>, Beulah Sabundayo<sup>1</sup>, Megan McKnight<sup>1</sup>, Lina Moscarella<sup>1</sup>, Xi Fang<sup>1</sup>, Jeff Mayfield<sup>1</sup>, Helen He<sup>1</sup>, Cendy Alacantara<sup>1</sup>, Will Stone<sup>2</sup>, Elaine Lamirande<sup>2</sup>, Stephen S. Whitehead<sup>2</sup>  
<sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>2</sup>National Institutes of Allergy & Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

9 a.m.

8403

#### IMOJEV LIVE, ATTENUATED CHIMERIC VACCINE AGAINST JAPANESE ENCEPHALITIS: AN UPDATE AFTER 25 YEARS IN USE

Thomas P. Monath<sup>1</sup>, Gray Heppner<sup>1</sup>, Tracy Kemp<sup>1</sup>, Bertrand Lepine<sup>2</sup>, Marc Vouillamoz<sup>2</sup>, Fabrice Baschiera<sup>2</sup>  
<sup>1</sup>Quigley BioPharma LLC, Leominster, MA, United States, <sup>2</sup>Substipharm Biologics SA, Geneva, Switzerland

9:15 a.m.

8404

#### SIMULTANEOUS INHIBITION OF DENGUE VIRUS INFECTION AND NS1-MEDIATED ENDOTHELIAL HYPERPERMEABILITY WITH A NATURAL STEROIDAL SAPOGENIN

E. Vanessa Jimenez Posada, Pedro H. Carneiro, Robert Beatty, Scott B. Biering, Eva Harris  
Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

9:30 a.m.

8405

#### ANTIBODY RESPONSE PROFILE ELICITED BY A LIVE-ATTENUATED TETRAVALENT DENGUE VACCINE IN CHILDREN AND ADOLESCENTS FROM ENDEMIC AREAS

Eduardo J.M. Nascimento<sup>1</sup>, Isadora Lape<sup>1</sup>, Brooke Norwood<sup>1</sup>, Jesuina Fernandes<sup>1</sup>, Huahua Wan<sup>1</sup>, Apurva Kulkarni<sup>1</sup>, Vianney Tricou<sup>2</sup>, Eloi Kpamegan<sup>1</sup>, Mayuri Sharma<sup>1</sup>  
<sup>1</sup>Takeda Vaccines Inc., Cambridge, MA, United States, <sup>2</sup>Takeda Pharmaceuticals International AG, Zürich, Switzerland

## Symposium 174

### From Ideation to Implementation: How Malaria and Dengue Early Warning Systems Can Strengthen Health System Adaptation and Response to Climate Change

Convention Center - Room 388/389 (3rd Floor)

Sunday, November 17, 8 a.m. - 9:45 a.m.

According to new World Bank data, climate change can lead to “at least 21 million additional deaths by 2050 from just five health risks: extreme heat, stunting, diarrhea, malaria, and dengue.” Climate-informed early warning systems (EWS) have the potential to serve as powerful adaptation tools to the growing threats of climate change to health by increasing the effectiveness of disease control and strengthening the climate resilience of health systems. The combined intelligence of climate, health, mobility, and geospatial data with AI-enabled predictive capacity can be used beyond traditional EWS. In addition to enabling precise and cost-effective health service delivery, these systems can generate evidence to support financing opportunities and facilitate long-term planning. Improved climate-health data platforms and national ownership can enable policymakers to assess health impacts and make informed decisions to build climate resilience. Despite the promising impacts of EWS, challenges and gaps remain. Researchers, scientists, and implementers face key challenges with gaps in local and global climate-health data and fragmented funding. From a survey of 32 EWS experts in the Institute for Health Modeling and Climate Solutions’ (IMACS) community of practice, 40% stated obstacles with operationalization, including delayed data sharing, weak technical

Sunday  
November 17



capacity, and scarce funding. To scale and sustain EWS, the operational challenges must be addressed in partnership with those at the frontlines of climate change, particularly the end users of an EWS. The most functional EWS is one with local data and system ownership that considers cost-effectiveness based on country capacity, and is informed by an overall strategic framework. Implementation of all the components of an EWS ecosystem can also provide lessons about data sharing and access, as well as preparation and response activities that are applicable to other diseases and overall public health emergency preparedness. This session brings together diverse stakeholders to review existing tools for malaria and dengue surveillance and health system readiness to adopt data tools for forecasting and response to climate-driven health threats. Attendees will learn and discuss how EWS development for malaria and dengue can better integrate local ownership, data sharing, and stakeholder engagement for the co-design and adoption of an EWS tool for adaptation. #ClimateChange #InfectiousDisease #Modeling

**CHAIR**

Grace Kim  
*Malaria No More, Washington, DC, United States*

James Colborn  
*Clinton Health Access Initiative, Maputo, Mozambique*

**8 a.m.**  
**INTRODUCTION**

**8:10 a.m.**  
**PERSPECTIVES FROM THE ASIA-PACIFIC REGION: STRENGTHENING TECHNICAL CAPACITY TO USE AND MANAGE SURVEILLANCE AND GEOSPATIAL DATA FOR NATIONAL MALARIA AND DENGUE PROGRAMS**

Richard J. Maude  
*Mahidol Oxford Tropical Medicine Research Unit, Bangkok, Thailand*

**8:20 a.m.**  
**BRIDGING SCIENTIFIC AND TRADITIONAL KNOWLEDGE: INCLUSION OF COMMUNITY PERSPECTIVES IN UNDERSTANDING CLIMATE-HEALTH LINKAGES**

Samson Nzou  
*Kenya Medical Research Institute (KEMRI), Nairobi, Kenya*

**8:30 a.m.**  
**PERSPECTIVES FROM THE UGANDA MINISTRY OF HEALTH: UTILITY OF EWS AND HOW TO ADDRESS BARRIERS**

Jimmy Opigo  
*Ministry of Health, Uganda, Kampala, Uganda*

**8:40 a.m.**  
**ASSESSING THE UTILITY OF EARLY WARNING SYSTEMS THROUGH END-USER ENGAGEMENT**

Kate Zinszer  
*University of Montreal, Montreal, Canada*

**8:50 a.m.**  
**EXPANDING VECTOR-BORNE EARLY WARNING SYSTEM CAPACITY IN LATIN AMERICA**

William Pan  
*Duke University, Durham, NC, United States*

**9 a.m.**  
**ENHANCING EARLY WARNING SYSTEMS FOR CLIMATE-SENSITIVE DISEASES: LEVERAGING MULTISECTORAL COLLABORATION, MULTIDIMENSIONAL DATA, AND DIGITAL INNOVATIONS**

Kaushik Sarkar  
*Malaria No More, Washington, DC, United States*

**Symposium 175**

**Socio-Cultural Practices, Low Risk Perception and Policy Implementation Gaps Heighten Zoonotic Disease Risk in Indigenous Communities: Observations from Northeast India**

*Convention Center - Room 391/392 (3rd Floor)*  
**Sunday, November 17, 8 a.m. - 9:45 a.m.**

Zoonotic diseases represent an increasing and significant threat to global health, with about one billion cases of illness and millions of deaths occurring annually. An estimated 60% of emerging infectious diseases are caused by zoonotic pathogens. Zoonotic diseases disproportionately affect vulnerable groups in low- and middle-income countries. India has emerged as a hotspot for zoonotic diseases. Northeast India is home to about 40 million people from 200 indigenous tribal communities residing in rural, remote and difficult terrain. These communities have unique cultural practices and a predominantly non-vegetarian diet, including consumption of bushmeat. Over half of the region is covered in forests, with designated 'biodiversity hotspots' linked to higher zoonotic disease risks. Mixed farming, a key economic activity, often involves rearing livestock in close proximity to human dwellings. Compounded by limited veterinary services and irregular animal health assessments, these practices pose inherent risks to animal health and the potential for transmission of zoonotic pathogens to humans. During this symposium, we will present and discuss case-studies that illustrate the heightened risks of zoonoses due to low-risk perception among community members, livestock handlers and traditional healers who treat sick animals. Insights from these case-studies were developed from our ongoing research on Zoonotic Vector Borne Diseases (ZVBD) in Meghalaya, a state in northeast India. We will focus on how socio-cultural beliefs and practices affect intentional and accidental contacts with domestic and wild animals, thereby impacting zoonotic disease risk. Our study has revealed that a significant portion of the population are being exposed to zoonotic pathogens, underscoring the urgent need for collective engagement with these vulnerable, indigenous communities to mitigate their disease risk. The relevance of our findings to other remote, less modern and culturally divergent populations will be explored. Symposium content tags: #EcologicalStudies; #EmergingDiseaseThreats; #FieldStudies; #Prevention; #SocialScience

**CHAIR**

Rajiv Sarkar  
*Indian Institute of Public Health Shillong, Shillong, India*

Melari S. Nongrum  
*Indian Institute of Public Health Shillong, Shillong, India*

**8 a.m.**  
**INTRODUCTION**

**8:10 a.m.**  
**LOW-RISK PERCEPTION OF ZOOSES AND HEALTH SEEKING BEHAVIOR FOR ANIMALS IN MEGHALAYA, INDIA**

Melari S. Nongrum  
*Indian Institute of Public Health Shillong, Shillong, India*

**8:30 a.m.**  
**ANIMAL REARING AND HANDLING PRACTICES AMONG RURAL HOUSEHOLDS IN MEGHALAYA, INDIA**

Uniqueky G. Mawrie  
*London School of Hygiene & Tropical Medicine, London, United Kingdom*

**8:45 a.m.**  
**MEAT HANDLING PRACTICES AND FOOD-SAFETY KNOWLEDGE AMONG BUTCHERS AND ABATTOIR WORKERS IN MEGHALAYA, INDIA**

Rajiv Sarkar  
*Indian Institute of Public Health Shillong, Shillong, India*

**9 a.m.**  
**THE IMPACT OF SOCIO-BEHAVIORAL PRACTICES ON INCREASED RISK OF ZOOTIC DISEASES IN NORTHEAST INDIA**

Benedicta S. Kumar  
*Indian Institute of Public Health Shillong, Shillong, India*

**9:15 a.m.**  
**PANEL DISCUSSION**

Mark Wilson  
*University of Michigan, School of Public Health, Ann Arbor, MI, United States*



**Symposium 176**

**Bartonellosis: A (Re)emerging Ectoparasite-borne Disease of People and Animals**

*Convention Center - Room 393/394 (3rd Floor)*  
**Sunday, November 17, 8 a.m. - 9:45 a.m.**

**This session does not carry CME credit.**

This session focuses on Bartonellosis, ectoparasite-borne systemic infections caused by various Bartonella species. Bartonellosis has worldwide distribution and diverse disease manifestations. Globally, epidemiologic risks for Bartonellosis depend on the local ecology of vectors and reservoir species associated with each Bartonella species. The session aims to explore the disease's re-emergence due to enhanced human-animal-vector interactions, evolving vector populations, and advancements in diagnostic methods. The symposium will delve into the epidemiology of Bartonella infections, particularly in low- and middle-income countries, and explore the risk factors for human infection and challenges to effective treatment. It will also examine the transmission dynamics of Bartonella species, including the potential role of ticks as vectors and roles for wildlife reservoirs. This session seeks to foster a comprehensive understanding of Bartonellosis, promoting global health and inter-professional collaboration. #EcologicalStudies

#EmergingDiseaseThreats #Epidemiology #InfectiousDisease  
#TranslationalScience

**CHAIR**

Erin Lashnits  
*University of Wisconsin, Madison, WI, United States*

Monica Embers  
*Tulane National Primate Research Center, Tulane University Health Sciences, Covington, LA, United States*

**8 a.m.**  
**INTRODUCTION**

**8:10 a.m.**  
**THE NEGLECTED BURDEN OF BARTONELLA QUINTANA INFECTION IN LOW- AND MIDDLE-INCOME COUNTRIES**

Carl Boodman  
*University of Antwerp/ Institute of Tropical Medicine (Belgium); University of Manitoba, Winnipeg, Canada*

**8:25 a.m.**  
**VETERINARY PROFESSIONALS AND RISK FOR BARTONELLA EXPOSURE**

Edward B. Breitschwerdt  
*North Carolina State University College of Veterinary Medicine, Raleigh, NC, United States*

**8:40 a.m.**  
**B. BACILLIFORMIS IN PERU**

Victor Alberto Jimenez- Vasquez  
*Instituto Nacional De Salud*

**8:55 a.m.**  
**BARTONELLA IN WILD ANIMALS FROM BRAZIL: SCRATCHING THE TIP OF THE ICEBERG**

Marcos Rogério André  
*Universidade Estadual Paulista Júlio de Mesquita Filho, UNESP, Jaboticabal, Brazil*

**9:10 a.m.**  
**BARTONELLA ANIMAL MODELS: ANTIBIOTIC EFFICACY, CO-INFECTION, AND TICKS**

Monica Embers  
*Tulane National Primate Research Center Tulane University Health Sciences, Covington, LA, United States*

**Scientific Session 177**

**Schistosomiasis II: Epidemiology and Control**

*Convention Center - Room 395/396 (3rd Floor)*  
**Sunday, November 17, 8 a.m. - 9:45 a.m.**

#ChildHealth #Diagnostics #EcologicalStudies

**CHAIR**

Charles B. Delahunty  
*Global Health Labs, Bellevue, WA, United States*

Karen Mozo Velazco  
*Instituto de Medicina Tropical Alexander von Humboldt – Universidad Peruana Cayetano Heredia, Cusco, Peru*

8 a.m.

8406

### COMBINING WEARABLE GPS LOGGERS WITH ENVIRONMENTAL AND SNAIL DATA TO UNCOVER FINE-SCALE *SCHISTOSOMA MANSONI* TRANSMISSION DYNAMICS IN UGANDA

Fabian Reitzug<sup>1</sup>, Narcis B. Kabatereine<sup>2</sup>, Betty Nabette<sup>2</sup>, Goylette F. Chami<sup>1</sup><sup>1</sup>University of Oxford, Oxford, United Kingdom, <sup>2</sup>Vector Control Division, Ministry of Health, Kampala, Uganda

8:15 a.m.

8407

### ACCEPTABILITY AND FEASIBILITY OF A ONE-STOP HOME-BASED GENITAL SELF-SAMPLING FOR FEMALE GENITAL SCHISTOSOMIASIS, HUMAN PAPILLOMA VIRUS AND TRICHOMONAS AND HIV SELF-TESTING: BASELINE DATA FROM A LONGITUDINAL COHORT STUDY IN ZAMBIA

Rhoda Ndubani<sup>1</sup>, Kwame Shanaube<sup>1</sup>, Olimpia Lamberti<sup>2</sup>, Nkatya Kasese<sup>1</sup>, Jennifer Fitzpatrick<sup>1</sup>, Maina Cheeba<sup>1</sup>, Beatrice Nyondo<sup>1</sup>, Bronwyn Neufeld<sup>2</sup>, Barry Kosloff<sup>2</sup>, Bonnie Webster<sup>4</sup>, Helen Kelly<sup>2</sup>, Amaya L. Bustinduy<sup>2</sup><sup>1</sup>Zambart, Lusaka, Zambia, <sup>2</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>3</sup>Longhorn Vaccines and Diagnostics LLC, Bethesda, MD, United States, <sup>4</sup>Natural History Museum, London, United Kingdom

8:30 a.m.

8408

### *SCHISTOSOMA MANSONI* AND *HELICOBACTER PYLORI* CO-INFECTIONS AMONG SCHOOL-AGED POPULATIONS: A STUDY IN NIGERIAN COMMUNITIES

Babatunde Adewale<sup>1</sup>, Muinah Fowora<sup>1</sup>, Hammed Mogaji<sup>1</sup>, Omolola Omolopo<sup>1</sup>, Nurudeen Rahman<sup>1</sup>, Ayorinde James<sup>1</sup>, Herbert De'Broski<sup>2</sup><sup>1</sup>Nigerian Institute of Medical Research, Lagos, Nigeria, <sup>2</sup>University of Pennsylvania, Philadelphia, PA, United States

8:45 a.m.

8409

### MAIN RESULTS FROM A PHASE II RANDOMISED PLACEBO-CONTROLLED TRIAL OF PRAZIQUANTEL IN PRESCHOOL CHILDREN WITH INTESTINAL SCHISTOSOMIASIS

Amaya Lopez Bustinduy<sup>1</sup>, Andrew Edielu<sup>2</sup>, Gloria Kakoba<sup>2</sup>, Jacent Nassuuna<sup>2</sup>, Racheal Nakyesige<sup>2</sup>, Victor Anguajibi<sup>2</sup>, Simon Mpooya<sup>2</sup>, Moses Adriko<sup>3</sup>, Govert Van Damm<sup>4</sup>, Paul Corstjens<sup>4</sup>, Sophie Pach<sup>1</sup>, Hannah Wu<sup>5</sup>, Susannah Colt<sup>5</sup>, Patrice Mawa<sup>2</sup>, Edridah Muheki<sup>2</sup>, Narcis Kabatereine<sup>3</sup>, Emily Webb<sup>1</sup>, Jennifer F. Friedman<sup>5</sup><sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>2</sup>MRC-LSHTM Research Unit, Entebbe, Uganda, <sup>3</sup>Vector Control Division, Kampala, Uganda, <sup>4</sup>Leiden University Medical Centre, Leiden, Netherlands, <sup>5</sup>Rhode Island Hospital, Providence, RI, United States

9 a.m.

8410

### THE USE OF WATER EDNA IN SNAIL IDENTIFICATION FOR THE UNDERSTANDING OF *FASCIOLOA* ENVIRONMENTAL BURDEN AND SNAIL DIVERSITY IN THE HIGHLANDS OF PERU

Melinda B. Tanabe<sup>1</sup>, Martha Vanessa Fernandez-Baca<sup>2</sup>, Rodrigo A. Ore Velarde<sup>2</sup>, Alejandro Castellanos-Gonzalez<sup>1</sup>, Miguel M. Cabada<sup>1</sup>, Fasciola Peru TMRC Research Group<sup>3</sup><sup>1</sup>UTMB, Galveston, TX, United States, <sup>2</sup>UPCH – UTMB Collaborative Research Center - Cusco, Universidad Peruana Cayetano, Cusco, Peru

9:15 a.m.

8411

### INFLAMMATION-ADJUSTED VITAMIN A DEFICIENCY IS ASSOCIATED WITH HEAVY *SCHISTOSOMA MANSONI* INFECTION INTENSITY AMONG PRESCHOOL-AGED CHILDREN IN UGANDA

Susannah Colt<sup>1</sup>, Hannah W. Wu<sup>1</sup>, Andrew Edielu<sup>2</sup>, Emily L. Webb<sup>3</sup>, Racheal Nakyesige<sup>4</sup>, Patrice A. Mawa<sup>2</sup>, Christopher P. Duggan<sup>5</sup>, Jonathan D. Kurtis<sup>6</sup>, Amaya L. Bustinduy<sup>3</sup>, Jennifer F. Friedman<sup>1</sup><sup>1</sup>Rhode Island Hospital, Providence, RI, United States, <sup>2</sup>London School of Hygiene & Tropical Medicine Uganda Research Unit, Entebbe, Uganda, <sup>3</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom, <sup>4</sup>Uganda Virus Research Institute, Entebbe, Uganda, <sup>5</sup>Boston Children's Hospital, Boston, MA, United States, <sup>6</sup>Warren Alpert Medical School of Brown University, Providence, RI, United States

9:30 a.m.

8412

### ASSOCIATION OF *S. HAEMATOBIIUM* INFECTION WITH PREGNANCY IN TANZANIA

Sheridan Bowers<sup>1</sup>, Jane K. Maganga<sup>2</sup>, Loyce Mhango<sup>2</sup>, Peter Shigella<sup>2</sup>, Crispin Mukerebe<sup>2</sup>, Humphrey D. Mazigo<sup>3</sup>, Govert J. van Dam<sup>4</sup>, Danielle de Jong<sup>5</sup>, Paul L. Corstjens<sup>5</sup>, Saidi H. Kapiga<sup>2</sup>, W. Evan Secor<sup>6</sup>, Myung Hee Lee<sup>7</sup>, Jennifer A. Downs<sup>7</sup>, John M. Changalucha<sup>2</sup><sup>1</sup>Weill Cornell Medicine, New York, NY, United States, <sup>2</sup>Mwanza Intervention Trials Unit/ National Institute for Medical Research, Mwanza, United Republic of Tanzania, <sup>3</sup>Department of Parasitology, Catholic University of Health and Allied Sciences, Mwanza, United Republic of Tanzania, <sup>4</sup>Department of Parasitology, Leiden University Medical Center, Leiden, Netherlands, <sup>5</sup>Department of Cell and Chemical Biology, Leiden University Medical Center, Leiden, Netherlands, <sup>6</sup>Division of Parasitic Diseases for Malaria, Center for Global Health, Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>7</sup>Center for Global Health, Weill Cornell Medicine, New York, NY, United States

### Coffee Break

Convention Center - Third Floor Lobby Areas  
Sunday, November 17, 9:45 a.m. - 10:15 a.m.

### Plenary Session 178

### Plenary Session V

Convention Center - Hall I-2 (1st Floor)  
Sunday, November 17, 10:15 a.m. - 11:15 a.m.

THIS SESSION DOES NOT CARRY CME CREDIT.



**Paulin Basinga, MD, PhD**  
Director, Africa  
Bill & Melinda Gates Foundation  
Nairobi, Kenya

Dr. Paulin Basinga leads the Gates Foundation's work across the African continent.

Assuming this role in March 2024, Paulin brings extensive experience gained through his country and global level engagements. Before this role, he held the position of foundation's Global Director of Program Advocacy and Communications (PAC) based in Seattle. In this role, Paulin orchestrated strategic advocacy initiatives and forged valuable partnerships with advocacy teams in S/E Asia and Africa.



## Symposium 179

### Malaria without Borders: Understanding the Influence of Cross-Border Migration on Malaria Elimination Strategies

Convention Center - Hall I-2 (1st Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

Geopolitical instability, climate change, and other factors make human migration a dynamic and increasingly important factor in disease elimination strategies. Since 2018, 4 countries in the Americas - El Salvador, Belize, Argentina, and Paraguay - have eliminated malaria. Honduras, Panama, and Ecuador (among others) were believed to be on the same elimination trajectory. Between 2014 and 2019, all dipped below 600 annual, locally transmitted cases. Unfortunately, in 2022, these same 3 countries reported 11,984 cases combined, the vast majority of which occurred in the border regions of Honduras-Nicaragua, Panama-Colombia, & Ecuador-Peru. Accelerating and achieving elimination at foci, national, or regional scales will require – among other things - understanding the mechanisms in which cross-border migration is sustaining transmission and finding creative solutions for malaria programs to respond. While data on cross-border movements and international migrant populations can be limited and difficult to analyze, when available, they provide valuable insight into malaria transmission dynamics, the success (or lack there-of) of various interventions, and strategies that could be deployed to reach the most affected populations and reduce transmission. The influence of migration patterns on transmission is highly setting-specific, as it depends both on the political and demographic aspects of people’s movement and on the epidemiology of malaria and magnitude of interventions. Leveraging such data with appropriate analytical approaches is key to understanding how case importation and malaria transmission interact specifically in each geography. This symposium will explore four unique approaches to understanding cross-border migration and its impact on malaria elimination. First, we will explore the genetic connectivity of parasites from South to Central America leveraging targeted and whole genome sequencing data from 5+ countries where cross-border migration is jeopardizing elimination. Second, we will dive into a novel *P. vivax* mathematical model that highlights how the success of various intervention strategies and elimination probabilities in Honduras are altered based on reductions in imported cases from Nicaragua. Third, we will present the most recent evidence from research being conducted in communities serving as migration transit points for the over 1 million migrants that have passed through the Darien Gap, Panama the past three years. Lastly, we will showcase how a network analysis along the Ecuador-Peru border is informing bi-national malaria response. Emphasis from each presentation will be given to discussing the implications of the findings for MoH strategies and elimination trajectories across the Americas. #Elimination #Modeling #Genetics #PopulationSurveillance #InfectiousDisease

#### CHAIR

Sarah Park  
Clinton Health Access Initiative, Boston, MA, United States

Before his PAC role, Paulin served as the foundation’s Director of Health for Africa, leading a dedicated team in devising and implementing comprehensive country plans to advance health priorities across the continent. As the foundation’s country director in Nigeria, Paulin revitalized critical partnerships and advanced health, nutrition, agriculture, gender, and financial inclusion priorities, aligning them with the Nigerian government’s Human Capital Development Agenda.

Paulin’s journey with the foundation began in 2012 as a Senior Program Officer on the HIV team. Here, he worked on the HIV Efficiency and Effectiveness Initiative, pioneering strategies to maximize the impact of the foundation’s investments in combating HIV/AIDS. Subsequently, he transitioned to the Integrated Delivery team, overseeing investments in community and child health before assuming the role of Deputy Director of the Country Primary Health Initiative team - covering Ethiopia, Nigeria, Senegal, Burkina Faso and other countries.

In 2015, Paulin was seconded to Rwanda to assume a pivotal role as Senior Advisor to the Rwanda Biomedical Centre within the Rwandan Ministry of Health. During this tenure, he provided crucial decision support for health sector reforms in Rwanda.

Before joining the foundation, Paulin served as Deputy Director of Research at the National University of Rwanda’s School of Public Health. Here, he led groundbreaking research initiatives addressing HIV/AIDS, tuberculosis, and maternal and child health, contributing significantly to efforts to strengthen Rwanda’s healthcare systems.

Paulin holds a medical degree from the National University of Rwanda, complemented by a Master’s degree and Ph.D. in International Development from Tulane University.

#### CHAIR

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

#### 10:15 a.m. INTRODUCTION

Linnie Golightly  
Weill Cornell Medical College, New York, NY, United States

#### 10:30 a.m. PLENARY ADDRESS: FROM LOCAL INNOVATION TO GLOBAL COLLABORATION: BREAKING DOWN SILOS TO TACKLE INFECTIOUS DISEASES IN AFRICA

Paulin Basinga  
Bill & Melinda Gates Foundation, Nairobi, Kenya

#### Break

Sunday, November 17, 11:15 a.m. - 11:30 a.m.

Sunday  
November 17

**11:30 a.m.**  
**INTRODUCTION**

**11:35 a.m.**  
**THE ROLE OF CROSS-BORDER CASE IMPORTATION ON P. VIVAX MALARIA ELIMINATION IN HONDURAS: COMPARING INTERVENTION STRATEGIES WITH MATHEMATICAL MODELLING**

Emilie Pothin  
*Swiss Tropical and Public Health Institute, Allschwil, Switzerland*

**11:55 a.m.**  
**RISK FACTORS OF MALARIA INFECTION IN COMMUNITIES ALONG MIGRATION ROUTES IN PANAMA**

Mark Janko  
*Duke University, Durham, NC, United States*

**12:15 p.m.**  
**LEVERAGING SOCIAL NETWORK ANALYSIS TO IMPROVING MALARIA RESPONSE ALONG THE ECUADOR-PERU BORDER**

Carolina Coombs  
*Universidad Peruana Cayetano Heredia (UPCH), Lima, Peru*

**12:35 p.m.**  
**TRENDS IN GENETIC CONNECTIVITY BETWEEN CENTRAL AND SOUTH AMERICAN PLASMODIUM POPULATIONS**

Paulo Manrique  
*Harvard T.H. Chan School of Public Health, Boston, MA, United States*

**Scientific Session 180**

**Clinical Tropical Medicine: Disease and Vaccine Safety Surveillance**

*Convention Center - Room 343/344 (3rd Floor)*  
**Sunday, November 17, 11:30 a.m. - 1:15 p.m.**

**#InfectiousDisease #Epidemiology #Diagnostics #PopulationSurveillance**

**CHAIR**

Eileen Farnon  
*Brighton Collaboration, Decatur, GA, United States*

Polly Yap  
*Monash University Malaysia, Subang Jaya, Malaysia*

**11:30 a.m.** **8413**

**PREPARING FOR VACCINE ADVERSE EVENTS OF SPECIAL INTEREST-X (AESI-X): A STANDARDIZED APPROACH APPLIED TO NOVEL VACCINES**

Eileen C. Farnon<sup>1</sup>, Barbara J. Law<sup>1</sup>, Dale Nordenberg<sup>1</sup>, Andy Stergachis<sup>1</sup>, Rebecca E. Chandler<sup>2</sup>, Robert T. Chen<sup>1</sup>, Brighton Collaboration SPEAC AESI-X Working Group<sup>1</sup>  
<sup>1</sup>Safety Platform for Emergency vACCines (SPEAC) Project, Brighton Collaboration, Decatur, GA, United States, <sup>2</sup>Coalition for Epidemic Preparedness Innovations, Oslo, Norway

**11:45 a.m.** **8414**

**ENHANCING ACCESS TO HIGHLY MULTIPLEXED DIAGNOSTICS IN LMICS: LEVERAGING OXFORD NANOPORE SEQUENCING FOR DETECTION OF RESPIRATORY VIRUSES AND EMERGING PATHOGENS**

Polly S. X. Yap<sup>1</sup>, Ryan C. Chapman<sup>2</sup>, Nathaniel Christy<sup>3</sup>, Sharifah Syed Hassan<sup>1</sup>, Chin Fang Ngim<sup>1</sup>, Lian Yih Pong<sup>1</sup>, Jessica D. Wiley<sup>4</sup>, Robert D. Hontz<sup>3</sup>, Anca Selariu<sup>3</sup>, Amreeta Dhanoa<sup>1</sup>, Wan Fadhilah Wan Ismail<sup>5</sup>, Andrew G. Letizia<sup>3</sup>, Michael R. Wiley<sup>2</sup>  
<sup>1</sup>Monash University Malaysia, Subang Jaya, Malaysia, <sup>2</sup>University of Nebraska Medical Center, Omaha, NE, United States, <sup>3</sup>United States Naval Medical Research Unit- INDO PACIFIC, Singapore, Singapore, <sup>4</sup>PraesensBio LLC, Omaha, NE, United States, <sup>5</sup>Mahmoodiah Health Clinic, Johor Bahru, Malaysia

**Noon** **8415**

**INTEGRATED SEROLOGICAL SURVEILLANCE FOR INFECTIOUS DISEASES IN ZAMBEZIA PROVINCE, MOZAMBIQUE USING MULTIPLEX BEAD ASSAYS**

Andrea C. Carcelen<sup>1</sup>, Celso Monjane<sup>2</sup>, Sophie Bérubé<sup>1</sup>, Saki Takahashi<sup>1</sup>, Thebora Sultane<sup>2</sup>, Imelda Chelene<sup>2</sup>, Gretchen Cooley<sup>3</sup>, Brook Goodhew<sup>3</sup>, Catriona Patterson<sup>4</sup>, Kevin Tetteh<sup>4</sup>, Manuel Mutambe<sup>2</sup>, Melissa Higdon<sup>1</sup>, George Mwinnyaa<sup>1</sup>, Gilberto Nhapure<sup>5</sup>, Pedro Duce<sup>5</sup>, Diana L. Martin<sup>3</sup>, Christopher Drakeley<sup>4</sup>, William J. Moss<sup>1</sup>, Ivalda Macicame<sup>2</sup>  
<sup>1</sup>Johns Hopkins University, Baltimore, MD, United States, <sup>2</sup>Instituto Nacional de Saude, Maputo, Mozambique, <sup>3</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>4</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom, <sup>5</sup>Instituto Nacional de Estadística, Maputo, Mozambique

**12:15 p.m.** **8416**

**A SEPSIS SYNOPSIS: HETEROGENEITY OF SEPSIS PRESENTATIONS ACROSS THE ACESO NETWORK**

Alyse Wheelock<sup>1</sup>, Melissa Bradshaw<sup>1</sup>, George Oduro<sup>2</sup>, Hannah Kibuuka<sup>3</sup>, Stephen Okello<sup>3</sup>, Andrew Kambugu<sup>4</sup>, Te Vantha<sup>5</sup>, Nehkonti Adams<sup>6</sup>, Subramaniam Krishnan<sup>1</sup>, Patrick Blair<sup>1</sup>, Joshua Chenoweth<sup>1</sup>, Deborah Striegel<sup>1</sup>, Qianru Wu<sup>1</sup>, Carlyle Gollogly<sup>7</sup>, Kristen Pettrone<sup>1</sup>, Danielle Clark<sup>1</sup>  
<sup>1</sup>ACESO, the Henry Jackson Foundation, Bethesda, MD, United States, <sup>2</sup>Komfo Anokye Teaching Hospital, Kumasi, Ghana, <sup>3</sup>Makerere University Walter Reed Project, Kampala, Uganda, <sup>4</sup>Infectious Diseases Institute, Kampala, Uganda, <sup>5</sup>Takeo Provincial Hospital, Takeo, Cambodia, <sup>6</sup>Naval Medical Research Command, Falls Church, VA, United States, <sup>7</sup>ACESO, Henry Jackson Foundation, Bethesda, MD, United States

**12:30 p.m.** **8417**

**SEPSIS-RELATED DEATHS AMONG CHILDREN BELOW 5 YEARS OF AGE ENROLLED IN THE CHILD HEALTH AND MORTALITY PREVENTION SURVEILLANCE (CHAMPS) NETWORK PROGRAM IN SUB-SAHARAN AFRICA AND SOUTH ASIA BETWEEN 2017 - 2022**

Harun Owuor<sup>1</sup>, Kyu Hun Lee<sup>2</sup>, Emily S. Gurley<sup>3</sup>, Shams El Arifeen<sup>4</sup>, Portia C. Mutevedzi<sup>2</sup>, Cynthia G. Whitney<sup>2</sup>, Jeannette Wadula<sup>5</sup>, Mohammad Zahid Hossain<sup>4</sup>, Inacio Mandomando<sup>6</sup>, Nega Assefa<sup>7</sup>, Soter Ameh<sup>8</sup>, Ikechukwu Ogbuanu<sup>8</sup>, Dickens Dickens Onyango<sup>9</sup>, Joyce Akinyi Were<sup>1</sup>, Kotloff Karen<sup>10</sup>, Shabir madhi<sup>5</sup>, Rosaura Varo<sup>6</sup>, Ziyaad Dangor<sup>5</sup>, Victor Akelo<sup>11</sup>  
<sup>1</sup>KEMRI CGHR, Kisumu, Kenya, <sup>2</sup>Emory University, Atlanta, GA, United States, <sup>3</sup>John Hopkins University, Baltimore, MD, United States, <sup>4</sup>International Centre for Diarrheal Disease Research, Bangladesh (icddr), Dhaka, Bangladesh, <sup>5</sup>University of the Witwatersrand, Johannesburg, South Africa, <sup>6</sup>Centro de Investigacao en Saude de Manhica (CISM), Maputo, Mozambique, <sup>7</sup>College of Health and Medical Sciences, Haramaya University, Harar, Ethiopia, <sup>8</sup>Crown Agents, Freetown, Sierra Leone, <sup>9</sup>Kenya Ministry of Health, Kisumu, Kenya, <sup>10</sup>University of Maryland School of Medicine, Baltimore, MD, United States, <sup>11</sup>Liverpool School of Tropical Medicine, London, United Kingdom

12:45 p.m.

8418

### RICKETTSIOSIS AND SCRUB TYPHUS AMONG HOSPITALIZED PATIENTS WITH ACUTE FEBRILE ILLNESS IN RURAL NORTHEASTERN AND NORTH BORDER PROVINCES OF THAILAND, 2017-2020

Adelaide F. Green<sup>1</sup>, Saithip Bhengsr<sup>2</sup>, Betsy Cadwell<sup>1</sup>, Emily Bloss<sup>2</sup>, Nuttagarn Chuenchom<sup>3</sup>, Supphachoke Khemla<sup>4</sup>, Sumonmal Uttayamakul<sup>5</sup>, Pongpun Sawatwong<sup>2</sup>, Ornuma Sangwichian<sup>2</sup>, Duangkamon Siludjai<sup>2</sup>, Phanthaneeya Teepruksa<sup>2</sup>, Beth Skaggs<sup>2</sup>, Cecilia Y. Kato<sup>1</sup>, Christopher J. Gregory<sup>2</sup>, John R. Macarthur<sup>2</sup>, James D. Heffelfinger<sup>2</sup>, Carol Y. Rao<sup>1</sup>

<sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>2</sup>Centers for Disease Control and Prevention - Thailand, Nonthaburi, Thailand, <sup>3</sup>Mae Sot Hospital, Nakhon Phanom, Thailand, <sup>4</sup>Nakhon Phanom hospital, Nakhon Phanom, Thailand, <sup>5</sup>Bamrasnaradura Infectious Diseases Institute, Department of Disease Control, Ministry of Public Health and National Institute of Health, Department of Medical Sciences, Ministry of Public Health, Nonthaburi, Thailand

1 p.m.

8419

### MICROSTRATIFICATION OF VISCERAL LEISHMANIASIS ENDEMIC AREAS TO IDENTIFY HOTSPOTS AND DISEASE SHIFTING PATTERNS IN NEPAL

Krishna Pant<sup>1</sup>, Megha R. Banjara<sup>1</sup>, Dharmanand Joshi<sup>1</sup>, Govinda R. Paneru<sup>1</sup>, Abraham Aseffa<sup>2</sup>, Rudra Marasini<sup>3</sup>, Gokarna Dahal<sup>3</sup>, Anand B. Joshi<sup>1</sup>

<sup>1</sup>Public Health and Infectious Disease Research Center, Kathmandu, Nepal, <sup>2</sup>Special Program for Research and Training in Tropical Diseases, Geneva, Switzerland, <sup>3</sup>Epidemiology and Disease Control Division, Ministry of Health, Kathmandu, Nepal

## Symposium 181

### The Role of Molecular Xenomonitoring in Transmission Risk Assessment and Post-Validation Surveillance After Mass Drug Administration for Lymphatic Filariasis

Convention Center - Room 345 (3rd Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

To eliminate lymphatic filariasis (LF) as a public health problem, the mass drug administration (MDA) strategy aims to reduce infection levels within the population to a point where transmission is no longer sustainable. However, confirming that treatment areas meet the established thresholds to suggest LF elimination in countries with less-developed health infrastructure can take time and effort. Community members may be unwilling or unable to participate in post-treatment surveillance for personal or logistical reasons. Molecular xenomonitoring (MX) may help overcome some of these limitations. This symposium will explore whether MX can monitor transmission interruption following MDA. Key areas of focus include 1) the correlation between data derived by MX and human monitoring studies after MDA for LF; 2) the required threshold of mosquito infection prevalence and the necessary number of mosquitoes to be sampled to determine cessation of transmission reliably; 3) the dependability of using surrogate mosquito species (e.g., *Culex*) in areas with *Anopheles* as the major LF vectors; and 4) the role and cost-effectiveness of MX in post-validation surveillance. These and other questions will be examined in three lectures, followed by a panel discussion and Q&A session. The symposium's organizers, speakers, and panelists

have experience in LF elimination in India, Africa, and Papua New Guinea. #Elimination, #FieldStudies, #PopulationSurveillance, #Infectious Diseases.

#### CHAIR

Christopher L. King  
Case Western Reserve University, Cleveland, OH, United States

Stephan Karl  
James Cook University, Cairns, Australia

11:30 a.m.

#### INTRODUCTION

11:40 a.m.

#### WHAT IS THE SENSITIVITY OF MX, AND IS IT BETTER THAN HUMAN SURVEYS AT DETECTING POST-MDA RESERVOIRS OF INFECTION IN LF?

Lisa Reimer  
Centers for Disease Control, Atlanta, GA, United States

#### Noon

#### WHAT IS THE STATUS OF MX IN LF ENDEMIC AREAS WHERE CULEX IS THE PRINCIPAL VECTOR?

K. Krishnamoorthy  
Vector Control Research Centre (retired). Formerly Senior Scientist, Pondicherry, India

12:20 p.m.

#### POST-VALIDATION LF MONITORING WITH MX WORKFLOWS FOR INTEGRATION WITH OTHER MOSQUITO-BORNE PATHOGENS AND THE DESIGN OF "TRAPPING NETWORKS" TO MAXIMIZE DETECTION OF LF SIGNALS

Brian Johnson  
Queensland Institute for Medical Research (QIMR) Burghofer, Brisbane, Australia

12:40 p.m.

#### POST-VALIDATION LF MONITORING WITH MX WORKFLOWS FOR INTEGRATION WITH OTHER MOSQUITO-BORNE PATHOGENS AND THE DESIGN OF "TRAPPING NETWORKS" TO MAXIMIZE DETECTION OF LF SIGNALS

Gregor Devine  
QIMR Burghofer, Brisbane, Australia

## Scientific Session 182

### Kinetoplastida and Other Opportunistic and Anaerobic Protozoa: Immunology, Invasion, Cellular and Molecular Biology

Convention Center - Room 352 (3rd Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

#InfectiousDisease #Immunology #HostResponse  
#CellBiology

#### CHAIR

Hira Nakhasi  
FDA, Silver Spring, MD, United States

Abhay Satoskar  
Ohio State University, Columbus, OH, United States

11:30 a.m.

8420

### BANGLADESHI CHILDREN HAVE IMMUNITY TO CRYPTOSPORIDIA-ASSOCIATED DIARRHEA BUT NOT TO INFECTION

Carol A. Gilchrist<sup>1</sup>, William A. O. Petri<sup>1</sup>, Biplob Hossain<sup>2</sup>, Md. Mamun Kabir<sup>2</sup>, Hannah H. So<sup>1</sup>, G. Brett Moreau<sup>1</sup>, Uma Nayak<sup>1</sup>, Jennie Z. Ma<sup>1</sup>, Zannatun Noor<sup>2</sup>, Abu S. G Faruque<sup>2</sup>, Md. Masud Alam<sup>2</sup>, Rashidul Haque<sup>2</sup>, William A. Petri<sup>1</sup>

<sup>1</sup>University of Virginia, Charlottesville, VA, United States, <sup>2</sup>icddr, Dhaka, Bangladesh

(ACMCIP Abstract)

11:45 a.m.

8421

### MECHANISM OF INTESTINAL BARRIER REPAIR IN GIARDIASIS

Rita Teye Kosile, Vanessa Angelova, Evan Pannkuk, Steven Singer  
Georgetown University, Washington, DC, United States

(ACMCIP Abstract)

Noon

8422

### UNWINDING THE IRONY OF SEVERE ANEMIA IN ANTIMONY-RESISTANT *LEISHMANIA DONOVANI* INFECTION AT THE NEXUS OF OXIDATIVE OUTBURST AND IRON PURSUIT

Souradeepa Ghosh, Krishna Vamshi Chigicherla, Budhaditya Mukherjee  
Indian Institute of Technology, Kharagpur, Kharagpur, India

(ACMCIP Abstract)

12:15 p.m.

8423

### UNIQUE IMMUNE AND TISSUE REPAIR MARKERS IN CONGENITAL CHAGAS

Sneider Alexander Gutierrez Guarnizo<sup>1</sup>, Carolina Duque<sup>1</sup>, Jill Hakim<sup>1</sup>, Martín Obregón<sup>2</sup>, Jessi Condori<sup>2</sup>, Paloma Samame<sup>3</sup>, Emily Arteaga<sup>3</sup>, Clariza Roxana<sup>3</sup>, Jean Karla Velarde<sup>3</sup>, Edith Malaga<sup>2</sup>, Andrea Diestra<sup>2</sup>, Alejandra Pando<sup>2</sup>, Manuela Verastegui<sup>2</sup>, Monica Pajuelo<sup>2</sup>, Maritza Calderon<sup>2</sup>, Freddy Tinajeros<sup>3</sup>, Natalie Bowman<sup>4</sup>, Robert Gilman<sup>1</sup>, Monica Mugnier<sup>1</sup>

<sup>1</sup>Johns Hopkins University, Baltimore, MD, United States, <sup>2</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>3</sup>Hospital de La Mujer Dr. Percy Boland Rodriguez, Santa Cruz, Plurinational State of Bolivia, <sup>4</sup>University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, NC, United States

(ACMCIP Abstract)

12:30 p.m.

8424

### CO-DELIVERY OF IL-12 AND *LEISHMANIA* PEPCK AS A VACCINATION STRATEGY TO INCREASE EXPRESSION OF SKIN HOMING MOLECULES AND RESIDENT MEMORY T CELL DEVELOPMENT

Anabel Zabala-Peñafiel<sup>1</sup>, Claudia Gonzalez-Lombana<sup>1</sup>, Anthony Phan<sup>1</sup>, Jude Uzonna<sup>2</sup>, Chris Hunter<sup>1</sup>, Phil Scott<sup>1</sup>

<sup>1</sup>University of Pennsylvania, Philadelphia, PA, United States, <sup>2</sup>University of Manitoba, Winnipeg, MB, Canada

12:45 p.m.

8425

### IMMUNE SIGNATURES PREDICT TREATMENT RESPONSE IN CUTANEOUS LEISHMANIASIS PATIENTS

Rúbia Costa<sup>1</sup>, Lucas P. Carvalho<sup>1</sup>, Paulo Machado<sup>2</sup>, Edgar M. Carvalho<sup>1</sup>, Augusto M. Carvalho<sup>1</sup>

<sup>1</sup>Gonçalo Moniz Institute, SALVADOR, Brazil, <sup>2</sup>Federal University of Bahia, SALVADOR, Brazil

(ACMCIP Abstract)

1 p.m.

8426

### MALNUTRITION CONTRIBUTES TO VISCERAL LEISHMANIASIS SEVERITY BY EXACERBATING LIVER PATHOLOGY

Lais Amorim Sacramento<sup>1</sup>, Claudia Lombana<sup>1</sup>, Lisa Mattei<sup>1</sup>, Daniel Beiting<sup>1</sup>, Phillip Scott<sup>2</sup>

<sup>1</sup>School of Veterinary Medicine University of Pennsylvania, PHILADELPHIA, PA, United States, <sup>2</sup>School of Veterinary Medicine University of Pennsylvania, Philadelphia, PA, United States

(ACMCIP Abstract)

## Symposium 183

### Closing the Typhoid Surveillance Gap: Operationalizing Novel Surveillance Methods to Describe Enteric Fever Burden and Support Vaccine Decision-Making

Convention Center - Room 353 (3rd Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

Typhoid fever continues to impose a significant health burden worldwide, particularly in low- and middle-income countries where access to clean water and sanitation can be limited. Typhoid affects up to 20 million people annually, claiming 8 million years of healthy life each year. Despite the existence of effective typhoid conjugate vaccines (TCVs), many high-risk communities remain unvaccinated due to the lack of precise, locally relevant epidemiological data. Passive, clinic-based case detection underestimates typhoid incidence, as a consequence of a sub-optimal laboratory reference standard (blood culture) and barriers to health care utilization. Consequently, the cases presenting to a health facility represent only a fraction of the true burden of illness, which makes it difficult for policymakers to accurately estimate the cost effectiveness of TCV introduction. Many Gavi-eligible countries interested in adding TCV to their routine immunization schedules have very limited disease burden data to support their application for Gavi funding, and countries that have introduced TCV are challenged to evaluate the true impact of the vaccine. Our symposium seeks to bridge these data gaps by describing the latest advancements in deploying low-cost, scalable tools to estimate enteric fever disease burden where blood-culture based estimates are not implementable. Seroepidemiology leverages antibody response data to characterize infection burden from cross-sectional population surveys that can be implemented quickly and efficiently. Detection of *Salmonella* Typhi bacteriophages in community water sources is a low-cost method of environmental surveillance to identify geographic areas of potential typhoid transmission. The combination of seroepidemiology and environmental surveillance offers a powerful suite of tools that public health systems can use to monitor disease burden and transmission hotspots. Typhoid intestinal perforations (TIP) are a severe and devastating complication of typhoid disease, with significant medical, economic and social consequences for patients and their families. In settings with limited typhoid surveillance, the presence of TIP can function as an indicator of underlying disease burden in a community, even

in the absence of laboratory confirmation of milder infections. We will present some of the latest findings from studies in Afghanistan, Cote d'Ivoire, India and Niger that are implementing these novel surveillance methods. #Epidemiology #FieldStudies #InfectiousDisease

#### CHAIR

Jessica Seidman  
*Sabin Vaccine Institute, Washington, DC, United States*

Kristen Aiemjoy  
*University of California, Davis School of Medicine, Davis, CA, United States*

#### 11:30 a.m. INTRODUCTION

#### 11:40 a.m. ENTERIC FEVER SEROSURVEILLANCE IN EASTERN AFGHANISTAN

Ghulam Rahim Awab  
*Nangarhar University, Nangarhar, Afghanistan*

#### 11:55 a.m. PAIRED PHAGE-BASED TYPHI ENVIRONMENTAL SURVEILLANCE AND COMMUNITY-BASED SEROSURVEILLANCE IN COTE D'IVOIRE

Jean Coulibaly  
*University Félix Houphouët-Boigny, Abidjan, Côte D'Ivoire*

#### 12:10 p.m. COMPREHENSIVE S. TYPHI SURVEILLANCE IN VELLORE, INDIA: INTEGRATING WASTEWATER, CLINICAL AND SEROLOGICAL DATA

Dilip Abraham  
*Christian Medical College Vellore, Vellore, India*

#### 12:25 p.m. ADVANCING ENVIRONMENTAL SURVEILLANCE METHODS: LYOPHILIZED REAGENTS FOR PHAGE-BASED DETECTION

Kesia da Silva  
*Stanford, Palo Alto, CA, United States*

#### 12:40 p.m. TYPHOID INTESTINAL PERFORATIONS AS AN INDICATOR OF ENTERIC FEVER DISEASE BURDEN IN GALMI, NIGER

Yakoubou Sanoussi  
*SIM Galmi Hospital, Madaoua-Kyara, Niger*

## Scientific Session 184

### American Committee of Molecular Cellular and Immunoparasitology (ACMCIP): Parasite Immunology - Insights from Natural and Experimental Infections

*Convention Center - Room 354/355 (3rd Floor)*

**Sunday, November 17, 11:30 a.m. - 1:15 p.m.**

**Supported with funding from the Burroughs Wellcome Fund**

#InfectiousDisease #CellBiology #Immunology  
#HostResponse #Pathogenesis

#### CHAIR

Usheer Kanjee  
*Harvard T.H. Chan School of Public Health, Boston, MA, United States*

Michelle Boyle  
*Burnet Institute, Melbourne, Australia*

#### 11:30 a.m.

8440

#### TICK INNATE IMMUNE RESPONSE TO PATHOGEN INFECTION AT SINGLE-CELL RESOLUTION

Abdulsalam Adegoke<sup>1</sup>, Jose M. c. Ribeiro<sup>2</sup>, Ryan C. Smith<sup>3</sup>, Shahid Karim<sup>4</sup>  
<sup>1</sup>Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor, MI, United States, <sup>2</sup>Vector Biology Section, Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, <sup>3</sup>Department of Plant Pathology, Entomology, and Microbiology, Iowa State University, Ames, IA, United States, <sup>4</sup>School of Biological, Environmental, and Earth Sciences, The University of Southern Mississippi, Hattiesburg, MS, United States

#### 11:45 a.m.

8427

#### HUMAN FILARIAL INFECTION RESHAPES THE TRANSCRIPTIONAL AND FUNCTIONAL PROGRAMMING OF CD8 T CELLS AT HOMEOSTASIS AND IN RESPONSE TO CYTOMEGALOVIRUS (CMV) IN FILARIAL/CMV COINFECTED INDIVIDUALS

Camila Queiroz Glauss, Thomas B. Nutman  
*National Institutes of Health, Bethesda, MD, United States*

#### Noon

8428

#### LATENT CYTOMEGALOVIRUS INFECTION DISRUPTS INNATE AND ADAPTIVE IMMUNITY TO *PLASMODIUM FALCIPARUM* DURING PRIMARY MALARIA INFECTION

Reena Kiran Mukhiya<sup>1</sup>, Jessica R. Loughland<sup>1</sup>, Jo-Anne Chan<sup>1</sup>, Megan Soon<sup>2</sup>, Nick Dooley<sup>1</sup>, Luke Quigley<sup>1</sup>, Fabian de Labastida Rivera<sup>2</sup>, Dean Andrew<sup>2</sup>, James Beeson<sup>1</sup>, James McCarthy<sup>3</sup>, Bridget E. Barber<sup>2</sup>, Alejandro Lopez<sup>4</sup>, Christian Engwerda<sup>2</sup>, Michelle J. Boyle<sup>1</sup>

<sup>1</sup>Burnet Institute, Melbourne, Australia, <sup>2</sup>QIMR Berghofer Medical Research Institute, Brisbane, Australia, <sup>3</sup>Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia, <sup>4</sup>School of Environmental Sciences, Griffith University, Brisbane, Australia

(ACMCIP Abstract)



12:15 p.m.

8429

### HOST DIRECTED THERAPY TO IMPROVE ANTI-PARASITIC IMMUNITY IN VOLUNTEERS EXPERIMENTALLY INFECTED WITH BLOOD STAGE MALARIA

Bridget Barber<sup>1</sup>, Rebecca Webster<sup>1</sup>, Luzia Bukali<sup>1</sup>, Damian Oyong<sup>2</sup>, Fabian de Labastida Rivera<sup>1</sup>, Jessica Engel<sup>1</sup>, Dean Andrew<sup>1</sup>, Megan Soon<sup>1</sup>, Nick Dooley<sup>2</sup>, Jessica Loughland<sup>1</sup>, James McCarthy<sup>3</sup>, Gerlinde Obermoser<sup>1</sup>, Michael Leipold<sup>4</sup>, Julianne Jamelink<sup>2</sup>, Reena Mukhiya<sup>2</sup>, Holder Maecker<sup>4</sup>, Christian Engwerda<sup>1</sup>, **Michelle Boyle**<sup>2</sup>

<sup>1</sup>QIMR-Berghofer, Brisbane, Australia, <sup>2</sup>Burnet Institute, Melbourne, Australia, <sup>3</sup>University of Melbourne, Melbourne, Australia, <sup>4</sup>Stanford University, Stanford, CA, United States

(ACMCIP Abstract)

12:30 p.m.

8430

### DIFFERENT MICRORNA PROFILES IN THE CIRCULATING CD4+T CELLS ARE ASSOCIATED WITH DIFFERENT CLINICAL PRESENTATIONS OF LEISHMANIA DONOVANI INFECTION

RITIRUPA ROY<sup>1</sup>, Cinthia Hudachek<sup>2</sup>, Shashi Bhushan Chauhan<sup>1</sup>, Sundaram Pandey<sup>1</sup>, Rajiv Kumar<sup>3</sup>, Madhukar Rai<sup>1</sup>, Mary E. Wilson<sup>2</sup>, Shyam Sundar<sup>1</sup>

<sup>1</sup>INSTITUTE OF MEDICAL SCIENCES, BANARAS HINDU UNIVERSITY, VARANASI, India, <sup>2</sup>University of Iowa and the Iowa City VA Medical Center, Iowa, IA, United States, <sup>3</sup>Centre of Experimental Medicine and Surgery, Banaras Hindu University, Varanasi, India, VARANASI, India

(ACMCIP Abstract)

12:45 p.m.

8431

### ISOLATION AND CHARACTERIZATION OF A-GAL-CONTAINING EXTRACELLULAR VESICLES FROM TRYPANOSOMA CRUZI: UNVEILING NEW BIOMARKERS FOR CHAGAS DISEASE

Priscila Silva Grijo Farani, Nasim Karimi Hosseini, Susana Portillo, Maria Tays Mendes, Brian Grajeda, Colin Knight, Cameron Ellis, Igor Almeida  
The University of Texas at El Paso, El Paso, TX, United States

(ACMCIP Abstract)

1 p.m.

8432

### EXTRACELLULAR VESICLES FROM TAENIA SOLIUM DAMPENS PI3K-AKT-MTORC1 SIGNALING AND AMELIORATES DSS-COLITIS IN MICE

Suraj Singh Rawat, Amit Prasad  
Indian Institute of Technology Mandi, Mandi, Himachal Pradesh, India

(ACMCIP Abstract)

## Symposium 185

### The Challenge of Schistosomiasis Diagnosis and Treatment in Young Children and Pregnant Women – The Example of freeBILy

Convention Center - Room 356 (3rd Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

The WHO NTD 2030 Roadmap targets schistosomiasis for elimination as a public health problem by 2030. There is a need to align national guidelines and strategies in endemic countries and to include all at-risk groups in targeted interventions such as preventive chemotherapy. Particularly, two risk groups are neglected in schistosomiasis prevention and treatment campaigns: preschool-aged children and pregnant women. Both groups are severely affected by schistosomiasis but are neglected in research and policy. To overcome reluctance to include these two vulnerable groups into preventive chemotherapy programs,

a test-and-treat strategy using easy-to-use and affordable diagnostics would be an appropriate approach. The EDCTP-funded freeBILy project included two clinical trials conducted in Gabon and Madagascar from 2018 to 2023. The aim of the project was to assess the safety, efficacy, feasibility and cost-effectiveness of test-based praziquantel treatment of schistosomiasis in pregnant women and young children. In Madagascar, a POC-CCA test-based treatment strategy was implemented in routine maternal health care settings and compared to the highly accurate UCP-LF CAA test. The latter was also implemented in Gabon, along with other diagnostic tests to evaluate efficacy of praziquantel treatment in pregnant women. In this session, we will present the first findings of the project in order to discuss the next steps needed to further push endemic countries to adapt strategies to include young children and pregnant women for preventive praziquantel treatment. After a brief introduction of the freeBILy project, the main findings will be presented within four talks. Specifically, we will discuss the diagnostic outcomes and challenges, the safety and tolerability and efficacy of praziquantel in young children and pregnant women, and the cost-effectiveness of the test-and-treat strategy for schistosomiasis. A final debate between the speakers and the audience will help to identify challenges and opportunities resulting from the freeBILy project and to align them with the goals and targets of the WHO NTD 2030 Roadmap for schistosomiasis ([www.freebily.eu](http://www.freebily.eu)). #Diagnostics #Therapeutics #InfectiousDisease #MNCH #ClinicalResearch

#### CHAIR

Govert van Dam  
Leiden University Medical Center, Leiden, Netherlands

Yabo Josiane Honkpehedji  
Centre de Recherches Médicale de Lambaréné, Lambaréné, Gabon

#### 11:30 a.m.

### INTRODUCTION AND PURPOSE OF THE SESSION

Andrea Kreidenweiss  
Universitätsklinikum Tübingen, Tübingen, Germany

Daniela Fusco  
Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

#### 11:50 a.m.

### THE DIAGNOSTIC CHALLENGES OF SCHISTOSOMIASIS: WHY DO WE NEED A POC?

Pytsje T. Hoekstra  
Leiden University Medical Center, Leiden, Netherlands

#### Noon

### LESSONS LEARNED FROM THE FIELD - EVALUATION OF THE PERFORMANCE OF CIRCULATING ANODIC ANTIGEN(CAA) MEASUREMENT AS A DIAGNOSTIC TOOL FOR THE DETECTION OF SCHISTOSOMA HAEMATOBIIUM INFECTIONS IN PREGNANT WOMEN AND THEIR NEWBORN AND CHILD IN LAMBARÉNÉ, GABON

Yabo Josiane Honkpehedji  
Centre de Recherches Médicales de Lambaréné, Lambaréné, Gabon

**12:20 p.m.**

**LESSONS LEARNED FROM THE FIELD - SCHISTOSOMIASIS AMONG PREGNANT WOMEN IN RURAL MADAGASCAR: A CALL FOR ACTION FOR ADAPTING PUBLIC HEALTH STRATEGIES**

Raphael Rakotozandrindrainy  
*Madagascar Institute for Vaccine Research, University of Antananarivo, Antananarivo, Madagascar*

**12:30 p.m.**

**LESSONS LEARNED FROM THE FIELD - EVALUATION OF THE PERFORMANCE OF THE POINT OF CARE CIRCULATING CATHODIC ANTIGEN (POC-CCA) MEASUREMENT AS A DIAGNOSTIC TOOL FOR THE DETECTION OF SCHISTOSOMA MANSONI INFECTIONS IN PREGNANT WOMEN IN RURAL MADAGASCAR**

Rivonirina Andry Rakotoarivelo  
*Université de Fianarantsoa, Fianarantsoa, Madagascar*

**12:40 p.m.**

**MODELLING THE COST-EFFECTIVENESS OF TEST AND TREAT STRATEGIES FOR SCHISTOSOMIASIS**

Elisa Sicuri  
*Fundación Privada Instituto de Salud Global Barcelona (ISGlobal), Barcelona, Spain*

## Symposium 186

### Will HAT be the Next NTD to Achieve Global Elimination?

*Convention Center - Room 357 (3rd Floor)*  
**Sunday, November 17, 11:30 a.m. - 1:15 p.m.**

In the late 1990s, the international community faced a surge in cases of gambiense Human African Trypanosomiasis (gHAT), marking the peak of an epidemic that had persisted since the 1970s. Responding to this public health challenge, global efforts gained momentum in the new millennium, culminating in the publication of the World Health Organisation's (WHO) 2020 and 2030 roadmaps. This strategic framework set ambitious goals for gHAT control, first targeting the disease for elimination as a public health problem (EPHP) then interrupting transmission to humans (EoT). Over the past two decades, national programmes and their international partners have achieved commendable success. Côte d'Ivoire, Uganda, Togo, Benin and Equatorial Guinea have now officially validated EPHP of gHAT. However, as we move past 2020, attention is shifting towards the critical phase of verifying EoT to humans. Despite substantial progress, the rate of decline of cases has slowed since 2018. This underscores the challenges in progressing from very low to zero cases, especially in regions with inadequate infrastructure, fragile healthcare systems or ongoing conflicts. The symposium aims to delve into key aspects of the ongoing battle against gHAT with a particular focus on the challenges faced in achieving EoT. Bringing together experts, researchers and policymakers we will discuss themes including what makes gHAT unique and a target for EoT, reasons to be optimistic, the challenges that lie ahead, the diverse toolkit for gHAT control and transmission interruption, current challenges for control and surveillance and ways to strengthen them, the potential impact of a new single-dose oral drug, acoziborole, current diagnostics and the necessity for new tools to reach EoT,

the extent to which tsetse control is needed to reach EoT, the challenges with current deployment methodologies and alternative approaches, the importance of sustained vigilance after achieving EoT and transmission and health economic modelling as a tool to support the operationalisation and application of interventions. We will also highlight uncertainties and old vs. new strategies as we approach elimination including (i) recommendations for scale-up, where and why (ii) where current strategies should be maintained (iii) where scale-back would be recommended and (iv) where completely new strategies should be introduced and what these constitute. Addressing these key focus areas, the symposium intends to highlight for others in the NTD field the challenges, successes and lessons learned by the HAT community whilst in parallel looking forward to building a comprehensive strategy for the successful elimination of the disease in humans. #Elimination #Epidemiology #InfectiousDisease #Modeling

#### CHAIR

Emily H. Crowley  
*University of Warwick, Coventry, United Kingdom*

Rachel Bronzan  
*Bill & Melinda Gates Foundation, Seattle, WA, United States*

**11:30 a.m.**

#### INTRODUCTION

**11:40 a.m.**

#### MOVING TOWARDS THE ELIMINATION OF SLEEPING SICKNESS

Gerardo Priotto  
*World Health Organization, Geneva, Switzerland*

**11:55 a.m.**

#### PREPARING FOR THE LAST MILE: INNOVATIONS, OPPORTUNITIES AND CHALLENGES IN THE GHAT ELIMINATION EFFORTS IN THE DRC

Erick Mwamba Miaka  
*Programme National de Lutte contre la Trypanosomiase Humaine Africaine (PNLTHA), Kinshasa, Democratic Republic of the Congo*

**12:10 p.m.**

#### LESSONS LEARNED AND CHALLENGES OF VECTOR CONTROL AS PART OF AN INTEGRATED STRATEGY TO ELIMINATE THE TRANSMISSION OF GHAT

Inaki Tirados  
*Liverpool School of Tropical Medicine, Liverpool, United Kingdom*

**12:25 p.m.**

#### ACOZIBOROLE: THE DEVELOPMENT OF A SINGLE-DOSE ORAL TREATMENT FOR SLEEPING SICKNESS

Stéphane Hugonnet  
*Drugs for Neglected Diseases initiative (DNDi), Geneva, Switzerland*

**12:40 p.m.**

#### WHAT INSIGHTS AND SUPPORT CAN MODELERS PROVIDE ON THE SHORT- AND LONG-TERM BATTLE TOWARDS ELIMINATION?

Kat S. Rock  
*Warwick University, Coventry, United Kingdom*

Sunday  
November 17

## Symposium 187

### Bridging the Rift: Interdisciplinary Approaches to Rift Valley Fever Virus Research

Convention Center - Room 383/384/385 (3rd Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

This symposium will feature a panel of experts detailing new findings in Rift Valley fever virus (RVFV) research. RVFV periodically re-emerges in epizootics in sub-Saharan Africa that can cause subclinical to severe infection in both ruminants and humans. Indicators of outbreaks include abortion storms in pregnant ewes and cattle and hemorrhagic fever, encephalitis or retinitis in humans. Viral transmission occurs primarily by *Aedes* and *Culex* mosquitoes. However, it can also occur via contact or exposure to infected animal tissue. Vertical transmission of RVFV in mosquitoes has been demonstrated, however, there is an overall lack of understanding of the impact on disease cycles. Climate change and other factors have caused concern that this virus may emerge into new regions, such as Europe or the US. This has stimulated multiple efforts: 1) human vaccine development, 2) study of disease dynamics in US mosquitoes, animals and wildlife and 3) redoubling of surveillance efforts in endemic countries, e.g. Tanzania. Highlights from the field will include gaps in the current understanding of RVF disease ecology and the status of clinical development of a human vaccine. Discussion of surveillance will feature the ways in which inter-epidemic transmission of RVFV across ecologies in Tanzania is addressed by community- and hospital-based surveillance, cross-sectional and sentinel animal epidemiological studies, and how ongoing transmission in absence of epidemic/epizootics fits into the bigger picture of RVF disease ecology. Molecular highlights will cover advances in tools used to understand RNA reassortment between co-infecting strains in mosquitoes and the ways in which viral reassortment affects viral kinetics. Our data demonstrates reassortment between virulent and vaccine strains occurs in mosquito midgut and salivary tissue. Reassortant virus recovered from these tissues, however did not lead to enhanced replication phenotypes compared to non-reassortant parental strains. Another presentation will report on animal and *in vitro* studies that reveal alterations in interferon lambda and key cytokines/chemokines during the inflammatory response to RVFV. scRNA-seq of *Culex tarsalis* ovaries was performed to generate tools for improved characterization of RVFV vertical transmission. Thirteen cell clusters were identified, representing nurse cells, germ cells, stretch cells and hemocytes. *In vivo* characterization by smFISH reveals that, following a round of egg-laying, ovarian stretch cells engulf nurse cells, presumably for nutrient recycling, as indicated by the presence of vitellogenin receptor mRNA in specific cell clusters. Lastly, exploring genomic regulation of RVFV infection in mosquitoes promises to reveal the underpinnings of vector competence. #EmergingDiseaseThreats, #Genomics, #Vaccinology, #MolecularBiology

#### CHAIR

Corey Campbell  
Colorado State University, Fort Collins, CO, United States

Emma Harris  
Colorado State University, Fort Collins, CO, United States

11:30 a.m.  
INTRODUCTION

11:40 a.m.  
RIFT VALLEY FEVER VIRUS: RISK OF EMERGENCE INTO EUROPE AND NORTH AMERICA

Chad Mire  
USDA-ARS-National Bio-Agro-Defense Facility, Manhattan, KS, United States

11:55 a.m.  
RIFT VALLEY FEVER IN TANZANIA: INTER-EPIDEMIC TRANSMISSION ACROSS ECOLOGIES AND PROSPECTS FOR ITS CONTROL

Robert David Sumaye  
Ifakara Health Institute, Ifakara, United Republic of Tanzania

12:10 p.m.  
EVALUATION OF IMMUNOMODULATORY TREATMENT STRATEGIES FOR RIFT VALLEY FEVER VIRUS

Darci R. Smith  
Naval Medical Research Command, Biological Defense Research Directorate, Frederick, MD, United States

12:25 p.m.  
DEFINING REGULATION OF RVFV INFECTION IN VECTOR MOSQUITOES

Corey L. Campbell  
Colorado State University, Fort Collins, CO, United States

12:40 p.m.  
CO-INFECTION OF CULEX TARSALIS WITH RIFT VALLEY FEVER PHLEBOVIRUS PRODUCES EFFICIENT SEGMENTAL REASSORTMENT ACROSS MIDGUT AND SALIVARY GLAND TISSUES

Emma Harris  
Colorado State University, Fort Collins, CO, United States

12:55 p.m.  
THE HALI PROJECT: RIFT VALLEY FEVER VACCINE DEVELOPMENT AND SURVEILLANCE IN TANZANIA - GLOBAL PARTNERSHIPS FOR GLOBAL GOOD

Brian Bird  
Viral Special Pathogens Branch, University of California, Davis, Davis, CA, United States

## Symposium 188

### Integrating Anthropology/Social Science Approaches Into Epidemic Outbreak Response

Convention Center - Room 388/389 (3rd Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

Anthropological and social science approaches have gained recognition in outbreak response since the 2014-16 West African Ebola outbreak, and the importance of understanding social dynamics in order to design effective outbreak response interventions has been reconfirmed during the Covid-19 pandemic. As a result, demand for social scientists, and anthropologists in particular, in outbreak response operations has increased significantly and we have successfully integrated these new data streams into epidemic responses to cholera in Malawi, Zimbabwe and Zambia over the past year alone. While largely

sitting under the RCCE pillar in the IMS structure, the findings and recommendations of social science research have much broader operational potential and have been taken up across pillars in these responses. We would like to take this opportunity to reflect on the successes and challenges of embedding social science approaches across the response pillars; the standardization of tools and frameworks; and the broader operational implications for developing sustainable approaches to epidemic preparedness and response. The panelists will discuss their experience of having participated in recent outbreak responses in different capacities – as government officials leading outbreak pillars, as academics joining outbreak investigation assessments for rapid action, and as technical experts representing major agencies' surge teams. Topics to be discussed revolve around methodological, political and operational concerns, including: • How to integrate community-based feedback data and anthropological arguments into the evidence base for decision-making in a rapidly shifting environment? This will require a discussion about the difficulties of navigating rapid research in emergency mode when traditional social science methods promote slow, long-term research and the challenges of working within an environment where large sample sizes often carry more weight than small-scale qualitative investigations, and where social-science and community-based data streams are still fairly new. • What are the political and programmatic implications of giving voice to the most marginalized in society, who often bear the heaviest burden of cases and case fatalities? Panelists will debate the challenges produced when these voices may highlight uncomfortable truths that make government and international partners' shortcomings visible, and the dilemmas created when actions recommended as critical by the community fall outside of planned response activities. The panelists will reflect on the value of social science insights and develop a roadmap for integrating social science data streams into the structure of epidemic preparedness and response. #SocialScience #InfectiousDisease

#### **CHAIR**

Nadine Beckmann  
*LSHTM, London, United Kingdom*

#### **11:30 a.m.** **INTRODUCTION**

#### **11:35 a.m.** **RAPID QUALITATIVE ASSESSMENT AND COMMUNITY FEEDBACK AS DATA STREAMS FOR OUTBREAK RESPONSE**

Christina Craig  
*US CDC, Atlanta, United States*

#### **11:55 a.m.** **INTEGRATING COMMUNITY FEEDBACK MECHANISMS INTO OUTBREAK RESPONSE**

Ngonizadshe Nyambarawo  
*IFRC/Collective Service, Pretoria, South Africa*

#### **12:15 p.m.**

#### **SOCIAL SCIENCE RESEARCH FOR COMMUNITY ENGAGEMENT IN THE 2023 CHOLERA OUTBREAK IN ZIMBABWE**

Sophie Everest  
*UKHSA, London, United Kingdom*

#### **12:35 p.m.** **OPERATIONALIZING SOCIAL SCIENCE RESEARCH IN THE 2024 CHOLERA OUTBREAK IN ZAMBIA**

Hanna Woldemeskale  
*Unicef, Lusaka, Zambia*

#### **12:55 p.m.** **OPERATIONALIZING AND BUILDING CAPACITY FOR RAPID QUALITATIVE ASSESSMENTS (RQAS) FOR CRISIS RESPONSE IN ZIMBABWE**

Loveness Chimombe  
*Unicef, Harare, Zimbabwe*

### **Symposium 189**

#### **Scaling the Optimal Use of Multiple ACT's to Prevent Antimalarials Drug Resistance: Progress and Challenges**

*Convention Center - Room 391/392 (3rd Floor)*  
**Sunday, November 17, 11:30 a.m. - 1:15 p.m.**

Prompt treatment with effective antimalarials is a crucial element of malaria control. WHO currently recommends the use of Artemisinin-Based Combination Therapies (ACTs) as the first-line treatment. However, partial artemisinin resistance has been confirmed in a number of African countries, notably Rwanda, Uganda, Tanzania and Ethiopia, threatening the longevity of these treatments. Fortunately, despite reduced efficacy of artemether-lumefantrine in some countries, to date ACTs remain largely effective in Africa and there have been no confirmed reports of partner drug failure. Nevertheless, innovative solutions are required to diversify the use of and protect the efficacy of currently available ACTs until new compounds become available. Multiple First-line Therapies (MFTs) in which several treatments are used concurrently, have been shown to slow down resistance evolution compared with using a single therapy for the whole population. Pilot studies on country readiness to implement MFTs have been conducted in Burkina Faso and Kenya. Several other countries including Rwanda have adopted MFTs as strategy in their national strategy and have begun implementation. This symposium is composed of five presentations that outline the evidence on the effectiveness of MFTs as well as supply, demand, implementation, and operational research issues relevant to the adoption and scale up of MFTs. The first presentation will provide an overview of drug resistance and the need for innovative strategies. The second presentation will share the evidence of the effectiveness of various MFT strategies in Central and East Africa derived from mathematical models. The third presentation will highlight how Rwanda has adopted, generated demand and begun implementation of this strategy. The fourth presentation will outline the operational research being undertaken by Nigeria

to document best practices that can be applied to the adoption and scale up of new therapies and strategies including MFTs in other countries in Africa wishing to implement this strategy. The last presentation will discuss the supply issues for new therapies that form part of the strategy to diversify the use of ACTs. The symposium will be moderated by Dr. Estée Török from the Bill & Melinda Gates Foundation. #InfectiousDisease #Resistance #Modeling

#### CHAIR

Rima Shretta  
*Jhpiego, Baltimore, MD, United States*

Estée Török  
*Bill & Melinda Gates Foundation, London, United Kingdom*

#### 11:30 a.m. INTRODUCTION

#### 11:40 a.m. OVERVIEW OF DRUG RESISTANCE AND THE NEED FOR INNOVATIVE TREATMENT STRATEGIES

Rima Shretta  
*Jhpiego, Baltimore, MD, United States*

#### 11:45 a.m. APPROACHES TO SLOWING DOWN THE CURRENTLY CIRCULATING KELCH13 VARIANTS IN CENTRAL AND EASTERN AFRICA: EVIDENCE ON THE EFFECTIVENESS OF MULTIPLE FIRST-LINE THERAPIES USING MODELING

Maciej F. Boni  
*Temple University, Philadelphia, PA, United States*

#### Noon FROM ADOPTION TO IMPLEMENTATION OF A POLICY OF MULTIPLE FIRST-LINE THERAPIES IN RWANDA

Aimable Mbituyumuremyi  
*Rwanda Biomedical Centre, National Malaria Program, Kigali, Rwanda*

#### 12:15 p.m. OPERATIONAL RESEARCH TO INFORM THE MULTIPLE FIRST-LINE THERAPY STRATEGY IN NIGERIA

Olugbenga A. Mokuolu  
*University of Ilorin Teaching Hospital, Ilorin, Nigeria*

#### 12:30 p.m. GLOBAL EFFORTS TO DIVERSIFY THE USE OF ARTEMISININ-BASED COMBINATION THERAPIES: SUPPLY CHALLENGES

Andre M. Tchouatieu  
*Medicines for Malaria Venture, Meyrin, Switzerland*

## Symposium 190

### Clinical Development of Monoclonal Antibodies that Target Malaria Sporozoites

*Convention Center - Room 393/394 (3rd Floor)*

**Sunday, November 17, 11:30 a.m. - 1:15 p.m.**

The aim of this symposium is to bring together leaders in the field to present results from Phase 2 trials of L9LS in Mali and Kenya, and a Phase 1 Challenge Study in the US for MAM01. The symposium will also explore delivery and cost of good considerations. The symposium will provide a forum for the community to discuss next steps in the clinical development and registration of mAbs including potential target populations. Each presenter will provide an overview on prior experience exploring some of these concepts in prior and current projects, but also will discuss important concepts to explore in future mAb clinical trials. Ample time will be provided at the end of the symposium to promote Q&A and discussion from the audience. #Immunology #Prevention #InfectiousDisease #Pediatrics #TranslationalScience

#### CHAIR

Kayla Andrews  
*Bill & Melinda Gates Medical Research Institute, Cambridge, MA, United States*

Aissata Ongoiba  
*MRTC/ICERMALI, Bamako, Mali*

#### 11:30 a.m. INTRODUCTION

#### 11:40 a.m. COST OF GOODS OF PROPHYLACTIC MONOCLONAL ANTIBODIES FOR *PLASMODIUM FALCIPARUM* MALARIA

Hong Liu  
*Bill & Melinda Gates Medical Research Institute, Cambridge, MA, United States*

#### 11:55 a.m. SAFETY AND EFFICACY OF SUBCUTANEOUS ADMINISTRATION OF L9LS IN MALIAN WOMEN OF CHILD-BEARING POTENTIAL

Aissata Ongoiba  
*MRTC/ICERMALI, Bamako, United States*

#### 12:10 p.m. SAFETY, PHARMACOKINETICS AND EFFICACY OF REPEATED DOSING OF L9LS IN MALIAN CHILDREN

Safiatou Doumbo  
*MRTC/ICERMALI, Bamako, Mali*

#### 12:25 p.m. SAFETY, PHARMACOKINETICS, AND EFFICACY OF REPEATED DOSING OF L9LS IN KENYAN INFANTS AND CHILDREN

Titus Kwambai  
*US Centers for Disease Control, Kisumu, Kenya*

#### 12:40 p.m. MAM01: SAFETY, PK AND PRELIMINARY EFFICACY OF A NEW 1ST GEN CSP MONOCLONAL ANTIBODY

Kirsten Lyke  
*University of Maryland School of Medicine, Baltimore, United States*

## Symposium 191

### The Changing Face of Mapping: Exploring Disease Monitoring Challenges and Innovations After Long-Term Implementation of Helminth Control Programs

Convention Center - Room 395/396 (3rd Floor)

Sunday, November 17, 11:30 a.m. - 1:15 p.m.

Since the advent of Preventative Chemotherapy (PC) as a key control measure for soil-transmitted helminths (STH) and schistosomiasis (SCH), the prevalence of both diseases has reduced globally. Many previously endemic countries now face a very low or highly heterogeneous prevalence landscape. Current guidelines suggest that the frequency of treatment be slowly scaled down until suspension in line with disease prevalence. Guidelines however, lack sufficient nuance around cost-effectively scaling back programs as decision making at a national or equivalent scale may miss endemic pockets of infection or areas of risk where continued or resurging infection may occur. A key determining factor for the future of PC programs is how monitoring is performed. Mapping in such environments is hindered primarily by three key issues 1) given the investment needed to test and treat children for STH and SCH at scale, and that most infections do not tend to trigger individuals to seek testing at health establishments, large-scale representative surveys remain necessary for programmatic decision making. 2) Traditional diagnostics may face issues around precision as prevalence and intensity of infections reduce. Current available alternatives are hindered by prohibitive costs. 3) Given the heterogeneity of prevalence, insufficient guidance exists on how to map sub-nationally and at what level optimal decision making should occur. In addition, geographies may now have multiple goals across a single country. The symposium will explore key issues and novel solutions for monitoring disease patterns as prevalence reduces, focusing on programmatically relevant decision-making and cost-effectiveness. The overarching goal of the symposium is to foster discussion on the issues currently facing decision making for future STH/SCH mapping. Differing from most other discussions a key focus will be what is achievable with cost-effectiveness in mind. Further goals include: Identifying novel survey design which can cost-effectively deal with multiple competing goals presenting helminth control programs after many years of treatment; high light how impactful novel diagnostics which can be cost-effective at scale and their potential for use in maturing helminth control programs; explore case-studies which researchers and program managers can use to approach their own cost-effective programming as programs mature. #Epidemiology #InfectiousDisease #PopulationSurveillance

#### CHAIR

Mark Minnery

*Evidence Action, Washington, DC, United States*

Judd Walson

*Johns Hopkins University, Baltimore, United States*

11:30 a.m.

#### INTRODUCTION

11:40 a.m.

#### THE CHANGING FACE OF HELMINTH MAPPING: KEY ISSUES WITH SURVEY DESIGN AND ANALYSIS FOR COST-EFFECTIVE SUB-NATIONAL MAPPING

Kate McCracken

*Evidence Action, Washington DC, United States*

11:55 a.m.

#### TRANSITIONING FROM DISTRICT TO SUB DISTRICT MONITORING FOR SCHISTOSOMIASIS: CHALLENGES AND WAY FORWARD

Ndellejong Cosmas Ejong

*Sight Savers, Calgary, Canada*

12:10 p.m.

#### EXPLORING SOIL-TRANSMITTED HELMINTH INFECTION PREVALENCE HETEROGENEITY: INSIGHTS FROM RECENT IMPACT ASSESSMENTS IN TANZANIA

Mohamed Ramadhan Nyati

*Neglected Diseases Control Program (NTDCP), Ministry of Health, United Republic of Tanzania*

12:20 p.m.

#### EXPLORING SOIL-TRANSMITTED HELMINTH INFECTION PREVALENCE HETEROGENEITY: INSIGHTS FROM RECENT IMPACT ASSESSMENTS IN TANZANIA

Stephen Mbwambo

*Tanzania Ministry of Public Health, Dodoma, United Republic of Tanzania*

12:35 p.m.

#### UTILITY AND FEASIBILITY OF HIGH THROUGHPUT MOLECULAR DIAGNOSTICS TO ENHANCE STH SURVEILLANCE

Sitara Swarna Rao Ajjampur

*CMC-Vellore, Tamil Nadu, India*

12:50 p.m.

#### GEOSTATISTICAL METHODS FOR SURVEY DESIGN IN LOW PREVALENCE SETTINGS

Freya Clark

*Lancaster University, Lancaster, United Kingdom*

Sunday, November 17, 1:15 p.m.

#### ASTMH 2024 Annual Meeting Adjourns

See you next year at the 2025 Annual Meeting

November 9-13, 2025 (Sunday through Thursday)

Metro Toronto Convention Centre

Toronto, Ontario, Canada















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