THE AMERICAN JOURNAL OF
Tropical Medicine and Hygiene
Official Journal of the American Society of Tropical Medicine and Hygiene

Volume 79 December 2008 Number 6

Final Program

American Society of Tropical Medicine and Hygiene

57th Annual Meeting

57TH ASTMH ANNUAL MEETING

December 7–11, 2008

Sheraton New Orleans

New Orleans, Louisiana, USA

Supplement to

The American Journal of Tropical Medicine and Hygiene

Volume 79, No. 6, Supplement • The American Society of Tropical Medicine and Hygiene Final Program • New Orleans, LA, USA — 2008

ASTMH Thanks the 57th Annual Meeting Supporters

Bill & Melinda Gates Foundation

Burroughs Wellcome Fund

International Association for Medical Assistance to Travelers

Medicines for Malaria Venture

National Institutes of Health/ National Institute of Allergy and Infectious Diseases

Novartis Pharma AG.

Novartis Vaccines

Pfizer Inc.

sanofi-aventis

Sigma-Tau Phamaceuticals, Inc.

sigma-tau SpA

SCYNEXIS, Inc.

TechLab, Inc.

www.astmh.org

American Society of Tropical Medicine and Hygiene

57th ASTMH Annual Meeting

See the ASTMH 57th Annual Meeting Abstract Book, included with your registration packet, to view the full text of abstracts presented at the annual meeting.

December 7–11, 2008
Sheraton New Orleans
New Orleans, Louisiana, USA

www.astmh.org

Table of Contents

About the American Society of Tropical Medicine and Hygiene (ASTMH)

ASTMH is the principal organization in the United States representing scientists, clinicians and others with interests in the prevention and control of tropical diseases and diseases of global health import. The interests of the society are in tropical medicine, including the varied parasitic and viral diseases of the tropics, as well as other infectious diseases, such as enteric and mycobacterial infections. ASTMH members include those with clinical, epidemiological, programmatic and basic biochemical, immunologic and molecular approaches to both diseases and pathogens. Within the society are various active subgroups with specific interests, such as medical entomology, arbovirology, molecular parasitology and clinical tropical diseases.

Join the American Society of Tropical Medicine and Hygiene

We invite you to join ASTMH and benefit from membership in the premier international organization for scientists involved in tropical medicine and global health. ASTMH provides a forum for sharing scientific advances, exchanging ideas, fostering new research and providing professional education. See the membership application on page 277.

Program Changes

The time and/or location of any activity or session is subject to change. Notices of program changes will be posted in the ASTMH registration area. A Program Update is included in your registration packet.

Questions

If you have any questions regarding the program or registration, visit the ASTMH registration desk in the Napoleon Ballroom on the fourth floor.

Schedule-at-a-Glance

Sunday, December 7, 2008

	Napoleon Ballroom 3rd floor	Napoleon Ballroom 3rd floor	Grand Ballroom AB 5th floor	Grand Ballroom C 5th floor	Grand Ballroom D 5th floor	Grand Ballroom E 5th floor	Oak Alley 4th floor	Rhythms I 2nd floor	Rhythms II/III 2nd floor
7 - 7:30 a.m.									
7:30 - 8 a.m.			Pre-Meeting Course: Malaria Eradication						
8 - 8:30 a.m.									
8:30 - 9 a.m.									
9 - 9:30 a.m.									
9:30 - 10 a.m.	Registration								
10 - 10:30 a.m.									
10:30 - 11 a.m.									
11 - 11:30 a.m.							Young Investigator Award Session A	Young Investigator Award Session B	
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.									
2:30 - 3 p.m.									
3 - 3:30 p.m.									
3:30 - 4 p.m.									
4 - 4:30 p.m.									Student Reception
4:30 - 5 p.m.									
5 - 5:30 p.m.									
5:30 - 6 p.m.			1 Opening Plenary Awards Ceremony p. 54						
6 - 6:30 p.m.									
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 p.m.									
9 - 9:30 p.m.									
9:30 - 10 p.m.									

Sunday, December 7, 2008 (continued)

	Bayside A 4th floor	Bayside B 4th floor	Bayside C 4th floor	Waterbury Ballroom 2nd floor	Grand Couteau 5th floor	Salon 816 8th floor	Salon 824 8th floor	Salon 817/821 8th floor
7 - 7:30 a.m.								
7:30 - 8 a.m.								
8 - 8:30 a.m.				ASTMH Council Meeting				
8:30 - 9 a.m.								
9 - 9:30 a.m.								
9:30 - 10 a.m.								
10 - 10:30 a.m.								
10:30 - 11 a.m.								
11 - 11:30 a.m.	Young Investigator Award Session C	Young Investigator Award Session D	Young Investigator Award Session E					ACAV SIE
11:30 a.m. - Noon								
Noon - 12:30 p.m.								ACAV SIRACA
12:30 -1 p.m.								
1 - 1:30 p.m.								
1:30 - 2 p.m.								
2 - 2:30 p.m.								ACAV SALS
2:30 - 3 p.m.								
3 - 3:30 p.m.								
3:30 - 4 p.m.					ACMCIP Council Meeting	Clinical Group Council Meeting	ACME Council Meeting	ACAV Council Meeting
4 - 4:30 p.m.								
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.								
8 - 8:30 p.m.								
8:30 - 9 p.m.								
9 - 9:30 p.m.								
9:30 - 10 p.m.								

Schedule-at-a-Glance

Monday, December 8, 2008

	Napoleon Ballroom 3rd floor	Armstrong 8th floor	Cornet 8th floor	Gallery 1st floor	Rhythms I 2nd floor	Rhythms II/III 2nd floor	Waterbury 2nd floor	Napoleon A123 3rd floor
7:00 - 7:30 a.m.								
7:30 - 8:00 a.m.								
8:00 - 9:45 a.m.	Exhibits Open 9:30-10:30			2 Symposium *Amblyomma americanum* I p. 56	3 Symposium GIS Systems and Infectious Dis. p. 56	4 Symposium Clinical Updates p. 57	5 Symposium Natural Disasters p. 57	6 Scientific Session Malaria Vaccines I p. 57
9:45 - 10:15 a.m.	Coffee Break	Poster Session A Set-Up	Poster Session A Set-Up					
10:15 - Noon		Poster Session A Viewing	Poster Session A Viewing	14 Symposium *Amblyomma americanum* II p. 62	15 Symposium GIS: Malaria, Schistosomiasis p. 62	16 Symposium Tropical Medicine HTD p. 63	17 Scientific Session Bacteria I Water and Hygiene p. 63	18 Scientific Session Malaria Vaccines II p. 64
Noon - 12:15 p.m.	Exhibit Hall Open Light Lunch	26 Poster Session A Light Lunch p. 70	26 Poster Session A Light Lunch p. 70					
12:15 - 12:30 p.m.							27 Peace Corps Masters Programs p. 96	
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.	Exhibits Open 3-4	Poster Session A Viewing	Poster Session A Viewing	31 Scientific Session Malaria Immunology I p. 97	32 Symposium Traveling Child p. 99	33 Symposium Building Clinical Programs p. 99	34 Symposium Intestinal Microbiota p. 100	35 Symposium Plasmodia Pores, Channels, Transporters p. 100
3:15- 3:45 p.m.	Coffee Break							
3:45 - 5:30 p.m.				43 Scientific Session Malaria Immunology II p. 105	44 Symposium Malnutrition and Infection p. 106	45 Symposium Malaria Rx in Pregnancy p. 107		46 Scientific Session Malaria Markers Drug Resistance p. 107
5:30 - 6:00 p.m.								
6:00 - 6:45 p.m.								
6:45 - 7:00 p.m.								
7:00 - 7:30 p.m.		Poster Session A Dismantle	Poster Session A Dismantle	Satellite Symposium Antimalarial Partnerships p. 113		Satellite Symposium Japanese Encephalitis p. 113		
7:30 - 8:00 p.m.								
8:00 - 8:30 p.m.								
8:30 - 9:00 p.m.								

Monday, December 8, 2008 (continued)

	Maurepas 3rd floor	Bayside A 4th floor	Bayside BC 4th floor	Grand Ballroom A 5th floor	Grand Ballroom B 5th floor	Grand Ballroom C 5th floor	Grand Ballroom D 5th floor	Grand Ballroom E 5th floor
7:00 - 7:30 a.m.				1A Gates Malaria Strategy p. 55				
7:30 - 8:00 a.m.								
8:00 - 9:45 a.m.	7 Symposium Field-Based Research p. 58		8 Symposium NTD Update: Latin American and Carribean p. 59	9 Symposium ACMCIP Host Cell Encounters p. 59	10 Symposium HIV: Africa Beyond ART p. 60	11 Scientific Session Flavivirus I Dengue I p. 60	12 Symposium Career Development I p. 61	13 Symposium Rectal Artesunate p. 61
9:45 - 10:15 a.m.								
10:15 - Noon	19 Scientific Session Malaria - Mosquito: Transmission p. 65		20 Symposium HAT: Drug R&D p. 66	21 Symposium Host-Pathogen Genomic: *Plasmodium falciparum* p. 67	22 Scientific Session Helminths I: Taenia/ Cysticercosis p. 67	23 Scientific Session Flavivirus II Dengue II p. 68	24 Symposium Career Development II p. 69	25 Symposium Home Management Malaria ACT and Dx p. 69
Noon - 12:15 p.m.								
12:15 - 12:30 p.m.			27A HAT Film p. 96	28 Meet the Professors A Enigmatic Cases p. 96		29 Malaria Eradication Summary p. 96	30 Cochrane Reviews in Tropical ID p. 97	
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.	35A Symposium Malaria Indicator Surveys p. 101	36 Symposium Schistosomiasis Rx Strategies p. 101	37 Symposium Conflict-Affected Populations p. 102	38 Symposium Disease Eradication NTDs p. 102	39 Scientific Session Schistosomiasis I Epidemiology/ Control p. 103	40 Symposium ACME I Modified Vectors p. 104	41 Symposium Antimalarial Global Strategy p. 104	42 Symposium Trypanosomatid Path and Protection p. 105
3:15- 3:45 p.m.								
3:45 - 5:30 p.m.	47 Scientific Session Kinetoplastida I Mol Biol and Immun p. 108	48 Symposium Research Capacity Building p. 109	49 Late Breakers in Clinical Tropical Medicine p. 110	50 Late Breakers in Basic Science Molecular Biology p. 110	51 Scientific Session Schistosomiasis II Immunology/ Pathology p. 110	52 Symposium ACME II Modified Vectors p. 111	53 Symposium Antimalarial Market: Africa p. 111	54 Symposium NTDs: PPP p. 112
5:30 - 6:00 p.m.								
6:00 - 6:45 p.m.						55 Plenary II Craig Lecture p. 112		
6:45 - 7:00 p.m.								
7:00 - 7:30 p.m.				Satellite Symposium Pyronaridine-Artesunate p. 114			Satellite Symposium Artemether/ Lumefantrine Safety-Efficacy p. 114	
7:30 - 8:00 p.m.								
8:00 - 8:30 p.m.								
8:30 - 9:00 p.m.								

Tuesday, December 9, 2008

	Napoleon Ballroom 3rd floor	Armstrong 8th floor	Cornet 8th floor	Gallery 1st floor	Rhythms I 2nd floor	Rhythms II/III 2nd floor	Waterbury 2nd floor	Napoleon A123 3rd floor
7:00 - 7:30 a.m.								
7:30 - 8:00 a.m.								
8:00 - 9:45 a.m.	Exhibits Open 9:30-10:30			56 Symposium Severe *Falciparum* Malaria p. 115	57 Symposium Operations Research Schisto: Africa p. 116	58 Symposium *Plasmodium* Mosquito Interactions p. 116	59 Symposium Mosquito Foraging and Vector Mgmt. p. 117	60 Symposium ACT Private Sector p. 117
9:45 - 10:15 a.m.	Coffee Break	Poster B Set-Up	Poster B Set-Up					
10:15 - Noon		Poster Session B Viewing	Poster Session B Viewing	69 Symposium Leprosy in U.S. p. 124	70 Scientific Session Helminths II Echinococcus p. 125	71 Symposium Vaccines for Intracellular Bacteria p. 126	72 Scientific Session Malaria Molecular Biology p. 126	73 Symposium Metabolic and Metagenomic Profiling p. 127
Noon - 12:15 p.m.	Exhibit Hall Open Light Lunch	82 Poster Session B Light Lunch p. 134	82 Poster Session B Light Lunch p. 134					
12:15 - 12:30 p.m.						83 Malaria Eradication Community Role p. 162	84 R.E. Shope Legacy and Climate Change p 162	
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.	Exhibits Open 3-4	Poster Session B Viewing	Poster Session B Viewing	87 Symposium Dengue: Antibodies Macrophages p 164		88 Symposium Drug Screening Approaches p. 164	89 Symposium Malaria and School Children p. 165	90 Scientific Session Malaria Chemotherapy p. 165
3:15- 3:45 p.m.	Coffee Break							
3:45 - 5:30 p.m.				97 Symposium Dengue Vaccines p. 171		98 Symposium *P. vivax*: Beyond Genomics p. 171	99 Symposium Malaria Outcome Analysis p. 172	100 Scientific Session Malaria Drug Development p. 172
5:30 - 6:00 p.m.								
6:00 - 6:45 p.m.								
6:45 - 7:00 p.m.								
7:00 - 7:30 p.m.		Poster Session B Dismantle	Poster Session B Dismantle	Satellite Symposium Antimalarial Synergy p. 178				
7:30 - 8:00 p.m.								
8:00 - 8:30 p.m.								
8:30 - 9:00 p.m.								

Tuesday, December 9, 2008 (continued)

	Maurepas 3rd floor	Bayside A 4th floor	Bayside BC 4th floor	Grand Ballroom A 5th floor	Grand Ballroom B 5th floor	Grand Ballroom C 5th floor	Grand Ballroom D 5th floor	Grand Ballroom E 5th floor
7:00 - 7:30 a.m.							55A Gates NTD Strategy p. 115	
7:30 - 8:00 a.m.								
8:00 - 9:45 a.m.	61 Scientifc Session Bacteriology II: Diarrhea Epi. and Treatment p. 118	62 Symposium Liver Fluke Cholangio-carcinoma p. 119	63 Scientific Session Clinical Tropical Medicine I p. 119	64 Symposium Vector and Disease Modeling p. 120	65 Scientific Session Filariasis I Immunology p. 121	66 Scientific Session Flavivirus III Dengue III p. 122	67 Symposium Global Health p. 123	68 Scientific Session Malaria Dx p. 123
9:45 - 10:15 a.m.								
10:15 - Noon	74 Symposium Innate Immunity: Protozoa p. 128	75 Scientific Session Bacteriology III p. 128	76 Scientific Session Clinical Tropical Medicine II p. 129	77 Symposium Artemisinin Resistance p. 130	78 Scientific Session Filariasis II Molecular Biology p. 131	79 Scientific Session Flavivirus IV West Nile Virus p. 132	80 Symposium Academic Global Health Programs p. 133	81 Symposium NTD Update: Africa p. 133
Noon - 12:15 p.m.								
12:15 - 12:30 p.m.			84A PATH MVI Sporozoite Vaccine p. 162	85 Meet the Professors B Enigmatic Cases p. 163			86 ASTMH Journal p. 163	86A NTD Film p. 164
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.			91 Scientific Session Mosquitoes: Vector Bio./Epi. p. 166	92 Scientific Session ACMCIP Mol. Parasitology p. 167	93 Scientific Session Anthropods/ Entomology p. 168	94 Symposium Clinical Group I p. 169	95 Symposium Malaria Vaccines p. 169	96 Scientific Session Schistosomiasis III Mol. Bio./ Biochem p. 170
3:15- 3:45 p.m.								
3:45 - 5:30 p.m.			101 Scientific Session Mosquitoes: Vector Biology/ Epidemiology II p. 173	102 Scientific Session ACMCIP Mol. Parasitology II p. 174	103 Scientific Session Ectoparasite-Borne Diseases p. 175	104 Symposium Clinical Group II p. 176	105 Symposium Malaria Syndrome Vaccines p. 176	106 Scientific Session Helminthic Coinfections p. 177
5:30 - 6:00 p.m.								
6:00 - 6:45 p.m.						107 Plenary III Comm. Fund. Lecture p. 178		
6:45 - 7:00 p.m.								
7:00 - 7:30 p.m.				Satellite Symposium Dihydroar-temisinin Piperaquine p. 178			Satellite Symposium Artemether/ Lumefantrine Impact p. 179	
7:30 - 8:00 p.m.								
8:00 - 8:30 p.m.								
8:30 - 9:00 p.m.								

Schedule-at-a-Glance

Wednesday, December 10, 2008

	Napoleon Ballroom 3rd floor	Armstrong 8th floor	Cornet 8th floor	Gallery 1st floor	Rhythms I 2nd floor	Rhythms II/ III 2nd floor	Waterbury 2nd floor	Napoleon A123 3rd floor
7:00 - 7:30 a.m.								
7:30 - 8:00 a.m.								
8:00 - 9:45 a.m.	Exhibits Open 9:30-10:30			108 Symposium Tick-Host: Post-Genomics p. 179	109 Symposium Genital Schisto and HIV p. 180	110 Scientific Session Malaria Epidemiology I p. 180	111 Symposium Remote Sensing Vector-borne Disease p. 181	112 Symposium *Wolbachia* p. 182
9:45 - 10:15 a.m.	Coffee Break	Poster C Set-Up	Poster C Set-Up					
10:15 - Noon		Poster Session C Viewing	Poster Session C Viewing	121 Symposium Loiasis p. 187	122 Symposium Cestode Disease Burden p. 188	123 Scientific Session Malaria Epidemiology II p. 188	124 Symposium Update: Vector-Borne Brazil p. 189	125 Symposium Diagnostic Tools p. 190
Noon - 12:15 p.m.	Exhibit Hall Open (Closes at 2:30 p.m.)	134 Poster Session C Light Lunch p. 194	134 Poster Session C Light Lunch p. 194					
12:15 - 12:30 p.m.						135 Pediatric TB p. 221	136 Science and Alarmists p. 221	
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.		Poster Session C Viewing	Poster Session C Viewing					
1:30 - 3:15 p.m.				139 Symposium Arthropod Saliva p. 222	140 Scientific Session Filariasis III Epidemiology I p. 222	141 Symposium Severe *Vivax* Malaria p. 223	142 Symposium Global Enteric GEMS Study p. 224	143 Symposium IT in Research and Training p. 224
3:15- 3:45 p.m.								
3:45 - 5:30 p.m.				152 Symposium Antimalarial Rx Discovery p. 231	153 Scientific Session Filariasis IV Epidemiology II p. 231	154 Symposium Dengue in Travelers p. 232	155 Symposium West Nile Virus Heterogeneity p. 233	156 Symposium *Yersinia pestis* p. 233
5:30 - 6:00 p.m.								
6:00 - 6:45 p.m.								
6:45 - 7:00 p.m.								
7:00 - 7:30 p.m.		Poster Session C Dismantle	Poster Session C Dismantle					
7:30 - 8:00 p.m.								
8:00 - 8:30 p.m.								
8:30 - 9:00 p.m.								

Schedule-at-a-Glance

Wednesday, December 10, 2008 (continued)

	Maurepas 3rd floor	Bayside A 4th floor	Bayside BC 4th floor	Grand Ballroom A 5th floor	Grand Ballroom B 5th floor	Grand Ballroom C 5th floor	Grand Ballroom D 5th floor	Grand Ballroom E 5th floor
7:00 - 7:30 a.m.								
7:30 - 8:00 a.m.								
8:00 - 9:45 a.m.	113 Symposium Cholera p. 182	114 Scientific Session Pneumonia RTI and TB p. 182	115 Symposium APCs and Helminths p. 184	116 Symposium Fogarty Intl. Ctr Developing Leaders p. 184	117 Symposium Refugees and Immigrants p. 185	118 Scientific Session Flavivirus V p. 185	119 Scientific Session ACMCIP Cellular Parasitology I p. 186	120 Symposium Antimalarials and G6PD p. 187
9:45 - 10:15 a.m.								
10:15 - Noon	126 Symposium Diarrhea and Poverty p. 190	127 Scientific Session HIV Tropics p. 190	128 Symposium Avian Influenza p. 191	129 Symposium Launching Careers BWF-ASTMH p. 192	130 Symposium Clinical Research Mali p. 192	131 Symposium ACAV Yellow Fever p. 193	132 Scientific Session ACMCIP Cellular Parasitology II p. 193	133 Symposium Non-hemolytic 8-aminoquino-lines p. 194
Noon - 12:15 p.m.								
12:15 - 12:30 p.m.			136A Malaria Film p. 221	137 Meet the Professors C Enigmatic Cases p. 221			138 Wellcome Trust Res. Fellowships p. 222	
12:30 - 12:45 p.m.								
12:45 - 1:15 p.m.								
1:15 - 1:30 p.m.								
1:30 - 3:15 p.m.	144 Scientific Session Malaria Drug Resistance p. 225	145 Scientific Session Viruses I p. 226	146 Scientific Session Mosquito Biochem. Mol. Biology Genetics I p. 227	147 Symposium Malaria Immunity and Anemia BWF p. 227	148 Scientific Session Protozoa p. 228	149 Symposium Vector Management I p. 229	150 Symposium Chagas: Women and Children p. 229	151 Scientific Session Helminths III Nematodes p. 230
3:15- 3:45 p.m.								
3:45 - 5:30 p.m.	157 Symposium Vector Transmission Blocking p. 234	158 Scientific Session Viruses II p. 234	159 Scientific Session Mosquito Biochem. Mol. Bio. Genetics II p. 235	160 Symposium Update: IPTi Malaria p. 236	161 Symposium Cerebral Malaria p. 237	162 Symposium Vector Management II p. 237	163 Symposium Chagas: U.S. p. 238	164 Scientific Session Helminths IV p. 238
5:30 - 6:00 p.m.								
6:00 - 6:45 p.m.						165 Plenary IV Presidential Address Business Meeting p. 239		
6:45 - 7:00 p.m.								
7:00 - 7:30 p.m.								
7:30 - 8:00 p.m.								
8:00 - 8:30 p.m.								
8:30 - 9:00 p.m.								

Schedule-at-a-Glance

Thursday, December 11, 2008

	Napoleon Ballroom 3rd floor	Gallery 1st floor	Waterbury 2nd floor	Napoleon 3rd floor	Bayside A 4th floor	Bayside BC 4th floor	Grand Ballroom C 5th floor	Grand Ballroom D 5th floor	Grand Ballroom E 5th floor
7:00 - 7:30 a.m.									
7:30 - 8:00 a.m.									
8:00 - 9:45 a.m.		166 Symposium Dengue: Latin America p. 239	167 Symposium Nipah and Hendra p. 240	168 Scientific Session Malaria Biology and Patho-genesis I p. 240	169 Symposium Helminth Drug Resistance p. 241	170 Symposium Transgenic Mosquito Fitness p. 242	171 Scientific Session Clinical Tropical Medicine III p. 242	172 Scientific Session ACMCIP Immuno-parasitology I p. 244	173 Scientific Session Kinetoplastida II Epi/Dx/Rx p. 244
9:45 - 10:15 a.m.	Coffee Break								
10:15 - Noon		174 Symposium Disease Burden Dengue p. 245	175 Symposium VHFs p. 246	176 Scientific Session Malaria Biology and Pathogenesis II p. 246	177 Symposium Sepsis in Tropics p. 247	178 Scientific Session Mosquito Insecticide Resistance p. 248	179 Scientific Session Clinical Tropical Medicine IV p. 248	180 Scientific Session ACMCIP Immuno-parasitology II p. 249	181 Symposium Influenza in Tropical Countries p. 250

Affiliate Group Meeting Schedule

Saturday, December 6

DoD-GEIS Malaria Drug Resistance Surveillance II
Salon 816/820
8 a.m. – 5 p.m.

Blantyre Malaria Project Think Tank for the Blantyre Autopsy Study
Crescent
8:30 a.m. – 5 p.m.

Fogarty International Center Grants Writing Workshop
Estherwood
9 a.m. – 5 p.m.

WARN Board Meeting
Off-site Meeting
9 a.m. – 8 p.m.

Liverpool School of Tropical Medicine AWOL Consortium
Cornet
9 a.m. – 5 p.m.

Sunday, December 7

Medicines for Malaria Venture Conference Room
Estherwood and Rampart
7 a.m. – 7 p.m.

Novartis Pharma Conference Room
Gallier AB
7 a.m. – 7 p.m.

Novartis Vaccines Conference Room
Oakley
7 a.m. – 7 p.m.

Pfizer Conference Room
Poydras
7 a.m. – 7 p.m.

sanofi-aventis Conference Room
Grand Chenier
7 a.m. – 7 p.m.

PATH Malaria Vaccine Initiative RTS,S Vaccine CTPC
Off-site Meeting
8 a.m. – 6 p.m.

Bill & Melinda Gates Foundation Meeting
Crescent
9 a.m. – 5 p.m.

Fogarty International Center Grants Writing Workshop
Grand Couteau
9 a.m. – Noon

UMass Medical School Dengue Hemorrhagic Fever Project Annual Investigators Meeting
Off-site Meeting
9 a.m. – 5 p.m.

WARN Board Meeting
Off-site Meeting
9 a.m. – 5 p.m.

Liverpool School of Tropical Medicine AWOL Management Committee and ESAC
Off-site Meeting
9 a.m. – 5 p.m.

MR4 Science Advisory Committee Meeting
Off-site Meeting
10 a.m. – 3 p.m.

International Society of Travel Medicine GeoSentinel Site Directors Meeting
Westin New Orleans Canal Place
1 p.m. – 5 p.m.

CDC Emerging Infections Meeting
Salon 828
3:30 p.m. – 5:30 p.m.

Monday, December 8

Medicines for Malaria Venture Conference Room
Estherwood and Rampart
7 a.m. – 7 p.m.

Novartis Pharma Conference Room
Gallier AB
7 a.m. – 7 p.m.

Novartis Vaccines Conference Room
Oakley
7 a.m. – 7 p.m.

Pfizer Conference Room
Poydras
7 a.m. – 7 p.m.

sanofi-aventis Conference Room
Grand Chenier
7 a.m. – 7 p.m.

sanofi-aventis R & D Ferroquine
Salon 828
7 a.m. – 10 a.m.

Bill & Melinda Gates Foundation Meeting
Crescent
9 a.m. – 5 p.m.

London School of Hygiene and Tropical Medicine Alumni Reception
Waterbury
7:30 p.m. – 9:30 p.m.

Tuesday, December 9

Medicines for Malaria Venture Conference Room
Estherwood and Rampart
7 a.m. – 7 p.m.

Novartis Pharma Conference Room
Gallier AB
7 a.m. – 7 p.m.

Novartis Vaccines Conference Room
Oakley
7 a.m. – 7 p.m.

Pfizer Conference Room
Poydras
7 a.m. – 7 p.m.

sanofi-aventis Conference Room
Grand Chenier
7 a.m. – 7 p.m.

National Institutes of Health/NIAID Collaborators Meeting
Salon 829
7 a.m. – 9 a.m.

CBR Project Meetings
Salon 828
7 a.m. – 7 p.m.

Bill & Melinda Gates Foundation Meeting
Crescent
9 a.m. – 5 p.m.

Tulane Department of Tropical Medicine Alumni Reception
World Trade Center of New Orleans
7 p.m. – 9 p.m.

Fogarty International Center GID Network Meeting
Grand Couteau
7 p.m. – 10 p.m.

Wednesday, December 10

Medicines for Malaria Venture Conference Room
Estherwood and Rampart
7 a.m. – 7 p.m.

Novartis Pharma Conference Room
Gallier AB
7 a.m. – 7 p.m.

Novartis Vaccines Conference Room
Oakley
7 a.m. – 7 p.m.

Pfizer Conference Room
Poydras
7 a.m. – 7 p.m.

sanofi-aventis Conference Room
Grand Chenier
7 a.m. – 7 p.m.

PATH Malaria Vaccine Initiative MALVA Funders Group Meeting
Grand Couteau
8 a.m. – 6 p.m.

Bill & Melinda Gates Foundation Meeting
Crescent
9 a.m. – 5 p.m.

Tulane SPHTM Chagas Disease: *Trypanosoma cruzi* Infection: Women and Children, a Vulnerable Population
Maurepas
12:15 p.m. – 1:15 p.m.

USUHS Achee Gates ITM
Salon 828
4 p.m. – 7 p.m.

PATH Malaria Vaccine Initiative AMA-1 Investigators Consortium
Oak Alley
6 p.m. – 9 p.m.

WARN Meeting
Bayside A
7:30 p.m. – 9:30 p.m.

Thursday, December 11

Medicines for Malaria Venture Conference Room
Estherwood and Rampart
7 a.m. – 7 p.m.

Novartis Pharma Conference Room
Gallier AB
7 a.m. – Noon

Novartis Vaccines Conference Room
Oakley
7 a.m. – Noon

Pfizer Conference Room
Poydras
7 a.m. – 7 p.m.

sanofi-aventis Conference Room
Grand Chenier
7 a.m. – 7 p.m.

PAHO-CDC Flavivirus Diagnostic Algorithm for the Americas
Salon 828
9 a.m. – 4:30 p.m.

Bill & Melinda Gates Foundation Meeting
Grand Couteau
Noon – 5 p.m.

Friday, December 12

Bill & Melinda Gates Foundation Meeting
Maurepas
8 a.m. – 5 p.m.

Note: Affiliate group meetings are by invitation only.

Sunday, December 7

ASTMH Council Meeting
Waterbury
8 a.m. – 3:30 p.m.

ACAV SIE Subcommittee Meeting
Salon 817/821
11 a.m. – Noon

ACAV SIRACA Subcommittee Meeting
Salon 817/821
Noon – 2 p.m.

ACAV SALS Subcommittee Meeting
Salon 817/821
2 p.m. – 3:30 p.m.

ACAV Council Meeting
Salon 817/821
3:30 p.m. – 5:30 p.m.

ACMCIP Council Meeting
Grand Couteau
3:30 p.m. – 5:30 p.m.

ACME Council Meeting
Salon 824
3:30 p.m. – 5:30 p.m.

Clinical Group Council Meeting
Salon 816
3:30 p.m. – 5:30 p.m.

Young Investigator Award Committee Meeting
Oak Alley
3:30 p.m. – 5 p.m.

Monday, December 8

ASTMH Diploma Course Directors Meeting
Salon 829
7 a.m. – 8 a.m.

Public Policy and Advocacy Leadership Committee Meeting
Salon 816
7 a.m. – 8 a.m.

Burroughs Wellcome Fund/ASTMH Fellowship Committee Meeting
Salon 828
Noon – 2 p.m.

Certificate Exam Executive Committee Meeting
Salon 829
12:15 p.m. – 1:15 p.m.

Clinical Group Education Curriculum Meeting
Salon 816
12:15 p.m. – 1:15 p.m.

Tuesday, December 9

Clinical Group Past Presidents Meeting
Salon 824
Tuesday, December 9, 7 a.m. – 8 a.m.

Education Committee Meeting
Salon 816
7 a.m. – 8 a.m.

Journal Editorial Board Meeting
Salon 817/821
7 a.m. – 8 a.m.

CME/Courses Committee Meeting
Salon 816
12:15 p.m. – 1:15 p.m.

Wednesday, December 10

Scientific Program Committee
Oak Alley
7 a.m. – 8 a.m.

ASTMH Past Presidents Meeting
Grand Couteau
7 a.m. – 8 a.m.

Web Site Committee Meeting
Salon 816
7 a.m. – 8 a.m.

Membership Committee Meeting
Salon 816
12:15 p.m. – 1:15 p.m.

Certificate Exam Committee Meeting
Salon 829
12:15 p.m. – 1:15 p.m.

Thursday, December 11

ASTMH Council Meeting
Grand Couteau
7:30 a.m. – 9:30 a.m.

Meeting Room Sign-Up

Rooms 816 and 824 on the eighth floor are designated for committee meetings and other group meetings. Meeting room reservations are available on a first-come, first-served basis. Use the sign-up sheets located outside these rooms to reserve meeting time for your group.

ASTMH Subgroup Tables

Visit the American Committee of Medical Entomology (ACME) and the American Committee on Arthropod-Borne Viruses (ACAV) information tables in the exhibit hall to learn about their programs and activities.

ASTMH 57th Annual Meeting

Officers

President
Claire Panosian

President-Elect
Thomas Wellems

Immediate Past President
Carlos (Kent) Campbell

Secretary-Treasurer
George Hillyer

Executive Director
Sally Finney

Councilors

Joel Breman
John Donelson
James Hughes
Regina Rabinovich
Frank Richards
Carol Hopkins Sibley
Scott Weaver
Mary Wilson

Chair, Scientific Program Committee
Edward Ryan

Editor, *American Journal of Tropical Medicine and Hygiene*
James Kazura

Editors, *Tropical Medicine and Hygiene News*
William Collins and Geoffrey Jeffery

Web Site Editor
Jack Woodall

Advisor
Peter Weller

American Society of Tropical Medicine and Hygiene
111 Deer Lake Road, Suite 100
Deerfield, IL 60015 USA
Phone +1-847-480-9592
Fax: +1-847-480-9282
info@astmh.org
www.astmh.org

ASTMH Scientific Program Committee

Edward T. Ryan, *Chair*

Career Development/Education
Chair: Sarah Volkman
Michele Barry
Steve Higgs
Anne McCarthy

Clinical Tropical Medicine
Chair: Alan Magill
Jean-Paul Chretien
Robert Gasser
John Gawoski
Davidson Hamer
Larry Laughlin
Jason Maguire
David McNeeley
Alan Spira
Joe Vinetz
Marty Wolfe

Diarrhea and Bacterial Illness
Chair: Ed Ryan
Davidson Hamer
James Hughes
Regina LaRocque
Pavani Ram

Entomology
Chair: William Black
Kate Aultman
Hilary Ranson
David Severson

Filariasis
Chair: Amy Klion
Edward Mitre
Frank Richards
Steven Williams

Intestinal and Tissue Helminths, Cestodes
Chair: A. Clinton White
David Abraham
Mark Eberhard
Peter Kern

Kinetoplastida
Chair: Rick Tarleton
Barbara Burleigh
Diane McMahon-Pratt

Late Breakers in Clinical Tropical Medicine
Barbara Herwaldt
David McNeeley

Late Breakers in Basic Science/ Molecular Biology
Greg Ebel
Stefan Kappe

Meet the Professors
Anne McCarthy

Malaria
Chair: Carol Sibley
Jeanne Courval
Johanna Daily
Mary Hamel
Chandy John
Sanjai Kumar
Miriam Laufer
Myaing Nyunt
Chris Plowe
Laurence Slutsker
Joe Vinetz
Sarah Volkman
Kim Williamson
Yimin Wu

Molecular Parasitology
Chair: Sarah Volkman
David Abraham
John Adams
Barbara Burleigh
Daniel Carucci
Brian Cooke
Don Harn
Stuart Kahn
Peter Kima
Barbara Mann
Diane McMahon-Pratt
Peter Melby
Evan Secor
Joe Vinetz
David Williams
Kim Williamson
Tom Wynn

Opportunistic and Anaerobic Protozoa
Chair: Thaddeus Graczyk
Beth Kirkpatrick
Barbara Mann
Upinder Singh

Pneumonia, Respiratory Infections and Tuberculosis
Chair: Abdullah Brooks
Rob Breiman
Davidson Hamer
Keith Klugman

Schistosomiasis-Helminths
Chair: Evan Secor
Miguel Stadecker
David Williams
Tom Wynn

Tick-Louse-Flea-Mite-Borne Diseases
Chair: Stephen Dumler
Bob Lane
Sam Telford

Tropical HIV and Co-Infections
Chair: Jean Nachega
Elizabeth Barnett
Davidson Hamer
Rocio Hurtado

Virology
Chair: Rebeca Rico-Hesse
Carol Blair
Scott Halstead
George Ludwig
Julia Lynch
Kate Rubins
Michael Turell

ASTMH Committees and Subgroups

Archives
Donald Burke, *Chair*

Audit
George Hillyer, *Chair*
Sally Finney; Tom Wellens; Peter Weller

Awards
Thomas Monath, *Chair*
Myron Levine; Kent Campbell

Benjamin H. Kean Traveling Fellowship in Tropical Medicine
Christopher Plowe, *Chair*
Alberto Acosta; Frank Bia; Stephen Hoffman; Colette Kean; Myaing Nyunt; Martin Wolfe

Bioterrorism
Daniel Carucci, *Chair*
Carter Diggs; James Hughes, George Korch

Burroughs Wellcome Fund ASTMH Fellowship
Terrie Taylor, *Chair*
Stephen Calderwood; Ravi Durvasula; Richard Guerrant; Regina LaRocque; Victoria McGovern; Peter Weller

Certificate Examination
Susan McLellan, *Chair*
Lin Chen; Jovita Fernandez; David Freedman; Gregory Juckett; Lisa Keep; Ali Khan; Victor Kovner; Walter Kuhn; James Maguire; Bonnie Smoak; William Stauffer; Clinton White

Certificate Exam Executive Committee
James Maguire, *Chair*
Claire Panosian; George Hillyer; Patricia Joyce; Larry Laughlin; Alan Magill; Susan McLellan

Commemorative Fund Lectureship
Claire Panosian, *Chair*

Communications Award
Claire Panosian, *Chair*
John Donnelly; Michael Leahy; James Maguire; Frank Richards

Continuing Medical Education
Jonathan Berman, *Chair*
Daniel Carucci; David Hill; Alan Magill; Edward Ryan

Corporate Liaison
Thomas Monath, *Chair*
Bradley Connor; Jaco Smit

Courses Committee
Alan Magill, *Chair*
Jonathan Berman; Daniel Carucci; David Hill; Edward Ryan

Credentialing Committee
Larry Laughlin, *Chair*
David Freedman; David Hill; Christopher Karp; Jay Keystone; Christopher King; Herbert Tanowitz

Current Affairs
Richard Guerrant, *Chair*
Joseph Cook; Jacob Frenkel; Scott Halstead

Editorial Board, *American Journal of Tropical Medicine and Hygiene*
David Abraham; John Barnwell; Michael Cappello; William Collins; Hector Garcia; James Hughes; Jay Keystone; Philip Loverde; Steven Meshnick; Thomas Nutman; Rebeca Rico-Hesse; Philip Rosenthal; Terrie Taylor; Robert Tesh; David Walker; Editorial Staff: James Kazura, Chair (Editor-in-Chief); McWilson Warren (Emeritus Editor); Joe Vinetz (Associate Editor); Cathi Siegel (Managing Editor); Laura Buckley (Editorial Assistant); Allen Hightower (Statistical Editor); Section Editors: J. Kevin Baird; J. Stephen Dumler; Diane McMahon-Pratt; Scott Weaver; Clinical Group Editor: James Maguire

Education
Stephen Higgs, *Chair*
Noah Craft; Hector Gorbea; Laura Harrington; Risa Hoffman; Charles McGee; Victoria McGovern; Claire Panosian, Sarah Volkman; Steve Wikel; Jack Woodall; Peter Zimmerman

Fundraising
Peter Weller, *Chair*
Michele Barry; Stephen Hoffman; Peter Hotez; James Kazura; Tom Monath; William Petri; Dyann Wirth

Gorgas Memorial Institute Research Award
Kathryn Aultman, *Chair*
Rodney Adam; Patricia Dorn; Ynes Ortega; Jorge Osorio; Rebeca Rico-Hesse; Tom Yuill

Honorary Membership
Thomas Monath, *Chair*
John David; Richard Guerrant; Frank Neva

International Federation of Tropical Medicine Representative
Don Krogstad

Lecture (Fred L. Soper and Charles F. Craig)
Robert Tesh, *Chair*
Donald Burke; David Freedman (Gorgas representative); Peter Hotez; William Petri

Membership
George Hillyer, *Chair*
Stephen Higgs, Anne McCarthy, Charles McGee; Claire Panosian; Sarah Volkman, Doug Watts

Newsletter Editorial Board
William Collins, Editor; Geoffrey Jeffery, Editor
Kathryn Aultman; Latha Rajan; Mitzi Sereno; Karl Western

Nominations
Kent Campbell, *Chair*
Dan Bausch; Nora Besansky; Mark Eberhard; Mary Hamel; Alan Magill; Julie Moore; Thomas Nutman; Gary Weil; Clinton White; Dyann Wirth

Pfizer Centennial Travel Award
Joe Vinetz, *Chair*
Michael Cappello; David Fidock; Diane McMahon-Pratt; Thomas Moore; Sarah Volkman

Public Policy and Advocacy Leadership
Kent Campbell, *Chair*
Michele Barry, Frank Collins, Stephen Hoffman, Peter Hotez, Alan Magill, Tom Monath, Claire Panosian, Frank Richards, Larry Slutsker, Terrie Taylor

Program Certification
James Maguire, *Chair*
Michele Barry; David Freedman; Richard Guerrant; Rocio Hurtado; James Kazura; Donald Krogstad; Larry Laughlin; Anne McCarthy; Alan Spira; Peter Weller

Robert E. Shope International Fellowship
Charles Calisher, *Chair*
Barry Beaty; Donald Burke; George Ludwig; Barry Miller; Philip Russell; Richard Shope; Peter Weller

Scientific Program
Edward T. Ryan, *Chair*

Travel Awards
James LeDuc, *Chair*
Mark Eberhard; James Maguire; Dan Milner; Terrie Taylor; Eileen Villasante; Joe Vinetz; Sarah Volkman

Update Course in Clinical Tropical Medicine and Travelers' Health
Alan Magill, *Co-Chair*; Richard Pearson, *Co-Chair*

Web Site Committee
Ken Dardick, *Chair*
Kathryn Aultman; Stephen Cunnion; Akhil Vaidya; Dawn Wesson; Jack Woodall

Young Investigator Award
Peter Zimmerman, *Chair*
Kate Aultman; Subash Babu; Brenda Beerntsen; Roland Cooper; Stephen Davies; Christopher King; Sanjai Kumar; Nick Komar; Miriam Laufer; Julian Rayner; Daniel Tisch; Joe Vinetz; David Williams; Yimin Wu

American Committee of Medical Entomology (ACME)
Kenneth Linthicum, *Chair*

American Committee on Arthropod-Borne Viruses (ACAV)
Douglas Watts, *Chair*

Clinical Group (American Committee on Clinical Tropical Medicine and Travelers' Health – ACCTMTH)
Alan Magill, *President*

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)
Sarah Volkman, *President*

ASTMH Headquarters Staff

Sally Finney
Executive Director

Judy DeAcetis
Administrative Director

Annie Cox
Administrator

Buffy Finn
Administrator

Lyn Maddox
Conference Director

Kim Santos
Conference Administrator

Matthew Lesh
Communications Manager

Jill Hronek
Communications Director

Bill Chandler
Accountant

Affiliate (Organizational) Membership

Affiliate membership is an opportunity for a company, corporation, foundation or other type of organization to support ASTMH and its mission. Affiliate members designate one individual to serve as the main contact and receive society mailings. Affiliate membership benefits include:

- Recognition in ASTMH publications and at the annual meeting, and
- Discounts on annual meeting exhibit space fees, journal advertising rates and list rentals

Affiliate membership is available at the Patron, Donor and Contributor levels. Contact ASTMH headquarters for details or to request an application.

ASTMH Affiliate Members

Donor
TechLab Inc.

Contributor
Merck Research Laboratories
Novartis Institute for Tropical Diseases

2008 Travel Awards

Supported with funding from the Bill & Melinda Gates Foundation and the National Institutes of Health/National Institute of Allergy and Infectious Diseases

Ambroise Ahouidi
Le Dantec Hospital & Cheikh Anta Diop
Dakar, Senegal
Abstract 1212

Sheri Anderson
University of Florida
Vero Beach, Florida, USA
Abstract 692

Maria Arevalo
University of Rochester
Rochester, New York, USA
Abstract 11

Emmanuel Arinaitwe
Makerere University-UCSF Malaria Research Collaboration
Kampala, Uganda
Abstract 729

Puji Asih
Eijkman Institute for Molecular Biology
Jakarta, Indonesia
Abstract 196

April Bobenchik
University of Connecticut Health Center
Farmington, Connecticut, USA
Abstract 938

Richelle Charles
Massachusetts General Hospital
Boston, Massachusetts, USA
Abstract 414

Patchanee Chootong
Mahidol University
Bangkok, Thailand
Abstract 628

Astrid Cienfuegos
Universidad de Antioquia
Medellin, Colombia
Abstract 686

Kelsey Deus
Colorado State University
Fort Collins, Colorado, USA
Abstract 770

Anne Dickson
University of Iowa
Iowa City, Iowa, USA
Abstract 350

Luc Djogbénou
Institut de Recherche pour le Développement/Centre de Recherche Entomologique de Cotonou
Cotonou, Benin
Abstract 765

Papa Drame
Institut de Recherche pour le Développement
Dakar, Senegal
Abstract 1219

Brett Ellis
Centro de Pesquisas Aggeu Magalaes (CPqAM), FIOCRUZ
Recife, Brazil
Abstract 907

Christen Fornadel
Johns Hopkins Bloomberg School of Public Health
Baltimore, Maryland, USA
Abstract 252

Kwadwo Frempong
Noguchi Memorial Institute for Medical Research
Accra, Ghana
Abstract 235

Dionicia Gamboa
Instituto de Medicina Tropical "Alexander Von Humboldt" Universidad Peruana Cayetano Heredia
Lima, Peru
Abstract 559

Phillip George
Virginia Tech University
Blacksburg, Virginia, USA
Abstract 675

Bruno Ghersi
Naval Medical Research Center Detachment
Lima, Peru
Abstract 719

Kathryn Griffiths
University of Wisconsin-Oshkosh
Oshkosh, Wisconsin, USA
Abstract 519

Aaron Harris
Tufts University School of Medicine
Boston, Massachusetts, USA
Abstract 415

Yan Hu
University of California, San Diego
La Jolla, California, USA
Abstract 1178

Alisa Junpee
Chulalongkorn University
Bangkok, Thailand
Abstract 526

Muhammed Khan
ICDDRB
Dhaka, Bangladesh
Abstract 1131

Cynthia Khoo
Colorado State University
Fort Collins, Colorado, USA
Abstract 1085

Joseph Koroma
Ministry of Health and Sanitation
Freetown, Sierra Leone
Abstract 135

Fiona Lovegrove
University of Toronto
Toronto, Ontario, Canada
Abstract 1184

Robin Moudy
Wadsworth Center/New York State Department of Health
Albany, New York, USA
Abstract 806

Erick Muok
Kenya Medical Research Institute
Kisumu, Kenya
Abstract 788

James Mutunga
Virginia Tech University
Blacksburg, Virginia, USA
Abstract 1216

Agnes Mwakingwe
Albert Einstein College of Medicine
Bronx, New York, USA
Abstract 928

Norah Mwebaza
Makerere University
Kampala, Uganda
Abstract 84

Joaniter Nankabirwa
Makerere University
Kampala, Uganda
Abstract 725

Samuel Nsobya
Makerere University
Kampala, Uganda
Abstract 591

Charles Obonyo
Kenya Medical Research Institute
Kisumu, Kenya
Abstract 953

Sarah Olson
University of Wisconsin-Madison
Madison, Wisconsin, USA
Abstract 685

Pamela Orjuela-Sánchez
University of São Paulo
São Paulo, Brazil
Abstract 211

Collins Ouma
University of New Mexico/KEMRI
Kisian, Kenya
Abstract 1230

Surendra Kumar Prajapati
National Institute of Malaria Research
Delhi, India
Abstract 224

Edsel Salvana
University Hospitals Case Medical Center and National Institutes of Health – University of the Philippines
Manila, The Philippines
Abstract 380

Anne Spichler
Health Municipality Secretariat of Sao Paulo
Sao Paulo, Brazil
Abstract 444

Maria de Jesus Trovoada
Instituto Gulbenkian de Ciência
Oeiras, Portugal
Abstract 227

Matt Tucker
University of South Florida
Tampa, Florida, USA
Abstract 1122

Iskra Tuero
Universidad Peruana Cayetano Heredia
Lima, Peru
Abstract 452

Bhagyashree Manivannan Uradey
Victoria University of Wellington
Wellington, New Zealand
Abstract 742

Tom Were
University of New Mexico/KEMRI
Kisumu, Kenya
Abstract 339

2008 American Committee of Medical Entomology (ACME) Travel Awards

Nicole L. Gottdenker
University of Georgia
Athens, Georgia, USA
Abstract 768

Meera Venkatesan
Johns Hopkins Bloomberg School of Public Health
Baltimore, Maryland, USA
Abstract 676

Continuing Medical Education Accreditation
The American Society of Tropical Medicine and Hygiene is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Continuing Medical Education Credits
The American Society of Tropical Medicine and Hygiene designates this educational activity for a maximum of 31.75 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Register for CME Credit
The CME documentation fee is $100. CME certificates will be mailed six-to-eight weeks after the annual meeting. Complete your CME evaluation form online. Visit the ASTMH Cyber Café and complete your online CME Attendance and Evaluation Form while at the meeting. Or access the evaluation form at www.astmh.org/cme.

Full Disclosure Policy Affecting CME Activities
Consistent with ASTMH policy, faculty for this meeting are expected to disclose any economic or other personal interests that create, or may be perceived as creating, a conflict related to the material discussed. All conflicts of interest must be resolved prior to the annual meeting. In addition, consistent with ASTMH policy, faculty are expected to disclose to attendees at the beginning of their presentation(s) any product mentioned during their presentation that is not labeled for the use under discussion or is still investigational. This policy is intended to allow you to form your own judgments about such material.

General Meeting Information

Pre-Meeting Course Registration Hours
Napoleon Ballroom Registration Desk (Fourth Floor)

Friday, December 5	4 p.m. – 6 p.m.
Saturday, December 6	7 a.m. – 1:30 p.m.

Annual Meeting Registration Hours
Napoleon Ballroom (Fourth Floor)

Sunday, December 7	9:30 a.m. – 6 p.m.
Monday, December 8	7 a.m. – 5 p.m.
Tuesday, December 9	7 a.m. – 5 p.m.
Wednesday, December 10	7 a.m. – 5 p.m.
Thursday, December 11	7 a.m. – 10:30 a.m.

Messages and Emergency Calls
A message board will be available near the ASTMH registration desk. Check the message board often to retrieve your messages. Phone calls should be directed to +1-504-525-2500, the main switchboard of the Sheraton New Orleans. Callers should ask to be connected to the ASTMH registration desk. Faxes can be sent to the hotel at +1-504-595-5552.

Badges/Access Control
Participation in the ASTMH Annual Meeting is limited to registered attendees. The official badge is required for admission to all sessions, social activities and the exhibit area. Do not place a business card into the badgeholder as identification. If there is an error on a badge, please have it corrected at the registration desk.

Replacement Badge
If your badge is lost, you must purchase a replacement badge for a fee of $15. Bring your photo I.D. with you to the registration desk to have a new badge issued. This fee will not be refunded if you find your original badge.

Spouse/Guest Registration
(Only for those outside the tropical medicine field)
Spouse/guest registration includes admission to the opening reception on Sunday, admission to the exhibit hall, plenary sessions and poster sessions only.

Food Functions
The following food functions are included in the registration fee:
- Opening reception (Sunday)
- Late Breakers in Clinical Tropical Medicine and Basic Science/Molecular Biology light dinner (Monday afternoon)
- Poster session lunches (Monday, Tuesday and Wednesday)
- Coffee breaks

Hotel Information
The Sheraton New Orleans is the site of all annual meeting activities.

Sheraton New Orleans
500 Canal Street
New Orleans, Louisiana 70131
Phone +1-504-525-2500
Fax: +1-504-595-5552

Hotel Parking
Parking at the Sheraton New Orleans is currently $30.18 for overnight valet parking with in/out privileges. If you choose to self-park, a garage is located directly across the street from the hotel. The rate is $28 for 24 hours with no in/out privileges.

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

Exhibits
Napoleon Ballroom, Fourth Floor

Exhibit Hall
The ASTMH 57th Annual Meeting features an exposition of displays by leading suppliers and vendors. A complete exhibitor and supporter directory is included on page 32.

Exhibit Hours

Sunday, December 7	7:30 p.m. – 9:30 p.m.
Monday, December 8	9:30 a.m. – 10:30 a.m.
	Noon – 1:30 p.m.
	3 p.m. – 4 p.m.
Tuesday, December 9	9:30 a.m. – 10:30 a.m.
	Noon – 1:30 p.m.
	3 p.m. – 4 p.m.
Wednesday, December 10	9:30 a.m. – 10:30 a.m.
	Noon – 2:30 p.m.

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.

Cyber Café
Visit the Cyber Café in Lagniappe on the second floor. As a courtesy to other attendees, we ask that you limit your computer use to ten minutes per visit.

Press Room
The press room is located in the Ellendale and Evergreen rooms on the fourth floor. ASTMH press kits are available. Media announcements and other details can be found in the press room. Press room hours of operation are:

Sunday, December 7	10 a.m. – 4 p.m.
Monday, December 8	7:30 a.m. – 6:30 p.m.
Tuesday, December 9	7:30 a.m. – 6:30 p.m.
Wednesday, December 10	8 a.m. – 6:30 p.m.
Thursday, December 11	8 a.m. – Noon

Employment Opportunities
Bulletin boards for posting employment opportunities are available in the ASTMH registration area.

Career Center
Our online Career Center, available at www.astmh.org, features a wide range of available positions in the tropical medicine and hygiene field. Members can now post resumes anonymously and search for jobs by keyword, location and job type. Employers can set up an account, post open positions on the ASTMH Web site, buy classified ad space in the *American Journal of Tropical Medicine and Hygiene* and search the ASTMH resume bank for qualified applicants.

Camera/Recording Restrictions
Only registered members of the press and attendees who receive approval from ASTMH staff may take cameras into the exhibit hall or use recording devices during sessions.

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

Meeting Evaluation
ASTMH needs your input to enhance future meetings. An online meeting evaluation survey will be e-mailed to you shortly after the meeting. Your participation in this survey is greatly appreciated. The scientific program committee welcomes your input concerning the format and planning of this and future ASTMH meetings. Organization of symposia and participation in educational program planning through the program committee is encouraged for all interested ASTMH members.

Meeting Room Directory

First Floor
Gallery Ballroom

Second Floor
Lagniappe (Cyber Café)
Waterbury Ballroom
Rhythms I
Rhythms II
Rhythms III

Third Floor
Maurepas
Napoleon Ballroom (Registration, Exhibit Hall)
Napoleon A123
Napoleon C123

Fourth Floor
Bayside A
Bayside BC
Crescent
Edgewood
Ellendale (Press Room)
Estherwood
Evergreen (Press Room)
Gallier

Fourth Floor (continued)
Nottoway (Speaker Ready Room)
Oak Alley
Oakley

Fifth Floor
Grand Ballroom A
Grand Ballroom B
Grand Ballroom C
Grand Ballroom D
Grand Ballroom E
Grand Chenier
Grand Couteau
Rampart

Eighth Floor
Armstrong Ballroom (Poster Hall)
Cornet (Poster Hall)
Salon 801
Salon 816 (Meeting Room Sign-Up)
Salon 817/821
Salon 824 (Meeting Room Sign-Up)
Salon 828
Salon 829

The American Journal of Tropical Medicine and Hygiene

Trial Journal Subscriptions

The American Journal of Tropical Medicine and Hygiene has included a complimentary trial subscription number in your registration packet. Non-members can activate this 90-day trial to enjoy the benefits of an online journal subscription at no charge. Members already enjoy a subscription to the online journal and can pass the trial subscription number along to a non-member colleague.

ASTMH Journal Symposium

Preparation and Review of Scientific Manuscripts for the *American Journal of Tropical Medicine & Hygiene*
Mid-Day Session Session 86
Tuesday, December 9
12:15 p.m. – 1:15 p.m.
Grand Ballroom D
This session is designed to educate attendees about the *Journal* and the publishing process as a whole. Discussion will focus on how manuscripts are reviewed, edited and processed by the *Journal*, and will include pointers on preparation and review of manuscripts. We encourage you to ask questions at this session and would like to hear your feedback on the *Journal*.

Program Information

Annual Meeting Audio Recordings

Can't figure out how to be in two places at once? Problem solved! With so much cutting-edge science available at the ASTMH conference, you can now purchase audio recordings of sessions you missed. Visit the sales desk in the registration area to purchase a CD and/or multimedia CD-ROM of the conference sessions from IntelliQuest Media. Discounts will be extended for on-site orders. Contact IntelliQuest Media at 866-651-2586 or visit www.intelliquestmedia.com.

Late Breaker Abstracts

Late Breaker Abstract Session 49
Late Breakers in Clinical Tropical Medicine
Monday, December 8
3:45 p.m. – 5:30 p.m.
Bayside BC

Late Breaker Abstract Session 50
Late Breakers in Basic Science/Molecular Biology
Monday, December 8
3:45 p.m. – 5:30 p.m.
Grand Ballroom A

These sessions are designed for brief presentations of important new data obtained after the closing date for abstract submission. Oral late breaker presentations will take place on Monday afternoon. Poster late breaker presentations will take place during the poster sessions on Monday, Tuesday and Wednesday. A schedule of late breaker abstract presentations can be found in your registration packet.

Meet the Professors

Meet the Professors sessions are small, interactive programs held on Monday, Tuesday and Wednesday at lunchtime. The sessions are open to all meeting participants and a light meal will be provided. While the professors will lead the program and have some prepared remarks, the sessions will be largely question-and-answer format.

ACMCIP Abstracts

Throughout this book, you will notice that some abstracts are followed by the notation "(ACMCIP abstract)." This notation means the abstract submitter indicated that the abstract 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 http://www.astmh.org/sic/acmcip.cfm.

Special Events for Trainees, Students, Fellows, Residents and Junior Faculty

***Events featuring light meals denoted with an asterisk.**

Young Investigator Award Presentations
Sunday, December 7, 11 a.m. – 3:30 p.m.
Oak Alley, Rhythms I, Bayside A, Bayside B, Bayside C

Student Reception*
Sunday, December 7, 4 p.m. – 5 p.m.
Rhythms II/III

The ASTMH council invites students, postdoctoral fellows and residents to the student reception. This reception is an opportunity to meet fellow trainees and interact with society leaders.

Symposium Session 12: Careers in Tropical Medicine – The Paths to Success Part I
Monday, December 8, 8 a.m. – 9:45 a.m.
Grand Ballroom D

Symposium Session 24: Careers in Tropical Medicine – The Paths to Success Part II
Monday, December 8, 10:15 a.m. – Noon
Grand Ballroom D

Mid-Day Session Session 27: Grad School or Peace Corps...Why Not Do Both?
Monday, December 8, 12:15 p.m. – 1:15 p.m.
Waterbury

Meet the Professors Session 28: Meet the Professors A: Enigmatic and Teaching Cases*
Monday, December 8, 12:15 p.m. – 1:15 p.m.
Grand Ballroom A

Symposium Session 80: Global Health Programs in University Settings: What's Out There
Tuesday, December 9, 10:15 a.m. – Noon
Grand Ballroom D

Meet the Professors Session 85: Meet the Professors B: Enigmatic and Teaching Cases*
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.
Grand Ballroom A

Mid-Day Session Session 86: Preparation and Review of Scientific Manuscripts for the *American Journal of Tropical Medicine & Hygiene*
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.
Grand Ballroom D

Symposium Session 129: Launching Careers in Tropical Disease Research: Progress Reports from The Burroughs Wellcome Fund/ASTMH Fellows
Wednesday, December 10, 10:15 a.m. – Noon
Grand Ballroom A

Meet the Professors Session 137: Meet the Professors C: Enigmatic and Teaching Cases*
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.
Grand Ballroom A

Mid-Day Session Session 138: Wellcome Trust Public Health and Tropical Medicine Fellowships Masterclass
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.
Grand Ballroom D

Elsevier Student Book Award Applicants

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 (oral or poster) at the ASTMH Annual Meeting. Support these young scientists by attending their presentations throughout the conference.

Abstract 61
Evaluation of Multi-Drug Therapy for Hansen's Disease in the U.S.A. Using Daily Rifampin
Mara Dacso

Abstract 97
Management of Childhood Diarrheal Disease in Gondar, Ethiopia
Rishi Mediratta

Abstract 322
Malaria Potentiates Experimental Mycobacterial Infection *in vitro* and *in vivo*
Michael Hawkes

Abstract 476
An Assessment of Blood Volumes in Relation to Symptom Resolution in Severely Anemic Malawian Children
Michael Esan

Abstract 506
Analysis of the Transcriptomic Response to West Nile Virus Infection in the Equine Host
Melissa Bourgeois

Abstract 653
The Status of the PfMSP3 N-Terminus as a Vaccine Candidate: Cross-Reactive Antibodies in Hypoendemic Transmission
Stephen Jordan

Abstract 765
Insensitive Acetylcholinesterase (ace-1R) of *Anopheles gambiae s.s.*: Events of Introgression and Duplication Between the M and S Molecular Forms
Luc Djogbenou

Abstract 827
Caring for the Mother and Child in an Integrated Health System: The Utility of a Postnatal Bridging Card
Eugene Richardson

Abstract 828
Biology is Destiny or Social Status Meets Sero-Status? Determinants of HIV Infection in Africa
Ashley Fox

Abstract 955
Detection of *Plasmodium knowlesi* by Real-Time PCR
Ngolela Babady

Abstract 1122
Examination of the Molecular Basis of Resistance to Artemisinin Drugs in *Plasmodium falciparum*
Matt Tucker

Abstract 2497
***In vivo* Assessment of Serum Th1 and Th2 Cytokines in Patients with Hydatid Cysts of the Liver**
Francesca Tamarozzi

Clinical Pre-Meeting Course:
Malaria Eradication:
Calibrating Aspirations, Technology and Commitment
Saturday, December 6, 1 p.m. - 7:15 p.m.
Napoleon C123

Sunday, December 7, 7:30 a.m. - 3 p.m.
Grand Ballroom AB

Plenary Session I: Opening Plenary Session and Awards Ceremony
Sunday, December 7, 5:30 p.m. - 7:30 p.m.
Grand Ballroom

Symposium Session 4
Clinical Updates in Leishmaniasis, Chagas Disease, Leptospirosis and Tuberculosis
Monday, December 8, 8 a.m. - 9:45 a.m.
Rhythms II/III

Symposium Session 16
Tropical Medicine in a Temperate Climate
Monday, December 8, 10:15 a.m. - Noon
Rhythms II/III

Meet the Professors 28
Meet the Professors A: Enigmatic and Teaching Cases
Monday, December 8, 12:15 p.m. - 1:15 p.m.
Grand Ballroom A

Symposium Session 32
The Traveling Child: Medical Advice and Advances
Monday, December 8, 1:30 p.m. - 3:15 p.m.
Rhythms I

Late Breaker Session 49
Late Breakers in Clinical Tropical Medicine
Monday, December 8, 3:45 p.m. - 5:30 p.m.
Bayside BC

Plenary Session II: Charles Franklin Craig Lecture
Monday, December 8, 6 p.m. - 6:45 p.m.
Grand Ballroom C

Scientific Session 63
Clinical Tropical Medicine I
Tuesday, December 9, 8 a.m. - 9:45 a.m.
Bayside BC

Scientific Session 76
Clinical Tropical Medicine II
Tuesday, December 9, 10:15 a.m. - Noon
Bayside BC

Meet the Professors 85
Meet the Professors B: Enigmatic and Teaching Cases
Tuesday, December 9, 12:15 p.m. - 1:15 p.m.
Grand Ballroom A

Symposium Session 94
Clinical Group I
Tuesday, December 9, 1:30 p.m. - 3:15 p.m.
Grand Ballroom C

Symposium Session 104
Clinical Group II
Tuesday, December 9, 3:45 p.m. - 5:30 p.m.
Grand Ballroom C

Plenary Session III: Commemorative Fund Lecture
Tuesday, December 9, 6 p.m. - 6:45 p.m.
Grand Ballroom C

Symposium Session 117
Presumptive Therapy and Medical Screening of Migrating Refugees and Immigrants
Wednesday, December 10, 8 a.m. - 9:45 a.m.
Grand Ballroom B

Symposium Session 121
Post-Treatment Reactions in Loiasis: Clinical and Programmatic Implications
Wednesday, December 10, 10:15 a.m. - Noon
Gallery

Meet the Professors 137
Meet the Professors C: Enigmatic and Teaching Cases
Wednesday, December 10, 12:15 p.m. - 1:15 p.m.
Grand Ballroom A

Symposium Session 141
Benign Tertian Malaria? Examining Severe Disease Caused by *Plasmodium Vivax*
Wednesday, December 10, 1:30 p.m. - 3:15 p.m.
Rhythms II/III

Symposium Session 154
Dengue in International Travelers
Wednesday, December 10, 3:45 p.m. - 5:30 p.m.
Rhythms II/III

Plenary IV: Presidential Address and ASTMH Annual Business Meeting
Wednesday, December 10, 6 p.m. - 7:30 p.m.
Grand Ballroom C

Scientific Session 171
Clinical Tropical Medicine III
Thursday, December 11, 8 a.m. - 9:45 a.m.
Grand Ballroom C

Scientific Session 179
Clinical Tropical Medicine IV
Thursday, December 11, 10:15 a.m. - Noon
Grand Ballroom C

Poster Sessions

Armstrong Ballroom, Eighth Floor

Three poster sessions will be held at the ASTMH 57th Annual Meeting in The Armstrong Ballroom on the eighth floor. 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 viewing time is scheduled each day in the morning and afternoon.

Poster Session Schedule

Poster Session A
Monday, December 8

Set-Up	9:45 a.m. – 10:15 a.m.
Presentations	Noon – 1:30 p.m.
Viewing	10:15 a.m. – Noon
	1:30 p.m. – 7 p.m.
Dismantle	7 p.m. – 8 p.m.

Poster Session B
Tuesday, December 9

Set-Up	9:45 a.m. – 10:15 a.m.
Presentations	Noon – 1:30 p.m.
Viewing	10:15 a.m. – Noon
	1:30 p.m. – 7 p.m.
Dismantle	7 p.m. – 8 p.m.

Poster Session C
Wednesday, December 10

Set-Up	9:45 a.m. – 10:15 a.m.
Presentations	Noon – 1:30 p.m.
Viewing	10:15 a.m. – Noon
	1:30 p.m. – 7 p.m.
Dismantle	7 p.m. – 8 p.m.

Online Program

Following the meeting, search the annual meeting program online by abstract word, title, subject, author and presentation time at http://www.astmh.org. Late breaker abstracts can be found in the Online Program Planner.

Speaker Ready Room and Audiovisual Facilities

Nottoway Room, Fourth Floor

Audio-visual preview and submission facilities are provided beginning Sunday, December 7 at noon in the Nottoway Room on the fourth floor. All oral presentations must use PowerPoint. Load your presentation in the Speaker Ready Room 24 hours prior to your session. If you are unable to do so, and you are speaking that day, please visit the Speaker Ready Room on the morning of your talk as early as possible.

Your presentation should be saved on a floppy disk, CD-R or memory stick. The CD-R should be in a version that can be read on any PC CD-ROM. If you use a Mac, make sure that your presentation is readable via PC PowerPoint. If your presentation includes a video and/or audio segment, it is very important that you visit the Speaker Ready Room and advise the AV techs of the video and/or audio piece.

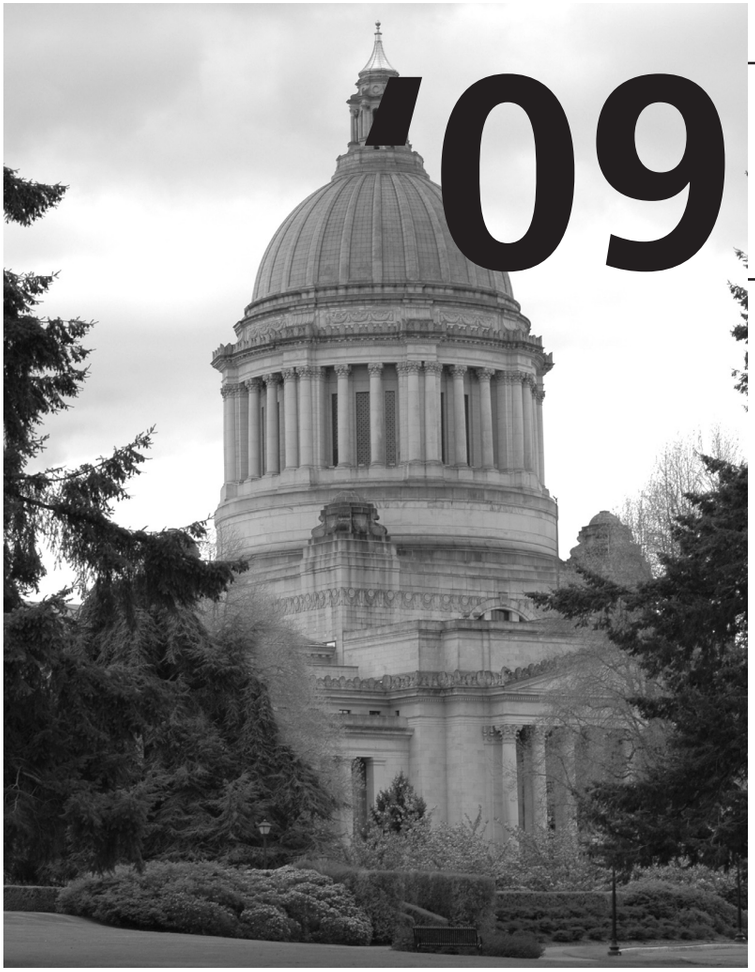
A computer and LCD projector will be set up in each presentation room. You cannot present your talk from your own laptop. Your presentation will be run from the AV technician's PC-based computer.

We strongly encourage you to pre-load your presentation in the Speaker Ready Room 24 hours prior to presentation time.

Speaker Ready Room Hours

Sunday, December 7	Noon – 6 p.m.
Monday, December 8	7 a.m. – 6 p.m.
Tuesday, December 9	7 a.m. – 6 p.m.
Wednesday, December 10	7 a.m. – 6 p.m.
Thursday, December 11	7 a.m. – Noon

MARK YOUR CALENDAR!



ASTMH 58th Annual Meeting
November 18-22, 2009
Marriott Wardman Park
Washington, DC, USA

ASTMH 59th Annual Meeting
November 3-7, 2010
Atlanta Marriott Marquis
Atlanta, Georgia, USA

American Society of Tropical Medicine and Hygiene
111 Deer Lake Road, Suite 100 • Deerfield, IL 60015 USA
Phone +1-847-480-9592 • Fax: +1-847-480-9282 • info@astmh.org • www.astmh.org

Workers in Tropical Medicine Video Presentation

Napoleon Ballroom

Workers in Tropical Medicine:

Oral History Project Re-Initiated

Selected biographical videos of ASTMH members who have made important contributions to the field of tropical medicine will be shown at the annual meeting. A viewing station in the Napoleon Ballroom has been reserved where interested visitors can view DVDs of their choice. DVD histories available include:

- Jordi Casals
- K.F. Meyer
- William Reeves
- Albert Sabin
- Thomas Weller
- Telford Work
- Karl Johnson

And others……

Elista and Ottis Causey

Thomas H. Weller

Robert Coatney

Alexander Langmuir

Telford H. Work

57TH ASTMH ANNUAL MEETING

William C. Reeves

Jordi Casals-Ariet

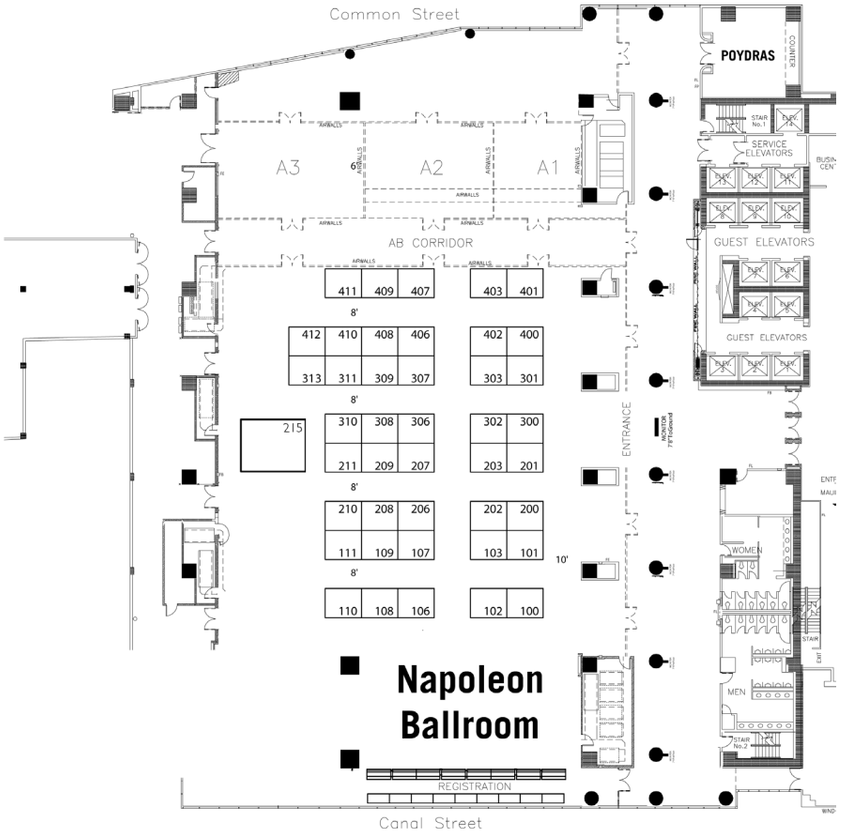
Karl Johnson

Albert Sabin

Karl F. Meyer

Thomas P. Monath

Exhibitor and Supporter Directory



Africa Health Placements (South Africa)
Contact: Therese Hansen
1820 9th Ave W.
Seattle, WA 98119
Suite 265
Dunkeld West Centre
Johannesburg, South Africa
Phone: 206-465-8824 USA +27 011 3281300 (South Africa)
Fax: +27 011 3281301
E-mail: theresemhansen@gmail.com
www.ahp.org.za
Booth 111
Africa Health Placements (AHP) is a South African non-profit organization recruiting Doctors to work in South Africa's rural hospitals. Broad-based clinical practice focuses on maternal and child health, infectious diseases and emergency care. AHP will assist you in finding a suitable position and provide you with highly-skilled registration/visa/logistical support.

American Society for Microbiology (ASM Press)
Contact:Jaclynn Martin
1752 N St., NW
Washington, DC 20036-2904
Phone: 202-737-3600
Fax: 202-942-9342
E-mail: books@asmusa.org
Booth 103
ASM Press, the book publishing division of the American Society for Microbiology, will be exhibiting a selection of texts, references and general interest titles at the meeting. Be sure to stop by the ASM Press booth to see all the new offerings and classic titles in the microbiological sciences. ASM Press offers a 10 percent discount on all purchases made at the meeting.

Bill & Melinda Gates Foundation
P.O. Box 23350
Seattle, WA 98102
Phone: 206-709-3100
E-mail: info@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, the foundation is led by CEO Jeff Raikes and co-chair William H. Gates Sr., under the direction of Bill and Melinda Gates and Warren Buffett. www.gatesfoundation.org

Exhibitor and Supporter Directory

Burroughs Wellcome Fund/The Wellcome Trust
Contact: Jean Kramarik
21 TW Alexander Drive
Research Triangle Park, NC 27709-3901
Phone: 919-991-5122
Fax: 919-991-5182
E-mail: jkramarik@bwfund.org
Booth 202
The Burroughs Wellcome Fund is an independent private foundation dedicated to advancing the biomedical science by supporting research and other scientific and educational activities. The Wellcome Trust is an independent charity funding research to improve human and animal health.

Carramore International Ltd
Contact: Alasdair Grant
Units 10-11
Thongsbridge Mills
Miry Lane
Holmfirth HD9 7RW
United Kingdom
Phone: +44 1484 690 444
Fax: +44 1484 690 456
E-mail: a.grant@carramore.com
Booth 110
Carramore - a single source for your supplies and shipping diagnostic specimens
Carramore is an independent buying house specializing in supplying research laboratories based in the tropics. We can source from all over the world to meet all your particular requirements, and we will check and monitor all aspects of the logistics to ensure that you receive the products and specimens in your laboratory quickly and safely. Carramore…making life easy.

Clinical Research Management
Contact: Caylee Ortega
411 Aviation Way
Suite 220
Frederick, MD 21701
Phone: 301-620-1987
Fax: 301-662-2236
E-mail: cortega@clinicalrm.com
Booth 402
Clinical Research Management, Inc. is a full service clinical research organization (CRO) providing a full range of clinical research services to support pre-clinical testing, product manufacturing, regulatory compliance and managing clinical trials.

Drugs for Neglected Diseases *initiative* (DND*i*)
Contact: Michelle French
7 World Trade Center, 250 Greenwich St., 40th Fl.
New York, NY 10007-2157
Phone: 212-298-3743
Fax: 212-300-3673
E-mail: mfrench@dndi.org
Booth 209
DND*i* is a needs-driven, not-for-profit product development partnership working to research and develop new treatments for neglected diseases such as sleeping sickness (HAT), visceral leishmaniasis (VL), Chagas disease, and malaria. Founded in 2003 by four publicly-funded research institutes from India, Malaysia, Kenya, and Brazil along with Institut Pasteur and MSF, DND*i* has developed the largest ever R&D portfolio for the kinetoplastid diseases and has already released two new anti-malarial drugs. For further information, visit www.dndi.org.

Elsevier Saunders Mosby Churchill Publishers
Contact: Steven Lowry
PO Box 360446
Birmingham, AL 35236
Phone: 205-542-7755
Fax: 205-988-3352
E-mail: s.lowry@elsevier.com
Booth 200
The latest in Medical Publications for health professionals. New Cook and Zumia Manson's Tropical Medicine text with on line version. New Jong Travel and Tropical Medicine Manual. Also the 2008 CDC Health Information and Travel Guide.

European Malaria Vaccine Initiative
Contact: Roland Ventura
c/o Statens Serum Instiut
Building 202/323
AR TilleriveJ5
Copenhagen-S, DK-2300
Denmark
Phone: +45 32 68 3798
Fax: +45 32 68 3144
E-mail: oly@ssi.dk
Booth 411
The European Malaria Vaccine Initiative (EMVI) contributes financially and technically to nationally and internationally funded malaria vaccine research and development. EMVI provides a funding mechanism to further experimental vaccine candidates through to limited industrial production and early phase clinical trials, in close collaboration with the African Malaria Network Trust. In addition, EMVI provides a forum for academics, industry, regulatory agencies and vaccine producers interested in developing an efficacious and affordable malaria vaccine.

Exhibitor and Supporter Directory

GlaxoSmithKline
Three Franklin Plaza
1600 Vine Street
Philadelphia, PA 19101
Phone: 800-366-8900
www.gsk.com
Booth 400
GlaxoSmithKline is a leading research-based pharmaceutical company with a powerful combination of skills to discover and deliver innovative medicines. We offer a number of programs to support effective health management strategies and improve patient care. Please visit our exhibit to learn more about our products.

Insect Shield Repellent Technology
Contact: Jason Griffin
814 West Market Street
Greensboro, NC 27401
Phone: 336-272-4157
Fax: 336-275-7604
E-mail: publicrelations@buzzoff.com
Booth 206
Insect Shield® Repellent Technology provides long-lasting, effective and odorless insect protection. The durable protection provided by Insect Shield apparel, gear and global health products is the result of years of research and testing. Insect Shield products combine the patent-pending Insect Shield process with a proprietary formulation of the insect repellent permethrin. Insect Shield® has been proven and registered by the United States Environmental Protection Agency (EPA) to repel many species of insects including those that can carry dangerous diseases. For more information please visit www.insectshield.com.

International Association for Medical Assistance to Travelers (IAMAT)
40 Regal Road
Guelph, ON N1K 1B5 Canada
Phone: 519-836-0102
Fax: 519-836-3412
E-mail: info@iamat.org
IAMAT is a non-profit organization dedicated to travel health. As an advocate for travelers' health, IAMAT has provided independent and accurate travel health advice since 1960. The organization also coordinates a network of highly qualified doctors worldwide for travelers in need of medical attention during their journey. Since 2002, IAMAT has awarded scholarships and grants to doctors and nurses from developing countries to study and train in the field of travel medicine. IAMAT was founded by the late Dr. Vincenzo Marcolongo, a specialist in tropical medicine who dedicated his life to the prevention of infectious diseases in travelers.

International Society of Travel Medicine
Contact: Brenda Bagwell
2386 Clower St., Suite A102
Snellville, GA 30078
Phone: 770-736-7060
Fax: 770-736-0313
E-mail: admindir@istm.org
Booth 303
The International Society if Travel Medicine (ISTM) is committed to the promotion of healthy and safe travel. In cooperation with national and International health care providers, academic centers, the travel industry and the media. ISTM advocates and facilitates education, service and research activities in the field of travel medicine.

London School of Hygiene & Tropical Medicine
Contact: Paul Shanley
50 Bedford Square
London WC1B 3DP
United Kingdon
Phone: +44-20-7299-4646
Fax: +44 73323-0638
E-mail: registry@Ishtm.ac.uk
Booth 307
The School offers 18 London-based taught Masters degrees (1 year FT/ 2 years PT) and four via distance learning. Research students can undertake either the MPhil/PhD programme or DrPH (Doctor of Public Health). Masters courses are comprised of a broad range of modules taught by expert academic staff. These modules are also offered as part of our Short Study Programme, which includes Diploma, Certificate and shorter courses covering all aspects of the School's work.

Macro International Inc.
Contact: Erin Eckert
11785 Beltsville Dr.
Suite 300
Beltsville, MD 20705
Phone: 301-572-0200
Fax: 301-572-0991
Booth 408
Macro International is dedicated to improving lives worldwide through social research and health informatics. We work with governments, businesses, and international organizations to assess emerging public health challenges, improve interventions, and expand the impact of successful programs.

Exhibitor and Supporter Directory

Malaria Research and Reference Reagent Resource Center (MR4)
Contact: Timothy T. Stedman
10801 University Blvd
Manassas, VA 20110
Phone: 703-365-2765
Fax: 703-365-2774
E-mail: malaria@atcc.org
Booth 310
The Malaria Research and Reference Reagent Resource Center (MR4) provides a central resource for reagents, protocols, information and workshops to the international malaria research community. Supported by the National Institutes of Health (NIH) National Institute of Allergy and Infectious Diseases (NIAID), the MR4 repository collects and distributes parasites, mosquito vectors, and many other biological reagents, free of production charges, to registered malaria research laboratories. MR4 is managed through the American Type Culture Collection (ATCC).

Mary Ann Liebert, Inc.
Contact: Lisa Pierce
140 Huquenot St.
New Rochelle, NY 10801
Phone: 914-740-2100
Fax: 914-740-2101
E-mail: info@liebertpub.com
Take One Table
Mary Ann Liebert, Inc., recognized as a Certified Woman-Owned Business, is a privately held, fully integrated media company known for establishing authoritative peer-reviewed journals in promising areas of science, biomedical research, and law, including Vector-Borne and Zoonontic Disease and Foodborne Pathogens and Disease, both Medline-Indexed Journals. A complete list of the firm's over 60 journals, books and news magazines is available at www.liebertpub.com. Visit our display in the 'Take One' Area!

Medicines for Malaria Venture
Contact: Anna Wang
Route de Pre-Bois 20
CH-1215 Geneva 15
Switzerland
Phone: +41 22 799 4060
Fax: +41 22 799 4061
E-mail: wanga@mmv.org
Booth 207
Medicines for Malaria Venture (MMV) is a non-profit organization created to discover, develop and deliver effective and affordable antimalarial drugs through public-private partnerships. Our vision is a world in which these innovative medicines will cure and protect the millions at risk of malaria and help to ultimately eradicate this terrible disease.

Merrick & Company-Facilities, Science and Technology Unit
Contact: Dr. Robert (Ross) Graham
2450 South Peoria Street
Aurora, CO 80014-5475
Phone: 703-680-6086
Fax: 703-680-6086
E-mail: ross.graham@merrick.com
Booth 409
Merrick & Company is an employee-owned, national A/E design firm, with over 400 employees located in Colorado, New Mexico, Georgia and Canada. Founded in 1955, Merrick provides full service architecture and engineering, construction management, and commissioning services to Federal clients including the USDA, DOD, DOE and DHS as well as universities and institutions, international and private clients. We have been a single-source provider of services for analytical, research laboratories and high containment facilities for over 20 years with our area of expertise originally focused on agencies and facilities involved in animal and plant research. Merrick is consistently registered in the top 200 of Engineering News Record's "Top 500 Design Firms" and has received numerous quality achievement awards for outstanding service since its inception. We are committed to sustainable design practices and our design firm has consistently implemented sustainable design principles in not only energy conservation, but pollution prevention, waste reduction, and recycled materials on all designs.

National Institute of Allergy and Infectious Diseases
Contact: Julie Marquardt
6610 Rockledge Drive MSC 6612
Bethesda, MD 20892-6612
Phone: 866-284-4107
Booth 208
The National Institute of Allergy and Infectious Diseases conducts and supports basic and applied research to better understand, treat, and ultimately prevent infectious, immunologic, and allergic diseases. NIAID staff will distribute printed information and answer questions on these subjects. Recruiters will be present to discuss employment opportunities at NIAID.

Exhibitor and Supporter Directory

National Research Council of the National Academies
Contact: Judith K. Nyquist, Ph.D.
3541 39th Street NW, Keck 568
Washington, DC 20001
Phone: 202-334-2760
Fax: 202-334-2759
E-mail: jnyquist@nas.edu
Booth 203
The National Research Council of the National Academies offers awards in all areas of science and engineering for postdoctoral and senior research to be conducted at participating U.S. government laboratories and affiliated centers. Awards include generous stipend, relocation, professional travel and health insurance. Duration is one year renewable up to three years. For detailed information, including instructions on how to apply online, see www.national-academies.org/rap. Annual application deadlines: February 1, May 1, August 1, November 1.

Novartis Pharma AG.
Contact: Nadia elMasry
Forum 2-P03, Novartis Pharma AG-Malaria Initiatives
Basel, CH-4056
Switzerland
Phone: +44 61 324 5015
Fax: +41 61 324 2146
E-mail: nadia.elmasry@novartis.com
Booth 215
Novartis offers a wide range of healthcare products through our Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health Divisions. Our complementary healthcare businesses address the changing needs of patients and societies worldwide. With innovative pharmaceuticals at the core, we are also a global leader in generics, vaccines and consumer health products. We believe this targeted portfolio best meets the challenges and opportunities in a dynamically changing healthcare environment.

Novartis Vaccines
Contact: Laura Wesolowski
350 Massachusetts Ave.
Cambridge, MA 02139
Phone: 862-778-6299
E-mail: laura.wesolowski@novartis.com
Booth 410
Novartis Vaccines and Diagnostics is a division of Novartis focused on the development of preventive treatments. The division has two businesses: Novartis Vaccines and Chiron. Novartis Vaccines is the world's fifth-largest vaccines manufacturer and second-largest supplier of flu vaccines in the US. The division's products also include meningococcal, pediatric and travel vaccines. Chiron, the blood testing and molecular diagnostics business, is dedicated to preventing the spread of infectious diseases through the development of novel blood-screening tools that protect the world's blood supply.

Paladin Labs
Contact: Fernando Koremblum
6111 Royalmount Ave. #102
Montreal, Quebec H4P 2T4
Canada
Phone: 514-340-1112 x 3034
514-340-1112
Fax: 514-340-7836
E-mail: fkorembl@paladin-labs.com
Booth 109
IMPAVIDO (Miltefosine), Impavido® is the first oral drug for the treatment of visceral and cutaneous leishmaniasis. Impavido® has been proven to be highly effective and less toxic than current therapies.

Pfizer, Inc.
Contact: Richa Chandra
50 Pequot Ave., MS6025-B3112
New London, CT 06320
Phone: 860-732-5532
Fax : 860-686-6128
E-mail: richa.s.chandra@pfizer.com
Pfizer Inc: Working together for a healthier world™
Founded in 1849, Pfizer is the world's largest research-based pharmaceutical company taking new approaches to better health. We discover, develop, manufacture and deliver quality, safe and effective prescription medicines to treat and help prevent disease for both people and animals. We also partner with healthcare providers, governments and local communities around the world to expand access to our medicines and to provide better quality health care and health system support. At Pfizer, more than 80,000 colleagues in more than 90 countries work every day to help people stay happier and healthier longer and to reduce the human and economic burden of disease worldwide.

Public Library of Science (PLoS)
Contact: Shabnam Sigman
185 Berry Street, Suite 3100
San Francisco, CA 94107
Phone: 415-624-1201
Fax: 415-546-4090
E-mail: plos@plos.org
Booth 101
Public Library of Science (PLoS.org) is committed to making the world's scientific and medical literature a freely available public resource. Our open access, peer-reviewed journals (PLoS Neglected Tropical Diseases, PLoS Pathogens, PLoS Biology, PLoS Medicine, PLoS Genetics, PLoS Computational Biology, and PLoS ONE) reach the widest possible audience. Everything we publish is automatically deposited in PubMed Central---making it easy for researchers to be NIH-compliant.

QBC Diagnostics
Contact: Tom Fuller
200 Innovation Blvd
Suite 212
State College, PA 16803
Phone:814-231-7660
Fax: 814-231-3118
E-mail: qbcsales@qbcdiag.com
Booth 401
QBC Diagnostics combines point-of-care medicine with advanced tropical disease diagnosis, creating a versitile laboratory package serving remote locations with tropical health concerns. The QBC Autoread provides a unique, simple hematology system, affording a CBC analysis from a finger stick. Combined with the fluorescent capabilities of the ParaLens, clinicians are provided with the highest level of sensitivity for the diagnosis of many tropical diseases. The QBC suite of instruments will significantly expand your tropical diagnostic capabilities.

Royal Society of Tropical Medicine and Hygiene
Contact: Gerri McHugh
50 Bedford Square
London WC1B 3DP
United Kingdon
Phone: +44 207 580 2127
Fax: +44 207 436 1389
E-mail: gerri.mchugh@rstmh.org
Booth 106
The objectives of the Society are to promote and advance the study, control and prevention of diseases in man and other animals in the tropics and sub-tropics, facilitate discussion and exchange of information among those who are interested in tropical diseases and international health, and generally to promote the work of those interested in these objectives.

Salix Pharmaceuticals, Inc.
Contact: Mark Droke
1700 Perimeter Park Drive
Morrisville, NC 27560
Phone: 919-862-1000
Fax: 919-862-1095
Booth 108
Salix Pharmaceuticals, Inc. follows a competitive strategy of in-licensing late-stage pharmaceutical products to treat GI diseases. The Salix portfolio includes COLAZAL®, XIFAXAN®, OsmoPrep®, MOVIPREP®, AZASAN®, ANUSOL-HC®, PROCTOCORT®, PEPCID® Oral Suspension, and DIURIL® Oral Suspension. Exceptional customer service, a dedicated specialty sales force, and quality products underscore Salix's commitment to the gastroenterology community.

sanofi-aventis
Contact: Frederique Bornier
82 Avenue
Raspail Gentilly Cedex
France
Phone: +33 14 124 7000
Fax: +33 14 124 5784
E-mail: frederique.bornier@sanofi-aventis.com
Booth 306 and 308
Sanofi-aventis, a leading global pharmaceutical company, discovers, develops and distributes therapeutic solutions to improve the lives of everyone.
Sanofi-aventis is listed in Paris (EURONEXT : SAN) and in New York (NYSE : SNY).

sanofi pasteur
Contact: Kim Quinn
Discovery Dr.
Swiftwater, PA 18370
Phone: 570-957-3473
Fax: 800-565-5756
E-mail: kim.quinn@sanofipasteur.com
Booth 300 and 302
Sanofi Pasteur Inc., the vaccines division of sanofi aventis Group, provides pediatric, adult, and travel vaccines for diseases such as diphtheria, tetanus, pertussis, polio, *Haemophilus influenzae* type b, influenza, rabies, Japanese encephalitis, typhoid fever, yellow fever, and meningococcal disease. To learn more about our products, visit our exhibit.

Sawyer Products
Contact: Amy Reed
605 7th Ave N
Safety Harbor, FL 34695
Phone: 800-356-7811
Fax: 727-725-1954
E-mail: feedback@sawyer.com
Booth 403
Sawyer Products has been providing the highest available technology in insect repellents and sun blocks to the market since 1984. Our most recent addition to our product line is the newest, most technically advanced water filtration system. Using Hollow Fiber Membranes we have achieved the highest level of bacterial and viral protection available while eliminating chemicals, pumping and wait time for your water. Our filters are rated for 1 MILLION Gallons of Water.

Scimedx Corporation
Contact: Michael Petrone
100 Ford Rd.
Suite 100-08
Denville, NJ 07834
Phone: 973-625-8822
Fax: 973-625-8796
E-mail: info@scimedx.com
Booth 100
Scimedx Corporation is a highly flexible diagnostic manufacturer with over 30 years of experience in the autoimmune and infectious disease testing market. Scimedx's recent acquisition of PanBio's IFA and Latex Infectious assays makes them the number one manufacturer of IFA tests worldwide. IFA products include West Nile, RSV, VZV, R, rickettsii, E. chaffeensis and HHV 6, 7, & 8. Also included in Scimedx's extensive viral and infectious menu of assays are rapid tests for Malaria and Dengue Fever.

SCYNEXIS, Inc.
Contact: Terry Marquardt
PO Box 12878
Research Triangle Park, NC 27709-2878
Phone: 919-544-8600
Fax: 919-544-8697
E-mail: terry.marquardt@scynexis.com
Booth 309 and 311
SCYNEXIS is a premier drug discovery and development company that delivers effective and innovative drug pipeline solutions for human and animal health to pharmaceutical and global health partners on either a fee-for-service or a shared risk basis. SCYNEXIS has developed highly productive capabilities to discover and develop drug compounds from early discovery with assay development and screening, through lead optimization and candidate selection, and beyond proof of concept in humans with cGMP synthesis and manufacturing.

Shin Poong Pharm. Co. LTD.
Contact: Soon Pil Lim
748-31 Yoksam-Dong, Kanfnam-Gu
Seoul 135-925
Korea
Phone: +82 2 2189 3475
Fax: +82 2 2189 2866
E-mail: splim@Shinpoong.co.kr
Booth 406
Shin Poong has been a major worldwide supplier of API as well as finished formulation for mebendazole and albendazole which are treatments for soil-transmitted helminthiasis, and praziquantel, which is treatment for schistosomiasis through public sector business with WHO and World Bank since the mid 1980's. Major schistosomiasis eradication campaigns carried out with praziquantel include Delta project in Egypt and China Project. Also Shin Poong is developing a new ACT anti-malarial drug with Medicines for Malaria Venture (MMV) and WHO since 1999.

sigma-tau SpA
Contact: Andreas Diedenhofen MD
Director, International Medical Marketing Affairs
Socio Unico
Via Pontina km 30,400
00040 Pomezia (Roma) Italy
Phone: +39 06 9139.36.28
Fax: +39 06 9139.40.00

Email: andreas.diedenhofen@sigma-tau.it

Sigma-Tau Pharmaceuticals, Inc.
Contact: Marc Tewey, MBA
Vice President, Commercial Operations
9841 Washingtonian Blvd., Ste 500
Gaithersburg, MD 20878
Phone: 301-670-1518
Fax: 301-948-1862
Email: Marc.Tewey@sigmatau.com
Sigma-Tau is a leading research-based pharmaceutical company headquartered in Pomezia, Italy with more than 2,500 employees worldwide. Sigma-Tau focuses its research and development on cardiovascular disease, metabolism, oncology, immunology, and the central and peripheral nervous systems. Sigma-Tau is also dedicated to creating novel therapies for the unmet needs of patients with rare diseases. Truly unique in its field, Sigma-Tau places its considerable scientific resources behind the discovery, development and distribution of compounds that benefit the few. Sigma-Tau has operating subsidiaries throughout Europe and the United States and maintains a presence in all of the world's major pharmaceutical markets.

Sustainable Sciences Institute (NGO)
Contact: Josefina Coloma
870 Market St., Suite 764
San Francisco, CA 94102
Phone: 415-772-0939
Fax: 415-772-9059
E-mail: ssi@ssilink.org
Take One Table
Sustainable Sciences Institute (SSI) is and international NGO, dedicated to developing scientific capacity in areas with pressing health problems, via education, training, and support of locally relevant scientific projects. By building local health research capacity, SSI empowers developing country researchers to solve infectious disease problems in their communities. By providing training in low-cost and appropriate techniques, SSI promotes sustainability, and strengthens the local research and health infrastructure in the areas of laboratory, epidemiology, manuscript and grant writing, bioinformatics, bioethics, and information and communication technologies for health.

Exhibitor and Supporter Directory

TechLab, Inc.
2001 Kraft Drive
Blacksburg, VA 24060-6358
Phone: 540-953-1664
Fas: 540-953-1665
E-mail: techlab@techlab.com
TechLab, Inc. develops, manufactures and distributes rapid non-invasive intestinal diagnostics in the areas of intestinal inflammation, antibiotic associated diarrhea and parasitology. The company continues its research on markers of intestinal inflammation, the toxins of *Clostridium difficile,* amebiasis and vaccine development. TechLab is registered with the U.S. Food and Drug Administration and is ISO 13485 certified.

The University of Chicago Press
Contact: Jennifer Ringblom
1427 East 60th Street
Chicago, IL 60637
Phone: 773-702-7363
Fax: 773-834-7201
E-mail: jringblom@press.uchicago.edu
Booth 210
Established in 1891, the University of Chicago Press is the largest American university press. The Press currently publishes nearly 50 leading journals and serials, in a wide range of disciplines including The Journal of Infectious Diseases, Clinical Infectious Diseases, and Infection Control & Hospital Epidemiology. Chicago also publishes approximately 250 books a year, and has published 11,000 books since its founding.

Tulane University Department of Tropical Medicine
Contact: Ron Cail
1440 Canal St. 2210
New Orleans, LA 70112
Phone: 504-988-5199
Fax: 504-988-7313
E-mail: rcail@tulane,edu
Booth 201
Department of Tropical Medicine Degree Programs:
> MSPH (Master's of Science in Public Health)
> MPH & TM (Master's of Science in Public Health)
> PhD (Doctorate of Philosophy in Parasitology)
> Diploma Course in Traveler's Health

University of Pennsylvania / EuPathDB
Contact: Omar Harb, Ph.D.
1403 Blockley Hall Center for Bioinformatics
Philadelphia, PA 19104-6021
Phone: 215-746-7019
Fax: 215-573-3111
E-mail: oharb@pcbi.upenn.edu
Booth 301
The Eukaryotic Pathogens database (www.EuPathDB.org) is an integrated database for protozoan pathogens and provides a functional resource for *Cryptosporidium spp., Giardia lamblia, Plasmodium spp., Toxoplasma gondii* and *Trichomonas vaginalis*. EupathDB provides a venue to analyze and query functional data from each of the maintained organisms, including transcript and protein expression evidence, population biology data (isolates and single nucleotide polymorphisms), gene annotations and orthology profiles. EupathDB representatives will answer questions, help with queries and distribute materials.

University of Texas Medical Branch
Contact: Amy Ogden
301 University Blvd
Galveston, TX 77555-111
Phone: 409-772-8460
Fax: 409-772-8921
E-mail: alogden@utmb.org
Booth 211 and Take One Table

Walter Reed Army Institute of Research
Peter D'Arpa
503 Robert Grant Avenue
Silver Spring, MD 20910-7500
Phone: 301-319-7549
Fax: 301-319-9743
E-mail: peter.darpa@us.army.mil
Booth 102
WRIAR is DoD's largest biomedical research laboratory. WRAIR conducts bench-to-bedside R&D -- developing diagnostics, vaccines and drugs to detect, prevent and treat traumatic injuries and infectious diseases. With facilities in the US for human sleep studies, veterinary medicine, pilot GMP vaccine/biological manufacture, and a dedicated clinical trials center -- and overseas laboratories in Asia and Africa conducting product development where tropical diseases are endemic – WRAIR, independently and through collaboration with university and industry partners, is improving soldier and world health.

WHO/TDR
Contact: Jamie Guth
Avenue Appia 20
Geneva 27 1211
Switzerland
Phone: +41 79 441 2289
Fax: +41 22 791 4854
E-mail: guthj@who.int
Booth 407
Documentation and information about the UNDP/ UNICEF/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.

Friday, December 5

Pre-Meeting Course Registration

Gallery
Friday, December 5, 4 p.m. – 6 p.m.

Saturday, December 6

Pre-Meeting Course Registration

Napoleon Ballroom Registration Desk
Saturday, December 6, 7 a.m. – 1:30 p.m.

ASTMH Certificate of Knowledge Exam

Napoleon B123
Saturday, December 6, 8 a.m. – Noon

Pre-Meeting Course

Whole Genome Association Studies: Understanding the Genetic Basis of Susceptibility to Infectious Diseases

Napoleon A123
Saturday, December 6, 8:30 a.m. – 4:30 p.m.

This course targets scientists, physicians, clinicians, graduate students and educators with interests in the rapidly evolving field of whole genome association studies and how these approaches can be used to understand the basis for susceptibility or resistance to infectious diseases. Topics will include an overview of whole genome association, a review of the state-of-the-art in technology development, an overview of computational analyses and biostatistics and a discussion of some of the bioethical considerations associated with these studies.

CHAIR

Daniel J Carucci
United Nations Foundation, Washington, DC, United States

Michael Gottlieb
Foundation for the National Institutes of Health, Bethesda, MD, United States

Dominic Kwiatkowski
Wellcome Trust Center for Human Genetics, Oxford, United Kingdom

8:30 a.m.

COFFEE AND LIGHT CONTINENTAL BREAKFAST

9 a.m.

INTRODUCTION – COURSE GOALS AND OUTLINE

Daniel J. Carucci
United Nations Foundation, Washington, DC, United States

Michael Gottlieb
Foundation for National Institutes of Health, Bethesda, MD, United States

Dominic Kwiatkowski
Wellcome Trust Center for Human Genetics, Oxford, United Kingdom

9:15 a.m.

INTRODUCTION TO WHOLE GENOME ASSOCIATION STUDIES

Dominic Kwiatkowski
Wellcome Trust Center for Human Genetics, Oxford, United Kingdom

10 a.m.

TECHNOLOGIES AND APPROACHES

Speaker to be announced

10:45 a.m.

COMPUTATIONAL ANALYSES AND BIOSTATISTICS

Paul DeBakker
Broad Institute, Cambridge, MA, United States

11:30 a.m.

LUNCH (ON YOUR OWN)

1 p.m.

BIOETHICAL ISSUES IN WHOLE GENOME ASSOCIATION STUDIES

Abdoulaye Djimde
University of Bamako, Bamako, Mali

1:30 p.m.

WHOLE GENOME ASSOCIATION STUDIES (MALARIA)

Kerrin Small
Wellcome Trust Centre for Human Genetics, Oxford, United Kingdom

2 p.m.

WHOLE GENOME ASSOCIATION STUDIES (HIV)

Dongliang Ge
Duke Institute, Durham, NC, United States

3 p.m.

BREAK

3:30 p.m.

WHOLE GENOME ASSOCIATION STUDIES (TUBERCULOSIS)

Fred Vannberg
Wellcome Trust Centre for Human Genetics, Oxford, United Kingdom

4 p.m.

PANEL DISCUSSION: IMPLICATION FOR IMPACT ON DISEASES OF THE DEVELOPING WORLD

Moderator
John Reeder
Burnet Institute for Medical Research and Public Health, Melbourne, VIC, Australia

Pre-Meeting Course

Malaria Eradication: Calibrating Aspirations, Technology and Commitment

Supported with funding from the Bill & Melinda Gates Foundation

Napoleon C123

Saturday, December 6, 1 p.m. – 5:45 p.m.

In the past five years, there has been enormous change in the financing and implementation of malaria prevention and treatment to meet agreed upon uptake goals, and this process had already been accelerated under the concept of "Scaling up for Impact," which is based on the potential for higher impact when the control program is scaled up rapidly rather than incrementally. A number of countries, supported by major financing agencies, have made commitments to drive malaria control interventions up to optimize impact. This course is designed to provide the participant an exposure to experts in the range of relevant topics to review the historical and contemporary issues that frame global malaria control strategies and programming. The course will focus on providing participants a broad interactive opportunity to learn about the rationale, feasibility and strategic approaches to intensification of malaria control.

CHAIR

Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Partnership in Africa (MACEPA), Seattle, WA, United States

Bernard Nahlen
President's Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States

David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

1 p.m.

INTRODUCTION — COURSE GOALS AND OUTLINE

Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Partnership in Africa (MACEPA), Seattle, WA, United States

Bernard Nahlen
President's Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States

David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

1:15 p.m.

MALARIA CONTROL OVERVIEW 2000-2008

Bernard Nahlen
President's Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States

Mac Otten
World Health Organization, Geneva, Switzerland

2:30 p.m.

LESSONS ON ERADICATION

Randall Packard
Johns Hopkins University, Baltimore, MD, United States

Linda Venczel
Bill & Melinda Gates Foundation, Seattle, WA, United States

3:30 p.m.

MALARIA CONTROL: CONTROL- ELIMINATION- ERADICATION- COUNTRY CASE PERSPECTIVES

Hoda Yousef Atta
World Health Organization, Cairo, Egypt.

Abdullah Ali
Zanzibar Malaria Control Program, Zanzibar, United Republic of Tanzania.

Keith Carter
Pan American Health Organanization, Hyattsville, MD, United States

5 p.m.

SUMMARY OF KEY ISSUES FROM DAY 1 AND CONTENT FOR DAY 2

Carlos C. (Kent) Campbell
PATH Malaria Control and Evaluation Partnership in Africa (MACEPA), Seattle, WA, United States

Sunday, December 7

Pre-Meeting Course

Malaria Eradication: Calibrating Aspirations, Technology and Commitment

Supported with funding from the Bill & Melinda Gates Foundation

Grand Ballroom AB

Sunday, December 7, 7:30 a.m. – 3 p.m.

7:30 a.m.

COFFEE AND CONTINENTAL BREAKFAST

8 a.m.

THE EPIDEMIOLOGIC FRAMEWORK FOR ELIMINATION AND ERADICATION

Richard W. Steketee
PATH, Seattle, WA, United States

8 a.m.

THE EPIDEMIOLOGIC FRAMEWORK FOR ELIMINATION AND ERADICATION

G. Dennis Shanks
Australian Army Malaria Institute, Enoggera, QLD, Australia

9:30 a.m.

THE RESEARCH AGENDA: MAPPING AND FILLING GAPS IN OUR KNOWLEDGE AND TOOLS TO ELIMINATION AND ERADICATION

Pedro Alonso
Centro de Investigacao em saude de Manhica (CISM), Barcelona, Spain

10:30 a.m.

BREAK

11:30 a.m.

THE POLITICAL AND FINANCING REQUIREMENTS FOR MALARIA ERADICATION

Richard Feachem
University of California at San Francisco, San Francisco, CA, United States

12:30 p.m.

LUNCH (ON YOUR OWN)

1:30 p.m.

A GLOBAL MALARIA STRATEGIC AND BUSINESS PLAN

James Banda
World Health Organization, Geneva, Switzerland

Regina Rabinovich
Bill & Melinda Gates Foundation, Seattle, WA, United States

2:45 p.m.

WRAP-UP

David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

ASTMH Council Meeting

Waterbury
Sunday, December 7, 8 a.m. – 3:30 p.m.

Registration

Napoleon Ballroom
Sunday, December 7, 9:30 a.m. – 6 p.m.

Press Room

Ellendale/Evergreen

Sunday, December 7, 10 a.m. – 4 p.m.

Young Investigator Award Poster Set-Up

Sunday, December 7, 10 a.m. – 10:45 a.m.

Information about location posted at ASTMH registration desk.

Cyber Cafe

Lagniappe
Sunday, December 7, Noon – 6 p.m.

ACAV SIE Subcommittee Meeting

Salon 817/821
Sunday, December 7, 11 a.m. – Noon

Young Investigator Award Presentations

In Honor of William A. Petri, Sr.
In Memory of Annie Liberati
Supported with funding from TechLab, Inc.

ASTMH will present the Young Investigator Award to outstanding young researchers during the 57th Annual Meeting. This award encourages developing young scientists to pursue careers in various aspects of tropical disease research.

Young Investigator Award Session A

Oak Alley
Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES

Subash Babu
National Institutes of Health, Bethesda, MD, United States

Stephen Davies
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Daniel J. Tisch
Case Western Reserve University, Cleveland, OH, United States

827

CARING FOR THE MOTHER AND CHILD IN AN INTEGRATED HEALTH SYSTEM: THE UTILITY OF A POSTNATAL BRIDGING CARD

Eugene Richardson[1], Robert Pattinson[2], Anne-Marie Bergh[2], Elsie Etsane[2], Jenny Makin[2]
[1]Yale University School of Medicine, New Haven, CT, United States, [2]University of Pretoria, Pretoria, South Africa

1147

LANDSCAPE GENETICS REVEALS FOCAL TRANSMISSION OF *ASCARIS LUMBRICOIDES*

Charles D. Criscione[1], Dan Sudimack[2], Joel D. Anderson[3], Janardan Subedi[4], Dev R. Rai[2], Ram P. Upadhayay[2], Bharat Jha[5], Kimberly D. Williams[6], Sarah Williams-Blangero[2], Timothy J. Anderson[2]
[1]Department of Biology, Texas A&M University, College Station, TX, United States, [2]Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio, TX, United States, [3]Perry R. Bass Marine Fisheries Research Station, Coastal Fisheries Division, Texas Parks and Wildlife Department, Palacios, TX, United States, [4]Department of Sociology and Gerontology, Miami University, Oxford, OH, United States, [5]Tribhuvan University Institute of Medicine, Kathmandu, Nepal, [6]Lifespan Health Research Center, Department of Community Health, Boonshoft School of Medicine, Wright State University, Dayton, OH, United States

1202

DIAGNOSTIC ACCURACY OF *LEISHMANIA* OLIGOC-TEST FOR THE DIAGNOSIS OF CUTANEOUS LEISHMANIASIS IN PERU

Diego Espinosa[1], Andrea K. Boggild[2], Stijn Deborggraeve[3], Thierry Laurent[4], Cristian Valencia[1], César Miranda-Verástegui[1], Alejandro Llanos-Cuentas[1], Thierry Leclipteux[4], Jean-Claude Dujardin[3], Philippe Büscher[3], Jorge Arévalo[1]
[1]Instituto de Medicina Tropical "Alexander von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada, [3]Department of Parasitology, Institute of Tropical Medicine, Antwerp, Belgium, [4]Coris BioConcept, Gembloux, Belgium

380

ANTI-*WOLBACHIA* ANTIBODIES MAY DECREASE THE LIKELIHOOD OF ACUTE ADENOLYMPHANGITIS IN LYMPHATIC FILARIASIS

Edsel Maurice T. Salvana[1], Katrin Daehnel[2], Amy G. Hise[3], Eric Pearlman[2], Daniel J. Tisch[3], James W. Kazura[3]
[1]Division of Infectious Diseases and HIV Medicine, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, [2]Department of Ophthalmology, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, [3]Center for Global Health and Diseases, Case Western Reserve University, Cleveland, OH, United States

415

MEMORY B CELL RESPONSES IN PATIENTS WITH DEHYDRATING DIARRHEA CAUSED BY VIBRIO CHOLERAE O1

Aaron M. Harris[1], Jason B. Harris[2], Md. Saruar Bhuiyan[3], Fahima Chowdhury[3], Ashraful I. Khan[3], Abu S. Faruque[3], Regina C. LaRocque[2], Edward T. Ryan[2], Firdausi Qadri[3], Stephen B. Calderwood[2]
[1]Tufts University School of Medicine, Boston, MA, United States, [2]Massachusetts General Hospital, Boston, MA, United States, [3]International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

429

WOLBACHIA SEQUENCES IN THE CHROMOSOMAL GENOME OF ONCHOCERCIA FLEXUOSA INDICATE PAST WOLBACHIA ENDOSYMBIOSIS

Samantha N. McNulty
Washington University School of Medicine, St. Louis, MO, United States

752

THE EFFECT OF PRAZIQUANTEL TREATMENT ON THE GENETIC DIVERSITY OF *SCHISTOSOMA MANSONI* INFECTIONS IN PRIMARY SCHOOL CHILDREN WITHIN MAYUGE DISTRICT, UGANDA

Poppy H. Lamberton[1], Alice J. Norton[1], Alan Fenwick[1], Narcis Kabatereine[2], Joanne P. Webster[1]
[1]Imperial College London, London, United Kingdom, [2]Vector Control Division, Ministry of Health, Kampala, Uganda

478

IDENTIFICATION OF *RICKETTSIA* FROM TICK SPECIES COLLECTED IN TENNESSEE

Sara B. Cohen[1], Michael J. Yabsley[2], J. D. Freye[3], Brett G. Dunlap[3], John R. Dunn[1], Daniel G. Mead[2], Timothy F. Jones[1], Abelardo C. Moncayo[1]
[1]Tennessee Department of Health, Nashville, TN, United States, [2]Southeastern Cooperative Wildlife Disease Study, University of Georgia, Athens, GA, United States, [3]United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services Program, Nashville, TN, United States

519

USE OF HETEROLOGOUS MICROARRAY HYBRIDIZATION TO IDENTIFY GENES INVOLVED IN MOSQUITO INFECTIVITY FOR BRUGIA PAHANGI MICROFILARIAE

Kathryn Griffiths[1], George Mayhew[2], Rebecca Zink[1], Sara Erickson[2], Jeremy Fuchs[2], Bruce Christensen[2], Colleen McDermott[1], Michelle Michalski[1]
[1]University of Wisconsin Oshkosh, Oshkosh, WI, United States, [2]University of Wisconsin Madison, Madison, WI, United States

144

CHRONIC HELMINTH INFECTION INCREASES THE THRESHOLD OF ACTIVATION FOR BASOPHILS AND MAST CELLS

David Larson, Marina N. Torrero, Marc P. Hübner, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

524

ALLEVIATING THE BURDEN OF LYMPHEDEMA IN TARABA STATE, NIGERIA VIA COMMUNITY-BASED REHABILITATION (CBR)

Lola E. Adigun[1], Stanley O. Foster[1], Henry B. Perry III[2], Oladele Akogun[3]
[1]Emory University, Atlanta, GA, United States, [2]Future Generations, Franklin, WV, United States, [3]Common Heritage Foundation, Yola, Nigeria

521

DEVELOPING BRUGIA MALAYI/BRUGIA PAHANGI HYBRIDS AS A TOOL FOR MOSQUITO INFECTIVITY STUDIES

Rebecca Zink[1], Kathryn Griffiths[1], Sara Erickson[2], Jeremy Fuchs[2], Bruce Christensen[2], Michelle Michalski[1]
[1]University of Wisconsin Oshkosh, Oshkosh, WI, United States, [2]University of Wisconsin Madison, Madison, WI, United States

482

CLIMATIC FACTORS, ENTOMOLOGIC ATTRIBUTES AND EPIDEMICS OF DENGUE IN TAIWAN, 1998 – 2006

Chuin-Shee Shang[1], Chi-Tai Fang[1], Chung-Ming Liu[2], Fu-Chang Hu[3], Chwan-Chuen King[1]
1Institute of Epidemiology, National Taiwan University, Taipei City, Taiwan, 2Global Change Researching Center, National Taiwan University, Taipei City, Taiwan, 3National Center of Excellence for General Clinical Trial & Research, NTU Hospital, Taipei City, Taiwan

302

A PRINCIPAL COMPONENTS ANALYSIS OF IMMUNE PARAMETERS ASSOCIATED WITH RESISTANCE TO REINFECTION WITH *SCHISTOSOMA MANSONI*

Carla L. Black[1], Pauline N. Mwinzi[2], W. Evan Secor[3], Diana M. Karanja[2], Daniel G. Colley[1]
[1]University of Georgia, Athens, GA, United States, [2]Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

1231

INHIBITION OF *ANCYLOSTOMA CEYLANICUM* MACROPHAGE MIGRATION INHIBITORY FACTOR (ACEMIF): POTENTIAL FOR PREVENTING HOOKWORM-ASSOCIATED IMMUNOMODULATION AND DISEASE PATHOGENESIS

Jon J. Vermeire[1], Yoonsang Cho[2], Lin Leng[3], Elias Lolis[2], Richard Bucala[3], Michael Cappello[1]
[1]Program in International Child Health and Department of Pediatrics, Yale University School of Medicine, New Haven, CT, United States, [2]Department of Pharmacology, Yale University School of Medicine, New Haven, CT, United States, [3]Department of Medicine, Yale University School of Medicine, New Haven, CT, United States

697

MODELING WEST NILE VIRUS TRANSMISSION AMONG BIRDS IN CONNECTICUT

Jennifer E. Simpson[1], Alison Galvani[1], Jan Medlock[1], Goudarz Molaei[2], Theodore Andreadis[2], Maria Diuk-Wasser[1]
[1]Yale University, New Haven, CT, United States, [2]The Connecticut Agricultural Experiment Station, New Haven, CT, United States

814

MOLECULAR CHARACTERIZATION OF FATTY ACID BINDING PROTEINS FROM THE HOOKWORM *ANCYLOSTOMA CEYLANICUM*

Keke C. Fairfax, Jon J. Vermeire, Richard D. Bungiro, Lisa M. Harrison, Sohail Husain, Michael Cappello
Yale University, New Haven, CT, United States

145

HISTAMINE DOES NOT PLAY A ROLE IN VACCINE-MEDIATED IMMUNITY AGAINST MURINE FILARIASIS

Ellen C. Mueller
Uniformed Services University, Bethesda, MD, United States

783

RICKETTSIA FELIS INFECTION IN A MURINE MODEL.

Kathryn E. Reif, Rhett W. Stout, Timothy W. Morgan, Kevin R. Macaluso
Louisiana State University, Baton Rouge, LA, United States

38

EFFECTIVENESS OF HEALTH EDUCATION INTERVENTION TRIAL TO REDUCE PORCINE CYSTICERCOSIS IN NORTHERN TANZANIA

Helena A. Ngowi[1], Hélène Carabin[2], M. R. Mlozi[1], Ayub A. Kassuku[1], J. E. Mlangwa[1], A. Lee Willingham[3]
[1]Sokoine University of Agriculture, Morogoro, United Republic of Tanzania [2]University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, [3]WHO/FAO Collaborating Center for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Frederiksberg, Denmark

Young Investigator Award Session B

Rhythms I
Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES

Kathryn S. Aultman
Bill & Melinda Gates Foundation, Seattle, WA, United States

Brenda T. Beerntsen
University of Missouri-Columbia, Columbia, MO, United States

Nicholas Komar
Centers for Disease Control and Prevention, Fort Collins, CO, United States

312

RABIES IN BATS IN TWO COMMUNITIES IN PERU AFTER AN OUTBREAK IN 2007

Gabriela Salmon-Mulanovich[1], Christian Albújar[1], Carolina Guevara[1], Alicia Vasquez[2], Alberto Laguna[1], Milagros Salazar[3], Hernán Zamalloa[1], Marcia Cáceres[4], Tadeusz Kochel[1], Carlos Contreras[4], Felix R. Jackson[5], Charles E. Rupprecht[5], Joel M. Montgomery[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru, [3]University of Texas Medical Branch, Galveston, TX, United States, [4]Dirección de Salud, Madre de Dios, Peru, [5]Centers for Disease Control and Prevention, Atlanta, GA, United States

1171

LARVAL ANOPHELINE MOSQUITO RECTA EXHIBIT A DRAMATIC CHANGE IN ION TRANSPORT PROTEINS IN RESPONSE TO SHIFTING SALINITY

Kristin E. Smith[1], Leslie A. VanEkeris[1], William R. Harvey[1], Peter J. Smith[2], Paul J. Linser[1]
[1]University of Florida, Saint Augustine, FL, United States, [2]BioCurrents Research Center, Program in Molecular Physiology, Marine Biological Center, Woods Hole, MA, United States

1131

UNDERSTANDING BATS ACCESS TO DATE PALM SAP: IDENTIFYING PREVENTATIVE TECHNIQUES FOR NIPAH VIRUS TRANSMISSION

M. S.U. Khan, Nazmun Nahar, Rebeca Sultana, M. Jahangir Hossain, Emily S. Gurley, Stephen P. Luby
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

235

BIOCHEMICAL AND KNOCKDOWN RESISTANCE OF *ANOPHELES GAMBIAE* TO PERMETHRIN AND DELTAMETHRIN (PYRETHROIDS) AT KPONE ON SEA IN THE GREATER ACCRA REGION OF GHANA

Kwadwo K. Frempong[1], Isabella Quakyi[2], Sulley K. Ben-Mahmoud[3], Irene Offei Owusu[1], Maxwell A. Appawu[1], Daniel Boakye[1]
[1]Noguchi Memorial Institute For Medical Research, Accra, Ghana, [2]School of Public Health, University of Ghana, Accra, Ghana, [3]African Regional Postgraduate Programme in Insect Science (ARPPIS), University of Ghana, Accra, Ghana

253

THE MITOCHONDRIA CYTOCHROME OXIDASE 1 DNA SEQUENCES DEFINE ECOLOGICAL DISTRIBUTION OF *ANOPHELES GAMBIAE* SPECIES COMPLEX IN GHANA

Dziedzom K. de Souza[1], Michael D. Wilson[2], Charles A. Brown[2], Bernard W. Lawson[3], Daniel A. Boakye[2]
[1]Noguchi Memorial Institute for Medical Research/Department of Theoretical and Applied Sciences, Kwame Nkrumah University of Science and Technology, Accra/Kumasi, Ghana, [2]Noguchi Memorial Institute for Medical research, Accra, Ghana, [3]Department of Theoretical and Applied Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

52

SCABIES: EMERGING IVERMECTIN RESISTANCE IN A NEGLECTED ECTOPARASITIC DISEASE

Kate E. Mounsey[1], James S. McCarthy[1], Deborah C. Holt[2], Cielo Pasay[1], Bart J. Currie[3], Shelley F. Walton[2]
[1]Queensland Institute of Medical Research, University of Queensland, Brisbane, Australia, [2]Menzies School of Health Research, Charles Darwin University, Darwin, Australia, [3]Northern Territory Clinical School, Flinders University, Darwin, Australia

319

TRANSMISSION OF NIPAH BY DATE PALM SAP, BANGLADESH 2008

Muhammad Aziz Rahman[1], M. Jahangir Hossain[2], Sharmin Sultana[3], Shahed Sazzad[2], Nusrat Homaira[1], Sayma Afroze[3], Mahmudur Rahman[3], Emily Gurley[2], Stephen P. Luby[4]
[1]International Center for Diarrhoeal Disease Research, Bangladesh and IEDCR (Institute of Epidemiology, Disease Control and Research), Dhaka, Bangladesh, [2]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [3]Institute of Epidemiology, Disease Control and Research, Dhaka, Bangladesh, [4]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh and Centers for Disease Control and Prevention, Atlanta, Georgia, USA

1135

THE ROLE OF KEY PTEN SPLICE VARIANTS ON REPRODUCTION AND LIFESPAN IN THE MOSQUITO *AEDES AEGYPTI*

Anam Javed, Jessica Brown, Michael A. Riehle
University of Arizona, Tucson, AZ, United States

712

PREVENTING NIPAH VIRUS INFECTION: INTERVENTIONS TO INTERRUPT BATS ACCESSING DATE PALM SAP

Nazmun Nahar, Rebeca Sultana, Elizabeth Oliveras, Utpal Kumar Mondal, M. Jahangir Hossain, Emily S. Gurley, M. Saiful Islam, M. S. Khan, Stephen P. Luby
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

8

NEWLY ISOLATED MUTANTS OF DENGUE VIRUS TYPE 1 WITH DELETIONS IN THE 3' NONCODING REGION SHOW HIGHER LEVELS OF REPLICATION *IN VIVO* IN MOSQUITOES

Yoko Nukui[1], Shigeru Tajima[1], Makiko Ikeda[1], Akira Kotaki[1], Tomohiko Takasaki[1], Yuki Eshita[2], Ichiro Kurane[1]
[1]National Institute of Infectious Diseases, Tokyo, Japan, [2]Oita University Faculty of Medicine, Oita, Japan

9

MOSQUITOES PUT THE BRAKE ON EVOLUTION: EXPERIMENTAL EVOLUTION REVEALS SLOWER MUTATION ACCUMULATION IN MOSQUITO CELLS THAN VERTEBRATE CELLS

Nikos Vasilakis[1], Eleanor Deardorf[1], Joanie Kenney[1], Shannan L. Rossi[1], Kathryn A. Hanley[2], Scott C. Weaver[1]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]New Mexico State University, Las Cruces, NM, United States

1138

RNA INTERFERENCE (RNAI) OF RIBOSOMAL PROTEIN S3A (RPS3A) SUGGESTS A LINK BETWEEN THIS GENE AND ARRESTED OVARIAN DEVELOPMENT DURING ADULT DIAPAUSE IN *CULEX PIPIENS*

Mijung Kim
The Ohio State University, Columbus, OH, United States

676

GENETIC STRUCTURE IN THE ARBOVIRAL VECTOR *CX. TARSALIS*: A SPATIAL ANALYSIS OF POPULATION DIFFERENTIATION ACROSS THE WESTERN UNITED STATES

Meera Venkatesan, Jason L. Rasgon
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

1126

CYTOKINE EXPRESSION IN A HAMSTER MODEL OF HANTAVIRUS PULMONARY SYNDROME

Martin H. Richter, Mary Louise Milazzo, Eduardo J. Eyzaguirre, Charles F. Fulhorst
University of Texas Medical Branch Galveston, Galveston, TX, United States

715

HOME POULTRY RAISING PRACTICES IN BANGLADESH: THE SETTING FOR ANIMAL TO HUMAN INFLUENZA TRANSMISSION

Rebeca Sultana, M. Saiful Islam, Nazmun Nahar, Nadia A. Rimi, Rouha A. Sarkar, Emily S. Gurley, Elizabeth Oliveras, M. S. Khan, M. Jahangir Hossain, Stephen P. Luby
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

719

AVIAN INFLUENZA IN WILD BIRDS FROM THE CENTRAL COAST OF PERU

Bruno M. Ghersi[1], David Blazes[1], Eliana Icochea[2], Rosa I. Gonzalez[2], Tadeusz Kochel[1], Yeny Tinoco[3], Merly Sovero[1], Stephen Lindstrom[4], Bo Shu[4], Alexander Klimov[4], Armando E. Gonzalez[2], Joel M. Montgomery[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]San Marcos University, Lima, Peru, [3]Johns Hopkins University, School of Public Health, MD, United States, [4]Center for Disease Control and Prevention, Atlanta, GA, United States

724

MATERNAL-FETAL TRANSMISSION OF CHIKUNGUNYA VIRUS IN MICE

Sarah A. Ziegler, Amelia P. Travassos da Rosa, Shu-Yuan Xiao, Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

807

REPLIVAX WN, A SINGLE-CYCLE FLAVIVIRUS VACCINE, IS SAFE AND EFFICACIOUS IN A RHESUS MACAQUE MODEL OF WEST NILE DISEASE

Douglas G. Widman[1], Tomohiro Ishikawa[1], Ricardo Carrion[2], Nigel Bourne[1], Peter W. Mason[1]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]Southwest Foundation for Biomedical Research, San Antonio, TX, United States

669

THE AGING MOSQUITO: INCREASED INSULIN SIGNALING IN THE MIDGUT OF *AN. STEPHENSI* REDUCES LIFESPAN

Laurel Watkins de Jong, Michael Riehle
University of Arizona, Tucson, AZ, United States

Young Investigator Award Session C

Bayside A
Sunday, December 7, 2008 11 a.m. – 3:30 p.m.

JUDGES

Roland A. Cooper
Old Dominion University, Norfolk, VA, United States

Miriam Laufer
University of Maryland, Baltimore, MD, United States

Julian C. Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

31

MODELLING THE POTENTIAL IMPACT OF ARTEMISININ COMBINATION THERAPIES AND LONG-LASTING DRUG COMBINATIONS ON MALARIA TRANSMISSION INTENSITY: A CASE STUDY IN TANZANIA

Lucy Okell[1], Chris Drakeley[1], Teun Bousema[2], Chris J. Whitty[1], Azra C. Ghani[3]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, [3]Imperial College, London, United Kingdom

350

CHANGES IN MICRORNAS EXPRESSED BY HUMAN MACROPHAGES AS A RESULT OF *LEISHMANIA CHAGASI* INFECTION

Anne M. Dickson[1], Anton McCaffrey[1], Mary E. Wilson[2]
[1]Department of Internal Medicine, University of Iowa, Iowa City, IA, United States, [2]Departments of Internal Medicine, Microbiology and Epidemiology, University of Iowa and the VA Medical Center, Iowa City, IA, United States

160

METACYCLOGENESIS ALTERS RECEPTOR-MEDIATED UPTAKE OF *LEISHMANIA CHAGASI* PROMASTIGOTES BY HUMAN MONOCYTE-DERIVED MACROPHAGES

Norikiyo Ueno, Nilda E. Rodriguez, Carol L. Bratt, Mary E. Wilson
University of Iowa, Iowa City, IA, United States

410

SAP1 IS A SELECTIVE MASTER REGULATOR OF MALARIA PARASITE LIVER INFECTION

Ahmed S. Aly, Stefan H. Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

811

HDP- A NOVEL HEME DETOXIFICATION PROTEIN IN THE MALARIA PARASITE.

Rana Nagarkatti[1], Dewal Jani[1], Wandy Beatty[2], Ross Angel[3], Carla Slebodnick[3], John Andersen[4], Sanjai Kumar[5], Dharmendar Rathore[1]
[1]Virginia Bioinformatics Institute, Blacksburg, VA, United States, [2]Washington University School of Medicine, St. Louis, MO, United States, [3]Virginia Polytechnic Institute and State University, Blacksburg, VA, United States, [4]Laboratory of Malaria and Vector Research, National Institutes of Health, Rockville, MD, United States, [5]Food and Drug Administration, Bethesda, MD, United States

928

REAL-TIME *IN VIVO* IMAGING OF LIVER STAGES OF *PLASMODIUM YOELII*: GFP/LUCIFERASE REPORTER PARASITES

Agnes Mwakingwe[1], Li-Min Ting[1], Sarah Hochman[1], John Chen[2], Richard Novick[2], Photini Sinnis[3], Kami Kim[1]
[1]Albert Einstein College of Medicine, Bronx, NY, United States, [2]Skirball Institute, New York University School of Medicine, New York, NY, United States, [3]Medical Parasitology, New York university School of Medicine, New York, NY, United States

1210

AFM STUDY OF THE EXTRACELLULAR AND THE CYTOPLASMIC SURFACES OF *PLASMODIUM FALCIPARUM* INFECTED ERYTHROCYTE MEMBRANES

Hui Shi, Ang Li, Jing Yin, Kavin Tan, Chwee Teck Lim
National University of Singapore, Singapore, Singapore

228

IDENTIFICATION OF POTENTIAL TARGET GENES FOR MALARIA VACCINE DEVELOPMENT BY DIFFERENTIAL EXPRESSION PROFILING OF RADIATION-ATTENUATED *PLASMODIUM FALCIPARUM* SPOROZOITES

Benjamin U. Hoffman[1], Charlie Xiang[2], Michael Brownstein[2], **Anusha M. Gunasekera**[1]
[1]Sanaria, Inc, Rockville, MD, United States, [2]J. Craig Venter *Institute, Rockville, MD, United States*

353

APPLICATION OF A BIOLUMINESCENT *LEISHMANIA MAJOR* IMAGING MODEL TO THE DEVELOPMENT OF A NOVEL KILLED BUT METABOLICALLY ACTIVE WHOLE CELL VACCINE

Jacquelyn N. Haskell[1], Ron A. Birnbaum[1], Veena Vanchinathan[1], Tamiko Konishi[1], Stephen M. Beverley[2], Kevin W. Bruhn[1], Noah Craft[1]
[1]Los Angeles Biomedical Research Institute, Division of Dermatology, Harbor-UCLA Medical Center, UCLA School of Medicine, Torrance, CA, United States, [2]Washington University School of Medicine, St. Louis, MO, United States

559

ANALYSIS OF GENE EXPRESSION AND EVOLUTIONARY PROCESS IN *LEISHMANIA (VIANNIA) BRAZILIENSIS* AND *LEISHMANIA (VIANNIA) PERUVIANA* MODEL

Dionicia Gamboa
Instituto de Medicina Tropical, Lima, Peru

1211

IDENTIFICATION OF A NOVEL FAMILY OF VARIANT SURFACE ANTIGENS IN *PLASMODIUM FALCIPARUM*

Amanda K. Lukens[1], Daniel E. Neafsey[2], Stephen F. Schaffner[2], Daniel J. Park[2], Philip Montgomery[2], Sarah K. Volkman[1], Pardis C. Sabeti[2], Danny A. Milner, Jr.[1], Johanna P. Daily[1], Ousmane Sarr[3], Daouda Ndiaye[3], Omar Ndir[3], Soulyemane Mboup[3], Nicole Stange-Thomann[2], Roger C. Wiegand[2], Bruce W. Birren[2], Daniel L. Hartl[4], James E. Galagan[2], Eric S. Lander[2], Dyann F. Wirth[1]
[1]Harvard School of Public Health, Boston, MA, United States, [2]The Broad Institute of MIT and Harvard, Cambridge, MA, United States, [3]Cheikh Anta Diop University, Dakar, Senegal, [4]Harvard University, Cambridge, MA, United States

831

YFV-INDUCED CYTOKINE EXPRESSION IN HUMAN HEPATOCYTES

Sara E. Woodson, Michael R. Holbrook
University of Texas Medical Branch, Galveston, TX, United States

838

DISTINCT ROLES OF *PLASMODIUM* RHOMBOID 1 IN PARASITE DEVELOPMENT AND MALARIA PATHOGENESIS

Prakash Srinivasan[1], Isabelle Coppens[2], Marcelo Jacobs-Lorena[2]
[1]National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [2]Johns Hopkins School of Public Health, Malaria Research Institute, Baltimore, MD, United States

1186

SINGLE MOLECULAR FORCE SPECTROSCOPY STUDY OF *PLASMODIUM FALCIPARUM*-INFECTED ERYTHROCYTE CYTOADHERENCE TO ENDOTHELIAL RECEPTORS

Ang Li, Tong Seng Lim, Hui Shi, Jing Yin, Shyong Wei Tan, Chwee Teck Lim
National University of Singapore, Singapore, Singapore

409

P. VIVAX POPULATION GENETICS IN PERU AND VIETNAM: A COMPARATIVE STUDY USING MICROSATELLITES MARKERS

Peter Van den Eede[1], Gert Van Der Auwera[1], Annette Erhart[1], Chantal Van Overmeir[1], Jozef Anné[2], Umberto D'Alessandro[1]
[1]Institute of Tropical Medicine Antwerp, Antwerp, Belgium, [2]Catholic University of Leuven, Leuven, Belgium

639

GENETIC VARIATION AMONG *PLASMODIUM VIVAX* PRIMATE ISOLATES AND THE IMPLICATION FOR VACCINE DEVELOPMENT

Francis B. Ntumngia[1], Amy M. McHenry[2], John W. Barnwell[3], Jennifer Cole-Tobian[4], Christopher L. King[4], John H. Adams[1]
[1]Global Health Infectious Disease Research, University of South Florida, Tampa, FL, United States, [2]University of Notre Dame, Notre Dame, IN, United States, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Center for Global Health and Disease at Case Western Reserve University School of Medicine, Cleveland, OH, United States

506

ANALYSIS OF THE TRANSCRIPTOMIC RESPONSE TO WEST NILE VIRUS INFECTION IN THE EQUINE HOST

Melissa Bourgeois[1], Maureen Long[1], Kathy Seino[2], Nancy Denslow[1]
[1]University of Florida College of Veterinary Medicine, Gainesville, FL, United States, [2]Washington State University College of Veterinary Medicine, Pullman, WA, United States

407

ANALYSIS OF *PLASMODIUM FALCIPARUM* QUANTITATIVE TRAIT LOCI DETERMINING DIFFERENTIAL INFECTIVITY TO *ANOPHELES* MOSQUITOES

Jonathan Mwangi, Lisa Ranford-Cartwright
University of Glasgow, Glasgow, United Kingdom

938

SPECIFIC INHIBITION OF THE PHOSPHOETHANOLAMINE METHYLTRANSFERASE OF THE HUMAN MALARIA PARASITE *PLASMODIUM FALCIPARUM* BY AMODIAQUINE

April M. Bobenchik, Arunima Mishra, Bing Hao, Iulian N. Rujan, Jeffrey C. Hoch, Choukri Ben Mamoun
University of Connecticut Health Center, Farmington, CT, United States

917

IDENTIFICATION, CHARACTERIZATION, AND EVALUATION OF THE *TRYPANOSOMA BRUCEI* CA^{2+} CHANNEL (TBCC1) AS A POTENTIAL DRUG AND VACCINE TARGET

Kiantra I. Ramey[1], Francis O. Eko[1], Nana Wilson[1], Zuzana Kucerova[2], Winston Thompson[1], Jonathan K. Stiles[1]
[1]Morehouse School of Medicine, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

1029

TRANSCRIPTIONAL ANALYSIS OF PUTATIVE FOLATE TRANSPORTER GENES IN *PLASMODIUM FALCIPARUM*

Edwin Ochong[1], Enrique Salcedo[1], Pat Bray[1], Steve Ward[1], Andrew Owen[2]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]Department of Pharmacology, University of Liverpool, Liverpool, United Kingdom

Young Investigator Award Session D

Bayside B

Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

David Williams
Illinois State University, Normal, IL, United States

Yimin Wu
National Institutes of Health, Rockville, MD, United States

97

MANAGEMENT OF CHILDHOOD DIARRHEAL DISEASE IN GONDAR, ETHIOPIA

Rishi P. Mediratta[1], R. Bradley Sack[2]
[1]Johns Hopkins University, Baltimore, MD, United States, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

1187

C5A POTENTIATES DYSREGULATED INFLAMMATORY AND ANGIOGENIC RESPONSES IN PREGNANCY-ASSOCIATED MALARIA

Andrea L. Conroy[1], Constance Finney[1], Lena Serghides[1], Simon O. Owino[2], D. Channe Gowda[3], W. Conrad Liles[1], Julie M. Moore[2], Kevin C. Kain[1]
[1]University of Toronto, Toronto, ON, Canada, [2]Center for Tropical and Emerging Global Diseases and Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, GA, United States, [3]Department of Biochemistry and Molecular Biology, Pennsylvania State University, College of Medicine, Hershey, PA, United States

343

GENETIC HITCHHIKING, SELECTIVE SWEEPS, AND MULTIPLE ORIGINS OF DRUG RESISTANT *PLASMODIUM FALCIPARUM* IN THREE DISTINCT POPULATIONS

Andrea M. McCollum[1], Venkatachalam Udhayakumar[1], Ananias A. Escalante[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Arizona State University, Tempe, AZ, United States

414

PROTEOMIC ANALYSIS OF THE PHOP REGULON IN *SALMONELLA ENTERICA* SEROVARS TYPHI AND TYPHIMURIUM

Richelle C. Charles[1], Jason B. Harris[1], Lauren M. Lebrun[1], Michael Chase[1], Alaullah Sheikh[2], Regina C. Larocque[1], Brian Krastins[3], David Saracino[3], Ian Rosenberg[3], Abdullah Tarique[2], Stephen B. Calderwood[1], Elizabeth Hohmann[1], Firduasi Qadri[2], Kenneth Parker[3], Edward T. Ryan[1]
[1]Massachusetts General Hospital, Boston, MA, United States, [2]International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, [3]Harvard-Partners Center for Genetics and Genomics, Cambridge, MA, United States

1182

NITRIC OXIDE DEPLETION AND ENDOTHELIAL DYSFUNCTION IN CHILDREN WITH MALARIA AND MARKED ANEMIA

Jacqueline Janka[1], Ousmane A. Koita[2], Maya Josepha[2], Broulayé Traoré[3], Fawaz Mzayek[4], Lansana Sangare[2], Ousmane Cissé[2], Laurel Mendelsohn[1], Xunde Wang[1], Henry Masur[1], Mark Gladwin[1], Donald J. Krogstad[4]
[1]National Institutes of Health, Bethesda, MD, United States, [2]University of Bamako, Bamako, Mali, [3]Hôpital Gabriel Touré, Bamako, Mali, [4]Tulane University, New Orleans, LA, United States

81

ACTIVITY OF AQUEOUS METHANOL AND WATER EXTRACTS OF *OSYRIS LANCEOLATA* ON ATCC 2592223 *STAPHYLOCOCUSS AUREUS* AND CLINICAL ISOLATES OF *STAPHYLOCOCUSS AUREUS*

Edna A. Ooko[1], Dr. Peter Lomo[1], Dr. Paul O. Ongugo[2], Dr.Christine Bii[3], Prof. Ahmed Hassanali[4]
[1]Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, [2]Kenya Forestry Research institute, Nairobi, Kenya, [3]Kenya Medical Research Institute, Nairobi, Kenya, [4]International Center for Insect Physiology and Ecology, Nairobi, Kenya

1190

THE LAMBARÉNÉ-ORGAN-DYSFUNCTION SCORE (LODS) IS A SIMPLE CLINICAL PREDICTOR FOR FATAL MALARIA IN AFRICAN CHILDREN

Raimund Helbok[1], Eric Kendjo[2], Saadou Issifou[2], Peter Lackner[3], Charles R. Newton[4], Maryvonne Kombila[5], Tsiri Agbenyega[6], Klaus Dietz[7], Kalifa Bojang[8], Erich Schmutzhard[3], Peter G. Kremsner[2]
[1]Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon; Innsbruck Medical University, Clinical Department of Neurology, Austria, [2]Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon; Department of Parasitology, Institute of Tropical Medicine, University of Tübingen, Tübingen, Germany, [3]Innsbruck Medical University, Clinical Department of Neurology, Innsbruck, Austria, [4]Centre for Geographical Medicine, Kenya Medical Research Institute Kilifi, Kilifi, Kenya; Neuroscience Unit, Institute of Child Health, University College London, London, United Kingdom, [5]Department of Parasitology, Mycology and Tropical Medicine, Faculty of Medicine, University of Health Sciences Libreville, Libreville, Gabon, [6]University of Science and Technology, School of Medical Science, Kumasi, Ghana, [7]Department of Medical Biometry, University of Tübingen, Tübingen, Germany, [8]Medical Research Council Laboratories, Banjul, Gambia

1208

ROLE OF RED CELL COMPLEMENT REGULATORY PROTEINS IN ERYTHROPHAGOCYTOSIS DURING *PLASMODIUM CHABAUDI* INFECTION

Juliana V. Harris[1], Catherine N. Stracener[1], Xiaobo Wu[2], Dirk Spitzer[2], John P. Atkinson[2], José A. Stoute[1]
[1]Uniformed Services University, Bethesda, MD, United States, [2]Washington University, St. Louis, MO, United States

37

TAENIA SOLIUM CYSTICERCOSIS IN NATURALLY INFECTED PIGS: VIABILITY OF CYSTICERCI AND PERSISTENCY OF SPECIFIC ISOTYPE ANTIBODIES AND CYSTICERCAL ANTIGENS AFTER TREATMENT WITH OXFENDAZOLE

Chummy S. Sikasunge[1], Maria V. Johansen[2], Lee A. Willingham III[3], Pall S. Leifsson[4], Isaac K. Phiri[1]
[1]School of Veterinary Medicine, University of Zambia, Lusaka, Zambia, [2]DBL – Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Copenhagen, Denmark, [3]WHO/FAO Collaborating Centre for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Copenhagen, Denmark, [4]Department of Veterinary Pathobiology, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Copenhagen, Denmark

625

TRANSPLACENTAL TRANSFER OF ANTIBODIES TO THE FETUS THAT COULD PROTECT INFANTS FROM MALARIA

Patrick T. Wilson[1], Peter Mungai[2], Indu Malhotra[2], Chris King[2], Arlene Dent[1]
[1]Rainbow Babies and Children's Hospital, Cleveland, OH, United States, [2]Case Western Center for Global Health and Diseases, Cleveland, OH, United States

197

IDENTIFICATION OF MOLECULAR MARKERS IN *PLASMODIUM FALCIPARUM* ISOLATES ASSOCIATED TO MEFLOQUINE AND ARTESUNATE DRUG RESITANCE IN THE PERUVIAN AMAZON BASIN

Valeria R. Soberon[1], Carola J. Salas[1], Meddly L. Santolalla[1], Andrea M. McCollum[2], Venkatachalam Udhayakumar[2], Carmen M. Lucas[1], David J. Bacon[1]
[1]U.S. Naval Medical Research Center Detachment, Lima, Peru, [2]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States

452

PATIENTS WHO HAVE RECOVERED FROM LEPTOSPIROSIS WITH NO DEMONSTRABLE *IN VITRO* MEMORY T-CELL RESPONSES TO *LEPTOSPIRA* OR LEPTOSPIRAL PROTEIN ANTIGENS

Iskra Tuero[1], Joseph Vinetz[2], Gary Klimpel[3]
[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]University of California, San Diego, CA, United States, [3]University of Texas Medical Branch, Galveston, TX, United States

421

THE EPIDEMIOLOGY OF *LEISHMANIA CHAGASI* INFECTION IN RIO GRANDE DO NORTE, NORTHEAST BRAZIL

Bruna L. Maciel[1], Iraci D. Lima[1], Hênio G. Lacerda[1], Paula V. Duarte[1], José W. Queiroz[1], Núbia N. Pontes[1], Sérgio R. Araújo[1], Eliana T. Nascimento[1], Glória R. Monteiro[1], Richard D. Pearson[2], Mary E. Wilson[3], Stephen E. McGowan[3], Selma M. Jerônimo[1]
[1]Universidade Federal do Rio Grande do Norte, Natal – RN, Brazil, [2]University of Virginia, Charlottesville, VA, United States, [3]University of Iowa, Wisconsin, IA, United States

1224

PATHOGENESIS OF HAEMORRHAGE ASSOCIATED WITH DENGUE INFECTION IN ADULTS IN VIETNAM

Dinh The Trung[1], Tran Tinh Hien[2], Le Thi Thu Thao[2], Nguyen Minh Dung[2], Tran Van Ngoc[2], Robert Goldin[3], Edward Tuddenham[4], Cameron Simmons[5], Jeremy Farrar[5], Bridget Wills[5]
[1]University of Medicine and Pharmacy of Ho Chi Minh city, Ho Chi Minh city, Viet Nam, [2]Hospital for Tropical Diseases, Ho Chi Minh city, Viet Nam, [3]Department of Investigative Sciences, Imperial College, London, United Kingdom, [4]Katherine Dormandy Haemophilia Centre and Thrombosis Unit University College, London, United Kingdom, [5]Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Ho Chi Minh City, Viet Nam

799

A REPORT OF THE FIRST TWO AND A HALF YEARS OF A COMPREHENSIVE INFLUENZA SENTINEL SURVEILLANCE SYSTEM IN KENYA AND ITS IMPLICATIONS FOR VACCINE STRAIN SELECTION IN THE EAST AFRICA REGION

David Schnabel[1], Wallace Bulimo[2], Jason Garner[3], Rachel Achilla[2], Virginia Headley[3], Sam Martin[1]
[1]US Army Medical Research Unit – Kenya, Nairobi, Kenya, [2]Kenya Medical Research Institute, Nairobi, Kenya, [3]U.S. Air Force School of Aerospace Medicine, Brooks City-Base, TX, United States

544

SERUM NITRIC OXIDE (NO) LEVELS IN CUTANEOUS LEISHMANIASIS (CL): CORRELATIONS WITH TREATMENT OUTCOME AND THE ADVERSE EVENT OF PANCREATITIS

Louis-Patrick Haraoui[1], Nancy Koles[2], Robin S. Howard[3], Glenn W. Wortmann[3], Mark Polhemus[3], Naomi E. Aronson[2]
[1]Internal Medicine Residency Training Program, Department of Medicine, McGill University, Montreal, QC, Canada, [2]Uniformed Services University of the Health Sciences, Bethesda, MD, United States, [3]Walter Reed Army Medical Center, Washington, DC, United States

965

PLASMODIUM FALCIPARUM HISTIDINE-RICH PROTEIN 2 ELISA FOR USE IN MALARIA INTERVENTION TRIALS

Carolyne M. Kifude[1], Ann Stewart[1], Carter Diggs[2], John N. Waitumbi[1]
[1]Walter Reed Project/KEMRI, Kisumu, Kenya, [2]Malaria Vaccine Development Program United States Agency for International Development, Washington, DC, United States

484

CLASSIFICATION AND REGRESSION TREE (CART) ANALYSIS USING CLINICAL LABORATORY VARIABLES KNOWN TO BE ASSOCIATED WITH DENGUE TO ESTABLISH EARLY DISEASE CLASSIFICATION

James A. Potts[1], Siripen Kalayanarooj[2], Suchitra Nimmannitya[2], Anon Srikiatkhachorn[1], Ananda Nisalak[3], David W. Vaughn[4], Timothy P. Endy[5], Daniel H. Libraty[1], Sharone Green[1], Alan L. Rothman[1]
[1]University of Massachusetts Medical School, Worcester, MA, United States, [2]Queen Sirikit National Institute of Child Health, Bangkok, Thailand, [3]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [4]U.S. Army Medical Research and Material Command, Fort Detrick, MD, United States, [5]University of New York, Upstate Medical University, Syracuse, NY, United States

1233

CO-INFECTION WITH HELMINTHS AND MALARIA DURING PREGNANCY EFFECT SUSCEPTIBILITY TO FALCIPARUM MALARIA DURING CHILDHOOD

Indu Malhotra[1], Peter Mungai[1], Alex Wamachi[2], John Ouma[3], Davy Koech[2], Eric Muchiri[4], Christopher L. King[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Kenya Medical Research Institute, Nairobi, Kenya, [3]Kenyatta University, Nairobi, Kenya, [4]Division Of Vector Born Diseases, Nairobi, Kenya

953

CLINDAMYCIN PLUS QUININE FOR TREATING UNCOMPLICATED _FALCIPARUM_ MALARIA: A META-ANALYSIS.

Charles O. Obonyo, Elizabeth A. Juma
Kenya Medical Research Institute, Kisumu, Kenya

Young Investigator Award Session E

Bayside C
Sunday, December 7, 11 a.m. – 3:30 p.m.

JUDGES

Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

Sanjai Kumar
Food and Drug Administration, Rockville, MD, United States

Peter Zimmerman
Case Western Reserve University, Cleveland, OH, United States

1198

TLR INVOLVEMENT DURING EXPERIMENTAL MALARIA: IMPLICATIONS FOR BOTH ENDS OF THE CLINICAL SPECTRUM OF HUMAN DISEASE

Constance A. Finney, Ziyue Lu, W. Conrad Liles, Kevin C. Kain
University of Toronto, Toronto, ON, Canada

68

IDENTIFICATION OF IMUNODOMINANT REGIONS OF LEPTOSPIRAL IMMUNOGLOBULIN-LIKE PROTEINS FOR USE IN THE DIAGNOSIS OF LEPTOSPIROSIS

Julio Croda[1], Marco A. Medeiros[2], Rena Greenwald[3], Jenny Sun[3], Alan Mcbride[1], Sharon J. Peacock[4], Henry A. Choy[5], David A. Haake[5], Akira Homma[2], Mitermayer G. Reis[1], Javan Esfandiari[3], Konstantin P. Lyashchenko[3], Albert I. Ko[6]
[1]Oswaldo Cruz Foundation, Gonçalo Moniz Institute, Brazilian Ministry of Health, Salvador, Brazil, [2]Oswaldo Cruz Foundation, Biomanguinhos, Brazilian Ministry of Health, Rio de Janeiro, Brazil, [3]Chembio Diagnostic Systems, Inc., Medford, NY, United States, [4]Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, [5]Veterans Affairs Greater Los Angeles Healthcare System, Department of Medicine and the David Geffen School of Medicine at UCLA, Los Angeles, CA, United States, [6]Oswaldo Cruz Foundation, Gonçalo Moniz Institute, Brazilian Ministry of Health and Division of International Medicine and Infectious Disease, Weill Medical College of Cornell University, Ithaca, NY, United States

50

ECOLOGICAL AND GENETIC RELATIONSHIPS OF THE FOREST-M FORM AMONG CHROMOSOMAL AND MOLECULAR FORMS OF THE MALARIA VECTOR _ANOPHELES GAMBIAE S. S._

Yoosook Lee[1], Claudio R. Meneses[1], Abdrahamane Fofana[2], Aurélie G. Andrianarivo[1], Rory D. McAbee[1], Etienne Fondjo[3], Sekou F. Traoré[2], Anthony J. Cornel[1], Gregory C. Lanzaro[1]
[1]University of California Davis, Davis, CA, United States, [2]Malaria Research and Training Center, Faculty of Medicine, University of Mali, Bamako, Mali, [3]National Malaria Program, Ministry of Health, Yaoundé, Cameroon

159

SUPPRESSION OF HOST MACROPHAGE TRANSCRIPTIONAL RESPONSES BY _LEISHMANIA MEXICANA_

Shuyi Zhang, P'ng Loke, James H. McKerrow
University of California San Francisco, San Francisco, CA, United States

1214

ABO POLYMORPHISM AND *PLASMODIUM FALCIPARUM* MALARIA

Kayla T. Wolofsky[1], Kodjo Ayi[2], Conrad W. Liles[3], Christine M. Cserti-Gazdewich[4], Kevin C. Kain[5]
[1]*McLaughlin-Rotman Centre for Global Health; Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada,* [2]*Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health, University of Toronto, Toronto, ON, Canada,* [3]*Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine;Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada,* [4]*Blood Transfusion Laboratory, Toronto General Hospital; Department of Laboratory Hematology, University of Toronto, Toronto, ON, Canada,* [5]*Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine; Institute of Medical Science, University of Toronto, Toronto, ON, Canada*

1200

STIMULATION OF TOLL-LIKE RECEPTOR 2 BY *PLASMODIUM FALCIPARUM* GLYCOSYLPHOSPHATIDYLINOSITOLS ENHANCES MACROPHAGE INTERNALIZATION OF PARASITIZED AND UNINFECTED ERYTHROCYTES

Laura Erdman, Kevin C. Kain
University of Toronto, Toronto, ON, Canada

357

THE EFFECT OF SNP VARIANTS IN THE 3'-UTR REGION OF *IL-5* ON GENE TRANSCRIPTION AND MRNA STABILITY AND THEIR ROLE IN SYMPTOMATIC INFECTION WITH *SCHISTOSOMA JAPONICUM*

Magda K. Ellis[1], Yuesheng Li[1], Honggen Chen[2], Donald P. McManus[1]
[1]*QIMR, Brisbane, Australia,* [2]*Jiangxi Institute of Parasitic Diseases, Nanchang, China*

338

B CELL ACTIVITY IN CHILDREN WITH MALARIA

Jackson C. Korir[1], Ronald P. Taylor[2], John N. Waitumbi[1]
[1]*Walter Reed Project/KEMRI, Kisumu, Kenya,* [2]*Department of Biochemistry and Molecular Genetics, University of Virginia School of Medicine, Charlottesville, VA, United States*

211

SINGLE-NUCLEOTIDE POLYMORPHISM IN *PLASMODIUM VIVAX* POPULATIONS FROM RURAL AMAZONIA

Pamela Orjuela-Sánchez, Mônica da Silva-Nunes, Natal Santos da Silva, Marcelo Urbano Ferreira
Institute of Biomedical Sciences, University of São Paulo, São paulo, Brazil

786

INHIBITION OF TYPE I DIABETES IN FILARIA INFECTED NOD MICE IS ASSOCIATED WITH A TH2 SHIFT AND INDUCTION OF REGULATORY T CELLS

Marc P. Hübner, Marina N. Torrero, David Larson, J. Thomas Stocker, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

290

CASPASE 9, A SIGNALING PROTEIN OF THE HUMAN LIVER FLUKE, *OPISTHORCHIS VIVERRINI*

Sandi K. Parriott[1], Thewarach Laha[2], Banchob Sripa[3], Alex Loukas[4], Paul J. Brindley[1]
[1]*Department of Microbiology, Immunology and Tropical Medicine, The George Washington University, Washington, DC, United States,* [2]*Department of Parasitology, Khon Kaen University, Khon Kaen, Thailand,* [3]*The Department of Pathology, Khon Kaen University, Khon Kaen, Thailand,* [4]*Division of Infectious Diseases and Immunology, Queensland Institute of Medical Research, Brisbane, Queensland, Australia*

959

MAPPING EPITOPES RECOGNISED BY MONOCLONAL ANTIBODIES AGAINST PFHRP2 AND IMPLICATIONS TOWARDS OPTIMISATION OF MALARIA RAPID DIAGNOSTIC TESTS

Nelson Lee[1], Joanne Baker[2], Martin Bubb[3], David Bell[3], Qin Cheng[2], James McCarthy[1]
[1]*Queensland Institute of Medical Research, Brisbane, Australia,* [2]*Australian Army Malaria Institute, Brisbane, Australia,* [3]*World Health Organization, Western Pacific Region Office, Manila, Philippines*

628

IDENTIFY B-CELL EPITOPES IN DUFFY BINDING PROTEIN ASSOCIATE WITH PROTECTION *P. VIVAX* INVASION

Patchanee Chootong
University of South Florida, Tampa, FL, United States

788

T LYMPHOCYTE SUBSETS IN CHILDREN WITH SCHISTOSOMIASIS MANSONI COMPARED TO CHILDREN WITH *SCHISTOSOMA MANSONI* AND *PLASMODIUM FALCIPARUM* CO-INFECTIONS IN WESTERN KENYA

Erick M. Muok[1], Pauline N. Mwinzi[1], Carla L. Black[2], Jennifer M. Carter[2], Zopporah W. Ng'ang'a[3], Michael M. Gicheru[4], W. Evan Secor[5], Diana M. Karanja[1], Daniel G. Colley[2]
[1]*Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya,* [2]*University of Georgia, Athens, GA, United States,* [3]*Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, 4Kenyatta University, Nairobi, Kenya,* [5]*Centers for Disease Control and Prevention, Atlanta, GA, United States*

906

MOLECULAR DETECTION OF FLAVIVIRUS IN ENDEMIC AREAS IN PERU

Dana Figueroa[1], Enrique Mamani[2], Egma Mayta[1]
[1]*Universidad Nacional Mayor de San Marcos, Lima, Peru,* [2]*Instituto Nacional de Salud, Lima, Peru*

649

RECOMBINANT PVS230C SPECIFICALLY RECOGNIZES GAMETE STAGE PARASITES OF *PLASMODIUM VIVAX* AND MAY BE USED TO DETECT ANTIBODIES IN HUMAN SERUM, BUT DOES NOT BLOCK OOCYST DEVELOPMENT IN EXPERIMENTAL MOSQUITO INFECTION

Victor Neyra
Instituto de Medicina Tropical, Lima, Peru

618

PATTERN OF CORD, PLACENTAL AND POST-DELIVERY MATERNAL MALARIA PARASITAEMIA IN CROSS RIVER STATE, NIGERIA

Chioma M. Oringanje, Martin M. Meremikwu
Institute of Tropical Disease, Research and Prevention, Calabar, Nigeria

339

FUNCTIONAL ASSOCIATION BETWEEN RANTES -4151C/T PROMOTER POLYMORPHISM AND HIGH-DENSITY FALCIPARUM PARASITEMIA AMONG CHILDREN IN A HOLOENDEMIC MALARIA TRANSMISSION AREA

Tom Were[1], Collins Ouma[1], Greg C. Davenport[2], James B. Hittner[3], Michael F. Otieno[4], Alloys S. Orago[5], John M. Vulule[6], John M. Ong'echa[1], Douglas J. Perkins[7]
[1]*University of New Mexico/KEMRI, Kisian, Kenya,* [2]*University of Pittsburgh, Pittsburgh, PA, United States,* [3]*Department of Psychology, College of Charleston, Charleston, SC, United States,* [4]*Department of Pre-Clinical Sciences, School of Health Sciences, Kenyatta University, Nairobi, Kenya,* [5]*National AIDS Control Council, Nairobi, Kenya,* [6]*Centre for Global Health Research, Kenya Medical Research Institute, Kisian, Kenya,* [7]*Division of Infectious Diseases, University of New Mexico School of Medicine, New Mexico, NM, United States*

653

THE STATUS OF THE PFMSP3 N-TERMINUS AS A VACCINE CANDIDATE: CROSS-REACTIVE ANTIBODIES IN HYPOENDEMIC TRANSMISSION

Stephen J. Jordan, Oralee H. Branch, Julian C. Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

13

EVALUATION OF THE ROLES OF CD209 PROMOTER AND GENE POLYMORPHISMS IN PATHOGENESIS OF DENGUE DISEASE IN INDONESIA

Zen Hafy[1], Purnomo Soeharso[2], Irani F. Rudiman[3], Wahyuning Ramelan[2], Bachti Alisjahbana[3], Susanna Widjaja[4], Herman Kosasih[4], Ervi Salwati[5], Djoko Yuwono[5], Maya Williams[4], Patrick Blair[4], Timothy Burgess[4]
[1]*University of Sriwijaya, Palembang, Indonesia,* [2]*University of Indonesia, Jakarta, Indonesia,* [3]*Hasan Sadikin Hospital, Bandung, Indonesia,* [4]*Viral Disease Program, US Namru-2, Jakarta, Indonesia,* [5]*National Institutes of Health Research and Development, Jakarta, Indonesia*

ACAV SIRACA Subcommittee Meeting

Salon 817/821
Sunday, December 7, Noon – 2 p.m.

Detailed Program

Speaker Ready Room

Nottoway
Sunday, December 7, Noon – 6 p.m.

ACAV SALS Subcommittee Meeting

Salon 817/821
Sunday, December 7, 2 p.m. – 3:30 p.m.

Young Investigator Award Committee Meeting

Oak Alley
Sunday, December 7, 3:30 p.m. – 5 p.m.

ACMCIP Council Meeting

Grand Couteau
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

ACAV Council Meeting

Salon 817/821
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

ACME Council Meeting

Salon 824
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

Clinical Group Council Meeting

Salon 816
Sunday, December 7, 3:30 p.m. – 5:30 p.m.

Student Reception

Rhythms II/III
Sunday, December 7, 4 p.m. – 5 p.m.

The ASTMH council invites students, postdoctoral fellows and residents to the student reception. This reception is an opportunity to meet fellow trainees and interact with society leaders.

Plenary Session 1

Opening Plenary Session and Awards Ceremony

Grand Ballroom
Sunday, December 7, 5:30 p.m. – 7:30 p.m.

CHAIR

Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

Edward T Ryan
Massachusetts General Hospital, Boston, MA, United States

5:30 p.m.

THE GENIUS OF BOLDNESS: THINKING BIG IN GLOBAL HEALTH

Richard Feachem
University of California at San Francisco, San Francisco, CA, United States

Formerly Executive Director, The Global Fund to Fight AIDS, TB and Malaria, and Under-Secretary General, United Nations

6:30 p.m.

AWARDS CEREMONY

COMMUNICATIONS AWARD
Charles Piller and Doug Smith
Los Angeles Times*, Los Angeles, CA, United States*

Presented by
Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

HONORARY MEMBERS
Pierre Ambroise-Thomas
President, French National Academy of Medicine, Gentilly, France

Anastácio de Queiroz Sousa
São José Hospital for Infectious Diseases, Fortaleza, Ceará, Brazil

Presented by Thomas P. Monath
Kleiner Perkins Caufield & Byers, Harvard, MA, United States

HOOGSTRAAL MEDAL
Daniel Sonenshine
Old Dominion University, Norfolk, VA, United States

Presented by Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

BAILEY K. ASHFORD MEDAL
Kevin Kain
University of Toronto Hospital, Toronto, ON, Canada

Presented by Alan Magill
Walter Reed Army Institute of Research, Washington, DC, United States

BEN KEAN MEDAL
Jay Keystone
Toronto Hospital, Toronto, ON, Canada

Presented by Phyllis Kozarsky
Emory University, Atlanta, GA, United States

WALTER REED MEDAL
Richard L. Guerrant
University of Virginia Medical School, Charlottesville, VA, United States

Presented by James Hughes
Emory University, Atlanta, GA, United States

Opening Reception

Napoleon Ballroom
Sunday, December 7, 7:30 p.m. – 9:30 p.m.

Exhibit Hall Open

Napoleon Ballroom
Sunday, December 7, 7:30 p.m. – 9:30 p.m.

Monday, December 8

Registration

Napoleon Ballroom
Monday, December 8, 7 a.m. – 5 p.m.

Cyber Cafe

Lagniappe
Monday, December 8, 7 a.m. – 5 p.m.

Speaker Ready Room

Nottoway
Monday, December 8, 7 a.m. – 6 p.m.

ASTMH Diploma Course Directors Meeting

Salon 829
Monday, December 8, 7 a.m. – 8 a.m.

Breakfast Session 1A

THE BILL & MELINDA GATES FOUNDATION'S MALARIA STRATEGY
Grand Ballroom A
Monday, December 8, 7 a.m. - 7:50 a.m.

Staff from the Bill & Melinda Gates Foundation will share the Foundation's malaria strategy, including a review of why the Foundation chose to fight malaria, how the Foundation approaches the issue, what types of programs the Foundation funds and what the Foundation hopes to accomplish in the long term. A small number of grantees may provide a brief overview of their programs. A question and answer period will follow. A light breakfast will be served.

Press Room

Ellendale/Evergreen
Monday, December 8, 7:30 a.m. – 6:30 p.m.

Symposium 2

Lone Star Rising Part I: Recent Efforts to Define the Role of *Amblyomma americanum* in the Transmission of Bartonella, Borrelia, Ehrlichia and Rickettsia species

Gallery

Monday, December 8, 8 a.m. – 9:45 a.m.

An understanding of the association between vectors, vertebrate hosts and pathogens is fundamental for the development of tick-borne disease prevention strategies. The lone star tick, *Amblyomma americanum*, is an aggressive anthropophilic tick often found in high densities in the southern and eastern United States, and is expanding its range northward. Until recently, this tick was regarded as a nuisance pest of humans but is now an important vector of zoonotic pathogens: *Ehrlichia chaffeensis*, the agent of human monocytic ehrlichiosis, and *E. ewingii*, the agent of granulocytic ehrlichiosis in humans and dogs. *A. americanum* also harbors organisms less clearly linked with human disease, *Bartonella spp.*, *Borrelia lonestari*, *Rickettsia amblyommii* and an ehrlichial pathogen ("Panola Mountain Ehrlichia") closely related to *E. ruminantium*. On one hand, clinical presentations are seen after *A. americanum* tick bites that are not yet definitively associated with specific etiological agents; on the other hand, *A. americanum*-borne organisms have been elucidated that are not yet associated with specific syndromes. Erythema migrans following *A. americanum* tick bite continues to be an unanswered clinical question, as is the role of *R. amblyommii* in mild or asymptomatic rickettsiosis. Furthermore, a recently discovered Coxiella-type symbiont may influence maintenance or transmissions of other pathogens within *A. americanum*, thereby impacting human disease transmission. This symposium will focus on efforts to describe these organisms, understand their interactions and sort out their roles in human disease.

CHAIR

Ellen Y. Stromdahl
U.S. Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, MD, United States

Rendi M. Bacon
Centers for Disease Control and Prevention, Ft. Collins, CO, United States

8 a.m.

PROPOSED ETIOLOGIES FOR SOUTHERN TICK-ASSOCIATED RASH ILLNESS

Susan E. Little
Oklahoma State University, Stillwater, OK, United States

8:25 a.m.

MOLECULAR SIGNATURES DETECTED IN *AMBLYOMMA AMERICANUM* AND SKIN BIOPSY SAMPLES FROM STARI PATIENTS USING THE IBIS UNIVERSAL BIOSENSOR

Mark A. Pilgard
Centers for Disease Control and Prevention, Ft. Collins, CO, United States

8:50 a.m.

DETECTION OF *RICKETTSIA AMBLYOMMII* IN *AMBLYOMMA AMERICANUM* TICKS

Allen L. Richards
Naval Medical Research Center, Silver Spring, MD, United States

9:15 a.m.

GENOMICS, MOLECULAR HETEROGENEITY AND PATHOGENICITY OF *RICKETTSIA AMBLYOMMII* AND OTHER AGENTS FOUND IN THE LONE STAR TICK

Gregory Dasch
Centers for Disease Control and Prevention, Atlanta, GA, United States

Symposium 3

Remote Technology to Create a Cyberenvironment for Infectious Disease Surveillance

Rhythms I

Monday, December 8, 8 a.m. – 9:45 a.m.

Remote Sensing and GIS applications, in the realm of disease surveillance on a global level, is continously being developed and upgraded. Its early beginnings, with satellite imagery such as Landsat data, has rapidly improved to include higher spatial resolution information such as IKONOS and QuickBird, as well as proliferation of statistical models, supercomputer applications and real-time communication. The global and rapid movement of humans, animals and goods, coupled with population growth and urbanization, provide for increased risk of infectious disease outbreaks. This warrants the continued need to exploit technology for surveillance systems that will minimize these risks. The objective of the symposium is to provide an up-to-date view of current technology and its application to infectious disease problems on a global level.

CHAIR

Benjamin G. Jacob
The University of Alabama at Birmingham, Birmingham, AL, United States

Robert J. Novak
University of Alabama, Birmingham, AL, United States

8 a.m.

GEOSTATISCAL ALGORITHMS

Daniel A. Griffith
University of Texas at Dallas, Richardson, TX, United States

8:25 a.m.

SATELLITE TECHNOLOGY

James L. Regens
University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States

8:50 a.m.

CYBERENVIRONMENT FOR REMOTE DIEASE SURVEILLANCE SYSTEMS AS A BASES FOR INTERGRATED MALARIA MANAGEMENT (IMM)

Ian Brooks
National Center for Supercomputing Applications (NCSA), Champaign, IL, United States

9:15 a.m

DESIGNING AND DEVELOPING LARVAL MANAGEMENT STRATEGIES BY IDENTIFYING CRITICAL FEATURES OF LANDSCAPE FOR LOCATING PRODUCTIVE AQUATIC HABITATS BASED ON FIELD SAMPLED AND GIS/RS DATA

Benjamin G. Jacob
University of Alabama at Birmingham, Birmingham, AL, United States

Symposium 4

Clinical Updates in Leishmaniasis, Chagas Disease, Leptospirosis and Tuberculosis

Rhythms II/III

Monday, December 8, 8 a.m. – 9:45 a.m.

This symposium will provide a clinical update of recent literature and unpublished data for these diseases.

CHAIR

Eric Houpt
University of Virginia, Charlottesville, VA, United States

Anne Moore
Centers for Disease Control and Prevention, Atlanta, GA, United States

8 a.m.

RECENT ADVANCES IN VISCERAL AND CUTANEOUS LEISHMANIASIS

Richard D. Pearson
University of Virginia, Charlottesville, VA, United States

8:25 a.m.

CHAGAS DISEASE IN THE IMMUNOCOMPROMISED HOST

Anne Moore
Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

8:50 a.m.

UPDATE IN LEPTOSPIROSIS

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

9:15 a.m

DIAGNOSIS AND MANAGEMENT OF DRUG RESISTANT TUBERCULOSIS

Eric R. Houpt
University of Virginia, Charlottesville, VA, United States

Symposium 5

Infectious Diseases and Other Health Risks Following Natural Disasters: Experiences from Hurricane Katrina and Beyond

Waterbury

Monday, December 8, 8 a.m. – 9:45 a.m.

This session will explore the relationship between natural disasters and risk of infectious diseases, with illustrations from local experiences following Hurricane Katrina and from other disaster situations around the world, such as the 2005 Indian Ocean tsunami. Speakers include a representative from the Louisiana Office of Public Health describing infectious diseases and surveillance following Katrina, an entomologist describing insect populations and vector-borne diseases following Katrina, a representative of Medecins Sans Frontieres describing responses to natural disasters in developing countries and a public health expert reviewing the relationship between global climate changes, natural disasters, and travel health risks.

CHAIR

Richard Oberhelman
Tulane School of Public Health, New Orleans, LA, United States

James H. Diaz
Louisiana State University School of Public Health, New Orleans, LA, United States

8 a.m.

SURVEILLANCE FOR HUMAN DISEASE IN THE WAKE OF HURRICANE KATRINA

Raoult Ratard
Louisiana Office of Public Health, New Orleans, LA, United States

8:25 a.m.

ENTOMOLOGICAL SURVEILLANCE AND VECTOR-BORNE DISEASES AFTER HURRICANE KATRINA

Dawn Wesson
Tulane University, New Orleans, LA, United States

8:50 a.m.

RESPONSE TO INFECTIOUS DISEASES AFTER NATURAL DISASTERS IN DEVELOPING COUNTRIES

Martin De Smet
Médecins Sans Frontières, Brussels, Belgium

9:15 a.m

GLOBAL CLIMATE CHANGES, NATURAL DISASTERS AND TRAVEL HEALTH RISKS

James H. Diaz
Louisiana State University School of Public Health, New Orleans, LA, United States

Scientific Session 6

Malaria – Vaccines I

Napoleon A123

Monday, December 8, 8 a.m. – 9:45 a.m.

CHAIR

Brent House
Naval Medical Research Center, Silver Spring, MD, United States

Takafumi Tsuboi
Ehime University, Matsuyama, Ehime, Japan

8 a.m.

1

ANTIBODY RESPONSES IN RABBITS TO IMMUNIZATION BY THE SUBCUTANEOUS AND INTRADERMAL ROUTES WITH A METABOLICALLY ACTIVE, NON-REPLICATING (ATTENUATED) *PLASMODIUM FALCIPARUM* SPOROZOITE VACCINE

Eric R. James[1], Kim Lee Sim[2], Mark Loyevsky[1], Adam Richman[1], Tao Li[1], Sumana Chakravarty[1], Anusha Gunesekera[1], Rana Chattopadhyay[1], Adriana Ahumada[2], MingLin Li[2], Richard Stafford[2], Peter Billingsley[1], Stephen L. Hoffman[1]
[1]Sanaria, Rockville, MD, United States, [2]Protein Potential, Rockville, MD, United States

8:15 a.m

2

IMMUNITY INDUCED BY *PLASMODIUM BERGHEI* CSP EXPRESSION FROM VARIOUS CELLULAR LOCALIZATIONS AND DELIVERY BY INACTIVATED *ESCHERICHIA COLI*

Katharine Boyle[1], Jessica Whittington[2], **Elizabeth Deriso**[1], Timothy Alefantis[2], Elke S. Bergmann-Leitner[1], Paul Grewal[2], Vito DelVecchio[2], Evelina Angov[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Vital Probes, Inc., Mayfield, PA, United States

8:30 a.m.

3

THE BIOCHEMICAL AND BIOPHYSICAL CHARACTERIZATION OF AN *ESCHERICHIA COLI* EXPRESSED *PLASMODIUM FALCIPARUM* CIRCUMSPOROZOITE PROTEIN (CSP), A LEADING MALARIA VACCINE CANDIDATE

Matthew Lee Plassmeyer[1], Nick MacDonald[1], Karine Reiter[1], Richard Shimp[1], Yanling Zhang[1], Brent House[2], Jack Lebowitz[3], Svetlana Kotova[3], Albert Jin[3], Merrit Hickman[1], Raul Herrera[1], Onyinyechukwu Uchime[1], Vu Nguyen[1], Jacqueline Glen[1], Louis Miller[1], Yimin Wu[1], David Narum[1]
[1]National Institutes of Health, Rockville, MD, United States, [2]U.S. Navy, Silver Spring, MD, United States, [3]National Institutes of Health, Bethesda, MD, United States

8:45 a.m.

4

CHARACTERIZATION OF ANTI-AMA1 ANTIBODIES INDUCED BY AMA1-C2, A THREE-ALLELE COMBINATION VACCINE

Sara A. Murray[1], Hong Zhou[2], Joan Aebig[1], Lynn Lambert[1], Laura B. Martin[1], Louis Miller[1], Carole Long[2], Kazutoyo Miura[1]
[1]Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Diseases, Rockville, MD, United States, [2]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, Rockville, MD, United States

9 a.m.

5

THE FIRST GENERATION *PLASMODIUM FALCIPARUM* AMA-1 BASED MONOVALENT ADENOVECTOR VACCINE AND THE SECOND GENERATION BIVALENT ADENOVECTOR VACCINE EXPRESSING *P. FALCIPARUM* AMA-1 AND MSP1-42 ELICIT ROBUST FUNCTIONAL ANTIBODIES IN NZW RABBIT

Noelle B. Patterson[1], Joseph T. Bruder[2], Keith Limbach[1], Samuel E. Moretz[3], Hong Zhou[3], Ababacar Diouf[3], C. Richter King[2], Kalpana Gowda[1], Ping Chen[2], Svetlana Konovalova[2], Elke S. Bergmann-Leitner[1], Emily Locke[4], Lorraine Soisson[5], Carter Diggs[5], Evelina Angov[1], Carole A. Long[3], Thomas L. Richie[1], Denise L. Doolan[1]
[1]U.S. Military Malaria Vaccine Program (Naval Medical Research Center & Walter Reed Army Institute of Research), Silver Spring, MD, United States, [2]GenVec, Inc., Gaithersburg, MD, United States, [3]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [4]PATH Malaria Vaccine Initiative, Bethesda, MD, United States, [5]United States Agency for International Development, Malaria Vaccine Development Program, Washington, DC, United States

9:15 a.m

6

DEVELOPMENT OF A MULTI-ANTIGEN MULTI-STAGE ADENOVECTOR-BASED MALARIA VACCINE THAT INDUCES ROBUST T-CELL AND ANTIBODY RESPONSES

Joseph T. Bruder[1], Ping Chen[1], Maureen E, Stefaniak[2], Elena Semenova[1], Keith Limbach[2], Noelle B. Patterson[2], Svetlana Konovalova[1], Charlie Thomas[1], Joseph J. Campo[2], Damodar Ettyreddy[1], Duncan McVey[1], Carole A. Long[3], Sheng Li[4], Emily Locke[4], Thomas L. Richie[2], C. Richter King[1], Denise L. Doolan[2]
[1]GenVec, Gaithersburg, MD, United States, [2]Naval Medical *Research Center, Malaria Program, Silver Spring, MD, United States, [3]Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [4]PATH Malaria Vaccine Initiative, Bethesda, MD, United States*

9:30 a.m.

7

SAFETY AND TOLERABILITY OF A MULTI-STAGE, MULTI-ANTIGEN ADENOVIRUS-VECTORED *P. FALCIPARUM* MALARIA VACCINE, IN HEALTHY, MALARIA-NAÏVE ADULTS

Cindy Tamminga[1], Ilin Chuang[1], David Regis[1], Jose Mendoza-Silveiras[1], Judith E. Epstein[1], Falgunee Parekh[1], Sharina Reyes[1], Victoria Steinbeiss[1], Charlotte Fedders[1], Santina Maiolatesi[1], Kathryn Smith[1], Francis Williams[2], Martha Sedegah[1], Denise L. Doolan[1], Keith Limbach[1], Noelle B. Patterson[1], Michele Spring[3], Joseph T. Bruder[4], CR King[4], Lorraine Soisson[5], Carter Diggs[5], Christian F. Ockenhouse[3], Thomas Richie[1]
[1]Naval Medical Research Center/Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]National Naval Medical Center, Bethesda, MD, United States, [3]Walter Reed Army Institute of Research/Naval Medical Research Center, Silver Spring, MD, United States, [4]GenVec, Inc., Gaithersburg, MD, United States, [5]United States Agency for International Development, Washington, DC, United States

Symposium 7

The Importance of Field-Based Research to Inform Public Health Decisions

Maurepas

Monday, December 8, 8 a.m. – 9:45 a.m.

This symposium will bring to the forefront the importance of field-based research to developing informed and evidence-based public health decisions regarding infectious diseases. A series of four talks will focus on the effect of field-based scientific research on public health decisions in order to highlight the growing importance of funding this type of research, particularly in emerging infectious diseases. The four speakers will discuss the complicated environment of this type of research, both from the perspective of resource-limited nations, as well as issues related to bridging the multi-disciplinary needs for such research to impact public health decision-making. The plan is to provide ample opportunity for discussion at the end of the four presentations, focusing on defining areas of need and future types of funding initiatives that might facilitate expansion of this area of research. The four talks will address malaria, dengue, HIV and Japanese encephalitis.

CHAIR

Laura D. Kramer
Wadsworth Center, Albany, NY, United States

Jeffrey S. Kennedy
Wadsworth Center, New York State Department Health, Albany, NY, United States

8 a.m.

THE ROLE OF FIELD RESEARCH IN DEVELOPING PARADIGMS FOR TREATMENT AND PREVENTION OF DENGUE

Timothy P. Endy
State University of New York, Upstate Medical University, Syracuse, NY, United States

8:25 a.m.

SUPPORTING AND EMPOWERING NATIONAL DECISION-MAKING FOR JE CONTROL, THE ROLE OF RESEARCH AND TECHNICAL ASSISTANCE

Julie Jacobson
Bill & Melinda Gates Foundation, Seattle, WA, United States

8:50 a.m.

MALARIA TRANSMISSION AND CONTROL – EVIDENCE-BASED PUBLIC HEALTH POLICY DECISIONS

Karen Day
New York University School of Medicine, New York, NY, United States

9:15 a.m

DEVELOPMENT OF A MULTI-NATIONAL PUBLIC HEALTH AND VACCINE RESEARCH INITIATIVE FOR HIV IN EAST AFRICA

Patricia E. Fast
International AIDS Vaccine Initiative, New York, NY, United States

Symposium 8

The Neglected Tropical Diseases in Latin America and the Caribbean: A Review of Disease Burden, Geographic Distribution and Methods Control and Elimination

Bayside BC
Monday, December 8, 8 a.m. – 9:45 a.m.

The most common infections of the poorest people living in Latin American and Caribbean (LAC) are caused by the neglected tropical diseases (NTDs). Geographically, the NTDs in LAC concentrate in 11 different sub-regions, each with a distinctive human and environmental ecology. Soil-transmitted helminth infections, primarily Hookworm disease and Chagas disease, are the most important NTDs in LAC based on prevalence data and healthy life years lost from disability. These are followed by high burdens of disease caused by schistosomiasis, leishmaniasis, trachoma, leprosy and lymphatic filariasis. This symposium will provide a review and an assessment of the distribution and the burden of these diseases in the region and provide a perspective for the roadmap for the control and elimination of these diseases.

CHAIR

Peter J. Hotez
The George Washington University, Washington, DC, United States

Jose Ignacio Santos
Hospital Infantil de Mexico Federico Gómez, Mexico, Mexico

8 a.m.

IMPROVING THE HEALTH OF NEGLECTED POPULATIONS IN LATIN AMERICA: APPROACHES TO ELIMINATION AND CONTROL OF CHAGAS DISEASE AND LEPROSY

Carlos Franco-Paredes
Emory University School of Medicine, Atlanta, GA, United States

8:25 a.m.

THE ANTIPOVERTY VACCINES: NEW TOOLS FOR THE CONTROL OF SOIL-TRANSMITTED HELMINTH INFECTIONS

Maria Elena Bottazzi
The George Washington University, Washington, DC, United States

8:50 a.m.

ELIMINATING LYMPHATIC FILARIASIS, ONCHOCERCIASIS AND SCHISTOSOMIASIS FROM THE AMERICAS

Patrick J. Lammie
Center for Disease Control, Atlanta, GA, United States

9:15 a.m

AN EMERGING GLOBAL INFECTIOUS DISEASE: STRONGYLOIDES AND THE LINK WITH HTLV-1

Eduardo Gotuzzo
IMT "Alexander Von Humboldt", Lima, Peru

Symposium 9

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Getting In and Getting Out—Strategies Used by Parasites During Their Host Cell Encounters

Supported with funding from The Burroughs Wellcome Fund
Grand Ballroom A
Monday, December 8, 8 a.m. – 9:45 a.m.

Parasites have many different strategies for getting into and out of host cells. This symposium will provide an overview of these strategies, as well review the most recent findings regarding pathways used by parasites for invasion and egress. This symposium is designed to review and update progress toward understanding the strategies used by parasites to get into and out of host cells, and how this information may be applied to the development of strategies to reduce the burden of disease.

CHAIR

Sarah K. Volkman
Harvard School of Public Health, Boston, MA, United States

8 a.m.

A PLANT-LIKE PATHWAY FOR CALCIUM SIGNALING CONTROLS EGRESS AND DEVELOPMENT IN TOXOPLASMA

David Sibley
Washington University School of Medicine, St. Louis, MO, United States

8:35 a.m.

WHAT A PEPTIDE TAUGHT US ABOUT *PLASMODIUM*-MOSQUITO INTERACTIONS

Marcelo Jacobs-Lorena
Johns Hopkins School of Public Health, Baltimore, MD, United States

9:10 a.m.

***PLASMODIUM FALCIPARUM* — PROTEOLYSIS AS A STRATEGY FOR GETTING INTO AND OUT OF THE HOST CELL**

Michael J. Blackman
National Institute for Medical Research, London, United Kingdom

Symposium 10

HIV/AIDS in Africa: Beyond the Antiretroviral Therapy Roll-Out

Grand Ballroom B

Monday, December 8, 8 a.m. – 9:45 a.m.

In Africa there are still many more new HIV infections than people placed on ART, and UNAIDS point to a widening funding gap for antiretroviral treatment (ART) programs. Antiretroviral scale-up clearly still faces major challenges. However, considerable experience has been gained as many African ART roll-out programs have been operating for longer than five years under initiatives such as PEPFAR and UN Global Fund, and 1.34 million people were receiving ART in 2006. Adherence rates have been high. Outcomes are generally excellent, apart from a high rate of early deaths, but a number of key issues have arisen with the maturing roll-out process. Long-running programs show that ART is being initiated with higher CD4 counts resulting in fewer deaths, but loss to follow up has increased as clinics approach capacity. Clinical and public health issues related to co-infection with tuberculosis or hepatitis B are emerging.

CHAIR

Jean B. Nachega
Johns Hopkins University, Baltimore, MD, United States

Timothy Sterling
Vanderbilt University, Nashville, TN, United States

8 a.m.

HIV/AIDS EPIDEMIOLOGY IN AFRICA: UPDATE

Jean Nachega
Johns Hopkins University, Baltimore, MD, United States

8:25 a.m.

TREATMENT REGIMES FOR HIV-INFECTED IN RESOURCE-LIMITED SETTINGS

Marco Vitoria
World Health Organization, Geneva, Switzerland

8:50 a.m.

MANAGING TB-HIV CO-INFECTION IN AFRICA

Timoty Sterling
Vanderbilt University, Nashville, TN, United States

9:15 a.m.

RETENTION AND LOSS TO FOLLOW-UP IN HIV TREATMENT PROGRAMS IN AFRICA

Chris Gill
Boston University, Boston, MD, United States

Scientific Session 11

Flavivirus I – Dengue I

Grand Ballroom C

Monday, December 8, 8 a.m. – 9:45 a.m.

CHAIR

Maria T. Arevalo
University of Rochester, Rochester, NY, United States

Nikos Vasilakis
University of Pittsburgh, Pittsburgh, PA, United States

8 a.m.

8

NEWLY ISOLATED MUTANTS OF DENGUE VIRUS TYPE 1 WITH DELETIONS IN THE 3' NONCODING REGION SHOW HIGHER LEVELS OF REPLICATION *IN VIVO* IN MOSQUITOES

Yoko Nukui[1], Shigeru Tajima[1], Makiko Ikeda[1], Akira Kotaki[1], Tomohiko Takasaki[1], Yuki Eshita[2], Ichiro Kurane[1]
[1]National Institute of Infectious Diseases, Tokyo, Japan, [2]Oita University Faculty of Medicine, Oita, Japan

8:15 a.m.

9

MOSQUITOES PUT THE BRAKE ON EVOLUTION: EXPERIMENTAL EVOLUTION REVEALS SLOWER MUTATION ACCUMULATION IN MOSQUITO CELLS THAN VERTEBRATE CELLS

Nikos Vasilakis[1], Eleanor Deardorf[1], Joanie Kenney[1], Shannan L. Rossi[1], Kathryn A. Hanley[2], Scott C. Weaver[1]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]New Mexico State University, Las Cruces, NM, United States

8:30 a.m.

10

ANTIBODY DEPENDENT ENHANCEMENT OF DENGUE VIRUS INFECTION IN HUMAN DENDRITIC CELLS

Kobporn Boonnak, Bonnie M. Slike, Mary A. Marovich
The Henry M. Jackson Foundation, Rockville, MD, United States

8:45 a.m.

11

PRIMARY HUMAN ENDOTHELIAL CELLS SUPPORT DIRECT BUT NOT ANTIBODY-DEPENDENT ENHANCED DENGUE VIRUS INFECTION

Maria T. Arevalo, Patricia J. Simpson-Haidaris, Zhihua Kou, Jacob J. Schlesinger, Xia Jin
University of Rochester, Rochester, NY, United States

9 a.m.

12

CANDIDATE GENE APPROACH TO IDENTIFY HOST GENETIC FACTORS FOR SEVERE FORMS OF DENGUE VIRUS INFECTION

Nguyen T. Lan[1], Michio Yasunami[1], Mihoko Kikuchi[1], Vu T. Huong[2], Vu T. Ngu[2], Hoang N. Dao[2], Do Q. Ha[2], Tran T. Thuy[3], Tran M. Tuan[3], Vo V. Tuong[4], Tran V. Dat[4], Naoko Okuda[1], Hitomi Horie[1], Toshifumi Oyama[1], Kouichi Morita[1], Kenji Hirayama[1]
[1]Institute of Tropical Medicine (NEKKEN), Nagasaki University, Nagasaki, Japan, [2]Pasteur Institute in Ho Chi Minh City, Ho Chi Minh City, Vietnam, [3]Nhi Dong Hospital No. 2, Ho Chi Minh City, Vietnam, [4]Center for Preventive Medicine of Vinh Long Province, Vinh Long Province, Vietnam

9:15 a.m.

13

EVALUATION OF THE ROLES OF CD209 PROMOTER AND GENE POLYMORPHISMS IN PATHOGENESIS OF DENGUE DISEASE IN INDONESIA

Zen Hafy[1], Purnomo Soeharso[2], Irani F. Rudiman[3], Wahyuning Ramelan[2], Bachti Alisjahbana[3], Susanna Widjaja[4], Herman Kosasih[4], Ervi Salwati[5], Djoko Yuwono[5], Maya Williams[4], Patrick Blair[4], Timothy Burgess[4]
[1]University of Sriwijaya, Palembang, Indonesia, [2]University of Indonesia, Jakarta, Indonesia, [3]Hasan Sadikin Hospital, Bandung, Indonesia, [4]Viral Disease Program, US Namru-2, Jakarta, Indonesia, [5]National Institutes of Health Research and Development, Jakarta, Indonesia

9:30 a.m.

14

CHARACTERIZATION OF THE GENE EXPRESSION PROGRAMS ASSOCIATED WITH DISEASE SEVERITY IN ACUTE PEDIATRIC DENGUE INFECTION

Stephen J. Popper[1], Aubree Gordon[2], Mingshun Liu[1], Maria Jose Vargas[3], Chelsey Perry[1], Angel Balmaseda[3], Crisanta Rocha[4], Eva Harris[2], David A. Relman[5]
[1]Stanford University School of Medicine, Stanford, CA, United States, [2]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, CA, United States, [3]Departamento de Virologia, Centro Nacional de Diagnostico y Referencia, Ministerio de Salud, Managua, Nicaragua, [4]Hospital Infantil Manuel de Jesus Rivera, Managua, Nicaragua, [5]Stanford University School of Medicine and VA Palo Alto Health Care System, Stanford, CA, United States

Symposium 12

Careers in Tropical Medicine – The Paths to Success Part I

Grand Ballroom D

Monday, December 8, 8 a.m. – 9:45 a.m.

This symposium is designed for trainees in the fields of tropical medicine and global health. The presenters will explore aspects of developing a successful career in tropical medicine, explain how to integrate different skills to obtain funding and highlight the value of ASTMH membership.

CHAIR

Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

8 a.m.

HERE TO HELP – WHAT ASTMH CAN DO FOR YOU

Edward T. Ryan
Massachusetts General Hospital, Boston, MA, United States

8:25 a.m.

GLOBAL HEALTH/TROPICAL DISEASES: OPPORTUNITIES FOR NETWORKING AND TRAINING

Michele Barry
Yale University, New Haven, CT, United States

8:50 a.m.

SO YOU WANT TO WORK OVERSEAS?

Stephen L. Hoffman
Sanaria Inc., Rockville, MD, United States

9:15 a.m.

SHOW ME THE MONEY – GRANT PREPARATION

Michael Strand
University of Georgia, Athens, GA, United States

Symposium 13

Use of Rectal Artesunate at the Community Level in Remote Malaria Settings in Asia and Africa

Grand Ballroom E

Monday, December 8, 8 a.m. – 9:45 a.m.

Death from malaria reflects delay in treatment. Artemisinin-based suppositories can help "buy time" for malaria patients who face a delay in accessing effective injectable antimalarial treatment. Malaria Treatment Guidelines advise that if there is delay in reaching hospital, the patient should be given an initial dose of an artemisinin-based suppository and proceed to the nearest hospital for complete diagnosis and treatment. The symposium describes the results of community-based research on rectal artesunate in different settings in Asia and Africa.

CHAIR

Melba Gomes
World Health Organisation, Geneva, Switzerland

Joel Breman
Fogarty International Center, Bethesda, United States

8 a.m.

RESULTS OF A RANDOMIZED, PLACEBO CONTROLLED TRIAL CARRIED OUT IN REMOTE RURAL AREAS OF AFRICA AND ASIA

John Gyapong
Ministry of Health, Accra, Ghana

8:25 a.m.

ETHICAL CONSIDERATIONS IN THE CONDUCT OF A PLACEBO-CONTROLLED TRIAL IN RURAL AREAS OF BANGLADESH

Abul Faiz
Director General of Health Services, Dhaka, Bangladesh

8:50 a.m.

THE LOGISTICS OF DEPLOYING RECTAL ARTESUNATE IN FIVE COUNTRIES IN AFRICA THROUGH MOTHER COORDINATORS OR VILLAGE HEALTH VOLUNTEERS

Amabelia Rodrigues
Bandim Health Project, Bissau, Guinea-Bissau

9:15 a.m.

ADHERENCE TO REFERRAL ADVICE TO PROCEED TO A HOSPITAL AFTER TREATMENT WITH RECTAL ARTESUNATE. WHAT HAPPENS IN PRACTICE?

Andrew Kitua
National Institute of Medical Research, Dar-es-Salaam, United Republic of Tanzania.

Exhibit Hall Open

Napoleon Ballroom
Monday, December 8, 9:30 a.m. – 10:30 a.m.

Coffee Break

Napoleon Ballroom
Monday, December 8, 9:45 a.m. – 10:15 a.m.

Poster Session A Set-Up

Armstrong Ballroom
Monday, December 8, 9:45 a.m. – 10:15 a.m.

Poster Session A Viewing

Armstrong Ballroom
Monday, December 8, 10:15 a.m. – Noon

Symposium 14

Lone Star Rising, Part II: Recent Efforts to Define the Role of *Amblyomma americanum* in the Transmission of Bartonella, Borrelia, Ehrlichia and Rickettsia Species

Gallery
Monday, December 8, 10:15 a.m. – Noon

An understanding of the association between vectors, vertebrate hosts and pathogens is fundamental for the development of tick-borne disease prevention strategies. The lone star tick, *Amblyomma americanum*, is an aggressive anthropophilic tick often found in high densities in the southern and eastern United States, and is expanding its range northward. Until recently, this tick was regarded as a nuisance pest of humans but is now an important vector of zoonotic pathogens: Ehrlichia chaffeensis, the agent of human monocytic ehrlichiosis, and *E. ewingii*, the agent of granulocytic ehrlichiosis in humans and dogs. *A. americanum* also harbors organisms less clearly linked with human disease, *Bartonella* spp., *Borrelia lonestari, Rickettsia amblyommii* and an ehrlichial pathogen ("Panola Mountain Ehrlichia") closely related to *E. ruminantium*. On one hand, clinical presentations are seen after *A. americanum* tick bites that are not yet definitively associated with specific etiological agents; on the other hand, *A. americanum*-borne organisms have been elucidated that are not yet associated with specific syndromes. Erythema migrans following *A. americanum* tick bite continues to be an unanswered clinical question, as is the role of *R. amblyommii* in mild or asymptomatic rickettsiosis. Furthermore, a recently discovered Coxiella-type symbiont may influence maintenance or transmissions of other pathogens within *A. americanum*, thereby impacting human disease transmission. This symposium will focus on efforts to describe these organisms, understand their interactions, and sort out their roles in human disease.

CHAIR

Ellen Y. Stromdahl
U.S. Army Center for Health Promotion & Preventive Medicine, Aberdeen Proving Ground, MD, United States

Rendi M. Bacon
Centers for Disease Control and Prevention, Ft. Collins, CO, United States

10:15 a.m.

CO-INFECTION RATES OF LONE STAR TICKS WITH RICKETTSIAL AND EHRLICHIAL ORGANISMS

Michael P. Smith
North Carolina State University, Raleigh, NC, United States

10:40 a.m.

DISCOVERY OF "PANOLA MOUNTAIN EHRLICHIA," AN EMERGING ZOONOSIS TRANSMITTED BY LONE STAR TICKS

Amanda D. Loftis
Idaho State University, Pocatello, ID, United States

11:05 a.m.

POTENTIAL TRANSMISSION OF BARTONELLA SPECIES BY *AMBLYOMMA AMERICANUM*

Michael G. Levy
North Carolina State University, Raleigh, NC, United States

11:30 a.m.

MICROBIAL COMMUNITIES AND INTERACTIONS IN *AMBLYOMMA AMERICANUM*

Keith Clay
Indiana University, Bloomington, IN, United States

Symposium 15

Advances in Geospatial Health

Rhythms I
Monday, December 8, 10:15 a.m. – Noon

Recent advances in health applications of geospatial science will be illustrated by review of new research results on malaria in Southeast Asia, schistosomiasis in Africa and in China, and geohelminths of ruminants in Italy. Presentations on use of satellite remote sensing and geographic information systems (GIS) for spatial analysis will provide the basis for discussion in the context of other geospatial analysis work in the health arena. It is the intent that spatial analysis concepts introduced can be adopted by participants for application to their own research area.

CHAIR

John B. Malone
Louisiana State University, Baton Rouge, LA, United States

Robert Bergquist
World Health Organization (retired), Geneva, Switzerland

10:15 a.m.

MALARIA MODELING AND SURVEILLANCE FROM SPACE

Richard Kiang
NASA, Greenbelt, MD, United States

10:40 a.m.

CLIMATE CHANGE AND *SCHISTOSOMA JAPONICUM* IN CHINA

Zhou Xiaonong
Institute of Parasitic Diseases-China Centers for Disease Control and Prevention, Shanghai, China

11:05 a.m.

LANDSCAPE EPIDEMIOLOGY OF ANIMAL GEOHELMINTHS IN ITALY

Laura Rinaldi
University of Naples, Naples, Italy

11:30 a.m.

GIS AND SCHISTOSOMIASIS IN AFRICA: THE CONTRAST INITIATIVE

Thomas Kristensen
DBL-Institute for Health Research and Development, Frederiksberg, Denmark

Symposium 16

Tropical Medicine in a Temperate Climate

Rhythms II/III
Monday, December 8, 10:15 a.m. – Noon

This session will present four case series of patients attending this hospital over the last eight years, focusing specifically on: 1. the prevalence of renal impairment in adults presenting with acute *P. falciparum* malaria; 2. imported enteric fever – clinical and laboratory features among 78 cases of culture positive *S. typhi* and paratyphi; 3. the changing pattern of acute hepatitis in travellers – highlighting that hepatitis E is now the most common; 4. amoebic liver abscess in a travelling population – clinical and laboratory features of 20 cases seen in London.

CHAIR

Tom Doherty
Hospital for Tropical Diseases, London, United Kingdom

Philip Gothard
Hospital for Tropical Diseases, London, United Kingdom

10:15 a.m.

THE PREVALENCE OF RENAL IMPAIRMENT AMONG TRAVELLERS WITH ACUTE *P. FALCIPARUM* MALARIA

Maggie Armstrong
Hospital for Tropical Diseases, London, United Kingdom

10:40 a.m.

IMPORTED ENTERIC FEVER – A REVIEW OF 78 CULTURE POSITIVE CASES

Trupti Patel
Hospital for Tropical Diseases, London, United Kingdom

11:05 a.m.

THE CHANGING PATTERN OF ACUTE IMPORTED HEPATITIS

Michael Brown
Hospital for Tropical Diseases, London, United Kingdom

11:30 a.m.

AMOEBIC LIVER ABSCESS AMONG TRAVELERS

Stephen G. Wright
Hospital for Tropical Diseases, London, United Kingdom

Scientific Session 17

Bacteriology I – Water and Hygiene

Waterbury
Monday, December 8, 10:15 a.m. – Noon

CHAIR

Stephen Luby
International Center for Diarrhoeal Disease Research Bangladesh, Dhaka, Bangladesh

CHAIR

Pavani Kalluri Ram
University at Buffalo, Buffalo, NY, United States

10:15 a.m.

15

ANALYSIS OF THE EFFECTIVENESS AND SUSTAINABILITY OF METHODS FOR HOUSEHOLD WATER TREATMENT AND SAFE STORAGE

Mark Sobsey
University of North Carolina, Chapel Hill, NC, United States

10:30 a.m.

16

SUCCESSFUL PROMOTION OF WATER TREATMENT AND HAND HYGIENE THROUGH A PILOT CLINIC-BASED INTERVENTION FOR PREGNANT WOMEN SEEKING ANTENATAL CARE: MALAWI, MAY 2007-MARCH 2008

Anandi N. Sheth[1], Elizabeth T. Russo[1], Manoj Menon[1], Amose C. Kudzala[2], John D. Kelly[1], Merri Weinger[3], Kiwe Sebunya[2], Humphreys Masuku[4], Kathleen Wannemuehler[1], Rob Quick[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]United Nations Children's Fund, Lilongwe, Malawi, [3]United States Agency for International Development, Washington, DC, United States, [4]Government of Malawi Ministry of Health, Lilongwe, Malawi

10:45 a.m.

17

USE OF A NOVEL METHOD TO DETECT REACTIVITY TO STRUCTURED OBSERVATION FOR MEASUREMENT OF HANDWASHING BEHAVIOR

Pavani Kalluri Ram[1], Amal K. Halder[2], Stewart P. Granger[3], Peter Hall[4], Therese Jones[3], David Hitchcock[3], Benjamin Nygren[5], M Sirajul Islam[2], John W. Molyneaux[6], Stephen P. Luby[2]
[1]University at Buffalo, Buffalo, NY, United States, [2]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [3]Unilever R&D Port Sunlight, Bebington, United Kingdom, [4]4-Front Research UK Ltd Capenhurst, United Kingdom, [5]Emory University, Atlanta, GA, United States, [6]Water and Sanitation Program, The World Bank Group, Washington, DC, United States

18

ACCEPTABILITY AND USE OF ALCOHOL-BASED WATERLESS HAND SANITIZER AMONG STREET FOOD VENDORS IN PILANI, INDIA

Melissa L. Robins[1], Nirupama Prakash[2], S. Nadeem Fatmi[2], Surya Kant Moharana[2], Pavani Kalluri Ram[1]
[1]University at Buffalo, Buffalo, NY, United States, [2]Birla Institute of Technology and Science, Pilani, Rajasthan, India

11:15 a.m.

19

A GRAVITY-FEED HOUSEHOLD WATER PURIFIER DEVICE FOR USE IN THE INDIAN MARKETPLACE: LABORATORY AND FIELD EXPERIENCES

Abhay Kumar[1], P. A. Shankar[2], Muralidhara Rao[3], Michael Bridges[4], **Jeffrey F. Williams**[4]
[1]Eureka Forbes, Mumbai, India, [2]Filtrex Limited, Bangalore, India, [3]Eureka Forbes, Bangalore, India, [4]HaloSource Incorporated, Bothell, WA, United States

11:30 a.m.

20

DIFFICULTIES IN SUSTAINING IMPROVED HANDWASHING BEHAVIOR, KARACHI, PAKISTAN

Stephen P. Luby[1], Mubina Agboatwalla[2], Anna Bowen[3], Robert M. Hoekstra[3]
[1]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [2]HOPE, Karachi, Pakistan, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

11:45 a.m.

21

INTERNALISATION OF MICROBES IN VEGETABLES: MICROBIAL LOAD OF EXOTIC VEGETABLES AND THE RELATIONSHIP WITH DIFFERENT WATER SOURCES OF IRRIGATION

Eric Sampane-Donkor
University of Ghana Medical School, Accra, Ghana

Scientific Session 18

Malaria – Vaccines II

Napoleon A123
Monday, December 8, 10:15 a.m. – Noon

CHAIR

Ruth D. Ellis
National Institutes of Health, Rockville, MD, United States

Seth Owusu-Agyei
Kintampo Health Research Center, Kintampo, Ghana

10:15 a.m.

22

A PHASE 1 TRIAL OF THE MALARIA TRANSMISSION BLOCKING VACCINE CANDIDATES PFS25 AND PVS25 FORMULATED WITH MONTANIDE ISA 51

Ruth D. Ellis[1], Yimin Wu[1], Donna Shaffer[2], Erica Fontes[2], Elissa Malkin[1], Siddhartha Mahanty[1], Michael P. Fay[1], David Narum[1], Kelly Rausch[1], Aaron P. Miles[1], Joan Aebig[1], Andrew Orcutt[1], Olga Muratova[1], Guanhong Song[1], Lynn Lambert[1], Daming Zhu[1], Kazutoyo Miura[1], Carole Long[1], Allan Saul[1], Louis H. Miller[1], Anna P. Durbin[2]
[1]National Institutes of Health, Rockville, MD, United States, [2]Johns Hopkins Center for Immunization Research, Washington, DC, United States

10:30 a.m.

23

A PHASE IB STUDY OF THE SAFETY OF MSP3-LSP CANDIDATE MALARIA VACCINE IN TANZANIAN CHILDREN AGED 12-24 MONTHS

John P. Lusingu[1], Salum Msham[1], Samuel Gesase[1], Samuel Sembuche[1], Seth Misago[1], Method Segeja[1], Daniel Minja[1], Acleus Rutta[1], Filbert Francis[1], Ramadhan Noor[2], Roma Chilengi[2], Martha M. Lemnge[1], Pierre Druilhe[3]
[1]National Institute for Medical Research, Tanga, United Republic of Tanzania, [2]African Malaria Network Trust, Dar es Salaam, United Republic of Tanzania, [3]Institut Pasteur Paris, Paris, France

10:45 a.m.

24

RANDOMIZED, CONTROLLED, PHASE 1 STUDY OF THE SAFETY AND IMMUNOGENICITY OF THE AMA1-C1/ALHYDROGEL® + CPG 7909 VACCINE FOR *PLASMODIUM FALCIPARUM* MALARIA, IN SEMI-IMMUNE MALIAN ADULTS

Issaka Sagara[1], Ruth Ellis[2], Alassane Dicko[1], Mohamed Balla Niambele[1], Beh Kamate[1], Ousmane Guindo[1], Mark Pierce[2], Michael Fay[2], Mahamadou S. Sissoko[1], Merepen A. Guindo[1], Ousmane Kante[1], Renion Saye[1], Amagana Dolo[1], Kazutoyo Miura[2], Dapa A. Diallo[1], Louis Miller[2], Ogobara K. Doumbo[1]
[1]MRTC/FMPOS, University of Bamako, Bamako, Mali, [2]MVDB/NIAID/National Institutes of Health, Twinbrook, MD, United States

11 a.m.

25

RANDOMIZED, CONTROLLED, PHASE 2B CLINICAL TRIAL TO EVALUATE THE SAFETY, IMMUNOGENICITY AND EFFICACY OF WALTER REED ARMY INSTITUTE OF RESEARCH'S AMA-1 MALARIA VACCINE (FMP2.1) ADJUVANTED IN GSK BIOLOGICALS' AS02 VS. RABIES VACCINE IN 1-6-YEAR-OLD CHILDREN IN BANDIAGARA, MALI

Mahamadou A. Thera[1], Ogobara K. Doumbo[1], Drissa Coulibaly[1], Matthew B. Laurens[2], Abdoulaye K. Kone[1], Ando B. Guindo[1], Dapa A. Diallo[1], Karim Traore[1], Issa Diarra[1], Amadou Niangaly[1], Amagana Dolo[1], Modibo Daou[1], Mady Sissoko[1], Mahamadou S. Sissoko[1], Bourema Kouriba[1], Drissa Traore[1], Kirsten E. Lyke[2], Shannon L. Takala[2], Olivier Godeaux[3], Carter Diggs[4], Sheetij Dutta[5], V. Ann Stewart[5], Brent House[5], D. Gray Heppner[5], Christopher V. Plowe[2], Joe Cohen[3], W. Ripley Ballou[3], Joelle Thonnard, Marie-Claude Dubois[3], Lorraine Soisson, Lisa A. Ware[5], David E. Lanar[5]

[1]University of Bamako Faculty of Medicine, Bamako, Mali, [2]University of Maryland School of Medicine, Baltimore, MD, United States, [3]GlaxoSmithKline Biologicals, Rixensart, Belgium, [4]U.S. Agency for International Development, Washington, DC, United States, [5]Walter Reed Army Institute of Research, Silver Spring, MD, United States

11:15 a.m.

26

PHASE IIB, RANDOMIZED, DOUBLE-BLIND TRIAL TO ASSESS THE EFFICACY, SAFETY AND IMMUNOGENICITY OF THE CANDIDATE MALARIA VACCINE RTS,S/AS01 IN KENYAN AND TANZANIAN CHILDREN

P. Bejon[1], J. Lusingu[2], **Ally Olotu**[1], A. Leach[3], M. Lievens[3], J. Vekemans[3], S. Msham[1], T. Lang[1], J. Gould[2], M.C. Dubois[3], M.A. Demoitie[3], P. Vansadia[4], T. Carter[4], P. Njuguna[1], K. Kawuondo[1], S. Gesase[2], C. Drakeley[5], B. Savarese[4], T. Villafana[4], W. R. Ballou[3], J. Cohen[3], E. Riley[5], M. Lemnge[2], K. Marsh[1], L. von Seidlein[2]

[1]KEMRI Wellcome Collaborative Research Programme, Kilifi, Kenya, [2]Joint Malaria Project, Korogwe, United Republic of Tanzania, [3]GlaxoSmithKline Biologicals, Rixensart, Belgium, [4]PATH Malaria Vaccine Initiative, Bethesda, MD, United States, [5]London School of Hygiene and Tropical Medicine, London, United Kingdom

11:30 a.m.

27

PHASE IIB, RANDOMIZED, DOUBLE-BLIND TRIAL TO ASSESS THE SAFETY, IMMUNOGENICITY AND EFFICACY OF THE CANDIDATE MALARIA VACCINE RTS,S/AS02 WHEN ADMINISTERED ACCORDING TO THE EXPANDED PROGRAM ON IMMUNIZATION SCHEDULE

Salim Abdulla[1], R. Oberholzer[2], O. Juma[1], A. Leach[3], J. Vekemans[3], M. Lievens[3], S. Kuboja[1], N. Salim[1], T. Carter[4], M.A. Demoitie[3], M.C. Dubois[3], A. Jumanne[1], F. Machel[1], C. Membi[1], M. Shomari[1], T. Aebi[2], H. Mshinda[1], T. Villafana[4], J. Cohen[3], W. R. Ballou[3], M. Tanner[2]

[1]Bagamoyo Research and Training Center, Ifakara Health Research and Development Centre, Dar-es-Salaam, United Republic of Tanzania, [2]Swiss Tropical Institute, Basel, Switzerland, [3]GlaxoSmithKline Biologicals, Rixensart, Belgium, [4]PATH Malaria Vaccine Initiative, Bethesda, MD, United States

11:45 a.m.

28

PHASE II, RANDOMIZED TRIAL TO ASSESS THE SAFETY AND IMMUNOGENICITY OF THE CANDIDATE MALARIA VACCINES RTS,S/AS02 AND RTS,S/AS01 WHEN GIVEN ACCORDING TO DIFFERENT VACCINATION SCHEDULES IN CHILDREN IN GHANA

Seth Owusu-Agyei[1], D. Ansong[2], K. P. Asante[1], S. Owusu-Kwarteng[2], R. Owusu[1], N.A. Wireko Brobby[2], D. Dosoo[1], A. Y. Osei Akoto[2], K. Osei-Kwakye[1], E. Asafo Adjei[2], K. Owusu Boahen[1], J. Sylverken[2], G. Adjei[1], D. Sambian[2], J. Vekemans[3], O. Ofori-Anyinam[3], M. Lievens[3], M. Demoitie[3], J. Cohen[3], W. R. Ballou[3], B. Savarese[4], B. Greenwood[5], T. Bawa[6], J. Evans[6], T. Agbenyega[2]

[1]Kintampo Health Research Center, Kintampo, Ghana, [2]School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, [3]GlaxoSmithKline Biologicals, Rixensart, Belgium, [4]PATH Malaria Vaccine Initiative, Bethesda, MD, United States, [5]London School of Hygiene and Tropical Medicine, London, United Kingdom, [6]Kumasi Centre for Collaborative Research, Kumasi, Ghana

Scientific Session 19

Malaria/Mosquitoes: Prevention of Transmission

Maurepas

Monday, December 8, 10:15 a.m. – Noon

CHAIR

Rhoel R. Dinglasan
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

Mark L. Wilson
University of Michigan School of Public Health, Ann Arbor, MI, United States

10:15 a.m.

29

REGIME SHIFTS IN MALARIA INCIDENCE PATTERNS ARE RELATED TO CLIMATIC VARIABILITY, BUT MEDIATED BY INSECTICIDE TREATED NET USE

Luis F. Chaves[1], Akira Kaneko[2], Mercedes Pascual[1], Mark L. Wilson[1]

[1]University of Michigan, Ann Arbor, MI, United States, [2]Karolinska Institutet, Stockholm, Sweden

10:30 a.m.

30

PROTEIN-GLYCAN INTERACTIONS MEDIATE MALARIA PARASITE TRANSMISSION

Rhoel R. Dinglasan[1], Toin H. van Kuppevelt[2], Luisella Verotta[3], Paolo Ferruti[3], Elisabetta Ranucci[3], Anil K. Ghosh[1], Aditi Alaganan[1], Akio Saito[4], Marcelo Jacobs-Lorena[1]

[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Radboud University of Nijmegen, Nijmegen, Netherlands, [3]University of Milan, Milan, Italy, [4]Kinki University, Osaka, Japan

31

MODELLING THE POTENTIAL IMPACT OF ARTEMISININ COMBINATION THERAPIES AND LONG-LASTING DRUG COMBINATIONS ON MALARIA TRANSMISSION INTENSITY: A CASE STUDY IN TANZANIA

Lucy Okell[1], Chris Drakeley[1], Teun Bousema[2], Chris J. Whitty[1], Azra C. Ghani[3]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, [3]Imperial College, London, United Kingdom

11 a.m.

32

CONTRIBUTION OF EXPOSURE-REDUCING INTERVENTIONS TO THE GOAL OF MALARIA ELIMINATION IN ENDEMIC AREAS

Azra C. Ghani[1], Colin J. Sutherland[2], Eleanor M. Riley[2], Chris J. Drakeley[2], Jamie Griffin[1], Roly D. Gosling[2], Joao A. Filipe[3]
[1]Imperial College London, London, United Kingdom, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom, [3]University of Cambridge, Cambridge, United Kingdom

11:15 a.m.

33

NETWORK METAPOPULATION MODELING OF MALARIA VECTOR CONTROL

Laith W. Yakob, Guiyun Yan
University of California, Irvine, Irvine, CA, United States

11:30 a.m.

34

DIRECT AND INDIRECT EFFECTS OF HIGH COVERAGE VECTOR CONTROL ON PREVALENCE OF MALARIAL INFECTION

Immo Kleinschmidt[1], Christopher Schwabe[2], Luis Benavente[2], Luis Segura[2]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Medical Care Development International, Silver Spring, MD, United States

11:45 a.m.

35

RAPID INCREASE IN COVERAGE WITH LONG-LASTING INSECTICIDAL NETS IN AMHARA, OROMIA AND SNNP REGIONS OF ETHIOPIA

Estifanos Biru Shargie[1], Patricia M. Graves[2], Asefaw Getachew[1], Jimee Hwang[3], Frank O. Richards[2], Paul M. Emerson[2], Teshome Gebre[1], Aryc W. Mosher[2], Tekola Endeshaw[1], Yeshewamebrat Ejigsemahu[1], Afework Hailemariam[4], Eskinder Tenaw[5], John Miller[6], Ambachew Medhin Yohannes[7], Jeremiah Ngondi[8], Daddi Jima[4], Zerihun Tadesse[4], Tedros Adhanom Ghebreyesus[4]
[1]The Carter Center, Addis Ababa, Ethiopia, [2]The Carter Center, Atlanta, GA, United States, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Ministry of Health, Addis Ababa, Ethiopia, [5]Central Statistical Agency, Addis Ababa, Ethiopia, [6]Malaria Control and Evaluation Partnership in Africa, Lusaka, Zambia, [7]World Health Organization, Addis Ababa, Ethiopia, [8]University of Cambridge, Cambridge, United Kingdom

Symposium 20

Addressing the R&D Challenges in Making New Drugs Available for Human African Trypanosomiasis (aka Sleeping Sickness): Potential in the Pipeline and Recent Clinical Results

Bayside BC

Monday, December 8, 10:15 a.m. – Noon

Human African trypanosomiasis (HAT or sleeping sickness) is a life-threatening disease which threatens 60 million people in 36 countries in Africa. Caused by *Trypanosoma brucei* parasites transmitted by tsetse flies, HAT is calucualted by WHO estimates to infect between 50,000 and 70,000 people in sub-Saharan Africa. Currently available treatments for HAT are few and limited due to toxicity and lost efficacy in several regions. Treatment is stage-specific, with more toxic and more difficult-to-administer treatments for stage 2 disease. There are a small number of projects for improved treatments currently in clinical development. This symposium will address the most recent results from these clinical trials and will also explore the most interesting candidates in the pipeline, including fexinidazole, a drug candidate currently in preclinical development by the Drugs for Neglected Diseases initiative (DNDi). DNDi, a new product development partnership (PDP) committed to develop new treatments for this and other fatal-yet-neglected diseases, and the HAT Platform, a regional clinical research partnership, are holding this symposium in order to also present results from a pivotal Phase III study and to review the opportunities and challenges ahead in the different phases of research and development of new drugs for sleeping sickness.

CHAIR

Leon Kazumba
HAT Platform, Kinshasa, The Democratic Republic of the Congo

Pere Simarro
World Health Organization, Geneva, Switzerland

10:15 a.m.

HAT PLATFORM – SUCCESS TO DATE, AND CHALLENGES/ OPPORTUNITIES AHEAD IN OVERCOMING DIFFICULTIES IN CLINICAL RESEARCH OF HAT DRUGS AND IN DEVELOPING REGIONAL RESEARCH PLATFORM

Dawson Mbulamberi
Ministry of Health, Kampala, Uganda

10:40 a.m.

PHASE III RESULTS OF MULTI-CENTRE STUDY EVALUATING NIFURTIMOX-EFLORTHINE COMBINATION FOR TREATMENT (NECT) OF STAGE 2 HAT

Gerardo Priotto
Epicentre, Paris, France

11:05 a.m.

RESEARCH RESULTS EVALUATING THE DIAMIDINE CLASS FOR THE TREATMENT OF HAT

Richard Tidwell
Consortium for Parasitic Drug Development, University of North Carolina, Chapel Hill, NC, United States

11:30 a.m.

FEXINIDAZOLE: A REDISCOVERED NITROIMIDAZOLE DRUG CANDIDATE MOVING INTO CLINICAL DEVELOPMENT FOR HAT

Els Torreele
Drugs for Neglected Diseases initiative, Geneva, Switzerland

Symposium 21

Genomic Approaches to Host-Pathogen Interactions for *Plasmodium falciparum*

Grand Ballroom A

Monday, December 8, 10:15 a.m. – Noon

Genomic approaches, methodologies and technologies for evaluation of both *P. falciparum* and its host organisms — humans and the anopheles mosquito — will be presented and discussed. With increased genetic and genomic knowledge, this symposium will review the latest data and technologies, as well as discuss how these data can be leveraged to identify signatures of natural selection and to infer biologic meaning about these genomic signatures of selection. Participants will also discuss real world applications of these genetic and genomic data toward understanding basic biologic and immunologic mechanisms, as well for epidemiologic, clinical, vaccine or drug studies in the natural setting.

CHAIR

Dyann F. Wirth
Harvard School of Public Health, Boston, MA, United States

Marc Muskavitch
Boston College, Boston, MA, United States

10:15 a.m.

GENETIC VARIATION IN THE HUMAN HOST — LEVERAGING SIGNATURES OF NATURAL SELECTION TO UNDERSTAND HOST-PATHOGEN INTERACTIONS

Dominic Kwiatkowski
Wellcome Trust Centre for Human Genetics, Oxford, United Kingdom

10:40 a.m.

GENETIC VARIATION IN *P. FALCIPARUM* — USING GENETIC VARIATION IN THE PARASITE TO IDENTIFY GENETIC LOCI UNDER NATURAL SELECTION.

Sarah K. Volkman
Harvard School of Public Health, Boston, MA, United States

11:05 a.m.

GENETIC VARIATION IN THE ANOPHELES HOST — HOW GENETIC AND GENOMIC DIFFERENCES IN THE VECTOR CONTRIBUTE TO PARASITE DEVELOPMENT AND SURVIVAL

Fotis C. Kafatos
Imperial College London, London, United Kingdom

11:30 a.m.

APPLYING KNOWLEDGE AND TOOLS OF GENETIC VARIATION IN THE FIELD FOR DEVELOPMENT OF INTERVENTION STRATEGIES

Christian T. Happi
University of Ibadan, Ibadan, Nigeria

Scientific Session 22

Intestinal and Tissue Helminths I: *Taenia*/ Cysticercosis

Grand Ballroom B

Monday, December 8, 10:15 a.m. – Noon

CHAIR

Ana Flisser
Universidad Nacional Autonoma de Mexico, Faculty of Medicine, Mexico City, Mexico

Theodore E. Nash
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

36

***IN VITRO* ASSESSMENT OF TAENIA CRASSICEPS MOTILITY AND ITS APPLICATION TO THE STUDY OF ANTHELMINTIC TREATMENT IN NEUROCYSTICERCOSIS**

Erick Scott[1], Juraj Kabat[2], Owen Schwartz[2], Theodore E. Nash[2], Siddhartha Mahanty[2]
[1]National Institutes of Health, Rockville, MD, United States, [2]National Institutes of Health, Bethesda, MD, United States

10:30 a.m.

37

***TAENIA SOLIUM* CYSTICERCOSIS IN NATURALLY INFECTED PIGS: VIABILITY OF CYSTICERCI AND PERSISTENCY OF SPECIFIC ISOTYPE ANTIBODIES AND CYSTICERCAL ANTIGENS AFTER TREATMENT WITH OXFENDAZOLE**

Chummy S. Sikasunge[1], Maria V. Johansen[2], Lee A. Willingham III[3], Pall S. Leifsson[4], Isaac K. Phiri[1]
[1]School of Veterinary Medicine, University of Zambia, Lusaka, Zambia, [2]DBL – Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen, Thorvaldsensvej, Frederiksberg C, Copenhagen, Denmark, *[3]WHO/FAO Collaborating Centre for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Dyrlægevej 100, 1870 Frederiksberg C, Copenhagen, Denmark, [4]Department of Veterinary Pathobiology, Faculty of Life Sciences, University of Copenhagen, Ridebanevej, Frederiksberg C, Copenhagen, Denmark*

10:45 a.m.

38

EFFECTIVENESS OF HEALTH EDUCATION INTERVENTION TRIAL TO REDUCE PORCINE CYSTICERCOSIS IN NORTHERN TANZANIA

Helena A. Ngowi[1], Hélène Carabin[2], M. R. Mlozi[1], Ayub A. Kassuku[1], J. E. Mlangwa[1], A. Lee Willingham[3]
[1]Sokoine University of Agriculture, Morogoro, United Republic of Tanzania, [2]University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, [3]WHO/FAO Collaborating Center for Parasitic Zoonoses, Faculty of Life Sciences, University of Copenhagen, Frederiksberg, Denmark

11 a.m.

39

A NATIONAL MODEL FOR THE CONTROL OF A PARASITIC DISEASE: CYSTICERCOSIS IN MEXICO

Ana Flisser[1], Javier Calderon-Albor[1], Miguel Robles-Barcena[1], Gina Martinez-Flisser[2], Jose Narro-Robles[1]
[1]Universidad Nacional Autonoma de Mexico, Faculty of Medicine, Mexico City, Mexico, [2]Private, Mexico City, Mexico

11:15 a.m.

40

KNOWLEDGE AND BELIEFS ASSOCIATED WITH EPILEPSY AND CYSTICERCOSIS IN BURKINA FASO

Alida Da[1], Athanase Millogo[2], Sennen Hounton[3], Linda D. Cowan[4], Rasmané Ganaba[5], Pascal Nitiema[4], **Hélène Carabin**[4]
[1]Université de Ouagadougou, Ouagadougou, Burkina Faso, [2]Centre Universitaire Hospitalier Souro Sanous, Bobo Dioulasso, Burkina Faso, [3]West Africa Field Epidemiology and Laboratory Training Program, Ouagadougou, Burkina Faso, [4]University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, [5]GREFSaD, Bobo Dioulasso, Burkina Faso

11:30 a.m.

41

PREVALENCE OF EPILEPSY, CYSTICERCOSIS AND NEUROCYSTICERCOSIS IN BURKINA FASO

Hélène Carabin[1], Athanase Millogo[2], Sennen Hounton[3], Nicolas Praet[4], Linda D. Cowan[1], Pascal Nitiema[1], Pierre Dorny[4], Zékiba Tarnagda[5], Rasmané Ganaba[6]
[1]University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, [2]Centre Universitaire Hospitalier Souro Sanous, Bobo Dioulasso, Burkina Faso, [3]West Africa Field Epidemiology and Laboratory Training Program, Ouagadougou, Burkina Faso, [4]Institute of Tropical Medicine, Antwerp, Belgium, [5]IRSS, Bobo Dioulasso, Burkina Faso, [6]GREFSaD, Bobo Dioulasso, Burkina Faso

11:45 a.m.

42

COMBINED GENOTYPAGE AND *IN SILICO* COMPARISON STUDIES OF PIG TAPEWORM *TAENIA SOLIUM* MATCH WITH UNIQUE ETHNOGEOGRAPHY OF MADAGASCAR

Lorraine Michelet
Pitié-Salpêtrière Hospital, Paris, France

(ACMCIP Abstract)

Scientific Session 23

Flavivirus II – Dengue II

Grand Ballroom C
Monday, December 8, 10:15 a.m. – Noon

CHAIR

Derek A. Cummings
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

CHAIR

Ana Fernandez-Sesma
Mount Siani School of Medicine, New York, NY, United States

10:15 a.m.

43

LACK OF TYPE I IFN IN DENGUE VIRUS (DENV) INFECTED HUMAN BLOOD CELLS MAY ACCOUNT FOR INEFFICIENT IMMUNE RESPONSES DURING DENV INFECTION

Ana Fernandez-Sesma[1], Dabeiba Bernal-Rubio[1], Dorothy Kaminski[1], Kelley Boyd[1], Hannah Phipps-Yonas[1], Thomas M. Moran[1], Adolfo Garcia-Sastre[1], Jorge Munoz-Jordan[2]
[1]Mount Sinai School of Medicine, New York, NY, United States, [2]Centers for Disease Control, Dengue Branch, San Juan, PR, United States

10:30 a.m.

44

INTRINSIC ANTIBODY DEPENDENT ENHANCEMENT OF DENGUE INFECTION IN PRIMARY HUMAN MONOCYTIC PHAGOCYTES AND CELL LINES

Zhihua Kou[1], Matthew H. Quinn[1], Huiyuan Chen[1], Jacob J. Schlesinger[1], Federica Sallusto[2], Xia Jin[1]
[1]University of Rochester, Rochester, NY, United States, [2]Institute of Research in Biomedicine, Bellinozona, Switzerland

(ACMCIP Abstract)

10:45 a.m.

45

A MOUSE MODEL FOR ANTIBODY-ENHANCED DENGUE VIRUS INFECTION AND DISEASE

Scott Balsitis, Katherine Williams, Jennifer L. Kyle, Robert Beatty, Eva Harris
Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

11 a.m.

46

PRELIMINARY DATA ON A POTENTIAL RHESUS MACAQUE MODEL FOR DHF/DSS

Guey Chuen Perng, Nattawat Onlamoon, Hui-Mien Hsiao, Margaret C. Tse, Francois Villinger, Aftab A. Ansari
Emory University School of Medicine, Atlanta, GA, United States

11:15 a.m.

47

INCREASED DENGUE DISEASE SEVERITY IN NICARAGUA IS ASSOCIATED WITH A CLADE REPLACEMENT IN DENGUE VIRUS 2

Angel Balmaseda[1], Tangni Gomez[1], Matthew Henn[2], Niall Lennon[2], Guillermina Kuan[3], Crisanta Rocha[4], Sheyla Silva[4], Aubree Gordon[5], Bruce Birren[2], **Eva Harris**[5]
[1]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, [2]Broad Institute, Cambridge, MA, United States, [3]Socrates Flores Vivas Health Center, Managua, Nicaragua, [4]Hospital Infantil Manuel Jesús de Rivera, Managua, Nicaragua, [5]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

11:30 a.m.

48

SPATIAL HETEROGENEITY IN THE FORCE OF INFECTION OF DENGUE IN THAILAND AND THE SPATIAL STRUCTURE OF PHASE RELATIONSHIPS IN MULTIANNUAL OSCILLATIONS

Derek A. Cummings[1], Ira Schwartz[2], Donald S. Burke[3], Robert V. Gibbons[4]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]United States Naval Research Laboratory, Washington, DC, United States, [3]University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States, [4]Armed Forces Institute of Medical Sciences, Bangkok, Thailand

11:45 a.m.

49

A UNIFYING FRAMEWORK FOR THE COMPLEX REGIONAL DYNAMICS OF MULTI-SEROTYPE DENGUE VIRUS TRANSMISSION

Karen M. Campbell[1], Arthur Getis[1], Jared Aldstadt[2], Kristopher Kuzera[1], Kumnuan Ungchusak[3], Richard A. Levine[1], Thomas W. Scott[4]
[1]San Diego State University, San Diego, CA, United States, [2]University at Buffalo, Buffalo, NY, United States, [3]Ministry of Public Health, Nonthaburi, Thailand, [4]University of California, Davis, CA, United States

Symposium 24

Careers in Tropical Medicine – The Paths to Success Part II

Grand Ballroom D
Monday, December 8, 10:15 a.m. – Noon

This symposium is designed for trainees in the fields of tropical medicine and global health. The presenters will explore aspects of developing a successful career in tropical medicine, explain how to integrate different skills to obtain funding and highlight the value of ASTMH membership.

CHAIR

Stephen Higgs
University of Texas Medical Branch, Galveston, United States

10:15 a.m.

NAVIGATING THE NATIONAL INSTITUTES OF HEALTH SYSTEM

Adriana Costero
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

10:40 a.m.

ALL THESE DATA....MANUSCRIPT PREPARATION, SUBMISSION AND MAKING REVIEWERS HAPPY

James Kazura
Case Western Reserve University, Cleveland, OH, United States

11:05 a.m.

WHEN THE CAMERAS ARE RUNNING – INTERVIEW SKILLS

Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

11:30 a.m.

RESOURCES FROM THE BURROUGHS WELLCOME FUND – "MAKING THE RIGHT MOVES – A PRACTICAL GUIDE TO SCIENTIFIC MANAGEMENT FOR POSTDOCS AND NEW FACULTY" AND "INTERNATIONAL CAREERS"

Victoria P. McGovern
Burroughs Wellcome Fund, Research Triangle Park, NC, United States

11:45 a.m.

QUESTIONS AND ANSWERS

Symposium 25

Home Management of Malaria in 2008: Improving Access to ACTs and Diagnostics at the Community Level in Sub-Saharan Africa

Grand Ballroom E
Monday, December 8, 10:15 a.m. – Noon

Home Management of Malaria (HMM) is becoming increasingly important as a way to increase access to treatment by underserved populations, in particular in sub-Saharan Africa (SSA). Developed in the 1990s, when chloroquine was the antimalarial drug of choice, HMM has in recent years faced the challenge to incorporate new tools like artemisinin-based combination therapy (ACT) and rapid diagnostic tests (RDT) for malaria. Furthermore, due to the dramatic increase in numbers of people living in urban areas in SSA, there is a need to develop and test the efficacy of a HMM strategy adapted to urban settings. Finally, findings will be presented on the additional benefit that community-level treatment of both malaria and pneumonia is going to provide compared to community-level treatment of malaria only, and on how to an integrated strategy for community-level management of both diseases can be designed and delivered. Results will be presented that provide the evidence to orient antimalarial policy for case management at the community level.

CHAIR

Franco Pagnoni
World Health Organization, Geneva, Switzerland

Joel G. Breman
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

FEASIBILITY, ACCEPTABILITY AND EFFECTIVENESS OF ACT USED WITHIN THE CONTEXT OF HMM

Ikeoluwapo O. Ajayi
Univerity of Ibadan, Ibadan, Nigeria

10:35 a.m.

THE USE OF RDTS IN THE CONTEXT OF HMM

James Tibenderana
Uganda Malaria Research Center, Kampala, Uganda

Thomas Anyorigiya
Navrongo Research Center, Navrongo, Ghana

11 a.m.

HOME MANAGEMENT OF MALARIA IN URBAN SETTINGS IN SUB-SAHARAN AFRICA: A FEASIBLE OPTION?

Patricia Akweongo
Navrongo Health Research Centre, Navrongo, Ghana

11:25 a.m.

INTEGRATED MANAGEMENT OF MALARIA AND PNEUMONIA AT THE COMMUNITY-LEVEL: PRELIMINARY RESULTS FROM A CLUSTER-RANDOMIZED TRIAL

John O. Gyapong
Ghana Health Service, Accra, Ghana

11:45 a.m.

DISCUSSION

Joel G. Breman
Fogarty International Center, Bethesda, MD, United States

Exhibit Hall Open/Light Lunch

Napoleon Ballroom
Monday, December 8, Noon – 1:30 p.m.

Poster Session 26/Light Lunch

Poster Session A (#50-321 and Late Breakers)

Armstrong Ballroom
Monday, December 8, Noon – 1:30 p.m.

Arthropods/Entomology-Other

50

ECOLOGICAL AND GENETIC RELATIONSHIPS OF THE FOREST-M FORM AMONG CHROMOSOMAL AND MOLECULAR FORMS OF THE MALARIA VECTOR *ANOPHELES GAMBIAE S S*.

Yoosook Lee[1], Claudio R. Meneses[1], Abdrahamane Fofana[2], Aurélie G. Andrianarivo[1], Rory D. McAbee[1], Etienne Fondjo[3], Sekou F. Traoré[2], Anthony J. Cornel[1], Gregory C. Lanzaro[1]
[1]University of California Davis, Davis, CA, United States, [2]Malaria Research and Training Center, Faculty of Medicine, University of Mali, Bamako, Mali, [3]National Malaria Program, Ministry of Health, Yaoundé, Cameroon

51

CROSS-SCALE PATTERNS OF PALM TREE INFESTATION BY TRIATOMINE BUGS (*HETEROPTERA: TRIATOMINAE*) IN AMAZONIA

Fernando Abad-Franch[1], Gonçalo Ferraz[1], Ciro Campos[1], Francisco S. Palomeque[2], Mario J. Grijalva[3], H Marcelo Aguilar[4], Michael A. Miles[5]
[1]Instituto Leônidas e Maria Deane – Fiocruz Amazônia, Manaus, Brazil, [2]Rollins School of Public Health, Emory University, Atlanta, GA, United States, [3]Tropical Disease Institute, Biomedical Sciences Department, Ohio University College of Osteopathic Medicine, Athens, OH, United States, [4]Organismo Andino de Salud – Convenio Hipólito Unanue/PAMAFRO, Quito, Ecuador, [5] p.m.BU-ITD, London School of Hygiene and Tropical Medicine, London, United Kingdom

52

SCABIES: EMERGING IVERMECTIN RESISTANCE IN A NEGLECTED ECTOPARASITIC DISEASE

Kate E. Mounsey[1], James S. McCarthy[1], Deborah C. Holt[2], Cielo Pasay[1], Bart J. Currie[3], Shelley F. Walton[2]
[1]Queensland Institute of Medical Research, University of Queensland, Brisbane, Australia, [2]Menzies School of Health Research, Charles Darwin University, Darwin, Australia, [3]Northern Territory Clinical School, Flinders University, Darwin, Australia

53

POPULATION GENETIC STRUCTURE OF *GLOSSINA FUSCIPES* IN UGANDA

Jon Beadell[1], Patrick Abila[2], Chaz Hyseni[1], Serap Aksoy[1], Loyce Okedi[2], Adalgisa Caccone[1]
[1]Yale University, New Haven, CT, United States, [2]National Livestock Health Research Institute, Tororo, Uganda

54

THE PHLEBOTOMINE SAND FLY FAUNA (DIPTERA: SYCHODIDAE) OF SIX *LEISHMANIA*-ENDEMIC SITES IN KABUL CITY, AFGHANISTAN

Hanafi A. Hanafi[1], Toby Leslie[1], Shabaan S. El-Hossary[1], Abdul Ali Ahmadi[2], Noorulhaleim Z. Safi[2], Najibullah Safi[2], Barry D. Furman[1]
[1]U.S. Naval Medical Research Unit No. 3, Cairo, Egypt, [2]National Malaria and Leishmaniasis Control Program, Ministry of Public Health, Kabul, Afghanistan

55

IMMUNITY IN *LUTZOMYIA LONGIPALPIS*: PUTATIVE GENES AND IDENTIFICATION OF A NONSPECIFIC ANTIVIRAL RESPONSE

Andre N. Pitaluga[1], Antonio J. Tempone[1], Juliana M. Dutra[1], Peter W. Mason[2], **Yara M. Traub-Csekö**[1]
[1]Instituto Oswaldo Cruz, Fiocruz, Rio de Janeiro, Brazil, [2]University of Texas Medical Branch, Galveston, TX, United States

56

USAMRU-K ENTOMOLOGY: CAPACITY AND CURRENT FOCUS

Jeffrey W. Clark
USAMRU-K, Nairobi, Kenya

57

WASTE TIRES AND RISK FOR DENGUE FEVER INFECTION IN BROWNSVILLE, TEXAS AND MATAMOROS, TAMAULIPAS

Mary H. Hayden[1], Emily Zielinski-Gutierrez[2], Christopher Uejio[3], Roberto Barrera[4], Jose Luis Robles Lopez[5], Josue Ramirez[6], Manuel Amador[4], Annette Diaz[4], Stephen Waterman[7]
[1]National Center for Atmospheric Research, Boulder, CO, United States, [2]Centers for Disease Control and Prevention/DVBID, Fort Collins, CO, United States, [3]University of Wisconsin-Madison, Madison, WI, United States, [4]Centers for Disease Control and Prevention/DVBID, San Juan, PR, United States, [5]Jurisdiccion Sanitaria III, Matamoros, Mexico, [6]Brownsville Department of Health, Brownsville, TX, United States, [7]Centers for Disease Control and Prevention/DGMQ, San Diego, CA, United States

58

COST-EFFECTIVENESS OF CHAGAS DISEASE VECTOR CONTROL STRATEGIES IN NORTHWESTERN ARGENTINA

Gonzalo M. Vazquez-Prokopec[1], Cynthia Spillmann[2], Mario Zaidenberg[2], Uriel Kitron[1], Ricardo E. Gürtler[3]
[1]Emory University, Atlanta, GA, United States, [2]Coordinación Nacional de Control de Vectores, Ministerio de Salud de la Nación, Córdoba, Argentina, [3]Laboratorio de Eco-Epidemiología, Universidad de Buenos Aires, Buenos Aires, Argentina

59

THE CHAGAS VECTOR, *TRIATOMA DIMIDIATA*, SPECIES AND CRYPTIC SPECIES OCCUR IN SYMPATRY IN GUATEMALA AND MEXICO

Patricia L. Dorn[1], Claudia Calderon[2], Sergio Melgar[2], Barbara Moguel[3], Elizabeth Solorzano[3], Eric Dumonteil[4], Carlota Monroy[3]
[1]Loyola University New Orleans, New Orleans, LA, United States, [2]University of Wisconsin, Madison, WI, United States, [3]San Carlos University, Guatemala City, Guatemala, [4]Autonomous University of the Yucatan, Merida, Mexico

60

PREVALENCE OF *TRYPANOSOMA CRUZI* IN TRIATOMINE VECTORS IN THE SOUTHWESTERN UNITED STATES

Jonathan R. Kurtz[1], Stephen A. Klotz[2], Justin Schmidt[2], Patricia L. Dorn[1]
[1]Loyola University New Orleans, New Orleans, LA, United States, [2]Arizona Health Sciences Center, Tucson, AZ, United States

Cinical Tropical Medicine

61

EVALUATION OF MULTI-DRUG THERAPY IN THE U.S.A. USING DAILY RIFAMPIN

Mara Dacso[1], R. R. Jacobson[2], D. M. Scollard[2], B. Stryjewska[2], J. Prestigiacomo[2]
[1]Univeristy of Texas Medical Branch at Galveston, Galveston, TX, United States, [2]National Hansen's Disease Programs, Baton Rouge, LA, United States

62

PHASE I CLINICAL TRIAL OF V3526, VIROLOGICAL AND SEROLOGICAL ANALYSES

Michael Parker[1], Donald Fine[2], Pamela Glass[3], Sara Terpening[4], Rayburn Mallory[3], Sarah Helber[5]
[1]US Army Medical Research Institute of Infectious Disease, Frederick, MD, United States, [2]Dymport Vaccine Co., a CSC Company, Frederick, MD, United States, [3]U.S. Army Medical Research Institute for Infectious Diseases, Frederick, MD, United States, [4]Dynport Vaccine Co., LLC, a CSC Co, Frederick, MD, United States, [5]Commonwealth Biotechnologies Inc, Richmond, VA, United States

63

SURVIVAL OF NEUTRALIZING ANTIBODY IN PREVIOUSLY RABIES VACCINATED SUBJECTS: A PROSPECTIVE STUDY SHOWING LONG LASTING IMMUNITY

Kanitta Suwansrinon
Queen Soavabha Memorial Institute, Bangkok, Thailand

64

EVALUATION OF THE IMPACT OF OVERSEAS PRE-DEPARTURE TREATMENT FOR INTESTINAL PARASITES AMONG MONTAGNARD REFUGEES MIGRATING FROM CAMBODIA TO NORTH CAROLINA, USA

Suzanna A. Young
North Carolina Division of Public Health, Raleigh, NC, United States

65

TO STUDY THE CLINICAL PROFILE OF PATIENTS PRESENTING WITH DENGUE DURING THE OUTBREAK IN 2006 TO THE EMERGENCY DEPARTMENT OF AN URBAN TERTIARY CARE HOSPITAL

Sanjeev Bhoi, Ashish Goel, Jasjit Singh
All India Institute of Medical Sciences, New Delhi, India

66

RETROSPECTIVE STUDY OF ANTIBIOTIC RESISTANCE AMONG *SALMONELLA ENTERICA* ISOLATES FROM 2005-2007

Bharat M. Pokhrel[1], Janak Koirala[2], Rajan Kumar Dahal[1], Prem Kumar Khadga[1], Basista Prasad Rijal[1], Nhuchhe Ratna Tuladhar[1]
[1]Tribhuvan University, Institute of Medicine, Kathmandu, Nepal, [2]Southern Illinois University, School of Medicine, Springfield, IL, United States

67

THE CLINICAL PATTERN AND COMPLICATIONS OF SEVER MALARIA IN PARTS OF THE IMO RIVER BASIN OF NIGERIA

Uchechukwu M. Chukwuocha[1], Ikechukwu N. Dozie[2], Betram E. Nwoke[2], Celestine O. Onwuliri[1], Kelechi K. Ashiegbu[3]
[1]Federal University of Technology, Owerri, Nigeria, [2]Imo State University, Owerri, Nigeria, [3]Federal Medical Center, Owerri, Nigeria

68

IDENTIFICATION OF IMUNODOMINANT REGIONS OF LEPTOSPIRAL IMMUNOGLOBULIN-LIKE PROTEINS FOR USE IN THE DIAGNOSIS OF LEPTOSPIROSIS

Julio Croda[1], Marco A. Medeiros[2], Rena Greenwald[3], Jenny Sun[3], Alan Mcbride[1], Sharon J. Peacock[4], Henry A. Choy[5], David A. Haake[5], Akira Homma[2], Mitermayer G. Reis[1], Javan Esfandiari[3], Konstantin P. Lyashchenko[3], Albert I. Ko[6]
[1]Oswaldo Cruz Foundation, Gonçalo Moniz Institute, Brazilian Ministry of Health, Salvador, Brazil, [2]Oswaldo Cruz Foundation, Biomanguinhos, Brazilian Ministry of Health, Rio de Janeiro, Brazil, [3]Chembio Diagnostic Systems, Inc., Medford, NY, United States, [4]Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, [5]Veterans Affairs Greater Los Angeles Healthcare System, Department of Medicine and the David Geffen School of Medicine at UCLA, Los Angeles, CA, United States, [6]Oswaldo Cruz Foundation, Gonçalo Moniz Institute, Brazilian Ministry of Health and Division of International Medicine and Infectious Disease, Weill Medical College of Cornell University, Ithaca, NY, United States

69

OPHTHALMOMYIASIS BY *CALLIPHORIDAE* LARVAE IN A 16-YEAR-OLD FEMALE FROM HAWAII

John D. Campagna, Suzie T. Nemmers
Tripler Army Medical Center, Honolulu, HI, United States

70

PERCEPTIONS OF MOTHERS AND HOSPITAL STAFF OF PAEDIATRIC CARE IN 13 PUBLIC HOSPITALS IN NORTHERN TANZANIA

Rose W. Mwangi
Kilimanjaro Christian Medical Center, Moshi, United Republic of Tanzania

71

HEALTH FACILITY-BASED ASSESSMENT OF THE BURDEN OF MALARIA IN LUANDA, ANGOLA

Julie I. Thwing[1], Jules Mihigo[1], Alexandra F. Pataca[2], Francisco Saute[3], Carolina Ferreira[4], Filomeno Fortes[5], Gabriel Ponce-de-Leon[1], Alexandre Macedo de Oliveira[1], Robert Newman[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Direcção Provincial de Saúde, Luanda, Angola, [3]United States Agency for International Development, Luanda, Angola, [4]Instituto Nacional de Saúde Pública, Luanda, Angola, [5]National Malaria Control Program, Luanda, Angola

72

IN-VIVO EFFICACY OF AMODIAQUINE-ARTESUNATE FOR TREATMENT OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN CHILDREN IN WESTERN KENYA

Julie I. Thwing[1], **Christopher Odero**[2], Frank Odhiambo[2], Simon Kariuki[2], Cally Roper[3], Rosalyn Ord[3], Meredith McMorrow[1], S. Patrick Kachur[1], Lawrence Slutsker[1], John Vulule[4], Robert Newman[1], Mary Hamel[2], Meghna Desai[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, [3]London School of Tropical Medicine and Hygiene, London, United Kingdom, [4]Kenya Medical Research Institute, Kisumu, Kenya

73

TREATMENT OF SEVERE SEPSIS WITH ARTEMETHER-LUMEFANTRINE IS ASSOCIATED WITH DECREASED MORTALITY IN UGANDAN PATIENTS WITHOUT MALARIA

Christopher Moore[1], Shevin Jacob[1], Relana Pinkerton[1], Patrick Banura[2], David Meya[3], Steven Reynolds[4], Nathan Kenya-Mugisha[5], Harriet Mayanja-Kizza[3], W. Michael Scheld[1]
[1]University of Virginia, Charlottesville, VA, United States, [2]Masaka Regional Referral Hospital, Masaka, Uganda, [3]Makerere University, Kampala, Uganda, [4]National Institutes of Health, Bethesda, MD, United States, [5]Maska Regional Referral Hospital, Masaka, Uganda

74

A SURVEY OF PHLEBOTOMINE SAND FLIES IN THREE FOCI OF CUTANEOUS LEISHMANIASIS IN THE HO DISTRICT OF THE VOLTA REGION OF GHANA

Shirley C. Odoom
Noguchi Memorial Institute for Medical Research, Accra, Ghana

75

HIV, GRAVIDITY AND MALARIA DURING PREGNANCY IN SOUTHERN MALAWI: ANTAGONISTIC INTERACTION?

Ella T. Nkhoma[1], Linda Kalilani[2], Victor Mwapasa[2], Stephen J. Rogerson[3], Steven R. Meshnick[1]
[1]UNC-Chapel Hill, Chapel Hill, NC, United States, [2]College of Medicine, Blantyre, Malawi, [3]University of Melbourne, Parkville, Victoria, Australia

76

NOVEL RECOMBINANT ANTIGEN-BASED ELISA FOR ASSESSING EXPOSURE TO MALARIA IN AT-RISK BLOOD DONORS

G-Halli R. Rajasekariah, Diane Dogcio, Jennifer J. Rubie, Hubert G. Mazure, Anthony M. Smithyman
Cellabs Pty Ltd Brookvale, Australia

77

COMPLIANCE TO UNSUPERVISED ACTS IN YOUNG BENINESE CHILDREN: DATA FROM A RANDOMISED TRIAL COMPARING ARTEMETHER-LUMEFANTRINE TO AMODIAQUINE-ARTESUNATE FIXED-DOSE FORMULATIONS

Jean-François Faucher[1], Pascal Houzé[2], Jennifer Wong[2], Bernard Gourmel[2], Valérie Lameyre[3], Philippe Deloron[4]
[1]IRD, Cotonou, Benin, [2]Saint-Louis Hospital Biochemistry Laboratory, Paris, France, [3]Sanofi, Gentilly, France, [4]IRD, Paris, France

78

CLIMATE CHANGE AND TROPICAL PUBLIC HEALTH

Paul R. Epstein
Harvard Medical School, Boston, MA, United States

79

ENHANCED EFFICACY OF AMODIAQUINE AND CHLORPHENIRAMINE COMBINATION OVER AMODIAQUINE ALONE IN THE TREATMENT OF ACUTE UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN CHILDREN

Catherine O. Falade[1], Obaro S. Michael[1], Ayoade M. Oduola[2]
[1]University of Ibadan, Ibadan, Nigeria, [2]Special Program for Research and Training in Tropical Diseases, World Health Organization, Geneva, Switzerland

80

CHANGING TRENDS OF DENGUE EPIDEMIC DURING RECENT OUTBREAK IN NORTH INDIA

Vineet Gupta[1], Sanjeev Bhoi[1], Ashish Goel[1], Gaurav Alreja[2], Prasun Mishra[3]
[1]All India Institute of Medical Sciences, New Delhi, India, [2]Baystate Medical Center, Springsfield, MA, United States, [3]Jacobi Medical Center, Bronx, NY, United States

81

ACTIVITY OF AQUEOUS METHANOL AND WATER EXTRACTS OF *OSYRIS LANCEOLATA* ON ATCC 2592223 *STAPHYLOCOCUSS AUREUS* AND CLINICAL ISOLATES OF *STAPHYLOCOCUSS AUREUS*

Edna A. Ooko[1], Dr. Peter Lomo[1], Dr. Paul O. Ongugo[2], Dr.Christine Bii[3], Prof. Ahmed Hassanali[4]
[1]Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, [2]Kenya Forestry Research institute, Nairobi, Kenya, [3]Kenya Medical Research Institute, Nairobi, Kenya, [4]International Center for Insect Physiology and Ecology, Nairobi, Kenya

82

LABORATORY PROFILE OF DENGUE OUTBREAK IN A DEVELOPING NATION (2006)

Vineet Gupta, Ashish Goel, Sanjeev Bhoi
All India Institute of Medical Sciences, New Delhi, India

83

FEASIBILITY, ACCEPTABILITY AND SAFETY OF USING ACTS IN HOME BASED MANAGEMENT OF FEVER IN RURAL UGANDA

Bateganya F. Mukama
Makerere University, Kampala, Uganda

84

EVALUATION OF HOME-BASED MANAGEMENT OF FEVER WITH ARTEMETHER-LUMEFANTRINE IN URBAN UGANDAN CHILDREN: A RANDOMIZED TRIAL

Norah Mwebaza[1], Moses R. Kamya[1], Tamara D. Clark[2], Grant Dorsey[2], Philip J. Rosenthal[2], Christopher J. Whitty[3], Sarah G. Staedke[3]
[1]Makerere University, Kampala, Uganda, [2]University of California, San Francisco, San Francisco, CA, United States, [3]London School of Hygiene and Tropical Medicine, London, United Kingdom

85

ELEVATED CEREBROSPINAL FLUID LEVELS OF NITRIC OXIDE ARE ASSOCIATED WITH PROTECTION FROM LONG-TERM COGNITIVE IMPAIRMENT IN CHILDREN WITH CEREBRAL MALARIA

Michael T. Rhodes[1], Paul Bangirana[2], Robert O. Opoka[3], Richard Idro[3], Justus Byarugaba[3], Michael J. Boivin[4], Chandy C. John[1]
[1]University of Minnesota, Minneapolis, MN, United States, [2]Makerere University, Kampala, Uganda, [3]Makerere University and Mulago Hospital, Kampala, Uganda, [4]Michigan State University, East Lansing, MI, United States

86

AN ASSAY SYSTEM FOR QUANTIFYING HISTIDINE RICH PROTEINS IN HUMAN MALARIA BLOOD SAMPLES

G-Halli R. Rajasekariah[1], Anthony M. Smithyman[1], Rogan Lee[2], Diane Dogcio[1], Kira Jessup[1]
[1]Cellabs Pty Ltd Brookvale, Australia, [2]ICPMR, Westmead Hospital, Westmead, NSW, Australia, Australia

87

DETECTION OF SURFACE COATED SPECIFIC ANTIBODY OF *CANDIDA TROPICALIS* ISOLATES FROM CLINICAL MATERIALS BY ELISA TEST

Anindita Nandy, Saikat Basu, **Satadal Das**
Peerless Hospital & B. K. Roy Research Centre, Kolkata, India

88

INCREASING PREVALENCE OF NOSOCOMIAL FLUCONAZOLE RESISTANT *CANDIDA TROPICALIS* INFECTION IN KOLKATA, INDIA

Saikat Basu, Anindita Nandy, Satadal Das
Peerless Hospital & B. K. Roy Research Centre, Kolkata, India

89

EFFECT OF AGRICULTURAL ACTIVITIES ON PREVALENCE RATES, CLINICAL AND PRESUMPTIVE MALARIA EPISODES IN CENTRAL CÔTE D'IVOIRE

Koudou G. Benjamin[1], Utzinger Juerg[2], Utzinger Juerg[2], Tanner Marcel[2]
[1]University of Abobo Adjamé, Abidjan, Cote d'Ivoire, [2]Swiss Tropical Institute, Switzerland, Basel, Switzerland

90

NOVEL ANTIHAEMORRAGIC EFFECT OF A NEW LOTION

Francis Enifo Oronsaye[1], Praise Ikpomwonsa Oronsaye[2]
[1]University of Benin School of Medicine, Benin City, Edo State, Nigeria, [2]University of Benin Teaching Hospital, Benin City, Edo State, Nigeria

91

AN INDIVIDUALLY RANDOMISED TRIAL OF RAPID DIAGNOSTIC TESTS IN RURAL GHANA

Evelyn K. Ansah
Ghana Health Service, Accra, Ghana

92

A STANDARDIZED IGG4 ANTIBODY ELISA FOR DETECTING FILARIAL INFECTIONS AND FOR MONITORING EXPOSURE TO LYMPHATIC FILARIASIS

G-Halli R. Rajasekariah[1], Diane Dogcio[1], Gary J. Weil[2], Wayne Melrose[3], Hubert Mazure[1], Anthony M. Smithyman[1]
[1]Cellabs Pty Ltd Brookvale, Australia, [2]Infectious Diseases Division, Washington University School of Medicine, St. Louis, MO, United States, [3]School of Public Health and Tropical Medicine, James Cook University, Townsville, Australia

93

QUALITY OF MEDICAL RECORDS: RESULTS FROM AN AUDIT OF SIX HOSPITALS IN UGANDA

Arthur Mpimbaza[1], Agaba Katureebe[1], Amos Odiit[2], Linda Quick[3], Amy Ratcliffe[3], Scott Filler[3], Moses R. Kamya[4], Sarah G. Staedke[5]
[1]Uganda Malaria Surveillance Project, Kampala, Uganda, [2]Mulago Hospital, Kampala, Uganda, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Makerere University, Kampala, Uganda, [5]London School of Hygiene and Tropical Medicine, London, United Kingdom

94

PHARMACOKINETICS OF SULFADOXINE AND PYRIMETHAMINE IN THE INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY

Myaing M. Nyunt[1], Kassoum Kayentao[2], Phil Thuma[3], Janneke van Dijk[3], Etienne Guirou[2], Boubacar Traore[2], Ogobara Doumbo[2], Peter Smith[4], Karen Barnes[4], David Sullivan[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]University of Bamako, Bamako, Mali, [3]Malaria Research at Macha, Choma, Zambia, [4]University of Cape Town, Cape Town, South Africa

95

Q FEVER COMPLICATED BY OGILVIE'S SYNDROME IN A U.S. SOLDIER

Joshua D. Hartzell[1], Todd Gleeson[2], Chris Ockenhouse[3], Glenn Wortmann[1]
[1]Walter Reed Army Medical Center, Washington, DC, United States, [2]National Navy Medical Center, Bethesda, MD, United States, [3]Walter Reed Army Institute of Research, Silver Spring, MD, United States

96

INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN INFANTS IN AN AREA OF HIGH SP RESISTANCE IN TANZANIA: A RANDOMIZED DOUBLE BLIND PLACEBO CONTROLLED TRIAL OF SP, LAPDAP OR MEFLOQUINE FOR PREVENTION OF MALARIA IN INFANTS

Samwel Gesase[1], Jacklin F. Mosha[2], Roly D. Gosling[3], Ilona Carneiro[3], Ramadhan Hashim[1], Martha Lemnge[1], Frank W. Mosha[2], Brian M. Greenwood[4], Brian M. Greenwood[3], Daniel Chandramohan[3]
[1]National Institute of Medical Research, Tanga, United Republic of Tanzania, [2]Kilimanjaro Christian Medical College, Moshi, United Republic of Tanzania, [3]London School of Hygiene and Tropical Medicine, London, United Kingdom, [4]London School of Hygiene and Tropical Medicine, United Republic of Tanzania

Diarrhea

97

MANAGEMENT OF CHILDHOOD DIARRHEAL DISEASE IN GONDAR, ETHIOPIA

Rishi P. Mediratta[1], R. Bradley Sack[2]
[1]Johns Hopkins University, Baltimore, MD, United States, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

98

DIARRHEA OUTBREAK WITH HIGH MORTALITY AMONG YOUNG CHILDREN IN SANTA ROSA, GUATEMALA – 2008

Wences Arvelo[1], Lissette Reyes[1], Beatriz Lopez[1], Michele Parsons[2], Tara Kerin[2], Marc-Alain Widdowson[2], Nancy Pezzarossi[3], Eric Mintz[2], Kimberly Lindblade[2]
[1]Universidad del Valle, Guatemala City, Guatemala, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Ministry of Public Health and Social Welfare of Guatemala, Guatemala City, Guatemala

99

BARRIERS TO MAINTAINING THE MICROBIOLOGIC QUALITY OF DRINKING WATER, SOUTH SULAWESI, INDONESIA: BANTAENG AND MAROS DISTRICTS, 2007

Samir V. Sodha[1], Manoj Menon[1], Kavita Trivedi[1], Abigael Ati[2], Maria Elena Figueroa[2], Robert Ainslie[2], Kathleen Wannemuehler[1], Rob Quick[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Johns Hopkins Bloomberg School of Public Health Center for Communications Programs, Baltimore, MD, United States

100

AVAILABILITY OF ORAL REHYDRATION SOLUTION PACKETS AT SMALL SHOPS IN TWO AREAS OF KENYA, 2007

Stefanie Bolas[1], Christine K. Olson[2], Kinnery Naik[2], Alice Mathingau[3], Beatrice Odidi[3], Lauren S. Blum[3], Daniel R. Feikin[3], Kayla F. Laserson[4], Annah W. Wamae[5], Robert F. Breiman[3], Pavani Kalluri Ram[1]
[1]University at Buffalo, Buffalo, NY, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]International Emerging Infections Program, CDC/KEMRI, Kisumu, Kenya, [4]CDC/KEMRI – Centre for Global Health Research, Kisumu, Kenya, [5]Republic of Kenya Ministry of Health, Nairobi, Kenya

101

RECOMMENDATION OF ORAL REHYDRATION SOLUTION FOR DIARRHEA CASE MANAGEMENT BY PHARMACY WORKERS IN KENYA, 2007

Pavani Kalluri Ram[1], Christine K. Olson[2], Kinnery Naik[2], Lauren S. Blum[3], Amy L. Boore[2], Alice Mathingau[3], Beatrice Odidi[3], Daniel R. Feikin[3], Kayla F. Laserson[4], Annah W. Wamae[5], Robert F. Breiman[3]
[1]University at Buffalo, Buffalo, NY, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]International Emerging Infections Program, CDC/KEMRI, Kisumu, Kenya, [4]CDC/KEMRI – Centre for Global Health Research, Kisumu, Kenya, [5]Republic of Kenya Ministry of Health, Nairobi, Kenya

102

INAPPROPRIATE RECOMMENDATION OF ANTIMICROBIAL AGENTS FOR TREATMENT OF WATERY DIARRHEA BY HEALTH WORKERS IN KENYA, 2007

Amy L. Boore[1], Kinnery Naik[1], Christine K. Olson[1], Lauren S. Blum[2], Alice Mathingau[2], Beatrice Odidi[2], Daniel R. Feikin[2], Kayla F. Laserson[3], Annah W. Wamae[4], Robert F. Breiman[2], Pavani Kalluri Ram[5]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]International Emerging Infections Program, Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, [3]Centers for Disease Control and Prevention/Kenya Medical Research Institute — Centre for Global Health Research, Kisumu, Kenya, [4]Republic of Kenya Ministry of Health, Nairobi, Kenya, [5]University at Buffalo, Buffalo, NY, United States

103

FECAL LEUCOCYTES IN DIARRHEAGENIC *E. COLI*

Erik H. Mercado, Martin Cabello, Francesca Barletta, Theresa Ochoa
Universidad Peruana Cayetano Heredia, Lima, Peru

104

A NOVEL NEONATAL MURINE MODEL OF ENTEROAGGREGATIVE *ESCHERICHIA COLI* INFECTION

Ace Bryan S. Cabal[1], James K. Roche[2], Jesus Emmanuel A. Sevilleja[1], James P. Nataro[3], Richard L. Guerrant[2]
[1]Enteric Diseases Study Group, National Institutes of Health, *University of the Philippines-Manila, Manila, Philippines, [2]Center for Global Health, Division of Infectious Disease and International Health, Department of Medicine, University of Virginia, Charlottesville, VA, United States, [3]Center for Vaccine Development, Departments of Pediatrics, Medicine, and Microbiology and Immunology, University of Maryland School of Medicine, Baltimore, MD, United States*

105

ROTAVIRUS INFECTION PREVALENCE AMONG INDONESIAN PEDIATRIC GASTROENTERITIS PATIENTS

Narain Punjabi[1], Magdrina Agtini[2], Erlin Listyaningsih[1], Matthew Kasper[1], Shannon Putnam[1]
[1]Naval Medical Research Unit No. 2, Jakarta, Indonesia, United States, [2]National Institutes of Health Research and Development, Jakarta, Indonesia

106

THE IMPACT OF A COMMUNITY-BASED PROGRAM TO PROMOTE POINT-OF USE WATER CHLORINATION PRODUCTS AND REDUCE DIARRHEAL RATES IN RURAL WESTERN KENYA

Patricia C. Juliao[1], Kathryn Teates[1], Alison Liang[2], Vincent Were[3], Alfredo Obure[3], Parminder Suchdev[1], Laird Ruth[1], Mike Hoekstra[1], Rob Quick[1]
[1]Center for Disease Control and Prevention, Atlanta, GA, United States, [2]Emory University, Atlanta, GA, United States, [3]Kenya Medical Research Institution, Kisumu, Kenya

107

ARGININE REDUCES *CRYPTOSPORIDIUM PARVUM* INFECTION IN MALNOURISHED SUCKLING MICE WITH INDUCIBLE NITRIC OXIDE AND ARGINASE INVOLVEMENT

Bruna B. Oliveira[1], Ibraim C. Castro[1], **Jesus E. Servilleja**[1], Jacek J. Slowikowski[1], Bruna P. Coutinho[1], Aldo A. Lima[2], Reinaldo B. Oria[3], Richard L. Guerrant[1]
[1]Center for Global Health, School of Medicine, University of Virginia, Charlottesville, VA, United States, [2]Institute of Biomedicine, School of Medicine, Federal University of Ceara, Fortaleza, Brazil, [3]Institute of Biomedicine and Morphology Department, School of Medicine, Federal University of Ceara, Fortaleza, Brazil

(ACMCIP Abstract)

108

TYPHOID FEVER: A RARE CAUSE OF FEVER AND DIARRHEA IN USA

Rahul Sehgal, Vishal Raj, Jaspreet Singh, Shadab Ahmed
Nassau University Medical Center, East Meadow, NY, United States

109

ETIOLOGY OF TRAVELERS' DIARRHEA AMONG INTERNATIONAL TOURISTS IN CUSCO, PERU

Rina Meza[1], Miguel Villanueva[2], Andres G. Lescano[1], Martha Lopez[3], Miguel Cabada[2], Juan Perez[1], Yocelinda Meza[1], Fernando Maldonado[2], Franca R. Jones[4], Eduardo Gotuzzo[2], Eric R. Hall[1]
[1]Naval Medical Research Center-Detachment, Lima, Peru, [2]Alexander Von Humboldt Tropical Medicine Institute, Universidad Peruana Cayetano Heredia, Lima, Peru, [3]Service Salud Laboratory, Cusco, Peru, [4]Naval Medical Research Center, Silver Spring, MD, United States

Flaviviridae- Dengue

110

PROLONGED DENGUE OUTBREAK IN TOURIST AREA, AN EASTERN PROVINCE, THAILAND, MARCH – JULY 2007

Rome Buathong[1], Potjaman Siriarayapon[1], Bun Sreng[2], Zheng Yan[2], Mantos Levio[2], Vanlaya Srethapranai[2], Krit Parnsut[3], Wilarwan Iamsa-aad[3], Surapee Anantapreecha[4], Michael O'Reily[5]
[1]Feild Epidemiology Training Program, Bureau of Epidemiology, Nonthaburi, Thailand, [2]International Field Epidemiology Training Program, Bureau of Epidemiology, Nonthaburi, Thailand, [3]Rayong Provincial Health Offices, Rayong, Thailand, [4]Arbovirus Section, National Institutes of Health, Department of Medical Science, Nonthaburi, Thailand, [5]Thailand Ministry of Public Health – United State Center for Disease Control and Prevention Collaboration Center (TUC), Nonthaburi, Thailand

111

PRODUCTION AND CHARACTERIZATION OF SINGLE-CYCLE REPLIVAX VACCINES TO PREVENT DENGUE

Evandro R. Winkelmann[1], Ryosuke Suzuki[2], Peter W. Mason[1]
[1]Department of Pathology, UTMB, Galveston, TX, United States, [2]Department of Virology II, NIID, Tokyo, Japan

112

THE INFLUENCE OF CLIMATE ON DENGUE TRANSMISSION AT LOCAL AND REGIONAL SCALES IN PUERTO RICO

Michael A. Johansson[1], Francesca Dominici[2], Gregory E. Glass[2]
[1]Centers for Disease Control, San Juan, PR, United States, *[2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*

113

ECONOMIC COST OF OFFICIALLY REPORTED DENGUE CASES IN EIGHT COUNTRIES IN THE AMERICAS AND ASIA

Jose A. Suaya[1], Binod K. Sah[1], Joao B. Siqueira[2], Celina T. Martelli[2], Lucy C. S. Lum[3], Sukhontha Kongsin[4], Sukhum Jiamton[5], Fàtima Garrido[6], Romeo Montoya[7], Blas Armien[8], Rekol Huy[9], Leticia Castillo[10], Lian H. Tan[3], Donald S. Shepard[1]
[1]Heller School, Brandeis University, Waltham, MA, United States, [2]Federal University of Goiás, Goiana, Brazil, [3]University of Malaya Medical Center, Kuala Lumpur, Malaysia, [4]Mahidol University, Bangkok, Thailand, [5]Mahidol University, Bangkok, Thailand, [6]Ministry of Health and Social Development, Caracas, Venezuela, [7]Ministry of Health and Social Assistance, San Salvador, El Salvador, [8]Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama, [9]The National Dengue Control Program at the National Center for Malaria, Phnom Penh, Cambodia, [10]National Health Laboratory, Guatemala City, Guatemala

114

SPATIAL VULNERABILITY TO DENGUE IN COASTAL THAILAND: A CASE STUDY, PRACHUAP KHIRIKHAN, 2003-2007

Mathuros Tipayamongkholgul[1], Chi-Tai Fang[1], Chwan-Chuen King[1], Sunisa Lisakulruk[2]
[1]College of Public Health, National Taiwan University, Taiwan, [2]Prachuap Khirikhan Provincial Public Health Office, Ministry of Public Health, Thailand

115

TRENDS OF DENGUE CASES AND DEATHS IN CEBU, PHILIPPINES

Frances Edillo[1], Jonathan Neil Erasmo[2], Joseph Tagle[2], Rennan Cimafranca[2], Susana Madarieta[2]
[1]University of San Carlos, Biology Department, Cebu City, Philippines, [2]Department of Health, Cebu City, Philippines

116

EVALUATION OF NS1 PROTEIN DETECTION AS A DIAGNOSTIC METHOD FOR DENGUE-3 INFECTION IN BRAZIL

Luiza A. Castro, Camila A. Fávero, Paula R. Machado, Marcos C. Borges, **Benedito A. Fonseca**
School of Medicine of Ribeirão Preto, Ribeirão Preto, S.P., Brazil

117

VIRUS REPLICATION IS INHIBITED BY RNA INTERFERENCE (RNAI) DIRECTED TO DIFFERENT DENGUE GENOMIC REGIONS

Alessandra C. Gomes-Ruiz[1], Breno M. Silva[2], Cláudio A. Bonjardim[2], **Benedito A. Fonseca**[1]
[1]School of Medicine of Ribeirão Preto, Ribeirão Preto, S.P., Brazil, [2]Federal University of Minas Gerais, Belo Horizonte, M.G., Brazil

118

MOLECULAR EPIDEMIOLOGY OF THE FOUR SEROTYPES OF THE DENGUE VIRUS IN PERU DURING 1990 – 2007 AND MOLECULAR SURVILLANCE IN 2008

Enrique Mamani[1], Cristina Domingo[2], Victoria Gutierrez[1], Paquita Garcia[1], Juan Arbiza[3], Juan Gallegos[4], Antonio Tenorio[2]
[1]Instituto Nacional de Salud, Lima, Peru, [2]Instituto de Salud Carlos III, Madrid, Spain, [3]Universidad de la República, Montevideo, Uruguay, [4]Universidad de Antioquia, Bogota, Colombia

119

THE EFFECT OF ROAD ACCESS ON THE TRANSMISSION OF DENGUE FEVER IN RURAL ECUADOR

Katherine J. Connors[1], Josefina Coloma[2], P. Robert Beatty[2], William Cevallos[3], Joseph N. Eisenberg[1]
[1]University of Michigan School of Public Health, Ann Arbor, MI, United States, [2]University of California, Berkeley, CA, United States, [3]University of San Francisco, Quito, Ecuador

120

PERFORMANCE OF THE DENGUE PLAQUE REDUCTION NEUTRALIZATION TEST (PRNT) IN PRIMARY AND SECONDARY DENGUE VIRUS (DENV) INFECTIONS ACROSS A SPECTRUM OF TEST CONDITIONS

Stephen Thomas[1], Ananda Nisalak[1], Daniel Libraty[2], Nongnard Sahasakmontri[3], Siripen Kalayanarooj[3], David Vaughn[4], Robert Putnak[5], Timothy Endy[6]
[1]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [2]University of Massachusetts Medical School, Worcester, MA, United States, [3]Queen Sirikit National Institute of Child Health, Bangkok, Thailand, [4]GlaxoSmithKline Biologicals, King of Prussia, PA, United States, [5]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [6]SUNY Upstate Medical University, Syracuse, NY, United States

121

SEROLOGICAL INVESTIGATIONS OF FLAVIVIRUS PREVALENCE IN KHAMMOUANE PROVINCE, LAO PDR, 2007-2008

Phengta Vongphrachanh[1], Thongchanh Sisouk[1], Virasack Somoulay[1], Surinder Kaul[2], Pany Sananikhom[3], Richard Paul[4], Paul Brey[5], **Juliet E. Bryant**[5]
[1]National Center for Laboratory and Epidemiology, Vientiane, Lao People's Democratic Republic, [2]Nam Theun 2 Power Co., International SOS, Vientiane, Lao People's Democratic Republic, [3]Nam Theun 2 Power Co., Vientiane, Lao People's Democratic Republic, [4]Institute Pasteur, Paris, France, [5]Institute Pasteur, Vientiane, Lao People's Democratic Republic

122

DO THE NONSTRUCTURAL PROTEINS 4A AND 4B OF DENGUE VIRUS CAUSE VESICLE FORMATION IN *AEDES AEGYPTI* CELLS?

B. Katherine Poole, Alexander W. Franz, Kenneth E. Olson, Carol D. Blair
Colorado State University, Fort Collins, CO, United States

123

DEFINING THE RELATIONSHIP BETWEEN DENGUE VIRUS TYPE-2 VIRAL GENETICS AND EPIDEMIC POTENTIAL IN PUERTO RICO, 1986-2007

Kate L. McElroy[1], Gilberto A. Santiago[1], Manuel Amador[1], Niall J. Lennon[2], Matthew R. Henn[2], Wellington Sun[1], Roberto Barrera[1], Jorge Muñoz-Jordán[1]
[1]Centers for Disease Control and Prevention, San Juan, Puerto Rico, [2]Broad Institute, Cambridge, MA, United States

124

CHLOROQUINE IMPROVES PAIN AND WELL-BEING OF DENGUE PATIENTS BUT DOES NOT INFLUENCE THE PRESENCE OF FEVER AND DURATION OF THE DISEASE

Benedito A. Fonseca, Camila A. Favero, Luiza A. Castro, Marcos C. Borges
School of Medicine of Ribeirão Preto, Ribeirão Preto, S.P., Brazil

125

GENETIC ANALYSIS OF DENGUE VIRUSES COLLECTED FROM MOSQUITOES AND HUMANS DURING DENGUE CLUSTER INVESTIGATIONS IN THAILAND

Richard G. Jarman[1], Chonticha Klungthong[1], Edward C. Holmes[2], Piyawan Chinnawirotpisan[1], Prinyada Rodpradit[1], Chusak Pimgate[1], Thomas W. Scott[3], Alan L. Rothman[4], In-Kyu Yoon[1], Robert V. Gibbons[1]
[1]Armed Forces Research Institute for Medical Sciences, Bangkok, Thailand, [2]Pennsylvania State University, University Park, PA, United States, [3]University of California, Davis, CA, United States, [4]University of Massachusetts Medical School, Worcester, MA, United States

126

EARLY CLINICAL AND LABORATORY MANIFESTATIONS OF DENGUE IN A PEDIATRIC COHORT STUDY IN MANAGUA, NICARAGUA

Oscar Ortega[1], Nicole Fitzpatrick[1], Guillermina Kuan[2], Angel Balmaseda[3], Yolanda Tellez[3], Juan Carlos Matute[3], Aubree Gordon[4], William Avilés[1], Andrea Nuñez[3], **Eva Harris**[4]
[1]Sustainable Sciences Institute, Managua, Nicaragua, [2]Socrates Flores Vivas Health Center, Managua, Nicaragua, [3]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, [4]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

127

TROPISM OF REPLICATING DENGUE VIRUS IN MICE AND HUMANS DEFINED BY VIRAL NONSTRUCTURAL PROTEIN 3-SPECIFIC IMMUNOHISTOCHEMISTRY

Scott J. Balsitis[1], Josefina Coloma[1], Glenda Castro[2], Aracely Alava[3], Diana Flores[1], Robert Beatty[1], Eva Harris[1]
[1]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, [2]Hospital de Infectología, Guayaquil, Ecuador, [3]Instituto Nacional de Higiene, Ministerio de Salud, Guayaquil, Ecuador

Helminths – Nematodes – Filariasis (Clinical)

128

INCREASED PREVALENCE OF HYDROCELE, LYMPHATIC DILATATION AND TESTICULAR CALCIFICATION IN MEN WITH *MANSONELLA PERSTANS* INFECTION

Siaka Y. Coulibaly[1], Benoit Dembele[1], Dramane Sanogo[1], Michel E. Coulibaly[1], Salif S. Doumbia[1], Lamine Soumarou[1], Siaka Konate[1], Housseini Dolo[1], Abdallah A. Diallo[1], Sekou Traore[1], Thomas B. Nutman[2], Amy D. Klion[2], Yaya I. Coulibaly[1], **Adama D. Keita**[3]
[1]Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [2]Laboratory of Parasitic Diseases, National Institutes of Health, Bethesda, MD, United States, [3]Department of Radiology, Hospital of Point G, Bamako, Mali

129

EFFECT OF ALBENDAZOLE AND IVERMECTIN DOSE ON *WUCHERERIA BANCROFTI* MICROFILARIAL CLEARANCE IN MALI: A RANDOMIZED, OPEN LABEL STUDY

Benoit Dembele[1], Yaya I. Coulibaly[1], Siaka Konate[1], Housseini Dolo[1], Siaka Y. Coulibaly[1], Dramane Sanogo[1], Lamine Soumaoro[1], Michel E. Coulibaly[1], Salif S. Doumbia[1], Abdallah A. Diallo[1], Sekou F. Traore[1], Adama D. Keita[2], Thomas B. Nutman[3], Amy D. Klion[3]
[1]Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [2]Department of Radiology, Hospital of Point G, Bamako, Mali, [3]Laboratory of Parasitic Diseases, National Institutes of Health, Bethesda, MD, United States

130

ONCHOCERCIASIS AS A SIGNIFICANT CAUSE OF EPILEPSY: EVIDENCE FROM MODELLING THE RELATIONSHIP BETWEEN ONCHOCERCIASIS AND EPILEPSY IN SEVEN AFRICAN COUNTRIES

Sébastien D. Pion[1], Christoph Kaiser[2], Fernand Boutros-Toni[3], Melanie M. Taylor[4], Stefanie Meredith[5], Ansgar Stufe[6], Ione Bertocchi[7], Walter Kipp[8], Pierre-Marie Preux[3], Michel Boussinesq[1]
[1]Institut de recherche pour le Développement, Montpellier, France, [2]Basic Health Services Kabarole & Bundbugyo Districts, Fort Portal, Uganda, [3]Institut d'Epidémiologie Neurologique et de Neurologie Tropicale (EA3174), Limoges, France, [4]Arizona Department of Health Services, Phoenix, AZ, United States, [5]International Federation of Pharmaceutical Manufacturers & Associations, Geneva, Switzerland, [6]Peramiho Mission Hospital, Peramiho, United Republic of Tanzania, [7]Diocèse de Bouar, Bouar, Central African Republic, [8]Department of Public Health Sciences, University of Alberta, Edmonton, AB, Canada

131

PROGRESS TOWARD ELIMINATION OF LYMPHATIC FILARIASIS IN THE EASTERN MEDITERRANEAN REGION

Maged A. El Setouhy[1], Hussein Kamal[2], Abdul Samid Al-Kubati[3], Rahma El Tigani[4], Gary J. Weil[5], Reda M. Ramzy[6]
[1]Faculty of Medicine, Ain Shams University, Cairo, Egypt, [2]Ministry of Health & Population, Cairo, Egypt, [3]Ministry of Public Health & Population, Taizz, Yemen, [4]Federal Ministry of Health, Khartoum, Sudan, [5]School of Medicine, Washington University, MO, United States, [6]National Nutrition Institute, Cairo, Egypt

132

A BLOOD AND FAECAL PARASITE SURVEY ON SATAWAL ISLAND, FEDERATED STATES OF MICRONESIA

Wayne Melrose[1], Jean-Paul Chaine[2], Jaime Carron[1], Deon Canyon[1], Moses Pretrick[2]
[1]James Cook University, Townsville, Australia, [2]Department of Health, Federated States of Micronesia

133

HUMAN HELMINTH CO-INFECTION: A MULTI-LEVEL ANALYSIS OF SPATIAL, HOUSEHOLD AND FAMILIAL CLUSTERING OF POLYPARASITISM IN SOUTH-EASTERN BRAZIL

Rachel L. Pullan[1], Jefferey M. Bethony[2], Stefan M. Geiger[3], Bonnie Cundill[1], Rodrigo Correa-Oliveira[3], Rupert J. Quinnell[4], Simon Brooker[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]The George Washington University, Washington, DC, United States, [3]René Rachou Research Centre FIOCRUZ, Belo Horizonte, Brazil, [4]University of Leeds, Leeds, United Kingdom

134

VECTOR COMPETENCE OF *SIMULIUM OYAPOCKENSE* S.L. AND *S. INCRUSTATUM* FOR *ONCHOCERCA VOLVULUS*: IMPLICATIONS FOR IVERMECTIN-BASED CONTROL IN THE AMAZONIAN FOCUS OF HUMAN ONCHOCERCIASIS, A MULTI-VECTOR-HOST SYSTEM

Maria Eugenia Grillet[1], Nestor J. Villamizar[2], Hortencia L. Frontado[3], José Cortez[2], **Maria-Gloria Basáñez**[4]
[1]Laboratorio de Biología de Vectores, Instituto de Zoología Tropical, Universidad Central de Venezuela, Caracas, Venezuela, [2]Centro Amazónico para Investigación y Control de Enfermedades Tropicales (CAICET), Puerto Ayacucho, Venezuela, [3]Instituto de Altos Estudios de Salud Pública "Dr. Arnoldo Gabaldón", Maracay, Venezuela, [4]Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom

135

THE IMPACT OF A 10-YEAR CIVIL CONFLICT ON ONCHOCERCIASIS CONTROL IN SIERRA LEONE

Joseph B. Koroma
Ministry of Health and Sanitation (MOHS), Freetown, Sierra Leone

136

BURDEN OF LYMPHEDEMA DUE TO LYMPHATIC FILARIASIS – ORISSA STATE, INDIA

Jonathan Rout[1], Grace Rao[1], **LeAnne M. Fox**[2]
[1]Church's Auxiliary for Social Action (CASA), Bhubaneswar, India, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

137

COMPLEX DYNAMICS IN PARASITE ECOLOGY AND CONTROL

Manoj Gambhir, Edwin Michael
Imperial College London, London, United Kingdom

138

ESTABLISHMENT OF MASS DRUG ADMINISTRATION PROGRAMME AND ITS ASSESSMENT: CASE STUDY OF MAFIA ARCHIPELAGO, TANZANIA

Mbutolwe E. Mwakitalu[1], Conrad Kabali[1], Wilfred Lazarus[1], Mwele Malecela[1], Charles Mackenzie[2]
[1]National Institute for Medical Research, Dar-es-salaam, United Republic of Tanzania, [2]Filarial Diseases Unit, Michigan State University, East Lansing, MI, United States

139

EVALUATION OF THE EFFECTS OF 3 ANNUAL ROUNDS OF MDA WITH IVERMECTIN AND ALBENDAZOLE ON BANCROFTIAN FILARIASIS IN MTWARA REGION, TANZANIA

Upendo J. Mwingira[1], Christina L. Makene[1], Mbutolwe E. Mwakitalu[1], Vitus Nyigo[1], Edwin Michael[2], Charles D. Mackenzie[3], Mwele N. Malecela[1]
[1]National Institute for Medical Research, Dar-es-salaam, United Republic of Tanzania, [2]Imperial College School of Medicine, London, United Kingdom, [3]Filarial Diseases Unit, Michigan State University, Michigan, MI, United States

140

THE IDENTIFICATION OF INFECTION IN ONCHOCERCIASIS ENDEMIC AREAS APPROACHING PARASITE ELIMINATION

Charles Mackenzie[1], Mahdi Shamad[2], Roberto Proano[3], Raquel Lovato[3], Samuel Wanji[4], Timothy Geary[5]
[1]Michigan State University, Dimondale, MI, United States, [2]Ministry of Health, Khartoum, Sudan, [3]Onchocerciasis Control Program, Quito, Ecuador, [4]University of Buea, Buea, Cameroon, [5]McGill University, Montreal, QC, Canada

141

TRANSMISSION HOTSPOTS AND FACTORS ASSOCIATED WITH CONTINUING TRANSMISSION OF LYMPHATIC FILARIASIS IN LEOGANE, HAITI

Alexis Boyd[1], Kimberly Y. Won[1], Katherine Vosswinkel[2], Sandra J. Laney[3], Steven A. Williams[3], Nils Pilotte[3], Thomas Streit[2], Madsen Beau de Rochars[4], Patrick J. Lammie[1]
[1]Center for Disease Control, Atlanta, GA, United States, [2]University of Notre Dame, Notre Dame, IN, United States, [3]Smith College, Northampton, MA, United States, [4]Hopital Ste. Croix, Leogane, Haiti

142

IDENTIFICATION OF MAJOR IMMUNOGLOBULIN E-BINDING PROTEINS IN TOTAL ADULT WORM EXTRACT OF *ONCHOCERCA VOLVULUS*

Nelson E. Kome
University of Buea, Buea, Cameroon

(ACMCIP Abstract)

143

DIFFERENCES IN EXPOSURE AND CHRONICITY IN HUMAN FILARIAL INFECTION LEADS TO VARIABLE GENE EXPRESSION PROFILES

Cathy Steel, Timothy G. Myers, Qin Su, Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

144

CHRONIC HELMINTH INFECTION INCREASES THE THRESHOLD OF ACTIVATION FOR BASOPHILS AND MAST CELLS

David Larson, Marina N. Torrero, Marc P. Hübner, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

145

HISTAMINE DOES NOT PLAY A ROLE IN VACCINE-MEDIATED IMMUNITY AGAINST MURINE FILARIASIS

Ellen C. Mueller
Uniformed Services Univeristy, Bethesda, MD, United States

HIV and Co-Infections

146

CHANGES IN THE HIV-1 ENVELOPE GENE FROM NON-SUBTYPE B HIV-1 INFECTED CHILDREN IN KENYA

Raphael M.L. Lwembe
Center for Virus Infections, Kanazawa, Japan

Center for Virus Infections, Kanazawa, Japan

147

SEROEPIDEMIOLOGY OF DENGUE VIRUS INFECTION IN HIV-INFECTED CHILDREN IN COMPARISON TO HEALHY CHILDREN

Kanyalak Vithessonthi[1], Chitsanu Pancharoen[1], Chule Thisyakorn[1], Ananda Nisalak[2], Usa Thisyakorn[1]
[1]King Chulalongkorn Memorial Hospital, Bangkok, Thailand, [2]U.S. Army Medical Component-Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand

148

FIGHTING AGAINST HIV/AIDS AND MALARIA AMONG RURAL POPULATION OF HUYE IN SOUTHERN PROVINCE OF RWANDA

Celestin Hategekimana
National University of Rwanda, Butare, Rwanda

149

HIV/AIDS AND MALARIA CO-INFECTION IN DOUALA, THE ECONOMIC CAPITAL OF CAMEROON

Theresa K. Nkuo-Akenji
University of Buea, Buea, South West Province, Cameroon

150

EFFICACY AND TOLERABILITY OF THE BOTSWANA NATIONAL ANTIRETROVIRAL PROGRAM: FOUR-YEAR RETROSPECTIVE COHORT STUDY IN THE CENTRAL DISTRICT OF THE REPUBLIC OF BOTSWANA

Michael A. Gillette, Megha J. Upadhyaya
Tulane University School of Public Health and Tropical Medicine, Garland, TX, United States

151

A SURVEY OF STIS/HIV IN FEMALE PROSTITUTES IN NIGERIA

Ngozi M. Otuonye[1], Stella Ifeanyi Smith[1], Onaiwu Enabulele[2]
[1]Nigerian Institute Of Medical Research, Yaba, lagos, Nigeria, [2]University Of Benin, Benin City, Nigeria

152

***MYCOBACTERIUM AVIUM* COMPLEX ASSOCIATED PYOMYOSITIS, LYMPHADENITIS AND PERICARDIAL TAMPONADE IN HIV INFECTED PATIENT**

Gulvahid Shaikh, Olaniran Ladipo, Janice Verley
Nassau Universtiy Medical Center, East Meadow, NY, United States

153

DISPOSITION OF RURAL NIGERIAN ADOLESCENTS TOWARDS HIV TESTING AND DISCLOSURE

Adebola E. Orimadegun, Adebolajo Adeyemo, Olatunde S. Oladoyinbo
Institute of Child Health, College of Medicine, University of Ibadan, Ibadan, Nigeria

154

USE OF HEALTHCARE FACILITIES AND THE IMPACT ON PREFERRED SOURCE OF TREATMENT FOR HIV/AIDS BY ADOLESCENTS IN NIGERIA

Adebolajo Adeyemo, Adebola E. Orimadegun, Olatunde S. Oladoyinbo
University of Ibadan, Ibadan, Nigeria

155

MONITORING THE VIROLOGICAL RESPONSE TO ANTIRETROVIRAL TREATMENT IN ADULT HIV/AIDS PATIENTS IN TANGA, TANZANIA

Lasse S. Vestergaard[1], Judith M. Haissman[2], Samuel Sembuche[3], Zahra Theilgaard[1], Bruno Mmbando[3], Martha M. Lemnge[3], Jan Gerstoft[1], Samuel Mtullu[4], Henrik Ullum[2], Terese Katzenstein[1]
[1]Department of Infectious Diseases, Copenhagen University Hospital, Copenhagen, Denmark, [2]Department of Clinical Immunology, Copenhagen University Hospital, Copenhagen, Denmark, [3]National Institute for Medical Research, Tanga Centre, Tanga, United Republic of Tanzania, [4]Tanga AIDS Working Group, Tanga, United Republic of Tanzania

156

COLONIZATION WITH CEFOTAXIM RESISTANT *ENTEROBACTER* SPP. AND *KLEBSIELLA* SPP. IN HIV-POSITIVE CAMBODIAN CHILDREN DECREASES WITH IMMUNE RECONSTITUTION AFTER HAART

Vladimir Krcmery[1], Erich Kalavsky[2], Andrea Augustinova[2], Andrea Shahum[1], Anna Liskova[1]
[1]St. Elizabeth University College of Health and Social Sciences, Bratislava, Slovakia, [2]Trnava University, Bratislava, Slovakia

Kinetoplastida – Molecular Biology and Immunology

157

LDLIP3 ENCODES A SECRETED LIPASE IN THE HUMAN PATHOGEN *LEISHMANIA DONOVANI*

Alison M. Shakarian[1], Glen McGugan[2], Dennis Dwyer[2]
[1]Salve Regina Univeristy, Newport, RI, United States, [2]National Institutes of Health, Bethesda, MD, United States

158

SECRETED PROTEINS OF *LEISHMANIA CHAGASI INFANTUM*-PROGRESSING TOWARDS A SUBUNIT ANTI PARASITE VACCINE

Sruti DebRoy
University of Iowa, Iowa City, IA, United States

159

SUPPRESSION OF HOST MACROPHAGE TRANSCRIPTIONAL RESPONSES BY *LEISHMANIA MEXICANA*

Shuyi Zhang, P'ng Loke, James H. McKerrow
University of California San Francisco, San Francisco, CA, United States

(ACMCIP Abstract)

160

METACYCLOGENESIS ALTERS RECEPTOR-MEDIATED UPTAKE OF *LEISHMANIA CHAGASI* PROMASTIGOTES BY HUMAN MONOCYTE-DERIVED MACROPHAGES

Norikiyo Ueno, Nilda E. Rodriguez, Carol L. Bratt, Mary E. Wilson
University of Iowa, Iowa City, IA, United States

(ACMCIP Abstract)

161

FUNCTIONAL VARIATIONS IN CANDIDATE GENES FROM INNATE IMMUNE RESPONSE (MCP-1 AND MBL2 GENES) ARE ASSOCIATED WITH MUCOSAL LEISHMANIASIS OUTCOME IN CORTE DE PEDRA, BAHIA, BRAZIL

Amelia R. de Jesus[1], Eliane P. Menezes[2], Rajendranath Ramaswmy[2], Kellen C. Fae[3], Susan C. Borba[3], Joyce Oliveira[2], Andrea Magalhães[2], Lea Castellucci[2], Luiz H. Guimarães[2], Marcus Lessa[2], Elza Noronha[4], Mary E. Wilson[5], Sarra E. Jamieson[6], Ashlee Bales[5], Jorge Kalil[3], Jenefer M. Blackwell[6], Edgar M. Carvalho[2]
[1]Federal University of Sergipe, Aracaju-SE, Brazil, [2]Federal University of Bahia, Salvador-BA, Brazil, [3]State University of Sao Paulo, Sao Paulo-SP, Brazil, [4]Federal University of Brasilia, Brasilia-DF, Brazil, [5]University of Iowa and the VA Medical Center, Iowa, IA, United States, [6]University of Cambridge School of Clinical Medicine, Cambridge, United Kingdom

(ACMCIP Abstract)

162

A NEW CLASS OF OXABOROLE-BASED POTENT ANTITRYPANOSOMAL AGENTS: PROBING THE EFFECT OF DIFFERENT CENTRAL LINKAGE GROUPS ON *TRYPANOSOMA BRUCEI* GROWTH INHIBITION

Y.K. Zhang[1], Dongsheng Xie[2], Vincent Hernandez[1], Huchen Zhou[2], Robert Jacobs[3], Dazhong Ding[2], Annie Xia[1], Bakela Nare[3], Yvonne Freund[1], James McKerrow[4], **Jacob Plattner**[1], Robert Don[5]
[1]Anacor Pharmaceuticals, Palo Alto, CA, United States, [2]Shanghai Jiao Tong University, Shanghai, China, [3]SCYNEXIS Inc, Research Triangle Park, NC, United States, [4]Sandler Center, University of California at San Francisco, San Francisco, CA, United States, [5]Drugs for Neglected Diseases initiative, Geneva, Switzerland

163

DEVELOPMENT OF AN ALAMAR BLUE 384 WELL WHOLE CELL VIABILITY ASSAY FOR HTS OF *T.B.BRUCEI* BS 427 CELLS

Melissa L. Sykes, Vicky M. Avery
Eskitis Institute for Cell and Molecular Therapies, Brisbane, Australia

164

TOWARDS THE IDENTIFICATION OF PROTEINS INVOLVED IN TRANSCRIPTION OF THE U2 AND U4 SMALL NUCLEAR RNA GENES IN *LEISHMANIA*

Elisa Figueroa-Angulo, Luis E. Florencio-Martinez, Norma E. Padilla-Mejia, Daniel E. Velez-Ramirez, Carlos Flores-Perez, Santiago Martinez-Calvillo
National University of Mexico, FES Iztacala, Tlalnepantla, Mexico

(ACMCIP Abstract)

165

POLYMERASE CHAIN REACTION (PCR) FOR DIAGNOSIS ON VERTICAL TRANSMISSION OF SECOND GENERATION OF *TRYPANOSOMA CRUZI* IN WISTAR RATS

Elio A. Moreno[1], Martha C. Ramírez[1], Maritza E. Alarcón[1], Ana Lugo de Yarbuh[1], Juana Villarreal[1], Anajulia González[2], Sonia Araujo[1], Nora Mogollón[1], Mary C. Pérez[1]
[1]Laboratorio de Parasitología Experimental (LAPEX), Departamento de Biología, Facultad de Ciencias, Merida, Venezuela, [2]Centro de Investigaciones Odontológicas. Universidad de los Andes, Merida, Venezuela

(ACMCIP Abstract)

166

PRODUCTION OF CYTOKINES IN FETUSES OF INFECTED MICE NMRI WITH *TRYPANOSOSMA CRUZI*

Maritza E. Alarcón[1], Mary C. Pérez[1], Elio A. Moreno[1], Loredana Goncalves[2], Sonia Araujo[1], Ana Lugo-Yarbuh[1], Juana Villarreal[1], Nora Mogollón[1]
[1]Laboratorio de Parasitología Experimental (LAPEX), Departamento de Biología, Facultad de Ciencias, Universidad de los Andes, Mérida, Venezuela, [2]Laboratorio de Inmunología de Parasitosis, Universidad de los Andes, Mérida, Venezuela

(ACMCIP Abstract)

Malaria – Chemotherapy

167

IMPROVING DRUG ADHERENCE AMONG VIVAX MALARIA PATIENTS IN NORTHERN THAILAND

Nardlada Khantikul
Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

168

EFFICACY OF ARTEMETHER-LUMEFANTRINE POWDER FOR SUSPENSION (CO-ARTESIANE®) COMPARED WITH ARTEMETHER-LUMEFANTRINE (COARTEM®) TABLETS IN THE TREATMENT OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN CHILDREN UNDER FIVE YEARS IN WESTERN KENYA: A RANDOMIZED OPEN-LABEL TRIAL

Elizabeth A. Juma
Kenya Medical Research Institute, Kisumu, Kenya

169

ARE MALARIA TREATMENT EXPENDITURES CATASTROPHIC TO DIFFERENT SOCIO-ECONOMIC AND GEOGRAPHIC GROUPS AND HOW DO THEY PAY IN SOUTHEAST NIGERIA?

Obinna Onwujekwe[1], Kara Hanson[2], Benjamin Uzochukwu[3]
[1]London School of Hygiene and Tropical Medicine and University of Nigeria, Enugu, Nigeria, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom, [3]College of Medicine, University of Nigeria, Enugu, Nigeria

170

A SINGLE LIQUID CHROMATOGRAPHY-TANDEM MASS SPECTROMETRIC METHOD FOR THE SIMULTANEOUS DETERMINATION OF 14 ANTIMALARIALS AND METABOLITES IN HUMAN PLASMA

Eva-Maria Hodel[1], Boris Zanolari[2], Thomas Mercier[2], Jennifer Keiser[1], Thierry Buclin[2], Jérôme Biollaz[2], Blaise Genton[1], Laurent A. Decosterd[2]
[1]Swiss Tropical Institute, Basel, Switzerland, [2]Division of Clinical Pharmacology, University Hospital, Lausanne, Switzerland

171

EXPOSURE TO LUMEFANTRINE IN INFANTS AND CHILDREN RECEIVING ARTEMETHER-LUMEFANTRINE FOR UNCOMPLICATED MALARIA: IMPACT OF AFRICAN DIET COMPONENTS

Steffen Borrmann[1], William M. Sallas[2], Anne-Claire Marrast[3], Gilbert Lefèvre[4], Steven E. Kern[5]
[1]Kenya Medical Research Institute/Wellcome Trust Collaborative Centre, Kilifi District Hospital, Kilifi, Kenya, [2]Department of Modeling and Simulation, Novartis Pharmaceuticals Corporation, East Hanover, NJ, United States, [3]Department of Tropical and Infectious Diseases, Novartis Pharma AG, Basel, Switzerland, [4]Department of Drug Metabolism and Pharmacokinetics, Novartis Pharma AG, Basel, Switzerland, [5]Department of Pharmaceutics, University of Utah, Salt Lake City, UT, United States

172

TYPICAL AFRICAN DIETS: FAT CONTENT AND ABSORPTION OF ARTEMETHER-LUMEFANTRINE

Zulfiqarali C. Premji[1], Salim Abdulla[2], Bernhards Ogutu[3], Alice Ojwang-Ndong[4], Catherine Falade[5], Issaka Sagara[6], Cecilia A. Ankrah[7], Nathan A. Mulure[8], Obiyo Nwaiwu[9], Gilbert Kokwaro[10]
[1]Muhimbili University of Health and Allied Sciences, Dar-es-Salaam, United Republic of Tanzania, [2]Ifakara Health Research and Development Centre, Dar-es-Salaam, United Republic of Tanzania, [3]Centre for Clinical Research, Kenya Medical Research Institute, Kisumu, Kenya, [4]Centre for Nutrition Education and Research, Nairobi, Kenya, [5]Department of Clinical Pharmacology, University College Hospital, Ibadan, Nigeria, [6]Malaria Research and Training Center, University of Bamako, Bamako, Mali, [7]Ministry of Health and Korle Bu Teaching Hospital, Accra, Ghana, [8]Novartis Pharma AG, Nairobi, Kenya, [9]Novartis Pharma AG, Lagos, Nigeria, [10]Kenya Medical Research Institute (KEMRI)/Wellcome Trust Research Programme and College of Health Sciences, University of Nairobi, Nairobi, Kenya

173

COMMUNITY-LEVEL DEPLOYMENT OF ARTEMETHER LUMEFANTRINE (AL) WITH RAPID DIAGNOSTIC TESTING: EFFECT ON MALARIA OUTCOMES AND RESOURCE UTILIZATION IN A RURAL SETTING

Hailemariam Lemma[1], Alem Desta[1], Edward Fottrell[2], Gebre Ab Barnabas[1], Angela Bianchi[3], Andrea Bosman[4], Peter Byass[4], Gianfranco Costanzo[5], Aldo Morrone[6], Nathan Mulure[7], Luigi Toma[8]
[1]Tigray Health Bureau, Mekelle, Ethiopia, [2]Department of Health and Clinical Medicine, Umea University, Umea, Sweden, [3]Novartis Pharma, Origgio, Italy, [4]WHO Global Malaria Programme, Geneva, Switzerland, [5]Italian Ministry of Health, Rome, Italy, [6]National Institute for Health Migration and Poverty, Rome, Italy, [7]Novartis Pharma, Nairobi, Kenya, [8]S. Gallicano Hospital, Rome, Italy

174

A QUALITATIVE STUDY OF THE FEASIBILITY AND COMMUNITY PERCEPTION ON THE EFFECTIVENESS OF ARTEMETHER-LUMEFANTRINE USE IN THE CONTEXT OF HOME MANAGEMENT OF MALARIA IN SOUTHWEST NIGERIA

Ikeoluwapo O. Ajayi[1], Catherine O. Falade[1], Benjamin O. Olley[2], Bidemi Yusuf[1], Sola Gbotosho[1], Toyin Iyiola[3], Omobola Olaniyan[3], Christian Happi[1], Kaendi Munguti[4], Franco Pagnoni[5]
[1]College of Medicine, University of Ibadan, Ibadan, Nigeria, [2]University of Ibadan, Ibadan, Nigeria, [3]Ministry of Health, Oyo State, Ibadan, Ibadan, Nigeria, [4]University of Nairobi, Nairobi, Kenya, [5]World Health Organisation, Geneva, Switzerland

175

IMPLEMENTATION OF ARTEMEMTHER LUMEFANTRINE IN TANZANIA: EARLY LESSONS AND EXPERIENCES

Emmy Metta[1], Seleman Mbuyita[1], Angela Kimweri[1], Elizeus Kahigwa[1], Denise Roth Allen[2], Salim Abdulla[1], S. Patrick Kachur[2]
[1]Ifakara Health Research and Development Centre (Ifakara Health Research and Development Centre) Ifakara, Dar es Salaam, United Republic of Tanzania, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

176

CHEMOTHERAPEUTIC EVALUATION OF WHOLE CELL MALARIA VACCINE CANDIDATES

Wilbur K. Milhous[1], Lucia Gerena[2], Mike O'Neil[2], Adriana Ahumada[3], Stephen Hoffman[3]
[1]University of South Florida, Tampa, FL, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [3]Sanaria Inc., Rockville, MD, United States

177

EFFECTIVENESS OF ORAL QUININE AND ARTEMETHER-LUMEFANTRINE IN THE TREATMENT OF UN-COMPLICATED FALCIPARUM MALARIA IN UGANDAN CHILDREN: A RANDOMIZED TRIAL

Jane W. Achan[1], Daniel Kyabayinze[2], Yeka Adoke[3], Moses Kamya[1], Fred W. Mangeni[1], Umberto D'Alessandro[4], James Tibenderana[2], Ambrose O. Talisuna[3]
[1]Makerere University, Kampala, Uganda, [2]Malaria Consortium, Kampala, Uganda, [3]Uganda Malaria Surveillance Project, Kampala, Uganda, [4]Institute Of Tropical Medicine, Antwerp, Belgium

Malaria – Drug Development

178

AREA UNDER THE EFFICACY CURVE ANALYSIS OF INTRAVENOUS ARTESUNATE IN TREATMENT OF SEVERE MALARIA

Louis Macareo[1], Qigui Li[1], Bryan Smith[2], Mark Polhemus[3], Scott Miller[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [3]United States Army Medical Research Unit – Kenya, Kisumu, Kenya

179

POPULATION PHARMACOKINETICS OF CHLORPROGUANIL-DAPSONE-ARTESUNATE AND THEIR MAJOR METABOLITES IN CHILDREN AND ADULTS DURING TREATMENT OF ACUTE UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA

Ann K. Miller[1], Mita Thapar[2], Siobhan Hayes[2], Ammar Qureshi[3], Cletus Ugwuegbulam[3], Li-Ean Goh[3], Allan Pamba[3]
[1]GlaxoSmithKline Pharmaceuticals, King of Prussia, PA, United States, [2]ICON Development Solutions, Marlow, Buckinghamshire, United Kingdom, [3]GlaxoSmithKline Pharmaceuticals, Greenford, Middlesex, United Kingdom

180

FOUR COMMUNITY-BASED NEGLECTED INFECTIOUS DISEASE COLLABORATIVE DRUG DISCOVERY CASE STUDIES

Barry Bunin, Moses Hohman, Sylvia Ernst, Kellan Gregory
Collaborative Drug Discovery, Burlingame, CA, United States

(ACMCIP Abstract)

181

THAI TRADITIONAL MEDICINE PLANT, *TINOSPORA CRISPA*, AFFECTS THE *PLASMODIUM* INFECTIVITY *IN VIVO*

Thanaporn Rungruang[1], Thidarut Boonmars[2]
[1]Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand, [2]Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

182

PHARMACOKINETIC EVALUATION OF ARTESUNATE FOLLOWING SINGLE INTRAVENOUS INJECTION OF 0.5, 1, 2, 4, AND 8 MG/KG IN NORMAL, HEALTHY VOLUNTEERS

Qigui Li[1], Louis R. Cantilena[2], Kevin J. Leary[2], George A. Saviolakis[2], R. Scott Miller[1], Victor Melendez[1], Peter J. Weina[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Uniformed Services University of the Health Sciences, Bethesda, MD, United States

183

COMPARTMENTAL MODEL-DEPENDENT ANALYSIS OF PHARMACOKINETIC DATA OF ARTESUNATE FOLLOWING SHORT-TERM INFUSION IN HEALTH VOLUNTEERS

Qigui Li, Peter J. Weina
Walter Reed Army Institute of Research, Silver Spring, MD, United States

184

EFFECTS OF *P. BERGHEI* AND *P. YOELII* SPOROZOITE NUMBER ON *IN VIVO* INFECTION RATES AND TIME TO PATENCY IN C57BL/6 MICE

Jing Zhang, Lisa H. Xie, Qiang Zeng, Erin Peacock, Qigui Li, Michael T. O'Neil
Walter Reed Army Institute of Research, Silver Spring, MD, United States

185

COMPARISON OF HPLC WITH ELECTROCHEMICAL DETECTION AND LC-MS/MS FOR THE SEPARATION AND VALIDATION OF ARTESUNATE AND DIHYDROARTEMISININ IN ANIMAL AND HUMAN PLASMA

Yuanchao C. Gu, Qigui Li, Victor Meledez, Peter J. Weina
Walter Reed Army Institute of Research, Silver Spring, MD, United States

186

TISSUE DISTRIBUTION, METABOLIC PROFILES AND PROTEIN BINDING OF [^{14}C] DIHYDROARTEMISININ FOLLOWING SINGLE INTRAVENOUS ADMINISTRATION IN RATS

Lisa H. Xie, Qigui Li, Jing Zhang, Peter J. Weina
Walter Reed Army Institute of Research, Silver Spring, MD, United States

187

ANTIPLASMODIAL BENZOPHENONES FROM *ENDODESMIA CALOPHYLLOIDES* (GUTTIFERAE)

Erasmienne T. Ngouamegne[1], René S. Fongang[1], Silvere Ngouela[1], Fabrice F. Boyom[1], Michel Rohmer[2], Etienne Tsamo[1], Jiri Gut[3], Philip J. Rosenthal[3]
[1]University of Yaounde 1, Yaounde, Cameroon, [2]Université Louis Pasteur, Strasbourg, France, [3]University of California, San Francisco, San Francisco, CA, United States

188

CLINICAL SAFETY AND DRUG INTERACTIONS WITH 8-AMINOQUINOLINES

Hla Y. Myint[1], Colin Ohrt[1], Aruna Sampath[2], Larry Walker[2], Nick White[3], Alan Magill[1]
[1]Walter Reed Army Institute Research, Silver Spring, MD, United States, [2]University Of Mississippi, University, MS, United States, [3]Mahidol Oxford Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

189

EVIDENCE OF HEMOLYTIC ANEMIA IN TAFENOQUINE AND PRIMAQUINE ANIMAL STUDIES

Yarrow Rothstein[1], James Myer[2], Geoffrey Dow[1], Peggy Wasson[1], Larry Walker[1], Alan Magill[1], Colin K. Ohrt[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]GlaxoSmithKline, Research Triangle Park, NC, United States

190

A NOVEL CHEMOTYPE WITH POTENT ACTIVITY AGAINST *PLASMODIUM FALCIPARUM* AND *P. BERGHEI*

Sameer Urgaonkar[1], Ralph Mazitschek[1], Cassandra Celatka[2], Joseph Cortese[3], Hanlan Liu[2], Mandy Cromwell[2], **Robert H. Barker**[2], Miryam Garcia Rosa[4], Adelfa Serrano[4], Dyann F. Wirth[5]
[1]Broad Institute of Harvard and MIT, Cambridge, MA, United States, [2]Genzyme Corporation, Waltham, MA, United States, [3]Broad Institute of Harvard and MIT, Waltham, MA, United States, [4]University of Puerto Rico-School of Medicine, San Juan, PR, United States, [5]Harvard School of Public Health, Boston, MA, United States

Malaria – Drug Resistance

191

MOLECULAR SURVEILLANCE OF DRUG-RESISTANCE ASSOCIATED MUTATIONS OF *PLASMODIUM FALCIPARUM* IN TWO DISTINCT GEOGRAPHICAL AREAS OF NIGERIA USING REAL TIME PCR TECHNIQUES

Daniel O. Ojurongbe[1], Segun I. Oyedeji[2], Wellington A. Oyibo[3], Taiwo A. Ojurongbe[4], Adetayo F. Fagbenro-Beyioku[3], Peter G. Kremsner[5], Juergen J. Kun[5]
[1]Ladoke Akintola University of Technology, Osogbo, Osun State, Nigeria, [2]Bells University, Sango Ota, Nigeria, [3]University of Lagos, Lagos, Nigeria, [4]Justus Liebig University, Giessen, Germany, [5]University of Tuebingen, Tuebingen, Germany

192

ADAPTATION OF A MULTIDRUG RESISTANT C2A CLONE OF *PLASMODIUM FALCIPARUM* FROM THAILAND TO *AOTUS LEMURINUS LEMURINUS* MONKEYS AND ITS PRELIMINARY *IN VIVO* ANTIMALARIAL DRUG SENSITIVITY-RESISTANCE PROFILE

Nicanor III Obaldia[1], Wilbur K. Milhous[2], Dennis E. Kyle[2]
[1]Tropical Medicine Research/Gorgas Memorial Institute, Panama, Panama, [2]Department of Global Health, College of Public Health, University of South Florida, Tampa, FL, United States

193

THE EFFICACY OF MALARTIN/SULPHADOXINE-PYRIMETHAMINE IN THE TREATMENT OF UNCOMPLICATED FALCIPARUM MALARIA IN A RURAL SETTING OF THE MOUNT CAMEROON REGION

Helen K. Kimbi[1], Theresa Nkuo-Akenji[1], Mesame Ntoko[1], Nelson N. Ntonifor[1], Emmaculate Lum[1], Bernice F. Muh[1], John Egbe[2]
[1]University of Buea, Buea, Cameroon, [2]Christian Medical Foundation, Dibanda, Buea, Cameroon

194

SIMULTANEOUS IDENTIFICATION OF SINGLE NUCLEOTIDE POLYMORPHISMS (SNPS) IN *PLASMODIUM FALCIPARUM DHFR, PFDHPS, PFCRT* AND *PFMDR1* GENES USING A MULTIPLEXED FLEXMAP™ MICROSPHERE-BASED MINISEQUENCING ASSAY

Carola J. Salas, David J. Bacon
U.S. Naval Medical Research Center Detachment, Lima, Peru

(ACMCIP Abstract)

195

THERAPEUTIC EFFICACY OF ARTEMETHER/LUMEFANTRINE AND AMODIAQUINE/ARTESUNATE FOR THE TREATMENT OF UNCOMPLICATED FALCIPARUM MALARIA IN CHILDREN AGED 6-59 MONTHS AT MKUZI AND UJIJI SENTINEL SITES IN TANZANIA

Samwel H. Sembuche[1], Johannes B. Kataraihya[2], Ezekiel K. Malecela[1], Juma A. Akida[1], Vito Baraka[1], Deo Maiga[1], Filbert Francis[1], Alex Mwita[3], Renata Mandike[3], Deus Ishengoma[1], Watoky M. Nkya[4], Martha M. Lemnge[1]
[1]National Institute for Medical Research, Tanga, United Republic of Tanzania, [2]Bugando Medical Centre and BUCHS, Mwanza, United Republic of Tanzania, [3]Ministry of Health, NMCP, Dar es Salaam, United Republic of Tanzania, [4]Mbeya Consultant Hospital, Mbeya, United Republic of Tanzania

196

PHENOTYPING SENSITIVITY AND RESISTANCE TO CHLOROQUINE IN *PLASMODIUM VIVAX*: STUDIES AT SENTANI, NORTHEASTERN PAPUA, INDONESIA

Puji BS Asih[1], John Leake[2], Yohanna Sorontou[3], Robert Sauerwein[4], Joseph Vinetz[2], Din Syafruddin[1], J. Kevin Baird[5], J. Kevin Baird[6]
[1]Eijkman Institute for Molecular Biology, Jakarta, Indonesia, [2]Department of Internal Medicine, University of California at San Diego, CA, United States, [3]School of Medicine, Cendrawasih University, Papua, Indonesia, [4]Department of Medical Microbiology, Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands, [5]Nuffield Department of Clinical Medicine, Oxford University, Oxford, United Kingdom, [6]Eijkman-Oxford Clinical Research Unit, Jakarta, Indonesia

(ACMCIP Abstract)

197

IDENTIFICATION OF MOLECULAR MARKERS IN *PLASMODIUM FALCIPARUM* ISOLATES ASSOCIATED TO MEFLOQUINE AND ARTESUNATE DRUG RESITANCE IN THE PERUVIAN AMAZON BASIN

Valeria R. Soberon[1], Carola J. Salas[1], Meddly L. Santolalla[1], Andrea M. McCollum[2], Venkatachalam Udhayakumar[2], Carmen M. Lucas[1], David J. Bacon[1]
[1]U.S. Naval Medical Research Center Detachment, Lima, Peru, [2]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States

(ACMCIP Abstract)

198

HITCHHIKING AND SELECTIVE SWEEPS OF *PLASMODIUM FALCIPARUM* SULFADOXINE AND PYRIMETHAMINE RESISTANT ALLELES IN CAMEROON

Andrea M. McCollum[1], Rachida Tahar[2], Leonardo K. Basco[2], Venkatachalam Udhayakumar[1], Ananias A. Escalante[3]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Unité de Recherche "Paludologie Afro-tropicale," Institut de Recherche pour le Développement (IRD) and Laboratoire de Recherche sur le Paludisme, Organisation de Coordination pour la lutte contre les Endémies en Afrique Centrale (OCEAC), Yaoundé, Cameroon, [3]Arizona State University, Tempe, AZ, United States

199

GENETIC ANALYSIS OF THE RETURN OF CHLOROQUINE SENSITIVE *P. FALCIPARUM* PARASITES TO LAMBARÉNÉ, GABON

Nicola Lehners[1], Pembe Mayengue[1], Julian Gabor[1], Matthias Dal-Bianco[1], Ghyslain Mombo Ngoma[2], Christian Supan[2], Bertrand Lell[2], Francine Ntoumi[1], Martin Grobusch[1], Peter Kremsner[1], **Frank Matthias**[1]
[1]Institute for Tropical Medicine, University of Tuebingen, Tuebingen, Germany, [2]Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon

200

HERITABILITY OF PARASITE CLEARANCE TIME FOLLOWING ARTEMISININ COMBINATION THERAPY

Tim Anderson[1], Shalini Nair[1], Ric Price[2], Marion Barends[3], Anchalee Jaidee[3], Francois Nosten[3]
[1]Southwest Foundation for Biomedical Research, San Antonio, TX, United States, [2]Menzies School of Health Research, Darwin, Australia, [3]Shoklo Malaria Research Unit, Mae Sot, Thailand

Malaria- Epidemiology

201

CHARACTERISTICS OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN CHILDREN AGED 6-59 MONTHS IN THE KASSENA NANKANA DISTRICT OF NORTHERN GHANA

Daniel Tindanbil
Navrongo Health Research Center, Navrongo, Ghana

202

PROSPECTS FOR MALARIA ELIMINATION IN MELANESIA

G. Dennis Shanks
Australian Army Malaria Institute, Brisbane, Australia

203

EPIDEMIOLOGY OF MALARIA IN FOREST AND PLAIN ECOTYPES OF NORTHERN ORISSA, INDIA

Surya K. Sharma
National Institute of Malaria Research, Rourkela, India

204

THE ROLE OF MALARIA PARASITAEMIA IN THE OCCURRENCE OF ANAEMIA IN FEBRILE ADULTS IN BUEA, CAMEROON

Ebako N. Takem[1], Eric A. Achidi[2], Peter M. Ndumbe[2]
[1]Ministry of Health, Buea, Cameroon, [2]University of Buea, Buea, Cameroon

205

PREDICTING GLOBAL FUND GRANT DISBURSEMENTS FOR PROCUREMENT OF ARTEMISININ-BASED COMBINATION THERAPIES

Justin M. Cohen, Inder Singh, Meg E. O'Brien
Clinton Foundation HIV/AIDS Initiative, Boston, MA, United States

206

GENOTYPING OF *PLASMODIUM VIVAX* ISOLATES FROM ARMENIA

Michela Menegon[1], Patrick Durand[2], Vladimir Davidyants[3], Giancarlo Majori[1], François Renaud[2], **Carlo Severini**[1]
[1]Istituto Superiore di Sanità, Rome, Italy, [2]Centre National de la Recherche Scientifique/Institut de Recherche pour le Developpement, Montpellier, France, [3]National Health Institut of Armenia, Yerevan, Armenia

207

THE TEMPORAL DYNAMICS OF *PLASMODIUM* DENSITY THROUGH THE SPOROGONIC CYCLE WITHIN *ANOPHELES* MOSQUITOES

Emma J. Dawes, Shijie Zhuang, Robert E. Sinden, María-Gloria Basáñez
Imperial College London, London, United Kingdom

208

ASSESSMENT OF SEXUAL STAGE SPECIFIC IMMUNITY IN CHILDREN (0-15 YEARS OF AGE) IN ZAMBIA

Ralph E. LeBlanc[1], Tamaki Kobayashi[2], Phil Thuma[1], Nirbhay Kumar[1]
[1]Malaria Research Institute of the Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

209

USE OF LOT QUALITY ASSURANCE SAMPLING (LQAS) TO MONITOR BEDNET DISTRIBUTION

Luis Benavente, Jose Luis Segura, Miguel Torrez
Medical Care Development International, Silver Spring, MD, United States

210

SPONTANEOUS POSTPARTUM CLEARANCE OF *PLASMODIUM FALCIPARUM* IN BENINESE WOMEN

Valérie Briand[1], Julie Bottero[1], Achille Massougbodji[2], Michel Cot[1]
[1]Institut de Recherche pour le Développement, Paris, France, [2]Faculté des Sciences de la Santé, Cotonou, Benin

211

SINGLE-NUCLEOTIDE POLYMORPHISM IN *PLASMODIUM VIVAX* POPULATIONS FROM RURAL AMAZONIA

Pamela Orjuela-Sánchez, Mônica da Silva-Nunes, Natal Santos da Silva, Marcelo Urbano Ferreira
Institute of Biomedical Sciences, University of São Paulo, São Paulo, Brazil

212

THE NET EFFECT OF NUMBERS: FACTORS ASSOCIATED WITH USE OF INSECTICIDE-TREATED NETS IN KENYA AFTER MASS DISTRIBUTION

Jimee Hwang[1], Paul Arguin[1], S. Patrick Kachur[1], Adam Wolkon[1], Joann Greenfield[2], Rebecca Kiptui[3], Laurence Slutsker[1], Willis Akhwale[3], Allen W. Hightower[4]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]World Health Organization, Nairobi, Kenya, [3]Division of Malaria Control, Nairobi, Kenya, [4]Centers for Disease Control and Prevention, Nairobi, Kenya

213

CAMBODIA MALARIA SURVEY, 2007

Samphornarann Top
National Malaria Center, Phnom Penh, Cambodia

214

EFFECTS OF INSECTICIDE TREATED BEDNETS (ITNS) ON THE GENETIC DIVERSITY OF *PLASMODIUM FALCIPARUM* PARASITES IN A MALARIA HOLOENDEMIC AREA OF WESTERN KENYA

Wangeci Gatei[1], Simon Kariuki[2], William Hawley[3], Feiko ter Kuile[4], Dianne Terlouw[4], Penny Phillips-Howard[5], Bernard Nahlen[6], John Gimnig[3], Kim Lindblade[3], Edward Walker[7], John Williamson[3], Mary Hamel[5], Ananias Escalante[8], Laurence Slutsker[3], Ya Ping Shi[3]
[1]Centers for Disease Control, Division of Parasitic Diseases, Malaria Branch and Atlanta Research and Education Foundation, Atlanta, GA, United States, [2]Kenya Medical Research Institute, Center for Global Health Research, Kisumu, Kenya, [3]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States, [4]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [5]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch and Kenya Medical Research Institute, Center for Global Health Research, Atlanta, GA, United States, [6]President's Malaria Initiative, Washington, DC, United States, [7]Michigan State University, East Lansing, MI, United States, [8]Arizona State University, Tempe, AZ, United States

215

THE RELATIONSHIP BETWEEN MSP-1_{19} HAPLOTYPE PREVALENCE AND HUMORAL IMMUNITY DURING A TREATMENT-REINFECTION STUDY IN KENYA

Daniel J. Tisch[1], Chris Yohn[1], Peter Odada Sumba[2], John Vulule[2], James W. Kazura[1], Moormann M. Ann[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Kenya Medical Research Institute, Kisumu, Kenya

(ACMCIP Abstract)

216

ACHIEVEMENTS IN MALARIA CONTROL IN ETHIOPIA – RESULTS FROM MALARIA INDICATOR SURVEY, 2007

Daddi Jima[1], Jimee Hwang[2], Asefaw Getachew[3], Hana Bilak[4], Estifanos Biru Shargie[3], Teshome Gebre[3], Gashu Fentie[3], Adam Wolkon[2], Scott Filler[2], Richard Reithinger[5], Paul M. Emerson[6], Tekola Endeshaw[3], Aryc W. Mosher[6], Frank O. Richards[6], Eskindir Tenaw[7], Ambachew M. Yohannes[8], Khoti Gausi[9], John Miller[4], Judith Robb-McCord[4], Richard Steketee[4], Patricia M. Graves[6], Zerihun Tadesse[1], Tedros Adhanom Ghebreyesus[10]
[1]Disease Prevention and Control Department, Ministry of Health, Addis Ababa, Ethiopia, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]The Carter Center, Addis Ababa, Ethiopia, [4]Malaria Control and Evaluation Partnership in Africa, PATH, Seattle, WA, United States, [5]United States Agency for International Development, Addis Ababa, Ethiopia, [6]The Carter Center, Atlanta, GA, United States, [7]Central Statistical Agency, Addis Ababa, Ethiopia, [8]World Health Organization, Addis Ababa, Ethiopia, [9]World Health Organization, Harare, Zimbabwe, [10]Minister of Health, Addis Ababa, Ethiopia

217

DEMOGRAPHIC PATTERNS OF *P. FALCIPARUM* INFECTION IN ANGOLA: USING A NATIONAL DEMOGRAPHIC SURVEY TO MEASURE PARASITEMIA

Shane Khan, Erin Eckert
Macro International Inc., Calverton, MD, United States

218

RISK FACTORS ASSOCIATED WITH SEVERE MALARIA AMONG UNDER-FIVE CHILDREN IN SEVENTH-DAY ADVENTIST HOSPITAL, ILE-IFE, NIGERIA

Idowu O. Senbanjo[1], Philips Opreh[2]
[1]Lagos State University College of Medicine, Ikeja, Lagos, Nigeria, [2]Seventh-day Adventist Hospital, Ile-Ife, Nigeria

219

A SIMULATION STUDY OF THE EPIDEMIOLOGICAL IMPACT OF MALARIA VACCINES

Melissa Penny, Nicolas Maire, Alain Studer, Allan Schapira, Tom Smith
Swiss Tropical Institute, Basel, Switzerland

220

CHARACTERIZATION OF THE KAMBILA, MALI COHORT FOR LONGITUDINAL STUDIES OF THE ACQUISITION AND MAINTENANCE OF NATURALLY-ACQUIRED MALARIA IMMUNITY

Kassoum Kayentao[1], Aissata Ongoiba[1], Boubacar Traore[1], Safiatou Doumbo[1], Didier Doumtabe[1], Younoussou Kone[1], Abdrahamane Traore[1], Greta Weiss[2], Seidina A. Diakite[1], Michael A. Krause[3], Seydou Doumbia[1], Aldiouma Guindo[1], Rick M. Fairhurst[4], Louis H. Miller[5], Susan K. Pierce[2], Peter D. Crompton[2], Ogobara K. Doumbo[1]
[1]Malaria Research and Training Center, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [2]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunogenetics, Bethesda, MD, United States, [3]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Malaria and Vector Research, Bethesda, MD, United States, [4]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, [5]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Malaria Vaccine Development Branch, Bethesda, MD, United States

Malaria – Molecular Biology

221

GENETIC DISRUPTION OF A MECHANOSENSITIVE ION CHANNEL IN *PLASMODIUM FALCIPARUM*

Kempaiah Rayavara, Sanjay A. Desai
Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

(ACMCIP Abstract)

222

REFINING THE ANNOTATIONS OF THE *PLASMODIUM YOELII* MALARIA GENOME

Alfred Simkin, William Vincent, Gaya Hettiarachchi, Lindsey Howlett, Doug Armour, David Courtney, Caroline Hackett, Doug Hardesty, **Peter Blair**
Earlham College, Richmond, IN, United States

(ACMCIP Abstract)

223

DISTRIBUTION AND GENETIC DIVERSITY OF *PLASMODIUM FALCIPARUM* ERYTHROCYTE BINDING ANTIGEN 175 (EBA 175) AND CLINICAL OUTCOME OF MALARIA IN CHILDREN IN THE KASSENA-NANKANA DISTRICT, GHANA

Beverly Egyir[1], Charles Brown[1], Langbon Bimi[2], Kwadwo Koram[1], Michael Wilson[1]
[1]Noguchi Memorial Institute for Medical Research, Accra, Ghana, [2]University of Ghana, Legon, Accra, Ghana

(ACMCIP Abstract)

224

A PANEL OF GENETIC MARKERS UNFOLD GENETIC RELATEDNESS AND EVOLUTIONARY HISTORIES OF *PLASMODIUM VIVAX* LINEAGES, OLD WORLD AND NEW WORLD

Surendra K. Prajapati[1], Hema Joshi[1], Simon Kang'a[2], Jane M. Carlton[2], Moshahid A. Rizvi[3], Aditya P. Dash[1]
[1]National Institute of Malaria Research, Delhi, India, [2]Department of Medical Parasitology, New York University Langone Medical Center, New York City, NY, United States, [3]Department of Biosciences, Jamia Millia Islamia University, Delhi, India

225

DIVERSITY IN THE LIGAND DOMAIN OF *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN: SPATIAL DISTRIBUTION ON 3-D STRUCTURE AND EVOLUTION

Taís N. Sousa[1], Eduardo M. Tarazona-Santos[2], Ana Paula Madureira[1], Paula Regina Kuser[3], Marcelo U. Ferreira[4], Luzia H. Carvalho[1], Cristiana F. Brito[1]
[1]René Rachou Institute/Oswaldo Cruz Foundation, Belo Horizonte, Brazil, [2]Department of General Biology/Federal University of Minas Gerais, Belo Horizonte, Brazil, [3]Laboratory of Bioinformatics/Brazilian Agricultural Research Corporation, Campinas, Brazil, [4]Department of Parasitology/University of São Paulo, São Paulo, Brazil

(ACMCIP Abstract)

226

GENETIC DIVERSITY OF THE MEROZOITE SURFACE PROTEIN-3A LOCUS IN *PLASMODIUM VIVAX* ISOLATES FROM SRI LANKA

Mette L. Schousboe[1], Rupika S. Rajakaruna[2], Gawrie N. Galappaththy[3], Priyanie H. Amerasinghe[4], Flemming Konradsen[1], Cally Roper[5], Ib C. Bygbjerg[1], Michael Alifrangis[1]
[1]Centre for Medical Parasitology, Copenhagen K, Denmark, [2]University of Peradeniya, Peradeniya, Sri Lanka, [3]Ministry of Health, Colombo, Sri Lanka, [4]International Water Management Institute, Andhra Pradesh, India, [5]London School of Hygiene and Tropical Medicine, London, United Kingdom

(ACMCIP Abstract)

227

GENETICS OF MALARIA IN THE PRÍNCIPE POPULATION

Maria de Jesus Trovoada[1], Lígia A. Gonçalves[1], Paulo Almeida[1], Roni Moya[2], Rita Neres[1], Rute Nascimento[1], João Costa[1], Isabel Marques[1], Artur Borja[3], António Coutinho[1], Carlos Penha-Gonçalves[1]
[1]Instituto Gulbenkian de Ciência, Oeiras, Portugal, [2]Centro de Histocompatibilidade do Sul, Lisboa, Portugal, [3]Hospital Dr Manuel Quaresma Dias da Graça, Príncipe, Sao Tome and Principe

228

IDENTIFICATION OF POTENTIAL TARGET GENES FOR MALARIA VACCINE DEVELOPMENT BY DIFFERENTIAL EXPRESSION PROFILING OF RADIATION-ATTENUATED *PLASMODIUM FALCIPARUM* SPOROZOITES

Benjamin U. Hoffman[1], Charlie Xiang[2], Michael Brownstein[2], **Anusha M. Gunasekera**[1]
[1]Sanaria, Inc, Rockville, MD, United States, [2]J. Craig Venter Institute, Rockville, MD, United States

(ACMCIP Abstract)

229

CEREBRAL MALARIA GENETICS IN ANGOLAN CHILDREN

Maria R. Sambo[1], Maria Trovoada[1], Carla Benchimol[2], Lígia Deus[1], Vatúsia Quinhento[2], Paulo Almeida[1], Rute Vieira[1], Isabel Marques[1], António Coutinho[1], Carlos Penha-Gonçalves[1]
[1]Instituto Gulbenkian de Ciência, Oeiras, Portugal, [2]Hospital Pediátrico David Bernardino, Luanda, Angola

(ACMCIP Abstract)

230

SEQUENCE DIVERSITY OF THE *MSP2* GENE (MEROZOITE SURFACE PROTEIN 2) IN THE *PLASMODIUM FALCIPARUM* COLLECTION AT THE MR4/ATCC BIORESOURCE CENTER

Thavamani Rajapandi, Linda Amoah, Timothy Stedman
MR4/American Type Culture Collection, Manassas, VA, United States

(ACMCIP Abstract)

Mosquitoes – Insecticide Resistance and Control

231

INSECTICIDE SUSCEPTIBILITY LEVEL OF *AEDES AEGYPTI* (LINN.) FROM MUNICIPALITY OF CABUYAO AND CITY OF MANILA, PHILIPPINES

Wilfredo E. Aure
Research Institute for Tropical Medicine, Muntinlupa City, Philippines

232

IDENTIFICATION OF METABOLIC INSECTICIDE RESISTANCE GENES IN *AEDES AEGYPTI* FROM MARTINIQUE (FRENCH WEST INDIES): FROM GENOTYPES TO PHENOTYPES

Sebastien Marcombe[1], Rodolphe Poupardin[2], Frédéric Darriet[1], Clare Strode[3], André Yébakima[4], Hilary Ranson[3], Jean-Philippe David[2], Vincent Corbel[1]
[1]Institut de Recherche pour le Developpement, UR016, Laboratoire de Lutte contre les Insectes Nuisibles, Montpellier, France, [2]Laboratoire d'Ecologie Alpine (LECA) UMR CNRS-Université 5553, Equipe «Perturbations Environnementales et Xénobiotiques», Grenoble, France, [3]Vector Group, Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [4]Centre de Démoustication/Conseil Général de la Martinique, Fort de France, Martinique

233

UNEXPEXTED NEUROTOXIC EFFECTS OF THE REPELLENT DEET OCCUR THROUGH AN INHIBITION OF ACETYLCHOLINESTERASE ACTIVITY IN INSECT AND MAMMAL NERVOUS SYSTEM

Vincent Corbel[1], Maria Stankiewicz[2], Cédric Pennetier[1], Didier Fournier[3], Jordi Molgo[4], Jure Stojan[5], Jean Marc Hougard[6], Bruno Lapied[7]
[1]Institut de Recherche pour le Developpement, UR016, Montpellier, France, [2]University of N. Copernicus, Torun, Poland, [3]University of Paul Sabatier, Toulouse, France, [4]CNRS, Gif sur Yvette, France, [5]Institute of Biochemistry, Ljubljana, Slovenia, [6]Institut de Recherche pour le Developpement, UR016, Cotonou, Benin, [7]University of Angers, Angers, France

234

MONITORING THE OPERATIONAL IMPACT OF INSECTICIDE USAGE FOR MALARIA CONTROL ON *ANOPHELES FUNESTUS* FROM MOZAMBIQUE

Michael Coleman[1], Sonia Casimiro[2], Janet Hemingway[3], Brian Sharp[1]
[1]MRC, Durban, Durban, South Africa, [2]National Institutes of Health, Maputo, Mozambique, [3]Liverpool School of Tropical Medicine, Liverpool, United Kingdom

235

BIOCHEMICAL AND KNOCKDOWN RESISTANCE OF *ANOPHELES GAMBIAE* TO PERMETHRIN AND DELTAMETHRIN (PYRETHROIDS) AT KPONE ON SEA IN THE GREATER ACCRA REGION OF GHANA

Kwadwo K. Frempong[1], Isabella Quakyi[2], Sulley K. Ben-Mahmoud[3], Irene Offei Owusu[1], Maxwell A. Appawu[1], Daniel Boakye[1]
[1]Noguchi Memorial Institute For Medical Research, Accra, Ghana, [2]School of Public Health, University of Ghana, Accra, Ghana, [3]African Regional Postgraduate Programme in Insect Science (ARPPIS), University of Ghana, Accra, Ghana

236

EFFECT OF REPEATED APPLICATION OF BIOLOGICAL LARVICIDES ON MALARIA TRANSMISSION IN CENTRAL CÔTE D'IVOIRE

Tchicaya E. Stephane[1], Utzinger Juerg[2], Keiser Jennifer[2], Tanner Marcel[2]
[1]Centre Suisse de Recherches Scientifiques en Côte d'Ivoire, Abidjan, Cote d'Ivoire, [2]Swiss Tropical Institute, Basel, Switzerland

237

WIDE PYRETHROIDS AND DDT RESSTANCE IN ANOPHELES GAMBIAE SENSU LATO SAMPLES FROM CAMEROON

Hamadou N. Ndjemai
National Malaria Control Program, Yaoundé, Cameroon

238

EVALUATION OF MOSQUITO DENSOVIRUSES FOR CONTROLLING *AEDES AEGYPTI* (DIPTERA: CULICIDAE): VARIATION IN EFFICIENCY DUE TO VIRUS STRAIN AND GEOGRAPHIC ORIGIN OF MOSQUITOES

Supanee Hirunkanokpun
Mahidol University, Bangkok, Thailand

239

SIMALIKALACTONE D IS RESPONSIBLE FOR THE LARVICIDAL PROPERTIES OF *QUASSIA AFRICANA*

Woquan Sama, Edith O. Ajaiyeoba
University of Ibadan, Ibadan, Nigeria

240

REPELLENCY FROM ESSENTIAL OILS AGAINST THE BITES OF *LUTZOMYIA MIGONEI* (DIPTERA: PSYCHODIDAE) *LEISHMANIA* VECTOR

Elsa Nieves[1], Janett Fernández[1], José Lia[2], Maritza Rondon[1]
[1]University Of the Los Andes, Merida, Venezuela, [2]Natural Products Laboratory, Botanical Garden, Unellez, Barinas, Venezuela

241

ROLE OF MONOOXYGENASE, ESTERASE, GLUTATHIONE S-TRANSFERASE AND THE KNOCKDOWN RESISTANT (KDR) ALLELE IN CONFERRING PYRETHROID RESISTANCE IN ANOPHELES GAMBIAE

Lisa J. Reimer[1], Adama Sacko[2], Sekou Traore[2], Gregory Lanzaro[1], Anthony Cornel[1]
[1]University of California at Davis, Davis, CA, United States, [2]Malaria Research and Training Center, Bamako, Mali

242

SPATIAL REPELLENT, CONTACT IRRITANT AND TOXICITY RESPONSES OF *AEDES AEGYPTI* TO PLANT DERIVED COMPOUNDS AS COMPARED TO DEET

Diana K. Riner[1], Paige B. Sachs[1], Nichole L. Achee[1], Kamal Chauhan[2], John P. Grieco[1]
[1]Uniformed Services University of the Health Sciences, Bethesda, MD, United States, [2]USDA, Beltsville, MD, United States

243

ANTI MOSQUITO CONTROL MEASURES TRENDS IN KINSHASA, DEMOCRATIC REPUBLIC OF THE CONGO DRC (2002-2007)
BOBANGA LT, MULUMBA MP, UMESUMBU-BOBANGA ES

Lengu T. Bobanga, Madishala P. Mulumba
University of Kinshasa, Kinshasa, The Democratic Republic of the Congo

Mosquitoes – Vector Biology – Epidemiology

244

USING ELEMENTARY SCHOOL STUDENTS TO ESTABLISH A MOSQUITO LARVAE MONITORING SYSTEM

Sandy Hoar
George Washington University, Washington, DC, United States

245

SUSCEPTIBILITY OF *PLASMODIUM VIVAX* TO ANOPHELES ANTHROPOPHAGUS FROM DIFFERENT AREAS IN CHINA

Guoding Zhu[1], Qi Gao[1], Huayun Zhou[1], Julin Li[1], Feng Lu[1], Yaobao Liu[1], Sattabongkot Jetsumon[2]
[1]Jiangsu Institute of Parasitic Diseases, Wuxi, China, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

246

IMPACT OF *ANOPHELES ARABIENSIS* FEEDING AND RESTING BEHAVIOUR IN ZOOPROPHYLAXIS FOR MALARIA CONTROL

Eliningaya J. Kweka, Aneth M. Mahande, Johnson M. Mahande
Tropical Pesticides Research Institute, Arusha, United Republic of Tanzania

247

A LARGE SEMI-FIELD SYSTEM FOR EXPERIMENTAL STUDY OF AFRICAN MALARIA VECTOR ECOLOGY AND CONTROL IN TANZANIA

Heather Ferguson[1], Kija R. Ng'habi[2], Sarah J. Moore[2], Issa Lyimo[2], Tanya L. Russell[2], Honorathy Urassa[2], Hassan Mshinda[2], Gerry Killeen[2], Bart G. Knols[2]
[1]University of Glasgow, Glasgow, United Kingdom, [2]Ifakara Health Research and Development Centre, Ifakara, United Republic of Tanzania

248

SPATIO-TEMPORAL DYNAMICS OF IMMATURE CULICINES AND THEIR LARVAL HABITATS IN MWEA RICE SCHEME, KENYA

Ephantus J. Muturi
University of Alabama at Birmingham, Birmingham, AL, United States

249

IMPACT OF *PLASMODIUM FALCIPARUM* INFECTION ON THE EGGS HATCHING RATE AND THE LARVAL DEVELOPMENT TIME AMONG THE MOLECULAR FORMS M & S OF *ANOPHELES GAMBIAE S.S*

Alpha S. Yaro, Amadou Guindo, Abdoulaye M. Touré, Adama Dao, Mamadou B. Coulibaly, Sekou F. Traoré
MRTC, Bamako, Mali

250

MALARIA-INFECTED MOSQUITO MORTALITY IS AGE- AND *PLASMODIUM*-DENSITY DEPENDENT

Emma J. Dawes, Shijie Zhuang, María-Gloria Basáñez, Robert E. Sinden
Imperial College London, London, United Kingdom

251

COMPARATIVE CAPTURE RATE RESPONSES OF MOSQUITO VECTORS TO LIGHT TRAP AND HUMAN LANDING COLLECTION METHODS

Donald Barnard, Gregory Knue
USDA-ARS, Gainesville, FL, United States

252

EVALUATION OF THE INDOOR AND OUTDOOR BLOOD FEEDING BEHAVIOR OF ANOPHELES ARABIENSIS IN AN AREA WITH HIGH INSECTICIDE TREATED BED NET USE IN SOUTHERN ZAMBIA

Christen M. Fornadel[1], Shadrack Habbanti[2], Mulenga Musapa[2], Julie A. Clennon[1], Douglas E. Norris[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]The Malaria Institute at Macha, Choma, Zambia

253

THE MITOCHONDRIA CYTOCHROME OXIDASE 1 DNA SEQUENCES DEFINE ECOLOGICAL DISTRIBUTION OF *ANOPHELES GAMBIAE* SPECIES COMPLEX IN GHANA

Dziedzom K. de Souza[1], Michael D. Wilson[2], Charles A. Brown[2], Bernard W. Lawson[3], Daniel A. Boakye[2]
[1]Noguchi Memorial Institute for Medical research/Department of Theoretical and Applied Sciences, Kwame Nkrumah University of Science and Technology, Accra/Kumasi, Ghana, [2]Noguchi Memorial Institute for Medical research, Accra, Ghana, [3]Department of Theoretical and Applied Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

254

IMPACT OF EXPOSURE TO ANOPHELES BITES ON THE DEVELOPMENT OF HUMAN ANTIBODY RESPONSE TO *PLASMODIUM FALCIPARUM* IN CHILDREN LIVING IN MALARIA ENDEMIC AREA

Jean Biram Sarr
IRD, Dakar, Senegal

255

HOST DENSITY EFFECTS ON FEEDING BEHAVIOR OF *CULEX QUINQUEFASCIATUS* SAY (DIPTERA: CULICIDAE)

Ivo M. Foppa[1], Kevin A. Caillouet[1], Sarah R. Michaels[1], Ricardo Cortez[2], Dawn M. Wesson[1]
[1]Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States, [2]Tulane University School of Science and Engineering, New Orleans, LA, United States

256

CULEX VECTOR COMPETENCE DOES NOT ENABLE OUTBREAKS OF WEST NILE VIRUS IN CALIFORNIA

W. Reisen, C. Barker, Y. Fang
University of California, Davis, Davis, CA, United States

257

POTENTIAL FOR NORTH AMERICAN MOSQUITOES TO TRANSMIT RIFT VALLEY FEVER VIRUS

Michael J. Turell[1], William C. Wilson[2], Kristine Bennett[2]
[1]U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States, [2]Arthropod-Borne Animal Diseases Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Laramie, WY, United States

258

MOSQUITO, *AEDES AEGYPTI*, INFESTATION CAUSES CD4+ T-CELLS RESPONDING TO COGNATE ANTIGEN TO DEVELOP THE CAPACITY TO EXPRESS INTERLUKIN-4

V. D. Boppana[1], F. J. Alarcon-Chaidez[1], S. Thangamani[1], A. J. Adler[2], S. K. Wikel[1]
[1]Department of Immunology, University of Connecticut Health Center, Farmington, CT, United States; Current Address: Department of Pathology, University of Texas Medical Branch, Galveston, TX, United States, [2]Department of Immunology, University of Connecticut Health Center, Farmington, CT, United States

(ACMCIP Abstract)

259

A REVIEW OF *ANOPHELES GAMBIAE* LARVAL ECOLOGY AND ITS IMPLICATIONS FOR CONTROL

Ulrike Fillinger[1], Silas Majambere[1], Bryson Ndenga[2], Khadija Kannady[3], Steven W. Lindsay[1]
[1]Durham University, Durham, United Kingdom, [2]Kenya Medical Research Institute, Kisumu, Kenya, [3]Urban Malaria Control Program, City Council, Dar es Salaam, United Republic of Tanzania

260

EVALUATION OF FEMALE *AEDES AEGYPTI* RESTING PREFERENCES USING A NOVEL LABORATORY ASSAY

Nicole L. Achee[1], Suppaluck Polsomboon[2], John P. Grieco[1]
[1]Uniformed Services University of the Health Sciences, Bethesda, MD, United States, [2]Katsetsart University, Bangkok, Thailand

261

HOST PREFERENCE OF POTENTIAL WEST NILE VIRUS VECTORS IN GUATEMALA

Rebekah J. Kent[1], Maria Eugenia Morales[2], Nicholas Komar[1]
[1]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]Universidad del Valle de Guatemala, Guatemala City, Guatemala

Other Bacterial Infections

262

INCREASING FLUOROQUINOLONE RESISTANCE IN *SALMONELLA TYPHI* IN ONTARIO, 2002-2007

Shaun K. Morris[1], Susan E. Richardson[1], Laura Sauve[2], E. Lee Ford-Jones[1], Frances Jamieson[3]
[1]The Hospital For Sick Children, Toronto, ON, Canada, [2]British Columbia Children's Hospital, Vancouver, BC, Canada, [3]Central Public Health Laboratory, Toronto, ON, Canada

263

VARIABILITY IN MEASUREMENT OF HAND CONTAMINATION: IMPLICATIONS FOR EVALUATING HAND HYGIENE PROMOTION PROGRAMS

Pavani Kalluri Ram[1], Iqbal Jahid[2], Amal K. Halder[2], Benjamin Nygren[3], M Sirajul Islam[2], Stewart P. Granger[4], John W. Molyneaux[5], Stephen P. Luby[2]
[1]University at Buffalo, Buffalo, NY, United States, [2]International Center for Diarrhoeal Disease Research, B: International Centre for Diarrhoeal Diseases Research, Dhaka, Bangladesh, [3]Emory University, Atlanta, GA, United States, [4]Unilever R&D Port Sunlight, Bebington, United Kingdom, [5]Water and Sanitation Program, The World Bank Group, Washington, DC, United States

264

A PHASE II, OBSERVER BLIND, RANDOMIZED, CONTROLLED STUDY TO EVALUATE THE SAFETY, IMMUNOGENICITY AND IMMUNOLOGICAL MEMORY OF A BOOSTER DOSE OF A NEW GROUP A MENINGOCOCCAL CONJUGATE VACCINE (MENAFRIVAC™) IN HEALTHY AFRICAN CHILDREN PREVIOUSLY PRIMED AT 12-23 MONTHS OF AGE

Olubukola T. Idoko[1], Brown J. Okoko[1], Samba Sow[2], Milagritos Tapia[2], Marie-Pierre Preziosi[3], Elisa Marchetti[4], Fadima C. Haidara[2], Lionel Martellet[5], Julie Chaumont[5], Varsha Parulekar[6], Brian Plikaytis[7], Ray Borrow[8], George Carlone[9], Richard Adegbola[1], Jean-Marie Preaud[5], Prasad Kulkarni[10], Subhash Kapre[10], Suresh Jadhav[10], Musa Hassan-King[5], Marc LaForce[5], Simonetta Viviani[5], Helen Findlow[8], Cheryl Elie[9]
[1]Medical Research Council, Banjul, Gambia, [2]Centre pour les Vaccins en Développement CVD-Mali, Bamako, Mali, [3]Meningitis Vaccine Project, Initiative for Vaccine Research, WHO, Geneva, Switzerland, [4]Meningitis Vaccine Project, PATH, Ferney-Voltaire, France, [5]Meningitis Vaccine Project, PATH, Ferney-Voltaire, France, [6]iGATE Clinical Research Int., Mumbai, India, [7]Centers for Disease Control and Prevention, Atlanta, GA, United States, [8]Vaccine Evaluation Unit, Health Protection Agency, Manchester, United Kingdom, [9]Centers for Disease Control and Prevention, Atlanta, GA, United States, [10]Serum Institute of India Ltd (SIIL), Pune, India

265

DISCOVERY OF NEW *BARTONELLA* SPECIES IN BATS FROM KENYA

Michael Y. Kosoy[1], Ying Bai[1], Ivan V. Kuzmin[2], Michael Niezgoda[2], Richard Franka[2], Bernard Agwanda[3], Robert F. Breiman[4], Charles E. Rupprecht[2]
[1]Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]Division of Viral and Rickettsial Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Mammalogy Section, National Museum of Kenya, Nairobi, Kenya, [4]Global Diseases Detection Division, CDC in Kenya, Nairobi, Kenya

266

ANTIMICROBIAL SUSCEPTIBILITIES OF CLINICAL HUMAN ISOLATES OF *LEPTOSPIRA* FROM EGYPT

Clinton K. Murray[1], Guillermo Pimentel[2], Tina Parker[3], Miriam L. Beckius[1], Ahmed Samir[4], Bassem Abdel Rhman[2], Katrin Mende[5], Renee L. Galloway[6], Duane R. Hospenthal[1]
[1]Brooke Army Medical Center, Fort Sam Houston, TX, United States, [2]US NAMRU-3, Cairo, Egypt, [3]National Institutes of Health, Bethesda, MD, United States, [4]Cairo University, Cairo, Egypt, [5]Infectious Disease Clinical Research Program, Fort Sam Houston, TX, United States, [6]Centers for Disease Control and Prevention, Atlanta, GA, United States

267

GENETIC DIVERSITY OF *ORIENTIA TSUTSUGAMUSHI* FROM FEBRILE PATIENT IN UPPER REGIONS OF THAILAND DURING 2004-2007

Pimmada Jeamwattanalert, Toon Ruang-areerate, Piyanate Sunyakumthorn, Carl J. Mason, Jariyanart Gaywee
Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

(ACMCIP Abstract)

268

SPATIAL CLUSTERING BY DISEASE SEVERITY AMONG ROCKY MOUNTAIN SPOTTED FEVER CASES IN THE UNITED STATES, 2001-2005

Jennifer Adjemian, John Krebs, Eric Mandel, Jennifer McQuiston
Centers for Disease Control and Prevention, Atlanta, GA, United States

269

SEROSURVEY OF LEPTOSPIROSIS IN PERUVIAN MILITARY PERSONNEL DEPLOYED TO HAITI

Mary K. Hinkle[1], Justin A. Green[2], Gregory J. Martin[3], Tadeusz J. Kochel[2], Eric R. Hall[2], Manuel Villaran[2], Josefina Garcia[2], Paul Scott[4], Christian T. Bautista[4], Warren B. Sateren[4], Michael Gray[5], Clinton K. Murray[1], Duane R. Hospenthal[1], Ryan C. Maves[2]
[1]Brooke Army Medical Center, San Antonio, TX, United States, [2]Naval Medical Research Center Detachment, Lima, Peru, [3]Uniformed Services University for the Health Sciences, Bethesda, MD, United States, [4]Walter Reed Army Institute of Research, Rockville, MD, United States, [5]Fort Sam Houston, San Antonio, TX, United States

270

PREVALENCE OF *VIBRIO*, *AEROMONAS* AND *SALMONELLA* SPECIES IN VARIOUS SEAFOODS FROM SUPERMARKETS AND FRESH MARKETS IN BANGKOK, THAILAND

Joseph V. Woodring[1], Apichai Srijan[2], Carl Mason[2]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Armed Forces Research Institute of Medical Sciences, U.S. Army Medical Component, Bangkok, Thailand

271

PROFILE ANTIBIOTIC SUSCEPTIBILITY IN URINE CULTURES AND PRESENCE OF EXTENDED SPECTRUM BETA LACTAMAZ

Libia R. Vasquez, Laura Vasquez, Milagros Oviedo
Universidad de Los Andes, Valera, Venezuela

272

EPIDEMIOLOGY OF RICKETTSIAL INFECTION IN IQUITOS, PERU

Alison Stewart[1], Amy Morrison[2], Brett M. Forshey[3], Ching Wei-Mei[4], Hugo Gálvez[5], Dominique Eza[2], Joel M. Montgomery[6], David E. Bentzel[3], Tadeusz Kochel[3]
[1]University of Michigan, Ann Arbor, Michigan, MI, United States, [2]University of California-Davis, Davis, CA, United States, [3]U.S. Naval Medical Research Center Detachment, Lima, Peru, [4]Naval Medical Research Center, Bethesda, MD, United States, [5]Instituto Veterinario de Investigaciones Tropicales y de Altura, Iquitos, Peru, [6]Center for Disease Control and Prevention, Atlanta, GA, United States

273

EXPRESSION, PURIFICATION AND REFOLDING OF TWO FRAGMENTS (X AND Y) OF THE OUTER MEMBRANE PROTEIN A (OMPA) FROM *RICKETTSIA RICKETTSII*

Hua-Wei Chen, Erin G. Glennon, Margarita T. Esteban, Wei-Mei Ching
Naval Medical Research Center, Silver Spring, MD, United States

274

IN VITRO* ANTIBACTERIAL ACTIVITY OF TIGECYCLINE BY TIME-KILL ASSAY AGAINST LINEZOLID-SUSCEPTIBLE AND -RESISTANT VANCOMYCIN-RESISTANT *ENTEROCOCCUS FAECIUM

George A. Pankey, Deborah S. Ashcraft
Ochsner Clinic Foundation, New Orleans, LA, United States

275

DETECTION OF LEPTOSPIRAL DNA FROM INOCULATED BLOOD AND URINE SAMPLES USING FIVE PCR PRIMERS

Janelle L. Robertson[1], Sara J. Becker[1], Xin Yu[2], Joshua A. Hawley[1], Matthew E. Griffith[1], Miriam L. Bekius[2], Duane R. Hospenthal[1], Katrin Mende[2], Clinton K. Murray[1]
[1]Brooke Army Medical Center, San Antonio, TX, United States, [2]Infectious Disease Clinical Research Program, San Antonio, TX, United States

(ACMCIP Abstract)

Protozoa – Ameba/Giardia

276

RISK FACTORS FOR ENDEMIC GIARDIASIS – ASSOCIATION WITH CONTAMINATED WATER AND FOOD

Johari Surin, Mohammad A. Mahdy, Yvonne A. Lim, Hesham M. Al-Mekhlafi
University of Malaya, Kuala Lumpur, Malaysia

277

ASSOCIATION OF TNF-ALPHA PRODUCTION BY PERIPHERAL BLOOD MONONUCLEAR CELLS WITH SUSCEPTIBILITY TO AMEBIASIS

Kristine M. Peterson[1], Jianfen Shu[1], Dinesh Mondal[2], Rashidul Haque[2], William Petri[1]
[1]University of Virginia, Charlottesville, VA, United States, [2]International Centre for Diarrheal Diseases, Dhaka, Bangladesh

278

PARASITIC CO-INFECTION WITH GIARDIA INTESTINALIS AND CYCLOSPORA CAYETANENSIS AMONG CHILDREN IN PERU

Jennifer M. Ross[1], Kevin L. Winthrop[1], Dongseok Choi[1], Robert H. Gilman[2], Ynes Ortega[3], Lilia Cabrera[4], Lihua H. Xiao[5], Vitaliano A. Cama[5]
[1]Oregon Health and Science University, Portland, OR, United States, [2]Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, United States, [3]Center for Food Safety, University of Georgia, Griffin, GA, United States, [4]Asociacion Benefica PRISMA, Lima, Peru, [5]Centers for Disease Control and Prevention, Atlanta, GA, United States

279

DEVELOPMENT OF 18S-BASED IDENTIFICATION OF *ENTAMOEBA SPP*. IN STOOL SAMPLES

Helena dos Santos[1], Kakali Bandyopadhyay[2], Rebecca Bandea[2], Regina H. Peralta[1], Jose M. Peralta[1], Mackevin Ndubuisi[3], Cindy Daniell[3], Lauren DiMiceli[3], Mahin Park[3], Alexandre J. da SIlva[4]
[1]Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, [2]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED and Atlanta Research and Education Foundation, Atlanta, GA, United States, [3]Georgia Department of Health, Atlanta, GA, United States, [4]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States

280

PREVALENCE OF ASYMPTOMATIC *ENTAMOEBA HISTOLYTICA* INFECTION AND INTESTINAL ANTI-LECTIN IGA ANTIBODIES IN SOUTHERN INDIA

Meghan K. Rothenberger[1], Prabha Adhikari[2], William Stauffer[1], Rajeev Arvindakshan[2], Mohamed Abd-dalla[1], Ye-Ying Cen[1], Jonathan Ravdin[1]
[1]University of Minnesota, St. Paul, MN, United States, [2]Kasturba Medical College, Mangalore, India

281

TARGETING THE PROCESS OF ATTACHMENT IN *GIARDIA LAMBLIA* PATHOGENESIS

Colleen D. Walls, Heidi G. Elmendorf
Georgetown University, Washington, DC, United States

282

USE OF PRINCIPAL COMPONENT ANALYSIS TO EVALUATE WEALTH AND ITS ASSOCIATIONS WITH ENTERIC PARASITIC INFECTIONS IN A LOW-INCOME COMMUNITY

Vitaliano A. Cama[1], Shantanu Nundy[2], Lilia Cabrera[3], Rosa Cama[3], Robert H. Gilman[2], Lihua Xiao[4]
[1]Centers for Disease Control and Prevention-Atlanta Research and Education Foundation, Atlanta, GA, United States, [2]Johns Hopkins University, Baltimore, MD, United States, [3]A. B. Prisma, Lima, Peru, [4]Centers for Disease Control and Prevention, Atlanta, GA, United States

283

SEROPREVALENCE OF *TOXOPLASMA GONDII* IN GOATS FROM SOUTHWESTERN MISSISSIPPI

Jamela S. Alexander, Alex D. Acholonu
Alcorn State University, Alcorn State, MS, United States

284

COMPARISON OF MOLECULAR MARKERS FOR THE DETECTION OF VIABLE/INFECTIOUS PROZOAN PARASITES USING MOLECULAR AND CELLULAR ASSAYS

Absar Alum[1], **M. Khalid Ijaz**[2]
[1]Arizona State University, Department of Civil & Environmental Engineering, Tempe, AZ, United States, [2]Reckitt Benckiser Inc., Center of Innovation, Montvale, NJ, United States

(ACMCIP Abstract)

285

IBP45: A UNIQUE HOMOLOGUE OF INITIATOR BINDING PROTEIN (IBP39) IN PRIMITIVE PROTOZOAN PARASITE *TRICHOMONAS VAGINALIS*

Shweta Srivastava, Patricia J. Johnson
Department of Microbiology Immunology and Molecular Genetics, University of California Los Angeles, Los Angeles, CA, United States

(ACMCIP Abstract)

286

ANTI-PARASITIC ACTIVITIES OF THIAZOLIDES AND POTENTIAL DRUG TARGETS IN *NEOSPORA CANINUM* AND HOST CELLS

Andrew Hemphill, Joachim Müller
University of Berne, Berne, Switzerland

287

EVALUATION OF STOOL FIXATIVES FOR MORPHOLOGIC AND MOLECULAR DIAGNOSIS OF CRYPTOSPORIDIOSIS

Stephanie P. Johnston, Yvonne Qvarnstrom, Michael Arrowood, Henry S. Bishop, Alexandre J. da Silva
Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States

288

INTRANASAL ADMINISTRATION OF A SALMONELLA-BASED VACCINE EXPRESSING CP15 ANTIGEN CONFERS PROTECTION IN NEONATAL MICE CHALLENGED WITH *CRYPTOSPORIDIUM PARVUM*

Ace Bryan S. Cabal[1], Patricio A. Manque[2], Ana M. Lara[2], Ute Woehlbier[2], James K. Roche[3], Jesus Emmanuel A. Sevilleja[1], Andrea Rivers-Davis[3], Gregory A. Buck[2], Richard L. Guerrant[3]
[1]Enteric Diseases Study Group, National Institutes of Health, University of the Philippines-Manila, Manila, Philippines, [2]Department of Microbiology and Immunology, Virginia Commonwealth University, Richmond, VA, United States, [3]Center for Global Health, Division of Infectious Disease and International Health, Department of Medicine, University of Virginia, Charlottesville, VA, United States

289

SIMULTANEOUS DETECTION OF *ENTAMOEBA HISTOLYTICA*, *CRYPTOSPORIDIUM PARVUM* AND *GIARDIA LAMBLIA* IN FECAL SAMPLES USING A SINGLE ENZYME IMMUNOASSAY

Cynthia Snider[1], Mamun Kabir[2], Joel Herbein[3], Jan Hencke[3], Rashidul Haque[2], William A. Petri Jr.[1]
[1]University of Virginia, Charlottesville, VA, United States, [2]International Centre for Diarrheal Disease Research-Bangladesh, Dhaka, Bangladesh, [3]TechLab, Inc., Blacksburg, VA, United States

Trematodes – Other

290

CASPASE 9, A SIGNALING PROTEIN OF THE HUMAN LIVER FLUKE, *OPISTHORCHIS VIVERRINI*

Sandi K. Parriott[1], Thewarach Laha[2], Banchob Sripa[3], Alex Loukas[4], Paul J. Brindley[1]
[1]Department of Microbiology, Immunology and Tropical Medicine, The George Washington University, Washington, DC, United States, [2]Department of Parasitology, Khon Kaen University, Khon Kaen, Thailand, [3]The Department of Pathology, Khon Kaen University, Khon Kaen, Thailand, [4]Division of Infectious Diseases and Immunology, Queensland Institute of Medical Research, Brisbane, Queensland, Australia

(ACMCIP Abstract)

291

TEMPERATURE-INDUCED GENE EXPRESSION OF *CLONORCHIS SINENSIS* NEWLY EXCYSTED JUVENILE IN ADAPTATION TO MAMMALIAN HOST

Won Gi Yoo[1], Tae Im Kim[1], Shunyu Li[1], Pyo Yun Cho[2], Tong-Soo Kim[3], Sung-Jong Hong[1]
[1]Chung-Ang University, Seoul, Republic of Korea, [2]Centers for Disease Control and Prevention, Seoul, Republic of Korea, [3]In-Ha University, In-Cheon, Republic of Korea

(ACMCIP Abstract)

292

CHOLIC ACID AND DOPAMINE NEURONS DRIVE BILE-CHEMOTAXIS OF *CLONORCHIS SINENSIS* NEWLY EXCYSTED JUVENILE

Shunyu Li[1], Tae Im Kim[1], Won Gi Yoo[1], Pyo Yun Cho[2], Tong-Soo Kim[3], Sung-Jong Hong[1]
[1]Chung-Ang, Seoul, Republic of Korea, [2]Centers for Disease Control and Prevention, Seoul, Republic of Korea, [3]In-Ha University, In-Cheon, Republic of Korea

(ACMCIP Abstract)

Trematodes – Schistosomiasis

293

PROPHYLACTIC EFFECT OF ARTESUNATE WITH/WITHOUT ANTIOXIDANTS ON JUVENILE AND ADULT EGYPTIAN STRAIN OF *SCHISTOSOMA MANSONI* IN MICE

Sayed H. Seif el-Din
Theodor Bilharz Research Institute (TBRI), Giza, Egypt

294

EVALUATION OF SURFACE ANTIGENS OF *SCHISTOSOMA MANSONI* AS VACCINE CANDIDATES

Jayendra Prasad, Erica Waite, Shifan Liu, Ronald E. Blanton, Christopher L. King
Case Western Reserve University, Cleveland, OH, United States

(ACMCIP Abstract)

295

HEALTH TECHNOLOGY ASSESSMENT OF *SCHISTOSOMA MEKONGI* CONTROL PROGRAM, CAMBODIA

Dysoley Lek

National Center for Parasitology, Entomology and Malaria Program, Phnom Penh, Cambodia

296

HIGH GENETIC DIVERSITY IN *SCHISTOSOMA MANSONI* IN THE SENEGAL RIVER BASIN, A POPULATION GENETIC ANALYSIS 20 YEARS AFTER THE EPIDEMIC OUTBREAK

Tine Huyse[1], Gregory E. Maes[2], Sarah Geldof[2], Kim Vereecken[1], Djibril Djibril[1], David Rollinson[3], Bonnie L. Webster[3], Katja Polman[1]
[1]Institute of Tropical Medicine, Antwerp, Belgium, [2]Katholieke Universiteit Leuven, Leuven, Belgium, [3]The Natural History Museum, London, United Kingdom

297

MECHANISM OF ANEMIA IN *SCHISTOSOMA MANSONI*-INFECTED SCHOOL CHILDREN IN WESTERN KENYA

Sara E. Butler[1], Erick M. Muok[2], Susan P. Montgomery[1], Pauline M. Mwinzi[2], Diana M. Karanja[2], W. Evan Secor[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Kenya Medical Research Institute, Kisumu, Kenya

298

POSSIBLE PRESENCE OF THREE PROMINENT IMMUNE SIGNALING PATHWAYS, IMD/RELISH, TOLL/DORSAL AND JAK/STAT, IN THE SNAIL *BIOMPHALARIA GLABRATA*, THE INTERMEDIATE HOST OF *SCHISTOSOMA MANSONI*

Si-Ming Zhang, Vijay Ramakrishnan, Hong Nian
University of New Mexico, Albuquerque, NM, United States

(ACMCIP Abstract)

299

COMMUNITY-DIRECTED INTERVENTION FOR SCHISTOSOMIASIS AND SOIL TRANSMITTED HELMINTHES IN WESTERN KENYA

Pauline N. Mwinzi[1], Mariam Mwanje[2], Chrispin Owaga[1], Erick Muok[1], Kayla Laserson[3], Adazu Kubaje[3], Susan Montgomery[4], W. Evan Secor[4], Erick Muchiri[2], Diana MS Karanja[1]
[1]Kenya Medical Research Institute, Center for Global Health Research, Kisumu, Kenya, [2]Division of Vector Borne Diseases, Kenya Ministry of Health, Nairobi, Kenya, [3]KEMRI-Centers for Disease Control and Prevention, Kenya Medical Research Institute, Center for Global Health Research, Kisumu, Kenya, [4]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

300

CIRCULATING CYTOKINES, THEIR SOLUBLE RECEPTORS AND HUMAN RESPONSES TO PRAZIQUANTAL TREATMENT OF SCHISTOSOMIASIS

Jenny Houghton[1], Colin M. Fitzsimmons[1], Narcis B. Kabatereine[2], Gachuhi Kimani[3], Eric Muchiri[4], Joseph K. Mwatha[3], Claus M. Reimert[5], Edridah M. Tukahebwa[2], Birgitte J. Vennervald[5], David W. Dunne[1]
[1]Department of Pathology, Cambridge University, Cambridge, United Kingdom, [2]Vector Control Division, Ministry of Health, Kampala, Uganda, [3]Kenya Medical Research Institute, Nairobi, Kenya, [4]Division of Vector Borne Diseases, Kenyan Ministry of Health, Nairobi, Kenya, [5]DBL – Centre for Health Research and Development, Copenhagen, Denmark

(ACMCIP Abstract)

301

TRANSPOSITION EXCISION ACTIVITIES OF THE PIGGYBAC AND MOS-1 MARINER TRANSPOSONS IN *SCHISTOSOMA MANSONI*

Yousef N. Alrefaei[1], Maria Morales[2], Paul J. Brindley[1]
[1]The George Washington University, Washington, DC, United States, [2]Tulane University, New Orleans, LA, United States

(ACMCIP Abstract)

302

A PRINCIPAL COMPONENTS ANALYSIS OF IMMUNE PARAMETERS ASSOCIATED WITH RESISTANCE TO REINFECTION WITH *SCHISTOSOMA MANSONI*

Carla L. Black[1], Pauline N. Mwinzi[2], W. Evan Secor[3], Diana M. Karanja[2], Daniel G. Colley[1]
[1]University of Georgia, Athens, GA, United States, [2]Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

(ACMCIP Abstract)

303

CHARACTERIZATION OF HUMORAL AND CD4+ T CELL RESPONSES TO SMCB1 IN SCHISTOSOMIASIS PATIENTS RESIDING IN ENDEMIC AREAS IN BRAZIL

Lucia A. O. Fraga[1], Erika Lamb[2], Elizabeth C. Moreno[3], Luiz Cosme C. Malaquias[4], Alda Maria S. Silveira[5], Jan Dvorak[6], Conor R. Caffrey[7], Stephen J. Davies[8]
[1]Uniformed Services University of the Health Sciences/UNIVALE/DRS, Bethesda, MD, United States, [2]Uniformed Services University of the Health Sciences, Bethesda, MD, United States, [3]Funasa-Fundação Nacional de Saúde-MS-Brasil, Belo Horizonte, Brazil, [4]UNIVALE-Universidade Vale do Rio Doce, Gov. Valadares, MG., Brazil, [5]UNIVALE-Universidade Vale do Rio Doce, Gov. Valadares, MG., Brazil, [6]Sandler Center for Basic Research in Parasitic Diseases, California Institute for Quantitative Biosciences (QB3), University of California, San Francisco, CA, United States, [7]Sandler Center for Basic Research in Parasitic Diseases, California Institute for Quantitative Biosciences (QB3), University of California, San Francisco, CA, United States, [8]Department of Microbiology and Immunology, Uniformed Services University of the Health Sciences, Bethesda, MD, United States

(ACMCIP Abstract)

305

URINARY SCHISTOSOMIASIS SCOURGE AMONG RURAL SCHOOL CHILDREN IN CHITONGO AREA, SOUTHERN ZAMBIA

Sandra Chishimba[1], Aniset Kamanga[1], Jay Sikalima[1], Julie Clennon[2], Sungano Mharakurwa[1], Clive J. Shiff[2]
[1]The Malaria Institute at Macha, Choma, Zambia, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

306

FEASABILITY OF *SCHISTOSOMIASIS MANSONI* ENDEMIC EVALUATION USING EITHER SERODIGNOSTIC OF MOLECULAR DETECTION METHODS IN BURKINA FASO

Hermann Sorgho, Ollo U. Da, Jean-Bosco Ouédraogo
Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso

307

A CLOSER LOOK AT THE PROTEINS INVOLVED IN SEROTONIN SIGNALING IN *SCHISTOSOMA MANSONI* AND HOW THEY MODULATE BEHAVIOR

Nicholas Patocka, Paula Ribeiro
McGill University, Ste-anne-de-bellevue, QC, Canada

(ACMCIP Abstract)

308

IMPLICATIONS OF THE EFFECT OF *SCHISTOSOMA MANSONI* AND *SCHISTOSOMA HAEMATOBIUM* CO-INFECTIONS ON HUMAN MORBIDITY INDICATORS

Anouk N. Gouvras[1], Alice J. Norton[1], Curtis H. Kariuki[2], Alan Fenwick[1], Joanne P. Webster[1]
[1]Imperial College London, London, United Kingdom, [2]National Museums Kenya, Kenya, Kenya

Viruses – Other

309

YIELD OF THREE WILD BIRD STOOL COLLECTION METHODS FOR AVIAN INFLUENZA SURVEILLANCE

Catalina Hoyos[1], Bruno M. Ghersi[2], Rodrigo Iglesias[2], Elliot Stieglitz[1], Hugo R. Razuri[3], Armando E. Gonzales[2], Andres G. Lescano[3], Joel M. Montgomery[3]
[1]Stony Brook University School of Medicine, Stony Brook, NY, United States, [2]Universidad Nacional Mayor de San Marcos, School of Veterinary Medicine, Lima, Peru, [3]U.S. Naval Medical Research Center Detachment, Lima, Peru

310

FIELD DETECTION OF EBOLA- AND MARBURG VIRUSES BY A PCR-BASED LATERAL FLOW DIPSTICK ASSAY

Roman Wölfel[1], Markus Panning[2], Gerhard Dobler[1]
[1]Bundeswehr Institute of Microbiology, Munich, Germany, [2]Bernhard-Nocht Institute for Tropical Medicine, Hamburg, Germany

311

VIRULENCE VARIATION AMONG ISOLATES OF WESTERN EQUINE ENCEPHALITIS VIRUS IN AN OUTBRED MOUSE MODEL

Christopher H. Logue
Centres for Disease Control and Prevention & Colorado State University, Fort Collins, CO, United States

312

RABIES IN BATS IN TWO COMMUNITIES IN PERU AFTER AN OUTBREAK IN 2007

Gabriela Salmon-Mulanovich[1], Christian Albújar[1], Carolina Guevara[1], Alicia Vasquez[2], Alberto Laguna[1], Milagros Salazar[3], Hernán Zamalloa[1], Marcia Cáceres[4], Tadeusz Kochel[1], Carlos Contreras[4], Felix R. Jackson[5], Charles E. Rupprecht[5], Joel M. Montgomery[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru, [3]University of Texas Medical Branch, Galveston, TX, United States, [4]Dirección de Salud, Madre de Dios, Peru, [5]Centers for Disease Control and Prevention, Atlanta, GA, United States

313

CORTICOSTEROIDS MODULATE SEOUL VIRUS INFECTION, REGULATORY T CELL RESPONSES, AND MMP-9 EXPRESSION IN MALE, BUT NOT FEMALE, NORWAY RATS

Judith D. Easterbrook, **Sabra L. Klein**
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

314

DETECTION OF VIRAL RNA FROM PARAFFIN-EMBEDDED TISSUES AFTER PROLONGED FORMALIN FIXATION

Randal J. Schoepp[1], Michelle D. McKinney[2], Steven J. Moon[1], David A. Kulesh[1], Thomas Larsen[1]
[1]U.S. Army Medical Research Institute for Infectious Diseases, Frederick, MD, United States, [2]GEO-CENTERS, Inc., Frederick, MD, United States

315

FULL LENGTH SEQUENCING AND GENETIC CHARACTERIZATION OF BREU BRANCO VIRUS (BE AR 494347) AND STRAINS BE AR 494475 AND BE AR 486204 ISOLATED FROM ANOPHELES MOSQUITOES

Conceição M. Vieira[1], Márcio R. Nunes[2], Eliana V. da Silva[2], Valéria L. Carvalho[2], Joaquim P. Nunes Neto[2], Helena B. Vasconcelos[2], Ana C. Cruz[2], Samir M. Casseb[2], **Pedro F. Vasconcelos**[2]
[1]Universidade Federal Rural da Amazônia, Belém, Brazil, [2]Instituto Evandro Chagas, Belém, Brazil

316

SEROPREVALENCE RATES OF MAYARO VIRUS IN URBAN AND RURAL AREAS OF MAYNAS PROVINCE, PERU

Kanya C. Long[1], Amy C. Morrison[2], Brett M. Forshey[3], Alfredo Huaman[3], Claudio Rocha[3], Rebeca Carrion[3], Cristian Carey[4], Joel M. Montgomery[5], Robert B. Tesh[1], Tad Kochel[3]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]University of California, Davis, Davis, CA, United States, [3]Naval Medical Research Center Detachment, Lima, Peru, [4]Dirección Ejecutiva de Epidemiología de Salud de Loreto, Iquitos, Peru, [5]US Centers for Disease Control, Atlanta, GA, United States

317

SINDBIS ALPHAVIRUS INFECTION: CLINICAL FEATURES, DIAGNOSIS AND EPIDEMIOLOGY

Satu Kurkela[1], Tapani Helve[2], Osmo Rätti[3], Tytti Manni[1], Eili Huhtamo[1], Nathalie Yumari Uzcátegui[1], Johanna Myllynen[4], Juha Laakkonen[5], Juha Pekka Nuorti[6], Antti Vaheri[1], Olli Vapalahti[1]
[1]Haartman Institute, University of Helsinki, Helsinki, Finland, [2]Helsinki University Central Hospital, Helsinki, Finland, [3]Arctic Centre, University of Lapland, Rovaniemi, Finland, [4]Helsinki University Central Hospital Laboratory, Helsinki, Finland, [5]Faculty of Veterinary Medicine, University of Helsinki, Helsinki, Finland, [6]National Public Health Institute, Helsinki, Finland

318

NORTH AND SOUTH AMERICAN EASTERN EQUINE ENCEPHALITIS VIRUS INFECTION OF HISPID COTTON RATS

Nicole C. Arrigo, Patrick C. Newman, A. Paige Adams, Douglas M. Watts, Scott C. Weaver
University of Texas Medical Branch, Galveston, TX, United States

319

TRANSMISSION OF NIPAH BY DATE PALM SAP, BANGLADESH 2008

Muhammad Aziz Rahman[1], M. Jahangir Hossain[2], Sharmin Sultana[3], Shahed Sazzad[2], Nusrat Homaira[1], Sayma Afroze[3], Mahmudur Rahman[3], Emily Gurley[2], Stephen P. Luby[4]
[1]International Center for Diarrhoeal Disease Research, Bangladesh and IEDCR (Institute of Epidemiology, Disease Control and Research), Dhaka, Bangladesh, [2]International Center for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh, [3]IEDCR (Institute of Epidemiology, Disease Control and Research), Dhaka, Bangladesh, [4]International Center for Diarrhoeal Disease Research, Bangladesh and Centers for Disease Control and Prevention, Dhaka, Bangladesh

320

EVALUATION OF RISK FOR AVIAN INFLUENZA INTRODUCTION USING GIS IN WETLANDS IN PERU

Hugo R. Razuri[1], Bruno M. Ghersi[1], Veronica Landa[2], Gabriela Salmon-Mulanovich[1], Jorge Pastor[2], Raul Zegarra[2], David L. Blazes[1], Joel Montgomery[1], Andres G. Lescano[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]National Animal and Plant Health Service, Ministry of Agriculture, Lima, Peru

321

DICISTRONIC EXPRESSION OF MULTIPLE FLUORESCENT PROTEINS FROM A DOUBLE SUBGENOMIC ALPHAVIRUS

Michael R. Wiley[1], Lisa O. Roberts[2], Zach N. Adelman[1], Kevin M. Myles[1]
[1]Virginia Tech, Blacksburg, VA, United States, [2]School of Biomedical and Life Sciences, University of Surrey, Guildford, United Kingdom

Poster Session A ACMCIP Abstracts – Molecular, Cellular and Immunoparasitology

107, 142, 159, 160, 161, 164, 165, 166, 180, 194, 196, 197, 215, 221, 222, 223, 225, 226, 228, 229, 230, 258, 267, 275, 284, 285, 290, 291, 292, 294, 298, 300, 301, 302, 303, 307

Burroughs Wellcome Fund/ASTMH Fellowship Committee Meeting

Salon 828
Monday, December 8, Noon – 2 p.m.

Clinical Group Education Curriculum Meeting

Salon 816
Monday, December 8, 12:15 p.m. – 1:15 p.m.

Exam Executive Committee Meeting

Salon 829
Monday, December 8, 12:15 p.m. – 1:15 p.m.

Mid-Day Session 27

Grad School or Peace Corps... Why Not Do Both?

Waterbury

Monday, December 8, 12:15 p.m. – 1:15 p.m.

The Peace Corps strives to help meet the world's demand for skilled volunteers in public health. Through its Master's International (MI) program, graduate students serve others overseas while earning their master's degree. Partner universities benefit as well by further internationalizing both particular schools and their campuses. A Peace Corps volunteer in public health may serve in a healthcare system either as a regional health educator for a government ministry of health, or as a community health or nutrition promoter working out of a rural dispensary or clinic. Collaborating with host country counterparts on education, awareness and other relevant projects, Master's International Peace Corps Volunteers encourage community members to adopt behaviors that promote health, prevent illness, treat disease and facilitate rehabilitation. The Master's International program provides an opportunity for these educators to pursue a master's degree that includes credit for Peace Corps service. It also benefits partner colleges and universities by further internationalizing campuses, as well as attracting focused and committed graduate students. The discussion will be facilitated by the coordinator of the Master's International program at Tulane University. Panelists include university representatives who coordinate the MI program on their campuses, as well as former MI students who have served overseas.

CHAIR

Eric Goldman
Peace Corps, Washington, DC, United States

Steve Bennett
Tulane University, New Orleans, LA, United States

SPEAKER

Steve Bennett
Tulane University, New Orleans, LA, United States

Mid-Day Session 27A

Video on Human African Trypanosomiasis: "Survival - The Deadliest Disease"

Bayside BC

Monday, December 8, 12:15 p.m. - 1:15 p.m.

Sleeping Sickness is the deadliest disease in the world. The Democratic Republic of Congo suffers more cases than almost any other country. Without treatment, parasites called trypanosomes invade the victim's brain, ravage their sleep cycle, driving them mad before finally killing them. But dedicated doctors and medics are fighting back. They travel throughout this war-torn and poverty-stricken country, seeking out the victims of Sleeping Sickness and treating them before it's too late. But their tools are limited. The most used drug, Melasoprol, kills one in twenty patients. Without new, safer drugs, this terrible disease may never be defeated.

CHAIR

Ann-Marie Sevcsik
Drugs for Neglected Diseases initiative, Geneva, Switzerland

Meet the Professors 28

Meet the Professors A: Enigmatic and Teaching Cases

Grand Ballroom A

Monday, December 8, 12:15 p.m. – 1:15 p.m.

A panel of professors will each present one clinical case of a tropical disease specific to a particular region that they have found a challenge to manage or diagnose. If there is time, participants may be able to present enigmatic cases for the audience and panel to consider. An open discussion will be encouraged, with audience participation.

CHAIR

Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada

PRESENTERS

Christina M. Coyle
Albert Einstein College of Medicine, Bronx, NY, United States

Eric R. Houpt
University of Virginia, Charlottesville, VA, United States

Mid-Day Session 29

Malaria Eradication: Calibrating Aspirations, Technology, and Commitment

Grand Ballroom C

Monday, December 8, 12:15 p.m. – 1:15 p.m.

In 2007 there was global call for a long-term course toward the eradication of malaria. The use of the term "malaria eradication" will remind many of the previous declaration of global malaria eradication in the mid-1950s and the outcomes of that – "failure" or "partial success," depending on to whom you talk. We need to understand what we are doing now for malaria control as a base for what progress and timeframe is realistic in the future. Questions about eradication of malaria as a long-term goal have included: Should eradication be undertaken at all, or will it be too costly? Is eradication feasible with today's tools and if not, what innovations will be needed? The symposium will provide a focused yet comprehensive overview of the critical technical, epidemiologic and programmatic issues critical to near-term control and the eventual eradication of malaria. The objective of the symposium is to increase international scholarly exchange focused on malaria control, elimination and eradication, and the importance of a coordinated strategic approach.

CHAIR

Carlos C. (Kent) Campbell
Malaria Control and Evaluation Partnership in Africa/PATH, Seattle, WA, United States

12:15 P.M.

OVERVIEW

Richard Feachem
The Global Health Group, San Francisco, CA, United States

12:20 p.m.

PERSPECTIVES ON MALARIA ERADICATION

Randall M. Packard
Institute of the History of Medicine, Baltimore, MD, United States

12:25 p.m.

MALARIA CONTROL OVERVIEW 2000-2008

Bernard Nahlen
President's Malaria Initiative, Washington, DC, United States

12:35 p.m.

MALARIA CONTROL-ELIMINATION-ERADICATION – COUNTRY PERSPECTIVE: ZANZIBAR

Abdullah Ali
Zanzibar Malaria Control Program, Zanzibar, United Republic of Tanzania.

12:45 p.m.

PROGRESS TOWARD MALARIA PROGRAM IMPACT AND ELIMINATION

Richard W. Steketee
PATH, Seattle, WA, United States

1 p.m.

A GLOBAL MALARIA ACTION PLAN

David Brandling-Bennett
Bill & Melinda Gates Foundation, Seattle, WA, United States

Pedro Alonso
Centro de Investigacao em saude de Manhica (CISM), Barcelona, Spain

Mid-Day Session 30

The Cochrane Infectious Diseases Group: Systematic Reviews in Tropical Diseases

Grand Ballroom D
Monday, December 8, 12:15 p.m. – 1:15 p.m.

The Cochrane Collaboration Infectious Diseases Group (CIDG) has been producing and updating systematic reviews in tropical diseases since 1992. As of 2008, more than 125 CIDG reviews are available in the Cochrane Database of Systematic Reviews. Most reviews have been done by the 228 academic or clinical specialists in disease areas from 43 countries, with technical support from the CIDG base at the Liverpool School of Tropical Medicine and seven international editors. The symposium will introduce CIDG, including the scope of reviews it undertakes, how it is supported and its influence on research and policy. The diseases covered by the CIDG include most major infectious diseases of the developing world with a strong focus on malaria and TB, as well as the neglected tropical diseases (HIV/AIDS, acute respiratory infections and trachoma are covered by other Cochrane groups). Speakers will underscore opportunities to become involved as review authors, referees or editors.

CHAIR

Paul Garner
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

12:15 p.m.

THE COCHRANE INFECTIOUS DISEASES GROUP (CIDG): WHAT IT IS, HOW IT WORKS, AND OPPORTUNITIES FOR INVOLVEMENT

Paul Garner
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

12:30 p.m.

CIDG IN AFRICA: TOPICAL REVIEWS AND AUTHORS

Martin Meremikwu
University of Calabar, Calabar, Nigeria

12:45 p.m.

CIDG REVIEWS IN MALARIA: WHAT WE KNOW FROM SYSTEMATIC REVIEWS, POLICY AND RESEARCH IMPLICATIONS

Piero Olliaro
World Health Organization, Geneva, Switzerland

1 p.m.

CIDG REVIEWS IN DIARRHEA: PAVING THE WAY FOR POLICY WITH RELIABLE SYNTHESES

Thomas Clasen
London School of Hygiene and Tropical Medicine, London, United Kingdom

Poster Session A Viewing

Armstrong Ballroom
Monday, December 8, 1:30 p.m. – 7 p.m.

Scientific Session 31

Malaria – Immunology I

Gallery
Monday, December 8, 1:30 p.m. – 3:15 p.m.

CHAIR

Peter Crompton
National Institutes of Health, Rockville, MD, United States

Franck Remoue
Institut de Recherche Pour Le Developpment, Epidem, Montpellier, France

1:30 p.m.

322

MALARIA POTENTIATES EXPERIMENTAL MYCOBACTERIAL INFECTION *IN VITRO* AND *IN VIVO*

Michael Hawkes, Xiaoming Li, Maryanne Crockett, Angelina Diassiti, W. Conrad Liles, Jun Liu, Kevin Kain
University of Toronto, Toronto, ON, Canada

(ACMCIP Abstract)

1:45 p.m.

323

IMPACT OF HIV-1 ON HUMORAL IMMUNITY TO *PLASMODIUM FALCIPARUM* MALARIA IN NON-PREGNANT ADULTS WITH UNCOMPLICATED MALARIA IN ZAMBIA

Erica Van Eijk[1], **Jean-Pierre Van geertruyden**[2], Francisca Yosaatmadja[3], Webster Kasongo[4], Modest Mulenga[4], Umberto D'Alessandro[2], Stephen Rogerson[3]
[1]Vrije Universiteit Amsterdam, Amsterdam, Netherlands, [2]Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium, [3]Melbourne University, Melbourne, Australia, [4]Tropical Disease Research Centre, Ndola, Zambia

(ACMCIP Abstract)

2 p.m.

324

CHILD MALNUTRITION AT THE ONSET OF MALARIA TRANSMISSION: IMPACT ON SUBSEQUENT MALARIA MORBIDITY AND ANTI-*PLASMODIUM FALCIPARUM* ANTIBODY RESPONSE

Florie Fillil[1], Jean Birame Sarr[2], Franck Remoue[3], Denis Boulanger[1], Badara Cisse[4], Cheikh Sokhna[3], Geoffrey Targett[5], Jean-François Trape[3], François Simondon[1], Brian Greenwood[5], Kirsten Simondon[1]
[1]Institut de Recherche pour le Développement (IRD), Montpellier, France, [2]Association Espoir Pour la Santé (EPLS), Saint-Louis, Senegal, [3]Institut de Recherche pour le Développement (IRD), Dakar, Senegal, [4]Université Cheikh Anta Diop (UCAD), Laboratory of Parasitology, Dakar, Senegal, [5]London School of Hygiene and Tropical Medicine, London, United Kingdom

2:15 p.m.

325

A LONGITUDINAL STUDY OF THE ACQUISITION AND MAINTENANCE OF *PLASMODIUM FALCIPARUM*-SPECIFIC MEMORY B CELLS

Greta Weiss[1], Boubacar Traore[2], Safiatou Doumbo[2], Didier Doumtabe[2], Younoussou Kone[2], Marko Mircetic[1], Aissata Ongoiba[2], Kassoum Kayentao[2], Ogobara K. Doumbo[2], Susan K. Pierce[1], Peter D. Crompton[1]
[1]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunogenetics, Bethesda, MD, United States, [2]Malaria Research and Training Center, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali

(ACMCIP Abstract)

2:30 p.m.

326

IMMUNITY TO *PLASMODIUM FALCIPARUM* MEASURED BY GROWTH INHIBITION ASSAY DECREASES WITH AGE AND IS ASSOCIATED WITH DELAYED TIME TO BLOOD STAGE INFECTION IN NATURALLY EXPOSED PERSONS

Arlene E. Dent[1], Elke Bergmann-Leitner[2], Danny Wilson[3], Daniel Tisch[1], Rhonda Kimmel[4], John Vulule[5], Peter Sumba[5], James Beeson[3], Evelina Angov[2], Ann Moormann[1], James Kazura[1]
[1]Case Western Reserved University, Cleveland, OH, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [3]Walter and Eliza Hall Institute, Parkville, Australia, 4Case Western Reserve University, Cleveland, OH, United States, 5Kenya Medical Research Institute, Kisumu, Kenya

(ACMCIP Abstract)

2:45 p.m.

327

COMPARISON OF SEROLOGICAL PROFILES AND ANTIBODY AVIDITIES TO EIGHT MAJOR CANDIDATE VACCINE ANTIGENS IN THAI AND CAMEROON ADULTS

Alexander K. Kayatani[1], Mark M. Fukuda[2], Rose G. Leke[3], Diane W. Taylor[1]
[1]University of Hawaii, Honolulu, HI, United States, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [3]University of Yaounde I, Yaounde, Cameroon

3 p.m.

328

DIFFERENCES IN TRANSMISSION INTENSITIES OF *FALCIPARUM* MALARIA AFFECT THE FREQUENCY OF HUMAN COMPLEMENT RECEPTOR 1 (CR1) POLYMORPHISMS IN NORTH-EASTERN TANZANIA

Helle H. Hansson[1], Lasse S. Vestergaard[2], Martha M. Lemnge[3], Bruno P. Mmbando[3], Anders Enevold[1], Mette L. Schousboe[1], John P. Lusingu[3], Thor G. Theander[1], Ib C. Bygbjerg[4], Michael Alifrangis[1]
[1]Center for Medical Parasitology, University of Copenhagen and Rigshospitalet, Copenhagen, Denmark, [2]Department of Infectious Diseases, Rigshospitalet, and Institute of International Health, Immunology and Microbiology, University of Copenhagen, Copenhagen, Denmark, [3]National Institute for Medical Research, Tanga, United Republic of Tanzania, [4]Institute for International Health, Immunology and Microbiology, University of Copenhagen and Rigshospitalet, Copenhagen, Denmark

Symposium 32

The Traveling Child: Medical Advice and Advances

Rhythms I

Monday, December 8, 1:30 p.m. – 3:15 p.m.

This symposium will address special considerations for the pediatric traveler in terms of pre-travel preparation and evaluation and management of post-travel illness. Content covered will include selected topics in pre-travel counseling, malaria prevention, updates in immunizations and medications and assessment of the ill child after travel to tropical areas. Illustrative case presentations will be included to emphasize key concepts.

CHAIR

Andrea P. Summer
Medical University of South Carolina, Charleston, SC, United States

Philip R. Fischer
Mayo Clinic, Rochester, MN, United States

1:30 p.m.

INFANTS, ALTITUDE AND AIR TRAVEL

Karl Neumann
Weill Cornell Medical College of Cornell University, Forest Hills, NY, United States

1:55 p.m.

PEDIATRIC VACCINE UPDATE

Sheila Mackell
Mountain View Pediatrics, Flagstaff, AZ, United States

2:20 p.m.

APPROACH TO THE ILL CHILD AFTER TRAVEL TO THE TROPICS

Andrea Summer
Medical University of South Carolina, Charleston, SC, United States

2:45 p.m.

CASE PRESENTATION IN PRE- AND POST-TRAVEL PATIENTS

William M. Stauffer
University of Minnesota, Minneapolis, MN, United States

Symposium 33

Building a Children's Clinical Centers of Excellence Network to Treat Pediatrics HIV/AIDS in Resource-Limited Settings

Rhythms II/III

Monday, December 8, 1:30 p.m. – 3:15 p.m.

Building and supporting clinical programs in resource-limited settings can be difficult. This symposium is a primer for individuals interested in starting, funding and maintaining such programs. Using the Baylor International Pediatric AIDS Initiative experience with the care and treatment of pediatric HIV/AIDS patients in Eastern Europe and Africa as a model, we will describe challenges and opportunities for the establishment of similar programs. The first session will help the participant understand the need for a preliminary business plan for the introduction of pediatric care and treatment in a selected community and how to identify resources from the public health and the private sector for supporting this endeavor. Addressing children's health care issues can be problematic in resource limited areas. Choosing the clinical services that will be provided, picking the appropriate clinical site and choosing community partners will be reviewed in the second session. The lack of human capacity is also a critical problem in many regions of the world and suggestions for addressing these issues will also be made from supplying expatriate physicians to training local health care providers in providing specialized care. The third session covers the importance of monitoring and evaluation of a program. This session will help the participant to understand how to develop a monitoring and evaluation plan, the implementation of this plan and how to use these data for program management and improvement in the future. Programs in resource limited areas can become isolated but by connecting multiple programs into a network their value can be increased. The final session of the symposium will demonstrate the power of such a network and how a strong working network can affect local, national and international policies.

CHAIR

Gordon E. Schutze
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

Mark W. Kline
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

1:30 p.m.

DEVELOPING, FUNDING, AND MAINTAINING PUBLIC-PRIVATE PARTNERSHIPS

Michael B. Mizwa
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

1:55 p.m.

ADDRESSING CHILDREN'S HEALTH CARE ISSUES IN RESOURCE-LIMITED AREAS

Gordon E Schutze
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

2:20 p.m.

THE MONITORING AND EVALUATION OF CLINICAL PROGRAMS IN RESOURCE-LIMITED SETTINGS

R. Sebastian Wanless
Baylor College of Medicine Pediatric International Pediatric AIDS Initiative, Houston, TX, United States

2:45 p.m.

THE POWER OF A NETWORK IN CHANGING HEALTH CARE FOR CHILDREN

Mark W. Kline
Baylor College of Medicine International Pediatric AIDS Initiative, Houston, TX, United States

Symposium 34

Roles of Intestinal Microbiota in Mucosal Function

Waterbury
Monday, December 8, 1:30 p.m. – 3:15 p.m.

Burgeoning information suggests that the commensal microbiota, which exceed by orders of magnitude our Homo sapiens genome, have profound influences on the development and maintenance of host immunity and resistance to infections. Our microbiota thus distinguish and help determine who we are (Gordon, Klein et al). Both innate and acquired host immune responses and mucosal growth, development and repair are substantially influenced by intestinal microbiota. Effects range from development of antigenic tolerance, immunologic counter-regulation and allergic disease to regulation of intestinal inflammation and mucosal barrier and absorptive function. Their importance in resistance to infection is clear from antibiotic associated complications. These topics will be addressed by pioneering investigators in this rapidly developing field.

CHAIR

Richard L. Guerrant
University of Virginia, Charlottesville, VA, United States

Chris Karp
Cincinnati Children's Hospital, Cincinannati, OH, United States

1:30 p.m.

IMPACT OF COMMENSAL MICROBIOTA ON MUCOSAL IMMUNITY AND INFLAMMATION

Balfour Sartor
University of North Carolina, Department of Medicine, Chapel Hill, NC, United States

2:05 p.m.

IMMUNE COUNTERREGULATION, THE HYGIENE HYPOTHESIS AND ORAL TOLERANCE

Christopher Karp
Cincinnati Children's Hospital, Cincinnati, OH, United States

2:40 p.m.

MECHANISMS TO PROTECT AGAINST INFLAMMATION AND BARRIER DISRUPTION

D. Brent Polk
Vanderbilt University Medical Center, Nashville, TN, United States

Symposium 35

Johns Hopkins Malaria Research Institute Symposium: Pores, Channels and Transporters in Plasmodium

Napoleon A123
Monday, December 8, 1:30 p.m. – 3:15 p.m.

The *Plasmodium* genome encodes over a hundred membrane proteins with putative functions of pores, channels and transporters. Many of these play a range of key physiological roles in the parasite, including the uptake of essential nutrients, the release of metabolic wastes, and ion homeostasis and signaling. Some of them are also known to play a role in the resistance to a number of anti-malarial drugs. Speakers in this symposium will provide an overview of the roles and characteristics of transporters and channels in the parasite.

CHAIR

Nirbhay Kumar
Johns Hopkins University, Baltimore, MD, United States

Peter Agre
Johns Hopkins University, Baltimore, MD, United States

1:30 p.m.

TRANSPORTERS AND CHANNELS OF THE MALARIA PARASITE

Kiaran Kirk
The Australian National University, Canberra, Australia

1:55 p.m.

AQUAGLYCEROPORIN IN *PLASMODIUM*

Peter Agre
Johns Hopkins University, Baltimore, MD, United States

2:20 p.m.

A PURINE PERMEASE IN THE ENDOPLASMIC RETICULUM OF *PLASMODIUM FALCIPARUM*

Choukri Ben Mamoun
University of Connecticut Health Center, Farmington, CT, United States

2:45 p.m.

K+ CHANNELS ENCODED BY *PLASMODIUM* PARASITES

Peter Ellekvist
University of Copenhagen, Copenhagen, Denmark

Symposium 35A

Roll Back Malaria Monitoring and Evaluation Reference Group: Progress and New Initiatives to Improving M&E for Malaria Control Programs

Maurepas

Monday, December 8, 1:30 p.m. - 3:15 p.m.

The Roll Back Malaria Monitoring and Evaluation Reference Group (MERG) was established to standardize indicators, develop data collection tools, and provide M&E guidance for national malaria control programs. The MERG brings together experts on malaria M&E from national control programs, regional institutions, and the RBM Partner organizations. The MERG has developed standardized indicators and tools for measuring malaria program coverage such as the DHS and MICS malaria modules and the Malaria Indicator Survey (MIS). The group has also worked on approaches to estimating changes in mortality. Together, these efforts have substantially increased the availability of consistent, reliable data at the country level on progress towards malaria control. The MERG also actively supports capacity development efforts for national malaria control programs to organize and conduct M&E efforts tailored to their own activities. As the world moves towards elimination of malaria, the MERG will take a leading role in refining existing tools and filling the emerging gaps in M&E. The symposium will highlight the work of the Roll Back Malaria Monitoring and Evaluation Reference Group to standardize M&E efforts, improve the quality of the available data on malaria control, and build capacity in M&E within country programs.

CHAIR

Richard W. Steketee
Malaria Control and Evaluation Partnership in Africa (MACEPA)/ PATH, Ferney, France

Erin Eckert
Macro International, Calverton, MD, United States

1:30 p.m.

OVERVIEW

Bernard Nahlen
President's Malaria Initiative, U.S. Agency for International Development, Washington, DC, United States

1:35 p.m.

CORE INDICATORS FOR MEASURING MALARIA COVERAGE AND IMPACT DURING PROGRAM SCALE-UP: GUIDANCE FROM THE RBM MERG

Emily White Johannson
UNICEF, New York, NY, United States

2:05 p.m.

MALARIA INDICATOR SURVEYS AND BUILDING LOCAL CAPACITY TO MEASURE PROGRESS

Erin Eckert
Macro International, Calverton, MD, United States

2:35 p.m.

M&E NEEDS IN THE MOVE TOWARDS ELIMINATION: WHAT ADAPTATIONS WILL MERG PARTNERS NEED TO DEVELOP TO MEET THE INTENSIFIED NEEDS IN M&E AS COUNTRIES MOVE TOWARDS ELIMINATION?

Larry Slutsker
Centers for Disease Control and Prevention, Atlanta, GA, United States

Richard W. Steketee
Malaria Control and Evaluation Partnership in Africa (MACEPA)/ PATH, Ferney, France

3:05 p.m.

DISCUSSION/SUMMARY

Symposium 36

Chemotherapeutic Strategies for Schistosomiasis

Bayside A

Monday, December 8, 1:30 p.m. – 3:15 p.m.

Schistosomiasis is a so-called neglected tropical disease, although almost 800 million people are at risk and more than 200 million individuals are infected. Individual treatment and community-based morbidity control relies on just one drug, namely praziquantel. The dependency on a single drug is an alarming situation, fueled by concern about the development and spread of resistance. Hence, alternative drugs are urgently needed. This symposium reviews some of the key advances in antischistosomal drug discovery now being undertaken by integrated public-private parterships.

CHAIR

Jennifer Keiser
Swiss Tropical Institute, Basel, Switzerland

Jürg Utzinger
Swiss Tropical Institute, Basel, Switzerland

1:30 p.m.

THE HELMINTH DRUG INITIATIVE

Solomon Nwaka
World Health Organisation/TDR, Geneva, Switzerland

1:50 p.m.

METALOMOME AND KINOME APPROACHES FOR THE IDENTIFICATION OF DRUG TARGETS IN *SCHISTOSOMA MANSONI*

Guilherme Oliveira
Centro de Pesquisas Rene Rachou, Belo Horizonte, Brazil

2:10 p.m.

IDENTIFICATION OF NEW DRUG LEADS FOR THE CONTROL OF SCHISTOSOMIASIS

David L. Williams
Illinois State University, Normal, IL, United States

2:30 p.m.

DRUG DISCOVERY FOR SCHISTOSOMES: POTENTIAL GENE TARGETS AND SMALL MOLECULE LEADS

Conor R. Caffrey
Sandler Center, San Franscisco, CA, United States

2:50 p.m.

NOVEL ANTISCHISTOSOMAL DRUGS: PIGGY BACKING FROM MALARIA DRUG DEVELOPMENT

Jennifer Keiser
Swiss Tropical Institute, Basel, Switzerland

Symposium 37

Update on the Control of Communicable and Tropical Diseases in Conflict-Affected Populations

Bayside BC

Monday, December 8, 1:30 p.m. – 3:15 p.m.

Conflict-affected, refugee or internally displaced populations, pose a challenge for control of communicable and tropical diseases. Population mobility, lack of adequate water and sanitation, breakdown of health care services, insufficient resources, tenuous security and inadequate shelter can result in increased levels of morbidity and mortality and threat of epidemics. Adequate disease control involves addressing basic human needs for food, water, shelter and sanitation, which requires coordination and communication among numerous humanitarian relief agencies. This symposium addresses current challenges in providing health care to populations affected by conflicts.

CHAIR

Holly A. Williams
Centers for Disease Control and Prevention, Atlanta, GA, United States

1:30 p.m.

IMPACT OF VIOLENCE ON A HEALTHCARE SYSTEM – CASE REPORT OF POST-ELECTION VIOLENCE IN KENYA, JANUARY – MARCH 2008

Susan Cookson
Centers for Disease Control and Prevention, Atlanta, GA, United States

1:55 p.m.

ACCESS TO AND QUALITY OF WATER AND SANITATION SERVICES IN REFUGEE SETTINGS

Thomas Handzel
Centers for Disease Control and Prevention, Atlanta, GA, United States

2:20 p.m.

OPERATIONAL DEVELOPMENT OF HIS FOR REFUGEES: SCIENCE, SURVEILLANCE AND ACTION

Basia Tomczyk
Centers for Disease Control and Prevention, Atlanta, GA, United States

2:45 p.m.

UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES STRATEGIC PLAN FOR MALARIA CONTROL

Holly A. Williams
Centers for Disease Control and Prevention, Atlanta, GA, United States

Symposium 38

Disease Eradication with the Forgotten Diseases: The NTDs and Their Progress Towards the Finish Line

Grand Ballroom A

Monday, December 8, 1:30 p.m. – 3:15 p.m.

The eradication of smallpox was an unparalleled public health accomplishment. Since that time, there have been many other targets set for the next disease to be eradicated. Polio has been in center stage, but still faces several hurdles before the final goal is accomplished. Outside of the main fanfare are several of the neglected tropical diseases which have made slow but steady progress toward elimination and eradication goals. This symposium will look at the progress, challenges and future facing eradication of Guinea Worm, onchocerciasis, lymphatic filariasis and Human African Trypanosomiasis.

CHAIR

Julie Jacobson
Bill & Melinda Gates Foundation, Seattle, WA, United States

Donald R. Hopkins
The Carter Center, Atlanta, GA, United States

1:30 p.m.

INTRODUCTION

Julie Jacobson
Bill & Melinda Gates Foundation, Seattle, WA, United States

1:40 p.m.

INTRODUCTION

Donald R. Hopkins
Carter Center, Atlanta, GA, United States

1:55 p.m.

GUINEA WORM ERADICATION: THE FINAL CHALLENGE

Donald R. Hopkins
The Carter Center, Atlanta, GA, United States

2:15 p.m.

ONCHOCERCIASIS: PROGRESS FROM CONTROL TO ELIMINATION/ERADICATION

Frank O. Richards
The Carter Center, Atlanta, GA, United States

2:35 p.m.

LYMPHATIC FILARIASIS: PROGRESS IN ELIMINATION AND NEW CHALLENGES

Eric Ottesen
The Taskforce for Child Survival and Development, Atlanta, GA, United States

2:55 p.m.

HAT: NEW SETBACKS AND OPPORTUNITIES

Jean Jannin
World Health Organization, Geneva, Switzerland

Scientific Session 39

Schistosomiasis I – Epidemiology/Control

Grand Ballroom B

Monday, December 8, 1:30 p.m. – 3:15 p.m.

CHAIR

Jennifer F. Friedman
Brown University, Providence, RI, United States

Joanne P. Webster
Imperial College Faculty of Medicine, London, United Kingdom

1:30 p.m.

329

ZOONOTIC TRANSMISSION OF *SCHISTOSOMA JAPONICUM* IN CHINA AND THE PHILIPPINES

James W. Rudge[1], Da-bing Lu[1], Maria-Gloria Basanez[1], Tianping Wang[2], Helene Carabin[3], Ernesto Balolong Jr[4], Stephen T. McGarvey[5], Joanne P. Webster[1]
[1]Imperial College London, London, United Kingdom, [2]Anhui Institute of Parasitic Diseases, Wuhu, China, [3]University of Oklahoma, Oklahoma City, OK, United States, [4]Research Institute for Tropical Medicine, Muntinlupa, Philippines, [5]Brown University, Providence, RI, United States

1:45 p.m.

330

IMPACT OF INTENSE, LONGITUDINAL RETREATMENT WITH PRAZIQUANTEL ON CURE RATES OF SCHISTOSOMIASIS MANSONI IN A COHORT OF OCCUPATIONALLY EXPOSED ADULTS IN WESTERN KENYA

Carla L. Black[1], Michelle L. Steinauer[2], Pauline N. Mwinzi[3], W. Evan Secor[4], Diana M. Karanja[3], Daniel G. Colley[1]
[1]University of Georgia, Athens, GA, United States, [2]University of New Mexico, Albuquerque, NM, United States, [3]Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, [4]Centers for Disease Control and Prevention, Atlanta, GA, United States

2 p.m.

331

RELATIONSHIP BETWEEN MATERNAL ANEMIA OF INFLAMMATION AND BIRTH OUTCOMES IN *S. JAPONICUM* ENDEMIC VILLAGES OF LEYTE, THE PHILIPPINES

Jennifer F. Friedman[1], Luz P. Acosta[2], Mario A. Jiz[1], Blanca Jarilla[2], David Margolius[1], Courtney Olson[1], Mary Paz Urbina[2], Remigio M. Olveda[2], Jonathan D. Kurtis[1]
[1]Center for International Health Research, Lifespan Hospital/ Brown University, Providence, RI, United States, [2]Research Institute of Tropical Medicine, Manila, Philippines

2:15 p.m.

332

ESTIMATION OF ATTRIBUTABLE RISK OF ANEMIA DUE TO SCHISTOSOMIASIS IN WESTERN KENYA

Susan P. Montgomery[1], Erick M. Muok[2], Pauline N. Mwinzi[2], John M. Williamson[1], W. Evan Secor[1], Diana M. Karanja[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Kenya Medical Research Institute, Kisumu, Kenya

2:30 p.m.

333

SCHISTOSOMIASIS AMONG YOUNG CHILDREN IN WESTERN KENYA

Jennifer R. Verani[1], Bernard Abudho[2], Susan P. Montgomery[1], Pauline M. Mwinzi[2], Hillary L. Shane[1], Sara E. Butler[1], Diana M. Karanja[2], William E. Secor[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Kenya Medical Research Institute, Kisumu, Kenya

2:45 p.m.

334

MATHEMATICAL MODELS FOR SCHISTOSOMIASIS TRANSMISSION DYNAMICS AND CONTROL IN SUB-SAHARAN AFRICA: LESSONS FROM KENYA AND UGANDA

Michael D. French[1], Thomas S. Churcher[2], Jimmy Kihara[3], Joanne P. Webster[1], Maria-Gloria Basáñez[2]
[1]Schistosomiasis Control Initiative, Imperial College London, London, United Kingdom, [2]Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom, [3]Kenya Medical Research Institute (KEMRI), Nairobi, Kenya

3 p.m.

335

INTEGRATING PROTOCOLS FOR MAPPING TRACHOMA AND URINARY SCHISTOSOMIASIS. CAN SURVEYS BE DONE SIMULTANEOUSLY?

Jonathan D. King[1], Frank Richards[1], Abel Eigege[2], Nimzing Jip[2], John Umaru[2], Michael Deming[3], Deborah McFarland[4], Emmanuel Miri[2], Paul M. Emerson[1]
[1]The Carter Center, Atlanta, GA, United States, [2]The Carter Center, Jos, Nigeria, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Emory University, Atlanta, GA, United States

Symposium 40

American Committee of Medical Entomology (ACME) I: Release of Modified Vectors: Strategies and Technical Feasibility

Grand Ballroom C

Monday, December 8, 1:30 p.m. – 3:15 p.m.

Twenty years ago, it was postulated that it would someday be possible to suppress certain vector-borne diseases through the release of vectors that were altered in such a way as to diminish the vector competence, lifespan or abundance of native populations. Rapid advances in molecular and genetic techniques have brought us to the threshold of that reality. Three general strategies have been developed: replacement of native vector populations with populations possessing reduced vector competence, shortening of vector longevity and suppression of vector abundance. This symposium examines the technical aspects of each strategy.

CHAIR

Jefferson A. Vaughan
University of North Dakota, Grand Forks, ND, United States

1:30 p.m.

REDUCING VECTOR COMPETENCE: THE MALARIA MODEL

Marcelo Jacobs-Lorena
Johns Hopkins School of Public Health, Baltimore, MD, United States

1:55 p.m.

CREATING GENETIC ELEMENTS TO DRIVE POPULATION REPLACEMENT

Bruce A. Hay
California Institute of Technology, Pasadena, CA, United States

2:20 p.m.

REDUCING VECTOR ABUNDANCE AND/OR CAPACITY WITH BACTERIAL ENDOSYMBIONTS

Stephen L. Dobson
University of Kentucky, Lexington, KY, United States

2:45 p.m.

REDUCING VECTOR ABUNDANCE WITH IMPROVED STERILE INSECT TECHNIQUE

Luke Alphey
Oxitec Limited, Oxford, United Kingdom

Symposium 41

Global Strategies for Using Antimalarial Drugs: Making the Most of a Precious Resource

Grand Ballroom D

Monday, December 8, 1:30 p.m. – 3:15 p.m.

The idea of using only combinations of drugs — as opposed to monotherapy — to treat cases of malaria took hold only a few years ago, decades after the same concept had become ingrained in the treatment of TB and had been the norm almost since the beginning of the HIV treatment era. Making sure everyone gets a drug combination for malaria treatment (preferably a coformulation, i.e., two or more drugs in one pill) is only the first step, however. This symposium will examine malaria drug policies that could be instituted to ensure that malaria drugs remain effective for as long as possible, while curing the greatest numbers. The results of modeling will be presented showing that deliberate use of more than one drug for first-line treatment of uncomplicated malaria in a population has a proportionately greater effect than would be predicted on the basis of simple drug pressure alone (that is, the fewer the courses of a drug used, the longer it would be expected to remain effective). A policy of "multiple first-line therapy" (MFT) would present practical challenges in malaria-endemic countries, where standard practice has been to name a single first-line treatment. The developing Affordable Medicines Facility-malaria (AMFm) may play a role in facilitating a transition to MFT.

CHAIR

Hellen Gelband
Resources for the Future, Washington, DC, United States

Ramanan Laxminarayan
Resources for the Future, Washington, DC, United States

1:30 p.m.

INTRODUCTION

Ramanan Laxminarayan
Resources for the Future, Washington, DC, United States

1:45 p.m.

MULTIPLE FIRST-LINE THERAPIES (MFT) FOR MALARIA: WHAT'S IT ALL ABOUT AND WHY WILL IT HELP SAVE MALARIA DRUGS

David Smith
University of Florida, Gainsville, FL, United States

2:10 p.m.

ANTIMALARIAL RESISTANCE MONITORING: USING SURVEILLANCE TO INFORM DECISIONS

Christopher V. Plowe
University of Maryland School of Medicine, Baltimore, MD, United States

2:35 p.m.

PRACTICAL CHALLENGES IN A MALARIA DRUG POLICY CHANGE TO MFT: FROM CONCEPT TO REALITY

Ambrose O. Talisuna
Medicines for Malaria Venture, Kampala, Uganda

3 p.m.

AMFM — THE AFFORDABLE MEDICINES FACILITY — MALARIA: HOW IT CAN HELP THE IMPLEMENTATION OF MFT POLICIES

Hellen Gelband
Resources for the Future, Washington, DC, United States

Symposium 42

Advances Towards Understanding Mechanisms of Pathology and Protection in Trypanosomatid Infections

Grand Ballroom E

Monday, December 8, 1:30 p.m. – 3:15 p.m.

Recent advances in both animal models and human studies of trypanosomatid infections have helped us gain a better understanding of the factors that control generation of protective and pathogenic immune responses in these important parasitic diseases that affect hundreds of millions worldwide. In particular, infection with *T. cruzi* (causative agent for Chagas disease) leads to a complex series of interactions with the host that can lead to the development of an indeterminate clinical form (mild) or cardiac disease (the most severe clinical form). Similarly, infection with one species of *Leishmania* can lead to relatively mild clinical forms such as cutaneous disease, or to severe clinical forms like mucosal or disseminated disease. Recent data points to important factors for development of protective or pathogenic responses in these diseases, as well as for development of effective memory responses. Our symposium will address these issues in both animal models and human infection with *T. cruzi* or *Leishmania*, providing insights to these and other diseases.

CHAIR

Kenneth J. Gollob
Federal University of Minas Gerais, Belo Horizonte, Brazil

1:30 p.m.

ADIPOSE TISSUE AND CHAGAS DISEASE: IS THERE A CONNECTION?

Herbert B. Tanowitz
Albert Einstein College of Medicine, New York, NY, United States

1:55 p.m.

GENERATION OF PROTECTIVE AND PATHOGENIC IMMUNE RESPONSES IN HUMAN CHAGAS DISEASE

Walderez O. Dutra
Federal University of Minas Gerais, Belo Horizonte, MG, Brazil

2:20 p.m.

MECHANISMS IMPORTANT FOR GENERATION OF EFFECTOR AND CENTRAL MEMORY RESPONSES IN ANIMAL MODELS OF *LEISHMANIA* INFECTION

Phillip Scott
University of Pennsylvania, Philadelphia, PA, United States

2:45 p.m.

IMMUNOREGULATION OF HUMAN LEISHMANIASIS AND IMPLICATIONS FOR TREATMENT

Edgar M. Carvalho
Federal University of Bahia, Salvador, BA, Brazil

Scientific Session 43

Malaria – Immunology II

Gallery

Monday, December 8, 3:45 p.m. – 5:30 p.m.

CHAIR

Chandy C. John
University of Minnesota Medical School, Minneapolis, MN, United States

John Waitumbi
Kenya Medical Research Institute, Kisumu, Kenya

3:45 p.m.

336

EXPERIMENTAL MALARIA INFECTION TRIGGERS RAPID EXPANSION OF NATURAL KILLER CELLS

Sunil Parikh, Charlie C. Kim, Joseph C. Sun, Alissa Myrick, Lewis L. Lanier, Philip J. Rosenthal, Joseph L. DeRisi
University of California-San Francisco, San Francisco, CA, United States

4 p.m.

337

SERUM VON WILLEBRAND FACTOR LEVELS EFFECTIVELY DISCRIMINATE BETWEEN CEREBRAL MALARIA AND UNCOMPLICATED MALARIA

Gregory S. Park[1], Robert O. Opoka[2], Michael J. Boivin[3], Chandy C. John[1]
[1]University of Minnesota, Minneapolis, MN, United States, [2]Makerere University, Kampala, Uganda, [3]Michigan State University, East Lansing, MI, United States

(ACMCIP Abstract)

4:15 p.m.

338

B CELL ACTIVITY IN CHILDREN WITH MALARIA

Jackson C. Korir[1], Ronald P. Taylor[2], John N. Waitumbi[1]
[1]Walter Reed Project/KEMRI, Kisumu, Kenya, [2]Department of Biochemistry and Molecular Genetics, University of Virginia School of Medicine, Charlottesville, VA, United States

(ACMCIP Abstract)

4:30 p.m.

339

FUNCTIONAL ASSOCIATION BETWEEN RANTES-4151C/T PROMOTER POLYMORPHISM AND HIGH-DENSITY FALCIPARUM PARASITEMIA AMONG CHILDREN IN A HOLOENDEMIC MALARIA TRANSMISSION AREA

Tom Were[1], Collins Ouma[1], Greg C. Davenport[2], James B. Hittner[3], Michael F. Otieno[4], Alloys S. Orago[5], John M. Vulule[6], John M. Ong'echa[1], Douglas J. Perkins[7]
[1]University of New Mexico/KEMRI, Kisian, Kenya, [2]University of Pittsburgh, Pittsburgh, PA, United States, [3]Department of Psychology, College of Charleston, Charleston, SC, United States, [4]Department of Pre-Clinical Sciences, School of Health Sciences, Kenyatta University, Nairobi, Kenya, [5]National AIDS Control Council, Nairobi, Kenya, [6]Centre for Global Health Research, Kenya Medical Research Institute, Kisian, Kenya, [7]Division of Infectious Diseases, University of New Mexico School of Medicine, New Mexico, NM, United States

(ACMCIP Abstract)

4:45 p.m.

340

LEUCOCYTES AND CYTOKINE PRODUCTION IN PATHOGENESIS OF SEVERE MALARIA IN MALAWIAN CHILDREN

Wilson L. Mandala[1], Steve A. Ward[2], Malcolm E. Molyneux[3], Calman A. MacLennan[4]
[1]College of Medicine, Blantyre, Malawi, [2]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [3]Malawi Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi, [4]MRC Centre for Immune Regulation, University of Birmingham, Birmingham, United Kingdom

5 p.m.

341

CYTOKINE PROFILE IN VARIOUS SEVERE FORMS OF FALCIPARUM MALARIA IN CENTRAL INDIA

Vidhan Jain[1], Sukla Biswas[2], A. P. Dash[3], Naomi Lucchi[4], Neeru Singh[5]
[1]National Institute of Malaria Research FS (ICMR), Jabalpur, India, [2]National Institute of Malaria Research (ICMR), New Delhi, India, [3]National Institute of Malaria Research (ICMR), New Delhi, India, [4]Malaria Branch, Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [5]Regional Medical Research Center for Tribals (ICMR), Jabalpur, India

(ACMCIP Abstract)

5:15 p.m.

342

ASSOCIATION OF LOW CYTOKINE GENE POLYMORPHISMS IN RESISTANCE AND SUSCEPTIBILITY TO *PLASMODIUM FALCIPARUM* INFECTION IN ZIMBABWE

Takafira Mduluza[1], Davison Sangweme[1], Nicholas Midzi[1], Sekesai Zinyowera[1], Godfree Mlambo[1], Susan L. Mutambu[2], Nirbhay Kumar[3]
[1]University of Zimbabwe, Harare, Zimbabwe, [2]National Institutes of Health Research, Harare, Zimbabwe, [3]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

(ACMCIP Abstract)

Exhibit Hall Open

Napoleon Ballroom
Monday, December 8, 3 p.m. – 4 p.m.

Coffee Break

Napoleon Ballroom
Monday, December 8, 3:15 p.m. – 3:45 p.m.

Symposium 44

Malnutrition and Infection in the Tropics

Rhythms I
Monday, December 8, 3:45 p.m. – 5:30 p.m.

The synergy of malnutrition between malnutrition and infections accounts for 55 percent of the deaths among children in developing countries. The epidemiologic scope of this problem is continuing to expand with recent recognition that malnutrition may contribute to susceptibility to malaria and amebiasis. The mechanisms of the immunodeficiency of malnutrition are also poorly understood. Evolving data suggest that adipokines, such as such as leptin and adiponectin, may influence susceptibility to infection.

CHAIR

Gregory M. Anstead
University of Texas Health Science Center, San Antonio, TX, United States

Richard L. Guerrant
University of Virginia, Charlottesville, VA, United States

3:45 p.m.

MALNUTRITION AND INFECTION: A GLOBAL PROBLEM

Richard L. Guerrant
University of Virginia, Charlottesville, VA, United States

4:10 p.m.

NUTRITIONAL STATUS IN SCHISTOSOMIASIS AND MALARIA: RESOLVING THE CONTROVERSIES

Jennifer F. Friedman
Brown University, Providence, RI, United States

4:35 p.m.

MALNUTRITION AND SUSCEPTIBILITY TO AMEBIASIS

William A. Petri
University of Virginia, Charlottesville, VA, United States

5 p.m.

NUTRIKINES: MOLECULAR LINKS BETWEEN NUTRITIONAL STATUS AND THE IMMUNE SYSTEM

Gregory M. Anstead
University of Texas Health Science Center, San Antonio, TX, United States

Symposium 45

Update on the Pharmacokinetics, Aafety and Efficacy of ACTs and Mefloquine for the Treatment and Prevention of Malaria in Pregnancy

Rhythms II/III
Monday, December 8, 3:45 p.m. – 5:30 p.m.

Experts in the field of malaria in pregnancy will provide updates on recent progress of their malaria in pregnancy studies: 1) the latest pharmacokinetics data on the use of antimalarials in pregnancy; 2) a review of the safety of artemisinins in pregnancy from the Thai-Burmese border; 3) a recently completed trial on mefloquine for the intermittent preventive treatment of malaria in pregnancy in Benin; and 4) a trial on artemether-lumefantrine for the treatment of malaria in the second and third trimester of pregnancy in Uganda.

CHAIR

Jenny Hill
Malaria in Pregnancy Consortium, Liverpool School of Tropical Medicine, United Kingdom

Feiko ter Kuile
Malaria in Pregnancy Consortium, Liverpool School of Tropical Medicine, Liverpool, United Kingdom

3:45 p.m.

AN UPDATE ON THE PHARMACOKINETICS OF ANTIMALARIALS IN PREGNANCY

Francois Nosten
Shoklo Malaria Research Institute, Mae Sod, Thailand

4:10 p.m.

A REVIEW OF THE SAFETY OF ARTEMISININS IN PREGNANCY: EXPERIENCE FROM THE THAI-BURMESE BORDER

Rose McGready
Shoklo Malaria Research Institute, Mae Sod, Thailand

4:35 p.m.

A TRIAL ON MEFLOQUINE FOR THE INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY IN BENIN.

Michel Cot
Institut de Recherche pour le Développment, Paris, France

5 p.m.

ARTEMETHER-LUMEFANTRINE FOR THE TREATMENT OF MALARIA IN SECOND AND THIRD TRIMESTER PREGNANCY: A TRIAL FROM UGANDA

Patrice Piola
Epicentre, Medecins sans Frontiere, Mbarara, Uganda

Scientific Session 46

Malaria – Molecular Markers of Drug Resistance

Napoleon A123
Monday, December 8, 3:45 p.m. – 5:30 p.m.

CHAIR

Andrea M. McCollum
Centers for Disease Control and Prevention, Atlanta, GA, United States

Daouda Ndiaye
Cheikh Anta Diop University, Dakar, Senegal

3:45 p.m.

343

GENETIC HITCHHIKING, SELECTIVE SWEEPS, AND MULTIPLE ORIGINS OF DRUG RESISTANT *PLASMODIUM FALCIPARUM* IN THREE DISTINCT POPULATIONS

Andrea M. McCollum[1], Venkatachalam Udhayakumar[1], Ananias A. Escalante[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Arizona State University, Tempe, AZ, United States

4 p.m.

344

DISPERSAL OF DRUG RESISTANT DHPS REVEALS REGIONAL MIGRATION PATTERNS AMONG AFRICAN *PLASMODIUM FALCIPARUM*

Richard Pearce, Cally Roper
London School of Hygiene and Tropical Medicine, London, United Kingdom

4:15 p.m.

345

FIVE-YEAR SURVEILLANCE OF MOLECULAR MARKERS OF *PLASMODIUM FALCIPARUM* ANTIMALARIAL DRUG RESISTANCE IN KOROGWE DISTRICT, TANZANIA – ACCUMULATION OF THE 581G MUTATION IN THE *PFDHPS* GENE

Michael Alifrangis[1], John P. Lusingu[2], Bruno Mmbando[2], Michael B. Dalgaard[1], Lasse S. Vestergaard[1], Deus Ishengoma[2], Insaf F. Khalil[1], Thor G. Theander[1], Martha M. Lemnge[2], Ib C. Bygbjerg[1]
[1]Centre for Medical Parasitology, University of Copenhagen and Rigshospitalet, Denmark, [2]National Institute for Medical Research, Tanga Centre, Tanga, United Republic of Tanzania

4:30 p.m.

346

THE INTRA-HOST DYNAMICS OF *PFCRT AND PFMDR*-1 ALLELES FOLLOWING ANTIMALARIAL TREATMENT IN SUDANESE PATIENTS

Nahla B. Gadalla[1], Ishag Adam[2], David C. Warhurst[1], Badria B. El-Sayed[3], Colin J. Sutherland[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Faculty of Medicine, University of Khartoum, Khartoum, Sudan, [3]Tropical Medicine Research Institute, Khartoum, Sudan

4:45 p.m.

347

META-ANALYSIS OF MOLECULAR SURVEILLANCE STUDIES EXAMINING SULPHADOXINE-PYRIMETHAMINE (SP) RESISTANCE MARKERS IN AFRICAN *P. FALCIPARUM* POPULATIONS

Sankar Sridaran, Luke M. Syphard, John W. Barnwell, Venkatachalam Udhayakumar
Centers for Disease Control and Prevention, Atlanta, GA, United States

5 p.m.

348

EMERGENCE OF A DHFR MUTATION CONFERRING HIGH-LEVEL DRUG RESISTANCE IN *PLASMODIUM FALCIPARUM* POPULATIONS FROM SOUTHWEST UGANDA

Caroline Lynch
London School of Hygiene and Tropical Medicine, London, United Kingdom

5:15 p.m.

349

EVALUATION OF *EX VIVO* DRUG SENSITIVITY FROM *PLASMODIUM FALCIPARUM*-INFECTED SENEGALESE PATIENTS

Daouda Ndiaye[1], Vishal Patel[2], Johanna Patricia Daily[2], Alisson Demas[1], Omar Ndir[1], Souleymane Mboup[1], Dyann F. Wirth[2]
[1]Cheikh Anta Diop University, Dakar, Senegal, [2]Immunology and Infectious Diseases, Harvard School of Public Health, Boston, MA, United States

Scientific Session 47

Kinetoplastida I: Molecular Biology and Immunology

Maurepas
Monday, December 8, 3:45 p.m. – 5:30 p.m.

CHAIR

Vivian Bellofatto
New Jersey Medical School, Newark, NJ, United States

Peter E. Kima
University of Florida, Gainesville, FL, United States

3:45 p.m.

350

CHANGES IN MICRORNAS EXPRESSED BY HUMAN MACROPHAGES AS A RESULT OF *LEISHMANIA CHAGASI* INFECTION

Anne M. Dickson[1], Anton McCaffrey[1], Mary E. Wilson[2]
[1]Department of Internal Medicine, University of Iowa, Iowa City, IA, United States, [2]Departments of Internal Medicine, Microbiology and Epidemiology, University of Iowa and the VA Medical Center, Iowa City, IA, United States

(ACMCIP Abstract)

4 p.m.

351

A NOVEL HIT-DOMAIN PROTEIN HYDROLYZES M7GPPPM662'A, WHICH IS A TRYPANOSOME-SPECIFIC HYPERMETHYLATED CAP STRUCTURE

Vivian Bellofatto
New Jersey Medical School, Newark, NJ, United States

(ACMCIP Abstract)

4:15 p.m.

352

METABOLIC PROFILING OF CO-INFECTION OF *TRYPANOSOMA BRUCEI BRUCEI* STRAINS IN MICE

Jia Li[1], Jasmina Saric[2], Yulan Wang[1], Juerg Utzinger[2], Oliver Balmer[2], Elaine Holmes[1]
[1]Imperial College London, London, United Kingdom, [2]Swiss Tropical Institute, Basel, Switzerland

4:30 p.m.

353

APPLICATION OF A BIOLUMINESCENT *LEISHMANIA MAJOR* IMAGING MODEL TO THE DEVELOPMENT OF A NOVEL KILLED BUT METABOLICALLY ACTIVE WHOLE CELL VACCINE

Jacquelyn N. Haskell[1], Ron A. Birnbaum[1], Veena Vanchinathan[1], Tamiko Konishi[1], Stephen M. Beverley[2], Kevin W. Bruhn[1], Noah Craft[1]
[1]Los Angeles Biomedical Research Institute, Division of Dermatology, Harbor-UCLA Medical Center, UCLA School of Medicine, Torrance, CA, United States, [2]Washington University School of Medicine, St. Louis, MO, United States

4:45 p.m.

354

PARASITOPHOROUS VACUOLES THAT HARBOR *LEISHMANIA* PARASITES INTERACT EXTENSIVELY WITH THE HOST ENDOPLASMIC RETICULUM.

Blaise Ndjamen, Peter Kima
*University of Fl*orida, Gainesville, FL, United States

(ACMCIP Abstract)

5 p.m.

355

NEW INSIGHTS IN THE PATHOGENESIS OF *L. BRAZILIENSIS* INFECTION: ROLE OF TNF-Α, IFN-Γ AND IL-17

Olivia Bacellar[1], Marcia Nascimento[1], Thiago M. Cardoso[1], Walker Nonato[1], Shelene Poetker[1], Paulo L. Machado[1], Edward Pearce[2], Philip Scott[2], **Edgar M. Carvalho**[1]
[1]Federal University of Bahia, Salvador, Brazil, [2]University of Pennsylvania, Philadelphia, PA, United States

5:15 p.m.

356

TUBULIN-BASED SUBUNIT VACCINE CANDIDATES SHOW PROMISE IN ANIMAL STUDIES

Elisabeth Knapp[1], Rosemary Flores[1], Kirby Steger[1], George Lubega[2], Ann Nantezza[2], Monica Namayanja[2], Roger Prichard[3], Douglas Holtzman[4], Vidadi Yusibov[1]
[1]Fraunhofer USA Inc., Center for Molecular Biotechnology, Newark, DE, United States, [2]Department for Veterinary Parasitology and Microbiology, Makerere University, Kampala, Uganda, [3]Institute of Parasitology, McGill University, Montreal, QC, Canada, [4]Bill and Melinda Gates Foundation, Seattle, WA, United States

Symposium 48

Research Capacity Building in the Tropics

BAYSIDE A

Monday, December 8, 3:45 p.m. – 5:30 p.m.

For decades, international research has been an important mechanism to build research capacity in the tropics. However, new investigators, especially foreign researchers, face many difficulties establishing themselves as researchers in their home countries and are often tempted to migrate to more favorable settings in developed countries. Debate began at an international symposium in 2004, and continued during the review of long-term training programs and a revision of the peer review process at the U.S. National Institutes of Health. Important regional experiences have taken place in the tropics, and now it is crucial to disseminate available evidence of their results and impact. Mechanisms to assist recent foreign graduates to re-establish at their home countries after international training deserve special attention, such as re-entry grants and international young investigator awards.

CHAIR

Andres G. Lescano
U.S. Naval Medical Research Center Detachment, Lima, Peru

Joel M. Montgomery
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

NATIONAL INSTITUTES OF HEALTH/FOGARTY INTERNATIONAL CENTER SUPPORT TO BUILD RESEARCH CAPACITY

Barbara Sina
Fogarty International Center, National Institutes of Health, Bethesda, United States

4:10 p.m.

BUILDING RESEARCH CAPACITY IN THE TROPICS: AN AFRICAN EXPERIENCE

John M. Ong'echa
University of Pittsburgh/KEMRI Laboratories of Parasitic and Viral Diseases, Nairobi, Kenya

4:35 p.m.

BUILDING RESEARCH CAPACITY IN INDIA

Gagandeep Kang
Christian Medical College, Vellore, India

5 p.m.

CRAFTING GOLDEN PARACHUTES: THE PERU EXPERIENCE

Andres G. Lescano
U.S. Naval Medical Research Center Detachment, Lima, Peru

Late Breaker Abstract Session 49

Late Breakers in Clinical Tropical Medicine

Bayside BC

Monday, December 8, 3:45 p.m. – 5:30 p.m.

This session is specifically designed for presentations of new data obtained after the closing date for abstract submission. Presentations feature reports of clinical trials, preliminary data on new outbreaks of disease or individual case reports of interest. See the Late Breaker handout in your registration packet for the presentation schedule.

CHAIR

Barbara L. Herwaldt
Centers for Disease Control and Prevention, Atlanta, GA, United States

David McNeeley
Tibotec, Teaneck, NJ, United States

Late Breaker Abstract Session 50

Late Breakers in Basic Science/Molecular Biology

Grand Ballroom A

Monday, December 8, 3:45 p.m. – 5:30 p.m.

This session is specifically designed for brief presentations of new data obtained after the closing date for abstract submission. See the Late Breaker handout in your registration packet for the presentation schedule.

CHAIR

Stefan Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

Greg Ebel
University of New Mexico School of Medicine, Albuquerque, NM, United States

Scientific Session 51

Schistosomiasis II – Immunology/Pathology

Grand Ballroom B

Monday, December 8, 3:45 p.m. – 5:30 p.m.

CHAIR

Stephen Davies
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Shona Wilson
University of Cambridge, Cambridge, United Kingdom

3:45 p.m.

357

THE EFFECT OF SNP VARIANTS IN THE 3'-UTR REGION OF *IL-5* ON GENE TRANSCRIPTION AND MRNA STABILITY AND THEIR ROLE IN SYMPTOMATIC INFECTION WITH *SCHISTOSOMA JAPONICUM*

Magda K. Ellis[1], Yuesheng Li[1], Honggen Chen[2], Donald P. McManus[1]
[1]QIMR, Brisbane, Australia, [2]Jiangxi Institute of Parasitic Diseases, Nanchang, China

4 p.m.

358

ASSOCIATION OF THE GENE POLYMORPHISMS IFN-Γ +874 AND IL-13 -1055 WITH PATTERNS OF REINFECTION WITH *SCHISTOSOMA MANSONI*

Michael R. Gatlin[1], Carla L. Black[1], Pauline N. Mwinzi[2], W. Evan Secor[3], Diana M. Karanja[2], Daniel G. Colley[1]
[1]University of Georgia, Athens, GA, United States, [2]Kenya Medical Research Institute, Kisumu, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

4:15 p.m.

359

COMPARISON OF POTENTIALLY PROTECTIVE HUMAN TH2 RESPONSES AGAINST DIFFERENT SCHISTOSOME SPECIES

Shona Wilson[1], Birgitte J. Vennervald[2], Narics B. Kabatereine[3], Moussa Sacko[4], Gachuhi Kimani[5], Eric Muchiri[6], David W. Dunne[1]
[1]University of Cambridge, Cambridge, United Kingdom, [2]DBL – Centre for Health Research and Development, Copenhagen, Denmark, [3]Vector Control Division, Ministry of Health, Kampala, Uganda, [4]Institut National de Recherche en Sante Publique, Bamako, Mali, [5]Kenya Medical Research Institute, Nairobi, Kenya, [6]Division of Vector Borne Diseases, Kenyan Ministry of Health, Nairobi, Kenya

4:30 p.m.

360

THE ROLE OF HYGIENIC BATHING AFTER DEFECATION IN THE TRANSMISSION OF *SCHISTOSOMA MANSONI*

Sake J. de Vlas[1], Seydou Sow[2], Kim Vereecken[3], Jozef Vercruysse[4], Bruno Gryseels[3], Katja Polman[3]
[1]Erasmus MC, Rotterdam, Netherlands, [2]Région Médicale de St. Louis, St. Louis, Senegal, [3]Institute of Tropical Medicine, Antwerp, Belgium, [4]Faculty of Veterinary Medicine, Ghent, Belgium

4:45 p.m.

361

CYTOKINES PROFILES IN SPLEEN CELLS AND EXPRESSION IN HEPATIC GRANULOMAS BEFORE AND AFTER CHALLENGE WITH *SCHISTOSOMA MANSONI* IN C57BL/6 MICE VACCINATED WITH MICE AND HUMAN ANTI-IDIOTYPES

Mohamed A. Ali[1], Atef M. Al-Shazly[2], Yehia S. Ibrahim[1]
[1]Faculty of Medicine, Minia University, Al-Minia Governorate, Egypt, [2]Faculty of Medicine, Mansoura University, Al-Dakhalia Governorate, Egypt

5 p.m.

362

CIRCULATING CD23+ B CELL SUBSET LEVELS IN ADULTS WITH *SCHISTOSOMA MANSONI* INFECTIONS

Pauline N. Mwinzi[1], Lisa M. Ganley-Leal[2], Carla L. Black[3], W. Evan Secor[4], Diana M. Karanja[1], Daniel G. Colley[3]
[1]Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, [2]Boston University School of Medicine, Boston Medical Center, Boston, MA, United States, [3]University of Georgia, Athens, GA, United States, [4]Centers for Disease Control and Prevention, Atlanta, GA, United States

5:15 p.m.

363

TREMATODE INDUCED CHANGES IN THE BRAIN METABOLIC PROFILE

Jasmina Saric[1], Jia Li[2], Jennifer Keiser[1], Jürg Utzinger[1], Olaf Beckonert[2], Elaine Holmes[2]
[1]Swiss Tropical Institute, Basel, Switzerland, [2]Imperial College London, London, United Kingdom

Symposium 52

American Committee of Medical Entomology (ACME) II: Release of Modified Vectors: Practical and Ethical Feasibility

Grand Ballroom C

Monday, December 8, 3:45 p.m. – 5:30 p.m.

Twenty years ago, it was postulated that it would someday be possible to suppress certain vector-borne diseases through the release of vectors that were altered in such a way as to diminish the vector competence, lifespan or abundance of native populations. Rapid advances in molecular and genetic techniques have brought us to the threshold of that reality. This symposium examines the practical aspects of moving from controlled laboratory experiments to actual release of modified vectors in the field. But before that can happen, there are certain risks, ethical issues and social ramifications that need to be considered. This symposium will review the modeling efforts used to predict the likely outcomes of releasing modified vectors on disease transmission within endemic areas. It will also attempt to define how best to develop a rational approach towards risk assessment and help to crystallize our understanding of the ethical and social issues involved.

CHAIR

Jefferson A. Vaughan
University of North Dakota, Grand Forks, ND, United States

3:45 p.m.

MODELING THE POTENTIAL OUTCOMES OF RELEASING MODIFIED VECTORS

John Marshall
University of California, Los Angeles, Los Angeles, CA, United States

4:10 p.m.

SCIENCE, SOCIETY AND SUSTAINABILITY: GENETICS AND THE CONTROL OF MOSQUITO-BORNE DISEASES

Anthony A. James
University of California, Irvine, Irvine, CA, United States

4:35 p.m.

ASSESSING THE RISKS OF RELEASING MODIFIED VECTORS

David A. Andow
University of Minnesota, St. Paul, MN, United States

5 p.m.

COMMUNITY ENGAGEMENT: AN ETHICAL REQUIREMENT BEFORE MODIFIED VECTORS ARE RELEASED

Lara El Zahabi-Bekdash
University of Toronto, Toronto, ON, Canada

Symposium 53

The Antimalarials Market in Africa: Do We Know Enough?

Grand Ballroom D

Monday, December 8, 3:45 p.m. – 5:30 p.m.

This symposium will share information on new initiatives to understand the antimalarials market, highlight gaps in knowledge requiring further research and emphasize the importance for countries, manufacturers and donors in having access to improved market data. Despite high mortality rates, malaria is a fact of life for many people across Africa, 40 – 60 percent of whom seek treatment in the private sector. There is a thriving market for antimalarials in the private sector. Older classes of drugs are available even in remote areas. However, these classes (Chloroquine and SP) often face resistance, while newer classes have not replaced them in the private sector at local level. The antimalarials market in endemic countries is poorly understood and inadequately described. Detailed IMS-type data, outlining the different product types, market segments, pricing structures and supply chains simply do not exist. The lack of market data has implications for manufacturers, donors and national authorities in terms of clarifying total market, making credible forecasts, planning access through different outlet types and securing required donor funding. New initiatives are underway to improve mapping of the antimalarials market. Medicines for Malaria Venture (MMV) brings together international players in the field of surveillance of the antimalarial market, focusing on non-commercial approaches to gathering and sharing data. By working together and using similar market survey methodologies, significant progress can be made to improve understanding of the size and structure of the antimalarials market in Africa.

CHAIR

Ricardo Thompson
National Institute of Research of Mozambique, Maputo, Mozambique

Renia Coghlan
Medicines for Malaria Ventures, Geneva, Switzerland

3:45 p.m.

THE ANTIMALARIALS MARKET IN AFRICA: A CRITICAL NEED FOR KNOWLEDGE

Saul Walker
United Kingdom Department for International Development (DfID), London, United Kingdom

4 p.m.

HOW THE ABSENCE OF MARKET DATA IMPACTS ON ENDEMIC COUNTRY UPTAKE OF ACTS: AN ENDEMIC COUNTRY EXPERIENCE

Storn Kabuluzi
Ministry of Health, Lilongwe, Malawi

4:20 p.m.

STRUCTURING A FIVE-YEAR MARKET SURVEY PROGRAMME: ACT WATCH

Kate O'Connell
ACT Watch, PSI, Washington, United States

4:35 p.m.

UNDERSTANDING THE ANTIMALARIALS MARKET IN UGANDA: RESULTS OF THE MMV MARKET STUDY

Rosette Mutambi
HEPS Uganda, Kampala, Uganda

4:55 p.m.

PANEL DISCUSSION AND CONCLUDING REMARKS

Symposium 54

How PPPs Can Contribute to the Fight Against Most Neglected Diseases?

Grand Ballroom E
Monday, December 8, 3:45 p.m. – 5:30 p.m.

Aside from the three killers – malaria, TB and AIDS – some diseases are more than neglected. This symposium will explore a partnership engaged in the fight against some of the most neglected tropical diseases, including sleeping sickness, Leishmaniasis, Buruli ulcer and Chagas Disease. The synergistic method is the best with a renewed commitment to work together for the elimination of these diseases. This symposium will explain the step by step strategy, the field objectives, the logical implication of everybody, from research to community centers with one goal: to work altogether to eliminate some of the MND of the developing world.

CHAIR

Jean Jannin
World Health Organization, Geneva, Switzerland

Simon Croft
London School of Hygiene and Tropical Medicine, London, United Kingdom

3:45 p.m.

OUR COMMITMENT, IN PARTNERSHIP WITH THE WHO, TO FIGHT AGAINST MOST NEGLECTED DISEASES

Robert Sebbag
sanofi-aventis, Paris, France

4:05 p.m.

CONCEPT OF ELIMINATION OF SOME OF THE MOST NEGLECTED DISEASES

Jean Jannin
World Health Organization, Geneva, Switzerland

4:25 p.m.

CUTANEOUS LEISHMANIASIS: CHALLENGES AND OPPORTUNITIES

Alan J. Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

4:45 p.m.

SLEEPING SICKNESS: CHANGING OUR MIND FOR SUSTAINABLE CONTROL

Pere Perez-Simarro
World Health Organization, Geneva, Switzerland

5:05 p.m.

PANEL DISCUSSION

Anne Moore
Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

Plenary Session 55

Plenary Session II: Charles Franklin Craig Lecture

Grand Ballroom C
Monday, December 8, 6 p.m. – 6:45 p.m.

The Charles Franklin Craig Lecture is an honor bestowed on a distinguished worker in the field of tropical medicine.

CHAIR

Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

THE HUNT FOR THE RESERVOIR HOSTS OF MARBURG AND EBOLA VIRUSES

Robert Swanepoel
National Institute for Communicable Diseases, Sandringham, South Africa

Poster Session A Dismantle

Armstrong Ballroom
Monday, December 8, 7 p.m. – 8 p.m.

Satellite Symposium

From Field Experience to the Discovery of Antimalarials: Partnerships in Action

Sponsored by sanofi-aventis

Gallery

Monday, December 8, 7 p.m. – 8:15 p.m.

sanofi-aventis and the Drugs for Neglected Diseases Initiative (DNDi) have in concert developed a fixed-dose combination of artesunate-amodiaquine ("ASAQ") that was launched in sub-Saharan Africa in 2007. This symposium aims to demonstrate how the partnership between sanofi-aventis and DNDi is evolving into a multi-pronged partnership with the objective to gather good quality data about existing antimalarials' safety and effectiveness, and to continue the development of new antimalarials. More specifically, we will present how the partnership is proactively collecting safety and efficacy data information on ASAQ. We will also discuss how sanofi-aventis and its partners conduct a discovery and development program, including the rationale for the development of a new antimalarial candidate (bis-thiazolium, SAR97276). Currently, the partnership discovery and development programs boast several compounds, two of which have reached the clinical development stage.

CHAIR

Wilfred Mbacham
Biotechnologies Centre, University of Yaounde I, Yaounde, Cameroon

REVIEW OF CLINICAL EXPERIENCE WITH THE ARTESUNATE-AMODIAQUINE FIXED-DOSE COMBINATION

Milijaona Randrianarivelojosia
Institut Pasteur, Madagascar, Madagascar

EFFICACY AND SAFETY MONITORING IN THE FIELD: THE ARTESUNATE-AMODIAQUINE FIXED-DOSE COMBINATION MONITORING PLAN

Francois Bompart
sanofi-aventis Access to Medicines, Paris, France

NEW APPROACHES FOR THE TREATMENT OF SEVERE MALARIA: BIS-THIAZOLIUM SAR97276

Henri Vial
University Montpellier, Montpellier, France

THE SEARCH FOR NEW ANTIMALARIAL DRUGS: SANOFI-AVENTIS' RESEARCH AND DEVELOPMENT PROGRAM

Laurent Fraisse
sanofi-aventis, Toulouse, France

Satellite Symposium

From Tourist to Expatriate: An Update on Risk and Prevention of Japanese Encephalitis

Sponsored by Novartis Vaccines

Rhythms II/III

Monday, December 8, 7 p.m. – 8:15 p.m.

A review of Japanese Encephalitis (JE), including epidemiology, case studies and consideration of JE vaccination; from past experience in Asia and the U.S. military, to the future outlook in travel.

CHAIR

David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States

WELCOME AND INTRODUCTION

David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States

JE RISK ASSESMENT IN THE TOURIST AND EXPATRIATE: A REVIEW OF EPIDEMIOLOGY, CASE STUDIES AND CONSIDERATIONS FOR PROPHYLAXIS

Bradley A. Connor
Travel Health Services, New York, NY, United States

JE VACCINATION: PAST SUCCESSES IN ASIA AND FUTURE OUTLOOK IN TRAVEL

Elaine Jong
University of Washington, Edmonds, WA, United States

JE VACCINATION IN THE U.S. MILITARY

LTC Wayne E. Hachey
Director, Preventive Medicine, Office of the Assistant Secretary Of Defense (Health Affairs) Force Health Protection And Readiness, Falls Church, VA, United States,

Satellite Symposium

Treating Malaria with Pyronaridine-Artesunate: Safety and Efficacy Results in Phase III Clinical Studies

Sponsored by Medicines for Malaria Venture and Shin Poong Pharmaceuticals

Grand Ballroom A

Monday, December 8, 7 p.m. – 8:15 p.m.

Choices of safe, effective and affordable antimalarials are limited. The co-sponsors of the symposium, Medicines for Malaria Venture and their partner, Shin Poong Pharmaceuticals Ltd, are dedicated to developing high-quality medicines appropriate for those living in disease endemic countries. The speakers will focus on presenting and discussing the clinical results of three Phase III clinical trials of this novel ACT combination which were carried out in Africa and Asia: A) The safety and efficacy of a fixed dose combination of Pyronaridine/Artesunate tablets compared to artemether/lumefantrine in children and adult patients with uncomplicated *P. falciparum* malaria; B) The safety and efficacy of a fixed dose combination of Pyronaridine/Artesunate granules (pediatric formulation) compared to artemether/lumefantrine crushed tablets in pediatric patients with uncomplicated *P. falciparum* malaria; C) The safety and efficacy of a fixed-dose combination of Pyronaridine/Artesunate tablets compared to chloroquine in children and adult patients with uncomplicated *P. vivax* malaria.

CHAIR

Antoinette Tshefu
University of Kinshasa, Kinshasa, Congo

Stephan Duparc
Medicines for Malaria Venture, Geneva, Switzerland

PYRONARIDINE-ARTESUNATE VS. ARTEMETHER/LUMEFANTRINE: EFFICACY IN MALARIA PATIENTS WITH UNCOMPLICATED ACUTE *P. FALCIPARUM* MALARIA: RESULTS FROM A PIVOTAL PHASE III TRIAL

Kassoum Kayentao
MRTC/FMPOS, Bamako, Mali

SAFETY IN ACUTE *P. FALCIPARUM* MALARIA PATIENTS TREATED WITH EITHER PYRONARIDINE-ARTESUNATE OR ARTEMETHER/LUMEFANTRINE IN A PIVOTAL PHASE III TRIAL

Antoinette Tshefu
University of Kinshasa, Kinshasa, Congo

TREATMENT OF PEDIATRIC PATIENTS WITH UNCOMPLICATED ACUTE *P. FALCIPARUM* MALARIA WITH PYRONARIDINE-ARTESUNATE GRANULES OR CRUSHED TABLET OF ARTEMETHER/LUMEFANTRINE IN A PHASE III CONTROLLED TRIAL

Riccardo Thompson
Instituto Nacional de Saude, Maputo, Mozambique

TREATMENT OF *P. VIVAX* PATIENTS WITH PYRONARIDINE-ARTESUNATE OR CHLOROQUINE IN A CONTROLLED PHASE III TRIAL

Emiliana Tjitra
National Institute of Malaria Research, Jakarta, Indonesia

Satellite Symposium

Artemether/Lumefantrine Continues to Demonstrate Excellent Efficacy and Safety

Sponsored by Novartis Pharma AG.

Grand Ballroom D

Monday, December 8, 7 p.m. – 8:15 p.m.

Clinical development of Artemether/Lumefantrine (A/L) led to registration by several stringent national drug regulatory authorities. Since the first approvals in 1999, further clinical work has been undertaken to improve the dosing regimen and to investigate the efficacy and safety of A/L in children with a body weight of >5 kg, leading to registration for treatment of this important patient group in 2005. The clinical program to profile A/L in the most vulnerable patient populations is ongoing. A prospective observational study in pregnant women was conducted, comparing the safety of sulfadoxine pyrimethamine (SP) vs. A/L in women exposed to A/L. In parallel, and with a view to ease the administration of A/L to infants and young children, a new formulation was developed in the form of a sweet-flavored dispersible tablet. This symposium will provide a comprehensive overview of the data collected from several clinical trials and observational studies investigating both the efficacy and safety of the regular and the dispersible A/L tablet.

CHAIR

Zul Premji
Muhimbili University, Department of Parasitic Infections, Dar es Salaam, United Republic of Tanzania.

POOLED EFFICACY AND SAFETY DATA IN ADULTS AND CHILDREN

Michael M. Makanga
European and Developing Countries Clinical Trials, Cape Town, South Africa

ARTEMETHER/LUMEFANTRINE DISPERSIBLE FORMULATION: PHARMACOKINETIC/PHARMACODYNAMIC AND FOOD EFFECT DATA FROM PHASE III TRIALS

Abdoulaye Djimde
University of Bamako, Bamako, Mali

ESTABLISHING A PREGNANCY REGISTRY TO ASSESS THE IMPACT OF ARTEMETHER/LUMEFANTRINE IF TAKEN DURING PREGNANCY

Christine Manyando
Tropical Diseases Research Centre, Ndola, Zambia.

DEVELOPING EFFECTIVE TRAINING MATERIALS FOR HEALTHCARE WORKERS

Ane E. Haaland
University of Oslo, Fjellstrand, Norway

Tuesday, December 9

Registration

Napoleon Ballroom
Tuesday, December 9, 7 a.m. – 5 p.m.

Cyber Cafe

Lagniappe
Tuesday, December 9, 7 a.m. – 5 p.m.

Speaker Ready Room

Nottoway
Tuesday, December 9, 7 a.m. – 6 p.m.

Education Committee Meeting

Salon 816
Tuesday, December 9, 7 a.m. – 8 a.m.

Journal Editorial Board Meeting

Salon 817/821
Tuesday, December 9, 7 a.m. – 8 a.m.

Clinical Group Past Presidents Meeting

Salon 824
Tuesday, December 9, 7 a.m. – 8 a.m.

Breakfast Session 55A

The Bill & Melinda Gates Foundation's Strategy on Neglected Tropical Diseases

Grand Ballroom D
Tuesday, December 9, 2008 7 a.m. - 7:50 a.m.

Staff from the Bill & Melinda Gates Foundation will share the Foundation's strategy on combating the following seven diseases, often referred to as Neglected Tropical Diseases (NTDs): Cysticercosis; Human African Trypanosomiasis; Guinea Worm; Lymphatic filariasis; Onchocerciasis; Schistosomiasis; Soil-transmitted helminthes (Ascariasis, Hookworm infection and Trichuriasis); Trachoma; and Visceral Leishmaniasis. The Foundation will discuss how it approaches combating NTDs, why combating these diseases is a priority, what select grantees are doing in support of the program's objectives and what the Foundation hopes to accomplish in the long term. A question and answer period will follow. A light breakfast will be served.

Press Room

Ellendale/Evergreen
Tuesday, December 9, 7:30 a.m. – 6:30 p.m.

Symposium 56

Pathophysiology, Pathology and Management of Severe Malaria

Gallery
Tuesday, December 9, 8 a.m. – 9:45 a.m.

This symposium is presented by the two research groups (working in Malawi and Southeast Asia) conducting studies of the pathology of severe malaria. Reflecting on over twenty years of research on the clinical features, pathophysiology and management of severe malaria, the similarities and differences in clinical and pathological features of severe malaria in African children and Asian adults will be presented and discussed and current management reviewed.

CHAIR

Nicholas J. White
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

Malcolm E. Molyneux
Blantyre Malaria Project, Blantyre, Malawi

8 a.m.

THE PATHOLOGY OF SEVERE MALARIA

Gareth Turner
Nuffield Department of Pathology, Oxford, United Kingdom

8:20 a.m.

THE PATHOLOGY OF SEVERE MALARIA

Steve Kamiza
University of Malawi, College of Medicine, Malawi, Malawi

8:40 a.m.

PATHOPHYSIOLOGY AND CLINICAL FEATURES OF SEVERE MALARIA IN MALAWIAN CHILDREN

Terrie Taylor
Michigan State University, Michigan, United States

9 a.m.

PATHOPHYSIOLOGICAL AND CLINICAL FEATURES OF SEVERE MALARIA IN ADULTS

Nicholas P. Day
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

9:15 a.m.

MANAGEMENT OF SEVERE MALARIA

Arjen Dondorp
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

9:30 a.m.

GENERAL DISCUSSION AND QUESTIONS

Malcolum Molyneux
Blantyre Malaria Project, Blantyre, Malawi

Symposium 57

Operation Research During Control of Schistosomiasis in Africa

Rhythms I

Tuesday, December 9, 8 a.m. – 9:45 a.m.

Since 2003, the Schistosomiasis Control Initiative (SCI) has assisted eight sub-Saharan African countries to develop sustainable schistosomiasis morbidity control programs. The monitoring and evaluation plan involves annual follow up of the cohorts and is therefore generating data to prove whether the control objectives have been met. Two speakers will present results which assess the health impact of control programs on a large scale in several countries, including infection status for *Schistosoma mansoni* and *Schistosoma haematobium*, haemoglobin levels, anaemia, nutritional status, ultrasound and clinical examination morbidity, before and after chemotherapeutic treatment. The integration of preventive chemotherapy programs targeting multiple neglected tropical diseases (NTDs) with similar strategic approaches offers further opportunities for estimation of health outcomes of integrated programs and some preliminary results will be presented . The next speaker will discuss how large-scale chemotherapeutic control programs exert prolonged new selection pressures on parasites with the resulting fear of the emergence of drug resistance. It will be shown that population genetic studies on schistosomes using recently developed neutral microsatellites can provide insights into the effects of such mass chemotherapeutic control programs and the transmission and clinical processes of the disease. Results will be presented for the population genetics of both *S. mansoni* and *S. haematobium* from several sub-Saharan countries. Finally, knowing that the pattern of human helminth infections, such as schistosomiasis, within a community, typically display heterogeneities in infection rates, infection intensity and development of morbidity, the final presenter will propose that capturing these heterogeneities is crucial in order to more accurately monitor control programs and predict their future course.

CHAIR

Alan Fenwick
Imperial College London, London, United Kingdom

Peter J. Hotez
The George Washington University, Washington, United States

8 a.m.

INTRODUCTION

Alan Fenwick
Imperial College London, London, United Kingdom

Peter J. Hotez
The George Washington University, Washington, United States

8:20 a.m.

MONITORING AND EVALUATION OF SCHISTOSOMIASIS AND INTEGRATED CONTROL PROGRAMS IN SUB-SAHARAN AFRICA

Artemis Koukounari
Schistosomiasis Control Initiative, London, United Kingdom

8:40 a.m.

PREDICTORS OF ANAEMIA IN ZAMBIA

Nadine Seward
Schistosomiasis Control Initiative, Imperial College Faculty of Medicine, London, United Kingdom

9 a.m.

POPULATION GENETICS OF *S. MANSONI* AND *S. HAEMATOBIUM* LINKED TO PRAZIQUANTEL DRUG PRESSURE IN AFRICA

Alice Norton
Schistosomiasis Control Initiative, Imperial College London, London, United Kingdom

9:20 a.m.

THE DEVELOPMENT OF SCHISTOSOMIASIS TRANSMISSION MODELS: CAPTURING INHERENT HETEROGENEITIES

Michael French
Schistosomiasis Control Initiative, London, United Kingdom

Symposium 58

Plasmodium-Mosquito Interactions

Rhythms II/III

Tuesday, December 9, 8 a.m. – 9:45 a.m.

Transmission of *Plasmodium*, the causative agent of malaria, is entirely dependent on its successful development in its mosquito vector. Thus, this part of the life cycle is a potential weak link in the transmission chain. Traditional control measures are either only partially effective (drugs, insecticides) or extremely hard to develop (vaccines). These considerations emphasize the importance of understanding parasite-insect vector interactions because such knowledge could lead to the development of novel control strategies. Exciting new discoveries are being made in this area of knowledge and the symposium will highlight some of these advances. Speakers will be asked to relate their discoveries to potential new strategies for disease control.

CHAIR

Marcelo Jacobs-Lorena
Johns Hopkins School of Public Health, Baltimore, MD, United States

8 a.m.

A MASTER TRANSCRIPTION FACTOR THAT CONTROLS GENE EXPRESSION IN THE MOSQUITO-INVASIVE STAGE OF MALARIA PARASITES

Masao Yuda
Mie University, Mie, Japan

8:25 a.m.

THE MOLECULAR REPERTOIRE OF MOSQUITO HEMOCYTES AND THEIR INFLUENCE OF MALARIA PARASITE TRANSMISSION

Kristin Michel
Kansas State University, Manhattan, KS, United States

8:50 a.m.

HOW DOES PLASMODIUM EVADE THE MOSQUITO'S IMMUNE SYSTEM?

Carolina Barillas-Mury
National Institutes of Health, Rockville, MD, United States

9:15 a.m.

VIRAL PARATRANSGENESIS AND MALARIA CONTROL IN *ANOPHELES GAMBIAE*

Jason Rasgon
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

Symposium 59

Integration of Mosquito Foraging in Management of Vector-Borne Diseases

Waterbury

Tuesday, December 9, 8 a.m. – 9:45 a.m.

Female mosquitoes need to find resources (hosts and oviposition sites) for completing the gonotrophic cycle. Foraging ecology of mosquitoes is important for understanding of interactions between hosts and mosquitoes. Recently, attention has been drawn to examine impacts of control interventions, such as insecticide-treated bednets and source reduction on mosquito foraging. This symposium represents both theoretic and experimental advances to highlight variability of resource-seeking patterns and implications on prevention and control of mosquito-borne diseases.

CHAIR

Weidong Gu
University of Alabama, Birmingham, Birmingham, United States

8 a.m.

LOCAL SCALE PATTERNS OF HOST SEEKING AND FEEDING AND IMPLICATIONS FOR PATHOGEN TRANSMISSION

A. Marm Kilpatrick
Consortium for Conservation Medicine, New York, United States

8:25 a.m.

AN AGENT-BASED MODEL OF MOSQUITO FORAGING FOR INTEGRATED MALARIA MANAGEMENT

Weidong Gu
University of Alabama, Birmingham, Birmingham, United States

8:50 a.m.

TESTING THE IMPORTANCE OF HABITAT SELECTION IN DETERMINING THE SPATIAL DISTRIBUTION OF MOSQUITO POPULATIONS: IMPLICATIONS FOR MANAGEMENT

Alicia Ellis
University of North Carolina, Charlotte, United States

9:15 a.m.

FOCUSING VECTOR INTERVENTIONS ON THE HOME FOR PREVENTION OF DENGUE

Thomas W. Scott
University of California, Davis, United States

Symposium 60

Expanding ACT Reach in the Private Sector

Napoleon A123

Tuesday, December 9, 8 a.m. – 9:45 a.m.

Over 40 percent of the world's inhabitants are at risk from malaria. Millions of children continue to fall prey to this dreaded disease. Among the many reasons for this unacceptable statistic is the fact that patients and caregivers have sorely limited access to high quality, effective treatment, particularly in private sector outlets where 40-60 percent of people buy their medicines. Are ACTs reaching people in Africa today? If not, why not? How can access to ACTs be facilitated? What are the challenges that must be overcome to ensure easy access of ACTs to malaria sufferers? Will a new, innovative mechanism in the form of a global subsidy ensure affordability, and thus access? What challenges still need to be overcome? Medicines for Malaria Venture (MMV) brings together international players in the field of access to antimalarials, as well as representatives from national malaria programs in Africa to share an overview of the status of access to effective antimalarials in Africa.

CHAIR

Francisco Songane
Partnership for Maternal, Newborn and Child Health, Geneva, Switzerland

George Jagoe
Medicines for Malaria Venture, Geneva, Switzerland

8 a.m.

PRIVATE SECTOR IN ACCESS: STRATEGIES FOR ENGAGEMENT AND CHALLENGES

Gladys Tetteh
MSH, Nairobi, Kenya

8:15 a.m.

DISPLACING INEFFECTIVE ANTIMALARIALS: FINDINGS FROM THE MOH-CHAI PILOT IN TANZANIA

Renata Mandike
Ministry of Health, Dar es Salaam, United Republic of Tanzania.

8:30 a.m.

ENSURING RESPONSIBLE ACCESS TO ACTS: FINDINGS FROM THE MOH-MMV LED UGANDA PILOT

Ambrose Talisuna
Medicines for Malaria Venture (MMV), Geneva, Switzerland

8:45 a.m.

MAKING ANTIMALARIALS MORE USER-FRIENDLY: DESIGNING APPROPRIATE PACKAGING

Susan Mukasa
PSI Uganda, Kampala, Uganda

9 a.m.

PANEL DISCUSSION AND WRAP-UP

Scientific Session 61

Bacteriology II – Diarrhea: Epidemiology and Treatment

Maurepas

Tuesday, December 9, 8 a.m. – 9:45 a.m.

CHAIR

Karen Levy
Stanford University, San Francisco, CA, United States

Theresa J. Ochoa
Baylor College of Medicine, Houston, TX, United States

8 a.m.

364

SEASONALITY, WATER QUALITY VARIABILITY AND DIARRHEAL DISEASE IN NORTHERN COASTAL ECUADOR

Karen Levy[1], Alan Hubbard[2], Kara Nelson[2], Joseph Eisenberg[3]
[1]Stanford University, Stanford, CA, United States, [2]UC Berkeley, Berkeley, CA, United States, [3]University of Michigan, Ann Arbor, MI, United States

8:15 a.m.

365

SHIFTING PREVALENCE OF MAJOR DIARRHEAL PATHOGENS IN PATIENTS SEEKING HOSPITAL CARE DURING FLOODS IN 1998, 2004, AND 2007 IN DHAKA, BANGLADESH

Aaron M. Harris[1], Fahima Chowdhury[2], Yasmin Ara Begum[2], Abu S. Faruque[2], Ann-Mari Svennerholm[3], Jason B. Harris[4], Edward T. Ryan[4], Alejandro Cravioto[2], Stephen B. Calderwood[4], Firdausi Qadri[2]
[1]Tufts University School of Medicine, Boston, MA, United States, [2]International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, [3]The Sahlgrenska Academy at University of Gothenburg, Goteborg, Sweden, [4]Massachusetts General Hospital, Boston, MA, United States

8:30 a.m.

366

SHIGA TOXIN GENE TYPES OF SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC) ISOLATED FROM PERUVIAN CHILDREN

Carmen A. Contreras[1], Theresa J. Ochoa[2], Francesca Barletta[2], Nelly Zavaleta[3], Claudio F. Lanata[3], Thomas G. Cleary[4]
[1]Universidad Nacional Mayor de San Marcos, Lima, Peru, [2]Universidad Peruana Cayetano Heredia, Lima, Peru, [3]Instituto de Investigación Nutricional, Lima, Peru, [4]University of Texas School of Public Health, Huston, TX, United States

8:45 a.m.

367

AGE-RELATED SUSCEPTIBILITY TO INFECTION WITH DIARRHEAGENIC *E. COLI*

Lucie Ecker[1], Theresa J. Ochoa[2], Francesca Barletta[2], Monica Mispireta[1], Ana I. Gil[1], Isabel Amemiya[1], Hector Verastegui[1], Eric Hall[3], Thomas G. Cleary[4], Claudio F. Lanata[1]
[1]Instituto de Investigación Nutricional, Lima, Peru, [2]Universidad Peruana Cayetano Heredia, Lima, Peru, [3]Naval Medical Research Center Detachment, Lima, Peru, [4]University of Texas Health Science Center, Houston, TX, United States

9 a.m.

368

FACTORS ASSOCIATED WITH ORAL REHYDRATION THERAPY UTILIZATION FOR CHILDHOOD DIARRHEA MANAGEMENT AMONG PRIMARY HOUSEHOLD CAREGIVERS — ASEMBO, KENYA 2007

Christine K. Olson[1], Lauren S. Blum[2], Kinnery Naik[1], Prisca Oria[2], Alice Mathingau[2], Beatrice Odidi[2], Daniel Feikin[2], Kayla Laserson[3], Anna W. Wamae[4], Robert F. Breiman[2], Pavani K. Ram[5]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]International Emerging Infections Program, Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, [3]Centers for Disease Control and Prevention/Kenya Medical Research Institute – Centre for Global Health Research, Kisumu, Kenya, [4]Republic of Kenya Ministry of Health, Nairobi, Kenya, [5]University at Buffalo, Buffalo, NY, United States

9:15 a.m.

369

MANAGEMENT OF DIARRHEAL ILLNESS IN YOUNG CHILDREN OF RURAL WESTERN KENYA – FINDINGS FROM A HEALTH UTILIZATION AND ATTITUDES SURVEY, 2007

Kavita K. Trivedi[1], Richard Omore[2], Elizabeth Blanton[1], Kubaje Adazu[2], John Vulule[3], Kayla Laserson[2], John A. Crump[1], Myron M. Levine[4], Karen Kotloff[4], Annemieke van Eijk[4], Eric D. Mintz[1], Ciara E. O'Reilly[1], Robert F. Breiman[5]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Kenya Medical Research Institute/Centers for Disease Control and Prevention, Kisumu, Kenya, [3]Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, [4]University of Maryland School of Medicine, Center for Vaccine Development, Baltimore, MD, United States, [5]Kenya Medical Research Institute/Centers for Disease Control and Prevention, Nairobi, Kenya

9:30 a.m.

370

FACTORS ASSOCIATED WITH RECOMMENDATION OF ORAL REHYDRATION THERAPY FOR DIARRHEA TREATMENT AMONG HEALTH WORKERS IN KENYA, 2007

Kinnery Naik[1], Christine K. Olson[1], Amy L. Boore[1], Lauren S. Blum[2], Alice Mathingau[2], Beatrice Odidi[2], Kayla F. Laserson[3], Daniel R. Feikin[2], Annah W. Wamae[4], Robert F. Breiman[2], Pavani Kalluri Ram[5]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]International Emerging Infections Program, CDC/KEMRI, Kisumu, Kenya, [3]CDC/KEMRI – Centre for Global Health Research, Kisumu, Kenya, [4]Republic of Kenya Ministry of Health, Nairobi, Kenya, [5]University at Buffalo, Buffalo, NY, United States

Symposium 62

Liver Fluke Infection Induces Cholangiocarcinoma

Bayside A
Tuesday, December 9, 8 a.m. – 9:45 a.m.

Throughout East Asia, there is a strikingly high prevalence of cholangiocarcinoma (CCA) in regions where *Opisthorchis viverrini* liver fluke infection is endemic. CCA is extremely prevalent in Northeast Thailand, where uncooked cyprinoid fish is often a dietary staple. These fish are the intermediate hosts of the liver flukes. Despite widespread administration of praziquantel, the prevalence of O. viverrini approaches 70 percent in Northeast Thailand and Laos. Moreover, in Thailand, liver cancer is the most prevalent of the fatal tumors, and rates of CCA in regions where the parasite is endemic are unprecedented — CCA is responsible for about 19 percent of liver cancers in the U.S.A. but represents 71 percent of cancers in Thailand's Khon Kaen region, the highest incidence in the world. *O. viverrini* infection induces inflammation of the bile ducts, resulting in oxidative DNA damage of the epithelium and subsequent malignant transformation to CCA. Experimental infections of hamsters with *O. viverrini* corroborate findings in human infections. Secreted fluke proteins stimulate biliary epithelial cells to hyper-proliferate but not undergo apoptosis, providing an additional potential mechanism by which epithelial cells become neoplastic. The symposium will address these issues and additional recent findings related to *O. viverrini*-associated liver cancer.

CHAIR

Paul J. Brindley
George Washington University Medical Center, Washington DC, United States

Banchob Sripa
Khon Kaen University, Khon Kaen, Thailand

8 a.m.

MOLECULAR CARCINOGENESIS OF *OPISTHORCHIS VIVERRINI* INDUCED CHOLANGIOCARINOGENESIS

Banchob Sripa
Khon Kaen University, Khon Kaen, Thailand

8:25 a.m.

IMMUNOLOGICAL CORRELATES OF HEPATO-BILIARY CHANGES IN HUMAN OPISTHORCHAISIS

Jeffrey M. Bethony
George Washington University, Washington DC, United States

8:50 a.m.

PROTEOMICS OF SECRETED *OPISTHORCHIS VIVERRINI* ANTIGENS

Alex Loukas
Queensland Institute of Medical Research, Brisbane, Australia

9:15 a.m.

DEVELOPMENTAL REGULATION OF SECRETED FASCIOLA PROTEASES REVEALED BY PROTEOMICS

Mark Robinson
University of Technology Sydney (UTS), Sydney, Australia

Scientific Session 63

Clinical Tropical Medicine I

Bayside BC
Tuesday, December 9, 8 a.m. – 9:45 a.m.

CHAIR
Kubaje Adazu
Centers for Disease Control and Prevention, Kisumu, Kenya

Kevin Baird
Oxford University, Jakarta, indonesia

8 a.m.

371

EXACERBATION OF ANEMIA IN *P. FALCIPARUM* MALARIA AND GRAM NEGATIVE BACTEREMIA CO-INFECTED CHILDREN IS ASSOCIATED WITH ELEVATED INFLAMMATORY MEDIATORS

Gregory C. Davenport[1], Tom Were[2], Collins Ouma[2], James B. Hittner[3], John M. Ong'echa[2], Douglas J. Perkins[4]
[1]University of Pittsburgh, Pittsburgh, PA, United States, [2]KEMRI Laboratories of Parasitic and Viral Diseases, Centre for Vector Biology and Control Research, Kenya Medical Research Institute, Kisumu, Kenya, [3]College of Charleston, Charleston, SC, United States, [4]University of New Mexico, Albuquerque, NM, United States

8:15 a.m.

372

MARKED DECLINE IN CHILDHOOD MORTALITY IN THE WESTERN KENYA DSS: EVIDENCE FROM LONGITUDINAL DATA, 2003-2007

Kubaje Adazu[1], Mary Hamel[1], Daniel Feikin[1], Peter Ofware[1], David Obor[1], Sheila Ogwang[1], Vincent Orimba[1], John Vulule[2], Laurence Slutsker[3], Kayla Laserson[1]
[1]KEMRI/CDC Field Research Station, Kisumu, Kenya, [2]KEMRI CGHR, Kisumu, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

8:30 a.m.

373

AN OPERATIONAL MALARIA OUTBREAK IDENTIFICATION AND RESPONSE SYSTEM IN MPUMALANGA PROVINCE, SOUTH AFRICA

Marlize Coleman[1], Michael Coleman[2], Maureen Coetzee[3], Aaron Mabuza[4], Gerdalize Kok[4], David Durrheim[5]
[1]Colorado State University, Ft. Collins, CO, United States, [2]Medical Research Council, South Africa, Durban, South Africa, [3]University of the Witwatersrand, Johannesburg, South Africa, [4]Mpumalanga Department of Health, Nelspruit, South Africa, [5]Hunter New England Population Health and Hunter Medical Research Institute, Wallsend, Australia

8:45 a.m.

374

A PHASE 2, OPEN LABEL, NON-COMPARATIVE TRIAL OF AZITHROMYCIN 2G PLUS CHLOROQUINE 600 MG BASE DAILY FOR THREE DAYS FOR THE TREATMENT OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA

Richa Chandra[1], Drew Lewis[2], Diego Moran[3], Nagesh Dubhashi[4], Shrisendu Sarkar[5], Cunshan Wang[1], Jenny Cai[1], Michael Dunne[1]
[1]Pfizer Inc., New London, CT, United States, [2]Pfizer Inc., New York, NY, United States, [3]Hospital San Andres de Tumaco, Colombia, Narino, Colombia, [4]Goa Medical College, Bambolim, Goa, India, [5]Pfizer Inc., Mumbai, India

9 a.m.

375

EPIDEMIOLOGY OF IMPORTED MALARIA IN HOUSTON CHILDREN: 1994-2007

Gloria E. Oramasionwu[1], Susan H. Wootton[2], Morven S. Edwards[1]
[1]Baylor College of Medicine, Houston, TX, United States, [2]University of Texas Health Science Center at Houston, Houston, TX, United States

9:15 a.m.

376

PROSPECTIVE ANALYSIS OF HOSPITAL ADMISSIONS, DIAGNOSIS, DISEASE AND OUTCOMES FOR MALARIA IN JAYAPURA, PAPUA, INDONESIA

Yohana Sorontou[1], Samuel Baso[2], Abdul Rohim[2], Puji B. Asih[3], Din Syafruddin[3], Robert W. Taylor[4], **J. Kevin Baird**[5]
[1]Cendrawasih University, Jayapura, Papua, Indonesia, [2]Dok II Hospital, Internal Medicine, Jayapura, Papua, Indonesia, [3]Eijkman Institute, Jakarta, Indonesia, [4]Oxford University, Hanoi, Vietnam, [5]Eijkman Oxford Clinical Research Unit, Jakarta, Indonesia

9:30 a.m.

377

A RANDOMISED TRIAL OF AN EIGHT-WEEK, ONCE WEEKLY PRIMAQUINE REGIMEN TO PREVENT RELAPSE OF *PLASMODIUM VIVAX* IN PAKISTAN

Toby Leslie[1], Ismail Mayan[2], Nasir Mohammed[2], Panna Erasmus[2], Jan Kolaczinski[1], Christopher J. Whitty[1], Mark Rowland[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]HealthNet-TPO, Peshawar, Pakistan

Symposium 64

Combining Vector and Disease Data for Improved Assessment of Vector-Borne Disease Risk

Grand Ballroom A

Tuesday, December 9, 8 a.m. – 9:45 a.m.

The symposium will focus on cross-disciplinary approaches that incorporate data for both arthropod vectors and human disease to deliver improved assessments of vector-borne disease risk. As noted in the 2008 Institute of Medicine Workshop Summary for "Vector-Borne Diseases: Understanding the Environmental, Human Health, and Ecological Connections," there has been a tendency in the research community to stovepipe Geographic Information System-based risk modeling approaches for vector-borne diseases to either vector data or epidemiologic data. This is highly unfortunate because vector and disease data not only have different weaknesses, but also complementary strengths. For example, although the location of sampling sites for vectors readily can be georeferenced, human behavior often impacts risk of vector and pathogen contact. On the other hand, a human disease case, which unequivocally demonstrates contact with an infected vector, often is accompanied by questionable information regarding the probable vector and pathogen exposure site. To overcome these issues, models combining independently derived estimates for vector risk and epidemiologic risk are needed. The symposium will explore the potential for developing risk models and risk maps that include both vector and disease data, and will include examples from a wide range of diseases of public health importance in the Americas and elsewhere (dengue, Lyme disease, malaria, plague, tularemia, West Nile virus disease).

CHAIR

Lars Eisen
Colorado State University, Fort Collins, CO, United States

8 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF RISK OF BACTERIAL VECTOR-BORNE DISEASES: LYME DISEASE, PLAGUE AND TULAREMIA

Rebecca J. Eisen
Centers for Disease Control and Prevention, Fort Collins, CO, United States

8:25 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF DENGUE RISK

Amy C. Morrison
University of California, Davis, Davis, CA, United States

8:50 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF MALARIA RISK

Michael Coleman
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

9:15 a.m.

COMBINING VECTOR AND DISEASE DATA FOR IMPROVED ASSESSMENT OF WEST NILE VIRUS DISEASE RISK

Lars Eisen
Colorado State University, Fort Collins, CO, United States

Scientific Session 65

Filariasis I – Immunology

Grand Ballroom B

Tuesday, December 9, 8 a.m. – 9:45 a.m.

CHAIR

Edward Mitre
National Institutes of Health, Bethesda, MD, United States

Sabine Specht
University Hospital Bonn, Bonn, Germany

8 a.m.

378

BASOPHILS AND IGE AMPLIFY THE IMMUNE RESPONSE TOWARDS *LITOMOSOIDES SIGMODONTIS*

Marina N. Torrero, Marc P. Hübner, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8:15 a.m.

379

INDUCTION OF TRAIL- AND TNF-A-DEPENDENT APOPTOTIC CELL DEATH IN HUMAN MONOCYTE-DERIVED DENDRITIC CELLS BY *BRUGIA MALAYI*

Roshanak Tolouei Semnani[1], Priyanka Goel Venugopal[1], Lily Mahapatra[1], Jason Skinner[2], Francoise Meylan[1], Damien Chaussabel[2], Richard M. Siegel[1], Thomas B. Nutman[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Baylor Institute for Immunology Research, Dallas, TX, United States

8:30 a.m.

380

ANTI-*WOLBACHIA* ANTIBODIES MAY DECREASE THE LIKELIHOOD OF ACUTE ADENOLYMPHANGITIS IN LYMPHATIC FILARIASIS

Edsel Maurice T. Salvana[1], Katrin Daehnel[2], Amy G. Hise[3], Eric Pearlman[2], Daniel J. Tisch[3], James W. Kazura[3]
[1]Division of Infectious Diseases and HIV Medicine, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, [2]Department of Ophthalmology, University Hospitals Case Medical Center and Case Western Reserve University, Cleveland, OH, United States, [3]Center for Global Health and Diseases, Case Western Reserve University, Cleveland, OH, United States

(ACMCIP Abstract)

8:45 a.m.

381

FILARIAL LYMPHATIC PATHOLOGY IS CHARACTERIZED BY AUGMENTED PRO-INFLAMMATORY CYTOKINE PRODUCTION IN RESPONSE TO TLR2 AND TLR9 LIGANDS

Subash Babu[1], Sajid Bhat[1], Pavan Kumar[1], C. Kolappan[2], V. Kumaraswami[2], Thomas B. Nutman[3]
[1]National Institutes of Health-TRC-International Center for Excellence in Research, Chennai, India, [2]Tuberculosis Research Center, Chennai, India, [3]National Institutes of Health, Bethesda, MD, United States

(ACMCIP Abstract)

9 a.m.

382

ELEVATED PLASMA ANGIOGENIC AND LYMPHANGIOGENIC FACTORS ARE ASSOCIATED WITH INFECTION PER SE RATHER THAN CLINICALLY APPARENT DISEASE IN HUMAN FILARIAL INFECTION

Sasisekhar Bennuru[1], Grace Maldarelli[1], Kumaraswami V[2], Thomas B. Nutman[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Tuberculosis Research Centre, Chennai, India

9:15 a.m.

383

INCREASED IMMUNE STIMULATION AFTER MACROFILARICIDAL THERAPY

Sabine Specht[1], Sabine Mand[1], Alexander Y. Debrah[2], Yeboah M. Debrekyei[2], Ohene Adjei[2], Frank Geisinger[3], Norbert W. Brattig[3], Achim Hoerauf[1]
[1]Institute for Medical Microbiology, Immunology and Parasitology,University Hospital, Bonn, Germany, [2]Kumasi Centre of Collaborative Research, Kumasi, Ghana, [3]Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

(ACMCIP Abstract)

9:30 a.m.

384

A LOA/BABOON MODEL FOR INVESTIGATING THE MECHANISMS OF ENCEPHALOPATHY FOLLOWING IVERMECTIN ADMINISTRATION

Samuel Wanji[1], Nicholas Tendongfor[1], Julius Che[1], Ebangha Joan Eyong[1], Jonas Moafo[1], Elive Ngalle[1], Peter Enyong[1], Charles Mackenzie[2]
[1]University of Buea, Buea, Cameroon, [2]Michigan State University, East Lansing, MI, United States

Scientific Session 66

Flavivirus III – Dengue III

Grand Ballroom C
Tuesday, December 9, 8 a.m. – 9:45 a.m.

CHAIR

Eva Harris
University of California, Berkeley, Berkeley, CA, United States

Daniel Libraty
University of Massachusetts Medical School, Worcester, MA, United States

8 a.m.

385

DENGUE AND THE DEMOGRAPHIC TRANSITION

Derek A. Cummings[1], Sopon Iamsirithaworn[2], Justin Lessler[1], Rungnapa Prasanthong[2], Richard G. Jarman[3], Donald S. Burke[4], Robert V. Gibbons[5]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Ministry of Public Health, Nonthaburi, Thailand, [3]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [4]University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States, [5]Armed Forces Institute of Medical Sciences, Bangkok, Thailand

8:15 a.m.

386

SAFETY AND IMMUNOGENICITY IN CHILDREN AND ADULTS FROM ENDEMIC COUNTRIES AND ADULTS FROM NONENDEMIC COUNTRIES OF A TETRAVALENT, LIVE ATTENUATED DENGUE VACCINE

Alain Bouckenooghe[1], Maria R. Capeding[2], Dennis N. Morrison[3], Jorge L. Poo[4], Jean Lang[5], Laurent Chambonneau[5], Remi Forrat[5]
[1]Sanofi Pasteur, Swiftwater, PA, United States, [2]Research Institute for Tropical Medicine, Muntinlupa City, Philippines, [3]Bio-Kinetic Clinical Applications, Springfield, MO, United States, [4]Hospital Medica Sur, México City, Mexico, [5]Sanofi Pasteur, Marcy l'Etoile, France

8:30 a.m.

387

IMMUNE RESPONSE TO TETRAVALENT DENGUE VACCINATION IN MEXICAN SUBJECTS: THE EFFECTS OF YELLOW FEVER VACCINATION

Remi Forrat[1], Jorge L. Poo[2], Juan F. Galán Herrera[2]
[1]Sanofi Pasteur, Lyon, France, [2]CIF-BIOTEC Médica Sur, Mexico City, Mexico

8:45 a.m.

388

INCIDENCE OF SYMPTOMATIC AND SUBCLINICAL DENGUE IN A FOUR-YEAR PEDIATRIC COHORT STUDY IN NICARAGUA

Guillermina Kuan[1], Angel Balmaseda[2], Aubree Gordon[3], Oscar Ortega[4], Nicole Fitzpatrick[4], William Avilés[4], Crisanta Rocha[5], Andrea Nuñez[2], Josefina Coloma[3], **Eva Harris**[3]
[1]Socrates Flores Vivas Health Center, Managua, Nicaragua, [2]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, [3]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, [4]Sustainable Sciences Institute, Managua, Nicaragua, [5]Hospital Infantil Manuel Jesús de Rivera, Managua, Nicaragua

9 a.m.

389

A PROSPECTIVE STUDY OF PRIMARY DENGUE VIRUS INFECTIONS DURING INFANCY: PRELIMINARY FINDINGS

Daniel H. Libraty[1], Rosario M. Capeding[2], Luz Acosta[2], Veronica Tallo[2], Edel Mercado[2], Analisa Bautista[2], Richard G. Jarman[3], In-Kyu Yoon[3], Robert V. Gibbons[3], Job D. Brion[4]
[1]University of Massachusetts Medical School, Worcester, MA, United States, [2]Research Institute for Tropical Medicine, Manila, Philippines, [3]Armed Forces Research Institute for Medical Sciences, Bangkok, Thailand, [4]San Pablo City Health Office, San Pablo, Philippines

9:15 a.m.

390

SUBSTANTIAL UNDERREPORTING OF DENGUE DEATHS IN AN ASIAN DENGUE ENDEMIC COUNTRY

Jose A. Suaya, Donald S. Shepard
Heller School, Brandeis University, Waltham, MA, United States

9:30 a.m.

391

AN ESTIMATION OF THE DISEASE AND ECONOMIC BURDEN OF DENGUE IN SOUTHERN VIETNAM

Laurent Coudeville[1], Laurence Pollissard[1], Quang Luong Chan[2], Trong Toan Nguyen[2], Huong Vu Thi Que[2], Christine Luxemburger[1], Kim Tien Nguyen Thi[2]
[1]Sanofi Pasteur, Lyon, France, [2]Pasteur Institute, Ho Chi Minh City, Vietnam

Scientific Session 67

Global Health Symposium on Tropical Medicine

Supported with funding from the Bill & Melinda Gates Foundation

Grand Ballroom D

Tuesday, December 9, 8 a.m. - 9:45 a.m.

This symposium features young investigators from Senegal, Brazil, Peru and Thailand who have received travel awards to present their work on malaria, leptospirosis, leishmania and filariasis at the annual meeting.

CHAIR

Anthony A. James
University of California, Irvine, Irvine, CA, United States

James LeDuc
University of Texas Medical Branch, Galveston, TX, United States

8:15 a.m.

1219

HUMAN ANTIBODY RESPONSE TO ANOPHELES GAMBIAE SALIVA: A NEW IMMUNO-EPIDEMIOLOGICAL MARKER TO EVALUATE THE EFFECTIVENESS OF INSECTICIDES TREATED NETS (ITNS)?

Papa Makhtar Drame[1], Anne Poinsignon[2], Patrick Besnard[3], Sylvie Cornélie[2], Vincent Foumane[4], Cheikh Saya Sow[1], Jacques Le Mire[5], Filomena Fortes[6], Denis Boulanger[2], Pierre Carnevale[2], Francois Simondon[2], Franck Remoue[1]
[1]Institut de Recherche pour le Developpement, Dakar, Senegal, [2]Institut de Recherche pour le Developpement, Montpellier, France, [3]Service Médical Sonamet, Lobito, Angola, [4]Organisation de Coordination pour la lutte contre les Endémies en Afrique Centrale (OCEAC), Yaoundé, Cameroon, [5]Service Médical Clinique Sonamet, Lobito, Angola, [6]Malaria Control Program, Luanda, Angola

8:30 a.m.

444

LEPTOSPIROSIS IN SAO PAULO, BRAZIL: EVEN MORE FULMINANT, EVEN MORE A PULMONARY DISEASE

Anne Spichler[1], Daniel Athanazio[2], Pedro Vilaca[1], Erica Chapolla[1], Marcia Buzzar[1], Bronislawa Castro[1], Antonio Seguro[1]
[1]Health Municipality Secretariat of Sao Paulo, Sao Paulo, Brazil, [2]Federal University of Bahia, Salvador, Brazil

8:45 a.m.

559

ANALYSIS OF GENE EXPRESSION AND EVOLUTIONARY PROCESS IN LEISHMANIA (VIANNIA) BRAZILIENSIS AND LEISHMANIA (VIANNIA) PERUVIANA MODEL

Dionicia Gamboa
Instituto de Medicina Tropical, Lima, Peru

(ACMCIP Abstract)

9 a.m.

526

ASSOCIATION OF TOLL-LIKE RECEPTOR 2 (TLR2) GENE POLYMORPHISMS WITH BANCROFTIAN FILARIASIS

Alisa Junpee, Vivornpun Sanprasert, Surang Nuchprayoon
Lymphatic Filariasis Research Unit, Department of Parasitology, and Chulalongkorn Medical Research Center (Chula MRC), Chulalongkorn University, Bangkok, Thailand

(ACMCIP Abstract)

9:15 a.m.

1212

CHARACTERIZATION OF NATURALLY ACQUIRED ANTIBODIES TO PFRH DOMAINS AND DETERMINATION OF THEIR FUNCTIONAL INHIBITORY ACTIVITY

Ambroise D. Ahouidi[1], Amy K. Bei[2], Ousmane Sarr[1], Daouda Ndiaye[1], Omar Ndir[1], Dyann Wirth[2], Souleymane Mboup[1], Manoj T. Duraisingh[2]
[1]Le Dantec Hospital and Cheikh Anta Diop, Dakar, Senegal, [2]Harvard School of Public Health, Boston, MA, United States

(ACMCIP Abstract)

9:30 a.m.

PANEL DISCUSSION

Scientific Session 68

Malaria – Diagnosis

Grand Ballroom E

Tuesday, December 9, 8 a.m. – 9:45 a.m.

CHAIR

Catherine O. Falade
College of Medicine, University of Ibadan, Ibadan, Nigeria

Naomi W. Lucchi
Centers for Disease Control adn Prevention, Chamblee, GA, United States

8 a.m.

392

EVALUATION OF THREE DIFFERENT PCR BASED ASSAYS FOR MALARIA DIAGNOSIS AND SPECIATION

Naomi W. Lucchi, Tonya Mixon, Venkatachalam Udhayakumar
Centers for Disease Control and Prevention, Chamblee, GA, United States

8:15 a.m.

393

IMMUNOCHROMATOGRAPHIC DETECTION OF *PLASMODIUM FALCIPARUM* INFECTION USING HUMAN SALIVA AND URINE SAMPLES

Sungano Mharakurwa[1], Mtawa A. Mkulama[1], Sandra Chishimba[1], Jay Sikalima[1], Clive J. Shiff[2], David J. Sullivan[2], Philip E. Thuma[1]
[1]The Malaria Institute at Macha, Choma, Zambia, [2]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

8:30 a.m.

394

LOW QUALITY OF ROUTINE MICROSCOPY FOR MALARIA AT DIFFERENT HEALTH SYSTEM LEVELS IN DAR ES SALAAM: RAPID DIAGNOSTIC TESTS SHOULD ALSO BE IMPLEMENTED IN HOSPITALS AND URBAN SETTINGS

Judith Kahama-Maro[1], Valérie D'Acremont[1], Deo Mtasiwa[2], Blaise Genton[3], Christian Lengeler[4]
[1]City Medical Office of Health, Dar es Salaam City Council, United Republic of Tanzania, [2]Ministry of Health and Social Welfare, Dar es Salaam, United Republic of Tanzania, [3]Ifakara Health Research and Development Center, Dar es Salaam, United Republic of Tanzania, [4]Swiss Tropical Institute, Basel, Switzerland

8:45 a.m.

395

EFFECTIVENESS AND SAFETY OF TRAINING IN FEVER CASE MANAGEMENT AND RDT USE AT HEALTH CENTERS IN UGANDA

Heidi Hopkins[1], Alex Ojaku[2], Adoke Yeka[3], Patrick Angutoko[3], John Ategeka[3], Robert Okiror[3], Peter Olwoch[3], Umaru Ssekabira[2], Carol Asiimwe[4], Jane Nabakooza[5], John B. Rwakimari[5], Lydia Mpanga Sebuyira[6], Fred Wabwire Mangen[7], Grant Dorsey[1]
[1]University of California, San Francisco, San Francisco, CA, United States, [2]Joint Uganda Malaria Training Program, Kampala, Uganda, [3]Uganda Malaria Surveillance Project, Kampala, Uganda, [4]Malaria Consortium, Kampala, Uganda, [5]Uganda Ministry of Health, Malaria Control Programme, Kampala, Uganda, [6]Infectious Diseases Institute, Makerere University, Kampala, Uganda, [7]Makerere University School of Public Health, Kampala, Uganda

9 a.m.

396

DECREASING TRENDS IN COMMUNITY-REPORTED FEVER AND HEALTH FACILITY MALARIA DIAGNOSES IN THE IFAKARA DSS (TANZANIA)

Sandra Alba[1], Manuel Hetzel[1], Angel Dillip[1], Iddy Mayumana[1], Christian Lengeler[2], Mathew Alexander[1], Rose Nathan[1], Brigit Obrist[2], Alexander Schulze[3], Flora Kessy[1], Hassan Mshinda[1]
[1]Ifakara Health and Research Development Centre, Ifakara, United Republic of Tanzania, [2]Swiss Tropical Institute, Basel, Switzerland, [3]Novartis Foundation for Sustainable Development, Basel, Switzerland

9:15 a.m.

397

WITHDRAWING ANTIMALARIALS IN FEBRILE CHILDREN WITH A NEGATIVE RAPID DIAGNOSTIC TEST IS SAFE IN A MODERATELY ENDEMIC AREA OF TANZANIA

Valérie D'Acremont[1], Judith Kahama-Maro[1], Deo Mtasiwa[2], Christian Lengeler[3], Blaise Genton[4]
[1]City Medical Office of Health, Dar es Salaam City Council, United Republic of Tanzania, [2]Ministry of Health and Social Welfare, Dar es Salaam, United Republic of Tanzania, [3]Swiss Tropical Institute, Basel, Switzerland, [4]Ifakara Health Research and Development Center, Dar es Salaam, United Republic of Tanzania

9:30 a.m.

398

MALARIA PARASITEMIA IN BLOOD BANKING IN AN ENDEMIC AREA

Catherine O. Falade, Oyekanmi Nash, Titi S. Akingbola, Obaro S. Michael, Folake Olojede, Olusegun G. Ademowo
University of Ibadan, Ibadan, Nigeria

Exhibit Hall Open

Napoleon Ballroom
Tuesday, December 9, 9:30 a.m. – 10:30 a.m.

Coffee Break

Napoleon Ballroom
Tuesday, December 9, 9:45 a.m. – 10:15 a.m.

Poster Session B Set-Up

Armstrong Ballroom
Tuesday, December 9, 9:45 a.m. – 10:15 a.m.

Poster Sesssion B Viewing

Armstrong Ballroom
Tuesday, December 9, 10:15 a.m. – Noon

Symposium 69

Leprosy Awareness in the U.S

Gallery
Tuesday, December 9, 10:15 a.m. – Noon

This symposium will raise awareness that leprosy does occur in the U.S., primarily within immigrants from countries where the disease is endemic. The epidemiology and unique clinical immunopathological features of HD will be discussed, along with the current concepts in diagnosis and treatment and the services provided by the National Hansen's Disease Programs (NHDP) in Baton Rouge, Louisiana.

CHAIR

James L. Krahenbuhl
National Hansen's Disease Programs, Baton Rouge, LA, United States

David M. Scollard
National Hanens's Disease Programs, Baton Rouge, LA, United States

10:15 a.m.

OVERVIEW OF THE SERVICES PROVIDED TO PRIVATE SECTOR PHYSICIANS BY THE NATIONAL HANSEN'S DISEASE PROGRAMS (NHDP)

James Krahenbuhl
National Hansen's Disease Programs, Baton Rouge, LA, United States

10:30 a.m.

LEPROSY AWARENESS IN THE UNITED STATES

Richard Truman
National Hansen's Disease Programs, Baton Rouge, LA, United States

10:55 a.m.

CLINICAL IMMUNOHISTOPATHOLOGICAL SPECTRUM OF LEPROSY

David M. Scollard
National Hansen's Disease Programs, Baton Rouge, LA, United States

11:20 a.m.

LEPROSY DIAGNOSIS, TREATMENT AND MANAGEMENT OF REACTIONS.

Barbara M. Stryjewska
National Hansen's Disease Programs, Baton Rouge, LA, United States

Scientific Session 70

Intestinal and Tissue Helminths II: Echinococcosis/Hydatidosis

Rhythms I
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR

Enrico Brunetti
University of Pavia, Pavia, Italy

10:15 a.m.

399

IMMUNOLOGICAL AND GENETIC FACTORS AFFECTING HUMAN SUSCEPTIBILITY TO ECHINOCOCCOSIS

Yu R. Yang[1], Magda K. Ellis[2], Philip S. Craig[3], Dominique A. Vuitton[4], Gail M. Williams[5], Geoffrey N. Gobert[2], Tao Sun[1], Donald P. McManus[2]
[1]Ningxia Medical College, Yinchuan City, Ningxia Hui Autonomous Region, China, [2]Molecular Parasitology Lab., Queensland Institute of Medical Research, Brisbane, Queensland, Australia, [3]Biomedical Sciences Research Institute and School of Environment and Life Sciences, University of Salford, Salford, United Kingdom, [4]Universite de Franche-Comte, Besancon, France, [5]School of Population Health, University of Queensland, Brisbane, Queensland, Australia

(ACMCIP Abstract)

10:30 a.m.

400

ACCELERATED LARVAL GROWTH OF *ECHINOCOCCUS SPP.* IN THE IMMUNODEFICIENT HOST?

Beate Gruener[1], Carmen-Michaela Cretu[2], Enrico Brunetti[3], Collin N. Menezes[4], Georg Haerter[1], Martin P. Grobusch[5], Peter Kern[1]
[1]University of Ulm, Ulm, Germany, [2]University of Medicine and Pharmacy, Bucharest, Romania, [3]University of Pavia, Pavia, Italy, [4]Infectious Diseases Unit, Helen Joseph Hospital, Johannesburg, South Africa, [5]University of Witwatersrand, Johannesburg, South Africa

10:45 a.m.

401

OBSERVATIONS ON THE CYTODIFFERENTIATION OF *ECHINOCOCCUS MULTILOCULARIS IN VITRO*

Tanya Armstrong[1], Andrew Thompson[1], Peta Clode[2]
[1]Murdoch University, Perth, Australia, [2]University of Western Australia, Perth, Australia

11 a.m.

402

CRITICAL APPRAISAL OF NITAZOXANIDE FOR THE TREATMENT OF ALVEOLAR ECHINOCOCCOSIS

Peter Kern[1], Philippe Abboud[2], Winfried V. Kern[3], August Stich[4], Solange Bresson-Hadni[5], Bruno Guerin[6], Klaus Buttenschoen[1], Beate Gruener[1], Stefan Reuter[7], Andrew Hemphill[8]
[1]University of Ulm, Ulm, Germany, [2]University of Rouen, Rouen, France, [3]University of Freiburg, Freiburg, Germany, [4]Medical Mission Hospital, Würzburg, Germany, [5]University of Besancon, Besancon, France, [6]Centre Hospitalier, Rodez, France, [7]University of Düsseldorf, Düsseldorf, Germany, [8]University of Berne, Berne, Switzerland

11:15 a.m.

403

GEO-ECOLOGICAL AND SOCIO-ECONOMIC ENVIRONMENTS AFFECTING *ECHINOCOCCUS* TRANSMISSION IN NINGXIA HUI AUTONOMOUS REGION OF CHINA

Yu R. Yang[1], David Pleydell[2], Philip S. Craig[3], Donald P. McManus[4], Patrick Giraudoux[2], Gail M. Williams[5], Jia Gang Guo[6], Rui Qi Liu[1]
[1]Ningxia Medical College, Yinchuan City, Ningxia Hui Autonomous Region, China, [2]Chrono-environment, Universite de Franche-Comte, UMR CNRS 6249 usc INRA, Besancon, France, [3]Biomedical Sciences Research Institute and School of Environment and Life Sciences, University of Salford, Salford, United Kingdom, [4]Molecular Parasitology Laboratory, Queensland Institute of Medical Research, Brisbane, Australia, [5]School of Population Health, University of Queensland, Brisbane, Queensland, Australia, [6]National Institute of Parasitic Diseases, Chinese Centre for Disease Control and Prevention, Shanghai, China

(ACMCIP Abstract)

11:30 a.m.

404

HUMAN HYDATIDOSIS IN SUDAN: IS IT A SPORADIC OR ENDEMIC DISEASE?

Rihab A. Omer[1], Anke Dinkel[2], Thomas Romig[2], Ute Mackenstedt[2], Mohamed Elamin[3], Ayman Elnahas[4], Imad Aradaib[5], Ibrahim Elmahdi[6]
[1]Central Veterinary Research Laboratories, Khartoum, Sudan, [2]Institut Für Zoologie, Fachgebiet Parasitologie, Stuttgart, Germany, [3]Elshab Teaching Hospital, Khartoum, Sudan, [4]Department of Surgery, Faculty of Vet. Med. University of Khartoum, Khartoum, Sudan, [5]Department of Medicine, Faculty of Veterinary Medicine, University of Khartoum, Khartoum, Sudan, [6]Institute of Nuclear Medicine, Molecular Biology and Oncology, University of Gezira, Medani, Sudan

11:45 a.m.

405

TREATMENT OF A LARGE PERITONEAL ECHINOCOCCAL CYST WITH PERCUTANEOUS DRAINAGE AND ALBENDAZOLE

Enrico Brunetti, Giuseppe Mariani, **Francesca Tamarozzi**, Antonella Grisolia, Carlo Filice
University of Pavia – San Matteo Foundation Hospital, Pavia, Italy

Symposium 71

Vaccine Development for Intracellular Bacteria: Biological Approaches for Stimulating Protective Immunity

Rhythms II/III
Tuesday, December 9, 10:15 a.m. – Noon

This symposium is designed to review and update participants regarding the history and future of vaccines for intracellular bacterial pathogens of interest to practitioners in tropical medicine and travelers' health. Speakers will consider the strengths and failings of prior and existing vaccines, and will discuss strategic approaches toward defining the immunological basis of protection as an underpinning for rational vaccine design. The main emphasis of the program is to define the conceptual framework by which protective immunity to intracellular bacteria differs from that developed against extracellular bacteria, viruses, and eukaryotic pathogens, and the demonstration of how these principles can be applied to maximize stimulation of immune response critical for protection against bacteria that occupy an intracellular niche. Four important emerging pathogens will serve as platforms for conveying principles and specific disease/vaccine-related information: Rickettsia spp., including *Rickettsia prowazekii* (louse-borne typhus) and Rickettsia rickettsii (Rocky Mountain spotted fever), *Orientia tsutsugamushi* (scrub typhus), *Coxiella burnetii* (Q fever) and *Burkholderia spp.* (melioidosis and glanders).

CHAIR

J. Stephen Dumler
The Johns Hopkins University School of Medicine, Baltimore, MD, United States

David H. Walker
University of Texas Medical Branch, Galveston, TX, United States

10:15 a.m.

RICKETTSIAL VACCINES: SUCCESSES, FAILINGS, AND THE BIOLOGICAL UNDERPINNING FOR STIMULATING PROTECTIVE IMMUNITY BY VACCINATION

David H. Walker
University of Texas Medical Branch at Galveston, Galveston, TX, United States

10:40 a.m.

SCRUB TYPHUS VACCINES: PAST HISTORY AND RECENT DEVELOPMENTS

Allen L Richards
Naval Medical Research Center, Silver Spring, MD, United States

11:05 a.m.

MECHANISMS OF VACCINE-INDUCED PROTECTIVE IMMUNITY AGAINST *COXIELLA BURNETII* INFECTION

James E. Samuel
Texas A&M Health Science Center, College Station, TX, United States

11:30 a.m.

GLANDERS AND MELIOIDOSIS: SUBUNIT VACCINES AGAINST *BURKHOLDERIA SPP.*

D. Mark Estes
University of Texas Medical Branch at Galveston, Galveston, TX, United States

Scientific Session 72

Malaria – Molecular Biology

Waterbury
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR

Amy M. McHenry
University of Notre Dame, Notre Dame, IN, United States

Jonathan Mwangi
University of Glasgow, Glasgow, United Kingdom

10:15 a.m.

406

HIGH-THROUGHPUT GENOTYPING AND POPULATION GENOMICS OF *P. FALCIPARUM* MALARIA

Sarah Volkman[1], Daniel E. Neafsey[2], Stephen F. Schaffner[2], Danny J. Park[2], Philip Montgomery[2], Nathan Houde[2], Ousmane Sarr[3], Douda Ndiaye[3], Soulyemane Mboup[3], Danny A. Milner, Jr.[1], Roger Wiegand[2], Daniel L. Hartl[4], Bruce W. Birren[2], Eric S. Lander[2], Pardis C. Sabeti[2], Dyann F. Wirth[1]
[1]Harvard School of Public Health, Boston, MA, United States, [2]Broad Institute of MIT and Harvard, Cambridge, MA, United States, [3]Cheikh Anta Diop University, Dakar, Senegal, [4]Harvard University, Cambridge, MA, United States

10:30 a.m.

407

ANALYSIS OF *PLASMODIUM FALCIPARUM* QUANTITATIVE TRAIT LOCI DETERMINING DIFFERENTIAL INFECTIVITY TO ANOPHELES MOSQUITOES

Jonathan Mwangi, Lisa Ranford-Cartwright
University of Glasgow, Glasgow, United Kingdom

10:45 a.m.

408

FIXATION OF MUTATIONS AND A SINGLE ORIGIN OF PFCRT AND PFMDR1 HAPLOTYPES IN *PLASMODIUM FALCIPARUM* FROM VENEZUELA

Sean M. Griffing[1], Luke Syphard[2], Sankar Sridaran[3], Andrea McCollum[3], Leopoldo Villegas[4], Ananias A. Escalante[5], John Barnwell[6], Venkatachalam Udhayakumar[6]
[1]Emory University, Centers for Disease Control and Prevention, Atlanta Research and Education Foundation, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Chamblee, GA, United States, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Asociación Civil Impacto Social, Tumeremo, Venezuela, [5]Arizona State University, Tempe, AZ, United States, [6]Centers for Disease Control and Prevention, Atlanta Research and Education Foundation, Atlanta, GA, United States

(ACMCIP Abstract)

11 a.m.

409

***P. VIVAX* POPULATION GENETICS IN PERU AND VIETNAM: A COMPARATIVE STUDY USING MICROSATELLITES MARKERS**

Peter Van den Eede[1], Gert Van Der Auwera[1], Annette Erhart[1], Chantal Van Overmeir[1], Jozef Anné[2], Umberto D'Alessandro[1]
[1]Institute of Tropical Medicine Antwerp, Antwerp, Belgium, [2]Catholic University of Leuven, Leuven, Belgium

(ACMCIP Abstract)

11:15 a.m.

410

SAP1 IS A SELECTIVE MASTER REGULATOR OF MALARIA PARASITE LIVER INFECTION

Ahmed S. Aly, Stefan H. Kappe
Seattle Biomedical Research Institute, Seattle, WA, United States

(ACMCIP Abstract)

11:30 a.m.

411

DETERMINATION OF THE BASIS FOR A LIMITED DIMORPHISM, N417K, IN THE *PLASMODIUM VIVAX* DUFFY-BINDING PROTEIN

Amy M. McHenry[1], John H. Adams[2]
[1]University of Notre Dame, Notre Dame, IN, United States, [2]University of South Florida, Tampa, FL, United States

(ACMCIP Abstract)

11:45 a.m.

412

CHARACTERIZATION OF *PLASMODIUM FALCIPARUM* PROTEIN KINASE 2

Kentaro Kato, Atsushi Sudo, Kyousuke Kobayashi, Yukinobu Tohya, Hiroomi Akashi
The University of Tokyo, Tokyo, Japan

Symposium 73

Metabolic and Metagenomic Profiling of Host-Parasite Interactions

Napoleon A123

Tuesday, December 9, 10:15 a.m. – Noon

Medical research strives to serve two main paradigms. On one hand, it aims to improve life quality in the modern world trying to perfect prevention and treatment of diseases coupled with developing highly specified, personalized health care. On the other hand, developing countries require rapid, inexpensive and efficient diagnostic methods for large-scale population screening. Post-genomic sciences such as transcriptomics, proteomics and metabonomics/metabolomics can yield new insights into disease diagnosis and prognosis. This symposium aims to evaluate the application of post-genomic technologies such as metabolic and metagenomic profiling to diagnosing and promoting mechanistic understanding of parasitic diseases based on easily accessible biofluids such as urine, plasma and fecal water. Spectroscopic tools such as nuclear magnetic resonance (NMR) spectroscopy and mass spectrometry (MS) can be used to metabolically characterize host-parasite interactions in animal models and humans. Each parasitic infection induces both general and specific changes in the metabolic signatures of infection, which can also uncover clues as to the mechanistic processes of the disease and may ultimately result in the identification of targets for therapeutic intervention. We will cover the technological strategies and demonstrate their multiple applications. We will also discuss the use of metagenomic approaches for defining relationships between parasites and host microflora. Unlike genomics, proteomics and transcriptomics, monitoring the metabolic state of an individual is relatively inexpensive, and its biggest advantage over the other –omics sciences is the capacity for high throughput of samples and ease of sample preparation, which uniquely suits it for screening programs in poor countries with high burdens of disease. Finally we will explore the potential of this technology for the diagnosis of multiple infections in human populations.

CHAIR

Juerg Utzinger
Swiss Tropical, Basel, Switzerland

Jennifer Keiser
Swiss Tropical Institute, Basel, Switzerland

10:15 a.m.

GLOBAL OVERVIEW OF METABOLIC PROFILING APPLICATIONS IN TROPICAL MEDICINE

Burton Singer
Princeton University, Princeton, NJ, United States

10:40 a.m.

EPIDEMIOLOGICAL STRATEGIES FOR MOLECULAR PARASITOLOGY

Juerg Utzinger
Swiss Tropical Institute, Basel, Switzerland

11:05 a.m.

MODELING SPECTROSCOPIC SIGNATURES OF INFECTION

Elaine Holmes
Imperial College, London, United Kingdom

11:30 a.m.

THE GUT MICROBIOTA: A VIRTUAL ORGAN AND ITS ROLE IN INFECTION

Julian Marchesi
Cardiff University, Cardiff, United Kingdom

Symposium 74

Innate Immunity to Protozoan Parasites

Maurepas
Tuesday, December 9, 10:15 a.m. – Noon

Much has been learned for the role of innate immunity in the control of acute infections caused by viruses and bacteria. However, it is less clear as to how protozoan parasites interact with key components in the host innate immunity system. This symposium will focus on the roles of neutrophils, dendritic cells, and NK cells in infections with protozoan parasites. This symposium will include four presentations: (1) Cell signaling mechanisms in inflammatory responses to malaria parasites; (2) *Toxoplasma gondii* and its close encounters with the innate immune system; and (3) Innate immune responses to *Leishmania* parasites. It is anticipated that participants will gain a general picture for the roles of neutrophils, dendritic cells and NK cells at early stages of infection with protozoa and gain some basic knowledge on parasites' strategies to subvert host innate immune responses.

CHAIR

Lynn Soong
The University of Texas Medical Branch, Galveston, TX, United States

10:15 p.m.

CELL SIGNALING MECHANISMS IN INFLAMMATORY RESPONSES TO MALARIA PARASITES

Channe D. Gowda
Pennsylvania State University, Hershey, PA, United States

10:50 p.m.

***TOXOPLASMA GONDII:* CLOSE ENCOUNTERS WITH CELLS OF THE INNATE IMMUNE SYSTEM**

Eric Y. Denkers
Cornell University, Ithaca, NY, United States

11:25 p.m.

INNATE IMMUNE RESPONSES TO *LEISHMANIA* PARASITES

Lynn Soong
The University of Texas Medical Branch, Galveston, TX, United States

Scientific Session 75

Bacteriology III

Bayside A
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR

Richelle C. Charles
Massachusetts General Hospital, Boston, MA, United States

Gabriel A. Trueba
Universidad San Francisco de Quito, Quito, Ecuador.

10:15 a.m.

413

HORIZONTAL GENE TRANSFER OF ANTIBIOTIC RESISTANCE GENES IN COMMENSAL *ESCHERICHIA COLI* FROM REMOTE COMMUNITIES

Gabriel A. Trueba[1], Rosana Segovia[1], William Cevallos[1], Karina Ponce[1], Dimitri Kakabadse[1], Lixin Zhang[2], Carl F. Marrs[2], Betsy Foxman[2], Joseph Eisenberg[2]
[1]Universidad San Francisco de Quito, Quito, Ecuador, [2]Department of Epidemiology, University of Michigan, Ann Arbor, MI, United States

10:30 a.m.

414

PROTEOMIC ANALYSIS OF THE PHOP REGULON IN *SALMONELLA ENTERICA* SEROVARS TYPHI AND TYPHIMURIUM

Richelle C. Charles[1], Jason B. Harris[1], Lauren M. Lebrun[1], Michael Chase[1], Alaullah Sheikh[2], Regina C. Larocque[1], Brian Krastins[3], David Saracino[3], Ian Rosenberg[3], Abdullah Tarique[2], Stephen B. Calderwood[1], Elizabeth Hohmann[1], Firduasi Qadri[2], Kenneth Parker[3], Edward T. Ryan[1]
[1]Massachusetts General Hospital, Boston, MA, United States, [2]International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh, [3]Harvard-Partners Center for Genetics and Genomics, Cambridge, MA, United States

10:45 a.m.

415

MEMORY B CELL RESPONSES IN PATIENTS WITH DEHYDRATING DIARRHEA CAUSED BY VIBRIO CHOLERAE O1

Aaron M. Harris[1], Jason B. Harris[2], Md. Saruar Bhuiyan[3], Fahima Chowdhury[3], Ashraful I. Khan[3], Abu S. Faruque[3], Regina C. LaRocque[2], Edward T. Ryan[2], Firdausi Qadri[3], Stephen B. Calderwood[2]
[1]Tufts University School of Medicine, Boston, MA, United States, [2]Massachusetts General Hospital, Boston, MA, United States, [3]International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

11 a.m.

416

PHYLOGENETIC RELATIONS BETWEEN *BARTONELLA* STRAINS IDENTIFIED IN ANIMALS AND HUMANS FROM THAILAND

Michael Y. Kosoy[1], Ying Bai[1], Kriangkrai Lerdthusnee[2], Jason H. Richardson[2], Sumalee Boonmar[3], Leonard F. Peruski[4], Saithip Sutthirattana[4], Susan A. Maloney[4]
[1]Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]Department of Entomology, Armed Forces Research Institute of Medical Science, Bangkok, Thailand, [3]Faculty of Veterinary Medicine, Kasetsart University, Bangkok, Thailand, [4]International Emerging Infections Program, Thailand MOPH – US CDC Collaboration, Nonthaburi, Thailand

11:15 a.m.

417

SEROPREVALENCE AND EPIDEMIOLOGY OF *BARTONELLA BACILLIFORMIS* INFECTION IN ECUADOR

Shari L. Lydy[1], Mauricio Lascano[2], Josselyn Garcia[3], Gregory A. Dasch[1], Mario J. Grijalva[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ohio University, Athens, OH, United States, [3]Catholic University of Ecuador, Quito, Ecuador

11:30 a.m.

418

INCIDENCE AND CASE FATALITY RATES OF *BURKHOLDERIA PSEUDOMALLEI* BACTEREMIA IN EASTERN AND NORTHEASTERN THAILAND

Saithip Sutthirattana[1], Henry C. Baggett[1], Leonard F. Peruski[1], Prabda Prapasiri[1], Somsak Thamthitiwat[1], Sathapana Naorat[1], Kittisak Tanwisaid[2], Paiwan Laowatanathaworn[3], Suchada Kongjaroon[4], Possawat Jornrakate[1], Anek Kaewpan[1], Surang Dejsirilert[5], Prasong Srisaengchai[1], Kittisak Noonsate[1], Susan Maloney[1]
[1]Thailand MOPH-US CDC Collaboration, Nonthaburi, Thailand, [2]Nakhon Phanom Provincial Hospital, Nakhon Phanom, Thailand, [3]Nakhon Phanom Provincial Health Office, Nakhon Phanom, Thailand, [4]Sa Kaeo Crown Prince Hospital, Sa Kaeo, Thailand, [5]National Institutes of Health, MOPH, Nonthaburi, Thailand

11:45 a.m.

419

PLAGUE IN THE WEST NILE REGION, UGANDA, 1999-2008

Ingrid B. Weber[1], J. Erin Staples[1], Nicholas Owor[2], Jeff N. Borchert[1], Titus Apangu[2], Nackson Babi[2], Kevin S. Griffith[1], Russell E. Enscore[1], Edward Mbidde[2], Paul S. Mead[1]
[1]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]Uganda Virus Research Institute, Entebbe, Uganda

Scientific Session 76

Clinical Tropical Medicine II

Bayside BC
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR

Arthur Mpimbaza
Uganda Malaria Surveillance Project, Kampala, Uganda

Anne Spichler
Health Municipality Secretariat of Sao Paulo, Sao Paulo, Brazil

10:15 a.m.

420

MOLECULAR DIAGNOSTICS AND SPECIATION GUIDE CHOICE OF ALTERNATIVE, SHORT-COURSE TREATMENT REGIMENS FOR CUTANEOUS LEISHMANIASIS

Roshan Ramanathan[1], Kawsar Talaat[2], Daniel Fedorko[1], Siddhartha Mahanty[1], Theodore Nash[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Johns Hopkins University, Baltimore, MD, United States

10:30 a.m.

421

THE EPIDEMIOLOGY OF *LEISHMANIA CHAGASI* INFECTION IN RIO GRANDE DO NORTE, NORTHEAST BRAZIL

Bruna L. Maciel[1], Iraci D. Lima[1], Hênio G. Lacerda[1], Paula V. Duarte[1], José W. Queiroz[1], Núbia N. Pontes[1], Sérgio R. Araújo[1], Eliana T. Nascimento[1], Glória R. Monteiro[1], Richard D. Pearson[2], Mary E. Wilson[3], Stephen E. McGowan[3], Selma M. Jerônimo[1]
[1]Universidade Federal do Rio Grande do Norte, Natal – RN, Brazil, [2]University of Virginia, Charlottesville, VA, United States, [3]University of Iowa, Wisconsin, IA, United States

10:45 a.m.

422

MILTEFOSINE FOR BOLIVIAN MUCOSAL LEISHMANIASIS: EFFICACY OF SIX WEEKS OF THERAPY

J. Soto[1], M. Balderrama[2], I. Rea[2], J. Toledo[1], **J. Berman**[3]
[1]Fundacion FADER, Bogota, Colombia, [2]Proyecto OSCAR, Palos Blancos, Bolivia, [3]ABF, North Bethesda, MD, United States

11 a.m.

423

CLINICAL CHARACTERISTICS OF THREES PATIENTS WITH ACUTE, ORALLY TRANSMITTED CHAGAS DISEASE: THE PROMINENCE OF GASTROINTESTINAL SYMPTOMS

Gisele Dias Freitas[1], Aglaer Nobrega[1], Alessandro Romano[1], Maria Pontes[2], Liliane Leite[2], Elenild Costa[3], Jeremy Sobel[4]
[1]Ministry of Health, Brasília, Brazil, [2]Municipal Department of Health, Pará, Brazil, [3]State Department of Health, Pará, Brazil, [4]Centers for Disease Control and Prevention, Atlanta, GA, United States

11:15 a.m.

424

MULTICENTER CLINICAL TRIAL OF NIFURTIMOX-EFLORNITHINE COMBINATION THERAPY FOR SECOND-STAGE SLEEPING SICKNESS

Gerardo Priotto[1], Serena Kasparian[1], Daniel Ngouama[2], Sara Ghorashian[3], Ute Arnold[3], Salah Ghabri[1], Elisabeth Baudin[1], Vincent Buard[4], Serge Kazadi-Kyanza[4], Victor Kande[5], Wilfried Mutombo[6], Medard Ilunga[6], Willy Mutangala[7], Caecilia Schmid[8], Els Torreele[9], Unni Karunakara[3]
[1]Epicentre, Paris, France, [2]Ministry of Health, Nkayi, Congo, [3]Médecins Sans Frontières, Amsterdam, Netherlands, [4]Médecins Sans Frontières, Brussels, Belgium, [5]Ministry of Health, Kinshasa, The Democratic Republic of the Congo, [6]Ministry of Health, Mbuji-Mayi, The Democratic Republic of the Congo, [7]Ministry of Health, Kataba, The Democratic Republic of the Congo, [8]Swiss Tropical Institute, Basel, Switzerland, [9]Drugs for Neglected Diseases initiative, Geneva, Switzerland

11:30 a.m.

425

SIMILARITIES AND DIFFERENCES BETWEEN PEDIATRIC AND ADULT LEPTOSPIROSIS IN SAO PAULO, BRAZIL

Anne Spichler[1], Daniel Athanazio[2], Pedro Vilaca[1], Erica Chapolla[1], Marcia Buzzar[1], Bronislawa Castro[1], Antonio Seguro[3]
[1]Health Municipality Secretariat of Sao Paulo, Sao Paulo, Brazil, [2]Federal University of Bahia, Salvador, Brazil, [3]University of Sao Paulo School of Medicine, Sao Paulo, Brazil

11:45 a.m.

426

IDENTIFICATION AND CHARACTERIZATION OF THE ETIOLOGIES OF ACUTE UNDIFFERENTIATED FEBRILE ILLNESS IN CAMBODIA IN 2007

Patrick J. Blair[1], Thomas F. Wierzba[2], Sok Touch[3], Buth Sokhal[4], Matthew R. Kasper[5], Maya Williams[5], Timothy H. Burgess[5], Shannon D. Putnam[5]
[1]Naval Health Research Center, San Diego, CA, United States, [2]NAMRU2-Phnom Penh, Phnom Penh, Cambodia, [3]Communicable Diseases Control Department, Phnom Penh, Cambodia, [4]National Institute of Public Health, Phnom Penh, Cambodia, [5]Naval Medical Research Unit #2, Jakarta, Indonesia

Symposium 77

Artemisinin Resistance Confirmation, Characterization and Containment in Southeast Asia

Grand Ballroom A

Tuesday, December 9, 10:15 a.m. – Noon

Global strategies for controlling and eliminating malaria rely heavily on artemisinin-based combination therapies (ACTs). Prolonged parasite clearance times and treatment failures have been reported following treatment with ACTs and with artemisinin monotherapy in Southeast Asia. Malariologists, malaria control officials, international agencies and donors are working together to confirm, characterize and contain the possible emergence of *Plasmodium falciparum* tolerance and/or resistance to the artemisinins. Speakers in this symposium will provide a status report of the situation including new clinical, *in vitro* and molecular data on artemisinin resistance and plans for containment.

CHAIR

Christopher V. Plowe
Howard Hughes Medical Institute and University of Maryland, Baltimore, MD, United States

Nicholas J. White
Mahidol University, Bangkok, Thailand

10:15 a.m.

CLINICAL AND *IN VITRO* EVIDENCE OF ARTEMISININ RESISTANCE IN SOUTHEAST ASIA I

Arjen Dondorp
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

10:35 a.m.

CLINICAL AND *IN VITRO* EVIDENCE OF ARTEMISININ RESISTANCE IN SOUTHEAST ASIA II

Mark M. Fukuda
Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

10:55 a.m.

POPULATION GENETICS APPROACHES TO CHARACTERIZING AND CONTAINING ARTEMISININ RESISTANCE IN SOUTHEAST ASIA

Shannon Takala
University of Maryland School of Medicine, Baltimore, MD, United States

11:15 a.m.

CONTAINING ARTEMISININ RESISTANCE IN SOUTHEAST ASIA

Shunmay Yeung
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

11:35 a.m.

SUMMARY AND DISCUSSION

NIcholas White
Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

Scientific Session 78

Filariasis II – Molecular Biology

Grand Ballroom B
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR

Sasisekhar Bennuru
National Institutes of Health, Bethesda, MD, United States

Gary J. Weil
Washington University, St. Louis, MO, United States

10:15 a.m.

427

EARLY CHANGES IN GENE EXPRESSION PROFILES IN *BRUGIA PAHANGI* L3 AFTER INFECTION IN JIRDS OR *IN VITRO* CULTURE

Ramakrishna U. Rao[1], Thomas R. Klei[2], Yuefang Huang[1], Krishna P. Shakya[2], Michael Heinz[1], Ben-Wen Li[1], Gary J. Weil[1]
[1]Washington University School of Medicine, St. Louis, MO, United States, [2]Louisiana State University, Baton Rouge, LA, United States

10:30 a.m.

428

CHANGES IN THE *AEDES AEGYPTI* TRANSCRIPTOME IN RESPONSE TO *BRUGIA MALAYI* DEVELOPMENT

Sara M. Erickson[1], Zhiyong Xi[2], Jose L. Ramirez[3], Matthew T. Aliota[1], George F. Mayhew[1], Bruce M. Christensen[1], George Dimopoulos[3]
[1]Univ of Wisconsin-Madison, Madison, WI, United States, [2]Michigan State University, East Lansing, MI, United States, *[3]Johns Hopkins School of Public Health, Baltimore, MD, United States*

10:45 a.m.

429

WOLBACHIA SEQUENCES IN THE CHROMOSOMAL GENOME OF *ONCHOCERCIA FLEXUOSA* INDICATE PAST *WOLBACHIA* ENDOSYMBIOSIS

Samantha N. McNulty, M. Mitreva, M. Heinz, J. Martin, N.W. Brattig, G.J. Weil, P.U. Fischer
Washington University School of Medicine, St. Louis, MO, United States

11 a.m.

430

GLOBOMYCIN: A NEW CLASS OF DRUG WITH EFFICACY AGAINST *WOLBACHIA* AND FILARIAL NEMATODES

Kelly L. Johnston[1], Bo Wu[2], Ana Guimarães[1], Louise Ford[1], Pauline A. Ambrose[1], Barton E. Slatko[2], Mark J. Taylor[1]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]New England Biolabs Incorporated, Ipswich, MA, United States

11:15 a.m.

431

A-WOL DRUG DISCOVERY – SCREENING OF NOVEL DERIVATIVES OF TETRACYCLINE WITH IMPROVED EFFICACY OVER DOXYCYCLINE IN AN *IN VITRO WOLBACHIA* CELL-LINE ASSAY

Louise Ford[1], Kelly L. Johnston[1], Pauline A. Ambrose[1], Michael P. Draper[2], Beena Bhatia[2], Mark J. Taylor[1]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]Paratek Pharmaceuticals, Inc., Boston, MA, United States

11:30 a.m.

432

MOLECULAR ANALYSIS OF THE EFFECT OF DIETHYLCARBAMAZINE ON *BRUGIA MALAYI* MICROFILARIAE

Tiffany S. Weinkopff[1], Seth D. Crosby[2], Mike Heinz[2], Janice Mladonicky[3], Patrick Lammie[3], Steve Williams[4]
[1]Department of Cellular Biology, University of Georgia, Athens, GA, United States, [2]Genome Sequencing Center, Department of Genetics, Washington University School of Medicine, St. Louis, MO, United States, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Clark Science Center, Department of Biological Sciences, Smith College, Northampton, MA, United States

11:45 a.m.

433

MOLECULAR CHARACTERIZATION OF RE-EMERGENT *BRUGIA MALAYI* IN SRI LANKA

Peter U. Fischer[1], Tilaka Liyanage[2], Ramakrishna U. Rao[1], Gary J. Weil[1]
[1]Washington University School of Medicine, St. Louis, MO, United States, [2]Anti-Filariasis Campaign, Ministry of Health, Colombo, Sri Lanka

Scientific Session 79

Flavivirus IV – West Nile Virus

Grand Ballroom C
Tuesday, December 9, 10:15 a.m. – Noon

CHAIR

Nicholas Komar
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Robin M. Moudy
Wadsworth Center/NYSDOH, Slingerlands, NY, United States

10:15 a.m.

804

THE STOICHIOMETRY OF ANTIBODY-MEDIATED NEUTRALIZATION OF WEST NILE VIRUS INFECTION: FACTORS THAT GOVERN ANTIBODY POTENCY

Steevenson Nelson[1], Erin Mehlhop[2], Christiane A. Jost[1], Syd Johnson[3], Daved H. Fremont[2], Michael S. Diamond[2], Theodore C. Pierson[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Washington University School of Medicine, St. Louis, MO, United States, [3]Macrogenics Inc., Rockville, MD, United States

10:30 a.m.

805

MOLECULAR BASIS FOR THE RESISTANCE OF WEST NILE VIRUS TO ANTIVIRAL ACTIVITY OF OAS1B

Eva Mertens[1], Isabelle Iteman[2], Marie-Pascale Frenkiel[1], Dominique Simon-Chazottes[3], Anna Kajaste-Rudnitski[1], Philippe Desprès[1]
[1]Institut Pasteur, Flavivirus Host Molecular Interactions, Paris, France, [2]Institut Pasteur, Public Health Platform, Paris, France, [3]Institut Pasteur, Functional Murine Genetics, Paris, France

10:45 a.m.

806

***WEST NILE VIRUS*-VECTOR INTERACTIONS ARE AFFECTED BY GLYCOSYLATION OF THE VIRAL ENVELOPE PROTEIN**

Robin M. Moudy, Mark A. Meola, Bo Zhang, Pei-Yong Shi, Laura D. Kramer
Wadsworth Center/NYSDOH, Albany, NY, United States

11 a.m.

807

REPLIVAX WN, A SINGLE-CYCLE FLAVIVIRUS VACCINE, IS SAFE AND EFFICACIOUS IN A RHESUS MACAQUE MODEL OF WEST NILE DISEASE

Douglas G. Widman[1], Tomohiro Ishikawa[1], Ricardo Carrion[2], Nigel Bourne[1], Peter W. Mason[1]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]Southwest Foundation for Biomedical Research, San Antonio, TX, United States

11:15 a.m.

808

ECOLOGY OF WEST NILE VIRUS IN GUATEMALA

Nicholas Komar[1], Maria Eugenia Morales-Betoulle[2], Nicholas Panella[1], Danilo Alvarez[2], Celia Cordon-Rosales[2]
[1]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]Centers for Disease Control and Prevention, Guatemala City, Guatemala

11:30 a.m.

809

DETECTION OF RNA FROM A NOVEL WEST NILE-LIKE VIRUS AND HIGH PREVALENCE OF AN INSECT-SPECIFIC FLAVIVIRUS IN MOSQUITOES IN THE YUCATAN PENINSULA OF MEXICO

Bradley J. Blitvich[1], Maria A. Loroño-Pino[2], Julian E. Garcia-Rejon[2], Einat Hovav[1], Ann M. Powers[3], Ming Lin[1], Karin S. Dorman[1], Kenneth B. Platt[1], Lyric C. Bartholomay[1], Jose A. Farfan-Ale[2]
[1]Iowa State University, Ames, IA, United States, [2]The Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico, [3]Centers for Disease Control and Prevention, Fort Collins, CO, United States

11:45 a.m.

810

TEMPORAL AND SPATIAL RELATIONSHIP BETWEEN FLANDERS VIRUS AND WEST NILE VIRUS IN THE SOUTHEASTERN UNITED STATES

Abelardo C. Moncayo[1], Rosmarie Kelly[2], Dora B. Huddleston[1], Sudeshna Mukherjee[1], William Reimels[1], Junjun Huang[1], Tim F. Jones[1], Daniel G. Mead[3]
[1]Tennessee Department of Health, Nashville, TN, United States, [2]Georgia Department of Human Resources, Division of Public Health, Atlanta, GA, United States, [3]University of Georgia, Southeastern Cooperative Wildlife Disease Study, Athens, GA, United States

Symposium 80

Global Health Programs in University Settings: What's Out There?

Grand Ballroom D

Tuesday, December 9, 10:15 a.m. – Noon

With over 100 programs in the U.S. now developing multidisciplinary global health programs within medical schools, as well as in residency training programs, this symposium will bring together a panel of directors of different models to describe programmatic content of such programs, as well as methods of sustainability.

CHAIR

Michele Barry
Yale University School of Medicine, New Haven, CT, United States

10:15 a.m.

GLOBAL HEALTH PROGRAMS AT U.S. UNIVERSITIES: THE JOHNS HOPKINS MODEL

Thomas C. Quinn
Johns Hopkins University, Baltimore, MD, United States

10:35 a.m.

GLOBAL HEALTH PROGRAM AT UNIVERSITY OF VIRGINIA/ HISTORY: BARRIERS AND SUSTAINABILITY

Richard Guerrant
University of Virginia, Charlottesville, VA, United States

10:55 a.m.

GLOBAL HEALTH PROGRAM AT DUKE/HISTORY: BARRIERS AND SUSTAINABILITY

Michael Merson
Duke University, Durham, NC, United States

11:15 a.m.

GLOBAL HEALTH PROGRAM AT MT. SINAI/HISTORY: BARRIERS AND SUSTAINABILITY

Jonathan Ripp
Mt. Sinai School of Medicine, New York, NY, United States

11:30 a.m.

SUMMARY OF UNIVERSITY CONSORTIUM FOR GLOBAL HEALTH MEETING

Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

11:50 a.m.

QUESTIONS AND ANSWERS

Symposium 81

Update on Control of Neglected Tropical Diseases in Sub-Saharan Africa

Grand Ballroom E

Tuesday, December 9, 10:15 a.m. – Noon

The Neglected Tropical Diseases affect some 500 million people in Africa, but thanks to donations of drugs from the pharmaceutical industry, many million are receiving treatment. In East and West Africa, with funding from a number of donors, several countries have now embarked on an integrated implementation program to deliver the donated drugs. In this symposium, speakers will report on the coverage achieved in their regions, while an analysis will be presented of the countries still in need of assistance to implement control. Challenges met so far and suggested solutions will be discussed.

CHAIR

Alan Fenwick
Imperial College London, London, United Kingdom

Peter J. Hotez
The George Washington University, Washington, United States

10:15 a.m.

INTRODUCTION

Alan Fenwick
Imperial College, London, United Kingdom

10:25 a.m.

CURRENT STATUS OF NEGLECTED TROPICAL DISEASE CONTROL IN EAST AFRICA

Narcis Kabatereine
Vector Control Division, Kampala, Uganda

10:50 a.m.

CURRENT STATUS OF NEGLECTED TROPICAL DISEASE IN W. AFRICA

Amadou Garba
RISEAL, Niamey, Niger

11:15 a.m.

CURRENT STATUS OF NEGLECTED TROPICAL DISEASE CONTROL IN RWANDA AND BURUNDI

Marie-Alice Deville
Schistosomiasis Control Initiative, London, United Kingdom

11:40 a.m.

AN ESTIMATE OF THE UNMET NEEDS OF COUNTRIES IN AFRICA IN ORDER TO CONTROL NEGLECTED TROPICAL DISEASES

Yaobi Zhang
Schistosomiasis Control Initiative, London, United Kingdom

Exhibit Hall Open/Light Lunch

Napoleon Ballroom
Tuesday, December 9, Noon – 1:30 p.m.

Poster Session 82/Light Lunch

Poster Session B (#434-724 and Late Breakers)

Armstrong Ballroom
Tuesday, December 9, Noon – 1:30 p.m.

Cestodes – Echinococcosis/Hytatid Disease

434

CRITICAL APPRAISAL OF NITAZOXANIDE FOR THE TREATMENT OF ALVEOLAR ECHINOCOCCOSIS

Peter Kern[1], Philippe Abboud[2], Winfried V. Kern[3], August Stich[4], Solange Bresson-Hadni[5], Bruno Guerin[6], Klaus Buttenschoen[1], Beate Gruener[1], Stefan Reuter[7], Andrew Hemphill[8]
[1]University of Ulm, Ulm, Germany, [2]University of Rouen, Rouen, France, [3]University of Freiburg, Freiburg, Germany, [4]Medical Mission Hospital, Würzburg, Germany, [5]University of Besancon, Besancon, France, [6]Centre Hospitalier, Rodez, France, [7]University of Düsseldorf, Düsseldorf, Germany, [8]University of Berne, Berne, Switzerland

435

PRIMARY CEREBRAL HYDATID CYST: REPORT OF A CASE AND REVIEW OF THE LITERATURE

Mehmet Tanyuksel, Zeynep Guclu Kilbas, Engin Araz, Yusuf Izci, Engin Gonul
GMMA, Ankara, Turkey

436

UPDATE ON HUMAN POLYCYSTIC ECHINOCOCCOSIS IN NORTH OF BRAZIL

Nilton G. Siqueira[1], Fernanda B. Almeida[2], Adriana P. Sudré[3], **Jose M. Peralta**[4], Jose R. Machado-Silva[5], Rosangela Rodrigues-Silva[6]
[1]Universidade Federal do Acre, Rio Branco, Acre, Brazil, [2]Instituto Oswaldo Cruz – Fiocruz, Rio de Janeiro, Brazil, [3]Universidade Federal Fluminense, Niteroi, Brazil, [4]Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, [5]Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil, [6]Instituto Owaldo Cruz – Fiocruz, Rio de Janeiro, Brazil

437

EVALUATION OF *TAENIA SOLIUM* CALRETICULIN AS AN ORAL VACCINE IN EXPERIMENTAL TAPEWORM INFECTION

Sonia Leon-Cabrera, Fela Mendlovic, Mayra Cruz-Rivera, Guillermina Avila-Ramirez, Salvador Fonseca-Coronado, **Ana Flisser**
Universidad Nacional Autonoma de Mexico, Faculty of Medicine, Mexico City, Mexico

(ACMCIP Abstract)

438

A COMPREHENSIVE APPROACH TO UNDERSTANDING *TAENIA SOLIUM* CYSTICERCOSIS IN EASTERN AND SOUTHERN AFRICA: THE CESA PROJECT

A. Lee Willingham[1], Maria Vang Johansen[2], Faustin Lekule[3], Helena A. Ngowi[3], Luis Neves[4], Emilia Noormahomed[4], Sonia Afonso[4], Isaac Nyamongo[5], C. Owuor Olungah[5], J. E. Mlangwa[3], M. R. Mlozi[3], S. Kimera[3], G. Ashimogo[3], P. Mwakilembe[6], Y. Assane[4], A. Pondja[4], E. Kimbi[3], E. Komba[3], C. Gule[4], R. Elisante[5], C. Cuinhane[5], W. Matuja[7], Pascal Magnussen[2], Stig M. Thamsborg[1]
[1]WHO/FAO Collaborating Center for Parasitic Zoonoses, University of Copenhagen, Frederiksberg C, Denmark, [2]DBL-Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen, Frederiksberg C, Denmark, [3]Sokoine University of Agriculture, Morogoro, United Republic of Tanzania, [4]Eduardo Mondlane University, Maputo, Mozambique, [5]Institute of African Studies, University of Nairobi, Nairobi, Kenya, [6]Uyole Livestock Research Institute, Mbeya, United Republic of Tanzania, [7]Muhimbili University of Health and Allied Sciences, Dar es Salaam, United Republic of Tanzania

439

CYSTICERCOSIS AND TAENIASIS IN PAPUA, INDONESIA

Lidwina Salim, Agnes Ang, Sukwan Handali, Cysticercosis Working Group in Papua, Victor C.W. Tsang
Centers for Disease Control and Prevention, Chamblee, GA, United States

440

ASSAY DEVELOPMENT AND OPTIMIZATION FOR CYSTICERCOSIS USING RECOMBINANT AND SYNTHETIC DIAGNOSTIC PROTEINS

John Noh[1], Isabel McAuliffe[1], Yeuk-Mui Lee[1], Sukwan Handali[2], Maria Silva-Ibanez[3], Kathy Hancock[1], Hector H. Garcia[4], Armando E. Gonzalez[4], Robert H. Gilman[4], Patricia Wilkins[1], Victor C.W. Tsang[3]
[1]Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA USA, [2]Atlanta Research and Education Foundation, Atlanta GA USA, [3]Georgia State University, Department of Biology, Atlanta GA USA, [4]Cysticercosis Working Group in Lima, Peru

Clinical Tropical Medicine

441

POLICY IMPLICATIONS OF THE RESULTS FROM THE RANDOMIZED DOUBLE BLIND PLACEBO CONTROLLED TRIAL OF SP, LAPDAP OR MEFLOQUINE FOR PREVENTION OF MALARIA IN INFANTS STUDY IN NORTH-EASTERN TANZANIA

Roly D. Gosling[1], Samwel Gesase[2], Ilona Carneiro[1], Brian M. Greenwood[1], Daniel Chandramohan[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]National Institute of Medical Research, Tanga, United Republic of Tanzania

442

FIRST AUTOCHTHONES OF *LEISHMANIA TROPICA* IN A REMOTE BORDER AREA OF NORTH-SINAI, EGYPT

Magdi Gebril Shehata[1], Abdallah Mohammed Samy[1], Said Abdallah Doha[2], Adel Ramzy Fahmy[1], Rania M. Kaldas[3], Jeffrey T. Villinski[3]
[1]Faculty of Science, Ain Shams University, Cairo, Egypt, [2]Research and Training Center on Vector of Diseases, Ain Shams University, Cairo, Egypt, [3]U.S. Navy Medical Research Unit No. 3, Cairo, Egypt

443

NEAR-FATAL ANAPHYLACTIC SHOCK FROM PERCUTANEOUS ASPIRATION OF AN ECHINOCOCCAL CYSTS IN A PATIENT WHO UNDERWENT FOUR PREVIOUS UNEVENTFUL INTERVENTIONS FOR ABDOMINAL ECHINOCOCCOSIS

Enrico Brunetti[1], Giuseppe Mariani[1], **Francesca Tamarozzi**[1], Carlo Filice[1], Giuseppe Sala Gallini[2]
[1]University of Pavia- S.Matteo Hospital Foundation, Pavia, Italy, [2]S.Matteo Hospital Foundation, Pavia, Italy

445

CLINICAL SPECTRUM OF PATIENTS PRESENTING WITH TROPICAL PARASITIC LUNG DISEASES IN NEPAL

Narendra Bhatta, Subodh Sagar Dhakal, Suman Rizal, Basudha Khanal, Avdesh Tiwari
B.P. Koirala Institute of Health Sciences, Dharan, Nepal

446

INTERRELATIONSHIP BETWEEN THROMBOCYTOPENIA, ACUTE RENAL FAILURE AND PULMONARY INVOLVEMENT IN SEVERE LEPTOSPIROSIS

Anne Spichler[1], Daniel A. Athanazio[2], Pedro Villaça[3], Marcia Buzzar[3], Bronislawa Castro[3], Erica Chapolla[3], Antonio Seguro[1]
[1]University of São Paulo, São Paulo, Brazil, [2]Federal University of Bahia, Salvador, Brazil, [3]Health Municipality Secretariat of São Paulo, São Paulo, Brazil

447

FACTORS RELATED WITH POOR OUTCOMES IN CHILDREN HOSPITALIZED WITH SEVERE MALARIA IN PEDIATRIC INTENSIVE CARE UNIT (PICU) IN NEPAL

Nisha Keshary Bhatta, Prakash poudel, Balakrishna Kalakheti, Rupa Singh, Basudha Khanal,
B.P.Koirala Institute of Health Sciences, Dharan, Nepal

448

NOVEL EXO-ANTIGEN BASED ELISAS FOR DIAGNOSIS OF VISCERAL AND CUTANEOUS LEISHMANIA INFECTIONS

G-Halli R. Rajasekariah, Diane Dogcio, Anthony M. Smithyman
Cellabs Pty Ltd Brookvale, Australia

449

PHARMACOKINETICS AND BIOEQUIVALENCE EVALUATION OF TWO FIXED TABLET FORMULATIONS OF DIHYDROARTEMISININ AND PIPERAQUINE IN VIETNAMESE SUBJECTS

Nguyen T. Chinh[1], Nguyen N. Quang[1], Nguyen X. Thanh[2], Bui Dai[2], Thomas Travers[3], **Michael D. Edstein**[3]
[1]Central Military Hospital 108, Hanoi, Vietnam, [2]Military Institute of Hygiene and Epidemiology, Hanoi, Vietnam, [3]Australian Army Malaria Institute, Brisbane, Australia

450

EVALUATION OF ARTEMISONE COMBINATIONS IN MALARIA-INFECTED AOTUS MONKEYS

Nicanor Obaldia III[1], Barbara M. Kotecka[2], Richard K. Haynes[3], Burkhard Fugmann[4], Michael D. Edstein[2], Dennis E. Kyle[5], Karl H. Rieckmann[2]
[1]Gorgas Memorial Institute, Panama, Panama, [2]Australian Army Malaria Institute, Brisbane, Australia, [3]The Hong Kong University of Science and Technology, Kowloon, Hong Kong, [4]Bayer Innovation, Düsseldorf, Germany, [5]University of South Florida, Tampa, FL, United States

451

MALARIA AMONG ASYMPTOMATIC SCHOOL CHILDREN IN EZINATIONAL INSTITUTES OF HEALTHITTE LOCAL GOVERNMENT AREA OF IMO STATE, NIGERIA

Ikechukwu N. Dozie[1], Uchechukwu M. Chukwuocha[2], Celestine O. Onwuliri[2], Betram E. Nwoke[3]
[1]Imo State University, Owerri, Imo State, Nigeria, [2]Federal University of Technology, Owerri, Imo State, Nigeria, [3]Imo State university, Owerri, Imo State, Nigeria

452

PATIENTS WHO HAVE RECOVERED FROM LEPTOSPIROSIS WITH NO DEMONSTRABLE *IN VITRO* MEMORY T-CELL RESPONSES TO *LEPTOSPIRA* OR LEPTOSPIRAL PROTEIN ANTIGENS

Iskra Tuero[1], Joseph Vinetz[2], Gary Klimpel[3]
[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]University of California, San Diego, CA, United States, [3]University of Texas Medical Branch, Galveston, TX, United States

453

ETHNOMEDICAL SURVEY OF ANTIMALARIAL HERBS AND ANTIMALARIAL ACTIVITY OF *MOMORDICA CHARANTIA* LINN

Mojisola C. Olutayo[1], Olufunke C. Adeloye[1], Taiwo T. Elufioye[2]
[1]Department of Plant Science and biotechnology, Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria, [2]Department of Pharmacognosy, Faculty of Pharmacy, Obafemi Awolowo University Ile Ife, Nigeria

454

EXTRALESIONAL PRESENCE OF *LEISHMANIA VIANNIA* IN ACTIVE AMERICAN CUTANEOUS LEISHMANIASIS

Roger Figueroa, María Teresa Cardona, Leyder Elena Lozano, Ibeth Romero, **Martin Prager**, María Consuelo Miranda, Nancy Saravia
CIDEIM, Centro Internacional de Entrenamiento e Investigaciones Medicas, Cali, Colombia

455

A SURVEY OF THE CARE SEEKING BEHAVIOUR OF MOTHERS OF SICK INFANTS IN AJEROMI/IFELODUN LOCAL GOVERNMENT AREA OF LAGOS STATE, NIGERIA

Nneoma Idika[1], Chimere C. Agomo[1], Christiana Nnenne Okoroma[2], Adeniyi K. Adeneye[1], Emmanuel O. Idigbe[1]
[1]Nigerian Institute of Medical Research, Lagos, Nigeria, [2]Lagos University Teaching Hospital, Lagos, Nigeria

456

USEFULNESS OF TELEDIAGNOSIS IN THE IDENTIFICATION OF TISSUE PARASITES: AN EVALUATION BASED ON TWO YEARS (FROM 2006 TO 2008) OF TELEDIAGNOSIS SUBMISSIONS TO THE CDC DPDX PROJECT

Blaine A. Mathison[1], Alexandre J. da Silva[2], Stephanie P. Johnston[2], Henry S. Bishop[2], Earl Long[2], Mark Eberhard[2]
[1]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED and Atlanta Research and Education Foundation, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States

457

POPULATION PHARMACOKINETICS OF ARTESUNATE AND DIHYDROARTEMISININ IN HEALTHY VOLUNTEERS

B. Tan[1], L. Fleckenstein[1], KS Yu[2], IJ Jang[2]
[1]College of Pharmacy, The University of Iowa, Iowa City, IA, United States, [2]Department of Pharmacology and Clinical Pharmacology, Seoul National University College of Medicine and Hospital, Seoul, Republic of Korea

458

THE USE OF ANTI-MSP1 ELISA TO IDENTIFY NON-IMMUNE INDIVIDUALS FOR INCLUSION IN MALARIA PROPHYLAXIS TRIALS

Gregory Deye[1], Shon Remich[2], Stephen Ntoburi[3], Earnest Cook[4], Duncan Apollo[4], Brent House[1], Colin Ohrt[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Walter Reed Army Medical Center, Silver Spring, DC, United States, [3]Kenya Medical Research Institute/Wellcome Trust Research Programme, Nairobi, Kenya, [4]Malaria Diagnostics Centre of Excellence, Centre for Clinical Research, Kenya Medical Research Institute, Kisumu, Kenya

459

ACCELERATED LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) OF *ENTEROCYTOZOON BIENEUSI* AND *ENCEPHALITOZOON INTESTINALIS* (PHYLUM MICROSPORIDIA)

Lisa C. Bowers, Terri A. Rasmussen, Trevor Thompson, Yuliya Y. Sokolova, **Elizabeth S. Didier**
Tulane National Primate Research Center, Covington, LA, United States

460

CLINICAL PRESENTATIONS OF *STRONGYLOIDES*

DeVon C. Hale, Theresa Sofarelli
University of Utah, Salt Lake City, UT, United States

461

TRAVEL HEALTH ADVICE-SEEKING BEHAVIOR OF US TRAVELERS TO YELLOW FEVER- AND JAPANESE ENCEPHALITIS-ENDEMIC COUNTRIES: FINDINGS FROM THE 2007 HEALTHSTYLES SURVEY

Pauline Han[1], Emad Yanni[2], Xiaohong Davis[2], William Pollard[2], Nina Marano[2]
[1]Centers for Disease Control and Prevention/Oak Ridge Institute for Science and Education, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

462

AN OPEN LABEL, RANDOMISED TRIAL OF ARTESUNATE + AMODIAQUINE, ARTESUNATE + CHLORPROGUANIL-DAPSONE AND ARTEMETHER-LUMEFANTRINE FOR THE TREATMENT OF UNCOMPLICATED MALARIA

Kwaku P. Asante[1], Seth Owusu-Agyei[1], Ruth Owusu[1], Martin Adjuik[2], Stephen Amenga-Etego[1], David Dosoo[1], John Gyapong[3], Brian Greenwood[4], Daniel Chandramohan[4]
[1]Kintampo Health Research Centre, Brong Ahafo Region, Ghana, [2]Navrongo Health Research Centre, Ministry of Health, Ghana, [3]Health Research Unit, Ghana Health Service, Ghana, [4]London School of Hygiene and Tropical Medicine, London, United Kingdom

463

FACILITATING PROGRAMMING OF QUESTIONNAIRES FOR PERSONAL DIGITAL ASSISTANTS BY NON-PROGRAMMERS

Fredy Muñoz[1], Kim A. Lindblade[2], Wences Arvelo[1], Gerard Lopez[1]
[1]Centers for Disease Control and Prevention-UVG Collaboration, Guatemala, Guatemala, [2]Centers for Disease Control and Prevention, Guatemala, Guatemala

464

TESTING VALIDITY OF REPORTED DRUG COVERAGE RATES OF THE NEGLECTED TROPICAL DISEASE CONTROL PROGRAM IN FOUR COUNTRIES

Margaret C. Baker[1], Lily Trofimovich[1], Dieudonne Sankara[1], Mary Linehan[1], Simon Brooker[2], Elisa Bosque-Oliva[3], Amadou Garba[4], Seydou Toure[5], Nana Biritwum[6], Ambrose Onapa[7], Harriet Namwanje[8]
[1]RTI International, Washington, DC, United States, [2]London School of Tropical Medicine and Hygiene, London, United Kingdom, [3]Schistosomiasis Control Initiative, London, United Kingdom, [4]Schistosomiasis Control Initiative, Niamey, Niger, [5]Schistosomiasis Control Initiative, Ouagadougou, Burkina Faso, [6]Ghana Health Services, Accra, United Kingdom, [7]RTI International, Kampala, Uganda, [8]Schistosomiasis Control Initiative, Kampala, Uganda

465

AMERICAN VISCERAL LEISHMANIASIS: FEATURES EPIDEMIOLOGIC, CLINIC AND THERAPEUTIC RESPONSE: TRUJILLO STATE, VENEZUELA

Laura C. Vasquez-Ricciardi[1], Libia R. Vasquez P[1], Gilberto Bastidas[1], Efrain Miliani[1], Yolanda Mendez[1], Miladros Oviedo[2]
[1]Universidad de Los Andes, Valera, Venezuela, [2]Universidad de Los Andes, Trujillo, Venezuela

466

IGG AS A RISK FACTOR FOR NON-HEALING DERMAL LEISHMANIASIS CAUSED BY *LEISHMANIA (VIANNIA) PANAMENSIS*

Olga L. Fernández
Centro Internacional de Entrenamiento e Investigaciones Médicas, Cali, Colombia

(ACMCIP Abstract)

467

EFFICACY OF DIHYDROARTEMISININ-PIPERAQUINE *VS*. ARTESUNATE-AMODIAQUINE FOR THE TREATMENT OF UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN CENTRAL VIETNAM

Nguyen X. Thanh[1], Trieu N. Trung[2], Nguyen C. Phong[1], Nguyen X. Thien[2], Bui Dai[1], Dennis Shanks[3], Marina Chavchich[3], **Michael D. Edstein**[3]
[1]Military Institute of Hygiene and Epidemiology, Hanoi, Vietnam, [2]Institute of Malariology, Parasitology and Entomology, Qui Nhon, Vietnam, [3]Australian Army Malaria Institute, Brisbane, Australia

468

OPPORTUNISTIC COINFECTIONS ASSOCIATED TO ACUTE CARRION'S DISEASE IN A REFERENCIAL NATIONAL HOSPITAL IN LIMA, PERU

Eduardo Sanchez, Miriam Callacna, Andres Kobashigawa, Luis Diaz, Gladys Patino, Arturo Tokechi
National Hospital Hipolito Unanue, Lima, Peru

469

THE DOMESTIC DOG IS A POTENTIAL RESERVOIR OF CUTANEOUS LEISHMANIASIS IN COLOMBIA

Julian Santaella-T[1], Ruppert J. Quinnell[2], Fabian Mendez[3], Clara B. Ocampo-D[1], Leonard Munstermann[4]
[1]CIDEIM, Cali, Valle, Colombia, [2]Leeds University, Leeds, United Kingdom, [3]Universidad del Valle, Cali, Valle, Colombia, [4]Yale University, New Haven, CT, United States

470

EFFECTS OF APPLYING NEW MALARIA TREATMENT POLICIES IN A RURAL DISTRICT OF CASAMANCE, SOUTHERN SENEGAL

Philippe M. Brasseur[1], Patrice Agnamey[2], Oumar Gaye[3], Moustapha Cisse[4], Malick Badiane[4], Michel Vaillant[5], Walter R. Taylor[6], Piero L. Olliaro[7]
[1]Institut de Recherche pour le Développement, Dakar, Senegal, [2]Centre Hospitalier Universitaire, Amiens, France, [3]Université Cheikh Anta Diop, Dakar, Senegal, [4]Centre de Santé, Oussouye, Senegal, [5]Centre de Recherche Public de la Santé, Luxembourg, Luxembourg, [6]OUCRU, Hanoi, Vietnam, [7]WHO/TDR, Geneva, Switzerland

471

DOSING ACCURACY OF ARTESUNATE AND AMODIAQUINE AS TREATMENT FOR *FALCIPARUM* MALARIA IN CASAMANCE, SENEGAL

Philippe M. Brasseur[1], Patrice Agnamey[2], Oumar Gaye[3], Moustapha Cisse[4], Malick Badiane[4], Michel Vaillant[5], Walter R. Taylor[6], Piero L. Olliaro[7]
[1]Institut de Recherche pour le Développement, Dakar, Senegal, [2]Centre Hospitalier Universitaire, Amiens, France, [3]Université Cheikh Anta Diop, Dakar, Senegal, [4]Centre de Santé, Oussouye, Senegal, [5]Centre de Recherche Public de la Santé, Luxembourg, Luxembourg, [6]OUCRU, Hanoi, Vietnam, [7]WHO/TDR, Geneva, Switzerland

472

DEVELOPMENT AND IMPLEMENTATION OF A LIFE CYCLE-DEPENDENT, PHENOTYPIC HIGH THROUGHPUT *LEISHMANIA MAJOR* PROMASTIGOTE DRUG SUSCEPTIBILITY ASSAYS

Elizabeth R. Sharlow[1], Heather Grieser[2], Archibong Yellow-Duke[2], Stephanie Leimgruber[2], David Close[2], Rebecca Barrett[2], Jacob Johnson[3], Michael O'Neil[3], Alan Magill[3], John S. Lazo[1]
[1]University of Pittsburgh, Drug Discovery Institute, Department of Pharmacology and Chemical Biology, Pittsburgh, PA, United States, [2]University of Pittsburgh, Drug Discovery Institute, Pittsburgh, PA, United States, [3]Walter Reed Army Institute of Research, Silver Spring, MD, United States

473

MALARIA CLINICAL TRIALS CAPACITY DEVELOPMENT IN AFRICA: CHALLENGES AND EXPERIENCES FROM THE KINTAMPO HEALTH RESEARCH CENTRE, GHANA

Kwaku Poku Asante, Ruth Owusu, Kingsley Osei-Kwakye, Boahen Owusu, Livesy Abokyi, George Adjei, David Dosoo, Seth Owusu-Agyei
Kintampo Health Research Centre, Brong Ahafo Region, Ghana

474

WHEN MULTIPLE REGRESSION IS JUST NOT ENOUGH

Eric B. Faragher[1], Job C. Calis[2], Kamija S. Phiri[3], Michael Boele van Hensbroek[2]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]Emma Children's Hospital, Academic Medical Center, Amsterdam, Netherlands, [3]Malawi-Liverpool-Wellcome Trust Clinical Programme, College of Medicine, Blantyre, Malawi

475

MALARIA DECISION SUPPORT SYSTEMS – LESSONS LEARNED

Michael Coleman[1], Natashia Morris[1], Immo Kleinschimidt[2], Raj Maharaj[1], Janet Hemingway[3]
[1]MRC, Durban, Durban, South Africa, [2]London School of Hygine and Tropical Medicine, London, United Kingdom, [3]Liverpool School of Tropical Medicine, Liverpool, United Kingdom

476

AN ASSESSMENT OF BLOOD VOLUMES IN RELATION TO SYMPTOM RESOLUTION IN SEVERELY ANEMIC MALAWIAN CHILDREN

Michael O. Esan
Malawi Liverpool Wellcome Trust Research Programme, Blantyre, Malawi

Ectoparasite-Borne Disease

477

IMPLICATIONS OF A CHANGE IN THE CASE DEFINITION OF LYME DISEASE SURVEILLANCE – MAINE, 2007

Jon Eric Tongren[1], Leif Deyrup[2], Anthony Yartel[2], Geoff Beckett[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Maine Centers for Disease Control and Prevention, Augusta, ME, United States

478

IDENTIFICATION OF *RICKETTSIA* FROM TICK SPECIES COLLECTED IN TENNESSEE

Sara B. Cohen[1], Michael J. Yabsley[2], J. D. Freye[3], Brett G. Dunlap[3], John R. Dunn[1], Daniel G. Mead[2], Timothy F. Jones[1], Abelardo C. Moncayo[1]
[1]Tennessee Department of Health, Nashville, TN, United States, [2]Southeastern Cooperative Wildlife Disease Study, University of Georgia, Athens, GA, United States, [3]United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services Program, Nashville, TN, United States

479

UTILIZATION OF QPCR FOR RAPID CHARACTERIZATION AND AUTHENTICATION OF LARGE AND DIVERSE *RICKETTSIA* COLLECTIONS

Briana Benton, Denise Merrill, Robert O. Baker, Sujatha Radhakrishnan, Kurt J. Langenbach
American Type Culture Collection/Biodefense and Emerging Infections Research Resources Repository, Manassas, VA, United States

480

DETECTION OF SPOTTED FEVER GROUP *RICKETTSIA* IN IXODID TICKS COLLECTED IN LOS ANGELES COUNTY, CALIFORNIA

Michele M. Sturgeon[1], Emily Beeler[2], Laura Krueger[3], Renjie Hu[4], Gail Vangordon[5], Michael Rood[5], Robyn Spano[5], Sergio Bermudez[1], Gregory A. Dasch[1], Marina E. Eremeeva[1]
[1]Center for Disease Control, Atlanta, GA, United States, [2]Veterinary Public Health and Rabies Control Program, Los Angeles Department of Public Health, Downey, CA, United States, [3]Orange County Vector Control District, Garden Grove, CA, United States, [4]Vector-Borne Disease Section, California Department of Public Health, Ontario, CA, United States, [5]Los Angeles County Department of Public Health, Environmental Health, Vector Management Program, Baldwin Park, CA, United States

Flaviviridae – Dengue

481

CYTOKINE-RELATED GENE EXPRESSION IN THE PERIPHERAL BLOOD AND DENGUE INFECTION SEVERITY

Woraman Waidab, Kanya Suphapeetiporn, Usa Thisyakorn
King Chulalongkorn Memorial Hospital, Bangkok, Thailand

(ACMCIP Abstract)

482

CLIMATIC FACTORS, ENTOMOLOGIC ATTRIBUTES AND EPIDEMICS OF DENGUE IN TAIWAN, 1998 – 2006

Chuin-Shee Shang[1], Chi-Tai Fang[1], Chung-Ming Liu[2], Fu-Chang Hu[3], Chwan-Chuen King[1]
[1]Institute of Epidemiology, National Taiwan University, Taipei City, Taiwan, [2]Global Change Researching Center, National Taiwan University, Taipei City, Taiwan, [3]National Center of Excellence for General Clinical Trial & Research, NTU Hospital, Taipei City, Taiwan

483

DETECTION AND IDENTIFICATION OF BIOMARKERS FOR DENGUE FEVER (DF) AND DENGUE HEMORRHAGIC FEVER (DHF) USING PLASMA SAMPLES FROM THAI CHILDREN AND SELDI-TOF-MS TECHNOLOGY

Alexa Gilbert[1], Takol Chareonsirisuthigul[2], Maike Milkreit[1], Sukathida Ubol[2], Brian J. Ward[1], Momar Ndao[1]
[1]McGill University, Montreal, QC, Canada, [2]Mahidol University, Bangkok, Thailand

484

CLASSIFICATION AND REGRESSION TREE (CART) ANALYSIS USING CLINICAL LABORATORY VARIABLES KNOWN TO BE ASSOCIATED WITH DENGUE TO ESTABLISH EARLY DISEASE CLASSIFICATION

James A. Potts[1], Siripen Kalayanarooj[2], Suchitra Nimmannitya[2], Anon Srikiatkhachorn[1], Ananda Nisalak[3], David W. Vaughn[4], Timothy P. Endy[5], Daniel H. Libraty[1], Sharone Green[1], Alan L. Rothman[1]
[1]University of Massachusetts Medical School, Worcester, MA, United States, [2]Queen Sirikit National Institute of Child Health, Bangkok, Thailand, [3]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [4]US Army Medical Research and Material Command, Fort Detrick, MD, United States, [5]University of New York, Upstate Medical University, Syracuse, NY, United States

485

PRIMARY AND SECONDARY INFECTIONS TO DENGUE VIRUS IN PERU – 2007

Maria García, Victoria Gutiérrez, Enrique Mamani, Victor Fiestas, Cesar Cabezas
Instituto Nacional de Salud, Lima, Peru

486

NOVEL SUBUNIT VACCINES FOR PREVENTION OF DISEASES CAUSED BY DENGUE AND OTHER FLAVIVIRAL PATHOGENS

Olivia Block, W.W. Shanaka Rodrigo, Jacob Schlesinger, Xia Jin, Robert Rose
University of Rochester, Rochester, NY, United States

487

IMMUNOGENICITY OF A PSORALEN-INACTIVATED DENGUE-1 VIRUS VACCINE CANDIDATE IN MICE

Ryan C. Maves, Roger M. Castillo, Tadeusz Kochel
U.S. Naval Medical Research Center Detachment, Lima, Peru

488

HANDHELD TECHNOLOGY FOR EFFICIENT INTERVIEWS TO ESTIMATE THE BURDEN AND ECONOMIC COST OF SYMPTOMATIC DENGUE: PILOT IN PUERTO RICO

Donald S. Shepard[1], Hamish Mohammed[2], Migda M. Dieppa[1], Binod K. Sah[1], Jose A. Suaya[1]
[1]Brandeis University, Waltham, MA, United States, [2]Centers for Disease Control, San Juan, PR, United States

489

INFECTION OF *AEDES AEGYPTI* BY DENGUE VIRUS TYPE 2 STRAIN 16681

Steven M. Erb[1], Siritorn Butrapet[2], Aaron Phillips[1], Thomas Childers[2], John Roehrig[2], Claire Huang[2], Carol Blair[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Centers for Disease Control and Prevention, Fort Collins, CO, United States

490

AN AUTOMATED DENGUE VIRUS MICRONEUTRALIZATION PLAQUE ASSAY PERFORMED IN VERO CELLS AND IN HUMAN FCΓ RECEPTOR-EXPRESSING CV-1 CELLS

W. W. Shanaka I. Rodrigo, Danielle C. Alcena, Robert C. Rose, Xia Jin, Jacob J. Schlesinger
University of Rochester, Rochester, NY, United States

491

EPIDEMIOLOGICAL BURDEN OF DENGUE OF OFFICIALLY REPORTED DENGUE CASES IN EIGHT COUNTRIES IN THE AMERICAS AND ASIA

Jose A. Suaya[1], Binod K. Sah[1], Lucy C. S. Lum[2], Blas Armien[3], Joao B. Siqueira[4], Sukhum Jiamton[5], Celina T. Martelli[4], Sukhontha Kongsin[5], Rekol Huy[6], Romeo Montoya[7], Fàtima Garrido[8], Leticia Castillo[9], Donald S. Shepard[1]
[1]Heller School, Brandeis University, Waltham, MA, United States, [2]University of Malaya Medical Center, Kuala Lumpur, Malaysia, [3]Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama, [4]Federal University of Goiás, Goiana, Brazil, [5]Mahidol University, Bangkok, Thailand, [6]The National Dengue Control Program at the National Center for Malaria, Phnom Penh, Cambodia, [7]Ministry of Health and Social Assistance, San Salvador, El Salvador, [8]Ministry of Health and Social Development, Caracas, Venezuela, [9]National Health Laboratory, Guatemala City, Guatemala

492

THE SEROEPIDEMIOLOGIC INVESTIGATION OF DENGUE ILLNESS VERSUS DENGUE VIRUS INFECTION AFTER THE 2007 OUTBREAK IN TAINAN CITY, TAIWAN

Ching-Yi James Chuo[1], Tzai-Hung Wen[2], Yan-Jang Scott Huang[1], Shu-Fang Chuang[2], Hsin-Chi Tseng[2], Min-Hau Lin[1], Min-Tze Huang[1], Chuan-Liang Kao[3], Susan C. Hu[4], Chwan-Chuen King[2]
[1]Department of Public Health, College of Public Health, National Taiwan University, Taipei, Taiwan, [2]Institute of Epidemiology, College of Public Health, National Taiwan University, Taipei, Taiwan, [3]Department of Clinical Laboratory Sciences and Medical Biotechnology, College of Medicine, National Taiwan University, Taipei, Taiwan, [4]Tainan Health Bureau, Tainan, Taiwan

493

CHARACTERIZATION AND GROWTH OF A DEN-2 PDK-53-BASED CHIMERIC TETRAVALENT VACCINE

Jill A. Livengood[1], Richard M. Kinney[1], Claire Y. Huang[2], Shawn J. Silengo[1], O'Neil Wiggan[1], Betty E. Luy[2], Kelley J. Moss[2], A. P. Kalanidhi[3], Jorge Osorio[4], Dan T. Stinchcomb[1]
[1]Inviragen, Fort Collins, CO, United States, [2]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [3]Shantha Biotechnics, Hyderabad, India, [4]University of Wisconsin, Madison, WI, United States

494

RAPID MOLECULAR TYPING OF DENGUE VIRUSES

Gerhard Dobler, Sandra Essbauer, Roman Wölfel
Bundeswehr Institute of Microbiology, München, Germany

495

USE OF A HIGH THROUGHPUT DENGUE REPORTER VIRUS NEUTRALIZATION ASSAY TO SCREEN PATIENT AND VACCINEE SERA

Bridget A. Puffer[1], Katherine L. Williams[2], Emily M. Sluzas[1], Meredith R. Murray[1], Eva Harris[2], Benjamin J. Doranz[1]
[1]Integral Molecular, Philadelphia, PA, United States, [2]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, CA, United States

496

IMPORTANT STRATEGIES TO PREVENT SEVERE EPIDEMICS OF DENGUE HEMORRHAGIC FEVER: TAIWAN'S EPIDEMIOLOGIC FINDINGS TO HELP GLOBAL CONTROL

Chwan-Chuen King[1], Day-Yu Chao[1], Tzai-Hung Wen[1], Chuan-Liang Kao[1], Jan-Jang Scott Huang[2], Mathuros Tipayamongkholgul[1], Chuin-Shee Shang[1], Shu-Fang Chuang[1], Wei-Kung Wang[3]
[1]Institute of Epidemiology, College of Public Health, National Taiwan University, Taipei, Taiwan, [2]Department of Public Health, College of Public Health, NTU, Taipei, Taiwan, [3]Institute of Microbiology, College of Med, NTU, Taipei, Taiwan

497

VECTORIAL COMPETENCE IN *AEDES AEGYPTI* OF TWO DIFFERENT DENGUE TYPE 2 VIRUSES ISOLATED FROM THE SAME GEOGRAPHIC AREA IN MEDELLIN, COLOMBIA

Carolina Quintero-Gil[1], Marlen Martinez-Gutierrez[1], Andres Uribe[1], Oladier Hoyos[1], Francisco J. Diaz[2], Marta C. Ospina[3], Ivan D. Vélez[1], Jorge E. Osorio[4]
[1]Programa de Estudio y Control de Enfermedades Tropicales-PECET, Universidad de Antioquia, Medellin, Colombia, [2]Grupo de Inmunovirología. Universidad de Antioquia, Medellin, Colombia, [3]Laboratorio Departamental de Salud Publica de Antioquia, Medellin, Colombia, [4]Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin, Madison, WI, United States

498

POTENTIAL USE OF STATINS IN PREVENTION AND TREATMENT OF DENGUE VIRUS INFECTION: *IN VITRO* STUDY

Marlen Martinez-Gutierrez, Juan C. Gallego-Gomez
Programa de Estudio y Control de Enfermedades Tropicales-PECET, Universidad de Antioquia, Medellin, Colombia

Flaviviridae – West Nile

499

ROLE OF INTERFERON IN RESPONSE TO WEST NILE VACCINATION

Tomohiro Ishikawa, Douglas G. Widman, Nigel Bourne, Peter W. Mason
University of Texas Medical Branch, Galveston, TX, United States

500

BIOTINYLATION OF ANTIBODIES IN SERUM SAMPLES ALLEVIATES THE NEED FOR SPECIES-SPECIFIC DETECTION CONJUGATES WHEN ASSAYED FOR IN A MICROSPHERE-BASED SYSTEM

Alison J. Johnson[1], Richard Bowen[2], Lillian Stark[3], Olga Kosoy[1], Ann Powers[1], Nicholas Panella[1], Nicole Nemeth[4]
[1]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]College of Veterinary Medicine, Colorado State University, Fort Collins, CO, United States, [3]Florida Department of Health, Tampa, FL, United States, [4]National Wildlife Research Center, USDA/APHIS/WS, Fort Collins, CO, United States

501

ANTIBODIES TO WEST NILE VIRUS DETECTED IN WILD MAMMALS IN IOWA: 2005 – 2007

Bradley J. Blitvich[1], Bradley J. Tucker[1], Luis Ibarra-Juarez[2], Wayne A. Rowley[1], Lyric C. Bartholomay[1], Kenneth B. Platt[1]
[1]Iowa State University, Ames, IA, United States, [2]Universidad Autonoma de Nuevo Leon, San Nicolás de los Garza, Nuevo Leon, Mexico

502

GENETIC AND BIOLOGICAL CHARACTERIZATION OF THE FIRST CARIBBEAN WEST NILE VIRUS ISOLATES

Kovi Bessoff, Kate L. McElroy, Candimar Colón, Manuel Amador, Roberto Barrera, Jorge Muñoz-Jordán, Wellington Sun, Elizabeth Hunsperger
Centers for Disease Control and Prevention, San Juan, Puerto Rico

503

A RARE PRESENTATION OF NEUROINVASIVE WEST NILE VIRUS INFECTION

Maheswaran M. Pillai, Raju Bishwakarma, Shaligram Dahal, Rishi Sharma, Shadab Ahmed
Nassau University Medical Center, East Meadow, NY, United States

504

ACUTE WEST NILE DISEASE IN NEW MEXICO: THE QUEST FOR NUCLEIC ACID

Randin C. Nelson, Robert Nofchissey, Greg Ebel, Diane Goade
University of New Mexico, Albuquerque, NM, United States

505

TRENDS IN WEST NILE VIRUS TRANSMISSION IN SUBURBAN COOK COUNTY, ILLINOIS

Richard L. Lampman
Illinois Natural History Survey, Champaign, IL, United States

506

ANALYSIS OF THE TRANSCRIPTOMIC RESPONSE TO WEST NILE VIRUS INFECTION IN THE EQUINE HOST

Melissa Bourgeois[1], Maureen Long[1], Kathy Seino[2], Nancy Denslow[1]
[1]University of Florida College of Veterinary Medicine, Gainesville, FL, United States, [2]Washington State University College of Veterinary Medicine, Pullman, WA, United States

507

CREATION OF A CHIMERIC WEST NILE VIRUS CONTAINING DENGUE-2 PRE-MEMBRANE AND ENVELOPE GENES

Eric T. Beck, Betty Luy, Claire Y.H. Huang
Centers for Disease Control and Prevention, Fort Collins, CO, United States

508

YEARLY VARIATION IN WEST NILE VIRUS ANTIBODIES IN AMERICAN KESTRELS (*FALCO SPARVERIUS*) IN PENNSYLVANIA

Darcy L. Medica
Pennsylvania State University, Schuylkill Haven, PA, United States

509

PREDICTORS FOR EPIDEMIC WEST NILE VIRUS TRANSMISSION IN EAST BATON ROUGE PARISH, LOUISIANA, 2003-2007

Sarah R. Michaels[1], Matthew Yates[2], Wayne Kramer[3], Dawn Wesson[1], Ivo Foppa[1]
[1]Tulane University, New Orleans, LA, United States, [2]East Baton Rouge Mosquito and Rodent Control, Baton Rouge, LA, United States, [3]Louisiana State University, Baton Rouge, LA, United States

510

REGIONAL INCREASE IN WEST NILE NEUROINVASIVE DISEASE AFTER HURRICANE KATRINA

Kevin A. Caillouët, Sarah R. Michaels, Xu Xiong, Ivo Foppa, Dawn M. Wesson
Tulane University, New Orleans, LA, United States

511

LIVE ATTENUATED WEST NILE VACCINE BASED ON DEN-2 PDK-53 VECTOR PROTECTS HAMSTERS FROM WILD-TYPE WEST NILE VIRUS CHALLENGE

Claire Y. Huang[1], Richard M. Kinney[2], Betty E. Luy[1], Kristin Jones[3], Nicole Marlenee[3], Dan T. Stinchcomb[2], Richard Bowen[3]
[1]Centers for Disease Control and Prevention, Fort Collins, CO, United States, [2]Inviragen, Fort Collins, CO, United States, [3]Colorado State University, Fort Collins, CO, United States

512

DUPLEX MICROSPHERE-BASED ASSAY FOR THE DETECTION OF IGG ANTIBODIES TO WEST NILE VIRUS AND ST. LOUIS ENCEPHALITIS VIRUS

Janeen J. Laven, Mark J. Delorey, Olga L. Kosoy, Amanda J. Panella, Robert S. Lanciotti, Alison J. Johnson
Centers for Disease Control and Prevention, Fort Collins, CO, United States

513

NONVIREMIC (NON-REPLICATIVE) TRANSMISSION OF WEST NILE VIRUS ON SPECIFIC IMMUNE RODENT HOSTS

Charles E. McGee[1], Bradley S. Schenider[2], Dana L. Vanlandingham[1], Konstantin Tsetsarkin[1], **Stephen Higgs**[1]
[1]University of Texas Medical Branch, Galveston, TX, United States, [2]Institute Pasteur, Paris, France

Helminths – Nematodes – Filariasis (Molecular Biology)

514

MULTIPLEX PROTEOMICS COMPARISON OF MALE AND FEMALE *BRUGIA MALAYI*

Daojun Jiang
Washington University, St. Louis, MO, United States

(ACMCIP Abstract)

515

APTAMER TECHNOLOGY FOR THE IDENTIFICATION OF NOVEL INHIBITORS OF WOLBACHIA ENZYMES FOR ANTIFILARIAL THERAPY

Smitha Pillai[1], Bo Wu[2], Sylvine Raverdy[2], Gunter Mayer[3], Barton Slatko[2], Clotilde Carlow[2], Michael Famulok[3], Achim Hoerauf[1], Kenneth Pfarr[1]
[1]Inst. of Med. Microbiology, Immunology and Parasitology, Bonn, Germany, [2]Division of Parasitology, New England Biolabs, Massachusetts, MA, United States, [3]LIMES Institute, Program Unit Chemical Biology and Medicinal Chemistry, Bonn, Germany

516

***WOLBACHIA* HEME BIOSYNTHESIS AS A POTENTIAL ANTI-FILARIASIS TARGET SET**

Bo Wu, Leslie Conway, Jacopo Novelli, Jeremy Foster, Barton Slatko
New England Biolabs, Inc, Ipswich, MA, United States

(ACMCIP Abstract)

517

QUANTITATIVE ANALYSIS OF MOLTING-REGULATED GENE TRANSCRIPTS IN *BRUGIA PAHANGI* INFECTIVE LARVAE

Yuefang Huang[1], Ramakrishna U. Rao[1], Thomas R. Klei[2], Gary J. Weil[1]
[1]Washington University School of Medicine, St. Louis, MO, United States, [2]Louisiana State University, Baton Rouge, LA, United States

518

LATERAL TRANSFER OF THE FERROCHELATASE GENE IN THE HUMAN PARASITE *BRUGIA MALAYI*

Bo Wu, Jacopo Novelli, Jeremy Foster, Barton Slatko
New England Biolabs, Inc., Ipswich, MA, United States

(ACMCIP Abstract)

519

USE OF HETEROLOGOUS MICROARRAY HYBRIDIZATION TO IDENTIFY GENES INVOLVED IN MOSQUITO INFECTIVITY FOR BRUGIA PAHANGI MICROFILARIAE

Kathryn Griffiths[1], George Mayhew[2], Rebecca Zink[1], Sara Erickson[2], Jeremy Fuchs[2], Bruce Christensen[2], Colleen McDermott[1], Michelle Michalski[1]
[1]University of Wisconsin Oshkosh, Oshkosh, WI, United States, [2]University of Wisconsin Madison, Madison, WI, United States

(ACMCIP Abstract)

520

ANNOTATION AND EVALUATION VERSION 2 *BRUGIA MALAYI* OLIGONUCLEOTIDE ARRAY

Ben-Wen Li[1], Makedonka Mitreva[2], Yong Yi[2], Amy C Rush[1], Jay DePasse[3], Elodie Ghedin[3], David Spiro[4], Gary J. Weil[1]
[1]Infectious Diseases Division, Washington University School of Medicine, St. Louis, MO, USA, [2]Genome Sequencing Center, Department of Genetics, Washington University School of Medicine, St. Louis, MO, USA, [3]Division of Infectious Diseases, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA, [4]The J. Craig Venter Institute

521

DEVELOPING *BRUGIA MALAYI*/BRUGIA PAHANGI HYBRIDS AS A TOOL FOR MOSQUITO INFECTIVITY STUDIES

Rebecca Zink[1], Kathryn Griffiths[1], Sara Erickson[2], Jeremy Fuchs[2], Bruce Christensen[2], Michelle Michalski[1]
[1]University of Wisconsin Oshkosh, Oshkosh, WI, United States, [2]University of Wisconsin Madison, Madison, WI, United States

(ACMCIP Abstract)

Helminths – Nematodes – Filariasis (Other)

522

EVALUATION OF DIFFERENT ANTIBODIES FOR IMMUNOSTAINING OF *WOLBACHIA* IN *BRUGIA MALAYI* AND OTHER FILARIAL PARASITES

Kerstin Fischer[1], Gary J. Weil[1], Claudio Bandi[2], Michelle L. Michalski[3], Jefferson A. Vaughan[4], Peter Fischer[1]
[1]Washington University School of Medicine, St. Louis, MO, United States, [2]Università degli Studi di Milano, Milano, Italy, [3]University of Wisconsin, Oshkosh, WI, United States, [4]University of North Dakota, Grand Forks, ND, United States

523

IDENTIFICATION OF INHIBITORS OF COFACTOR-INDEPENDENT PHOSPHOGLYCERATE MUTASE (IPGM) FOR POTENTIAL TREATMENT OF LYMPHATIC FILARIASIS

Michael L. Booker[1], Amy M. Fife[1], Sylvine Raverdy[2], Martin L. Kramer[1], Alexei Belenky[1], Clotilde K.S. Carlow[2]
[1]Genzyme Corporation, Waltham, MA, United States, [2]New England Biolabs, Division of Parasitology, Ipswich, MA, United States

524

ALLEVIATING THE BURDEN OF LYMPHEDEMA IN TARABA STATE, NIGERIA VIA COMMUNITY-BASED REHABILITATION (CBR)

Lola E. Adigun[1], Stanley O. Foster[1], Henry B. Perry III[2], Oladele Akogun[3]
[1]Emory University, Atlanta, GA, United States, [2]Future Generations, Franklin, WV, United States, [3]Common Heritage Foundation, Yola, Nigeria

525

ASSESSMENT OF KNOWLEDGE AND PERCEPTIONS ON ELEPHANTIASIS AND HYDROCELE AMONG RESIDENTS OF DAR ES SALAAM, TANZANIA

Upendo J. Mwingira[1], Christina L. Makene[1], William J. Kisoka[1], Mtango Myombo[1], Prince Mutalemwa[1], Kesheni Senkoro[1], Vivian K. Barongo[1], Edwin Michael[2], Kazuhiko Moji[3], Charles D. Mackenzie[4], Mwele Malecela[1]
[1]National Institute for Medical Research, Dar-es-salaam, United Republic of Tanzania, [2]Imperial College School of Medicine, London, United Kingdom, [3]Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan, [4]Filarial Diseases Unit, Michigan State University, East Lansing, MI, United States

527

IMPACT OF INCREASED NUMBERS OF COMMUNITY DIRECTED DISTRIBUTORS ON SUCCESSFUL DISTRIBUTION OF IVERMECTIN IN ETHIOPIA, 2007

Aryc W. Mosher[1], Moses Katabarwa[1], Teshome Gebre[2], Estifanos Biru Shargie[2], Patricia Graves[1], Frank O. Richards[1]
[1]The Carter Center, Atlanta, GA, United States, [2]The Carter Center, Addis Abba, Ethiopia

528

EFFECT OF NTD INTEGRATION ON RESOURCE AVAILABILITY FOR LYMPHATIC FILARIASIS

PJ Hooper[1], Maggie Baker[2], Roland Bougma[3], Nana-Kwadwo Biritwum[4], Massitan Dembélé[5], Ibrahim Komblo[6], Dominique Kyelem[1], Mary Linehan[2], Eric Ottesen[1], Jean Shaikh[2]
[1]Task Force for Child Survival and Development, Decatur, GA, United States, [2]NTD Control Program, RTI International, Washington, DC, United States, [3]Ministry of Health, Ouagadougou, Burkina Faso, [4]Ghana Health Service, Accra, Ghana, [5]Ministry of Health, Bamako, Mali, [6]Ministry of Health, Niamey, Niger

529

REDUCED PLASMA VEGF-C AND INCREASED SOLUBLE VEGFR3 ARE ASSOCIATED WITH THE PRESENCE OF HYDROCELE IN MEN WITH LYMPHATIC FILARIASIS

Kim Brustoski, Amy G. Hise, Daniel J. Tisch, Moses J. Bockarie, James W. Kazura
Case Western Reserve University, Cleveland, OH, United States

(ACMCIP Abstract)

Helminths – Nematodes – Intestinal Nematodes

530

AN UNUSUAL CASE OF STRONGYLOIDES STERCORALIS COLITIS MIMICKING CROHN'S DISEASE

Shuchita Gupta, Shweta Gupta
Albert Einstein Medical Center, Philadelphia, PA, United States

531

GASTROINTESTINAL PARASITE COMMUNITIES OF NON-HUMAN PRIMATES FROM CAMEROON

Diffo J. Le Doux[1], Arouna Ndassa[2], Charles Bilong Bilong[2], Matthew LeBreton[1], Yves-Xavier Pourrut[3], Flobert Njiokou[2], Nathan Wolfe[4], Roger Moyou Somo[2]
[1]Johns Hopkins Cameroon Program, Yaounde, Cameroon, [2]University of Yaounde I, Yaounde, Cameroon, [3]IRD, Paris, France, [4]University of California, Los Angeles, CA, United States

532

OPTIMIZATION OF AN ELISA ASSAY FOR THE DETECTION OF *S. STERCORALIS* INFECTION IN HUMANS

Isabel T. McAuliffe
Centers for Disease Control and Prevention, Chamblee, GA, United States

Kinetoplastida – Diagnosis and Treatment

533

ACUTE CENTRAL NERVOUS SYSTEM INFECTION BY *TRYPANOSOMA CRUZI* IN PREGNANCY RATS

Ana Lugo-Yarbuh, Johan Rondon, Maritza Alarcon, Elio Moreno, Sonia Araujo
Universidad de los Andes, Merida, Venezuela

(ACMCIP Abstract)

534

ECG ALTERATIONS IN FIRST AND SECOND STAGE HUMAN AFRICAN TRYPANOSOMIASIS BEFORE AND AFTER TREATMENT

Johannes A. Blum
Swiss Tropical Institute, Basel, Switzerland

535

EVALUATION OF THE IMMUNOBLOT WITH TESA FROM THREE DIFFERENT *TRYPANOSOMA CRUZI* STRAINS FOR THE SEROLOGICAL DIAGNOSIS OF CHAGAS DISEASE IN THE USA

Debora R. Casandra[1], Eufrosina S. Umezawa[2], Charles W. Todd[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Instituto de Medicina Tropical de São Paulo, São Paulo, Brazil

536

APPLICATION OF A 384 WELL *T.B.BRUCEI* BS 427 WHOLE CELL VIABILITY ASSAY TO THE HTS OF A NATURAL PRODUCT MARINE FRACTIONATED LIBRARY

Melissa L. Sykes, Vicky M. Avery
Eskitis Institute for Cell and Molecular Therapies, Brisbane, Australia

537

IDENTIFICATION AND EARLY HIT-TO-LEAD OPTIMIZATION OF NOVEL DRUG CANDIDATES FOR THE TREATMENT OF HUMAN AFRICAN TRYPANOSOMIASIS

Matthew D. Orr[1], Daitao Chen[1], Joe B. Perales[1], Kyle Bolduc[1], Jennifer C. Freeman[1], Tien Nguyen[1], Robert A. Noe[1], Cindy Rewerts[1], Mohanish Shrestha[1], Jessica M. Sligar[1], Bakela Nare[1], Stephen A. Wring[1], Robert Jacobs[1], Robert Don[2]
[1]SCYNEXIS, Inc., Durham, NC, United States, [2]Drugs for Neglected Disease Initiative, Geneva, Switzerland

538

A WHOLE CELL HTS ASSAY PLATFORM TO IDENTIFY & SUPPORT HIT-TO-LEAD PROGRESSION OF SELECTIVE INHIBITORS OF *TRYPANOSOMA BRUCEI*

Bakela Nare[1], Tana Bowling[1], Luke Mercer[1], Mari Vogel[1], Robert Don[2], Robert Jacobs[1]
[1]SCYNEXIS, INC, Research Triangle Park, NC, United States, [2]Drugs for Neglected Diseases initiative (DNDi), Geneva, Switzerland

539

REAL-TIME PCR ASSAY FOR *TRYPANOSOMA BRUCEI* DETECTION

Elaine B. Bohórquez[1], Jonathan J. Juliano[1], Philippe Büscher[2], Reto Brun[3], Steven R. Meshnick[1]
[1]University of North Carolina at Chapel Hill, Chapel Hill, NC, United States, [2]Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium, [3]Swiss Tropical Institute, Basel, Switzerland

540

REVERSED AMIDINES AS ANTILEISHMANIAL CANDIDATES

Xiaohua Zhu[1], Chad Stephens[2], Arvind Kumar[2], Mark Sweat[3], Trupti Pandharkar[1], Dennis Kyle[3], David Boykin[2], Karl Werbovetz[1]
[1]The Ohio State University, Columbus, OH, United States, [2]Georgia State University, Atlanta, GA, United States, [3]University of South Florida, Tampa, FL, United States

541

A MULTIPLEX APPROACH FOR SIMULTANEOUS IDENTIFICATION OF SIX DISTINCT *LEISHMANIA SPP*

Kakali Bandyopadhyay[1], Marcos de Almeida[1], Francis Steurer[2], Ozgur Koru[1], Barbara L. Herwaldt[2], Alexandre J. da Silva[2]
[1]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED and Atlanta Research and Education Foundation, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States

(ACMCIP Abstract)

542

PHASE 3 TRIAL OF PAFURAMIDINE MALEATE (DB289), A NOVEL, ORAL DRUG, FOR TREATMENT OF FIRST STAGE SLEEPING SICKNESS: SAFETY AND EFFICACY

Gabriele Pohlig[1], Sonja Bernhard[1], Johannes Blum[1], Christian Burri[1], Alain Mpanya Kabeya[2], Jean-Pierre Fina Lubaki[3], Alfred Mpoo Mpoto[3], Blaise Fungala Mununguu[3], Gratias Kambau Manesa Deo[4], Pierre Nsele Mutantu[4], Florent Mbo Kuikumbi[2], Alaine Fukinsia Mintwo[2], Auguy Kayeye Mununguu[2], Amadeu Dala[5], Stephen Macharia[6], Constantin Miaka Mia Bilenge[2], Victor Kande Betu Ku Mesu[2], Jose Ramon Franco[6], Ndinga Dieyi Dituvanga[5], **Carol A. Olson**[7]
[1]Swiss Tropical Institute, Basel, Switzerland, [2]Programme Nationale de Lutte contre la Trypanosomiase Humaine Africaine, Kinshasa, Congo, The Democratic Republic of the, [3]Evangelic Hospital, Vanga, The Democratic Republic of the Congo, [4]Evangelic Hospital, Kikongo, The Democratic Republic of the Congo, [5]Instituto de Combate e de Controlo das Tripanossomíases, Luanda, Angola, [6]Malteser International, Yei, Sudan, [7]Immtech Pharmaceuticals, Inc., Vernon Hills, IL, United States

543

IN-VITRO EFFICACY OF HYPERBARIC OXYGEN AGAINST *LEISHMANIA TROPICA* PROMASTIGOTES AND AMASTIGOTES

Bulent A. Besirbellioglu[1], Hanefi C. Gul[1], Hakan Ay[1], Ozgur Koru[1], Soykan Ozkoc[2], Seray Ozensoy Toz[3], Mehmet Tanyuksel[1], Omer Coskun[1], Kemal Simsek[1]
[1]Gulhane Military Medical Academy, Ankara, Turkey, [2]Dokuz Eylul University, Faculty of Medicine, Izmir, Turkey, [3]Ege University Medical School, Izmir, Turkey

544

SERUM NITRIC OXIDE (NO) LEVELS IN CUTANEOUS LEISHMANIASIS (CL): CORRELATIONS WITH TREATMENT OUTCOME AND THE ADVERSE EVENT OF PANCREATITIS

Louis-Patrick Haraoui[1], Nancy Koles[2], Robin S. Howard[3], Glenn W. Wortmann[3], Mark Polhemus[3], Naomi E. Aronson[2]
[1]Internal Medicine Residency Training Program, Department of Medicine, McGill University, Montreal, QC, Canada, [2]Uniformed Services University of the Health Sciences, Bethesda, MD, United States, [3]Walter Reed Army Medical Center, Washington, DC, United States

545

MINIEXON PCR-RFLP FOR *LEISHMANIA* SPECIES IDENTIFICATION IN NEW WORLD LEISHMANIASIS

Clemencia Ovalle Bracho, Yira R. Díaz Toro, Daniel Velandia, Sandra Muvdi
Centro Dermatológocal Federico Llerass Acosta, Bogotá, Colombia

(ACMCIP Abstract)

546

EVALUATION OF THE INFECTIVE PROCESS BY *LEISHMANIA PANAMENSIS* IN A CELL LINE DERIVED FROM *AEDES AEGYPTI*, WITH BASE IN PHYSICOCHEMICAL AND ENVIROMENTAL VARIABLES

Felio J. Bello[1], Angela Cristina Zapata[2], Víctor Manuel Acero[2], Andrés Ramírez[2]
[1]Universidad del Rosario, Bogotá, Colombia, [2]Universidad de La Salle, Bogotá, Colombia

547

QUANTIFICATION OF PARASITEMIA IN *LEISHMANIA DONOVANI*-INFECTED HAMSTERS BY REAL-TIME PCR

Brian Vesely, Azliyati Azizan, J. Mark Sweat, **Dennis E. Kyle**
University of South Florida, Tampa, FL, United States

548

EVALUATION OF A RAPID IMMUNOCHROMATOGRAPHIC ASSAY FOR DETECTION OF *TRYPANOSOMA CRUZI* ANTIBODIES IN WILDLIFE RESERVOIRS

Michael J. Yabsley, Emily L. Brown, Dawn M. Roellig
University of Georgia, Athens, GA, United States

Kinetoplastida – Epidemiology

549

GENETICALLY DISTINCT *L.DONOVANI* CAUSING CUTANOUES LEISHMANIASIS IN SRI LANKA: A STUDY ON *LEISHMANIA* SPECIES/STRAIN VARIATION

Yamuna D. Siriwardana[1], NJ Beeching[2], HA Noyes[3], ML Chance[2], P. Bates[2], Nadira Karunaweera[1]
[1]Department of Parasitology, Faculty of Medicine, University of Colombo, Colombo, Sri Lanka, [2]Liverpool School of Tropical Medicine and Hygiene, University of Liverpool, Liverpool, United Kingdom, [3]School of Biological Sciences, University of Liverpool, Liverpool, Liverpool, United Kingdom

(ACMCIP Abstract)

550

LEISHMANIASIS IN SRI LANKA: STUDY OF CLINICAL DISEASE

Yamuna D. Siriwardana[1], Ganga Sirimanna[2], Chandani Udagedara[3], PH Chandrawansa[4], Nadira D. Karunaweera[5]
[1]Department of Parasitology, Faculty of Medicine, University of Colombo, Colombo, Sri Lanka, [2]National Hospital, Colombo, Sri Lanka, [3]General Hospital, Matale, Sri Lanka, [4]General Hospital, Matara, Sri Lanka, [5]Department of Parasitology, Faculty of Medicine, University of Colombo, Colombo, Sri Lanka

551

SEROPREVALENCE OF *TRYPANOSOMA CRUZI* IN RACCOONS IN TENNESSEE

Jenny G. Maloney[1], Anthony Newsome[1], Junjun Huang[2], Jordona Kirby[3], Brett Dunlap[3], Michael Yabsley[4], John R. Dunn[2], L. Rand Carpenter[2], Timothy F. Jones[2], Abelardo C. Moncayo[2]
[1]Middle Tennessee State University, Murfreesboro, TN, United States, [2]Tennessee Department of Health, Nashville, TN, United States, [3]United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, Nashville, TN, United States, [4]Southeastern Cooperative of Wildlife Disease Study, University of Georgia, Athens, GA, United States

552

AMERICAN VISCERAL LEISHMANIASIS: II DIVERSITY OF WILD ANIMALS ASSOCIATE IN VISCERAL LEISHMANIASIS FOCUS IN TRUJILLO STATE VENEZUELA

Milagros Oviedo[1], Antonio Mendez[1], Adalberto Gonzalez[1], Jorge Suarez[1], Herminia Bendezu[1], Eliades Ledezma[1], Laura Vasquez[2]
[1]Universidad de Los Andes, Trujillo, Venezuela, [2]Universidad de Los Andes, Valera, Venezuela

553

***TRYPANOSOMA EVANSI* ANTIBODY LEVELS IN THE GOATS FROM SLAUGHTER HOUSES OF KOLKATA, INDIA**

Satadal Das[1], Payel Bhattacharya[2], Sejuti Naha Biswas[2], Tanima Bose[2], Debrup Sen[2], Debanjana Das[2], Sajal Roy[2], **Pulak Lahiri**[2]
[1]Peerless Hospital and B. K. Roy Research Centre, Kolkata, India, [2]University of Calcutta, Kolkata, India

(ACMCIP Abstract)

554

STUDY THE ABILITY OF MONOCYTES CORD BLOOD OF NEWBORNS NOT INFECTED THE MOTHERS INFECTED BY *T. CRUZI* TO CONTROL INFECTION

Amilcar Alejandro Flores Leon
University Mayor of San Simon, Cochabamba, Bolivia

(ACMCIP Abstract)

555

CHARACTERIZATION OF A RARE EQUINE LEISHMANIA IN PUERTO RICO; NATIVE OR IMPORTED?

Juan Mendez[1], Ioana Brasov[1], Ghosh Kashinath[1], Peter Weina[1], Victor Melendez[1], Adeline Chan[1], Bernardino Ortiz[2], Rossana Morales[2], Elias Algarin[2], Adelfa E. Serrano[2]
[1]Division of Experimental Therapeutics, Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Department of Microbiology and Medical Zoology, Medical Sciences Campus, University of Puerto Rico School of Medicine, San Juan, PR, United States

Kinetoplastida – Molecular Biology and Immunology

556

GENE ORGANIZATION AND SEQUENCE ANALYSIS OF TRANSFER RNA GENES IN TRYPANOSOMATID PARASITES

Norma E. Padilla-Mejia, Luis E. Florencio-Martinez, Elisa Figueroa-Angulo, Claudia M. Gomez-Hurtado, Juan C. Vizuet-de-Rueda, Santiago Martinez-Calvillo
National University of Mexico, FES Iztacala, Tlalnepantla, Mexico

(ACMCIP Abstract)

557

EVALUATION OF ALKANEDIAMIDE-LINKED BISBENZAMIDINES AS NOVEL AND POTENT ANTITRYPANOSOMAL AGENTS

Tien L. Huang[1], Jean Jacques Vanden Eynde[1], Annie Mayence[1], Cyrus J. Bacchi[2], Nigel Yartlet[2], Donna Rattendi[2], Aixa Rodriguez[2], Lakshman Mazumder[2]
[1]Xavier University of Louisiana, New Orleans, LA, United States, [2]Pace University, Haskins Laboratories, New York, NY, United States

558

MAGNETIC RESONANCE IMAGING INVESTIGATION OF MEGASYNDROME OF THE GASTROINTESTINAL TRACT IN EXPERIMENTAL *TRYPANOSOMA CRUZI* INFECTION

Herbert B. Tanowitz[1], Lars NY[2], Hua Li[1], Shankar Mukherjee[1], Stephen M. Factor[1], Linda A. Jelicks[1]
[1]Albert Einstein College of Medicine, Bronx, NY, United States, [2]Sahlgrenska University Hospital, Gothenburg, Sweden

(ACMCIP Abstract)

560

INNATE IMMUNITY IN THE CONTROL OF *LEISHMANIA AMAZONENSIS* INFECTION: A ROLE FOR TYPE I IFN RECEPTOR AND NEUTROPHIL

Lijun Xin, Diego A. Vargas-Inchaustegui, Jiaren Sun, **Lynn Soong**
The University of Texas Medical Branch, Galveston, TX, United States

561

DECREASE OF PARASITIC LOAD AND LESION SIZE IN MURINE CUTANEOUS LEISHMANIASIS INDUCED BY *LEISHMANIA AMAZONENSIS* AFTER TREATMENT WITH MESOIONIC COMPOUNDS

Raquel F. Rodrigues[1], Karen S. Charret[1], Aurea Echevarria[2], Veronica Amaral[3], Leonor L. Leon[1], Marilene M. Canto-Cavalheiro[1]
[1]Oswaldo Cruz Foundation – Brazil, Rio de Janeiro, Brazil, [2]Universidade Federal Rural do Rio de Janeiro – Brazil, Rio de Janeiro, Brazil, [3]Universidade Federal Fluminense – Brazil, Niterói, Brazil

(ACMCIP Abstract)

562

CHARACTERIZATION OF INTERMEDIATE DEVELOPMENTAL FORMS OBTAINED DURING *IN VITRO* DIFFERENTIATION OF *TRYPANOSOMA CRUZI* FROM TRYPOMASTIGOTES TO AMASTIGOTES

Luis A. Hernández-Osorio[1], Claudia Márquez-Dueñas[2], Luis E. Florencio-Martínez[3], Gilberto Ballesteros-Rodea[4], Santiago Martinez-Calvillo[5], **Rebeca G. Manning-Cela**[2]
[1]Centro de Investigación y de Estudios Avanzados del IPN and Facultad de Ciencias Químicas, Universidad Autónoma Benito Juárez de Oaxaca, México, México D.F. and Oaxaca, México, Mexico, [2]Centro de Investigación y de Estudios Avanzados del IPN, México D.F., Mexico, [3]Centro de Investigación y de Estudios Avanzados del IPN and FES Iztacala, UBIMED. UNAM. Edo. de México., México D.F., Mexico, [4]Centro de Investigación y de Estudios Avanzados del IPN and Facultad de Medicina Veterinaria y Zootecnia, Universidad Nacional Autonoma de Mexico, México D.F., Mexico, [5]FES Iztacala, UBIMED. UNAM. Edo. de México, México, México D.F., Mexico

(ACMCIP Abstract)

563

EVIDENCE OF GENETIC EXCHANGE IN NEW WORLD LEISHMANIA POPULATIONS FROM THE SEQUENCE ANALYSIS OF THREE ISOENZYME MARKERS

Pablo Tsukayama, Carmen M. Lucas, Benjamin Espinosa, David J. Bacon
U.S. Naval Medical Research Center Detachment, Lima, Peru

564

CONSTRUCTION OF POLY-PROTEIN VACCINE ANTIGENS FOR LEISHMANIASIS

Yasuyuki Goto, Ajay Bhatia, Thomas S. Vedvick, Randall F. Howard, Steven G. Reed
Infectious Disease Research Institute, Seattle, WA, United States

565

***TRYPANOSOMA CRUZI*-INDUCED ERECTILE DYSFUNCTION IN MICE**

Moses Tar, Rowena Chua, Arnold Melman, Dazhi Zhao, Stephen M. Factor, Herbert B. Tanowitz, Michael E. DiSanto
Albert Einstein College of Medicine, Bronx, NY, United States

(ACMCIP Abstract)

566

PILOT STUDY OF A THERAPEUTIC DNA VACCINE AGAINST *TRYPANOSOMA CRUZI* IN NON-HUMAN PRIMATES

Eric Dumonteil[1], Meredith Hunter[2], Hiatzy Zapata-Estrella[1], Patricia Dorn[3], Preston Marx[2]
[1]Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico, [2]Tulane University, New Orleans, LA, United States, [3]Loyola University, New Orleans, LA, United States

(ACMCIP Abstract)

Malaria – Chemotherapy

567

EXTENDED HIGH EFFICACY (90 DAYS FOLLOW UP) OF THE COMBINATION SULPHADOXINE-PYRIMETHAMINE WITH ARTESUNATE IN CHILDREN WITH UNCOMPLICATED FALCIPARUM MALARIA ON THE BENIN COAST, WEST AFRICA

Alain M. Nahum[1], Annette Erhart[2], Daniel Ahounou[1], Chantal Van Overmeir[2], Joris Menten[2], Martin Akogbeto[1], Marc Coosemans[2], Achille Massougbodji[3], Umberto D'Alessandro[2]
[1]Centre de Recherche Entomologique de Cotonou, Cotonou, Benin, [2]Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium, [3]Laboratoire de Parasitologie, Faculté des Sciences de la Santé, Université Nationale du Bénin, Cotonou, Benin

568

EARLY DEVELOPMENT OF THE NEW ARTEMETHER-LUMEFANTRINE DISPERSIBLE TABLET: PALATABILITY AND PHARMACOKINETICS IN HEALTHY SUBJECTS

Gilbert Lefèvre[1], Salim Abdulla[2], John Lyimo[2], Alex Agyemang[3], Christine Reynolds[4], Steve Pascoe[3], Serge Fitoussi[5], Ching-Ming Yeh[4], Marja Nuortti[1], Gilles-Jacques Rivière[6], Romain Séchaud[1]
[1]Novartis Pharma AG, Basel, Switzerland, [2]Ifakara Health Research and Development Centre, Dar es Salaam, United Republic of Tanzania, [3]Novartis Pharma Ltd Horsham, United Kingdom, [4]Novartis Pharma Corporation, East Hanover, NJ, United States, [5]Mediscis, Lagord, France, [6]Novartis Pharma SAS, Rueil-Malmaison, France

569

PHARMACOKINETIC AND PHARMACODYNAMIC CHARACTERISTICS OF A NEW DISPERSIBLE TABLET FORMULATION OF ARTEMETHER-LUMEFANTRINE COMPARED TO THE CRUSHED COMMERCIAL TABLET IN AFRICAN CHILDREN WITH *P. FALCIPARUM* MALARIA

Abdoulaye Djimdé[1], Steffen Borrmann[2], Salim Abdulla[3], Gilbert Lefèvre[4], Kim Andriano[5]
[1]Malaria Research and Training Center, University of Bamako, Bamako, Mali, [2]Kenya Medical Research Institute, Kifili, Kenya, [3]Ifakara Health Research and Development Centre, Dar es Salaam, United Republic of Tanzania, [4]Novartis Pharma AG, Basel, Switzerland, [5]Novartis Pharma Corporation, East Hanover, NJ, United States

570

SAFETY PROFILE OF ARTEMETHER-LUMEFANTRINE (AL; COARTEM®) COMPARED WITH SULFADOXINE-PYRIMETHAMINE (SP) IN PREGNANT WOMEN WITH SYMPTOMATIC MALARIA: PRELIMINARY RESULTS OF AN OBSERVATIONAL STUDY

Christine Manyando[1], Rhoda Mkandawire[2], Lwipa Puma[3], Moses Sinkala[4], Eric Njunju[1], Melba Gomes[5], Kim Andriano[6], Raymond Schlienger[7], Mailis Virtanen[7]
[1]Tropical Diseases Research Centre, Ndola, Zambia, [2]District Health Office, Choma, Zambia, [3]District Health Office, Ndola, Zambia, [4]District Health Office, Lusaka, Zambia, [5]World Health Organisation, Geneva, Switzerland, [6]Novartis Pharmaceuticals Corporation, East Hanover, NJ, United States, [7]Novartis Pharma AG, Basel, Switzerland

571

EFFICACY AND SAFETY OF ARTEMETHER-LUMEFANTRINE DISPERSIBLE TABLET ACCORDING TO BODY WEIGHT IN AFRICAN INFANTS AND CHILDREN WITH UNCOMPLICATED MALARIA

Lucas Otieno[1], John Lyimo[2], Hamma Maiga[3], Mahfudh Bashraheil[4], Alain Nahum[5], Sonia Machevo[6], Peter Ouma[7], Hamad Makame[8], Nathan Mulure[9], Obiyo Nwaiwu[10]
[1]Walter Reed Project – KEMRI, Kisumu, Kenya, [2]Ifakara Health Research and Development Centre, Dar es Salaam, United Republic of Tanzania, [3]Malaria Research and Training Center, University of Bamako, Bamako, Mali, [4]Kenya Medical Research Institute, Kilifi, Kenya, [5]Centre de Recherche Entomologique de Cotonou, Cotonou, Benin, [6]Manhiça Health Research Centre (CISM), Manhiça, Mozambique, [7]Kenya Medical Research Institute/Center for Disease Control, Kisumu, Kenya, [8]Zanzibar Malaria Research Unit of the Karolinska Institute, Zanzibar, United Republic of Tanzania, [9]Novartis Pharma AG, Nairobi, Kenya, [10]Novartis Pharma AG, Lagos, Nigeria

572

INTERVENTIONS TO IMPROVE PROMPT AND EFFECTIVE TREATMENT OF MALARIA: DO WE KNOW WHAT WORKS?

Lucy A. Smith, Jayne Webster, Caroline Jones
London School of Hygiene and Tropical Medicine, London, United Kingdom

573

MALARIA TREATMENT IN THE PRIVATE SECTOR IN TANZANIA

Angel Dillip[1], Sandra Alba[1], Manuel Hetzel[2], Brigit Obrist[2], Flora Kessy[1], Christian Lengeler[2], Iddy Mayumana[1], Alexander Schulze[3], Christopher Mshana[1], Hassan Mshinda[1], Ahmed Makemba[1]
[1]Ifakara Health Research and Development Centre, Morogoro, United Republic of Tanzania, [2]Swiss Tropical Institute, Basel, Switzerland, [3]Novartis Foundation for Sustainable Development, Basel, Switzerland

574

EFFECTS OF AMODIAQUINE, ARTESUNATE, AND ARTESUNATE-AMODIAQUINE ON *PLASMODIUM FALCIPARUM* MALARIA-ASSOCIATED ANAEMIA IN CHILDREN

Akintunde Sowunmi, Sulayman T. Balogun, Grace O. Gbotosho, Christian T. Happi
University of Ibadan, Ibadan, Nigeria

575

DRUG-DRUG INTERACTIONS BETWEEN ARTEMETHER/LUMEFANTRINE AND LOPINAVIR/RITONAVIR IN HIV NEGATIVE HEALTHY VOLUNTEERS

Polina German[1], **Sunil Parikh**[1], Jody Lawrence[1], Diane Havlir[1], Philip J. Rosenthal[1], Grant Dorsey[1], Niklas Lindegardh[2], Francesca Aweeka[1]
[1]University of California-San Francisco, San Francisco, CA, United States, [2]Mahidol University, Bangkok, Thailand

576

PHARMACOVIGILANCE AND ANTIMALARIAL TREATMENT IN UGANDA: A PILOT SYSTEM OF ENHANCED PASSIVE SURVEILLANCE

Hasifa Bukirwa[1], Norah Mwebaza[2], Susan Nayiga[1], Heidi Hopkins[3], Umberto D'Alessandro[4], Ambrose O. Talisuna[5], Sarah G. Staedke[6]
[1]Uganda Malaria Surveillance Project, Kampala, Uganda, [2]Makerere University, Kampala, Uganda, [3]University of California, San Francisco, CA, United States, [4]Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium, [5]Ministry of Health, Kampala, Uganda, [6]London School of Hygiene & Tropical Medicine, London, United Kingdom

577

MASSIVE REDUCTION OF ANTIMALARIAL PRESCRIPTIONS AFTER RAPID DIAGNOSTIC TESTS IMPLEMENTATION IN DAR ES SALAAM, TANZANIA

Valérie D'Acremont[1], Judith Kahama-Maro[1], Deo Mtasiwa[2], Blaise Genton[3], Christian Lengeler[4]
[1]City Medical Office of Health, Dar es Salaam City council, United Republic of Tanzania, [2]Ministry of Health and Social Welfare, Dar es Salaam, United Republic of Tanzania, [3]Ifakara Health Research and Development Center, Dar es Salaam, United Republic of Tanzania, [4]Swiss Tropical Institute, Basel, Switzerland

Malaria – Drug Development

578

POTENT AND SELECTIVE INHIBITORS OF HISTONE DEACETYLASE IN *PLASMODIUM FALCIPARUM* AND *P. BERGHEI*

Ralph Mazitschek[1], Vishal Patel[2], Joseph Cortese[1], Liu Hanlan[3], Mandy Cromwell[3], Adelfa Serrano[4], Cokey Nguyen[3], Dyann Wirth[5], Roger Wiegand[1], **Robert H. Barker**[3]
[1]Broad Institute of Harvard and MIT, Cambridge, MA, United States, [2]Harvard Medical School, Boston, MA, United States, [3]Genzyme Corporation, Waltham, MA, United States, [4]University of Puerto Rico-School of Medicine, San Juan, PR, United States, [5]Harvard School of Public Health, Boston, MA, United States

579

HIGH THROUGHPUT SCREENING TO IDENTIFY CHEMOTYPES AS POSSIBLE ANTIMALARIALS

Joseph Cortese[1], Cassandra Celatka[2], Baniecki Mary Lynn[1], Liu Hanlan[2], **Robert H. Barker**[2], Dyann F. Wirth[3], Roger Wiegand[1]
[1]Broad Institute of Harvard and MIT, Cambridge, MA, United States, [2]Genzyme Corporation, Waltham, MA, United States, [3]Harvard School of Public Health, Boston, MA, United States

580

QUANTITATIVE STRUCTURE-ACTIVITY RELATIONSHIPS (QSARS) FOR CANDIDATE ANTIMALARIALS AGAINST CHLOROQUINE-RESISTANT *PLASMODIUM FALCIPARUM*

Simon J. Hocart, Huayin Liu, Haiyan Deng, Frances M. Krogstad, Dibyendu De, Donald J. Krogstad
Tulane University Health Sciences Center, New Orleans, LA, United States

(ACMCIP Abstract)

581

IDENTIFICATION OF MODELS TO PREDICT A NON-HEMOLYTIC 8-AMINOQUINOLINE

Aruna Sampath[1], Babu Tekwani[1], Rosemary Rochford[2], Prabhati Ray[3], Jeffery Friedman[4], David McMillan[5], Jayendra Bhonsle[3], Yarrow Rothstein[3], Alan Magill[3], Larry Walker[1], Colin Ohrt[3]
[1]University of Mississippi, University, MS, United States, [2]SUNY Upstate Medical University, Syracuse, NY, United States, [3]Walter Reed Army Institute of Research, Silverspring, MD, United States, [4]The Scripps Research Institute, La Jolla, CA, United States, [5]University of Nebraska Medical Center, Omaha, NE, United States

582

A MEDICINAL CHEMISTRY PROGRAM FOR THE DISCOVERY OF *PLASMODIUM FALCIPARUM* DIHYDROOROTATE DEHYDROGENASE INHIBITORS WITH ANTIMALARIAL ACTIVITY

Vishal Patel[1], **Michael L. Booker**[2], Cassandra Celatka[2], Martin L. Kramer[2], Hanlan Liu[2], Joseph Cortese[3], James Lillie[2], Roger Wiegand[3], Jon Clardy[1], Dyann F. Wirth[4]
[1]Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, MA, United States, [2]Genzyme Corporation, Waltham, MA, United States, [3]Infectious Diseases Initiative, Broad Institute of Harvard and the Massachusetts Institute of Technology, Cambridge, MA, United States, [4]Department of Immunology and Infectious Diseases, Harvard School of Public Health, Boston, MA, United States

583

ANTIMALARIAL ACTIVITY OF ARYL-SUBSTITUTED 2-ETHOXYACETAMIDES

Clare E. Gutteridge[1], Joshua W. Major[1], Daniel A. Nin[1], Apurba K. Bhattacharjee[2], Lucia Gerena[2]
[1]U.S. Naval Academy, Annapolis, MD, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States

584

CHLORPROGUANIL-DAPSONE-ARTESUNATE VS. CHLORPROGUANIL-DAPSONE: A RANDOMISED, DOUBLE-BLIND PHASE III TRIAL FOR THE TREATMENT OF ACUTE UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA

Alfred Tiono[1], Alassane Dicko[2], Dennis A. Ndububa[3], Tsiri Abenyega[4], Simon Pitmang[5], Jacob Awobusuyi[6], Allan Pamba[7], Stephan Duparc[8], Li-Ean Goh[7], Emma Harrell[7], Nick Carter[7], Stephen A. Ward[9], Brian Greenwood[10], Peter A. Winstanley[11]
[1]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [2]Malaria Research and Training Centre, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [3]Obafemi Awolowo University Teaching Hospital, Department of Medicine, Ile Ife, Nigeria, [4]Komfo Anokye Teaching Hospital, Kumasi, Ghana, [5]Department of Medicine, Plateau State Specialist Hospital, Jos, Plateau State, Nigeria, [6]Lagos State University Teaching Hospital, Department of Medicine, Ikeja, Lagos, Nigeria, [7]GlaxoSmithKline, Greenford, Middlesex, United Kingdom, [8]Formerly at GlaxoSmithKline, Greenford, United Kingdom, now at Medicines for Malaria Venture, Geneva, Switzerland, [9]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [10]Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom, [11]School of Clinical Sciences, University of Liverpool, Liverpool, United Kingdom

585

TRAINING ON PHARMACOVIGILANCE IN AFRICAN RURAL AREAS: THE EXPERIENCE OF ALIVE

Abdunoor M. Kabanywanyi[1], Nathan Mulure[2], Aggrey Malila[3], Christian Lengeler[4], Blaise Genton[5]
[1]Ifakara Health Research and Development Centre, Dar es Salaam, United Republic of Tanzania, [2]Novartis Pharma (EACA), Nairobi, Kenya, [3]Ifakara Health Research and Development Centre, Ifakara, United Republic of Tanzania, [4]Swiss Tropical Institute, Basel, Switzerland, [5]Ifakara Health Research and Development Centre & Swiss Tropical Institute, Basel, Switzerland

586

THERAPEUTIC EFFICACY OF GSK932121, A 4(1H)-PYRIDONE CANDIDATE FOR CLINICAL DEVELOPMENT AGAINST *P. YOELII* AND *P. FALCIPARUM*

Belén Jiménez-Díaz, Teresa Mulet, Sara Viera, Vanesa Gómez, Helen Garuti, Angela Alvarez, Iñigo Angulo-Barturen, Javier Ibáñez, Elena Jiménez, Pablo Castañeda, Isabel Camino, Magdalena Jiménez, Domingo Gargallo-Viola
GlaxoSmithKline, Tres Cantos, Spain

587

NOD-*SCID IL2R*$^{-/-}$ MICE ENGRAFTED WITH HUMAN ERYTHROCYTES SUPPORT HIGHER *P. FALCIPARUM*-PARASITEMIAS THAN NOD-*SCID BETA2 MICROGLOBULIN*$^{-/-}$ ENGRAFTED MICE

Belén Jiménez-Díaz[1], Teresa Mulet[1], Sara Viera[1], Vanesa Gómez[1], Helen Garuti[1], Angela Alvarez[1], Javier Ibáñez[1], Leonard Shultz[2], Domingo Gargallo-Viola[1], Iñigo Angulo-Barturen[1]
[1]GlaxoSmithKline, Tres Cantos, Spain, [2]The Jackson Laboratory, Bar Harbor, ME, United States

(ACMCIP Abstract)

588

DEVELOPMENT OF A HIGH-THROUGHPUT *IN-VITRO* SCREEN TO IDENTIFY INHIBITORS OF THE *PLASMODIUM FALCIPARUM* HEAT SHOCK PROTEIN 90 BINDING ACTIVITY

Martin L. Kramer[1], Vishal Patel[2], Jon Clardy[2], Dyann F. Wirth[3]
[1]Genzyme Corporation, Waltham, MA, United States,
[2]Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, MA, United States, [3]Department of Immunology and Infectious Diseases, Harvard School of Public Health, Boston, MA, United States

589

PHARMACOKINETIC-PHARMACODYNAMIC RELATIONSHIPS OF IMIDAZOLIDINEDIONE DERIVATIVES

David Saunders, Michael Kozar, Melendez Victor, Qiqui Li, Paktiya Teja-Isavadharm, Gettayacamin Montip, Michael O'Neill, *Colin Ohrt, Alan Magill, Ai J. Lin*
Walter Reed Army Institute of Research, Silver Spring, MD, United States

590

PHARMACOKINETIC CHARACTERIZATION STUDIES IN MICE AND BEAGLE DOGS OF 4(1H)-PYRIDONE DERIVATIVE GSK932121

Adolfo García, María Martínez, Hugo Salgado, Laura Alameda, *Ciriaco Maraschiello, Domingo Gargallo-Viola, Santiago Ferrer*
GlaxoSmithKline, Tres Cantos, Spain

(ACMCIP Abstract)

Malaria – Drug Resistance

591

COMPLEXITY OF *PLASMODIUM FALCIPARUM* CLINICAL SAMPLES FROM UGANDA DURING SHORT-TERM CULTURE

Samuel L. Nsobya[1], Moses Kiggundu[1], Moses Joloba[1], Grant Dorsey[2], **Philip J. Rosenthal**[2]
[1]Makerere University, Kampala, Uganda, [2]University of California, San Francisco, San Francisco, CA, United States

592

MOLECULAR EVIDENCE FOR CHLOROQUINE-RESISTANT *PLASMODIUM FALCIPARUM* IN HAITI

Berlin L. Londono[1], Thomas P. Eisele[1], Joseph A. Keating[1], Adam Benett[1], Chandon Chattopadhyay[2], Brian Mack[1], Jean Francois Vely[3], Olbeg Disinor[4], Donald J. Krogstad[1]
[1]Tulane University, New Orleans, LA, United States, [2]Swiss Tropical Institute, Basel, Switzerland, [3]Hôpital Albert Schweitzer, Deschapelles, Haiti, [4]Ministry of Health and United States Agency for Agency for International Development, Port-au-Prince, Haiti

(ACMCIP Abstract)

593

ASSESSMENT OF THE ORIGINS AND SPREAD OF PUTATIVE RESISTANCE-CONFERRING MUTATIONS IN *PLASMODIUM VIVAX* DIHYDROPTEROATE SYNTHASE

Vivian N. Hawkins[1], Stephanie Suzuki[1], Kanchana Rungsihirunrat[2], Hapuarachchige C. Hapuarachchi[3], Amanda Maestre[4], Kesara Na-Bangchang[5], Carol Hopkins Sibley[1]
[1]University of Washington, Seattle, WA, United States, [2]Chulalongkorn University, Bangkok, Thailand, [3]University of Kelaniya, Ragama, Sri Lanka, [4]Universidad de Antioquia, Medellín, Colombia, [5]Thammasat University, Pathumthanee, Thailand

594

PLASMODIUM FALCIPARUM HEME DETOXIFICATION PROTEIN (HDP) IS NOT LINKED TO CHLOROQUINE RESISTANCE GENOTYPE

Sumiti Vinayak[1], Dharmendar Rathore[2], Simon Kariuki[3], Laurence Slutsker[4], Ya Ping Shi[4], Leopoldo Villegas[5], Ananias Escalante[6], Venkatachalam Udhayakumar[7]
[1]Atlanta Research and Education Foundation, Atlanta, GA, United States; Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States, [2]Virginia Bioinformatics Institute, Virginia Tech, Blacksburg, VA, United States, [3]Center for Vector Biology and Control Research, Kenya Medical Research Institute, Kisumu, Kenya, [4]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States, [5]Asociación Civil Impacto Social, Tumeremo, Venezuela, [6]Arizona State University, Tempe, AZ, United States, [7]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Malaria Branch, Atlanta, GA, United States; Atlanta Research and Education Foundation, Atlanta, GA, United States

595

RANDOMIZED CONTROLLED CLINICAL TRIAL OF ARTESUNTE/MEFLOQUINE PAEDIATRIC FORMULATION *VERSUS* ARTEMETHER/LUMEFANTRINE FOR UNCOMPLICATED CHILDHOOD *FALCIPARUM* MALARIA IN IVORY COAST

Toure A. Offianan[1], Kouame G. Menan[1], Yapi J. Didier[1], Ako A. Aristide[1], Khali D. Djerea[2], Gomez G. Opportune[3], Penali K. Louis[1]
[1]Pasteur Institute, Abidjan, Cote d'Ivoire, [2]Anonkoua-koute Hospital, Abidjan, Cote d'Ivoire, [3]Anonkoua-koute hospital, Abidjan, Cote d'Ivoire

596

MOLECULAR GENOTYPING AND DRUG RESISTANCE ANALYSES OF *PLASMODIUM FALCIPARUM* RECURRENT PARASITEMIAS IN A CLINICAL TRIAL IN THE PERUVIAN AMAZON REGION

Christopher Delgado
Instituto de Medicina Tropical, Lima, Peru

(ACMCIP Abstract)

597

SELECTION OF *PLASMODIUM FALCIPARUM* MULTIDRUG RESISTANCE GENE 1 ALLELE IN ASEXUAL STAGES AND GAMETOCYTES BY ARTEMETHER-LUMEFANTRINE IN NIGERIAN CHILDREN WITH *FALCIPARUM* MALARIA

Onikepe A. Folarin[1], Christian T. Happi[1], Grace O. Gbotosho[1], Akin Sowunmi[1], Tunde Balogun[1], Dyann F. Wirth[2], A. M. Oduola[3]
[1]University Of Ibadan, Ibadan, Nigeria, Ibadan, Nigeria, [2]Harvard School of Public Health, Boston, MA, United States, [3]Special Programme for Research and Training in Tropical Diseases, WHO/TDR, Geneva, Switzerland

(ACMCIP Abstract)

598

SELECTION OF *P. FALCIPARUM* WITH DIMINISHED RESPONSE TO AMODIAQUINE FOLLOWING TREATMENT WITH COMBINATION THERAPY IN UGANDA

Fatima Nawaz[1], Samuel L. Nsobya[2], Moses Kiggundu[2], Moses Joloba[2], Bryan Greenhouse[3], Grant Dorsey[3], **Philip Rosenthal**[3]
[1]University of California, Berkeley, Berkeley, CA, United States, [2]Makerere University, Kampala, Uganda, [3]University of California, San Francisco, San Francisco, CA, United States

599

FAILURE OF ARTESUNATE-MEFLOQUINE COMBINATION THERAPY FOR UNCOMPLICATED *P. FALCIPARUM* MALARIA IN SOUTHERN CAMBODIA

William O. Rogers[1], **Rithy Sem**[2], D'thong Tero[3], Phektra Chim[4], Parath Lim[4], Sinuon Muth[2], Duong Socheat[2], Frederic Ariey[4], Chansuda Wongsrichanalai[1]
[1]Naval Medical Research Unit #2, Jakarta, Indonesia, [2]National Malaria Centre, Phnom Penh, Cambodia, [3]Ministry of Health, Phnom Penh, Cambodia, [4]Institut Pasteur du Cambodge, Phnom Penh, Cambodia

600

STABILITY OF PFMDR1 AMPLIFICATION IN *PLASMODIUM FALCIPARUM IN VITRO*

Nanhua Chen[1], Marina Chavchich[1], Jennifer Peters[2], Michelle Gatton[2], Dennis E. Kyle[3], **Qin Cheng**[1]
[1]Australian Army Malaria Institute, Brisbane, Australia, [2]Queensland Institute of Medical Research, Brisbane, Australia, [3]University of South Florida, Tampa, FL, United States

Malaria – Epidemiology

601

A DECLINING BURDEN OF MALARIA IN NORTHEASTERN TANZANIA

John P. Lusingu[1], Lasse Vestergaard[2], Bruno P. Mmbando[1], Samuel Gesase[1], Deus Ishengoma[1], Chris Drakeley[3], Pamela Magistrado[2], Andrew Y. Kitua[4], Martha M. Lemnge[1], Thor G. Theander[2], Thor G. Theander[2]
[1]National Institute for Medical Research, Tanga, United Republic of Tanzania, [2]University of Copenhagen, Copenhagen, Denmark, [3]London School of Tropical Medicine and Hygiene, London, United Kingdom, [4]National Institute for Medical Research, Dar es Salaam, United Republic of Tanzania

602

KNOWLEDGE AND UTILIZATION OF MALARIA PREVENTION STRATEGIES IN PREGNANCY IN TWO STATES OF INDIA

Blair J. Wylie[1], Neeru Singh[2], Ahmar H. Hashmi[3], Mrigendra P. Singh[2], Jordan Tuchman[3], Lora Sabin[3], Kojo Yeboah-Antwi[3], Mobassir Hussain[2], Camellia Banerjee[3], Aditya P. Dash[4], Davidson H. Hamer[3]
[1]Department of Obstetrics, Massachusetts General Hospital, Boston, MA, United States, [2]National Institute For Malaria Research Field Station, Jabalpur, India, [3]Center for International Health and Development, Boston, MA, United States, [4]National Institute For Malaria Research, Delhi, India

603

SPATIAL DISTRIBUTION AND TEMPORAL DYNAMICS OF CLINICAL MALARIA CASES IN A WESTERN KENYA HIGHLAND SITE

Yaw A. Afrane[1], Andrew Karanja Githeko[1], Guiyun Yan[2]
[1]Kenya Medical Research Institute, Kisumu, Kenya, [2]University of California at Irvine, Irvine, CA, United States

604

MICROSATELLITE ANALYSIS OF MULTIPLE-CLONE *PLASMODIUM VIVAX* INFECTIONS

Tatiana Havryliuk[1], Pamela Orjuela-Sánchez[2], Marcelo Urbano Ferreira[3]
[1]Mount Sinai School of Medicine, New York, NY, United States, [2]Institute of Biomedical Sciences, Unversity of Sao Paulo, Sao Paulo, Brazil, [3]Institute of Biomedical Sciences, University of Sao Paulo, Sao Paulo, Brazil

605

A COMMUNITY EFFECTIVENESS TRIAL ON STRATEGIES PROMOTING INTERMITTENT PREVENTIVE ANTIMALARIAL TREATMENT IN PREGNANT WOMEN IN RURAL BURKINA FASO

Sabine Gies[1], Sheick O. Coulibaly[2], Florence T. Ouattara[3], Clotilde Ky[4], Bernard J. Brabin[5], Umberto D'Alessandro[1]
[1]Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium, [2]UFR Sciences de la Santé, Université de Ouagadougou, Ouagadougou, Burkina Faso, [3]District Sanitaire Boromo, Boromo, Burkina Faso, [4]Laboratoire National de Santé Publique, Ouagadougou, Burkina Faso, [5]Child and Reproductive Health Group, Liverpool, United Kingdom

606

IMPROVING UPTAKE OF INTERMITTENT PREVENTIVE ANTIMALARIAL TREATMENT IN ANTENATAL CLINICS THROUGH COMMUNITY BASED PROMOTION IN RURAL BURKINA FASO: A HEALTH CENTRE RANDOMIZED TRIAL

Sabine Gies[1], Sheick O. Coulibaly[2], Clotilde Ky[3], Florence T. Ouattara[4], Bernard J. Brabin[5], Umberto D'Alessandro[1]
[1]Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium, [2]UFR Sciences de la Santé, Université de Ouagadougou, Ouagadougou, Burkina Faso, [3]Laboratoire National de Santé Publique, Ouagadougou, Burkina Faso, [4]District Sanitaire Boromo, Boromo, Burkina Faso, [5]Child and Reproductive Health Group, Liverpool, United Kingdom

607

PREVALENCE AND DISTRIBUTION OF *PLASMODIUM VIVAX* CIRCUMSPOROZOITE PROTEIN, VK210 AND VK247 VARIANTS, IN PAPUA NEW GUINEA

Cara N. Henry[1], Daphne Sepe[2], Melinda Suspau[2], David T. McNamara[1], Moses Bockarie[1], Christopher King[1], Peter A. Zimmerman[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Papua New Guinea Institute of Medical Research, Goroka, Papua New Guinea

608

EPIDEMIOLOGY OF MALARIA IN AN AREA PREPARED FOR CLINICAL TRIALS IN KOROGWE, NORTHEASTERN TANZANIA

Bruno P. Mmbando[1], Method D. Segeja[2], Hamis H. Msangeni[2], Samwel H. Sembuche[2], Deus Ishengoma[2], Seth Misago[2], Ezekiel Malecela[2], Rashid Madebe[2], Acleus Rutta[2], Mathias L. Kamugisha[2], Martha M. Lemnge[2]
[1]University of Copenhagen, Copenhagen, Denmark, [2]National Institute for Medical Research, Tanga Medical Research Centre, Tanzania, Tanga, United Republic of Tanzania

609

MAPPING THE NUMBER OF PREGNANT WOMEN AT RISK OF MALARIA GLOBALLY

Stephanie Dellicour[1], Feiko ter Kuile[1]
[1]Liverpool School of Tropical Medicine, Liverpool, United *Kingdom, [2]Department of Infectious Diseases, Tropical Medicine and AIDS, Academic Medical Centre, University of Amsterdam, Amsterdam, Netherlands*

610

PEDIATRIC MALARIA IN THE NATION'S CAPITAL AND VICINITY: CHILDREN'S NATIONAL MEDICAL CENTER 1999-2006

Patrick W. Hickey[1], Joseph Campos[2], Edward Wong[2], Nalini Singh[2]
[1]Uniformed Services University of the Health Sciences, Bethesda, MD, United States, [2]Children's National Medical Center, Washington, DC, United States

611

EVOLUTIONARY FITNESS OF MINORITY-VARIANT CHLOROQUINE-RESISTANT *PLASMODIUM FALCIPARUM* IN MADAGASCAR

Jonathan J. Juliano[1], Milijaona Randrianarivelojosia[2], Frederic Ariey[3], Steven R. Meshnick[1]
[1]University of North Carolina, Chapel Hill, NC, United States, [2]Institut Pasteur de Madagascar, Antananarivo, Madagascar, [3]Institut Pasteur de Cambodge, Phnom Penh, Cambodia

612

HOME MANAGEMENT OF MALARIA EPISODES AMONG THE UNDERFIVES PRIOR TO ACT IMPLEMENTATION IN AN URBAN SETTING

Dickson S. Nsagha
University of Buea, Buea, Cameroon

613

DETECTION OF MINORITY-VARIANT CHLOROQUINE-RESISTANT *PLASMODIUM FALCIPARUM* BY A NON-RADIOACTIVE HETERODUPLEX TRACKING ASSAY

Jonathan J. Juliano[1], Milijaona Randrianarivelojosia[2], Steven R. Meshnick[1]
[1]University of North Carolina, Chapel Hill, NC, United States, [2]Institut Pasteur de Madagascar, Antananarivo, Madagascar

614

DYNAMICS OF MALARIA PARASITE AND ANAEMIA PREVALENCE IN RURAL TANZANIA: COMMUNITY CROSS-SECTIONAL SURVEYS, 2001-2006

Rashid A. Khatib[1], Meredith L. McMorrow[2], Elizeus Kahigwa[1], Berty F. Elling[1], Peter B. Bloland[2], Salim M. Abdulla[1], S. Patrick Kachur[2]
[1]Ifakara Health Research and Development Centre, Dar-es-Salaam, United Republic of Tanzania, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

615

KENYAN POST-ELECTION VIOLENCE 2007-2008: USE OF A DEMOGRAPHIC SURVEILLANCE SYSTEM TO DOCUMENT THE DEMOGRAPHIC AND HEALTH BURDEN OF INTERNALLY DISPLACED PERSONS

Daniel Feikin[1], Kubaje Adazu[1], David Obor[1], Peter Ofware[1], John Vulule[2], Mary Hamel[1], Kayla Laserson[1]
[1]Centers for Disease Control and Prevention, Kisumu, Kenya, [2]Kenya Medical Research Institute, Kisumu, Kenya

616

A HOLISTIC VIEW OF THE LONG-TERM IMPACT OF MALARIA INTERVENTION STRATEGIES

Michelle L. Gatton[1], Qin Cheng[2]
[1]Queensland Institute of Medical Research, Brisbane, Australia, [2]Australian Army Malaria Institute, Brisbane, Australia

617

THE IMPACT OF ACCESS TO PRIMARY HEALTH CARE ON THE INCIDENCE OF CLINICAL MALARIA IN CHILDREN

Wendy P. O'Meara[1], Abdisalan Noor[2], Benjamin Tsofa[3], F. Ellis McKenzie[1], Kevin Marsh[4]
[1]Fogarty International Center, National Institutes of Health, Bethesda, MD, United States, [2]KEMRI/Wellcome Trust Collaborative Program, Nairobi, Kenya, [3]Ministry of Health, Kilifi, Kenya, [4]Kenya Medical Research Institute, CGMRC/Wellcome Trust Collaborative Program, Kilifi, Kenya

618

PATTERN OF CORD, PLACENTAL AND POST-DELIVERY MATERNAL MALARIA PARASITAEMIA IN CROSS RIVER STATE, NIGERIA

Chioma M. Oringanje, Martin M. Meremikwu
Institute of Tropical Disease, Research and Prevention, Calabar, Nigeria

619

BOTTLENECKS FOR HIGH COVERAGE OF INTERMITTENT PREVENTIVE TREATMENT IN PREGNANCY IN A RURAL AREA IN BURKINA FASO

Koen Peeters, S. Gies, S. O. Coulibaly, C. Ky, U. D'Alessandro
ITM, Antwerp, Belgium

Malaria – Immunology

620

ASSESSING THE CORRELATION BETWEEN GROWTH INHIBITION ACTIVITY AND MALARIA RISK IN A LONGITUDINAL STUDY IN MALI

Peter D. Crompton[1], Kazutoyo Miura[2], Boubacar Traore[3], Kassoum Kayentao[3], Aissata Ongoiba[3], Greta Weiss[1], Safiatou Doumbo[3], Didier Doumtabe[3], Younoussou Kone[3], Chiung-Yu Huang[4], Ogobara K. Doumbo[3], Louis H. Miller[2], Carole A. Long[5], Susan K. Pierce[1]
[1]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunogenetics, Bethesda, MD, United States, [2]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Malaria Vaccine Development Branch, Bethesda, MD, United States, [3]Malaria Research and Training Center, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [4]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Biostatistics Research Branch, Bethesda, MD, United States, [5]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Malaria and Vector Research, Bethesda, MD, United States

621

PROFILING PROTECTIVE HUMORAL IMMUNE RESPONSES TO *PLASMODIUM FALCIPARUM* BY PROTEIN MICROARRAY IN A LONGITUDINAL STUDY IN MALI

Peter D. Crompton[1], Matt Kayala[2], Boubacar Traore[3], Greta Weiss[1], Chad Burk[4], Kassoum Kayentao[3], Aissata Ongoiba[3], Safiatou Doumbo[3], Louis H. Miller[5], Ogobara K. Doumbo[3], Denise L. Doolan[6], Pierre Baldi[2], Philip L. Felgner[4], Susan K. Pierce[1]
[1]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunogenetics, Bethesda, MD, United States, [2]School of Information and Computer Sciences, Institute for Genomics and Bioinformatics, University of California, Irvine, CA, United States, [3]Malaria Research and Training Center, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [4]Department of Medicine, Division of Infectious Diseases, University of California, Irvine, CA, United States, [5]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Malaria Vaccine Development Branch, Bethesda, MD, United States, [6]Vaccine Immunology Laboratory, Queensland Institute of Medical Research, Brisbane, Australia

(ACMCIP Abstract)

622

THE MEMORY B CELL RESPONSE TO AMA1-C1/ ALHYDROGEL® VACCINATION IN SEMI-IMMUNE ADULTS IN MALI, WITH OR WITHOUT THE CPG 7909 OLIGODEOXYNUCLEOTIDE ADJUVANT

Boubacar Traore[1], Safiatou Doumbo[1], Didier Doumtabe[1], Younoussou Kone[1], Abdrahamane Traore[1], Marko Mircetic[2], Ruth D. Ellis[3], Laura B. Martin[3], Louis H. Miller[3], Peter D. Crompton[2], Susan K. Pierce[2], Ogobara K. Doumbo[1]
[1]Malaria Research and Training Center, Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [2]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunogenetics, Bethesda, MD, United States, [3]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Malaria Vaccine Development Branch, Bethesda, MD, United States

(ACMCIP Abstract)

623

VACCINATION WITH MSP142-C1/ALHYDROGEL® GENERATES ANTIGEN-SPECIFIC MEMORY B CELLS IN MALARIA-NAÏVE U.S. ADULTS AND THE CPG 7909 OLIGODEOXYNUCLEOTIDE ADJUVANT ENHANCES THIS RESPONSE

Marko Mircetic[1], Greta Weiss[1], Gregory E. Mullen[2], Laura B. Martin[2], Louis H. Miller[2], Susan K. Pierce[1], Peter D. Crompton[1]
[1]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunogenetics, Bethesda, MD, United States, [2]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Malaria Vaccine Development Branch, Bethesda, MD, United States

(ACMCIP Abstract)

624

SOME CHILDREN THAT LACK MEROZOITE SURFACE PROTEIN-1(MSP1) SECONDARY PROCESSING – INHIBITORY ANTIBODIES STILL POSSESS MSP1$_{19}$-SPECIFIC ERYTHROCYTE INVASION-INHIBITORY ANTIBODIES

Muyideen K. Tijani[1], Munira Grainger[2], Alex A. Odaibo[3], Chiaka I. Anumudu[4], Henrieta O. Awobode[3], Olajumoke A. Morenikeji[3], Yusuf Omosun[5], Christian M. Okafor[6], Josiane Ngoundou-Landji[1], Micheal C. Asuzu[7], Adanze Asinobi[8], Brendan S. Crabb[9], Holder A. Anthony[2], Roseangela I. Nwuba[4]
[1]Cellular Parasitology Programme, Department of Zoology, University of Ibadan, Ibadan, Nigeria, [2]Parasitology Unit, National Institute For Medical Research, London, United Kingdom, [3]Parasitology Unit, Department of Zoology, University of Ibadan, Ibadan, Nigeria, [4]Cellular Parasitology Programme, Department of Zoology, University of Ibadan, Ibadan, Nigeria, [5]Division of Parasitic Diseases, Center for Disease Control and Prevention, Atlanta, GA, United States, [6]Seattle Biomedical Research Institute, Seattle, WA, United States, [7]Department of Community Medicine, College of Medicine, University of Ibadan, Ibadan, Nigeria, [8]Department of Peadiatrics, University College Hospital, Ibadan, Nigeria, [9]Department of Microbiology and Immunology, The University of Melbourne, Melbourne, Australia

(ACMCIP Abstract)

625

TRANSPLACENTAL TRANSFER OF ANTIBODIES TO THE FETUS THAT COULD PROTECT INFANTS FROM MALARIA

Patrick T. Wilson[1], Peter Mungai[2], Indu Malhotra[2], Chris King[2], Arlene Dent[1]
[1]Rainbow Babies and Children's Hospital, Cleveland, OH, United States, [2]Case Western Center for Global Health and Diseases, Cleveland, OH, United States

(ACMCIP Abstract)

626

IMMUNOGLOBULIN G SUBTYPE RESPONSES TO UB05, A DOMINANT *PLASMODIUM FALCIPARUM* ANTIGEN BY INDIVIDUALS LIVING IN A HIGH TRANSMISSION ENDEMIC AREA OF THE CAMEROONIAN RAINFOREST

Anong D. Nota
University of Buea, Buea, Cameroon

(ACMCIP Abstract)

627

CYTOKINE PROFILE IN MURINE MODEL OF PREGNANCY-ASSOCIATED MALARIA

Rosette Megnekou[1], Trine Staalsoe[2], Lars Hviid[2]
[1]Faculty of Sciences and the Biotechnology Center, University of Yaounde I, Cameroon, Yaounde, Cameroon, [2]Center for Medical Parasitology, Department of International Health, University of Copenhagen, Copenhagen, Denmark

(ACMCIP Abstract)

628

IDENTIFY B-CELL EPITOPES IN DUFFY BINDING PROTEIN ASSOCIATE WITH PROTECTION *P. VIVAX* INVASION

Patchanee Chootong[1], Kelly M. VanBuskirk[1], Francis B. Ntumngia[1], Moses Biasor[2], Christopher L King[3], John H. Adams[1]
[1]Global Health Infectious Disease Research Program, University of South Florida, Tampa, FL, USA, [2]Papua New Guinea Institute for Medical Research, Madang, Papua New Guinea, [3]Division of Geographic Medicine, Case Western Reserve University, Cleveland, OH, USA

(ACMCIP Abstract)

629

MALARIA RECRUDESCENCE IN MICE PREGNANCY

Rita Neres[1], Claudio R. Marinho[1], Lígia A. Gonçalves[1], Manuela B. Catarino[2], Carlos Penha-Gonçalves[1]
[1]Instituto Gulbenkian de Ciencia, Oeiras, Portugal, [2]Faculdade de Farmácia, Universidade de Lisboa, Lisbon, Portugal

(ACMCIP Abstract)

630

IGG ANTIBODIES AGAINST MSP-1 (19-KDA) IN PATIENTS INFECTED WITH DIFFERENT *PLASMODIUM FALCIPARUM* GENOTYPES IN IQUITOS, PERU

Katherine Torres
Instituto de Medicina Tropical, Lima, Peru

(ACMCIP Abstract)

Malaria – Molecular Biology

631

MSP1 AND MSP2-BASED ESTIMATES OF GENETIC DIVERSITY IN *PLASMODIUM FALCIPARUM* FROM THE ARTIBONITE VALLEY OF HAITI, 2006-2007

Berlin L. Londono[1], Thomas Eisele[1], Joseph Keating[1], Adam Benett[1], Ian Rawson[2], Donald J. Krogstad[1]
[1]Tulane University, New Orleans, LA, United States, [2]Hôpital Albert Schweitzer, Deschapelles, Haiti

(ACMCIP Abstract)

632

DETERMINATION OF GENETIC DIVERSITY OF VACCINE CANDIDATE ANTIGENS IN *PLASMODIUM VIVAX* ISOLATES FROM THE AMAZON BASIN OF PERU

Stella M. Chenet[1], OraLee H. Branch[2], Carmen M. Lucas[1], Benjamin J. Espinosa[1], David J. Bacon[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]University of Alabama at Birmingham, Birmingham, AL, United States

633

GENETIC ANALYSIS OF THE DIHYDROFOLATE REDUCTASE-THYMIDYLATE SYNTHASE GENE FROM GEOGRAPHICALLY DIVERSE ISOLATES OF *PLASMODIUM MALARIAE*

Naowarat Tanomsing[1], Mallika Imwong[1], Sasithon Pukrittayakamee[1], Kesinee Chotivanich[1], Sornchai Looareesuwan[1], Mayfong Mayxay[2], Christiane Dolecek[3], Tran Tinh Hien[3], Virgilio E do Rosario[4], Ana Paula Arez[4], Pascal Michon[5], Georges Snounou[6], Nicholas J White[1,7], Nicholas P J Day[1,7]
[1]Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, [2]Wellcome Trust-Mahosot Hospital-Oxford Tropical Medicine Research Collaboration, Microbiology Laboratory, Mahosot Hospital, Vientiane, Lao PDR, [3]Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Ho Chi Minh City, Vietnam, [4]Centro de Malária e outras Doenças Tropicais, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, Rua da Junqueira, Lisboa, Portugal, [5]Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, [6]Parasitologie Comparée et Modèles Expérimentaux USM0307, Muséum National d'Histoire Naturelle, Paris, France, [7]Centre for Tropical Medicine, Nuffield Department of Clinical Medicine, University of Oxford, Oxford, United Kingdom

634

EXTENSIVE GENETIC DIVERSITY IN THE HUMAN MALARIA PARASITE *PLASMODIUM VIVAX*

Nadira D. Karunaweera[1], Marcelo U. Ferreira[2], John W. Barnwell[3], Anusha Munasinghe[4], Christopher King[5], Fumihiko Kawamoto[6], Daniel Hartl[7], Dyann F. Wirth[4]
[1]Faculty of Medicine, University of Colombo, Colombo, Sri Lanka, [2]University of Sao Paulo, Sao Paulo, Brazil, [3]Center for Disease Control, Atlanta, GA, United States, [4]School of Public Health, Harvard University, Boston, MA, United States, [5]Case Western Reserve University, Cleveland, OH, United States, [6]Oita University, Oita, Japan, [7]Harvard University, Boston, MA, United States

(ACMCIP Abstract)

635

SEQUENCE ANALYSIS OF THE CIRCUMSPOROZOITE PROTEIN GENE OF *PLASMODIUM FALCIPARUM* POPULATIONS IN THAILAND

Somchai Jongwutiwes[1], Thongchai Hongsrimuang[1], Kriengsak Limpitikul[2], Sunee Seethamchai[3], Chaturong Putaporntip[1]
[1]Department of Parasitology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, [2]Department of Tropical Pediatrics, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, [3]Department of Biology, Faculty of Science, Naresuan University, Pitsanulok, Thailand

(ACMCIP Abstract)

636

PROSPECTIVE IDENTIFICATION OF MALARIA PARASITE ANTIGEN GENES UNDER BALANCING SELECTION

Kevin K. Tetteh
London School of Hygiene and Tropical Medicine, London, United Kingdom

637

SEQUENCE DIVERSITY IN THE MEROZOITE SURFACE PROTEIN 1 GENE OF *PLASMODIUM VIVAX* AS INFERRED FROM 200 THAI ISOLATES

Chaturong Putaporntip[1], Tongchai Hongsrimuang[1], Pannatat Areekul[1], Sunee Seethamchai[2], Somchai Jongwutiwes[1]
[1]Department of Parasitology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, [2]Department of Biology, Faculty of Science, Naresuan University, Pitsanulok, Thailand

(ACMCIP Abstract)

638

***PFCRT* GENETIC MUTATIONS AS MARKERS OF CHLOROQUINE RESISTANCE AMONG SEVERE MALARIA PATIENTS IN GHANA**

Harry H. Abruquah
University Hospitals NHS Trust, University of Nottingham, Nottingham, United Kingdom

(ACMCIP Abstract)

639

GENETIC VARIATION AMONG *PLASMODIUM VIVAX* PRIMATE ISOLATES AND THE IMPLICATION FOR VACCINE DEVELOPMENT

Francis B. Ntumngia[1], Amy M. McHenry[2], John W. Barnwell[3], Jennifer Cole-Tobian[4], Christopher L. King[4], John H. Adams[1]
[1]Global Health Infectious Disease Research, University of South Florida, Tampa, FL, United States, [2]University of Notre Dame, Notre Dame, IN, United States, [3]Center for Disease Control and Prevention, Atlanta, GA, United States, [4]Center for Global Health and Disease at Case Western Reserve University School of Medicine, Cleveland, OH, United States

(ACMCIP Abstract)

640

VARIATION AT -607C/A IN THE IL-18 PROMOTER IS ASSOCIATED WITH PROTECTION AGAINST MALARIAL ANEMIA IN KENYAN CHILDREN

Samuel Anyona[1], Collins Ouma[1], Gregory Davenport[2], Tom Were[1], John Vulule[3], Jeremy Martinson[2], Robert Ferrell[2], John Michael Ong'echa[1], Douglas Perkins[4]
[1]University of New Mexico/KEMRI, Kisian, Kenya, [2]University of Pittsburgh, Pittsburgh, PA, United States, [3]KEMRI, Kisian, Kenya, [4]University of New Mexico, Albuquerque, NM, United States

(ACMCIP Abstract)

Malaria – Vaccines

641

ASSESSMENT OF THE ABILITY OF ANTIBODY REAGENTS WITH SPECIFICITY AGAINST VAR2CSA TO RECOGNIZE THE SURFACE OF INFECTED ERYTHROCYTES FROM PREGNANT WOMEN

Pamela A. Magistrado[1], Ali Salanti[1], Davis John[2], Nicaise G. Tuikue Ndam[3], Steven B. Mwakalinga[1], Mafalda Resende[1], Madeleine Dahlbäck[1], Martha Lemnge[4], Raimos Olomi[2], John Lusingu[4], Thor G. Theander[1], Morten A. Nielsen[1]
[1]Institute of International Health, Immunology and Microbiology, Copenhagen, Denmark, [2]Kilimanjaro Christian Medical Centre, Moshi, United Republic of Tanzania, [3]Institut de Recherche pour le Développement, Paris, France, [4]National Institute for Medical Research, Tanga, United Republic of Tanzania

(ACMCIP Abstract)

642

A PHASE 1 STUDY OF THE BLOOD STAGE MALARIA VACCINE CANDIDATE AMA1-C1/ALHYDROGEL WITH CPG 7909, USING TWO DIFFERENT FORMULATIONS AND DOSING INTERVALS

Ruth D. Ellis[1], Laura B. Martin[1], Mark Pierce[1], Kazutoyo Miura[1], Gregory E. Mullen[1], Michael P. Fay[1], Carole A. Long[1], Donna Shaffer[2], Allan Saul[1], Louis H. Miller[1], Anna P. Durbin[2]
[1]National Institutes of Health, Rockville, MD, United States, [2]Johns Hopkins Center for Immunization Research, Washington, DC, United States

643

EVALUATION OF HUMORAL AND CELLULAR RESPONSES INDUCED BY *P. BERGHEI* CELTOS ADMINISTERED BY RECOMBINANT PROTEIN AND GENE-GUN DELIVERY

Elke S. Bergmann-Leitner, Ryan M. Mease, Kari M. Laquer, Elizabeth H. Duncan, Tatiana Savranskaya, Jack L. Williams, Christian F. Ockenhouse, **Evelina Angov**
Walter Reed Army Institute of Research, Silver Spring, MD, United States

644

ADVANCED GENERATION ADENO-BASED VECTORS FOR MALARIA VACCINE DEVELOPMENT

Joseph T. Bruder[1], Ping Ping Chen[1], Elena Semenova[1], Charlie Thomas[1], Melissa Hamilton[1], Noelle B. Patterson[2], Maureen E. Stefaniak[2], Keith Limbach[2], Thomas L. Richie[2], Jason Gall[1], C. R. King[1], Duncan McVey[1], Denise L. Doolan[2]
[1]GenVec, Gaithersburg, MD, United States, [2]United States Military Malaria Program, Silver Spring, MD, United States

645

COMPARATIVE ANALYSIS OF MALARIA VACCINE CANDIDATE AMA1-C1/ALHYDROGEL WITH THE ADDITION OF UNIQUE CPG SEQUENCES

Kelly M. Rausch, Bhanumati Ramineni, Lynn Lambert, Kazutoyo Miura, Emma K. Barnafo, Carole A. Long, Louis H. Miller, Laura B. Martin
National Institutes of Health, Rockville, MD, United States

646

MULTI-FUNCTIONAL T-CELL RESPONSES INDUCED BY THE AS01 OR AS02 ADJUVANTED MALARIA VACCINE CANDIDATE APICAL MEMBRANE ANTIGEN-1 (AMA-1) ADMINISTERED TO MALARIA-NAÏVE ADULTS

Shannon McGrath[1], James Cummings[1], Mark Kortepeter[2], Robin Nielsen[1], Ev Tierney[3], Lisa Ware[1], Opokua Ofori-Anyinam[4], Sheetij Dutta[1], David Lanar[1], Martha Sedegah[1], Kent Kester[5], Elissa Malkin[3], Carter Diggs[6], Lorraine Soisson[6], Marie-Claude Dubois[4], Ripley Ballou[7], Joe Cohen[4], Urszula Krzych[1], Chris Ockenhouse[1], Gray Heppner[1], Michele Spring[1]
[1]U.S. Military Malaria Vaccine Program, Silver Spring, MD, United States, [2]U.S. Army Medical Research Institute for Infectious Diseases, Ft. Detrick, MD, United States, [3]PATH Malaria Vaccine Initiative, Bethesda, MD, United States, [4]GlaxoSmithKline Biologicals, Rixensart, Belgium, [5]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [6]U.S. Agency for International Development, Washington, DC, United States, [7]Bill and Melinda Gates Foundation, Seattle, WA, United States

647

PHASE 1A OPEN-LABEL DOSE ESCALATION STUDY TO EVALUATE THE SAFETY, REACTOGENICITY, AND IMMUNOGENICITY OF THE CANDIDATE *PLASMODIUM FALCIPARUM* MEROZOITE SURFACE PROTEIN-1 ($MSP\text{-}1_{42}$) ADMINISTERED INTRAMUSCULARLY WITH GSK BIOLOGICALS' ADJUVANT SYSTEM AS01B IN HEALTHY MALARIA-NAÏVE ADULTS

Michele Spring[1], Elke Bergmann-Leitner[1], Cummings James[1], Brent House[1], Urszula Krzych[1], Donna Tosh[1], Lori Miller[2], Lisa Ware[1], Olivier Godeaux[3], Marie-Claude Dubois[3], Jeffrey Lyons[2], Ripley Ballou[4], Lorraine Soisson[5], Carter Diggs[5], Joe Cohen[3], Gray Heppner[1], Chris Ockenhouse[1], Evelina Angov[1]
[1]U.S. Military Malaria Vaccine Program, Silver Spring, MD, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [3]GlaxoSmithKline Biologicals, Rixensart, Belgium, [4]Bill and Melinda Gates Foundation, Seattle, WA, United States, [5]US Agency for International Development, Washington, DC, United States

(ACMCIP Abstract)

648

ADJUVANT AND CARRIER EFFECT OF SELF-ASSEMBLING POLYPEPTIDE NANOPARTICLES (SAPN)

Clara Brando
Walter Reed Army Institute of Research, Silver Spring, MD, United States

649

RECOMBINANT PVS230C SPECIFICALLY RECOGNIZES GAMETE STAGE PARASITES OF *PLASMODIUM VIVAX* AND MAY BE USED TO DETECT ANTIBODIES IN HUMAN SERUM, BUT DOES NOT BLOCK OOCYST DEVELOPMENT IN EXPERIMENTAL MOSQUITO INFECTION

Victor Neyra
Instituto de Medicina Tropical, Lima, Peru

(ACMCIP Abstract)

650

IMMUNOGENICITY STUDIES OF *PLASMODIUM VIVAX* MALARIA VACCINE CANDIDATES BASED ON RECOMBINANT MODULAR CHIMERAS

Balwan Singh, Monica Cabrera-Mora, Jianlin Jiang, **Alberto Moreno**
Emory Vaccine Center at Yerkes National Primate Research Center, Atlanta, GA, United States

651

STABILITY OF *PLASMODIUM FALCIPARUM* MSP 1-19 HAPLOTYPES INFECTING KENYAN CHILDREN IN TWO REGIONS

Kee Thai Yeo[1], Christopher Yohn[2], Rhonda Kimmel[2], Peter Mungai[2], John Vulule[3], Indu Malhotra[2], Christopher King[2], Ann Moormann[2], James Kazura[2], Arlene Dent[1]
[1]Rainbow Babies & Children's Hospital, Cleveland, OH, United States, [2]Center for Global Health and Diseases, Case Western Reserve University, Cleveland, OH, United States, [3]Kenya Medical Research Institute, Kisumu, Kenya

(ACMCIP Abstract)

652

ANTI-APICAL MEMBRANE ANTIGEN 1 IGG IS MORE EFFECTIVE IN INHIBITING *PLASMODIUM FALCIPARUM* GROWTH AS MEASURED BY *IN VITRO* GROWTH INHIBITION ASSAY THAN ANTI-MEROZOITE SURFACE PROTEIN 1 42 IGG

Kazutoyo Miura[1], Hong Zhou[2], Ababacar Diouf[2], Samuel E. Moretz[2], Louis H. Miller[1], Laura B. Martin[1], Gregory E. Mullen[1], Carole A. Long[2]
[1]Malaria Vaccine Development Branch/NIAID/National Institutes of Health, Rockville, MD, United States, [2]Laboratory of Malaria and Vector Research/NIAID/National Institutes of Health, Rockville, MD, United States

(ACMCIP Abstract)

653

THE STATUS OF THE PFMSP3 N-TERMINUS AS A VACCINE CANDIDATE: CROSS-REACTIVE ANTIBODIES IN HYPOENDEMIC TRANSMISSION

Stephen J. Jordan, Oralee H. Branch, Julian C. Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

(ACMCIP Abstract)

Mosquitoes – Biochemistry and Molecular Biology

654

POLYMORPHISM OF *AEDES AEGYPTI* DEFENSIN A GENE

Tereza Magalhaes[1], Ieda F. Oliveira[1], Karen L. Haag[2], Constancia F. Ayres[1]
[1]Centro de Pesquisas Aggeu Magalhães/FIOCRUZ, Recife-PE, Brazil, [2]Universidade Federal do Rio Grande do Sul, Porto Alegre-RS, Brazil

655

TRANSCRIPTION PROFILING OF FAT METABOLISM GENES IN DIAPAUSING *CULEX PIPIENS*

Cheolho Sim, David L. Denlinger
The Ohio State University, Columbus, OH, United States

656

ENERGY METABOLISM IN DIAPAUSING CULEX PIPIENS MOSQUITOES

Guoli Zhou, Roger L. Miesfeld
University of Arizona, Tucson, AZ, United States

657

REGULATION AND FUNCTION OF MIDGUT PROTEASE GENES IN *AEDES AEGYPTI* MOSQUITOES

Brianna Kolody, Susan Kunz, Jun Isoe, Roger L. Miesfeld
University of Arizona, Tucson, AZ, United States

658

REGULATION OF FATTY ACID METABOLISM IN *AEDES AEGYPTI* MOSQUITOES

Amy Alabaster, Jorge Zamora, Roger L. Miesfeld
University of Arizona, Tucson, AZ, United States

659

POSSIBLE INVOLVEMENT OF AGSGS PROTEINS DURING INVASION OF ANOPHELES SALIVARY GLANDS BY PLASMODIUM SPOROZOITES

Jonas G. King, Julián F. Hillyer
Vanderbilt University, Nashville, TN, United States

660

BINDING OF THE CRY4B TOXIN OF *BACILLUS THURINGIENSIS* SUBSP. *ISRAELENSIS* TO THE CADHERIN RECEPTOR OF *ANOPHELES GAMBIAE* MEDIATES CELL DEATH

Mohamed Ibrahim, Natalya Griko, Xuebin Zhang, Jian Sun, Lee Bulla
Biological Targets, Inc., Pilot Point, TX, United States

661

GLYCOCONJUGATE ANALYSIS IN *ANOPHELES GAMBIAE*

Paul J. Linser, Marco V. Neira Oviedo, Kristin E. Smith
University of Florida Whitney Laboratory, Saint Augustine, FL, United States

662

THE RELATIONSHIP BETWEEN VITELLOGENIN EXPRESSION AND AUTOGENY IN *CULEX TARSALIS*

Katie Provost-Javier, Jason Rasgon
Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States

663

CHARACTERIZATION OF IMMUNE PEPTIDES IN RESPONSE TO FILARIAL WORM INFECTION IN THE MOSQUITO, *ARMIGERES SUBALBATUS*

Matthew T. Aliota, Jeremy F. Fuchs, Thomas A. Rocheleau, Bruce M. Christensen
University of Wisconsin, Madison, WI, United States

664

EX VIVO PROMOTER ANALYSIS OF *ANOPHELES GAMBIAE* HEAT SHOCK COGNATE (HSC70) GENE DURING O'NYONG-NYONG VIRUS INFECTION

Seokyoung Kang[1], Brian D. Byrd[2], Cheolho Sim[3], Frank H. Collins[4], Young S. Hong[1]
[1]Tulane University, New Orleans, LA, United States, [2]Western Carolina University, Cullowhee, NC, United States, [3]Ohio State University, Columbus, OH, United States, [4]University of Notre Dame, Notre Dame, IN, United States

(ACMCIP Abstract)

665

BLOODMEAL ANALYSIS OF *CULEX* SPECIES IN CENTRAL ILLINOIS

Nina M. Krasavin
University of Illinois, Champaign, IL, United States

666

SELECTION OF A PEPTIDE INHIBITOR OF WEST NILE VIRUS INFECTIVITY FROM A PHAGE DISPLAY LIBRARY

Young S. Hong[1], Seokyoung Kang[1], Brian D. Byrd[2]
[1]Tulane University, New Orleans, LA, United States, [2]Western Carolina University, Cullowhee, NC, United States

(ACMCIP Abstract)

667

COMPARATIVE GENOMICS OF ANTI-VIRAL RNA INTERFERENCE PATHWAYS IN MOSQUITOES

Corey L. Campbell, Ann M. Hess, William C. Black, IV, Brian D. Foy
Colorado State University, Fort Collins, CO, United States

(ACMCIP Abstract)

668

CHARACTERIZATION OF PI3K AND ITS REPRODUCTIVE ROLE IN THE MOSQUITO *AEDES AEGYPTI*

Michael A. Riehle[1], Benjamin M. Pri-Tal[2]
[1]University of Arizona, Tucson, AZ, United States, [2]Portland State University, Portland, OR, United States

669

THE AGING MOSQUITO: INCREASED INSULIN SIGNALING IN THE MIDGUT OF *AN. STEPHENSI* REDUCES LIFESPAN

Laurel Watkins de Jong, Michael Riehle
University of Arizona, Tucson, AZ, United States

670

GENE EXPRESSION IN ADULT MOSQUITOES DURING POST-EMERGENCE DEVELOPMENT

Jinsong Zhu, Jeff Busche, Xing Zhang
Virginia Tech, Blacksburg, VA, United States

Mosquitoes – Molecular Genetics

671

DEVELOPMENT OF A MULTIPLEXED PCR DIAGNOSTIC TO IDENTIFY COMMON MEMBERS OF THE SUBGENERA *CULEX (CULEX)* AND *CULEX (PHENACOMYIA)* IN GUATEMALA

Rebekah J. Kent, Stephen Aspen, Martin Williams, Harry Savage
Centers for Disease Control and Prevention, Fort Collins, CO, United States

672

THE POPULATION GENETIC STRUCTURE OF A*NOPHELES GAMBIAE* IN KENYA

Janet T. Midega[1], Charles M. Mbogo[1], Guiyun Yan[2], John I. Githure[3], John Beier[4]
[1]Kenya Medical Research Institute, Kilifi, Kenya, [2]University of California, Irvine, CA, United States, [3]International Centre for Insect Physiology and Ecology, Nairobi, Kenya, [4]University of Miami, Miami, FL, United States

673

GENE FLOW OF *AEDES AEGYPTI* IN URBAN REGIONS BASED ON THE USE OF NEW MICROSATELLITE MARKERS

Paulo R. Melo[1], Luciano K. Silva[1], Gilmar J. Ribeiro[1], Carlos G. Santos[1], Ronald E. Blanton[2], Mitermayer G. Reis[1]
[1]Oswaldo Cruz Foundation, Salvador, Brazil, [2]Case Western Reserve University, Cleveland, OH, United States

674

EVOLUTIONARY PLASTICITY OF THE MALARIA MOSQUITO GENOME

Ai Xia, Maria V. Sharakhova, Zhijian Tu, Igor V. Sharakhov
Virginia Tech, Blacksburg, VA, United States

675

HIGH-RESOLUTION CYTOGENETIC PHOTOMAP FOR THE MAJOR MALARIA VECTOR *ANOPHELES GAMBIAE*

Phillip George, Maria V. Sharakhova, Igor V. Sharakhov
Virginia Tech, Blacksburg, VA, United States

676

GENETIC STRUCTURE IN THE ARBOVIRAL VECTOR *CX. TARSALIS*: A SPATIAL ANALYSIS OF POPULATION DIFFERENTIATION ACROSS THE WESTERN UNITED STATES

Meera Venkatesan, Jason L. Rasgon
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

677

RECONSTRUCTING ANCESTRAL CHROMOSOMAL ARRANGEMENTS IN THE *ANOPHELES GAMBIAE* COMPLEX

Igor V. Sharakhov, Ai Xia, Maria V. Sharakhova
Virginia Tech, Blacksburg, VA, United States

678

STRUCTURAL ORGANIZATION OF THE MALARIA MOSQUITO HETEROCHROMATIN

Maria V. Sharakhova[1], Irina V. Brusentsova[2], Zhijian Tu[1], Igor V. Sharakhov[1]
[1]Virginia Tech, Blacksburg, VA, United States, [2]Institute of Cytology and Genetics, Novosibirsk, Russian Federation

679

CONTRASTING PATTERNS OF EVOLUTION IN FIVE CHROMOSOMAL INVERSIONS OF *ANOPHELES GAMBIAE*

Bradley J. White[1], Changde Cheng[1], Matthew W. Hahn[2], Marcia Kern[1], Marco Pombi[3], Neil F. Lobo[1], Mamadou Coulibaly[1], Frederic Simard[4], Nora J. Besansky[1]
[1]University of Notre Dame, Notre Dame, IN, United States, [2]University of Indiana, Bloomington, IN, United States, [3]University of Rome "La Sapienza", Rome, Italy, [4]IRD/OCEAC, Yaounde, Cameroon

680

DEMOGRAPHIC HISTORY AND MICRO-GEOGRAPHIC POPULATION GENETICS OF *ANOPHELES ALBIMANUS* IN CENTRAL AMERICA BASED ON MITOCHONDRIAL DNA *CO1* AND *CYT B* SEQUENCES

Jose R. Loaiza
Wadsworth Center, Albany, NY, United States

681

CHROMOSOMAL PLASTICITY AND EVOLUTIONARY POTENTIAL IN THE MALARIA VECTOR *ANOPHELES GAMBIAE* SENSU STRICTO: INSIGHTS FROM THREE DECADES OF RARE PARACENTRIC INVERSIONS

Marco Pombi[1], Beniamino Caputo[1], Carlo Costantini[2], Maria Angela Di Deco[1], Mario Coluzzi[1], Alessandra della Torre[1], Frederic Simard[3], Nora J. Besansky[4], Vincenzo Petrarca[5]
[1]Dip. Scienze di Sanità Pubblica, Università Sapienza, Rome, Italy, [2]Institut de Recherche pour le Développement, UR016, and Organisation de Coordination pour la lutte contre les Endémies en Afrique Centrale, Yaoundé, Cameroon, [3]Institut de Recherche pour le Développement, UR016, and Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, [4]Centre for Tropical Disease Research and Training, Dep. of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States, [5]Dip. Genetica e Biologia Molecolare, Università Sapienza, Rome, Italy

Mosquitoes – Vector Biology – Epidemiology

682

WHAT IS THE IMPACT OF ARBOVIRAL INFECTION ON VECTOR LONGEVITY?

Louis Lambrechts, Thomas W. Scott
University of California, Davis, CA, United States

683

THE EVOLUTION OF ANTI-MALARIAL IMMUNE GENES IN THE *ANOPHELES GAMBIAE* COMPLEX

Michel A. Slotman[1], Aristeidis Parmakelis[2], Nikolas Poulakakis[3], Kirstin B. Dion[1], Jonathon C. Marshall[4], Christophe Antonio-Nkondjio[5], Parfait H. Awono-Ambene[5], Frederic Simard[6], Adalgisa Caccone[1], Jeffrey R. Powell[1]
[1]Yale University, New Haven, CT, United States, [2]University of Athens, Athens, Greece, [3]University of Crete, Heraklion, Greece, [4]Southern Utah University, Cedar City, UT, United States, [5]Organisation de Coordination pour la Lutte Contre les Endemies en Afrique Centrale, Yaounde, Cameroon, [6]Institute de Recherche pour le Development, Ouagadougou, Burkina Faso

684

ASSOCIATIONS BETWEEN URBAN STRUCTURE AND *AEDES AEGYPTI* LARVAL HABITATS IN PUNTARENAS, COSTA RICA

Adriana Troyo[1], Kristopher L. Arheart[2], Douglas O. Fuller[2], Olger Calderon-Arguedas[1], John C. Beier[2]
[1]Universidad de Costa Rica, San Jose, Costa Rica, [2]University of Miami, Miami, FL, United States

685

SURPRISES IN THE CLIMATE-MALARIA LINK IN THE AMAZON

Sarah H. Olson[1], Ronald Gangnon[1], Eric Elguero[2], Laurent Durieux[3], Jean-François Guégan[2], Jonathan A. Foley[1], Jonathan A. Patz[1]
[1]University of Wisconsin Madison, Madison, WI, United States, [2]IRD/CNRS/Montpellier University, Montpellier, France, [3]Institut de Recherche pour le Développement, Brasilia, Brazil

686

EVALUATION OF A PCR-RFLP METHOD FOR IDENTIFICATION OF ANOPHELINE SPECIES FROM THE PACIFIC AND ATLANTIC COASTS OF COLOMBIA

Astrid V. Cienfuegos[1], Doris A. Rosero[1], Luz M. Jaramillo[1], Lina A. Gutiérrez[1], Shirley Luckhart[2], Jan E. Conn[3], Margarita M. Correa[1]
[1]Grupo de Microbiologia Molecular, Escuela de Microbiologia, Universidad de Antioquia, Medellin, Colombia, [2]Department of Medical Microbiology and Immunology, University of California, Davis, CA, United States, [3]Griffin Laboratory, Wadsworth Center, New York State Department of Health, Albany, NY, United States

687

EVALUATING THE IMPACT OF ENVIRONMENTAL VARIABLES ON THE TRANSMISSION OF AMERICA CUTANEOUS LEISHMANIASIS IN RURAL COLOMBIA

Carlos Valderrama-A[1], Neal Alexander[2], Clara B. Ocampo[2], Cristina Ferro[3], Horacio Cadena[2], Dairo Marin[2], Theodore Holford[4], Leonard Munstermann[4]
[1]Universidad ICESI, Cali, Valle, Colombia, [2]CIDEIM, Cali, Valle, Colombia, [3]Instituto Nacional de Salud, Bogota, Colombia, [4]Yale University, New Haven, CT, United States

688

SPATIAL DISTRIBUTION OF MOSQUITO LARVAE AND THE POTENTIAL FOR TARGETED LARVAL CONTROL IN THE GAMBIA

Silas Majambere, Ulrike Fillinger, David Sayer, Clare Green, Steve W. Lindsay
Durham University, Durham City, United Kingdom

689

HABITAT SEGREGATION AND CHARACTERIZATION OF *ANOPHELES* LARVAE IN LOWLAND WESTERN KENYA

Francis Mutuku[1], Nabie M. Bayoh[1], Allen W. Hightower[2], John M. Vulule[1], Jones M. Mueke[3], John E. Gimnig[4], Edward D. Walker[5]
[1]Kenya Medical Research Institute, Kisumu, Kenya, [2]Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, [3]Kenyatta University, Nairobi, Kenya, [4]Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [5]Department of Microbiology and Molecular Genetics, Michigan State University, East Lansing, MI, United States

690

LAND COVER ASSOCIATIONS OF IMMATURE *ANOPHELES* HABITATS IN A WESTERN KENYA LOWLAND ENDEMIC FOR MALARIA

Francis Mutuku[1], Nabie M. Bayoh[2], Allen W. Hightower[2], John M. Vulule[1], Jones M. Mueke[3], John E. Gimnig[4], Edward D. Walker[5]
[1]Kenya Medical Research Institute, Kisumu, Kenya, [2]Centers for Disease Control and Prevention/Kenya Medical Research Institute, Kisumu, Kenya, [3]Kenyatta University, Nairobi, Kenya, [4]Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [5]Department of Microbiology and Molecular Genetics, Michigan State University, East Lansing, MI, United States

691

ROLE OF A SERINE PROTEASE FROM *A. GAMBIAE* IN *PLASMODIUM* DEVELOPMENT

Janneth Rodrigues, Ekua Abban, Corrie Ortega, Alvaro Molina-Cruz, Carolina Barillas Mury
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

692

EFFECTS OF WEST NILE VIRUS DOSE ON SPATIOTEMPORAL MIDGUT INFECTION PATTERNS IN *CULEX PIPIENS QUINQUEFASCIATUS* SAY (DIPTERA: CULICIDAE)

Sheri L. Anderson, Chelsea T. Smartt, Walter J. Tabachnick, Stephanie L. Richards
University of Florida, Vero Beach, FL, United States

693

HIGH RATES OF FEEDING ON HUMANS IN THE GENERALIST BITER *AEDES ALBOPICTUS* IN ROME (ITALY)

Laura Valerio[1], Francesca Marini[1], Gioia Bongiorno[2], Luca Facchinelli[1], Marco Pombi[1], Beniamino Caputo[1], Michele Maroli[2], **Alessandra della Torre**[1]
[1]Dip. Scienze di Sanità Pubblica, Università Sapienza, Rome, Italy, [2]Section of Vector-Borne Diseases and International Health, MIPI Department, Istituto Superiore di Sanità, Rome, Italy

694

FREQUENCY OF MULTIPLE HUMAN BLOODMEALS TAKEN BY *ANOPHELES ARABIENSIS* MOSQUITOES IN MACHA, ZAMBIA

Laura C. Norris, Fernando J. Pineda, Douglas E. Norris
Johns Hopkins School of Public Health, Baltimore, MD, United States

695

CHARACTERIZATION OF WATER-HOLDING CONTAINERS AS MOSQUITO-HABITATS, AND DENGUE-PREVENTION COMMUNITY EDUCATION IN RURAL ECUADORIAN COMMUNITIES

Mauricio Lascano[1], Christine Leistner[2], Abbey Wojno[3], Margaret Romoser[3], David Dohm[4], Richard Trudel[5], Christa Tomc[6], **William S. Romoser**[1]
[1]Tropical Disease Institute, Biomedical Sciences, College of Osteopathic Medicine, Ohio University, Athens, OH, United States, [2]International Development Studies, Ohio University, Athens, OH, United States, [3]Communication Studies, Scripps College of Communication, Ohio University, Athens, OH, United States, [4]U.S. Army Medical Research Institute of Infectious Diseases, Frederick, MD, United States, [5]Société de protection des forêts contre les insectes et maladies (SOPFIM), Quebec, QC, Canada, [6]College of Osteopathic Medicine, Ohio University, Athens, OH, United States

696

MICROFILARIAL UPTAKE AND PENETRATION OF THE MIDGUT AMONG DIFFERENT MOSQUITO SPECIES FED SIMULTANEOUSLY ON THE SAME MICROFILAREMIC HOST

Jefferson A. Vaughan[1], Joseph O. Mehus[1], Jeffrey A. Bell[1], Michael J. Turell[2]
[1]University of North Dakota, Grand Forks, ND, United States, [2]U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States

697

MODELING WEST NILE VIRUS TRANSMISSION AMONG BIRDS IN CONNECTICUT

Jennifer E. Simpson[1], Alison Galvani[1], Jan Medlock[1], Goudarz Molaei[2], Theodore Andreadis[2], Maria Diuk-Wasser[1]
[1]Yale University, New Haven, CT, United States, [2]The Connecticut Agricultural Experiment Station, New Haven, CT, United States

698

VECTOR INCRIMINATION IN A HIGHLY ENDEMIC MALARIA LOCALITY OF CÓRDOBA, COLOMBIA

Lina A. Gutiérrez[1], Martha I. Castro[2], John J. González[3], Giovan F. Gomez[1], Jan E. Conn[4], Shirley Luckhart[5], **Margarita M. Correa**[1]
[1]Grupo de Microbiologia Molecular, Escuela de Microbiologia, Universidad de Antioquia, Medellin, Colombia, [2]Grupo de Biodiversidad, Universidad de Córdoba, Monteria, Colombia, [3]Unidad de Entomología, Laboratorio de Salud Pública, Departamento de Córdoba, Monteria, Colombia, [4]Griffin Laboratory, Wadsworth Center, New York State Department of Health, Albany, NY, United States, [5]Department of Medical Microbiology and Immunology, University of California, Davis, CA, United States

699

FLUCTUATION IN WATER LEVEL OF LAKE VICTORIA AFFECTS ABUNDANCE OF *ANOPHELES FUNESTUS*

Noboru Minakawa[1], Kyoko Futami[1], Satoshi Kaneko[1], George Sonye[2], Gabriel O. Dida[3]
[1]Nagasaki University, Nagasaki, Japan, [2]International Centre for Insect Physiology and Ecology, Mbita, Kenya, [3]Maseno University, Maseno, Kenya

Pneumonia, Respiratory Infections and Tuberculosis

700

ADENOVIRUS 21 OUTBREAK AT THE COAST GUARD TRAINING CENTER IN CAPE MAY, NEW JERSEY

Theodore R. Brown[1], Luis J. Martinez[2], Joseph K. Llanos[1], Julia A. Lynch[2], Rodney L. Coldren[3]
[1]Uniformed Services University of the Health Sciences, Bethesda, MD, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [3]United States Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, MD, United States

701

VENTRICULAR DYSFUNCTION IN A PROBABLE MYOCARDIAL TUBERCULOSIS PEDIATRIC CASE

Antoni Soriano Arandes, Esther Guirado Sayago, Olga Calavia Garsaball, Laia Call Ramon, Ester Castellarnau Figueras, Juan Carretero Bellón
Hospital Universitari Joan XXIII, Tarragona, Spain

702

MYCOBACTEREMIA IN RURAL THAILAND: INVASIVE SPECIES AND ANTIBIOTIC SUSCEPTIBILITY WITHIN AN IMMUNOCOMPROMISED POPULATION

Possawat Jorakate[1], Somkid Yoonprakhon[2], Pokasem Sirinarm[2], Somsak Rienthong[3], Sathapana Naorat[1], Sirirat Makprasert[1], Jeeranun Areerob[1], Charnchai Thipsuk[1], Warunyu Phordee[1], Leonard Peruski[4]
[1]International Emerging Infections Program, Sa Kaeo, Thailand, [2]Crown Prince Hospital, Ministry of Public Health, Sa Kaeo, Thailand, [3]National Tuberculosis Reference Laboratory, Bangkok, Thailand, [4]International Emerging Infections Program, Nonthaburi (Bangkok), Thailand

703

EVIDENCE OF PRIMARY MDR RESISTANCE AMONG TUBERCULOSIS CASES IN PAPUA NEW GUINEA

Suparat Phuanukoonnon[1], Dagwin Luang Suarkia[1], Lisol Nirai Luke[1], Ivo Mueller[1], Jethro Usurup[2], Robyn Carter[3], Christopher M. Gilpin[3], Christopher Coulter[3], James McCarthy[4], Peter Max Siba[1]
[1]PNG Institute of Medical Research, Goroka, Papua New Guinea, [2]Modilon Hospital, Madang, Papua New Guinea, [3]Mycobacterium Reference Laboratory, Brisbane, Australia, [4]Queensland Institute of Medical Research, Brisbane, Australia

704

HIGH FREQUENCY OF ANTIBIOTIC RESISTANCE IN NASOPHARYNGEAL CARRIERS OF *STREPTOCOCCUS PNEUMONIAE* IN CHILDREN YOUNGER THAN 2 YEARS OF AGE IN LIMA, PERU

Jackeline Pando[1], Gertrudiz Horna[2], Lidia Mejia[2], Roger Hernandez[3], Maria Esther Castillo[4], Wilda Silva[5], Francisco Campos[6], Theresa Ochoa[7]
[1]Royal Collge of Physicians of Ireland, Dublin, Ireland, [2]Universidad Peruana Cayetano Heredia, Lima, Peru, [3]Hospital Cayetano Heredia, Lima, Peru, [4]Instituto de Salud del Niño, Lima, Peru, [5]Hospital Edgardo Rebagliati-Essalud, Lima, Peru, [6]Hospital San Bartolome, Lima, Peru, [7]Universidad Cayetano Heredia, Lima, Peru

705

RESPIRATORY VIRUSES IN A PROSPECTIVE COMMUNITY-BASED PEDIATRIC COHORT IN NICARAGUA

Aubree Gordon[1], Saira Saborío[2], Guillermina Kuan[3], Elsa Videa[4], Nathan Yozwiak[5], Oscar Ortega[4], Miguel Reyes[3], Arthur Reingold[6], Angel Balmaseda[2], Eva Harris[1]
[1]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, [2]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua, [3]Socrates Flores Vivas Health Center, Managua, Nicaragua, [4]Sustainable Sciences Institute, Managua, Nicaragua, [5]University of California, San Francisco, San Francisco, CA, United States, [6]Division of Epidemiology, School of Public Health, University of California, Berkeley, Berkeley, CA, United States

706

A FAST THERAPEUTIC EFFICACY ASSAY WHICH DISCRIMINATES CIDAL AND STATIC ANTITUBERCULAR COMPOUNDS AGAINST *MYCOBACTERIUM TUBERCULOSIS* GROWING EXPONENTIALLY IN THE LUNGS OF MICE

Joaquín Rullas, Juan García, Manuela Beltrán, Domingo Gargallo-Viola, Iñigo Angulo-Barturen
GlaxoSmithKline, Tres Cantos, Spain

(ACMCIP Abstract)

707

TUBERCULOSIS PRESENTING AS A CARCINOID TUMOR

Hemavarna Tiruvury, Deborah Asnis, Nageswara Mandava
Flushing Hospital Medical Center, Flushing, NY, United States

708

H5N1 SURVEILLANCE IN RESIDENT, CAPTIVE, AND MIGRATORY BIRDS IN JAVA, INDONESIA

K. A. Barbara[1], M. Indrawan[2], B. Wicaksana[1], S. Wijaya[1], A. Farzelli[1], U. Antonjaya[1], L. W. Sien[3], A. Maruli[3], N. Hidayatullah[3], S. Purnama[3], I. Kristanto[3], I. N. Ibrahim[4], T. H. Burgess[1], M. Williams[1], S. Tobias[1], C. A. Stoops[5], P. J. Blair[1]
[1]U.S. Naval Medical Research Unit No. 2, Jakarta, Indonesia, [2]IdOU – Indonesian Ornithologists' Union, PILI – Pusat Informasi Lingkungan hidup Indonesia, Bogor, Indonesia, [3]Yayasan Kutilang Indonesia, Yogyakarta, Indonesia, [4]Ecology and Health Status Research and Development Center, National Institutes of Health Research and Development, Jakarta, Indonesia, [5]Navy Entomology Center of Excellence, Jacksonville, FL, United States

709

DESCRIPTION OF FOUR ACUTE RESPIRATORY ILLNESS OUTBREAKS IN PERUVIAN MILITARY TRAINING UNITS – 2007

Moises A. Huaman[1], Roger V. Araujo-Castillo[1], Rollin A. Cruz[2], Giselle Soto[1], Cecilia C. Mundaca[1], Mariana Ramos-Rodriguez[1], Alberto V. Laguna-Torres[1], Gloria Chauca[1], Joan M. Neyra[1], Miguel Fernandez[3], Carlos Leturia[2], Tadeusz Kochel[1], David L. Blazes[1], Joel M. Montgomery[1]
[1]U.S. Naval Medical Research Center Detachment, Lima, Peru, [2]Jefatura de Salud del Ejercito (JESAL), Lima, Peru, [3]Centro Medico Naval (CEMENA), Lima, Peru

710

SURVEILLANCE OF EMERGING DISEASE IN RESOURCE LIMITED SETTINGS

Jacqueline S. Coberly[1], Richard Wojcik[1], Jean-Paul Chretien[2], Sheri Lewis[1]
[1]Johns Hopkins University Applied Physics Laboratory, Laurel, MD, United States, [2]Walter Reed Army Institute for Research, Global Emerging Infection System, Silver Spring, MD, United States

711

A SYSTEMATIC REVIEW AND META-ANALYSIS OF TUBERCULOSIS INFECTION RISK IN DEPLOYED MILITARY PERSONNEL AND LONG-TERM CIVILIAN TRAVELERS

Randall J. Freeman, Jamie Mancuso, Lisa Keep
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

Viruses – Other

712

PREVENTING NIPAH VIRUS INFECTION: INTERVENTIONS TO INTERRUPT BATS ACCESSING DATE PALM SAP

Nazmun Nahar, Rebeca Sultana, Elizabeth Oliveras, Utpal Kumar Mondal, M. Jahangir Hossain, Emily S. Gurley, M. Saiful Islam, M. S. Khan, Stephen P. Luby
International Center for Diarrhoeal Disease Research, B, Dhaka, Bangladesh

713

PREDICTING HANTAVIRUS RISK IN CHILE

Gregory E. Glass[1], Pablo A. Marquet[2], Eduardo R. Palma[3], Iván Barria[3], Terry L. Yates[4], Pablo A. Vial[5], Marcela Ferrés[6], Gregory J. Mertz[7]
[1]The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Center for Advanced Studies in Ecology and Biodiversity (CASEB) & Departamento de Ecología, Pontificia Universidad Católica de Chile, Santiago, Chile, [3]Center for Advanced studies in Ecology and Biodiversity (CASEB) & Departamento de Ecología, Pontificia Universidad Católica de Chile, Santiago, Chile, [4]Department of Biology and Museum of Southwestern Biology, University of New Mexico, Albuquerque, NM, United States, [5]Facultad de Medicina, Clínica Alemana-Universidad del Desarrollo, Santiago, Chile, [6]Facultad de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile, [7]Division of Infectious Diseases, Department of Internal Medicine, University of New Mexico, Albuquerque, NM, United States

714

DEVELOPMENT AND EVALUATION OF RECOMBINANT ARENAVIRUS PROTEINS FOR USE IN DIAGNOSTIC, PROPHYLACTIC & THERAPEUTIC APPLICATIONS

Joseph Fair[1], Mary Guttieri[2], Luis Branco[3], Jon Geske[4], Humarr Khan[5], Randal Schoepp[2], Augustine Goba[5], Joan Geisbert[6], Robert Garry[1], Daniel Bausch[1]
[1]Tulane University, New Orleans, LA, United States, [2]U.S. Army Medical Research Institute for Infectious Diseases, Fort Detrick, MD, United States, [3]Biofactura, INC, Rockville, MD, United States, [4]Corgenix, Denver, CO, United States, [5]Kenema Government Hospital, Kenema, Sierra Leone, [6]Boston University, Boston, MA, United States

715

HOME POULTRY RAISING PRACTICES IN BANGLADESH: THE SETTING FOR ANIMAL TO HUMAN INFLUENZA TRANSMISSION

Rebeca Sultana, M. Saiful Islam, Nazmun Nahar, Nadia A. Rimi, Rouha A. Sarkar, Emily S. Gurley, Elizabeth Oliveras, M. S. Khan, M. Jahangir Hossain, Stephen P. Luby
International Center for Diarrhoeal Disease Research, B, Dhaka, Bangladesh

716

ENVELOPE REGION GENETIC CHARACTERIATION OF CHIKUNGUNYA VIRUS ISOLATES FROM INDONESIA

Erlin Listiyaningsih[1], Fredrik[2], Ungke Antonjaya[1], Zen Hafy[1], James L. McArdle[3], Charmagne G. Beckett[4], Kevin R. Porter[4], Timothy H. Burgess[1], Agus Suwandono[5], Patrick J. Blair[1], **Maya Williams**[1]
[1]Naval Medical Reseach Unit 2, Jakarta, Indonesia, [2]University of Indonesia, Depok, Indonesia, [3]American Type Culture Collection, Manassas, VA, United States, [4]Naval Medical Research Center, Silver Spring, MD, United States, [5]National Institutes of Health Research and Development, Ministry of Health, Jakarta, Indonesia

717

HOW TO IMPLEMENT A SUCCESSFUL TRAINING PROGRAM AT YOUR INSTITUTION?

Anne-Sophie Brocard, Je T'Aime Newton, Karin Loftin, Marian Downing, Joanna Taoromina, Dominica Zimmerman
University of Texas Medical Branch, Galveston, TX, United States

718

WORLD RABIES DAY: A ONE HEALTH INITIATIVE TO...*MAKE RABIES HISTORY!*

Robert E. Dedmon[1], Cathleen A. Hanlon[2], Abbigail Tumpey[3], Deborah J. Briggs[4], Peter J. Costa[5]
[1]Medical College of Wisconsin, Milwaukee, WI, United States, [2]Kansas State University, Manhattan, KS, United States, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Alliance for Rabies Control, Midlothian, United Kingdom, [5]Global Alliance for Rabies Control, Manhattan, KS, United States

719

AVIAN INFLUENZA IN WILD BIRDS FROM THE CENTRAL COAST OF PERU

Bruno M. Ghersi[1], David Blazes[1], Eliana Icochea[2], Rosa I. Gonzalez[2], Tadeusz Kochel[1], Yeny Tinoco[3], Merly Sovero[1], Stephen Lindstrom[4], Bo Shu[4], Alexander Klimov[4], Armando E. Gonzalez[2], Joel M. Montgomery[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]San Marcos University, Lima, Peru, [3]Johns Hopkins University, School of Public Health, MD, United States, [4]Center for Disease Control and Prevention, Atlanta, GA, United States

720

DETECTION OF FEBRILE RESPONSES IN VENEZUELAN EQUINE ENCEPHALITIS VIRUS (VEEV) INFECTED MICE

Shannon S. Martin[1], Michael D. Parker[2], Russell Bakken[2], Jessica L. Price[1], Mary Kate Hart[1], Donald L. Fine[1]
[1]DynPort Vaccine Company, Frederick, MD, United States, [2]United States Army Medical Research Institute of Infectious Diseases, Frederick, MD, United States

721

MAYARO FEVER VIRUS OUTBREAK IN SANTA BARBARA, PARÁ STATE, BRAZIL, 2008

Raimunda S. Azevedo, Valéria L. Carvalho, Eliana V. da Silva, Jannifer O. Chiang, Joaquim P. Nunes Neto, Hamilton A. Monteiro, Daniele F. Henriques, Márcio R. Nunes, Vítor S. Peixoto, Sueli G. Rodrigues, **Pedro F. Vasconcelos**
Instituto Evandro Chagas, Belém, Brazil

722

ANTIGENIC DRIFT AND THE REASSORTMENT OF GENOMIC RNA SEGMENTS PROTAGONIST THE MICROEVOLUTION OF PUUMALA HANTAVIRUS IN A BANK VOLE (*MYODES GLAREOLUS*) POPULATION

Maria Razzauti Sanfeliu[1], Angelina Plyusnina[1], Heikki Henttonen[2], Alexander Plyusnin[1]
[1]Haartman Institute/University of Helsinki, Helsinki, Finland, [2]Finnish Forest Research Institute, Vantaa, Finland

(ACMCIP Abstract)

723

GENETIC CHARACTERIZATION OF THE RABIES VIRUS STRAIN QR 18867 (*RHABDOVIRIDAE*, *LYSSAVIRUS*) ISOLATED FROM THE *URODERMA BILOBATUM* BAT IN PORTEL MUNICIPALITY, PARÁ STATE, 2004

Keley N. Nunes, Elizabeth S. Travassos da Rosa, Taciana F. Barbosa, Armando S. Pereira, Daniele B. Medeiros, Lívia M. Casseb, **Pedro F. Vasconcelos**, Márcio R. Nunes
Instituto Evandro Chagas, Belém, Brazil

724

MATERNAL-FETAL TRANSMISSION OF CHIKUNGUNYA VIRUS IN MICE

Sarah A. Ziegler, Amelia P. Travassos da Rosa, Shu-Yuan Xiao, Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

Poster Session B ACMCIP Abstracts – Molecular, Cellular and Immunoparasitology

437, 466, 481, 514, 516, 518, 519, 521, 526, 529, 533, 541, 545, 549, 553, 554, 556, 558, 559, 561, 562, 565, 566, 580, 587, 590, 592, 596, 597, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 634, 635, 637, 638, 639, 640, 641, 647, 649, 651, 652, 653, 664, 666, 667, 706, 722

CME/Courses Committee Meeting

Salon 816
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.

Mid-Day Session 83

What are the Roles of Community in Malaria Eradication?: A Roundtable Discussion

Rhythms II/III

Tuesday, December 9, 12:15 p.m. – 1:15 p.m.

In the latest call for malaria eradication, much has been discussed regarding the roles of health professionals, medico-scientific innovation, NGOs and local governments in designing, implementing and funding malaria eradication. Little has been discussed regarding the roles of the estimated 2-3 billion people at risk for malaria. This roundtable discussion and open forum addresses the potential roles for community, broadly defined, to participate in planning, implementing, sustaining and evaluating malaria programs. Issues that may hinder or facilitate current eradication strategies including reliance on large international programs, technical interventions and expanding roles of affected communities will be discussed. Roundtable participants include health professionals with backgrounds in social sciences; broad historical perspectives on the relationships between malaria, malaria control practices and affected communities; and community-based research and intervention experience in Africa, Asia, the Americas and Europe.

CHAIR

Frank Mannix
Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States

12:15 p.m.

Peter Brown
Emory University, Atlanta, GA, United States

12:25 p.m.

Caroline Jones
London School of Hygiene and Tropical Medicine, London, United Kingdom

12:35 p.m.

Peter Kunstadter
University of California at San Francisco, San Francisco, CA, United States

12:45 p.m.

Holly A. Williams
Centers for Disease Control and Prevention, Atlanta, GA, United States

1 p.m.

Marcel Tanner
Swiss Tropical Institute, Basel, Switzerland

Mid-Day Session 84

Constructive Consilience: Applying the Legacy of Robert E. Shope

Waterbury

Tuesday, December 9, 12:15 p.m. – 1:15 p.m.

The purpose of this symposium is to reflect on how the ASTMH research community and the NASA research community might work together in constructive consilience to raise public awareness about the connections between emerging infectious diseases and global climate change. "Constructive consilience" is a phrase that refers to the effort to bring together people of different disciplines and world views to work together to solve common problems. Robert E. Shope was well-known among his colleagues for his knack for overcoming interdisciplinary obstacles. In his final public talk, he encouraged the science community to commit itself to science education and public awareness of emerging infectious diseases. This session organizer is a science educator and research analyst with NASA's Jet Propulsion Laboratory, the principal investigator of Arctica Science Research Projects for Urban Youth — an official project of the International Polar Year, carried out by the Urban Science Corps in Los Angeles and Baltimore and other metropolitan areas around the nation. Presenters include esteemed colleagues of Robert E. Shope and an outstanding recipient of the Robert E. Shope Fellowship to participate in this symposium.

CHAIR

Richard E. Shope
NASA-Jet Propulsion Laboratory, Pasadena, CA, United States

Charles Calisher
Colorado State University, Fort Collins, CO, United States

12:15 p.m.

Scott C. Weaver
University of Texas Medical Branch, Galveston, TX, United States

12:30 p.m.

Rebekah J. Kent
The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

12:45 p.m.

Charles Calisher
Colorado State University, Fort Collins, CO, United States

1 p.m.

Robert B. Tesh
University of Texas Medical Branch, Galveston, TX, United States

Mid-Day Session 84A

Attenuated Sporozoite Vaccines for Malaria

Bayside BC

Tuesday, December 9, 12:15 p.m. - 1:15 p.m.

It was previously demonstrated that irradiated infected mosquitoes fed on volunteers protected them against challenge with fully virulent sporozoites. This observation has led to the development of purified, attenuated sporozoites to be prepared as a vaccine administered by needle and syringe. This symposium will present the current approaches of irradiation and genetic modification of sporozoites to develop a vaccine.

CHAIR

Laurence Lemiale
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

12:15 p.m.

RADIATION ATTENUATED SPOROZOITE VACCINE FOR MALARIA

Stephen L Hoffman
Sanaria Inc, Rockville, MD, United States

12:35 p.m.

GENETIC ENGINEERING OF LIVE ATTENUATED MALARIA VACCINES

Stefan Kappe
SBRI, Seattle, WA, United States

12:55 p.m.

GENETICALLY ATTENUATED SPOROZOITE VACCINE FOR MALARIA

Robert Sauerwein
Radboud University Nijmegen Medical Center, Nijmegen, Netherlands

Meet the Professors 85

Meet the Professors B: Enigmatic and Teaching Cases

Grand Ballroom A
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.

A panel of professors will each present one clinical case of a tropical disease specific to a particular region that they have found a challenge to manage or diagnose. If there is time, participants may be able to present enigmatic cases for the audience and panel to consider. An open discussion will be encouraged, with audience participation.

CHAIR

Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada

PRESENTERS

David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States

J. Dick MacLean
McGill Univ. Center for Tropical Disease, Montreal, QC, Canada

Mid-Day Session 86

Preparation and Review of Scientific Manuscripts for the *American Journal of Tropical Medicine & Hygiene*

Grand Ballroom D
Tuesday, December 9, 12:15 p.m. – 1:15 p.m.

This symposium is aimed at trainees and others interested in better understanding how manuscripts are reviewed, edited and processed by the society's journal. Pointers on preparation and review of manuscripts will be stressed. The following topics will be covered: 1) Why publish your work in our society's journal; 2) Why and where to publish, i.e. selection of the "right" journal for your work; 3) Examples of a paper in progress; how to prepare and how to write a good paper; 4) The submission and review processes and how they work; 5) How to properly review a paper; 6) How to respond to reviewer comments; and 6) The publication process: what happens after your paper is accepted.

CHAIR

James Kazura
Case Western Reserve University, Cleveland, OH, United States

Cathi Siegel
Case Western Reserve University, Cleveland, OH, United States

12:15 p.m.

WHY SELECT THE *AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE* (AJTMH) FOR YOUR PAPER: SELECTING THE RIGHT JOURNAL FOR YOUR WORK

James Kazura
Case Western Reserve University, Cleveland, OH, United States

12:30 p.m.

MANUSCRIPT PROCESSING AT AJTMH

Cathi Siegel
Case Western Reserve University, Cleveland, OH, United States

12:45 p.m.

WHAT CONSTITUTES A WELL- VERSUS POORLY-WRITTEN MANUSCRIPT: RESPONDING TO REVIEWERS' COMMENTS

James Kazura
Case Western Reserve University, Cleveland, OH, United States

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

12:55 p.m.

THE REVIEW: EDITORIAL, CORRESPONDING AUTHOR AND REVIEWER PERSPECTIVES

James Kazura
Case Western Reserve University, Cleveland, OH, United States

1 p.m.

THE REVIEW: EDITORIAL, CORRESPONDING AUTHOR AND REVIEWER PERSPECTIVES

Joseph M. Vinetz
University of California at San Diego, La Jolla, CA, United States

1:05 p.m.

OPEN FORUM WITH AUDIENCE

Mid-Day Session 86A

Video on Neglected Tropical Diseases: "Survival - Distant Places, Forgotten Lives"

Grand Ballroom E
Tuesday, December 9, 12:15 p.m. - 1:15 p.m.

The people of Niger, one of the poorest countries in the world, suffer from a host of forgotten, parasitic diseases. Schistosomiasis and Lymphatic Filariasis were defeated long ago in the developed world but still blight the lives of millions, especially in sub-Saharan Africa. Yet the drugs which can cure these and other neglected diseases are cheap and safe to use. Now, thousands of ordinary people - farmers and teachers, not doctors - are being recruited to distribute these drugs to millions of their fellow citizens. Their ambitious goal - to eliminate five neglected diseases in just five years.

CHAIR

Ann-Marie Sevcsik
Drugs for Neglected Diseases initiative, Geneva, Switzerland

Poster Sesssion B Viewing

Armstrong Ballroom
Tuesday, December 9, 1:30 p.m. – 7 p.m.

Symposium 87

Dengue Viruses, Antibodies and Macrophages: A Lethal Combination

Gallery
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

These several papers provide substantial new, direct evidence from living and deceased humans of the role of monocytes/macrophages in supporting dengue infections in human beings. More importantly, evidence is presented describing a new phenomenon, "intrinsic antibody dependent enhancement (ADE) in which infection in macrophages by dengue viruses-antibody complexes (at appropriate antibody concentrations or directed at appropriate sites on the virion), suppresses innate immunity. The result is a significant increase in the production of virus per cell. As evidenced in two presentations, dengue viruses differ in their ability to be neutralized by heterotypic dengue antibodies. During second dengue infections, high levels of pre-existing cross-neutralization correlate with protection against severe disease; low levels of neutralization accurately predict susceptibility to overt disease presumably via intrinsic ADE.

CHAIR

Scott B. Halstead
Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea

Susie Kliks
Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea

1:30 p.m.

ASSAY OF ANTIBODIES IN FCR-BEARING CELLS, VARIANT VIRAL ANTIGENS ON DENGUE 3 VIRUSES

Aravinda de Silva
University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

1:55 p.m.

IMMUNOCYTOLOGY OF INFECTED TARGET CELLS: STUDIES ON PATIENTS AND FATAL CASES

Eva Harris
University of California at Berkeley, Berkeley, CA, United States

2:20 p.m.

DENGUE ANTIBODIES ASSAYED IN HUMAN FCGR-ENGINEERED CELLS: IMPROVING THE CORRELATION BETWEEN NEUTRALIZATION AND PROTECTION

Jacob Schlesinger
University of Rochester School of Medicine, Rochester, NY, United States

2:45 p.m.

INTRINSIC ANNTIGODY DEPENDENT ENHANCEMENT (ADE) IN MONOCYTES

Xia Jin
University of Rochester School of Medicine, Rochester, NY, United States

Symposium 88

Use of Fluorescent Probes and Transgenic Parasites to Enhance Drug Screening

Rhythms II/III
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

The development of new therapeutics for important parasitic diseases of humans is essential for the control of these pathogens. Such efforts rely on screening potentially effective compounds in pathogen growth/multiplication assays, both *in vitro* and *in vivo*. However, in the case of the parasites that cause malaria and leishmaniasis, these assays have technical limitations that potentially restrict drug development. In response to this problem, the WHO/TDR established a network of investigators from disease endemic and non-endemic countries with capabilities and interests in drug screening using new genomic technology. This symposium will highlight the progress made by the network and will focus on the use of fluorescent probes and transgenic parasites expressing proteins, such as green fluorescent protein (GFP) and luciferase, that have opened up new possibilities for high throughput drug screening.

CHAIR

Ayo Oduola
WHO/TDR, Geneva, Switzerland

Dennis E. Kyle
University of South Florida, Tampa, FL, United States

1:30 p.m.

TRANSGENIC LEISHMANIA FOR *IN VITRO* AND *IN VIVO* DRUG SCREENING

Dennis E. Kyle
University of South Florida, Tampa, FL, United States

1:55 p.m.

***IN VITRO* PLASMODIUM DRUG SUSCEPTIBILITY TESTING IN CONTEXT: TRANSGENIC PARASITES AND ALTERNATIVE METHODS FOR DRUG DISCOVERY AND EPIDEMIOLOGY.**

Martin J. Smilkstein
Portland VA Medical Center, Portland, OR, United States

2:20 p.m.

USE OF TRANSGENIC *P. BERGHEI* RODENT MALARIA MODEL FOR *IN VITRO* AND *IN VIVO* DRUG SCREENING

Andrew P. Waters
University of Glasgow, Glasgow, United Kingdom

2:45 p.m.

DEVELOPMENT OF TRANSGENIC *P FALCIPARUM* FOR *IN VITRO* DRUG SCREENING

Chairat Uthaipabull
National Center for Genetic Engineering and Biotechnology (BIOTEC), Pathumthani, Thailand

Symposium 89

Malaria, Health and Education: New Perspectives and Prospects

Waterbury
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

Recent evidence from randomized trials has demonstrated the gains for health and education of effective malaria control in schools (Fernando et al, 2006; Clarke et al 2008), equal to or exceeding that seen in previous approaches within school health. Yet, to date, the importance of malaria in school-aged children has been largely overlooked within malaria control. The speakers in this symposium will draw on recent, and past, evidence from Africa and Asia to demonstrate the profound epidemiological consequences of malaria infection and disease for the health, cognition and education of schoolchildren. The symposium will conclude by a panel discussion looking at prospects for integrated control in schools, illustrated by recent developments in school health policy and practice in various countries.

CHAIR

Sian E. Clarke
London School of Hygiene and Tropical Medicine, London, United Kingdom

Simon Brooker
London School of Hygiene and Tropical Medicine, London, United Kingdom

Feiko ter Kuile
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

1:30 p.m.

THE IMPACT OF MALARIA ON THE HEALTH OF SCHOOLCHILDREN IN AFRICA: A REVIEW OF THE EVIDENCE

Sian E. Clarke
London School of Hygiene and Tropical Medicine, London, United Kingdom

2 p.m.

IMPACT OF MALARIA ON THE EDUCATION OF SCHOOLCHILDREN: EXPERIENCE FROM ASIA

Deepika Fernando
University of Colombo, Colombo, Sri Lanka

2:25 p.m.

MALARIA CONTROL WITHIN AN INTEGRATED SCHOOL HEALTH PROGRAM: EXPERIENCES FROM MALAWI

Seung Lee
Save The Children Malawi, Lilongwe, Malawi

2:50 p.m.

THE IMPACT OF MALARIA CONTROL ON COGNITION AND EDUCATION OF SCHOOLCHILDREN: A REVIEW OF THE EVIDENCE

Matthew C. Jukes
Harvard Graduate School of Education, Cambridge, MA, United States

Scientific Session 90

Malaria – Chemotherapy

Napoleon A123
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

CHAIR

Kalifa A. Bojang
MRC Laboratories, Banjul, Gambia

Miriam Laufer
University of Maryland, Baltimore, MD, United States

1:30 p.m.

725

INTERMITTENT PREVENTIVE TREATMENT (IPT) IN SCHOOLCHILDREN: A RANDOMIZED TRIAL TO COMPARE THE EFFICACY, SAFETY, AND TOLERABILITY OF ANTIMALARIAL REGIMENS IN UGANDA

Joaniter I. Nankabirwa[1], Sian E. Clarke[2], Narcis Kabatereine[3], Bonnie Cundill[2], Simon Brooker[2], Sarah G. Staedke[2]
[1]Makerere University, Kampala, Uganda, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom, [3]Ministry of Health, Kampala, Uganda

1:45 p.m.

726

A RANDOMISED TRIAL TO COMPARE THE SAFETY, TOLERABILITY AND EFFICACY OF THREE POTENTIAL DRUG COMBINATIONS FOR INTERMITTENT PREVENTIVE TREATMENT IN CHILDREN AGED ONE TO FIVE YEARS IN AN AREA OF SEASONAL MALARIA TRANSMISSION IN UPPER RIVER REGION, THE GAMBIA

Kalifa A. Bojang[1], Francis Akor[1], David Conway[1], Paul Milligan[2], Ousman Bittaye[1], Brian Greenwood[2]
[1]MRC Laboratories, Banjul, Gambia, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom

2 p.m.

727

IMPACT OF ARTEMISININ-BASED COMBINATION THERAPY INTERMITTENT PREVENTIVE TREATMENT ON MALARIA MORBIDITY IN ELEMENTARY SCHOOL STUDENTS IN MALI

Hamma Maiga[1], Breanna Barger[2], Oumar B. Traore[1], Mamadou Tekete[1], Atime Timbine[1], Antoine Dara[1], Zoumana I. Traore[1], Ogobara K. Doumbo[1], Abdoulaye A. Djimde[1]
[1]University of Bamako, Bamako, Mali, [2]University of Washington, Seattle, WA, United States

2:15 p.m.

728

PUBLIC HEALTH IMPLICATIONS OF RECRUDESCENT VERSUS NEW INFECTIONS IN DRUG EFFICACY TRIALS

Miriam K. Laufer[1], Matthew B. Laurens[1], Fraction K. Dzinjalamala[2], Osward Nyirenda[2], Phillip C. Thesing[1], Terrie E. Taylor[3], Christopher V. Plowe[1]
[1]Center for Vaccine Development, University of Maryland, Baltimore, MD, United States, [2]Blantyre Malaria Project, Blantyre, Malawi, [3]College of Osteopathic Medicine, Michigan State University, East Lansing, MI, United States

2:30 p.m.

729

ARTEMETHER-LUMEFANTRINE VERSUS DIHYDROARTEMISININ-PIPERAQUINE FOR THE TREATMENT OF UNCOMPLICATED MALARIA: A RANDOMIZED LONGITUDINAL TRIAL IN A COHORT OF UGANDAN INFANTS

Emmanuel Arinaitwe[1], Taylor Sandison[2], Jaco Homsy[3], Julius Kalamya[4], Abel Kakuru[1], Humphrey Wanzira[1], Neil Vora[5], Philip J. Rosenthal[5], Moses Kamya[6], Jordan W. Tappero[3], Grant Dorsey[5]
[1]MU-University of California at San Francisco Malaria Research Collaboration, Kampala, Uganda, [2]Department of Medicine, University of Washington, Seattle, WA, United States, [3]Centers for Disease Control and Prevention – Uganda, Entebbe, Uganda, [4]Centers for Disease Control and Prevention – Uganda, Tororo Field Station, Tororo, Uganda, [5]Department of Medicine, University of California, San Francisco, CA, United States, [6]Department of Medicine, Makerere University, Kampala, Uganda

2:45 p.m.

730

PHARMACOKINETICS OF ARTEMISININ COMBINATION THERAPY IN CHILDREN IN KAMPALA, UGANDA

Julia Mwesigwa[1], Bryan McGee[2], Joan Nakayaga[1], Tamara Clark[2], Grant Dorsey[2], Philip J. Rosenthal[2], Niklas Lindegardh[3], Moses R. Kamya[1], Francesca Aweeka[2], Sunil Parikh[2]
[1]Makerere University, Kampala, Uganda, [2]University of California-San Francisco, San Francisco, CA, United States, [3]Mahidol University, Bangkok, Thailand

3 p.m.

731

REGIONAL AGE-BASED DOSE REGIMENS FOR A NEW FIXED-DOSE COMBINATION OF ARTESUNATE-MEFLOQUINE FOR THE TREATMENT OF UNCOMPLICATED *FALCIPARUM* MALARIA IN LATIN AMERICA AND ASIA

Dianne J. Terlouw[1], Daniel J. Hayes[1], Stef van Buuren[2], Isabela Ribeiro[3], Piero L. Olliaro[4], Feiko O. ter Kuile[1]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]The Netherlands Organization for Applied Scientific Research, Leiden, Netherlands, [3]Drugs for Neglected Diseases initiative, Geneva, Switzerland, [4]World Health Organization Special Programme for Research and Training in Tropical Diseases/(WHO/TDR), Geneva, Switzerland

Scientific Session 91

Mosquitoes – Vector Biology – Epidemiology I

Bayside BC
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

CHAIR

Lars Eisen
Colorado State University, Fort Collins, CO, United States

Thomas W. Scott
University of California, Davis, CA, United States

1:30 p.m.

732

DENGUE VIRUS-INFECTED *AEDES AEGYPTI* IN THE HOME ENVIRONMENT

Julian Garcia-Rejon[1], Maria Alba Lorono-Pino[1], Jose Arturo Farfan-Ale[1], Luis Flores-Flores[1], Elsy del Pilar Rosedo-Paredes[1], Nubia Rivero-Cardenas[1], Rosario Najera-Vazquez[2], Salvador Gomez-Carro[2], Victor Lira-Zumbardo[2], Pedro Gonzalez-Martinez[2], Saul Lozano-Fuentes[3], Darwin Elizondo-Quiroga[3], Barry Beaty[3], **Lars Eisen**[3]
[1]Universidad Autonoma de Yucatan, Merida, Mexico, [2]Servicios de Salud de Yucatan, Merida, Mexico, [3]Colorado State University, Fort Collins, CO, United States

1:45 p.m.

733

IMPACT ON SEROLOGICAL, ENTOMOLOGICAL, AND BEHAVIORAL INDICES OF AN EVIDENCE-BASED COMMUNITY-DERIVED COMMUNICATION PROGRAM FOR THE CONTROL OF *AEDES AEGYPTI* AND DENGUE IN MANAGUA, NICARAGUA

Jorge Arostegui[1], Harold Suazo[1], Josefina Coloma[2], Alvaro Carcamo[1], Carlos Hernandez[1], Angel Balmaseda[3], Neil Andersson[1], **Eva Harris**[2], CIETNicaragua Dengue Group[1]
[1]CIETNicaragua, Managua, Nicaragua, [2]Division of Infectious Diseases, School of Public Health, University of California, Berkeley, Berkeley, CA, United States, [3]Departamento de Virología, Centro Nacional de Diagnóstico y Referencia, Ministerio de Salud, Managua, Nicaragua

2 p.m.

734

A RESIDUAL DEMOGRAPHY METHOD FOR ESTIMATING AGE STRUCTURE OF WILD MOSQUITO VECTOR POPULATIONS

Thomas W. Scott[1], James R. Carey[1], Thanyalak Fansiri[2], Jason Richardson[2]
[1]University of California, Davis, CA, United States, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

2:15 p.m.

735

SCREENING HOMES TO PREVENT MALARIA: A RANDOMISED CONTROLLED TRIAL

Matthew J. Kirby[1], Paul J. Milligan[2], Momodou Jasseh[3], David J. Conway[2], Steve W. Lindsay[1]
[1]Durham University, Durham, United Kingdom, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom, [3]Medical Research Council Laboratories, Banjul, Gambia

2:30 p.m.

736

THE ROLE OF SUGAR IN THE MATING BEHAVIOR OF *ANOPHELES GAMBIAE S.S.*

Chris M. Stone, Woodbridge A. Foster
The Ohio State University, Columbus, OH, United States

2:45 p.m.

737

HUMAN IGG RESPONSE TO *ANOPHELES GAMBIAE* SALIVARY PROTEINS AS AN *IMMUNO-EPIDEMIOLOGICAL* MARKER OF EXPOSURE TO MALARIA VECTOR BITES

Anne Poinsignon[1], Sylvie Cornelie[1], Montserrat Mestres-Simon[2], Alessandra Lanfrancotti[2], Marie Rossignol[1], Denis Boulanger[1], Badara Cisse[3], Cheikh Sokhna[4], Bruno Arcà[2], François Simondon[1], Franck Remoue[1]
[1]Institut de Recherche pour le Développement, Montpellier, France, [2]Sapienza University, Rome, Italy, [3]Université Cheikh Anta Diop, Dakar, Senegal, [4]Institut de Recherche pour le Développement, Dakar, Senegal

3 p.m.

738

CHARACTERIZATION OF HOST-SEEKING ACTIVITY OF ANOPHELES MELAS IN RESPONSE TO INDOOR-BASED ANTI-VECTOR INTERVENTIONS ON BIOKO ISLAND, EQUATORIAL GUINEA

Michael R. Reddy[1], Michel A. Slotman[1], Arcardio Edu[2], Simon Abaga[2], Valeriano Aloy[3], Jaime Kuklinski[3], Adgalisa Caccone[1]
[1]Yale University, New Haven, CT, United States, [2]Ministerio de Sanidad y Bienestar Social, Malabo, Equatorial Guinea, [3]One World Development Group Inc., Malabo, Equatorial Guinea

Scientific Session 92

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Molecular Parasitology I

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom A

Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

CHAIR

Tobin Dickerson
The Scripps Research Institute, La Jolla, CA, United States

Andrew V. Oleinikov
Seattle Biomedical Research Institute, Seattle, WA, United States

1:30 p.m.

1234

IDENTIFICATION AND CLONING OF BABOON TLF WHICH KILLS HUMAN INFECTIVE AFRICAN TRYPANOSOMES *IN VIVO*

Russell Thomson
New York University School of Medicine, New York, NY, United States

1:45 p.m.

739

INTEGRATION OF REPORTER TRANSGENES INTO *SCHISTOSOMA MANSONI* CHROMOSOMES MEDIATED BY PSEUDOTYPED MURINE LEUKEMIA VIRUS

Kristine J. Kines[1], Maria E. Morales[2], Victoria H. Mann[1], Geoffrey N. Gobert[3], Paul J. Brindley[1]
[1]George Washington University, Washington, DC, United States, [2]Tulane University, New Orleans, LA, United States, [3]Queensland Institute of Medical Research, Brisbane, Australia

2 p.m.

740

METABOLOMIC APPROACH TO ONCHOCERCIASIS DIAGNOSTICS

Tobin J. Dickerson, Judith R. Denery, Ashlee A. Nunes, Kim D. Janda
The Scripps Research Institute, La Jolla, CA, United States

2:15 p.m.

741

DEORPHANIZATION OF TWO NOVEL SCHISTOSOMA MANSONI G-PROTEIN COUPLED RECEPTORS (GPCRS), USING A YEAST EXPRESSION SYSTEM

Fouad El-Shehabi, Paula Ribeiro
Institute of Parasitology-McGill University, Montreal, QC, Canada

2:30 p.m.

1235

UNEXPECTED TRNA ENCODED WITHIN THE MITOCHONDRIAL 12S RRNA OF *TRYPANOSOMA BRUCEI*

Melissa Lerch, Matt Beverly, Ken Stuart, Steve Hajduk

Seattle Biomedical Research Institute, Seattle, WA, United States, University of Georgia, Biochemistry and Molecular Biology Department, Athens, GA, United States

2:45 p.m.

742

DIFFERENTIAL PATTERNS OF PROTEIN EXPRESSION IN HEPATOSPLENIC SCHISTOSOMIASIS

Bhagyashree Manivannan (Uradey)[1], Thomas William Jordan[1], William Evan Secor[2], Anne Camille LaFlamme[1]
[1]Victoria University of Wellington, Wellington, New Zealand, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

3 p.m.

743

HIGH THROUGHPUT QUANTITATIVE ANALYSIS OF ICAM-1 BINDING TO 3D7 DUFFY-BINDING LIKE (DBL) DOMAINS

Andrew V. Oleinikov, Emily Amos, Tyler Frye, Eddie Rossnagle, Theonest K. Mutabingwa, Michal Fried, Patrick E. Duffy
Seattle Biomedical Research Institute, Seattle, WA, United States

Scientific Session 93

Arthropods/Entomology

Grand Ballroom B

Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

CHAIR

Clara B. Ocampo
CIDEIM, Cali, Colombia

Claudia C. Paredes-Esquivel
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

1:30 p.m.

744

CHARACTERIZATION OF A DOMESTIC TRANSMISSION FOCUS OF AMERICAN CUTANEOUS LEISHMANIASIS IN RURAL COLOMBIA

Clara B. Ocampo-D[1], Cristina Ferro[2], Horacio Cadena[1], Dairo Marin[1], Layder Lozano[1], Cesar Ramirez[1], Leonard Munstermann[3]
[1]CIDEIM, Cali, Valle, Colombia, [2]Instituto Nacional de Salud, Bogota, Colombia, [3]Yale University, New Haven, CT, United States

1:45 p.m.

745

MOLECULAR SYSTEMATICS OF THE BARBIROSTRIS SUBGROUP AND HYRCANUS GROUP OF THE GENUS *ANOPHELES* IN SOUTHEAST ASIA

Claudia C. Paredes-Esquivel, Harold Townson
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

2 p.m.

746

CHROMOSOMAL INVERSIONS, NATURAL SELECTION AND ADAPTATION IN THE MALARIA VECTOR *ANOPHELES FUNESTUS*

Diego Ayala[1], Michael C. Fontaine[2], Anna Cohuet[1], Carlo Costantini[3], Didier Fontenille[1], Renaud Vitalis[4], Frederic Simard[5]
[1]Institut de Recherche pour le Developpement, UR Caractérisation et contrôle des populations de vecteurs, Montpellier, France, [2]Institute of Integrative and Comparative Biology, Faculty of Biological Sciences, University of Leeds, Leeds, United Kingdom, [3]Institut de Recherche pour le Developpement, UR Caractérisation et contrôle des populations de vecteurs, Yaoundé, Cameroon, [4]Muséum National d'Histoire Naturelle – Centre National de la Recherche Scientifique UMR 5145 – Université Paris 7, Éco-Anthropologie et Ethnobiologie, Musée de l'Homme, Paris, France, [5]Institut de Recherche pour le Developpement, UR Caractérisation et contrôle des populations de vecteurs, Bobo-Dioulasso, Burkina Faso

2:15 p.m.

747

DOES HEMOLYMPH FLOW DRIVE MALARIA SPOROZOITE MIGRATION THROUGH THE MOSQUITO HEMOCOEL?

Julián F. Hillyer, Jonas G. King, Justin D. Glenn
Vanderbilt University, Nashville, TN, United States

2:30 p.m.

748

IDENTIFICATION OF THE BARRIERS PREVENTING SUCCESSFUL DEVELOPMENT OF *PLASMODIUM FALCIPARUM* IN CULEX MOSQUITOES

Jen Hume, Tovi Lehmann
National Institutes of Health/National Institute of Allergy and Infectious Diseases, Rockville, MD, United States

2:45 p.m.

749

ENVIRONMENTAL FACTORS INFLUENCE *CULEX PIPIENS QUINQUEFASCIATUS* (DIPTERA: CULICIDAE) SUSCEPTIBILITY TO WEST NILE AND ST. LOUIS ENCEPHALITIS VIRUSES

Stephanie L. Richards, Cynthia C. Lord, Kendra Pesko, Walter J. Tabachnick
University of Florida /Florida Medical Entomology Laboratory, Vero Beach, FL, United States

3 p.m.

750

BLOOD FEEDING IN MOSQUITOES PROMPTS EXPRESSION OF TWO HEAT SHOCK PROTEINS

Joshua Benoit, Giancarlo Lopez-Martinez, David L. Denlinger
The Ohio State University, Columbus, OH, United States

Symposium 94

Clinical Group I

Supported with funding from International Association for Medical Assistance to Travelers

Grand Ballroom C

Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

This session features the Marcolongo Lecture, named for Vincenzo Marcolongo, who founded the International Association for Medical Assistance to Travellers (IAMAT) and organized physicians from all over the world into a network assisting travelers.

CHAIR

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

1:30 p.m.

VINCENZO MARCOLONGO MEMORIAL LECTURE: UNDERSTANDING NEUROCYSTICERCOSIS: ADVANCES IN THE LAST 50 YEARS

Raul Isturiz
Hospital Privado Centro Medico de Caracas, Caracas, Venezuela.

2:15 p.m.

GEOSENTINEL SURVEILLANCE REPORT

David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States

Symposium 95

Toward a Second-Generation Malaria Vaccine Development: The Expanding Horizons of Malaria Vaccine Development

Grand Ballroom D

Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

In late 2008 or early 2009, the world's most clinically advanced malaria vaccine candidate is expected to enter a Phase 3 trial, among the last hurdles en route to it being made available for use. If successful, one of two milestones endorsed by the malaria vaccine development community will have been achieved on schedule, that is, the development of a partially efficacious vaccine by 2015. Achieving the next milestone — a vaccine of at least 80 percent efficacy against clinical disease by 2025 — comes next. This symposium will bring together leaders in the vaccine development field to discuss the challenges and opportunities to developing a safe and highly effective "next-generation" malaria vaccine. The symposium will feature presentations on the new approaches that are being explored, and the new or improved tools to be developed, from nanoparticles to challenge models.

CHAIR

Christian Loucq
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

Tonya Villafana
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

1:30 p.m.

Tonya Villafana
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

1:50 p.m.

DELIVERY PLATFORMS, INCLUDING VIRAL VECTORS, BACTERIA, REPLICONS AND VIROSOMES

Ashley Birkett
PATH Malaria Vaccine Initiative, Bethesda, MD, United States

2:10 p.m.

EVALUATION TECHNOLOGIES FOR MALARIA VACCINE DEVELOPMENT

Carole Long
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

2:30 p.m.

ANTIGENS AND THE PROSPECTS FOR ACCELERATING ANTIGEN DISCOVERY

Patrick Duffy
Seattle Biomedical Research Institute, Seattle, WA, United States

2:50 p.m.

ADJUVANTS AND OTHER IMMUNOPOTENTIATORS FOR MALARIA VACCINE DEVELOPMENT

Robert A. Seder
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

Scientific Session 96

Schistosomiasis III – Molecular Biology/ Biochemistry

Grand Ballroom E
Tuesday, December 9, 1:30 p.m. – 3:15 p.m.

CHAIR

Ronald Blanton
Case Western Reserve University, Cleveland, OH, United States

Timothy Yoshino
University of Wisconsin, Madison, WI, United States

1:30 p.m.

751

STUDIES OF *S. MANSONI* POPULATION STRUCTURE BY MICROSATELLITE ANALYSIS OF AGGREGATED SAMPLES

W.A. Blank[1], E.A. Reis[2], J.F. Braghiroli[2], J.M. Santos[2], P.S. Melo[2], L.K. Silva[2], M.G. Reis[2], R.E. Blanton[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Oswaldo Cruz Foundation, Salvador, Brazil

1:45 p.m.

752

THE EFFECT OF PRAZIQUANTEL TREATMENT ON THE GENETIC DIVERSITY OF *SCHISTOSOMA MANSONI* INFECTIONS IN PRIMARY SCHOOL CHILDREN WITHIN MAYUGE DISTRICT, UGANDA

Poppy H. Lamberton[1], Alice J. Norton[1], Alan Fenwick[1], Narcis Kabatereine[2], Joanne P. Webster[1]
[1]Imperial College London, London, United Kingdom, [2]Vector Control Division, Ministry of Health, Kampala, Uganda

2 p.m.

753

INTEGRATION OF LASER MICRODISSECTION AND MICROARRAY ANALYSIS FOR TISSUE SPECIFIC GENE EXPRESSION PROFILES OF *SCHISTOSOMA JAPONICUM*

Geoffrey N. Gobert
Queensland Institute for Medical Research, Brisbane, Australia

2:15 p.m.

754

THE IDENTIFICATION OF PUTATIVE MOLECULAR PATHWAYS REGULATING SCHISTOSOMA MANSONI MIRACIDIAL TRANSFORMATION BY THE USE OF A HIGH-THROUGHPUT SMALL-MOLECULE SCREEN

Andrew S. Taft, Timothy P. Yoshino
UW-Madison, Madison, WI, United States

2:30 p.m.

755

NEW SCHISTOSOMIASIS DRUGS

Alexander Doemling[1], Sanaa Botros[2]
[1]University of Pittsburgh, Pittsburgh, PA, United States, [2]Theodor Bilharz Institute, Imbaba, Giza, Egypt

2:45 p.m.

756

RANDOMIZED DOUBLE BLIND CLINICAL TRIAL, COMPARING THE EFFECTIVENESS OF ARTESUNATE+SULFAMETHOXYPYRAZINE/PYRIMETHAMINE VERSUS PRAZIQUANTEL IN THE TREATMENT OF *SCHISTOSOMA HAEMATOBIUM* IN MALIAN CHILDREN

Mahamadou S. Sissoko
MRTC, Bamako, Mali

3 p.m.

757

MOLECULAR AND BIOCHEMICAL CHARACTERIZATION OF *SCHISTOSOMA MANSONI* CAMP-DEPENDENT PROTEIN KINASE (PKA): A POTENTIAL NEW DRUG TARGET

Brett E. Swierczewski, Stephen J. Davies
Uniformed Services University of the Health Sciences, Department of Microbiology and Immunology, Bethesda, MD, USA

Exhibit Hall Open

Napoleon Ballroom
Tuesday, December 9, 3 p.m. – 4 p.m.

Coffee Break

Napoleon Ballroom
Tuesday, December 9, 3:15 p.m. – 3:45 p.m.

Symposium 97

Status of Phase 1 and Phase 2 Clinical Trials of Dengue Vaccines

Gallery

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

The pipeline of dengue vaccine candidates is progressing rapidly, and Phase I/II clinical trials in dengue-exposed populations have begun. Candidate dengue vaccines in clinical stages of development include live vaccines attenuated by passage in cell lines or constructed as live flavivirus chimeras. In his introduction, the chair will review the current pipeline of dengue vaccines in development, summarize the unique safety issues surrounding deployment of dengue vaccines, and justify the need to provide simultaneous protection against the four dengue serotypes. After this introduction, each of the three leading, live-attenuated vaccine candidates will be discussed in separate presentations, to include updates on vaccine safety and immunogenicity in healthy adult and pediatric (if tested) volunteers in the U.S. and several dengue-endemic countries. The fourth talk will be a discussion of the issues and progress made in providing future field sites for Phase 3 efficacy trials of dengue vaccines.

CHAIR

Robert Edelman
University of Maryland School of Medicine, Baltimore, MD, United States

3:45 p.m.

INTRODUCTION

Robert Edelman
University of Maryland School of Medicine, Baltimore, MD, United States

3:55 p.m.

TETRAVALENT, PDK-DERIVED, LIVE-ATTENUATED VACCINE CANDIDATES

Stephen Thomas
Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand

4:20 p.m.

SAFETY AND IMMUNOGENICITY IN CHILDREN AND ADULTS FROM ENDEMIC COUNTRIES AND ADULTS FROM NONENDEMIC COUNTRIES OF A TETRAVALENT, LIVE ATTENUATED DENGUE VACCINE

Alain Bouckenooghe
sanofi pasteur, Swiftwater, PA, United States

4:45 p.m.

NIAID CHIMERIC VACCINE CANDIDATES

Anna Durbin
Johns Hopkins University, Baltimore, MD, United States

5:10 p.m.

THE DEVELOPMENT OF FUTURE FIELD SITES FOR PHASE 3 EFFICACY TRIALS

Bill Letson
Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea

Symposium 98

Plasmodium vivax: Beyond the Genome

Rhythms II/III

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

This symposium will review and update the progress of genomic studies in the human malaria parasite *P. vivax* since the unraveling of its genome. The developments in the *P. vivax* genomic studies will be discussed in parallel to the more extensively studied species *P. falciparum*. A review and discussion of the extent of genetic diversity in the *P. vivax* will be presented, as well as how this information can be utilized to understand the biology, pathogenesis and evolutionary aspects of this organism. Finally, applications of these findings on investigations of human infection with *P. vivax* will be discussed. It is the goal of this symposium to explore how population genetic approaches can reveal mechanisms of malaria disease, pathogenesis and evolution.

CHAIR

Nadira D. Karunaweera
University of Colombo, Colombo, Sri Lanka

Marcelo U. Ferreira
University of Sao Paolo, Sao Paolo, Brazil

3:45 p.m.

***PLASMODIUM VIVAX*: GENOME AND COMPARATIVE GENOMICS**

Jane Carlton
New York University School of Medicine, New York, NY, United States

4:10 p.m.

GENETIC DIVERSITY IN *PLASMODIUM VIVAX*

Nadira Karunaweera
Faculty of Medicine, University of Colombo, Colombo, Sri Lanka

Marcelo Ferreira
University of Sao Paolo, Sao Paolo, Brazil

4:35 p.m.

APPLICATION OF GENOMICS TO THE STUDY OF BIOLOGY AND VACCINE DEVELOPMENT IN *PLASMODIUM VIVAX*

John W. Barnwell
Centers for Disease Control and Prevention, Atlanta, GA, United States

5 p.m.

MOLECULAR MARKERS OF ANTIMALARIAL DRUG RESISTANCE IN *P. VIVAX* FIELD ISOLATES

Ric Price
Menzies School of Health Research, Darwin, Australia

Symposium 99

Measurement and Prediction of Malaria Treatment Outcome: Parasite, Drug and Host Factors

Waterbury

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

Reliable methods to measure and predict the usefulness of therapies are needed for effective malaria treatment policies. Malaria treatment outcome is determined by parasite (susceptibility to the drug(s) used), pharmacological (drug pharmacokinetics, PK and dynamics, PD) and host factors (ability to deal with parasites and their effects). These can be assessed by molecular methods (molecular markers in the parasite related to drug resistance; genetic markers in the host related to resistance to infection and parasite clearance); *in vitro* assays to measure parasite susceptibility to drugs; *in vivo* clinical trials in patients to assess response to treatment; measurement of drug levels. Information on the correlation between these methods is incomplete. To date, no single method available alone can provide the information needed and predict how a patient will respond to treatment. Leading experts will review the current protocols for the *in vitro* and molecular measurements of antimalarial drug resistance and discuss limitations and how these relate to the other factors involved with treatment outcome in patients.

CHAIR

Abdulaje Djimde
University of Bamako, Bamako, Mali

Olumide Ogundahunsi
World Health Organization, Geneva, Switzerland

3:45 p.m.

METHODOLOGICAL ISSUES WITH THE ANALYSIS OF CRUDE AND PCR-ADJUSTED OUTCOMES IN MALARIA CLINICAL TRIALS

Elisabeth Ashley
Epicentre, Paris, France

4:10 p.m.

MOLECULAR TOOLS FOR GENOTYPING ISOLATES AND CHARACTERIZING RESISTANCE IN MALARIA TRIALS

Kefas Mugittu
Novartis Institute of Tropical Diseases, Singapore, Singapore

4:35 p.m.

MOLECULAR/*IN VIVO* CORRELATES OF ANTIMALARIAL TREATMENTS

Stéphane Picot
University Claude Bernard, Lyon, France

5 p.m.

PHARMACOKINETIC/PHARMACODYNAMIC CORRELATES OF ANTIMALARIAL TREATMENTS

Karen Barnes
University of Cape Town, Cape Town, South Africa

Scientific Session 100

Malaria – Drug Development

Napoleon A123

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR

Myaing M. Nyunt
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

Bryan L. Smith
Walter Reed Army Institute of Research, Silver Spring, MD, United States

3:45 p.m.

758

ANTI-MALARIAL ACTIVITY OF MIRINCAMYCIN AND ITS ANALOGS *IN VITRO* AND IN AN *IN VIVO* PRESUMPTIVE CAUSAL PROPHYLACTIC MOUSE MODEL

Susan Fracisco[1], Yarrow Rothstein[1], Montip Gettayacamin[2], Richard Westerman[3], Colin Ohrt[1]
[1]Walter Reed Army Institute of Research Experimental Therapeutics, Silver Spring, MD, United States, [2]Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand, [3]MALDEVCO, LLC, Kalamazoo, MI, United States

4 p.m.

759

MALARIA-INFECTED MICE ARE CURED BY NEW TRIOXANE DIMERS

Gary H. Posner
Johns Hopkins University, Baltimore, MD, United States

4:15 p.m.

760

OPTIMIZATION OF DUAL-FUNCTION ACRIDONE ANTIMALARIALS: IMPROVED EFFICACY AND SYNERGY WITH PIPERAQUINE

Jane X. Kelly[1], Martin Smilkstein[1], Victor Melendez[2], Roland Cooper[3], Rolf Winter[1], Dave Hinrichs[1], Mike Riscoe[1]
[1]Portland VA Medical Center, Portland, OR, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [3]Old Dominion University, Norfolk, VA, United States

4:30 p.m.

761

RANDOMIZED CROSSOVER TRIAL TO EXAMINE THE SAFETY AND PHARMACOKINETICS OF 2100 MG DOSE OF AQ-13 AND THE FOOD EFFECT ON ITS BIOAVAILABILITY

Fawaz Mzayek[1], Haiyan Deng[1], Vidya Mave[1], Azam Hadi[1], Juan J. Lertora[2], Donald J. Krogstad[1]
[1]Tulane University, New Orleans, LA, United States, [2]National Institutes of Health, Bethesda, MD, United States

4:45 p.m.

762

ASSESSMENT OF THE CAUSAL PROPHYLACTIC ACTIVITY OF DB289 IN HEALTHY VOLUNTEERS CHALLENGED WITH *PLASMODIUM FALCIPARUM*

Myaing M. Nyunt[1], Craig W. Hendrix[2], Rahul Bakshi[2], Nirbhay Kumar[1], Theresa A. Shapiro[2]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Johns Hopkins University School of Medicine, Baltimore, MD, United States

5 p.m.

763

A PHASE II, RANDOMIZED, OPEN-LABEL, DOSE-RANGING STUDY OF GMP INTRAVENOUS ARTESUNATE FOR OPTIMIZING PARASITE CLEARANCE IN UNCOMPLICATED *P. FALCIPARUM* MALARIA

Bryan L. Smith[1], Mark E. Polhemus[1], Krisada Jongsakul[2], Bernhards Ogutu[3], Peter J. Weina[1], R. Scott Miller[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [3]United States Army Medical Research Unit-Kenya, Nairobi, Kenya

5:15 p.m.

764

CHLORPROGUANIL-DAPSONE-ARTESUNATE VS. ARTEMETHER-LUMEFANTRINE: A RANDOMISED, DOUBLE-BLIND PHASE III TRIAL FOR THE TREATMENT OF ACUTE, UNCOMPLICATED *PLASMODIUM FALCIPARUM* MALARIA IN AFRICAN CHILDREN AND ADOLESCENTS

Zul Premji[1], Rich E. Umeh[2], Seth Owusu-Agyei[3], Fabian Esamai[4], Emmanuel Ezedinachi[5], Stephen Oguche[6], Steffen Borrmann[7], Akintunde Sowunmi[8], Stephan Duparc[9], Paula L. Kirby[10], Allan Pamba[11], Lynda Kellam[11], Robert Guiguemdé[12], Brian Greenwood[13], Stephen A. Ward[14], Peter A. Winstanley[15]
[1]Ifakara Health Research and Development Center, Ifakara, Kilombero, Morogoro, United Republic of Tanzania, [2]University of Nigeria College of Medicine, Enugu Campus, Enugu, Nigeria, [3]Kintampo Health Research Centre, Kintampo, Ghana, [4]Department of Child Health and Paediatrics, Faculty of Health Sciences, Moi University, Eldoret, Kenya, [5]Institute of Tropical Diseases Research and Prevention, University of Calabar Teaching Hospital, Calabar, Nigeria, [6]Department of Paediatrics, Jos University Teaching Hospital, Jos, Plateau State, Nigeria, [7]Kenya Medical Research Institute (KEMRI)/Wellcome Trust Research Programme, Kilifi, Kenya, and University of Heidelberg School of Medicine, Germany, [8]Malaria Research Laboratories, Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, Ibadan, Nigeria, [9]Formerly at GlaxoSmithKline, Greenford, United Kingdom, now at Medicines for Malaria Venture, Geneva, Switzerland, [10]GlaxoSmithKline, Stockley Park West, Middlesex, United Kingdom, [11]GlaxoSmithKline, Greenford, Middlesex, United Kingdom, [12]Centre Muraz, Bobo-Dioulasso, Burkina Faso, [13]Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom, [14]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [15]School of Clinical Sciences, University of Liverpool, Liverpool, United Kingdom

Scientific Session 101

Mosquitoes – Vector Biology – Epidemiology II

Bayside BC
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR

Kelsey M. Deus
Colorado State University, Fort Collins, CO, United States

Kevin C. Kobylinski
Colorado State University, Fort Collins, CO, United States

3:45 p.m.

765

INSENSITIVE ACETYLCHOLINESTERASE (*ACE-1^R*) OF *ANOPHELES GAMBIAE* S.S.: EVENTS OF INTROGRESSION AND DUPLICATION BETWEEN THE M AND S MOLECULAR FORMS

Djogbénou S. Luc[1], Mylène Weill[2], Jean-Marc Hougard[1], Martin Akogbéto[3], Fabrice Chandre[1]
[1]Institut de Recherche pour le Developpement/Centre de Recherche Entomologique de Cotonou, Cotonou, Benin, [2]Centre National de Recherche Scientifique, Institut des Sciences de l'Evolution, Equipe Génétique de l'Adaptation, Montpellier, France, [3]Centre de Recherche Entomologique de Cotonou, Cotonou, Benin

4 p.m.

766

ENTOMOLOGICAL EVALUATION OF PERMETHRIN IMPREGNATED BEDNETS AGAINST *AN. DARLINGI* IN THE PERUVIAN AMAZON

Elvira Zamora Perea[1], Wagner Orellana Rios[1], Ernesto Curto[1], Yuri Alegre Palomino[2], Victor Lopez Sifuentes[3], Norma Padilla[4], **Gregor J. Devine**[5]
[1]Laboratorio de Salud Publica, Iquitos, Peru, [2]Direccion General de Salud Ambiental, Iquitos, Peru, [3]Naval Medical Research Center Detachment, Iquitos, Peru, [4]Universidad del Valle de Guatemala, Guatemala City, Guatemala, [5]Rothamsted Research, Harpenden, United Kingdom

4:15 p.m.

767

SPATIO-TEMPORAL ORDERING OF A CHAGAS DISEASE VECTOR ELIMINATION CAMPAIGN

Michael Z. Levy[1], Fernando Malaga[2], Juan G. Cornejo del Carpio[3], Ellis McKenzie[1], Joshua B. Plotkin[4]
[1]Fogarty International Center, National Institutes of Health, Bethesda, MD, United States, [2]Region de Salud, Arequipa, Peru, Arequipa, Peru, [3]Region de Salud, Arequipa, Peru, [4]University of Pennsylvania, Philadelphia, PA, United States

4:30 p.m.

768

EFFECTS OF FOREST FRAGMENTATION ON RELATIVE ABUNDANCE, BLOOD MEAL SPECIES COMPOSITION, AND TRYPANOSOME INFECTION OF THE CHAGAS DISEASE VECTOR *RHODNIUS PALLESCENS* IN A PANAMANIAN LANDSCAPE

Nicole L. Gottdenker[1], Ana María Santamaría[2], Jose Calzada[2], Azael Saldaña[2], Vanessa Pineda[2], C. Ronald Carroll[3]
[1]Odum School of Ecology, University of Georgia, Athens, GA, United States, [2]Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama, [3]Odum School of Ecology, University of Georgia, Athens, GA, United States

4:45 p.m.

769

THE EFFECT OF IVERMECTIN (MECTIZAN®) TREATMENT OF HUMANS ON FIELD-CAUGHT BLOODFED *ANOPHELES SPP.* SURVIVAL RATES IN SENEGAL

Kevin C. Kobylinski[1], Massamba Sylla[2], Jason Meckel[1], Brian D. Foy[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Centre IRD de Hann, Dakar, Senegal

5 p.m.

770

DEVELOPMENT OF A MOSQUITOCIDAL VACCINE AGAINST *AE.* AEGYPTI USING THE MOSQUITO LYSOSOMAL ASPARTIC PROTEASE (MLAP) AS AN IMMUNIZATION ANTIGEN

Kelsey M. Deus[1], Tereza Magalhaes[2], Brian D. Foy[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Cidade Universitaria, Recife, Brazil

5:15 p.m.

771

DEVELOPMENT OF CONTROLLED VOCABULARIES AND ONTOLOGIES FOR SURVEILLANCE AND CONTROL OF VECTORS OF HUMAN DISEASE AGENTS

Marlize Coleman[1], Lars Eisen[1], Saul Lozano-Fuentes[1], Sanika Chitari[1], Chester G. Moore[1], Natashia Morris[2], Michael Coleman[2]
[1]Colorado State University, Fort Collins, CO, United States, [2]Medical Research Council, Durban, South Africa

Scientific Session 102

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Molecular Parasitology II

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom A

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR

Ian H. Cheeseman
MRC Gambia, Banjul, Gambia

Jennifer S. Sims
Harvard School of Public Health, Boston, MA, United States

3:45 p.m.

1236

VALIDATION OF PLASMODIUM FALCIPARUM ISOLEUCYL TRNA SYNTHETASE AS A DRUG TARGET

Eva S. Istvan, Daniel E. Goldberg

Washington University School of Medicine, St. Louis, MO, United States

4 p.m.

772

***PLASMODIUM FALCIPARUM* MOLECULAR BARCODE ASSESSMENT OF PARASITES SEQUESTERED IN TISSUES AT AUTOPSY**

Danny A. Milner[1], Jacqui Montgomery[2], Rachel Daniels[3], Kayla Barnes[4], David Rosen[4], Nira Mahesh[4], Steve Kamiza[5], Malcolm Molyneux[2], Sarah Volkman[4], Roger Wiegand[3], Terrie Taylor[6], Dyann Wirth[4]
[1]The Brigham and Women's Hospital, Boston, MA, United States, [2]Malawi-Liverpool-Wellcome Trust Clinical Research Programme, Blantyre, Malawi, [3]The Broad Institute, Cambridge, MA, United States, [4]Harvard School of Public Health, Boston, MA, United States, [5]University of Malawi College of Medicine, Blantyre, Malawi, [6]Michigan State University, East Lansing, MI, United States

4:15 p.m.

773

GENOME-WIDE SURVEY OF GENE COPY NUMBER VARIATION IN THE MALARIA PARASITE *PLASMODIUM FALCIPARUM*

Ian H. Cheeseman[1], Natalia Gomez-Escobar[1], Celine Carret[2], Alasdair Ivens[2], Kevin K. Tetteh[3], Lindsay Stewart[3], Micheal Walther[1], Dominic Kwiatkowski[2], David Conway[1]
[1]MRC Gambia, Banjul, Gambia, [2]Wellcome Trust Sanger Institute, Cambridge, United Kingdom, [3]London School of Hygiene and Tropical Medicine, London, United Kingdom

4:30 p.m.

774

ANALYSIS OF DRUG RESISTANCE USING *PLASMODIUM FALCIPARUM* GENETIC CROSSES

Juliana M. Sa, Olivia Twu, Karen Hayton, Pascal Ringwald, Thomas E. Wellems
National Institutes of Health, Rockville, MD, United States

4:45 p.m.

1237

PROBING CENTRAL CARBON METABOLISM IN PLASMODIUM FALCIPARUM

Kellen Olszewski[1], Joshua D. Rabinowitz[2], Manuel Llinás[1]
[1]Molecular Biology and Lewis-Sigler Institute for Integrative Genomics, Princeton University, Princeton, NJ, United States, [2]Chemistry and Lewis-Sigler Institute for Integrative Genomics, Princeton University, Princeton, NJ, United States

5 p.m.

775

INSIGHTS INTO GENE EXPRESSION THROUGH ANALYSIS OF TRANSCRIPTIONAL ACTIVITY DURING THE INTRAERYTHROCYTIC DEVELOPMENTAL CYCLE OF *PLASMODIUM FALCIPARUM*

Jennifer S. Sims[1], Kevin T. Militello[2], Peter A. Sims[3], Vishal P. Patel[1], Jacob M. Kasper[1], Dyann F. Wirth[1]
[1]Harvard School of Public Health, Boston, MA, United States, [2]State University of New York at Geneseo, Geneseo, NY, United States, [3]Harvard University, Cambridge, MA, United States

5:15 p.m.

776

IDENTIFICATION OF BIOLOGICAL PATHWAYS CRITICAL FOR MALARIA PARASITE DEVELOPMENT, THROUGH TRANSPOSON-MEDIATED MUTAGENESIS

Bharath Balu, Steven P. Maher, Chitra Chauhan, John H. Adamas
University of South Florida, Tampa, FL, United States

Scientific Session 103

Ectoparasite-Borne Diseases

Grand Ballroom B
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR

Philip McCall
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Kathryn E. Reif
Louisiana State University, Baton Rouge, LA, United States

3:45 p.m.

777

INVESTIGATION OF AN OUTBREAK OF A FATAL FEBRILE ILLNESS IN GUATEMALA, 2007

Marina E. Eremeeva[1], Gregory A. Dasch[1], Elsa Berganza[2], Lorena Gobern[2], Erica Dueger[3], Carlos Alonso[4], Leticia Castillo[2], Lissette Reyes[2], Kimberly Lindblade[5], Gloria Suarez[4]
[1]Division of Viral and Rickettsial Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Ministry of Public Health and Social Welfare, Guatemala City, Guatemala, [3]Division of Emerging Infections & Surveillance Services, Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Field Epidemiology Training Program, Coordinating Office of Global Health, Centers for Disease Control and Prevention, Atlanta, GA, United States and CDC Regional Office for Central America and Panama, Guatemala City, Guatemala, [5]Division of Emerging Infections & Surveillance Services, Centers for Disease Control and Prevention, Atlanta, GA, United States and CDC Regional Office for Central America and Panama, Guatemala City, Guatemala

4 p.m.

778

TBRF IN EAST AFRICA: EPIDEMIOLOGY AND CLINICAL DIAGNOSIS IN CENTRAL TANZANIA

Philip J. McCall
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

4:15 p.m.

779

QUANTUM OF TULAREMIA INFECTION WITHIN QUESTING DOG TICKS

Heidi K. Goethert, Sam R. Telford
Tufts University School of Veterinary Medicine, N. Grafton, MA, United States

4:30 p.m.

780

IDENTIFICATION OF BACTERIAL PATHOGENS AND HOSTS OF BLOOD MEALS IN QUESTING IXODID TICKS IN THE NORTH CAROLINA PIEDMONT

Michael P. Smith[1], Loganathan Ponnusamy[1], Allen Richards[2], **Charles S. Apperson**[1]
[1]N.C. State University, Raleigh, NC, United States, [2]Naval Medical Research Unit, Silver Spring, MD, United States

4:45 p.m.

781

ISOLATION OF *FRANCISELLA TULARENSIS TULARENSIS* SUBPOPULATION A.I. FROM MISSOURI LONE STAR TICKS

Zenda L. Berrada, Heidi K. Goethert, Sam R. Telford, III
Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States

5 p.m.

782

EARLY INNATE IMMUNE EVENTS IN THE SKIN AFTER TRANSMISSION OF *YERSINIA PESTIS* BY FLEAS

Christopher F. Bosio, Clayton O. Jarrett, B. Joseph Hinnebusch
Rocky Mountain Laboratories, National Institutes of Health, Hamilton, MT, United States

(ACMCIP Abstract)

5:15 p.m.

783

***RICKETTSIA FELIS* INFECTION IN A MURINE MODEL**

Kathryn E. Reif, Rhett W. Stout, Timothy W. Morgan, Kevin R. Macaluso
Louisiana State University, Baton Rouge, LA, United States

(ACMCIP Abstract)

Symposium 104

Clinical Group II

Grand Ballroom C

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

This session features a malaria update and travel vaccine update.

CHAIR

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

3:45 p.m.

MALARIA PREVENTION UPDATE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION

Paul Arguin
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:20 p.m.

TRAVELERS' VACCINE UPDATE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION

Nina Marano
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:55 p.m.

CLINICAL GROUP ANNUAL BUSINESS MEETING

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Symposium 105

Development of *Plasmodium falciparum* Vaccines Based on Variant Surface Antigens

Grand Ballroom D

Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

Variant surface antigens (VSA) mediate the receptor-specific adhesion of *Plasmodium falciparum*-infected red blood cells (iRBC) and are key to the pathogenesis of *P. falciparum* malaria. These antigens are targeted by acquired antibodies that predict protection from infection and disease. Although this makes them attractive vaccine candidates, vaccine development is hindered by the extensive inter- and intraclonal diversity of the best-known VSA family called PfEMP1 (*P. falciparum* erythrocyte membrane protein 1), and the capacity of *P. falciparum* to switch among transcription of PfEMP1 family members that encode antigenically and functionally distinct adhesive proteins. Strategies for VSA vaccine development include defining the key VSA epitopes that mediate iRBC adhesion or are targeted by broadly reactive inhibitory antibodies. This requires the identification of the host receptors that are involved in severe *P. falciparum* malaria. Two multinational consortia are currently tackling these issues in a coordinated effort to design VSA-based vaccines. The Pregnancy Malaria Initiative is systematically assessing immunogens for a vaccine against pregnancy-associated malaria, with a focus on the VAR2CSA member of the PfEMP1 family. Pregnancy-associated malaria is a major cause of morbidity and mortality for mothers, fetuses and infants. The Severe Malaria Grand Challenges in Global Health consortium is engaged in a parallel effort aimed at characterizing the VSA and host receptors involved in the pathogenesis of life-threatening malaria complications in small children. The symposium is composed of four presentations by lead scientists in these consortia. Each talk will give particular attention to a key aspect of their endeavors to develop *P. falciparum* vaccines based on variant surface antigens.

CHAIR

Lars Hviid
University of Copenhagen and Rigshospitalet, Copenhagen, Denmark

3:45 p.m.

INTRODUCTION

Lars Hviid
University of Copenhagen, Copenhagen, Denmark

4 p.m.

VARIANT SURFACE ANTIGEN DIVERSITY AND CONSERVATION

Joseph D. Smith
Seattle Biomedical Research Institute, Seattle, WA, United States

4:20 p.m.

MECHANISMS OF VAR GENE SWITCHING

Artur Scherf
Institut Pasteur, Paris, France

4:40 p.m.

MAPPING OF EPITOPES IN VARIANT SURFACE ANTIGENS

Ali Salanti
University of Copenhagen and Rigshospitalet, Copenhagen, Denmark

5:05 p.m.

MEASURING AND INTERFERING WITH INFECTED RED BLOOD CELL ADHESION

Patrick E. Duffy
Seattle Biomedical Research Institute, Seattle, WA, United States

Scientific Session 106

Helminthic Coinfections

Grand Ballroom E
Tuesday, December 9, 3:45 p.m. – 5:30 p.m.

CHAIR

Subash Babu
National Institutes of Health, Bethesda, MD, United States

W. Evan Secor
Centers for Disease Control, Atlanta, GA, United States

3:45 p.m.

784

A COHORT STUDY EVALUATING IMMUNOLOGICAL AND CLINICAL CONSEQUENCES OF THE CO-INFECTION HTLV-1 AND *SCHISTOSOMA MANSONI*

Aurelia Porto, Silvane B. Santos, Isadora Siqueira, Andre Luiz Muniz, **Edgar M. Carvalho**
Federal University of Bahia, Salvador, Brazil

4 p.m.

785

HELMINTH INFECTIONS DURING PREGNANCY IS ASSOCIATED WITH IMPAIRED HIB VACCINE RESPONSES IN KENYAN INFANTS

John Kioko[1], Indu Malhotra[2], Peter Mungai[2], Alex Wamachi[3], A. Desiree LaBeaud[2], John Ouma[1], Davy Koech[3], Eric Muchiri[1], **Christopher L. King**[2]
[1]Division of Vector Borne Diseases, Nairobi, Kenya, [2]Case Western Reserve University, Cleveland, OH, United States, [3]Kenya Medical Research Institute, Nairobi, Kenya

4:15 p.m.

786

INHIBITION OF TYPE I DIABETES IN FILARIA INFECTED NOD MICE IS ASSOCIATED WITH A TH2 SHIFT AND INDUCTION OF REGULATORY T CELLS

Marc P. Hübner, Marina N. Torrero, David Larson, J. Thomas Stocker, Edward Mitre
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

4:30 p.m.

787

INFLUENCE OF PRE-EXISTING FILARIAL INFECTION ON THE INCIDENCE AND SEVERITY OF CLINICAL MALARIA IN CHILDREN AND YOUNG ADULTS IN A COENDEMIC REGION OF MALI

Benoit Dembele[1], Housseini Dolo[1], Siaka Konate[1], Siaka Y. Coulibaly[1], Dramane Sanogo[1], Simon Metenou[2], Siddhartha Mahanty[2], Michel E. Coulibaly[1], Lamine Soumaoro[1], Salif S. Doumbia[1], Marissa Wagner[3], Boubacar Guindo[1], Abdallah A. Diallo[1], Aldiouma Guindo[1], Seidina Diakite[1], Merepin A. Guindo[1], Renion Saye[1], Ousmane Kante[1], Dapa A. Diallo[1], Sekou F. Traore[1], Thomas B. Nutman[2], Yaya I. Coulibaly[1], **Amy D. Klion**[2]
[1]Faculty of Medicine, Pharmacy and Dentistry, University of Bamako, Bamako, Mali, [2]National Institutes of Health, Bethesda, MD, United States, [3]Harvard Medical School, Boston, MA, United States

4:45 p.m.

788

T LYMPHOCYTE SUBSETS IN CHILDREN WITH SCHISTOSOMIASIS MANSONI COMPARED TO CHILDREN WITH *SCHISTOSOMA MANSONI* AND *PLASMODIUM FALCIPARUM* CO-INFECTIONS IN WESTERN KENYA

Erick M. Muok[1], Pauline N. Mwinzi[1], Carla L. Black[2], Jennifer M. Carter[2], Zopporah W. Ng'ang'a[3], Michael M. Gicheru[4], W. Evan Secor[5], Diana M. Karanja[1], Daniel G. Colley[2]
[1]Centre for Global Health Research, Kenya Medical Research Institute, Kisumu, Kenya, [2]University of Georgia, Athens, GA, United States, [3]Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, [4]Kenyatta University, Nairobi, Kenya, [5]Centers for Disease Control and Prevention, Atlanta, GA, United States

(ACMCIP Abstract)

5 p.m.

789

***WUCHERERIA BANCROFTI* AND *MANSONELLA PERSTANS* INFECTIONS MAY PROTECT AGAINST *P. FALCIPARUM* INDUCED ANEMIA IN FILARIA/MALARIA CO-INFECTED POPULATIONS**

Benoit Dembele[1], Siaka Konate[1], Housseini Dolo[1], Dramane Sanogo[1], Siaka Y. Coulibaly[1], Michel E. Coulibaly[1], Lamine Soumaoro[1], Simon Metenou[2], Salif S. Doumbia[1], Abdallah Diallo[1], Yaya I. Coulibaly[1], Sekou F. Traore[1], Amy Klion[2], Thomas B. Nutman[2], Siddhartha Mahanty[2]
[1]Filariasis Unit, FMPOS, University of Bamako, Bamako, Mali, [2]LPD, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

Plenary Session 107

Plenary Session III: Commemorative Fund Lecture

Grand Ballroom C
Tuesday, December 9, 6 p.m. – 6:45 p.m.

The ASTMH Commemorative Fund Lecture is presented annually by an invited senior researcher in the tropics.

CHAIR

Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

RESEARCH, DEVELOPMENT AND INNOVATION ON NEGLECTED DISEASES: A DEVELOPING COUNTRY PERSPECTIVE

Carlos Morel
Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

Poster Session B Dismantle

Armstrong Ballroom
Tuesday, December 9, 7 p.m. – 8 p.m.

Satellite Symposium

The Search for Synergistic Interactions between Antimalarial Agents: A Review of *in vitro* and *in vivo* Approaches and Current Prospects for the Development of Synergistic Combinations

Sponsored by Pfizer, Inc.
Gallery
Tuesday, December 9, 7 p.m. – 8:15 p.m.

The recent move toward worldwide implementation of artemisinin-based combination therapies (ACTs), as a replacement for the former first-line antimalarials chloroquine and sulfadoxine-pyrimethamine, has focused attention on how to identify the most suitable ACTs. Synergy between combination partners is a particularly desirable property. This symposium will present a series of talks that dissect issues relating to the study and identification of synergistic, additive or antagonistic interactions between antimalarials. Factors affecting the experimental investigation and definition of synergy will be explored, and current knowledge about synergistic interactions between distinct classes of antimalarials will be presented. The symposium will also discuss clinical investigations that have permitted an investigation into the clinical efficacy of synergistic drug combinations, and provide a perspective on promising avenues to develop new antimalarial combinations that partner compounds with synergistic modes of action.

CHAIR

David Fidock
Columbia University, New York, NY, United States

INVESTIGATIONS INTO AND DEFINITIONS OF ANTIMALARIAL DRUG SYNERGISM AND ANTAGONISM

Angus Bell
Trinity College, Dublin, Ireland

SYNERGISTIC INTERACTIONS BETWEEN DISTINCT CLASSES OF ANTIMALARIALS

Simon Croft
London School of Hygiene and Tropical Medicine, London, United Kingdom

INVESTIGATIONS INTO POSSIBLE SYNERGISTIC INTERACTIONS BETWEEN AZITHROMYCIN AND QUINOLINE-BASED ANTIMALARIALS

David Fidock
Columbia University, New York, NY, United States

DOES SYNERGY CONTRIBUTE TO EFFICACY WITH ANTIMALARIAL COMBINATION THERAPIES IN CLINICAL USE?

Harald Noedl
Medical University of Vienna, Vienna, Austria.

PROSPECTS OF DEVELOPING NOVEL ANTIMALARIAL COMBINATIONS USING SYNERGISTIC PARTNER DRUGS

Philip Rosenthal
University of California at San Francisco, San Francisco, CA, United States

Satellite Symposium

Dihydroartemisinin/Piperaquine: An Innovative ACT in the Treatment of *P. falciparum* Malaria

Sponsored by Medicines for Malaria Venture and sigma-tau
Grand Ballroom A
Tuesday, December 9, 7 p.m. – 8:15 p.m.

Malaria is a widespread disease prevalent in many developing countries. Dihydroartemisinin/Piperaquine (DHA + PQP) is a fixed-ratio drug combination developed to treat uncomplicated *P. falciparum* malaria. It can be given in a once a day dosing over three days. This session reports on two Phase III comparative trials with DHA + PQP versus artesunate/mefloquine (AS+MQ), and artemether/lumefantrine (A+L), as well as the pharmacokinetics. These studies included over 2,500 patients in different epidemiological settings in Africa and Asia. The results demonstrate that DHA + PQP is an effective and well tolerated treatment for uncomplicated *P. falciparum* malaria, showing also significantly higher cure-rate at day 42 versus A+L and at day 63 versus AS+MQ. These findings, from one of the largest pivotal trials conducted for an innovative antimalarial, provide significant insights into the usage of ACTs in the treatment of uncomplicated *P. falciparum* malaria.

CHAIR

Ncholas White
Mahidol University, Faculty of Tropical Medicine, Bangkok, Thailand

Christopher Hentschel
Medicines for Malaria Venture, Geneva, Switzerland

PHARMACOKINETICS OF PIPERAQUINE AND DIHYDROARTEMISININ

Allan Evans
University of South Australia, Adelaide, Australia

PHASE III, RANDOMIZED, NON-INFERIORITY TRIAL OF DIHYDROARTEMISININ/PIPERAQUINE IN COMPARISON WITH ARTEMETHER/LUMEFANTRINE IN AFRICAN CHILDREN

Umberto D'Alessandro
Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium

PHASE III, RANDOMIZED, NON-INFERIORITY TRIAL OF DIHYDROARTEMISININ/PIPERAQUINE IN COMPARISON WITH ARTESUNATE/MEFLOQUINE IN PATIENTS IN ASIA

Neena Valecha
National Institute of Malaria Research, Delhi, India

COMPARING THE PERSPECTIVE OF THE EPIDEMIOLOGIST WITH THAT OF THE REGULATOR

Antonella Bacchieri
sigma-tau, Pomizia, Italy

Satellite Symposium

The Positive Impact of Artemether/ Lumefantrine on Malaria Morbidity and Mortality

Sponsored by Novartis Pharma AG.
Grand Ballroom D
Tuesday, December 9, 7 p.m. – 8:15 p.m.

To date, 34 countries in Africa, Asia and Latin America have adopted Artemether/Lumefantrine (A/L) as first-line treatment for uncomplicated falciparum malaria. Since 1999, when A/L was first registered, over 200 million treatments have been used, the vast majority of them through public sector distribution. In 2001, the World Health Organization adopted a new policy on artemisinin-based combination therapy (ACTs), leading to scaling up of A/L. Widespread use of A/L started in 2005, resulting in a steady accumulation of solid data supporting its positive impact on malaria mortality and morbidity. Time-series data and community based studies are contributing to the growing body of evidence that case management with A/L significantly reduces the burden of malaria in a time where LLINs (long lasting insecticidal nets) coverage is improving but not yet achieving targets in most countries. This symposium will discuss health impact data from several African countries, including evaluation of safety.

CHAIR

Ambrose Talisuna
Ministry of Health, Kampala, Uganda

EPIDEMIOLOGICAL CHANGES IN MALARIA IN AFRICA – REAL OR A MIRAGE?

Ambrose Talisuna
Ministry of Health, Kampala, Uganda

THE IMPACT OF ARTEMETHER/LUMEFANTRINE COMMUNITY DEPLOYMENT ON MORTALITY AND MORBIDITY IN TIGRAY, ETHIOPIA AT TWO YEARS

Hailemariam Lemma
Tigray Health Bureau, Tigray, Ethiopia.

THE ALIVE STUDY – MEASURING THE IMPACT OF ARTEMETHER/LUMEFANTRINE IN VULNERABLE POPULATIONS IN TANZANIA

Blaise Genton
Ifakara Health Research and Development Center, Dar Es Salaam, United Republic of Tanzania

KENYAN HOSPITAL TIME-SERIES DATA TO MEASURE THE IMPACT OF ARTEMETHER/LUMEFANTRINE

Emelda Okiro
Wellcome Trust Collaborative Programme, Nairobi, Kenya

Wednesday, December 10

Registration

Napoleon Ballroom
Wednesday, December 10, 7 a.m. – 5 p.m.

Cyber Cafe

Lagniappe
Wednesday, December 10, 7 p.m. – 5 p.m.

Speaker Ready Room

Nottoway
Wednesday, December 10, 7 a.m. – 6 p.m.

ASTMH Past Presidents Meeting

Grand Couteau
Wednesday, December 10, 7 a.m. – 8 a.m.

Web Site Committee Meeting

Salon 816
Wednesday, December 10, 7 a.m. – 8 a.m.

Scientific Program Committee

Oak Alley
Wednesday, December 10, 7 a.m. – 8 a.m.

Symposium 108

Tick-Host-Pathogen Research in the Post-Genomic Era

Gallery
Wednesday, December 10, 8 a.m. – 9:45 a.m.

Tick genomics research is expanding dramatically with the Ixodes scapularis genome sequencing project and availability of expressed sequence tags (ESTs) from specific tissues and life cycle stages of several tick species. Speakers will focus on how this wealth of emerging data can be used to achieve more robust insights into tick genome organization, gene function, evolutionary relationships, modulation of the host environment, vector competence, control and physiological processes, including those not previously amenable to study.

CHAIR

Stephen Wikel
University of Texas Medical Branch, Galveston, TX, United States

Francisco Alarcon-Chaidez
University of Texas Medical Branch, Galveston, TX, United States

8 a.m.

TICK GENOME PROJECT AND BEYOND

Catherine A Hill
Purdue University, West Lafayette, IN, United States

8:25 a.m.

TICK NEUROBIOLOGY IN THE POST-GENOMIC ERA

Alan Bowman
University of Aberdeen, Aberdeen, United Kingdom

8:50 a.m.

MOLECULAR DETERMINANTS OF TICK SUSCEPTIBILITY AND RESPONSE TO RICKETTSIA

Kevin Macaluso
Louisiana State University, Baton Rouge, LA, United States

9:15 a.m.

COMPLEXITY OF THE TICK SALIVARY GLAND TRANSCRIPTOME AND PROTEOME

Jose Ribeiro
National Institutes of Health, NIAID/LPD, Rockville, MD, United States

Symposium 109

Genital Schistosomiasis as a Risk Factor for HIV Transmission

Rhythms I

Wednesday, December 10, 8 a.m. – 9:45 a.m.

Up to 75% of the women excreting *S. haematobium* eggs in the urine have been found to have schistosome eggs in the genital tract. *S. haematobium* is associated with sandy patches in the genital mucosa, as well as contact bleeding. The manifestations may mimic some of the sexually transmitted diseases, and the disease may be found to be associated with HIV. The symposium will address some of the key issues of the disease as a neglected public health problem for women and for men.

CHAIR

Eyrun F. Kjetland
Centre for Imported and Tropical Diseases, Oslo, Norway

8 a.m.

INTRODUCTION

Eyrun F. Kjetland
Centre for Imported and Tropical Diseases, Oslo, Norway

8:10 a.m.

TREATMENT OF SCHISTOSOMIASIS AS INTERVENTION AGAINST HIV TRANSMISSION IN AFRICA

Eyrun F. Kjetland
Centre for Imported and Tropical Diseases, Oslo, Norway

8:30 a.m.

THE RELATIONSHIP BETWEEN URINARY AND GENITAL SCHISTOSOMIASIS

Patrcia D. Ndhlovu
University of Zimbabwe, Harare, Zimbabwe

8:55 a.m.

FEMALE GENITAL SCHISTOSOMIASIS AS A RISK FACTOR FOR HIV TRANSMISSION, A HISTOPATHOLOGICAL TAKE ON THE ISSUE

Peter M. Jourdan
Centre for imported and Tropical Diseases, Oslo, Norway

9:20 a.m.

MALE GENITAL SCHISTOSOMIASIS AS A RISK FACTOR FOR HIV TRANSMISSION TO WOMEN – A NEW INTERVENTION POINT AGAINST HIV TRANSMISSION?

Peter D. C. Leutscher
DBL Centre for Health and Research, Frediksberg, Copenhagen, Denmark

Scientific Session 110

Malaria – Epidemiology I

Rhythms II/III

Wednesday, December 10, 8 a.m. – 9:45 a.m.

CHAIR

Nakul Chitnis
Swiss Tropical Institute, Basel, Switzerland

J.R. Poespoprodjo
District Health Authority, Darwin, Australia

8 a.m.

790

STEEP INCREASE IN CHILD SURVIVAL AFTER FOUR YEARS OF INTEGRATED MALARIA CONTROL IN BIOKO ISLAND, EQUATORIAL GUINEA

Immo Kleinschmidt[1], Christopher Schwabe[2], Luis Segura[2], Luis Benavente[2]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Medical Care Development International, Silver Spring, MD, United States

8:15 a.m.

791

THE IMPACT OF HOME BASED MANAGEMENT OF MALARIA (HMM) ON UNDER FIVE MALARIA MORTALITY: THE RWANDAN EXPERIENCE

Waltruda Van Doren[1], **Daniel Ngamije**[2], Corine K. Karema[3], François Nyitegeka[3], Jean B. Ahoranayezu[4], Jean-Pierre Van geertruyden[5]
[1]Malaria Control Programme of Rwanda/Belgian Technical Cooperation, Kigali, Rwanda, [2]National Malaria Control Programme of Rwanda, Kigali, Rwanda, [3]National Malaria Control Programme of Rwanda, Kigali, Rwanda, [4]WHO, Kigali, Rwanda, [5]Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium

8:30 a.m.

792

COMPARISON OF THE EFFECTIVENESS OF ITNS, IRS, AND CHEMOTHERAPEUTIC INTERVENTIONS, IN REDUCING MALARIA TRANSMISSION, USED INDIVIDUALLY AND IN COMBINATION, THROUGH A MATHEMATICAL MODEL

Nakul Chitnis[1], Allan Schapira[1], Thomas A. Smith[1], Richard Steketee[2]
[1]Swiss Tropical Institute, Basel, Switzerland, [2]PATH, Ferney-Voltaire, France

8:45 a.m.

793

IMPACT OF LARVICIDING ON MALARIA IN THE GAMBIA

Margaret Pinder[1], Silas Majambere[1], David Ameh[2], David Jeffries[2], Musa Jawara[2], Ann Kelly[3], Clare Green[4], Robert Hutchinson[1], David Conway[2], Steve Lindsay[1]
[1]Durham University, Durham, United Kingdom, [2]MRC Laboratories, Banjul, Gambia, [3]London School of Hygiene and Tropical Medicine, London, United Kingdom, [4]Centre for Infectious Diseases and International Health, London, United Kingdom

9 a.m.

794

A CROSS-NATIONAL COMPARISON OF INSECTICIDE-TREATED NET HOUSEHOLD POSSESSION AND USE AMONG CHILDREN UNDER FIVE YEARS OLD AND PREGNANT WOMEN

Thomas P. Eisele, Joseph Keating, Megan Littrell, David Larsen, Kate Macintyre
Department of International Health and Development, Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

9:15 a.m.

795

POTENTIAL CONTRIBUTION OF SERO-EPIDEMIOLOGICAL ANALYSIS FOR MALARIA ELIMINATION: HISTORICAL AND CURRENT PERSPECTIVES

Chris Drakeley[1], Jackie Cook[1], Patrick Corran[2], Jamie Griffin[3], Lucy Okell[1], Azra Ghani[3], Eleanor Riley[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]NIBSC, South Mimms, United Kingdom, [3]Imperial College, London, United Kingdom

9:30 a.m.

796

MULTIDRUG RESISTANT VIVAX MALARIA: A MAJOR CAUSE OF MORBIDITY IN EARLY LIFE

J.R. Poespoprodjo[1], W. Fobia[2], E. Kenangalem[1], D.A. Lampah[1], A. Hasanuddin[3], N. Warikar[2], P. Sugiarto[4], E. Tjitra[5], N.M. Anstey[6], R.N. Price[6]
[1]District Health Authority, Timika, Papua, Indonesia, [2]Menzies School of Health Research-National Institutes of Health Research and Development Malaria Research Program, Timika, Papua, Indonesia, [3]Mitra Masyarakat Hospital, Timika, Papua, Indonesia, [4]Mitra Masyarakat Hospita, Timika, Papua, Indonesia, [5]National Institutes of Health Research and Development, Jakarta, Indonesia, [6]Menzies School of Health Research, Darwin, Australia

Symposium 111

Predicting and Mitigating Outbreaks of Vector-Borne Disease Utilizing Satellite Remote Sensing Technology and Models

Waterbury
Wednesday, December 10, 8 a.m. – 9:45 a.m.

The symposium is designed to review progress in the effort to predict and mitigate vector-borne disease using remote sensing parameters. The speakers will discuss models developed by NASA and their partners for application of the research results for improved prevention and prediction of outbreaks. We will update the projects that were introduced last year and also present new projects that are using NASA data.

CHAIR

Sue M. Estes
NASA/USRA, Huntsville, AL, United States

John A. Haynes
NASA, Washington, DC, United States

8 a.m.

Introduction

John A. Haynes
NASA, Washington, DC, United States

8:10 a.m.

AN OVERVIEW OF NASA PUBLICATIONS APPLICATIONS USING REMOTE SENSING DATA AND HOW TO BECOME A RESEARCH COLLABORATOR WITH NASA

Sue M. Estes
NASA/USRA, Huntsville, AL, United States

8:25 a.m.

AN OVERVIEW OF NASA PUBLICATIONS APPLICATIONS USING REMOTE SENSING DATA AND HOW TO BECOME A RESEARCH COLLABORATOR WITH NASA

John Haynes
NASA, Washington, DC, United States

8:45 a.m.

REMOTE SENSING BASED MODELING AND SURVEILLANCE OF MALARIA AND AVIAN INFLUENZE RISK PREDICTION IN SOUTH EAST ASIA AND EARLY WARNING OF PANDEMIC INFLUENZA

Richard K. Kiang
NASA, Greenbelt, MD, United States

9 a.m.

UTILIZATION OF NASA EARTH SCIENCE RESEARCH RESULTS TO ENHANCE THE CDC ARBONET/PLAGUE SURVEILLANCE SYSTEM AND PREDICTING ZOONOTIC HEMORRHAGIC FEVER EVENTS IN SUB-SAHARAN AFRICA USING NASA EARTH SCIENCE DATA FOR DOD – GLOBAL EMERGING INFECTIONS SURVEILLANCE

Jorge Pinzon E. Pinzon
NASA, Greenbelt, MD, United States

9:15 a.m.

MALARIA EARLY WARNING SYSTEM (MEWS/FAMINE EARLY WARNING SYSTEM (FEWS)

Molly E. Brown
NASA, Greenbelt, MD, United States

9:30 a.m.

INTEGRATION OF REMOTE SENSING INTO ENCEPHALITIS VIRUS INTERVENTION DECISION SUPPORT SYSTEMS

William Reisen
University of California – Davis, Davis, CA, United States

Symposium 112

Wolbachia Endosymbionts of Filarial Parasites: From Basic Symbiosis Research to New Treatment Approaches for Filariasis

Napoleon A123
Wednesday, December 10, 8 a.m. – 9:45 a.m.

Wolbachia are obligatiory symbionts required for development and reproduction in most filarial species. Depletion of these alpha-proteobacteria by antibiotics leads to sterility of the female worms and to the death of adult worms. Because many pathogenic filarial species depend on Wolbachia, they represent a breakthrough target for the development of new anti-filarial drugs and a novel insight into the pathogenesis of filariasis by stimulating an inflammatory immune response in the human host. Recent genome sequencing of the filarial parasite *Brugia malayi* and its *Wolbachia* revealed new hypotheses on the nature of their mutualistic relationship which will form the basis for post-genomic experiments. The *Wolbachia*/ filarial parasite system offers the possibility to study the nature of symbiosis taking place within a unique three-dimensional vertebrate host/parasite/ endosymbiont relationship.

CHAIR

Peter Fischer
Washington University School of Medicine, St. Louis, United States

Mark Taylor
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

8 a.m.

BIOLOGY OF *WOLBACHIA* AND THEIR ROLE IN PATHOGENESIS OF HUMAN FILARIASIS

Mark Taylor
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

8:25 a.m.

GENOME ORGANIZATION OF *WOLBACHIA* AND FURTHER DIRECTIONS OF POST-GENOMIC RESEARCH

Barton Slatko
New England Biolabs, Ipswich, MA, United States

8:50 a.m.

LATERAL GENE TRANSFER FROM *WOLBACHIA* TO THE NUCLEAR GENOME OF FILARIAL PARASITES

Peter Fischer
Washington University School of Medicine, St. Louis, MO, United States

9:15 a.m.

TREATMENT OF HUMAN FILARIASIS USING ANTIBIOTICS TARGETING *WOLBACHIA* ENDOSYMBIONTS

Achim Hoerauf
Institute for Medical Parasitology, Bonn, Germany

Symposium 113

Update on Cholera

Maurepas
Wednesday, December 10, 8 a.m. – 9:45 a.m.

Cholera remains an important cause of morbidity and mortality in the developing world. The symposium will update clinical and epidemiological data on cholera, and review molecular epidemiologic studies from India and Bangladesh, mathematical modeling of cholera transmission and recent vaccine studies.

CHAIR

J. Glenn Morris
University of Florida, Gainesville, FL, United States

O. Colin Stine
University of Maryland, Baltimore, Baltimore, MD, United States

8 a.m.

CLINICAL AND EPIDEMIOLOGICAL UPDATE

J. Glenn Morris
University of Florida, Gainesville, FL, United States

8:25 a.m.

MOLECULAR EPIDEMIOLOGY OF CHOLERA IN INDIA AND BANGLADESH

O. Colin Stine
University of Maryland, Baltimore, Baltimore, MD, United States

8:50 a.m.

MATHEMATICAL MODELS OF CHOLERA

Elsa Schaefer
Marymount College, Arlington, VA, United States

9:15 a.m.

CHOLERA VACCINES: THE KOLKATA VACCINE TRIAL

John Clemens
International Vaccine Institute, Seoul, Republic of Korea

Scientific Session 114

Pneumonia, Respiratory Infections and Tuberculosis

Bayside A
Wednesday, December 10, 8 a.m. – 9:45 a.m.

CHAIR

W. Abdullah Brooks
International Center for Diarrhoeal Disease Research, B: Centre for Health & Population Research, Dhaka, Bangladesh

Davidson H. Hamer
Center for International Health and Development, Boston, MA, United States

8 a.m.

797

PNEUMOCOCCAL DISEASE IN MALI AND THE INTRODUCTION OF 7-VALENT VACCINE INTO THE EPI

Samba O. Sow[1], Milagritos D. Tapia[2], Mariam Sylla[3], Souleymane Diallo[3], Mahamadou Keita[1], Nouhoum Kone[4], Karen Kotloff[2], Myron M. Levine[2]
[1]Center for Vaccine Development-Mali, Bamako, Mali, [2]Center for Vaccine Development Baltimore, CVD-Baltimore, MD, United States, [3]Hopital Gabriel Toure, Bamako, Mali, [4]EPI, Ministere de la Sante, Bamako, Mali

8:15 a.m.

798

NEW DIAGNOSTIC APPROACHES FOR PEDIATRIC TB AMONG PERUVIAN CHILDREN

Richard Oberhelman[1], Giselle Soto-Castellares[2], Luz Caviedes[3], Maria Castillo[4], Mayuko Saito[5], Alberto Laguna[2], Robert Gilman[6]
[1]Tulane School of Public Health, New Orleans, LA, United States, [2]U.S. Naval Medical Reseach Center Detachment, Lima, Peru, [3]Universidad Peruana Cayetano Heredia, Lima, Peru, [4]Instituto de Salud del Nino, Lima, Peru, [5]Asociacion Benefica PRISMA, Lima, Peru, [6]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

8:30 a.m.

799

A REPORT OF THE FIRST TWO AND A HALF YEARS OF A COMPREHENSIVE INFLUENZA SENTINEL SURVEILLANCE SYSTEM IN KENYA AND ITS IMPLICATIONS FOR VACCINE STRAIN SELECTION IN THE EAST AFRICA REGION

David Schnabel[1], Wallace Bulimo[2], Jason Garner[3], Rachel Achilla[2], Virginia Headley[3], Sam Martin[1]
[1]US Army Medical Research Unit – Kenya, Nairobi, Kenya, [2]Kenya Medical Research Institute, Nairobi, Kenya, [3]US Air Force School of Aerospace Medicine, Brooks City-Base, TX, United States

8:45 a.m.

800

THE EPIDEMIOLOGY OF HUMAN PARAINFLUENZA VIRUS-ASSOCIATED PNEUMONIA IN THAILAND

Oliver Morgan[1], Malinee Chittaganpitch[2], Birgit Clague[3], Wiwan Sanasuttipun[4], Teresa C. Peret[5], Dean D. Erdman[5], Henry C. Baggett[6], Sonja J. Olsen[1], Alicia Fry[7]
[1]Division of Emerging Infections and Surveillance Services, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Thailand National Institutes of Health, Ministry of Public Health, Nonthaburi, Thailand, [3]International Emerging Infections Program, Thailand MOPH-U.S. CDC Collaboration, Nonthaburi, Thailand, [4]Sa Kaeo Provincial Health Office, Sa Kaeo, Thailand, [5]Division of Viral Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [6]International Emerging Infections Program, Thailand MOPH-U.S. CDC Collaboration, Nonthaburi, Thailand, [7]Division of Viral Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States

9 a.m.

801

RESPIRATORY DISEASE SURVEILLANCE IN 6 ROYAL THAI ARMY HOSPITALS ALONG THAI BORDERS

Jariyanart Gaywee[1], Narongrid Sirisopana[1], Chirapa Eamsila[1], Pochaman Watcharapichat[1], Thippawan Chuenchitra[1], Judpon Vudtakanok[2], Vim Jangyodsuk[3], Smin Boonlikit[3], Wisuth Srichantrapunt[4], Surat Paonin[5], Rattaporn Pattanarangsan[6], Thongdang Arthayapan[7], Ladaporn Bodhidatta[1], Richard G. Jarman[1], Julie A. Pavlin[1], Carl J. Mason[1]
[1]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [2]Fort Surasi Hospital, Kanchanaburi, Thailand, [3]Fort Surasinghanath Hospital, Sa-Kaew, Thailand, [4]Fort Sunpasitthiprasong Hospital, Ubon Ratchathani, Thailand, [5]Fort Mengraimaharat Hospital, Chiangrai, Thailand, [6]Fort Khetudomsak Hospital, Chumphon, Thailand, [7]Fort Ingkayuthaborihan Hospital, Pattani, Thailand

9:15 a.m.

802

EPIDEMIOLOGY AND GENETIC CHARACTERIZATION OF INFLUENZA VIRUSES ISOLATED FROM PATIENTS ENROLLED IN A HOSPITAL-BASED FEBRILE SURVEILLANCE STUDY IN CAMBODIA

Patrick J. Blair[1], Thomas F. Wierzba[2], Sok Touch[3], Saphonn Vonthanak[4], Rebecca J. Garten[5], Xiyan X. Xu[5], Alexander I. Klimov[5], Shannon D. Putnam[6]
[1]Naval Health Research Center, San Diego, CA, United States, [2]Naval Medical Research Unit 2-Phnom Penh, Phnom Penh, Cambodia, [3]Communicable Diseases Control Department, Phnom Penh, Cambodia, [4]National Institute of Public Health, Phnom Penh, Cambodia, [5]Centers for Disease Control and Prevention, Atlanta, GA, United States, [6]Naval Medical Research Unit #2, Jakarta, Indonesia

9:30 a.m.

803

EVALUATION OF SYMPTOM RECALL DURING A TWO-WEEK INTERVAL IN HOME-BASED MORBIDITY SURVEILLANCE, KISUMU AND NAIROBI, KENYA

Daniel Feikin[1], Allen Audi[1], James Ndirango[2], Christina Polyak[1], Godfrey Bigogo[1], Beatrice Olack[2], John Williamson[3], Heather Burke[2], Robert Breiman[2]
[1]Centers for Disease Control and Prevention, Kisumu, Kenya, [2]Centers for Disease Control and Prevention, Nairobi, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

Symposium 115

Antigen Presenting Cells in Helminth Infection- A Role for Immune Regulation? From Mice to Human – Comparison Between *in vitro* and *in vivo* Systems

Bayside BC

Wednesday, December 10, 8 a.m. – 9:45 a.m.

A common feature of chronic helminth infection is the inability of T cells to proliferate or produce IFN-g in response to parasite Ag. Considerable published data suggest that dysregulation of professional antigen presenting cells (APCs) — e.g., dendritic cells (DC) and macrophages (Mac) — can explain the lack of an antigen-specific T cell response. Although the detailed mechanisms remain elusive, common data from human studies and mouse studies are beginning to emerge. Nonetheless, differences in the experimental systems need to be resolved. Our knowledge of T cell hypo-responsiveness is probably best studied in filarial disease and thus that will be the topic of this symposium. Microfilaria of *Brugia malayi* affect human DC in at least two ways: 1) by interfering with their viability and 2) by altering their function. In addition, the infective larval stage (L3, has been shown to alter the function of human Langerhans' cells (LC) quite profoundly. Interestingly, these same filarial parasites, in mouse models of filariasis, generate suppressive nematode-elicited macrophages (NeMac), capable of blocking T cell proliferative responses. Moreover, data from another mouse system indicate that a phosphorylcholine-containing glycoprotein, ES-62, secreted by Acanthocheilonema viteae, induces the maturation of DC2 with the capacity to induce Th2 responses that may cross regulate Th1 responses. This symposium is organized to review the existing data on the role of professional APCs in helminth infection. The goal is to address the role of APCs in mouse and human models and to give an overview of the differences and similarities that exist between these models, as well to compare and contrast *in vitro* models and clinical or *in vivo* studies that have been done so far. The final goal is to address the research needs for a better understanding of APC function in filariasis and other helminth infections.

CHAIR

Roshanak T. Semnani
National Institutes of Health, Bethesda, MD, United States

8 a.m.

MODULATION OF DENDRITIC CELL FUNCTION BY NEMATODES

Mary M. Stevenson
McGill University Health Centre, Montreal, Canada

8:25 a.m.

THE ROLE OF MACROPHAGES IN MURINE MODELS OF FILARIASIS

Judith E. Allen
The University of Edinburgh, Edinburgh, United Kingdom

8:50 a.m.

GENERATING PROTECTIVE IMMUNITY TO INTESTINAL PARASITES

Jackie Perrigoue
University of Pennsylvania, Philadelphia, PA, United States

9:15 a.m.

THE ROLE OF HUMAN DENDRITIC CELLS IN FILARIAL INFECTION

Roshanak T. Semnani
National Institutes of Health, Bethesda, MD, United States

Symposium 116

Developing Great Leaders in Tropical Medicine: The Fogarty International Center at 40

Grand Ballroom A

Wednesday, December 10, 8 a.m. – 9:45 a.m.

The Fogarty International Center (FIC) of National Institutes of Health is one of the few institutions devoted entirely to developing foreign and U.S. leaders in science and public health focused on working in poor countries. The research-training model links institutions in the north and south to mutual benefit. Examples of successful training programs and research highlights will focus on: cholera in Bangladesh; malaria in Uganda; STI/HIV in Africa and Latin America; and, emerging infections in Cameroon and Congo The principles of successful programs leading to sustainability and career enhancement will be discussed. The history of FIC and the model used for successful international collaboration will be featured.

CHAIR

Joel G. Breman
Fogarty International Center, Bethesda, MD, United States

Roger Glass
Fogarty International Center, Bethesda, MD, United States

8 a.m.

Introduction

Joel G. Breman
Fogarty International Center, Bethesda, MD, United States

Roger Glass
Fogarty International Center, Bethesda, MD, United States

8:25 a.m.

CHOLERA IN BANGLADESH

Stephen Calderwood
Harvard Medical School, Boston, United States

8:45 a.m.

MALARIA THERAPY AND DRUG RESISTANCE IN UGANDA

Philip Rosenthal
University of California, San Francisco, San Francisco, CA, United States

9:05 a.m.

PREVENTION OF STI/HIV IN AFRICA AND LATIN AMERICA

King Holmes
University of Washington, Seattle, WA, United States

9:25 a.m.

PYGMIES, BUSHMEAT AND HIV IN CAMEROON AND CONGO

Nathan Wolfe
University of California, Los Angeles, Los Angeles, CA, United States

Symposium 117

Presumptive Therapy and Medical Screening of Migrating Refugees and Immigrants

Grand Ballroom B

Wednesday, December 10, 8 a.m. – 9:45 a.m.

This symposium will address the development of the Centers for Disease Control and Prevention pre-departure and post-arrival presumptive therapy and medical screening for infectious diseases for refugees relocating to the United States. In addition, the domestic medical screening guidelines for immigrants and refugees relocating to Canada are under development and will be introduced. The symposium will include an in-depth discussion around infectious diseases of immigrants and refugees with high prevalence and large public health impact. Some of these interventions are based on mass presumptive therapy, which is a new concept for U.S.- and Canadian-based clinicians (common in developing country settings).

CHAIR

William M. Stauffer
University of Minnesota, Minneapolis, MN, United States

Christina A. Greenaway
SMBD Jewish General Hospital, Montreal, QC, Canada

8 a.m.

INTRODUCTION TO THE CDC'S OVERSEAS AND DOMESTIC PRESUMPTIVE THERAPY AND MEDICAL SCREENING GUIDELINES

William M. Stauffer
University of Minnesota, Minneapolis, MN, United States

8:25 a.m.

EVIDENCE REVIEWS TO RECOMMENDATIONS FOR CANADIAN CLINICAL PREVENTIVE GUIDELINES FOR NEWLY ARRIVED IMMIGRANTS AND REFUGEES

Kevin Pottie
University of Ottawa, Ottawa, ON, Canada

8:50 a.m.

MALARIA MANAGEMENT IN U.S.-BOUND REFUGEES

Christina Phares
Centers for Disease Control and Prevention, Atlanta, GA, United States

9:15 a.m.

ENHANCED MEDICAL SCREENING FOR TUBERCULOSIS IN U.S.-BOUND REFUGEES

John Painter
Centers for Disease Control and Prevention, Atlanta, GA, United States

Scientific Session 118

Flavivirus V

Grand Ballroom C

Wednesday, December 10, 8 a.m. – 9:45 a.m.

CHAIR

Carol Blair
Colorado State University, Fort Collins, CO, United States

Amadou A. Sall
Institut Pasteur Dakar, Dakar, Senegal

8 a.m.

830

THE USE OF HUMAN-MURINE CHIMERIC ANTIBODIES FOR TREATMENT OF YELLOW FEVER IN THE AG129 MOUSE MODEL

Brett A. Thibodeaux[1], John T. Roehrig[2], Carol D. Blair[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Centers for Disease Control, Fort Collins, CO, United States

8:15 a.m.

831

YFV-INDUCED CYTOKINE EXPRESSION IN HUMAN HEPATOCYTES.

Sara E. Woodson, Michael R. Holbrook
University of Texas Medical Branch, Galveston, TX, United States

8:30 a.m.

832

PHYLOGENETIC ANALYSIS OF WEST AFRICAN ZIKA VIRUS USING SEQUENCES OF PARTS OF E, NS5 AND NS5/3'NC

FayeE Oumar[1], Faye Ousmane[1], Dupressoir Anne[2], Ndiaye Mady[3], Diallo Mawlouth[1], Sall Amadou Alpha[1]
[1]Institut Pasteur Dakar, Senegal, Dakar, Senegal, [2]Institut Gustave Roussy, Paris, France, [3]University Cheikh Anta Diop Dakar, Dakar, Senegal

8:45 a.m.

833

INSECT-ONLY FLAVIVIRUSES DETECTED IN *CULEX* SPECIES MOSQUITOES FROM NORTHERN COLORADO

Bethany G. Bolling, Lars Eisen, Chester G. Moore, Barry J. Beaty, Carol D. Blair
Colorado State University, Fort Collins, CO, United States

9 a.m.

834

EVALUATION OF IGM CAPTURE ELISA ASSAYS FOR THE DETECTION ANTI-JEV IGM ANTIBODIES IN CEREBROSPINAL FLUID SAMPLES

Ravi Vasanthapuram[1], Jamie S. Robinson[2], Brandy Russell[2], Anita Desai[1], Nalini Ramamurty[3], David A. Featherstone[4], Barbara W. Johnson[2]
[1]Department of Neurovirolorgy, National Institute of Mental Health and Neuro Sciences, Bangalore, India, [2]Centers for Disease Control and Prevention, Division of Vector-Borne Infectious Diseases, Fort Collins, CO, United States, [3]World Health Organization – Southeast Asia Regional Office, Immunization and Vaccine Development, New Delhi, India, [4]World Health Organization, Geneva, Switzerland

9:15 a.m.

835

FIRST CLINICAL TRIAL OF A VERO CELL DERIVED, INACTIVATED JAPANESE ENCEPHALITIS (JE) VACCINE IC51 IN PEDIATRIC POPULATION

Elisabeth Schuller
Intercell AG, Vienna, Austria

9:30 a.m.

836

SIX MONTHS SAFETY OF A VERO-CELL CULTURE DERIVED JAPANESE ENCEPHALITIS VACCINE, IC51, ACROSS PHASE 3 TRIALS AND IN A LONG-TERM FOLLOW-UP COHORT

Katrin Dubischar-Kastner
Intercell AG, Vienna, Austria

Scientific Session 119

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Cellular Parasitology I

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom D

Wednesday, December 10, 8 a.m. – 9:45 a.m.

CHAIR

Brian Cooke
Monash University, Victoria, Australia

Rana Nagarkatti
Virginia Bioinformatics Institute, Blacksburg, VA, United States

8 a.m.

1238

RAPID MEMBRANE DISRUPTION BY A PERFORIN-LIKE PROTEIN FACILITATES PARASITE EXIT FROM THE HOST CELL

Björn F.C. Kafsack[1], Janethe D.O. Pena[3], Isabelle Coppens[2], Sandeep Ravindran[4], John C. Boothroyd[4], Vern B. Carruthers[1]
[1]Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor, MI, United States, [2]Department of Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, United States, [3]Department of Immunology, Universidade Federal de Uberlandia, Uberlandia, Brazil, [4]Department of Microbiology and Immunology, Stanford University School of Medicine, Stanford, CA, United States

8:15 a.m.

811

HDP- A NOVEL HEME DETOXIFICATION PROTEIN IN THE MALARIA PARASITE

Rana Nagarkatti[1], Dewal Jani[1], Wandy Beatty[2], Ross Angel[3], Carla Slebodnick[3], John Andersen[4], Sanjai Kumar[5], Dharmendar Rathore[1]
[1]Virginia Bioinformatics Institute, Blacksburg, VA, United States, [2]Washington University School of Medicine, St. Louis, MO, United States, [3]Virginia Polytechnic Institute and State University, Blacksburg, VA, United States, [4]Laboratory of Malaria and Vector Research, National Institutes of Health, Rockville, MD, United States, [5]Food and Drug Administration, Bethesda, MD, United States

8:30 a.m.

812

DEFINING THE INTERACTION BETWEEN *P. FALCIPARUM* SKELETON BINDING PROTEIN 1 AND THE MEMBRANE SKELETON OF MALARIA-INFECTED RED BLOOD CELLS

Lev M. Kats[1], Donna W. Buckingham[1], Kate Fernandez[1], Xinhong Pei[2], Xiuli An[2], Narla Mohandas[2], **Brian M. Cooke**[1]
[1]Monash University, Melbourne, Australia, [2]New York Blood Center, New York, NY, United States

8:45 a.m.

1239

A CALCIUM DEPENDENT PROTEIN KINASE MODULATES MICRONEME SECRETION IN *TOXOPLASMA GONDII*

Sebastian Lourido, L. David Sibley
Washington University School of Medicine, St. Louis, MO, United States

9 a.m.

813

BROAD-SPECTRUM ANTI-INFECTIVE DRUGS THAT TARGET METABOLIC PATHWAYS AND *E. HISTOLYTICA* TROPHOZOITE GROWTH

Avelina Espinosa[1], David Rowley[2], George Perdrizet[1], Aaron Socha[3], Erika Rye[1]
[1]Roger Williams University, Bristol, RI, United States, [2]University of Rhode Island, Kingston, RI, United States, [3]University of Rhode Island, Kingston, RI, United States

9:15 a.m.

814

MOLECULAR CHARACTERIZATION OF FATTY ACID BINDING PROTEINS FROM THE HOOKWORM *ANCYLOSTOMA CEYLANICUM*

Keke C. Fairfax, Jon J. Vermeire, Richard D. Bungiro, Lisa M. Harrison, Sohail Husain, Michael Cappello
Yale University, New Haven, CT, United States

9:30 a.m.

815

HOOKWORM SECRETED TISSUE INHIBITORS OF METALLOPROTEINASE: CLONING, CHARACTERIZATION AND FUNCTIONS

Bin Zhan, Richi Gupta, Susan P. Wang, Stacia Bier, Desheng Jiang, Gaddam Goud, Helton Santiago, Peter J. Hotez
The George Washington University Medical Center, Washington, DC, United States

Symposium 120
Antimalarials and Glucose 6-Phosphate Dehydrogenase Deficiency

Grand Ballroom E
Wednesday, December 10, 8 a.m. – 9:45 a.m.

Glucose 6-phosphate dehydrogenase (G6PD) deficiency is the most common enzymopathy affecting approximately 400 million people worldwide. The G6PD deficient genotypes are relatively protected against malaria, but are sensitive to hemolytic episodes triggered by oxidative stress due to viral/bacterial infections or treatments with oxidant drugs. The use of certain class of antimalarials has been restricted in G6PD deficient population due to hemolytic toxicities. Limitations with experimental models of G6PD deficiency have hampered the development of drugs, which are safe to use in G6PD deficient populations. Recent advancements in generation of transgenic animals have provided the tools for producing the experimental animals with required phenotypic traits. Also, better understanding on mechanism of hemolytic toxicities produced by the oxidant drugs has helped in standardization of alternate cellular models of G6PD deficiency and *in vitro* evaluation of hemolytic potential of new candidate drugs. This symposium shall discuss the current status of the knowledge on malaria and G6PD deficiency. Development of experimental models of G6PD deficiency and their applications for discovery of non-hemolytic antimalarials shall also be discussed.

CHAIR

Larry A. Walker
University of Mississippi, University, MS, United States

Babu L. Tekwani
University of Mississippi, University, MS, United States

Colin Ohrt
Walter Reed Army Institute of Research, Germantown, MD, United States

8 a.m.

INTRODUCTION

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

8:15 a.m.

MALARIA AND G-6-PD: CLINICAL ASPECTS

Colin Ohrt
Walter Reed Army Institute of Research, Silver Spring, MD, United States

8:35 a.m.

LABORATORY ANIMAL MODELS FOR G-6-PD DEFICIENCY

Rosemary Rochford
SUNY Upstate Medical University, Syracuse, NY, United States

8:55 a.m.

PHARMACOLOGICAL MODELS FOR G-6-PD DEFICIENCY

David McMillan
University of Nebraska Medical Center, Omaha, NE, United States

9:15 a.m.

ROS INTERMEDIATES AND HEMOLYSIS IN G-6-PD DEFICIENT ERYTHROCYTES

Jeff Friedman
The Scripps Research Institute, La Jolla, CA, United States

Exhibit Hall Open

Napoleon Ballroom
Wednesday, December 10, 9:30 a.m. – 10:30 a.m.

Coffee Break

Napoleon Ballroom
Wednesday, December 10, 9:45 a.m. – 10:15 a.m.

Poster Session C Set-Up

Armstrong Ballroom
Wednesday, December 10, 9:45 a.m. – 10:15 a.m.

Poster Session C Viewing

Armstrong Ballroom
Wednesday, December 10, 10:15 a.m. – Noon

Symposium 121

Post-Treatment Reactions in Loiasis: Clinical and Programmatic Implications

Gallery
Wednesday, December 10, 10:15 a.m. – Noon

Loa loa is a filarial infection affecting approximately 13 million people in Central and West Africa, with a geographic distribution that overlaps considerably with that of *Wuchereria bancrofti* and *Onchocerca volvulus*. Although the majority of patients with Loa loa infection are asymptomatic despite high levels of microfilariae in the blood, microfilaricidal treatment with DEC or ivermectin can provoke severe reactions, including fatal encephalopathy. This has created significant problems for the Lymphatic Filariasis Eradication Program ongoing in Africa as drug distribution in Loa-endemic areas has been suspended. This symposium is designed to: 1) provide an overview of Loa loa infection and its impact on the mass treatment programs for filariasis, 2) describe recent advances in our understanding of post-treatment reactions and 3) highlight research advances necessary for the continued success of mass treatment programs for filariasis in Africa.

CHAIR

Amy D. Klion
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

LOA LOA: A CLINICAL OVERVIEW

Thomas B. Nutman
National Institutes of Health, Bethesda, MD, United States

10:40 a.m.

MASS TREATMENT PROGRAMS FOR FILARIASIS IN AFRICA: IMPACT OF LOA LOA INFECTION

Yao Sodahlon
Mectizan Donation Program, Atlanta, GA, United States

11:05 a.m.

POST-TREATMENT REACTIONS IN LOIASIS: PAST AND PRESENT

Joseph Kamgno
National Onchocerciasis Task Force, Yaounde, Cameroon

11:30 a.m.

POST-TREATMENT REACTIONS IN LOIASIS: LOOKING TOWARDS THE FUTURE

Amy D. Klion
National Institutes of Health, Bethesda, MD, United States

Symposium 122

Monetary and Non-Monetary Burden of Human Larval Cestode Infections

Rhythms I
Wednesday, December 10, 10:15 a.m. – Noon

As part of the World Health Organization's Global Burden of Disease Study, the disability adjusted life year (DALY) has been utilized to assess non-financial burden of disease for more than one hundred communicable and non-communicable conditions. DALYs simultaneously evaluate morbidity and mortality, associated with a condition, thereby permitting comparison of dissimilar afflictions. The DALY is now under review, especially for infectious diseases, where the data is typically poor. In addition, this approach strictly focuses on the human impact of an infection and, in the case of zoonoses, completely ignores the impact of infections on the agricultural sector. This impact can have tremendous consequences on the well-being of small holders farming communities. Studying the extent of human larval cestode infections will most likely raise awareness of these potentially eradicable zoonoses among policy makers and stakeholders in both the public health and agricultural sectors of developing and developed countries where any of the human larval cestode infections are a burden. This symposium will provide examples of calculating the burden of larval cestodes, with both the DALYs approach and the monetary impact approach. The latter takes the animal impact into account. These estimates are key to supporting international efforts to raise awareness about neglected diseases and their impact.

CHAIR

Ana Flisser
Universidad Nacional Autonoma de Mexico, Mexico City, Mexico

Arve Lee Willingham
WHO/FAO Collaborating Center for Parasitic Zoonoses Faculty of Life Sciences, University of Copenhagen, Frederiksberg, Denmark

10:15 a.m.

ESTIMATION OF THE NON-MONETARY BURDEN OF ECHINOCOCCOSIS, WITH SPECIAL REFERENCE TO CHINA

Christine M. Budke
Texas A&M University, College Station, TX, United States

10:35 a.m.

ESTIMATION OF THE ECONOMIC BURDEN OF NEUROCYSTICERCOSIS IN PERU

Andres G. Lescano
Universidad Peruana Cayetano Heredia, Lima, Peru

10:55 a.m.

ESTIMATION OF THE COST-BENEFIT OF A HEALTH-EDUCATION INTERVENTION TRIAL TO REDUCE PORCINE CYSTICERCOSIS IN MBULU DISTRICT, TANZANIA

Helena Ngowi
Sokoine University of Agriculture, Morogoro, United Republic of Tanzania.

11:15 a.m.

ESTIMATION OF THE MONETARY IMPACT OF CYSTICERCOSIS IN THE EASTERN CAPE PROVINCE, SOUTH AFRICA

Hélène Carabin
University of Oklahoma, Oklahoma City, OK, United States

11:35 a.m.

DISCUSSION

Scientific Session 123

Malaria – Epidemiology II

Rhythms II/III
Wednesday, December 10, 10:15 a.m. – Noon

CHAIR

Hasifa Bukirwa
Uganda Malaria Surveillance Project, Kampala, Uganda

Bryan Greenhouse
University of California, San Francisco, San Francisco, CA, United States

10:15 a.m.

816

ASSESSING THE IMPACT OF INDOOR RESIDUAL SPRAYING ON MALARIA INDICATORS USING A SENTINEL SITE SURVEILLANCE SYSTEM IN WESTERN UGANDA

Hasifa F. Bukirwa[1], Vincent Yau[2], Ruth Kigozi[1], Linda Quick[3], Myers Lugemwa[4], Gunawardena Dissanayake[5], Sarah G. Staedke[6], Moses R. Kamya[7], Fred Wabwire-Mangen[8], Grant Dorsey[9]
[1]Uganda Malaria Surveillance Project, Kampala, Uganda, [2]University of California, Berkely, CA, United States, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Uganda Ministry of Health, Kampala, Uganda, [5]U.S. Agency for International Development, Kampala, Uganda, [6]London School of Hygiene and Tropical Medicine, London, United Kingdom, [7]Makerere University, Kampala, Uganda, [8]Makerere University School of Public Health, Kampala, Uganda, [9]University of California, San Francisco, CA, United States

10:30 a.m.

817

THE RELATIONSHIP BETWEEN MALARIA TRANSMISSION INTENSITY, CLINICAL DISEASE AND MORTALITY IN AN AREA OF DECLINING TRANSMISSION

Wendy P. O'Meara[1], Tabitha Mwangi[2], Thomas Williams[2], F. Ellis McKenzie[1], Robert Snow[3], Kevin Marsh[2]
[1]Fogarty International Center, National Institutes of Health, Bethesda, MD, United States, [2]Kenya Medical Research Institute, CGMRC/Wellcome Trust Collaborative Program, Kilifi, Kenya, [3]KEMRI/Wellcome Trust Collaborative Program, Nairobi, Kenya

10:45 a.m.

818

INCREASING RISK OF TREATMENT FAILURE WITH ANTIMALARIAL COMBINATION THERAPY: PARASITE AND HOST FACTORS

Bryan Greenhouse[1], Madeline Slater[1], Denise Njama-Meya[2], Bridget Nzarubara[2], Catherine Maiteki-Sebuguzi[2], Tamara D. Clark[1], Moses R. Kamya[2], Alan Hubbard[3], Philip J. Rosenthal[1], Grant Dorsey[1]
[1]University of California, San Francisco, San Francisco, CA, United States, [2]Makerere University Medical School, Kampala, Uganda, [3]University of California, Berkeley, Berkeley, CA, United States

11 a.m.

819

POPULATION HEMOGLOBIN LEVELS: A NEW METRIC FOR DEFINING MALARIA ENDEMICITY

Nicolas Senn[1], Albert Sie[1], Seri Maraga[1], Stephen Rogerson[2], John Reeder[3], Ivo Mueller[1]
[1]PNG IMR, Madang, Papua New Guinea, [2]University of Melbourne, Melbourne, Australia, [3]Burnet Institute, Melbourne, Australia

11:15 a.m.

820

EFFICACY AND COST-EFFECTIVENESS OF MALARIA PREVENTION IN PREGNANCY IN LOW AND UNSTABLE TRANSMISSION: RESULTS OF A RANDOMISED CONTROLLED TRIAL

Richard Ndyomugyenyi[1], **Sian E. Clarke**[2], Coll Hutchison[2], Kristian Schultz Hansen[3], Daniel Chandramohan[2], Pascal Magnussen[4]
[1]Vector Control Division, Ministry of Health, Kampala, Uganda, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom, [3]University of Aarhus, Aarhus, Denmark, [4]DBL-Institute for Health Research and Development, Copenhagen, Denmark

11:30 a.m.

821

EFFICACY OF INTERMITTENT PREVENTIVE TREATMENT WITH SULFADOXINE-PYRIMETHAMINE IN PRIMI- AND SECUNDIGRAVIDAE IN RURAL BURKINA FASO: IMPACT ON PARASITAEMIA, ANAEMIA AND BIRTH WEIGHT

Sabine Gies[1], Sheick O. Coulibaly[2], Florence T. Ouattara[3], Umberto D'Alessandro[1]
[1]Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium, [2]UFR Sciences de la Santé, Université de Ouagadougou, Ouagadougou, Burkina Faso, [3]District Sanitaire Boromo, Boromo, Burkina Faso

11:45 a.m.

822

GLUCOSE 6-PHOSPHATE DEHYDROGENASE (G6PD) DEFICIENCY GENOTYPE-PHENOTYPE CORRELATIONS IN MALARIA ASSOCIATION STUDIES

Sunil Parikh[1], Marla K. Johnson[1], Moses R. Kamya[2], Grant Dorsey[1], Philip J. Rosenthal[1]
[1]University of California-San Francisco, San Francisco, CA, United States, [2]Makerere University, Kampala, Uganda

Symposium 124

Update on Epidemic and Endemic Vector-Borne Diseases in Brazil: Dengue Fever, Yellow Fever, Orally Transmitted Chagas Disease and Malaria

Waterbury

Wednesday, December 10, 10:15 a.m. – Noon

This symposium will provide an update of the marked epidemiological changes in four vector-borne diseases in Brazil, and discuss the implications for diagnosis, treatment and control. The diseases are: dengue fever, Chagas disease, yellow fever and malaria. The massive 2008 outbreak of dengue fever in Brazil is characterized by a shift to the pediatric age group and historically high levels of hemorrhagic complications and mortality. Oral transmission of Chagas disease has emerged as the leading mode of infection in the Amazon region, with distinct clinical manifestations; it indicates an emerging relationship between sylvatic transmission cylce, non-domiciliated vectors, and encroachment of human populations on new spaces in the ecosystem. The 2007 outbreak of yellow fever in humans is a signal event for intensive concurrent epizootic transmission. Far-reaching changes in the ecology and population of the Amazon basin have been paralleled by changes in the epidemiology of malaria in the region, with consequent implications for control and prevention.

CHAIR

Jeremy Sobel
Centers for Disease Control and Prevention, Atlanta, GA, United States

Gerson O. Penna
Ministry of Health of Brazil, Brasilia, Brazil

10:15 a.m.

DENGUE FEVER IN BRAZIL: EPIDEMIOLOGY AND CLINICAL OUTCOMES, WITH EMPHASIS ON THE OUTBREAKS OF 2008

João B Siqueira
Federal University of Goiás, Goiânia, Brazil

10:40 a.m.

UPDATE ON YELLOW FEVER IN BRAZIL, WITH EMPHASIS ON THE 2007 OUTBREAK

Gerson O. Penna
Ministry of Health of Brazil, Brasilia, Brazil

11:05 a.m.

EPIDEMIOLOGY, DIAGNOSIS AND TREATMENT OF ORALLY TRANSMITTED CHAGAS DISEASE, AN IMPORTANT MODE OF TRANSMISSION IN BRAZIL

Eduardo H. Carmo
Ministry of Health of Brazil, Brasilia, Brazil

11:30 a.m.

THE CHANGING EPIDEMIOLOGY OF MALARIA IN THE BRAZILIAN AMAZON REGION, AND IMPLICATIONS FOR TREATMENT AND CONTROL

Ana Carolina F. Santelli
Ministry of Health of Brazil, Brasilia, Brazil

Symposium 125

Accelerating the Development and Deployment of Diagnostic Tools into Developing World: Promises and Challenges

Napoleon A123

Wednesday, December 10, 10:15 a.m. – Noon

Although high-quality diagnostic tests for infectious diseases are available, they are neither affordable nor accessible to patients in developing countries, largely due to the lack of laboratory infrastructure and expertise. The few tests that are available in developing countries are often sold and used with little evidence of their effectiveness, because diagnostics are not subject to strict regulatory approval standards as for drugs and vaccines. There is an urgent need for quality-assured diagnostics for infectious diseases of public health importance in the developing world. This symposium aims to describe promises and challenges along the pathway from diagnostic target discovery to test development and deployment to reduce disease burden in the developing world.

CHAIR

Rosanna W. Peeling
World Health Organization, Geneva, Switzerland

Steven G. Reed
Infectious Disease Research Institute, Seattle, WA, United States

10:15 a.m.

AFFORDABLE AND ACCESSIBLE DIAGNOSTICS FOR TROPICAL DISEASES: NEEDS AND RECENT ADVANCES

Rosanna W. Peeling
World Health Organization, Geneva, Switzerland

10:40 a.m.

THE CHALLENGE OF TARGET DISCOVERY AND DEVELOPING APPROPRIATE DIAGNOSTIC TOOLS FOR TROPICAL DISEASES

Steven G. Reed
Infectious Disease Research Institute, Seattle, WA, United States

11:05 a.m.

DEPLOYMENT OF DIAGNOSTIC TOOLS AT VARIOUS LEVELS OF THE HEALTH CARE SYSTEM: BARRIERS AND THE WAY FORWARD

Andrew R. Ramsay
World Health Organization, Geneva, Switzerland

11:30 a.m.

FROM BRIGHT IDEAS TO AN FDA CLEARED DEVICE: LESSONS LEARNED FROM A MALARIA RAPID DIAGNOSTIC TEST PROGRAM AND THE REALITIES OF PRODUCT DEVELOPMENT

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Symposium 126

Diarrhea in Children Living in Poverty: Current Reflections on an Old Affliction

Maurepas

Wednesday, December 10, 10:15 a.m. – Noon

Diarrheal disease is still one of the most important public health problems in developing countries, despite advances in understanding and management that have occurred in recent years. Multiple episodes of acute diarrhea and persistent diarrhea seriously affect growth, nutritional status and cognition. This symposium will review the changing epidemiology of diarrheal diseases in children in developing countries, the pathogens associated with diarrhea, the effect on growth and intellectual function and new topics on management and prevention.

CHAIR

Theresa J. Ochoa
Universidad Peruana Cayetano Heredia, Lima, Peru

A. Clinton White
The University of Texas Medical Branch, Galveston, TX, United States

10:15 a.m.

EPIDEMIOLOGY AND BURDEN OF DIARRHEAL DISEASE

Margaret Kosek
Johns Hopkins School of Public Health, Baltimore, MD, United States

10:40 a.m.

DIARRHEAGENIC E. COLI: PREVALENCE, PATHOGENESIS AND ANTIBIOTIC RESISTANCE

Theresa J. Ochoa
Universidad Peruana Cayetano Heredia, Lima, Peru

11:05 a.m.

DIARRHEA AND INTESTINAL PARASITES

A. Clinton White
The University of Texas Medical Branch, Galveston, TX, United States

11:30 a.m.

DIARRHEA, NUTRITION AND COGNITION

Richard Guerrant
University of Virginia, Charlottesville, VA, United States

Scientific Session 127

HIV in the Tropics

Bayside A

Wednesday, December 10, 10:15 a.m. – Noon

CHAIR

Rocio Hurtado
Massachusetts General Hospital, Boston, MA, United States

Jean B. Nachega
Johns Hopkins University, Baltimore, MD, United States

10:15 a.m.

823

HIV-1 INFECTION INCREASES THE RISK OF SEVERE MALARIA IN SEMI-IMMUNE ADULTS IN ZAMBIA

Victor Chalwe[1], **Jean-Pierre Van geertruyden**[2], Felix Mutale[3], Doreen Mukwamataba[4], Joris Menten[2], John Kamalamba[3], Modest Mulenga[1], Umberto D'Alessandro[2]
[1]Tropical Disease Research Centre, Ndola, Zambia, [2]Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium, [3]Thomson Hospital, Luanshya, Zambia, [4]Tropical Disease Research Centre, Nola, Zambia

10:30 a.m.

824

IMMUNE RECONSTITUTION INFLAMMATORY SYNDROME IN THE FIRST SIX MONTHS OF ANTIRETROVIRAL THERAPY IN HIV-INFECTED UGANDAN CHILDREN

Fredrick K. Kateera[1], Jane Achan[1], Ted Theodore[2], Joan Kalyango[3], Edwin Charlebois[2], Moses Kamya[3], Diane Havlir[2]
[1]MU-University of California at San Francisco Malaria Research Collaboration, Kampala, Uganda, [2]University of California at San Francisco, San Francisco, CA, United States, [3]Makerere University, Kampala, Uganda

10:45 a.m.

825

DIARRHEAGENIC *E. COLI* IN PERUVIAN CHILDREN WITH HIV

Anicia M. Medina[1], Fulton P. Rivera[1], Liliana M. Romero[1], Francesca Barletta[1], Lenka A. Kolevic[2], Maria E. Castillo[2], Eduardo Verne[3], Yovanna E. Mayor[4], Theresa J. Ochoa[1]
[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Instituto Especializado de Salud del Niño, Lima, Peru, [3]Hospital Nacional Cayetano Heredia, Lima, Peru, [4]Hospital Nacional Hipolito Unanue, Lima, Peru

11 a.m.

826

DETECTION AND GENOTYPING OF *ENTEROCYTOZOON BIENEUSI* IN STOOL SPECIMENS FROM HIV-INFECTED RURAL KENYANS

Ozgur Koru[1], John T. Brooks[2], Yvonne Qvarnstrom[3], Mark Eberhard[3], Stephanie P. Johnston[3], Marianna Wilson[3], Laurence Slutsker[3], Mary Hamel[3], Ya Ping Shi[3], Tom Chiller[4], Alexandre J. da Silva[3]
[1]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED and Atlanta Research and Education Foundation, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention, NCHHSTP, Atlanta, GA, United States, [3]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States, [4]Division of Fungal Bacterial and Mycotic Diseases, NCZVED, Atlanta, GA, United States

(ACMCIP Abstract)

11:15 a.m.

827

CARING FOR THE MOTHER AND CHILD IN AN INTEGRATED HEALTH SYSTEM: THE UTILITY OF A POSTNATAL BRIDGING CARD

Eugene Richardson[1], Robert Pattinson[2], Anne-Marie Bergh[2], Elsie Etsane[2], Jenny Makin[2]
[1]Yale Univeristy School of Medicine, New Haven, CT, United States, [2]University of Pretoria, Pretoria, South Africa

11:30 a.m.

828

BIOLOGY IS DESTINY OR SOCIAL STATUS MEETS SERO-STATUS?: DETERMINANTS OF HIV INFECTION IN AFRICA

Ashley M. Fox
Columbia University, New York, NY, United States

11:45 a.m.

829

IMPACT OF HIV-1 INFECTION ON THE HEMATOLOGICAL RECOVERY AFTER CLINICAL MALARIA

Jean-Pierre Van Geertruyden[1], Modest Mulenga[2], Victor Chalwe[2], Michael Nambozi[3], Filip Moerman[1], Doreen Mukwamataba[3], Umberto D'Alessandro[1]
[1]Prince Leopold Instituut voor tropische geneeskunde, Antwerpen, Belgium, [2]Tropical Disease Research Centre, Ndola, Zambia, [3]Tropical Disease Research Center, Ndola, Zambia

Symposium 128

Avian Influenza: Collaborative Clinical Research from Southeast Asia

Bayside BC

Wednesday, December 10, 10:15 a.m. – Noon

This symposium will provide an overview of recent clinical research on avian influenza from regional collaboration in SEA. Content will include an overview of avian influenza in Southeast Asia, overview and findings from an H5N1 clinical data base, recent pharmacokinetic studies on influenza therapeutics, and a presentation of viral kinetics and pathogenesis of human H5N1 disease.

CHAIR

Elizabeth S. Higgs
National Institutes of Health, National Institute of Allergy and Infectious Diseases, DCR, Bethesda, MD, United States

Tawee Chotpitayasunondh
Queen Sirikit National Institute of Child Health, Bangkok, Thailand

10:15 a.m.

OVERVIEW OF HUMAN H5N1 DISEASE IN SEA WITH EMPHASIS ON EPIDEMIOLOGY AND CLINICAL OUTCOMES IN H5N1

Endang Rahayu Sedyaningsih
National Institutes of Health Research and Development, Jakarta, Indonesia

10:40 a.m.

FINDING FROM A COLLABORATIVE SEA CLINICAL DATABASE STUDY

Sardikin Giriputro
Sulianti Saroso Hospital, Jakarta, Indonesia

11:05 a.m.

THERAPEUTIC CONSIDERATIONS FOR H5N1 DISEASE IN HUMANS: OPTIONS FOR VARIOUS CLADES OF H5N1, POTENTIAL IMPORTANCE OF LOADING DOSE, DRUG LEVELS AFTER NG ADMINISTRATION OF OSELTAMIVIR IN H5N1 DISEASE.

Yupaporn Wattanagoon
Mahidol University, Bangkok, Thailand

11:30 a.m.

H5N1 VIRAL KINETICS, DEVELOPMENT OF RESISTANCE, AND PATHOGENESIS

Tran Tinh Hien
Hospital for Tropical Diseases, HCMC, Vietnam.

Symposium 129

Launching Careers in Tropical Disease Research: Progress Reports from Burroughs Wellcome Fund/ASTMH Fellows

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom A

Wednesday, December 10, 10:15 a.m. – Noon

This session will highlight the work of Burroughs Wellcome Fund/ASTMH fellows who are focusing their work on global health problems in situ — doing excellent research on tropical diseases where they occur. Both of these highly competitive fellowship programs focus on training excellent U.S.-based researchers who are launching careers that are expected to involve long-term research presence both abroad and at their home institutions in the U.S. There will also be a discussion of career issues faced by those who take on working in two countries (home and abroad).

CHAIR

Victoria McGovern
Burroughs Wellcome Fund, Research Triangle Park, NC, United States

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

10:15 a.m.

A CAREER IN TROPICAL DISEASE RESEARCH

Rebeca M. Plank
Brigham and Women's Hospital, Boston, MA, United States

10:55 a.m.

QUESTIONS AND ANSWERS

Fellowship Program Awardees and Advisors

Symposium 130

Clinical Research in Disease-Endemic Countries: The New Clinical Research Center in Mali

Grand Ballroom B

Wednesday, December 10, 10:15 a.m. – Noon

Moving candidate drugs and vaccines from the laboratory to the field (from Phase 1 to Phase 2 and 3 testing) requires testing for efficacy in a disease-endemic area, which must be performed according to the guidelines of FDA, National Institutes of Health, Centers for Disease Control and Prevention, WHO and other federal and international agencies. Because the extensive clinical observations, laboratory testing and record-keeping required for those studies is not feasible at most clinical facilities in disease-endemic areas, the development of clinical research centers in sub-Saharan Africa is a necessary step in the control of diseases such as malaria, HIV and TB. This symposium will review the planning, construction and training that have been necessary to develop a new Clinical Research Center in Mali. It will also examine the training (capacity building) that was necessary to ensure that study design, record-keeping, laboratory results and quality control in this facility are indistinguishable from those in the U.S. and Europe. Finally, it will examine the ways in which such facilities will need to collaborate with developed country investigators to ensure that interventions which are efficacious in Phase 2 proceed to larger scale (Phase 3) testing and subsequently to implementation.

CHAIR

Donald J. Krogstad
Tulane University Health Sciences Center, New Orleans, LA, United States

Fawaz Mzayek
Tulane University, New Orleans, LA, United States

10:15 a.m.

THE NEED FOR CLINICAL RESEARCH FACILITIES ON-SITE IN DISEASE-ENDEMIC COUNTRIES

10:35 a.m.

Daniel J. Carucci
United Nations Foundation, Washington, DC, United States

10:55 a.m.

STUDY DESIGN, STATISTICAL SUPPORT, QUALITY CONTROL AND OTHER RESOURCES FOR RANDOMIZED CLINICAL TRIALS

Seydou Doumbia
Malaria Research and Training Center, Bamako, Mali

11:15 a.m.

CLINICAL AND RESEARCH LABORATORY SUPPORT FOR CLINICAL RESEARCH ON MALARIA, HIV AND TB

Ousmane A. Koita
University of Bamako, Bamako, Mali

11:35 a.m.

CLINICAL RESEARCH BY DEVELOPED COUNTRY INVESTIGATORS ON-SITE IN DISEASE-ENDEMIC COUNTRIES

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

Symposium 131

American Committee on Arthropod-Borne Viruses (ACAV): Yellow Fever

Grand Ballroom C

Tuesday, December 9, 10:15 a.m. – 12:45 p.m.

Yellow fever (YF) is among the oldest known arboviral diseases and a disease for which there is a very effective vaccine. Yet, the virus continues to be the cause of thousands of human cases in Africa and South America with fatality rates ranging from 20-50 percent. Could the public health importance of this disease be increasing, as suggested by recent outbreaks in unusual areas of South America and the unexplained occurrence of severe and fatal cases associated with YF vaccine? The symposium will provide excellent overall coverage of YF as an emerging sylvatic disease with some insight regarding the absence of urban transmission of YF virus for decades.

CHAIR

Douglas M. Watts
University of Texas El Paso, El Paso, TX, United States

10:15 a.m.

ACAV BUSINESS MEETING AND AWARDS PRESENTATION

Douglas M. Watts
University of Texas El Paso, El Paso, TX, United States

10:45 a.m.

OVERVIEW OF YELLOW FEVER, THEN AND NOW

Thomas P. Monath
Kleiner Perkins Caufield & Byers, Harvard, MA, United States

11 a.m.

EMERGING PATTERN OF YELLOW FEVER OUTBREAKS IN SOUTH AMERICA

Pedro F. Vasconcelos
Instituto Evandro Chagas, Belém, Brazil

11:25 a.m.

OUBREAK OF YELLOW FEVER IN PARAGUAY: URBAN OR SYLVATIC?

Antonio Arbo
Ministry of Health, Asuncion, Paraguay

11:50 p.m.

SAFETY OF YELLOW FEVER VACCINES: AN UPDATE

Dirk E. Teuwen
Catholic University Leuven, Leuven, Belgium

12:15 p.m.

THREAT OF YELLOW FEVER TO ASIA

Jack Woodall
Federal University of Rio De Janeiro, Petropolis, Brazil

Scientific Session 132

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Cellular Parasitology II

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom D

Wednesday, December 10, 10:15 a.m. – Noon

CHAIR

Megan J. Downie
University of Connecticut Health Center, Farmington, CT, United States

Prakash Srinivasan
National Institutes of Health, Rockville, MD, United States

10:15 a.m.

837

***PLASMODIUM* PYRUVATE DEHYDROGENASE IS ONLY ESSENTIAL FOR LIVER STAGE DEVELOPMENT**

Alice S. Tarun, Stefan H. Kappe
Seattle Biomedial Research Institute, Seattle, WA, United States

10:30 a.m.

838

DISTINCT ROLES OF *PLASMODIUM* RHOMBOID 1 IN PARASITE DEVELOPMENT AND MALARIA PATHOGENESIS

Prakash Srinivasan[1], Isabelle Coppens[2], Marcelo Jacobs-Lorena[2]
[1]National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States, [2]Johns Hopkins School of Public Health, Malaria Research Institute, Baltimore, MD, United States

10:45 a.m.

839

ISOLATION OF INVASIVE LONG LIVED *PLASMODIUM FALCIPARUM* MEROZOITES BY CELL SIEVING

David L. Narum[1], J. David Haynes[2], J. Kathleen Moch[2], Sheetij Dutta[2]
[1]National Institutes of Health, Rockville, MD, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States

11 a.m.

840

A COMPLEX FORMATION OF RHOPTRY NECK PROTEIN 2 WITH A MICRONEME PROTEIN, AMA1, IN *PLASMODIUM FALCIPARUM*

Jun Cao[1], Osamu Kaneko[2], Amporn Thongkukiatkul[3], Mayumi Tachibana[4], Hitoshi Otsuki[4], Takafumi Tsuboi[5], Motomi Torii[4]
[1]Jiangsu Institute of Parasitic Diseases, Wuxi, China, [2]Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan, [3]Faculty of Science, Burapha University, Chonburi, Thailand, [4]Department of Molecular Parasitology, Ehime University Graduate School of Medicine, Toon, Japan, [5]Cell-Free Science and Technology Research Center, Ehime University, Matsuyama, Japan

11:15 a.m.

841

A PURINE TRANSPORTER IN THE ENDOPLASMIC RETICULUM OF *PLASMODIUM FALCIPARUM*

Megan J. Downie[1], Kamal El Bissati[1], April M. Bobenchik[1], Kiaran Kirk[2], Choukri Ben Mamoun[1]
[1]University of Connecticut Health Center, Farmington, CT, United States, [2]The Australian National University, Canberra, Australia

11:30 a.m.

ACMCIP ANNUAL BUSINESS MEETING

Sarah Volkman
Harvard School of Public Health, Boston, MA, United States

Symposium 133

Towards Non-Hemolytic 8-Aminoquinolines: New Developments

Grand Ballroom E
Wednesday, December 10, 10:15 a.m. – Noon

8-Aminoquinolines are the only class of antimalarials active against all the life cycle stages of the malaria parasite with utility for treatment and prophylaxis against falciparum malaria, as well as treatment and radical cure of relapsing vivax malaria. Recently, their utility against other protozoal infections has also been suggested. However, severe hemolytic toxicities seen in G6PD deficient individuals have limited their therapeutic applications. This symposium will discuss the importance and necessity of development of non hemolytic 8-aminoquinoline antimalarials; updates on 8-aminoquinolines under preclinical evaluations and clinical development; current status of the knowledge on understanding the mechanism of hemolytic toxicity and development of *in vitro* assays for prediction of hemolytic potential of candidate molecules; and their applications in development of non-hemolytic 8-aminoquinolines.

CHAIR

Babu L. Tekwani
University of Mississippi, University, MS, United States

Larry Walker
University of Mississippi, University, MS, United States

10:15 a.m.

INTRODUCTION

Wilbur K. Milhous
University of South Florida, Tampa, FL, United States

10:30 a.m.

NON-HEMOLYTIC 8-AMINOQUINOLINES: CONSORTIUM APPROACH

Larry Walker
University of Mississippi, University, MS, United States

11 a.m.

UPDATES ON TAFENOQUINE DEVELOPMENT

Colin Ohrt
Walter Reed Army Institute of Research, Silver Spring, MD, United States

11:30 a.m.

ENANTIOSELECTIVITY IN METABOLISM, EFFICACY AND SAFETY OF 8-AMINOQUINOLINES

Babu L. Tekwani
University of Mississippi, University, MS, United States

Exhibit Hall Open/Light Lunch

Napoleon Ballroom
Wednesday, December 10, Noon – 2:30 p.m.

Poster Session 134 (#842-1111 and Late Breakers)

Poster Session C/Light Lunch

Armstrong Ballroom
Wednesday, December 10, Noon – 1:30 p.m.

Arthropods/Entomology – Other

842

STUDY ON PREVALENCE, DISTRIBUTION AND BEHAVIORAL ASPECTS OF THE POTENTIAL VECTOR/S OF CUTANEOUS LEISHMANIASIS IN SELECTED AREAS OF SRI LANKA

Sanath C. Senanayake[1], Nadira D. Karunaweera[1], Wimaladharma Abeyewickreme[2]
[1]University of Colombo, Colombo, Sri Lanka, [2]University of Kelaniya, Faculty of Medicine, Ragama, Sri Lanka

843

GENETIC STRUCTURE OF A HIGHLY *TRYPANOSOMA CRUZI*-INFECTED POPULATION OF TRIATOMA SANGUISUGA IN NEW ORLEANS, LOUISIANA, USA

Nicolas de la Rua[1], Kristina Cesa[2], Leon Perniciaro[1], Dawn Wesson[2], Patricia L. Dorn[1]
[1]Loyola University New Orleans, New Orleans, LA, United States, [2]Tulane University Health Sciences Center, New Orleans, LA, United States

844

ANALYSIS OF THE SPATIO-TEMPORAL DYNAMICS OF HOUSE INFESTATION BY NON-DOMICILIATED TRIATOMA DIMIDIATA REVEALS AN HETEROGENOUS DISTRIBUTION OF CHAGAS DISEASE TRANSMISSION RISK AND POTENTIAL VECTOR MANIPULATION BY *TRYPANOSOMA CRUZI*

Eric Dumonteil[1], Melba Herrera-Aguilar[1], Maria Euan-Gracia[1], Leysi Chavez-Nuñez[1], Sébastien Gourbière[2], Maria Jesus Ramirez-Sierra[1]
[1]Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico, [2]University of Perpignan, Perpignan, France

845

EFFECTS OF VIRAL INFECTION ON BLOOD FEEDING BEHAVIOR AND FECUNDITY IN *CULICOIDES SONORENSIS* (DIPTERA: CERATOPOGONIDAE)

Kristine Bennett[1], Jessica E. Hopper[1], Melissa A. Stuart[1], Mark West[2], Barbara S. Drolet[1]
[1]USDA/ARS/ABADRL, Laramie, WY, United States, [2]USDA/ARS/NPA, Fort Collins, CO, United States

846

CHARACTERIZATION OF TRYPSINS IN LUTZOMYIA LONGIPALPIS, THE MAIN VECTOR OF VISCERAL LEISHMANIASIS IN BRAZIL

Erich L. Telleria, Claudia M. d'Avila-Levy, Yara M. Traub-Cseko
Instituto Oswaldo Cruz – Fiocruz, Rio de Janeiro, Brazil

847

RESPONSE OF *PHLEBOTOMUS PAPATASI* (DIPTERA: PSYCHODIDAE) TO COMMERCIAL MOSQUITO TRAPS IN SOUTHERN EGYPT

D.F. Hoel[1], S.S. El-Hossary[2], H.A. Hanafi[2], N. Watany[2], E.Y. Fawaz[2], B.D. Furman[2], P.J. Obernauer[3], D.E. Szumlas[4], D.L. Kline[5]
[1]Navy Liaison Officer, USDA, Gainesville, FL, United States, [2]U.S. Naval Medical Research Unit No. 3, Cairo, Egypt, [3]University of Florida, Departments of Entomology and Nematology, Gainesville, FL, United States, [4]Centers for Disease Control and Prevention, Atlanta, GA, United States, [5]Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL, United States

848

SEARCHING FOR MOLECULAR DETERMINANTS OF SPECIES SPECIFICITY IN SAND FLIES COLONIZED BY *LEISHMANIA* PARASITES

Ryan C. Jochim, Jesus G. Valenzuela
National Institute of Allergy and Infectious Diseases, Rockville, MD, United States

(ACMCIP Abstract)

849

PERSISTENCE OF PLASMODIUM DNA IN DESICCATED *ANOPHELES* MOSQUITOES AS DETERMINED BY REAL-TIME PCR

Mark A. Rider, Brian D. Byrd, Kevin A. Caillouët, Dawn M. Wesson
Tulane University, New Orleans, LA, United States

850

IDENTIFICATION OF BLOODMEALS IN SANDFLIES BY ELISA, IN PERU

Carmen Flores-Mendoza[1], Nelson Solorzano[2], Roberto Fernandez[1], Fanny Castro-Llanos[1], John Grieco[3], David Florin[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Caraz Hospital, Ancash, Peru, [3]Uniformed Services University of the Health Sciences, Departament of Preventive Medicine and Biometrics, Bethesda, MD, United States

Clinical Tropical Medicine

851

MULTIPLE-DOSE POPULATION PHARMACOKINETICS OF PYRONARIDINE IN HEALTHY VOLUNTEERS

T. Wattanavijitkul[1], L. Fleckenstein[1], K. S. Yu[2], I. J. Jang[2]
[1]College of Pharmacy, The University of Iowa, Iowa City, IA, *United States, [2]Department of Pharmacology and Clinical Pharmacology, Seoul National University College of Medicine and Hospital, Seoul, Republic of Korea*

852

MONITORING OF INTERNATIONAL OUTBREAKS WITH AN OUTBREAK SURVEILLANCE DATABASE

Naomi Bryant[1], Joanne Lawrence[2], Jane Jones[2], Alexandra Jordan[1], Hilary Simons[1], **David R. Hill**[1]
[1]National Travel Health Network and Centre, London, United Kingdom, [2]Health Protection Agency, Centre for Infections, London, United Kingdom

853

THE FACTORS AFFECTING MALARIA PREVENTION AND TREATMENT DECISIONS FOR CHILDREN IN THE DEMOCRATIC REPUBLIC OF CONGO

Olufunke A. Alaba, Gauthier Tshiswaka Kashalala
University of Pretoria, Pretoria, South Africa

854

USE OF INSECTICIDE SYNERGISTS IN INVESTIGATING PYRETHROID RESISTANCE IN SARCOPTES SCABIEI

Cielo Pasay[1], **Marjorie Morgan**[2], Larry Arlian[2], Deborah Holt[3], Shelley Walton[3], James McCarthy[1]
[1]Queensland Institute of Medical Research and Australian Centre for International and Tropical Health, University of Queensland, Brisbane, Australia, [2]Wright State University, Dayton, OH, United States, [3]Menzies School of Health Research and Charles Darwin University, Darwin, Australia

855

PHARMACOKINETICS, CLINICAL AND SAFETY OUTCOMES OF PYRONARIDINE/ARTESUNATE TREATMENT OF ACUTE *PLASMODIUM FALCIPARUM* MALARIA IN UGANDA

Patrice Piola[1], Lawrence Fleckenstein[2]
[1]MSF Epicentre, Mbarara, Uganda, [2]The University of Iowa, Iowa City, IA, United States

856

A DOUBLE BLIND, RANDOMIZED, CONTROLLED, DOSE ESCALATION PHASE IB FIELD TRIAL IN 12 TO 24 MONTH OLD CHILDREN IN BURKINA FASO TO EVALUATE THE SAFETY AND IMMUNOGENICITY OF THE *P. FALCIPARUM* MEROZOITE SURFACE PROTEIN-3 LONG SYNTHETIC PEPTIDE (MSP 3-LSP) ADJUVANTED IN ALUMINIUM HYDROXIDE VERSUS ENGERIX B

Sirima Sodiomon Bienvenu[1], Tiono B. Alfred[2], Ouedraogo Alphonse[2], Diarra Amidou[2], Yaro Jean Baptist[2], Ouedraogo Espérance[2], Gansané Adama[2], Ouedraogo André Lin[2], Bougouma Edith[2], Konaté T. Amadou[2], Soulama Issiaka[2], Traoré Abdoulaye[2], Kaboré Youssouf[2], Roma Chilengi[3], Druilhe Pierre[4], Luty Adrian[5], Cousens Simon[6], Nébié Issa[2]
[1]Centre National de Recherche et de Formation sur le Paludisme, Groupe d'action et de Recherche en Santé, Ouagadougou, Burkina Faso, [2]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [3]African Malaria Network Trust, Dar Es Ssalaam, United Republic of Tanzania, [4]Institut Pasteur, Paris, France, [5]Radboug University Nijmegen Medical Centre, Nijemegen, Netherlands, [6]London School of Hygiene and Tropical Medicine, London, United Kingdom

857

IN VITRO HEMOLYTIC EFFECTS OF 8-AMINOQUINOLINES IN NORMAL AND GLUCOSE 6-PHOSPHATE DEHYDROGENASE DEFICIENT ERYTHROCYTES

Shobana Ganesan, Babu L. Tekwani, Lalit M. Tripathi, Dhammika Nanayakkara, Larry A. Walker
University of Mississippi, Oxford, MS, United States

858

PILOT TRIAL OF THE HECT-CL DEVICE AS THERMOTHERAPY FOR CUTANEOUS LEISHMANIASIS IN PERU

David A. Miller[1], Cesar Miranda-Verastegui[2], Dalila Martinez-Medina[3], Alejandro Llanos-Cuentas[3], Richard S. Witzig[4]
[1]University of Chicago, Chicago, IL, United States, [2]Universidad Peruana Cayetano Heredia Hospital, Lima, Peru, [3]Universidad Peruana Cayetano Heredia, Lima, Peru, [4]Tulane University, New Orleans, LA, United States

859

POPULATION PHARMACOKINETICS OF ARTESUNATE AND AMODIAQUINE IN AFRICAN CHILDREN

Kasia Stepniewska[1], William Taylor[2], Sodiomon Sirima[3], Nicholas J. White[1], Jean-Rene Kiechel[4]
[1]Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand, [2]University of Oxford Clinical Research Unit, Hanoi, Vietnam, [3]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [4]Drugs for Neglected Diseases Initiative, Geneva, Switzerland

860

SEROPOSITIVE WOMEN AND THEIR NEWBORNS DETECTED BY ELISA WITH ANTIGENS OF A LOCAL STRAIN OF *TRYPANOSOMA CRUZI* AND FOLLOW-UP TO IDENTIFY CASES OF CONGENITAL TRANSMISSION IN TWO MEXICAN STATES

Rubi Gamboa-Leon[1], Claudia Gonzalez-Ramirez[1], Nicolas Padilla-Raygoza[2], Sergio Sosa-Estani[3], Pierre Buekens[4], Eric Dumonteil[1]
[1]Centro de Investigaciones Regionales "Dr. Hideyo Noguchi", Merida, Mexico, [2]Facultad de Enfermería y Obstetricia de Celaya, Universidad de Guanajuato, Celaya, Celaya, Mexico, [3]Instituto de Efectividad Clínica y Sanitaria, y Centro Nacional de Diagnóstico e Investigación de Endemoepidemias (CeNDIE) ANLIS Dr. Carlos G. Malbrán, Ministerio de Salud, Buenos Aires, Argentina, [4]School of Public Health and Tropical Medicine, Tulane University, New Orleans, LA, United States

(ACMCIP Abstract)

861

GMM AND THE LOSS OF ACQUIRED IMMUNITY: LESSONS LEARNED FROM HISTORY

Shannon Famenini
University of California at Los Angeles, Los Angeles, CA, United States

862

EVALUATION OF DOD-GEIS OVERSEAS SURVEILLANCE PROJECTS: 1998-2007

J. Jeremy Sueker
Department of Defense Global Emerging Infections Surveillance System, Silver Spring, MD, United States

863

THE ADDED BURDEN OF MALARIA AND ITS HEALTH IMPLICATIONS IN RURAL WOMEN IN OKIGWE ONCHOENDEMIC AREA OF IMO STATE, NIGERIA

Preet I. Onyeka
Imo State University, Owerri, Nigeria

864

DEVELOPMENT OF *SCHISTOSOMA JAPONICUM* FAST-ELISA ASSAY FOR SCHISTOSOMIASIS DIAGNOSIS

Yeuk-Mui Lee[1], John Noh[1], Patricia Wilkins[1], Victor C. Tsang[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Georgia State University, Atlanta, GA, United States

865

TREATMENT OF ACUTE *PLASMODIUM VIVAX* MALARIA WITH PYRAMAX® (PYRONARIDINE TETRAPHOSPHATE/ARTESUNATE) IN A CONTROLLED PHASE III CLINICAL TRIAL

Emiliana Tjitra[1], Ronnatrai Ruangweerayut[2], Duong Socheat[3], Neena Valecha[4]
[1]National Institutes of Health Research and Development, Jakarta, Indonesia, [2]Mae Sod General Hospital, Tak, Thailand, [3]National Malaria Center, Phnom Penh, Cambodia, [4]National Institute of Malaria Research, Delhi, India

866

HUMANS FROM AN ENDEMIC AREA OF CUTANEOUS LEISHMANIASIS IN MALI PRODUCE IFN-GAMMA TO SAND FLY SALIVARY PROTEINS

Fabiano Oliveira, Regis Gomes, Clarissa Teixeira, Ousmane Faye, Pierre Traore, Souleymane S. Diarra, Jeniffer M. Anderson, Elnaiem A. Dia-Eldin, Sibiry Samake, Bourama Traore, Cheick A. Coulibaly, Fairhurst Rick, Somita Keita, Seydou Doumbia, Shaden Kamhawi, Jesus G. Valenzuela
National Institutes of Health, Rockville, MD, United States

867

ESSENCE DESKTOP EDITION; A SELF-CONTAINED DISEASE SURVEILLANCE APPLICATION

Charles J. Hodanics, Jacqueline Coberly
Johns Hopkins University Applied Physics Laboratory, Laurel, MD, United States

868

EVALUATION OF A RAPID IMMUNOCHROMATOGRAPHIC TEST FOR GLUCOSE-6-PHOSPHATE DEHYDROGENASE DEFICIENCY

Kathleen E. Tinley, Elizabeth D. Barnett, Anita M. Loughlin
Boston Medical Center, Boston, MA, United States

869

TWO CASES OF CUTANEOUS AND VISCERAL LEISHMANIASIS IMPORTED INTO GUATEMALA FROM SOUTH AMERICA AND ITS POSSIBLE PUBLIC HEALTH IMPLICATIONS

Rodrigo A. Gramajo, Nidia R. Rizzo, Byron A. Arana
Center for Health Studies, Universidad del Valle de Guatemala, Guatemala City, Guatemala

870

VILLAGE BASED MALARIA CONTROL IN UNDERPRIVILEGED COMMUNITIES-RWANDA: SHOWCASE OF RWANDA VILLAGE CONCEPT PROJECT IN MUYOGORO VILLAGE

Remy Serge Muhire Manzi[1], Félicien Shikama[1], Christian Rusangwa[2], Edmond Baganizi[2]
[1]Rwanda Village Concept Project/National University of Rwanda, HUYE, Rwanda, [2]Rwanda Village Concept Project/National University of Rwanda, Huye, Rwanda

871

PRELIMINARY STUDY ON THE INCIDENCE OF SNAKEBITES IN BOLIVIA

Jean-Philippe F. Chippaux, Jorge R. Postigo, Leonardo *Belmonte, Gabriela C. Onofre Arce*
Institut de Recherche pour le Développement, La Paz, Bolivia

872

CLUSTERING OF HANSEN'S DISEASE (LEPROSY) IN A POPULATION IN NORTHEAST BRAZIL

José W. Queiroz[1], Gutemberg H. Dias[1], Maurício L. Nobre[1], Marcia C. De Sousa Dias[2], Sérgio F. Araújo[1], James D. Sousa[1], Jenefer M. Blackwell[3], **Selma M. Jeronimo**[1]
[1]Universidade Federal do Rio Grande do Norte, Natal, Brazil, [2]Universidade Estadual do Rio Grande do Norte, Mossoró, Brazil, [3]Telethon Institute for Child Health Research, The University of Western Australia, West Perth, Western Australia, Australia

873

ASSESSING THE CARDIAC EFFECTS OF ARTESUNATE (AS) AND MEFLOQUINE (MQ) IN HEALTHY VOLUNTEERS IN A SAFETY AND PK, SINGLE DOSE, RANDOMISED, TWO PHASE CROSS OVER STUDY OF A NEW FIXED DOSE AS/MQ COMBINATION AND LOOSE AS + MQ

Walter Taylor[1], Srivicha Krudsood[2], Noppadon Tangpukdee[2], Polrat Wilairatana[2], Polrat Wilairatana[2], Sornchai Looareesuwan[2], Suresh Ramanathan[3], Viswerwaran Navaratnam[3], Michel Vaillant[4], Piero Olliaro[5], Jean-Rene Kiechel[6]
[1]Oxford University, Hanoi, Vietnam, [2]Mahidol University, Bangkok, Thailand, [3]Universiti Sains Malaysia, Penang, Malaysia, [4]Centre for Health Studies, Luxembourg, Luxembourg, [5]WHO/TDR, Geneva, Switzerland, [6]DNDi, Geneva, Switzerland

874

INTEGRATED MAPPING FOR TRACHOMA AND URINARY SCHISTOSOMIASIS IS MORE COST EFFICIENT THAN SINGLE DISEASE APPROACHES. A STUDY OF "COST DRIVERS" IN PLATEAU AND NASARAWA STATES, NIGERIA

Deborah McFarland[1], Priscillia Dewa[2], Abel Eigege[2], N. Jip[2], J. Umaru[2], Jonathan King[3], G. Ogah[4], D. Goshit[5], N. Njepuome[6], Frank Richards[3]
[1]Rollins School of Public Health of Emory University, Atlanta, GA, United States, [2]The Carter Center, Jos, Nigeria, [3]The Carter Center, Atlanta, GA, United States, [4]Plateau State Ministry of Health, Jos, Nigeria, [5]Nasarawa State Ministry of Health, Lafia, Nigeria, [6]Federal Ministry of Health, Nigeria, Abuja, Nigeria

875

HIGH ACCEPTABILITY OF A NEW POU SAFE WATER SYSTEM FOR TANZANIAN RURAL HOUSEHOLDS

Esther Mwakitalu[1], Steven Himley[2], **Charles Mackenzie**[3], Nsa Kiasi[1], Mwele Malecela[1], Mickey Bridges[2], Jeffrey Williams[2]
[1]National Institute for Medical Research, Dar es Salaam, United Republic of Tanzania, [2]HaloSource Incorporated, Bothwell, WA, United States, [3]Michigan State University, Dimondale, MI, United States

876

MALARIA MORTALITY AND MORBIDITY IN THE FIRST FIVE YEARS OF LIFE IN A BIRTH COHORT OF CHILDREN IN NORTHERN GHANA

Frank Atuguba[1], Abraham R. Oduro[1], Abraham Hodgson[1], Martin Adjuik[1], Patrick Ansah[1], Francis Anto[1], Thomas Anyorigya[1], Victor Asoala[1], Lucas Amenga-Etego[1], William Rogers[2], Kojo Koram[3], David Fryauff[4]
[1]Navrongo Health Research Centre, Navrongo, Ghana, [2]Naval Medical Research Unit No. 2, Jakarta, Indonesia, [3]Noguchi Memorial Institute for Medical Research, Legon, Ghana, [4]Naval Medical Research Center, Silver Spring, MD, United States

877

AGE-SPECIFIC INCIDENCE OF CLINICAL MALARIA IN A POTENTIAL MALARIA VACCINE CANDIDATE TESTING SITE OF BURKINA FASO

Tiono B. Alfred[1], Ouedraogo Alphonse[1], Diarra Amidou[1], Sanon Souleymane[1], Yaro Jean Baptist[1], Ouedraogo Espérance[1], Ouedraogo Amathe[1], Soulama Issiaka[1], Bougouma Edith[1], Konaté T. Amadou[1], Nébié Issa[1], Sirima Sodiomon Bienvenu[2]
[1]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [2]Centre National de Recherche et de Formation sur le Paludisme, Groupe d'action et de Recherche en Santé, Ouagadougou, Burkina Faso

878

LEUKOCITURIA AND BACTERIURIA AS INDICATORS OF URINARY TRACT INFECTION

Lida Mejia-Zuluaga, Frine Salmavides, Humberto A. Guerra, Theresa Ochoa
Instituto de Medicina Tropical Alexander Von Humbold – Universidad Peruana Cayetano Heredia, Lima, Peru

879

DEMODEX FOLLICULORUM COUNT ON EYELID SCRAPING FROM PATIENTS ATTENDING CAYETANO HEREDIA NATIONAL HOSPITAL

Henry Anchante-Herrera[1], Marco Canales[1], Angelica Terashima[2], Frine Samalvides[2], Edwin Miranda-Choque[3]
[1]Institute of Tropical Medicine Alexander von Humboldt, Universidad Peruana Cayetano Heredia, Lima, Perú, [2]Departamento de Enfermedades, Infecciosas, Tropicales y Dermatológicas, Hospital Nacional Cayetano Heredia, Lima, Perú, [3]Universidad Peruana Cayetano Heredia, Lima, Peru

880

ASSESSMENT OF RISK FACTORS FOR DRUG RESISTANT TUBERCULOSIS IN LOUISIANA, 1993-2005

Adiba Hassan
Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States

881

ASYMPTOMATIC PARASITEMIA AND COMPLEX SPECIES ASSOCIATIONS IN MALARIA ENDEMIC SUB-SAHARAN AFRICA

Chidi Nwizu[1], Tsiri Agbenyega[2], Daniel Ansong[2], Maurine R. Hobbs[1], Benjamin Crookston[1], Stephen Alder[1], DeVon Hale[1]
[1]University of Utah School of Medicine, Salt Lake City, UT, United States, [2]Komfo Anokye Teaching Hospital, Kumasi, Ghana

882

ARTEMETHER-LUMEFANTRINE (COARTEM)IN TREATMENT OF UNCOMPLICATED MALARIA AT KASANGATI HEALTH CENTRE, UGANDA

Hakim Sendagire, Mark Kaddu-Mukasa, Steven M. Kiwuwa, Fred A. Kironde
Makerere University, Kampala, Uganda

883

SAFETY AND IMMUNOGENICITY OF A NEW MENINGOCOCCAL A CONJUGATE VACCINE IN A HEALTHY AFRICAN POPULATION AGED 2-29 YEARS

Fadima Cheick Haidara[1], Samba O. Sow[1], Okoko Brown[2], Aldjouma Diallo[3], Marie Pierre Preziosi[4], Elisa Marcheti[5], Julie Chaumont[5], Milagritos Tapia[6], Richard Agdebola[7], Ilubukola Idoko[7], Pascal Arduin[3], Ray Borrow[8], Georges Carlone[9], Adebayo Akinsola[7], Varsha Parulekar[10], Brian Plikyatis[9], Jamie Findlow[8], Cheryl Elie[9], Marc Laforce[5], Prasad Kulkarni[11], Simonetta Viviani[5]
[1]Center for Vaccine Development-Mali, Bamako, Mali, [2]MRC The Gambia, Banjul, Gambia, [3]IRD-Dakar, Dakar, Senegal, [4]MVP-WHO, Ganava, Switzerland, [5]MVP-France, Ferney, France, [6]Center for Vaccine Development-Mali, Baltimore, MD, United States, [7]MRC The Gambia, Fajara, Gambia, [8]HPA, Manchester, United Kingdom, [9]Centers for Disease Control and Prevention, Atlanta, GA, United States, [10]iGATE, Mumbai, India, [11]SIIL, Pune, India

884

FIELD VALIDITY AND COMPARATIVE PERSISTENT ANTIGENICITY OF HRP-2 RAPID DIAGNOSTIC TESTS FOR MALARIA IN A HYPERENDEMIC REGION OF UGANDA

Daniel J. Kyabayinze
Malaria Consortium, Kampala, Uganda

885

POTENTIAL HEALTH IMPLICATION OF CHRONIC PARACETAMOL EXPOSURE IN AFRICAN POPULATION STUDY

Elaine Holmes
Imperial College London, London, United Kingdom

Flaviviridae – Dengue

886

PASSIVE IMMUNIZATION WITH SERUM FROM SECONDARY DENV PROVIDES PARTIAL CROSS PROTECTION AGAINST WNV INFECTION

Xiomara Mercado[1], Yisel Rivera[1], Sun Wellington[2], Elizabeth Hunsperger[2], Idalí Martínez[1]
[1]University of Puerto Rico Medical Sciences Campus, Department of Microbiology and Medical Zoology, San Juan, PR, United States, [2]Centers for Diseases Control and Prevention, Division of Vector-Borne Infectious Disease, Dengue Branch, San Juan, PR, United States

887

ANALYSIS OF ANTIBODY RESPONSE AGAINST DENGUE VIRAL RECOMBINANT PROTEINS IN SERUM SAMPLES OF PATIENTS WITH IN DF AND DHF

Balam May[1], Garcia Cordero[1], Escobar Gutierrez[2], Cedillo Rivera[3], Gutierrez Castañeda[4], Cedillo Barron[1]
[1]Centro de Investigacion y Estudios Avanzado del Instituto Politecnico Nacional, Mexico City, Mexico, [2]Instituto Nacional de Diagnóstico y Referencia Epidemiológicas, Departamento de Enfermedades Inmunológicas., Mexico City, Mexico, [3]Centro Medico Nacional "Ignacio García Téllez" del Instituto Mexicano del Seguro Social, Unidad de Investigación, Mérida, Yucatan, Mexico, [4]Facultad de Estudios Superiores Iztacala, Universidad Nacional Autonoma de Mexico, Mexico City, Mexico

888

THE ROLE OF HUMAN FIBROBLAST IN THE INNATE IMMUNITY AGAINST DENGUE VIRUS

Bustos Arriaga, Garcia Machorro, Garcia Cordero, Flores Romo, Santos Argumedo, Cedillo Barron
Centro de Investigacion y Estudios Avanzado del Instituto Politecnico Nacional, Mexico City, Mexico

(ACMCIP Abstract)

889

ALTERED CD8$^+$ T CELL RESPONSES TO *IN VITRO* SECONDARY STIMULATION WITH HETEROLOGOUS DENGUE VIRUS SEROTYPES

Heather L. Friberg, Anuja Mathew, Alan L. Rothman
University of Massachusetts Medical School, Worcester, MA, United States

890

THE SPATIAL DIMENSION OF DENGUE TRANSMISSION IN IQUITOS, PERU

Steven T. Stoddard[1], Amy C. Morrison[1], Tad Kochel[2], Sharon Minnick[1], Claudio Rocha[2], Moises Sihuincha[3], Thomas W. Scott[1]
[1]University Of California, Davis, CA, United States, [2]Naval Medical Research Center Detachment, Lima, Peru, [3]Loreto Regional Health Department Reference Laboratory, Iquitos, Peru

891

PATTERNS OF CROSS-REACTIVITY AND SPECIFICITY IN THE SEROLOGICAL RESPONSE TO DENGUE INFECTION IN KAMPHAENG PHET, THAILAND

Kathryn B. Anderson[1], Supamit Chunsuttiwat[2], Ananda Nisalak[3], Richard G. Jarman[3], Daniel H. Libraty[4], Anon Srikiatkhachorn[3], Mammen P. Mammen Jr[3], Alan L. Rothman[4], Robert V. Gibbons[3], Timothy P. Endy[5]
[1]Emory University, Atlanta, GA, United States, [2]Department of Disease Control, Ministry of Public Health, Bangkok, Thailand, [3]Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [4]University of Massachusetts Medical School, Worcester, MA, United States, [5]Upstate Medical University, Syracuse, NY, United States

892

PRECLINICAL EVALUATION OF DENVAX: A CHIMERIC TETRAVALENT DENGUE VACCINE

Jorge E. Osorio[1], Joseph Brewoo[2], Richard M. Kinney[2], Claire Y. Huang[3], Kelly J. Moss[3], Betty E. Luy[3], Richard A. Bowen[4], Jill A. Livengood[2], Shawn J. Silengo[2], A. P. Kalanidhi[5], Dan T. Stinchcomb[2]
[1]University of Wisconsin, Madison, WI, United States, [2]Inviragen, Inc., Fort Collins, CO, United States, [3]Division of Vector Borne Infectious Diseases, Centers for Disease Control and Prevention, Fort Collins, CO, United States, [4]Colorado State University, Fort Collins, CO, United States, [5]Shantha Biotechnics, Ltd., Hyderabad, India

893

DYNAMIC HOST GENE EXPRESSION PROFILING OF SEVERE FORMS OF DENGUE VIRUS INFECTION

Michio Yasunami[1], Nguyen T. Lan[1], Mihoko Kikuchi[1], Vu T. Huong[2], Vu T. Ngu[2], Hoang N. Dao[2], Do Q. Ha[2], Tran T. Thuy[3], Tran M. Tuan[3], Hiroki Shibata[1], Hitomi Horie[1], Kouichi Morita[1], Kenji Hirayama[1]
[1]Institute of Tropical Medicine (NEKKEN), Nagasaki University, Nagasaki, Japan, [2]Pasteur Institute in Ho Chi Minh City, Ho Chi Minh City, Vietnam, [3]Nhi Dong Hospital No.2, Ho Chi Minh City, Vietnam

894

USING GPS TECHNOLOGY TO STUDY DISEASE TRANSMISSION: WHAT DO POTENTIAL STUDY PARTICIPANTS THINK ABOUT THIS?

Valerie Paz Soldan[1], Steven Stoddard[2], Amy Morrison[2], John Elder[3], Gonzalo Vasquez-Prokopec[4], Uriel Kitron[4], Thomas Scott[2]
[1]Tulane University School of Public Health and Tropical Medicine, New Orleans, LA, United States, [2]University of California, Davis, CA, United States, [3]San Diego State University, San Diego, CA, United States, [4]Emory University, Atlanta, GA, United States

895

DENGUE VIRUS TYPE-2 (VD2), INDUCE FILOPODIAL STRUCTURES DURING VIRAL ENTRY IN CELL LINE HMEC-1

Horacio Zamudio-Meza, Isaura Meza Gómez-Palacio
Centro de Investigación y de Estudios Avanzados del IPN, México D.F., Mexico

896

EVALUATION OF HOUSEHOLD TRANSMISSION OF DENGUE USING A CLUSTER EPIDEMIOLOGY STUDY DESIGN IN WEST JAVA, INDONESIA

Nurhayati[1], Herman Kosasih[1], Kiki M. Samsi[2], Bachti Alisjahbana[3], Tatang K. Samsi[2], Hadi Jusuf[3], Primal Sudjana[3], Djatnika Setiabudi[3], Ida Parwati[3], Nugroho H. Susanto[1], Zen Hafy[4], Gustiani *[1], Susanna Widjaja[1], Djoko Yuwono[5], Ungke Antonjaya[1], Charmagne Beckett[6], Kevin Porter[6], Maya Williams[1], Patrick Blair[1], Timothy Burgess[1]
[1]Naval Medical Research Unit 2, Jakarta, Indonesia, [2]Sumber Waras Hospital, Jakarta, Indonesia, [3]Hasan Sadikin Hospital, Bandung, Indonesia, [4]University of Sriwijaya, Palembang, Indonesia, [5]National Institutes of Health Research and Development, Jakarta, Indonesia, [6]Naval Medical Research Center, Silver Spring, MD, United States

897

LONGITUDINAL PROSPECTIVE STUDY OF DENGUE IN A COHORT OF INDONESIAN ADULTS REVEALS A SHIFT IN SEROTYPE PREDOMINANCE AND INCREASED DISEASE SEVERITY

Herman Kosasih[1], Bachti Alisjahbana[2], Pandji I. Rudiman[2], Nugroho H. Susanto[1], Djoko Yuwono[3], Harli Novriani[3], Ratna I. Tan[1], Primal Sudjana[2], Hadi Jusuf[2], Ida Parwati[2], Maya Williams[1], Patrick J. Blair[1], Charmagne G. Beckett[4], Kevin R. Porter[4], Timothy H. Burgess[1]
[1]Viral Diseases Program, US NAMRU-2, Jakarta, Indonesia, [2]Hasan Sadikin Hospital, Bandung, Indonesia, [3]National Institutes of Health Research and Development, Indonesian Ministry of Health, Jakarta, Indonesia, [4]Naval Medical Research Center, Silver Spring, MD, United States

898

DENGUE KNOWLEDGE AND PRACTICE, A PHYSICIAN SURVEY IN AN ENDEMIC AREA OF THE U.S.

Kay M. Tomashek[1], Carmen L. Perez[1], Mary Ramos[1], D. Fermin Arguello[1], Brad Biggerstaff[1], Enid Garcia[2], Wellington Sun[1]
[1]Centers for Disease Control and Prevention, San Juan, PR, United States, [2]Puerto Rico Health Department, San Juan, PR, United States

899

FREQUENCY OF DENGUE FEVER AMONG FEBRILE PATIENTS PRESENTING TO AN URBAN HOSPITAL IN MEDELLIN, COLOMBIA: PILOT STUDY RESULTS

Jorge E. Osorio[1], Mark Beatty[2], Yenny Goez-Rivillas[3], Ruth E. Ramirez[3], Dianna Edgil[2], Bill Letson[2], Francisco J. Diaz[4], Bertha N. Restrepo[3]
[1]University of Wisconsin, Madison, WI, United States, [2]Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea, [3]Instituto Colombiano de Medicina Tropical-Universidad CES, Sabaneta, Colombia, [4]Universidad de Antioquia, Medellin, Colombia

900

USE OF HAND HELD COMPUTERS FOR DENGUE CASE REPORTING AND FOLLOW UP, MEDELLIN, COLOMBIA: PILOT STUDY RESULTS

Mark Beatty[1], Yenny Goez-Rivillas[2], Bertha N. Restrepo[2], Jorge E. Osorio[3]
[1]Pediatric Dengue Vaccine Initiative, Seoul, Republic of Korea, [2]Instituto Colombiano de Medicina Tropical-Universidad CES, Sabaneta, Colombia, [3]University of Wisconsin, Madison, WI, United States

Flaviviridae – Other

901

LIMITED EVIDENCE OF HCV TRANSMISSION IN STABLE HETEROSEXUAL COUPLES FROM BAHIA, BRAZIL

Marcia Bessa[1], Itatiana F. Rodart[2], Gisele B. Menezes[2], Theomira M. Carmo[2], Daniel A. Athanazio[2], **Mitermayer G. Reis**[2]
[1]Escola Bahiana de Medicina e Saúde Pública, Salvador, Brazil, [2]Oswaldo Cruz Foundation, Salvador, Brazil

902

PRO-INFLAMMATORY CYTOKINES IL-1Β, IL-8 AND TNF-Α ARE ASSOCIATED WITH PROTECTIVE EVENTS WHEREAS IL-2 AND IFN-Γ WERE MORE LINKED WITH THE INCREMENT OF THE BIOMARKER ALT IN HCV SEROPOSITIVE PRE-BLOOD DONORS

Maria Alice S. Zarife[1], Eliana A. Reis[1], Glenda C. Meira[1], Theomira M. Carmo[1], Gisele B. Menezes[1], Emilia C. Malafaia[1], Helder R. Silva[1], Nelma Santana[2], Olindo A. Martins-Filho[1], **Mitermayer G. Reis**[1]
[1]Oswaldo Cruz Foundation, Salvador, Brazil, [2]Fundação de Hematologia e Hemoterapia da Bahia (HEMOBA), Salvador, Brazil

903

ENHANCED FREQUENCY OF $CD56^{BRIGHT}$ NK-CELLS TOGETHER WITH $CD3^{-}CD16^{+}CD56^{-}$ NK-CELLS AND ACTIVATED $CD4^{+}$T-CELLS OR B-CELLS PARALLEL WITH $CD4^{+}CDC25^{HIGH}$ T-CELL REGULATORY MAY PLAY AN IMPORTANT ROLE CONTROLLING VIREMIA IN HCV SEROPOSITIVE PRE-BLOOD DONORS

Maria Alice S. Zarife[1], Eliana A. Reis[1], Theomira M. Carmo[1], Gisele B. Menezes[1], Emilia C. Malafaia[1], Helder R. Silva[1], Nelma Santana[2], Olindo A. Martins-Filho[1], **Mitermayer G. Reis**[1]
[1]Oswaldo Cruz Foundation, Salvador, Brazil, [2]Fundação de Hematologia e Hemoterapia da Bahia (HEMOBA), Salvador, Brazil

904

DO WE NEED TO USE LABILE SERUM FACTOR FOR DETECTION OF NEUTRALIZING ANTIBODIES IN ARBOVIRAL DIAGNOSTICS?

Olga Kosoy, Jason Velez, Barbara W. Johnson, Jane Johnson, Amanda Panella, Janeen Laven, Robert Lanciotti
Centers for Disease Control and Prevention, Fort Collins, CO, United States

905

EVALUATION OF NUCLEIC ACID AMPLIFICATION ASSAYS FOR DETECTION OF JAPANESE ENCEPHALITIS VIRUS RNA IN CEREBRAL SPINAL FLUID FROM ACUTE ENCEPHALITIS PATIENTS

Barbara W. Johnson[1], Jaimie Robinson[1], Prachi Rahul Fadnis[2], Vijayalakshmi Reddy[2], Anita Desai[2], Ravi Vasanthapuram[2]
[1]Centers for Disease Control and Prevention, Division of Vector-Borne Infectious Diseases, Fort Collins, CO, United States, [2]Department of Neurovirolorgy, National Institute of Mental Health and Neuro Sciences, Bangalore, India

906

MOLECULAR DETECTION OF FLAVIVIRUS IN ENDEMIC AREAS IN PERU

Dana Figueroa[1], Enrique Mamani[2], Egma Mayta[1]
[1]Universidad Nacional Mayor de San Marcos, Lima, Peru, [2]Instituto Nacional de Salud, Lima, Peru

907

THE NATURAL HISTORY OF YELLOW FEVER IN EAST AFRICA REVISITED

Brett R. Ellis[1], Rosemary C. Sang[2], Scott F. Michael[3], Moses G. Otsyula[4], Dawn M. Wesson[5]
[1]Centro de Pesquisas Aggeu Magalaes (CPqAM), FIOCRUZ, Recife, Brazil, [2]Kenya Medical Research Institute, Nairobi, Kenya, [3]Florida Gulf Coast University, Fort Myers, FL, United States, [4]Institute of Primate Research, Nairobi, Kenya, [5]Tulane University, New Orleans, LA, United States

908

KINETICS OF THE NEUTRALIZING ANTIBODY RESPONSE TO THE VERO-CELL CULTURE DERIVED JAPANESE ENCEPHALITIS VACCINE, IC51

Katrin Dubischar-Kastner
Intercell AG, Vienna, Austria

909

PREVALENCE OF CANDIDIASIS AMONG WOMEN USING CONTRACEPTIVES IN BENIN CITY NIGERIA

Doris I. Ossai, Ftancis E. Oronsaye
University of Benin, Benin City, Nigeria

910

ANALYSIS OF GENETIC DIVERSITY WITHIN A STABLE ENZOOTIC FOCUS OF POWASSAN VIRUS IN NORTHERN WISCONSIN

Doug E. Brackney, Ivy K. Brown, Robert A. Nofchissey, Kelly A. Fitzpatrick, Gregory D. Ebel
University of New Mexico, Albuquerque, NM, United States

911

ONE STEP RT-PCR FOR DETECTION OF ZIKA VIRUS

Faye Oumar
Institut Pasteur Dakar, Senegal, Dakar, Senegal

912

ONE STEP RT-PCR FOR DETECTION OF ZIKA VIRUS

Faye Oumar[1], Faye Ousmane[1], Anne Dupressoir[2], Manfred Weidmann[3], Mady Ndiaye[4], Amadou Alpha Sall[1]
[1]Institut Pasteur, Dakar, Senegal, [2]UMR8122 CNRS, Institut Gustave Roussy, Paris, France, [3]Institute of Virology, University of Göttingen, Göttingen, Germany, [4]Univsersity Cheikh Anta Diop, Dakar, Senegal

913

THE BLOOD-BRAIN BARRIER IN THE CEREBRUM IS THE INITIAL SITE FOR THE JAPANESE ENCEPHALITIS VIRUS ENTERING THE CENTRAL NERVOUS SYSTEM

Tsan-Hsiun Liu[1], Li-Ching Liang[2], Chien-Chih Wang[2], Hwei-Chung Liu[2], **Wei-June Chen**[2]
[1]Kaohsiung Medical University, Kaohsiung, Taiwan, [2]Chang Gung University, Tao-Yuan, Taiwan

914

YELLOW FEVER VACCINE VIRUS AND IGM ANTIBODY DETECTION IN URINE AND CEREBROSPINAL FLUID IN PATIENTS WITH YELLOW FEVER VACCINE-ASSOCIATED VISCEROTROPIC DISEASE

Maria Garcia, Enrique Mamani, Jose Bolarte, Paul Pachas, Dana Figueroa, Nancy Merino, Victoria Gutierrez, Maria Miraval, Manuel Espinoza, Eduardo Matos, Cesar Cabezas
Instituto Nacional de Salud, Lima, Peru

Kinetoplastida – Molecular Biology and Immunology

915

TH1/TH2 DIFFERENTIATION IN CHRONIC AND RECURRENT AMERICAN CUTANEOUS LEISHMANIASIS AND ASYMPTOMATIC INFECTION WITH *LEISHMANIA VIANNIA PANAMENSIS*

Adriana Navas[1], Beatriz Parra[2], Liliana Valderrama[1], Nancy Gore Saravia[1]
[1]Centro Internacional de Entrenamiento e Investigaciones Medicas, Cali, Colombia, [2]Universidad del Valle, Departamento de Microbiologia (Grupo VIREM), Cali, Colombia

(ACMCIP Abstract)

916

IDENTIFICATION AND CHARACTERIZATION OF SECRETED PROTEINS OF *L. CHAGASI*

Alexandra B. Keenan, Sruti DebRoy, Mary E. Wilson
The University of Iowa, VA Medical Center, Iowa City, IA, United States

(ACMCIP Abstract)

917

IDENTIFICATION, CHARACTERIZATION, AND EVALUATION OF THE *TRYPANOSOMA BRUCEI* CA^{2+} CHANNEL (TBCC1) AS A POTENTIAL DRUG AND VACCINE TARGET

Kiantra I. Ramey[1], Francis O. Eko[1], Nana Wilson[1], Zuzana Kucerova[2], Winston Thompson[1], Jonathan K. Stiles[1]
[1]Morehouse School of Medicine, Atlanta, GA, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

(ACMCIP Abstract)

918

***LUTZOMYIA LONGIPALPIS* RECOMBINANT SALIVARY YELLOW-RELATED PROTEIN (LJM11) CONFERS PROTECTION AGAINST *LEISHMANIA* INFECTED SAND FLIES**

Regis B. Gomes, Fabiano Oliveira, Clarissa Teixeira, Dia-Eldin Elnaiem, Shaden Kamhawi, Jesus G. Valenzuela
National Institutes of Health, Rockville, MD, United States

919

EFFECT OF THIADIAZOLE AND ARIL-SYDNONE DERIVATIVES ON A CONSTITUTIVE NITRIC OXIDE SYNTHASE OF *LEISHMANIA AMAZONENSIS*

Rômulo J. Bezerra[1], Áurea Echevarria[2], Camilla M. dos Reis[2], Dílson C. Maia[2], Adriana V. Carvalho[1], Liliane G. Silva[1], Thiago B. Santos[1], Leonor Leon[1], Marcelo Genestra[1]
[1]FIOCRUZ, Rio de Janeiro, Brazil, [2]Departamento de Química, Universidade Federal Rural do Rio de Janeiro/RJ, Rio de Janeiro, Brazil

(ACMCIP Abstract)

920

THERAPEUTIC AND IMMUNOLOGICAL EFFECTS OF PYRAZOLE CARBOHYDRAZIDES DERIVATIVES ON THE MOUSE MODEL OF *LEISHMANIA AMAZONENSIS* INFECTION

Karen S. Charret[1], Raquel F. Rodrigues[1], Adriana Gomes[2], Alice Bernadino[2], Marilene M. Canto-Cavalheiro[1], Leonor L. Leon[1], Veronica Amaral[2]
[1]FIOCRUZ- Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, [2]Universidade Federal Fluminense UFF, Niterói, Brazil

(ACMCIP Abstract)

921

CHARACTERIZATION OF THE EARLY INFLAMMATORY RESPONSE TO BITES OF *LEISHMANIA MAJOR* INFECTED PHLEBOTOMUS DUBOSCQI SAND FLIES IN NAÏVE AND PRE-EXPOSED MICE

Clarissa R. Teixeira, Luis F. Oliveira, Regis B. Gomes, Dia Elnaiem, Shaden Kamhawi, Jesus G. Valenzuela
National Institute of Allergy and Infectious Diseases, Rockville, MD, United States

(ACMCIP Abstract)

922

EVALUATION OF THE CHRONIC PHASE IN DOGS NATURALLY INFECTED BY *TRYPANOSOMA CRUZI*

Vladimir Cruz-Chan, Manuel Bolio-Gonzalez, Rafael Colin-Flores, Maria Jesus Ramirez-Sierra, Israel Quijano-Hernandez, **Eric Dumonteil**
Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico

(ACMCIP Abstract)

923

***TRYPANOSOMA CRUZI* STRAINS INDUCED DIFFERENTIAL DETACHMENT OF THE PLACENTAL TROPHOBLAST THROUGH OXIDATIVE STRESS AND COULD PARTICIPATE IN THE CONGENITAL CHAGAS INFECTION**

Maria F. Triquell[1], Cintia M. Diaz Lujan[1], Maria C. Romanini[2], Elisa Bolatti[1], Evelin Pets[1], Gina M. Mazzudulli[1], Hector Freilij[3], Ricardo E. Fretes[1]
[1]Cell Biology, Histology and Embriology Department Medical School, National University of Cordoba, Cordoba, Argentina, [2]National Rio Cuarto University, Cordoba, Argentina, [3]Ricardo Gutierrez Hospital, Buenos Aires, Argentina

(ACMCIP Abstract)

924

***TRYPANOSOMA CRUZI* UP-REGULATES HUMAN DEFENSIN A-1 IN EPITHELIAL CELLS TO CAUSE TRYPANOSOME MEMBRANE PORE FORMATION AND REGULATE CELLULAR INFECTION**

Marisa N. Madison, Maria F. Lima, Yulyia Y. Kleshchenko, Pius N. Nde, Fernando Villalta
Meharry Medical College, Nashville, TN, United States

(ACMCIP Abstract)

925

GENETIC POLYMORPHISM IN THE VISCERALIZING GENE SEQUENCE OF *LEISHMANIA TROPICA* ISOLATED FROM THE SOLDIERS RETURNING FROM IRAQ

Kashinath Ghosh[1], Juan Mendez[1], Henk R. Braig[2], Peter J. Weina[1]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]School of Biological Sciences, Bangor University, Bangor, Wales, United Kingdom

(ACMCIP Abstract)

926

STUDY OF TRYPANOSOMATID VIRULENCE FACTORS USING BIOINFORMATIC AND EXPERIMENTAL APPROACHES

Rosa M. Corrales
Institut de Recherche pour le Developpement, Montpellier, France

(ACMCIP Abstract)

Malaria- Biology and Pathogenesis

927

IDENTIFICATION OF *PLASMODIUM* GENES INVOLVED IN THE PROTECTIVE PRE-ERYTHROCYTIC IMMUNE RESPONSE

Calvin Williams, Abdu Azad
University of Maryland Baltimore, Baltimore, MD, United States

928

REAL-TIME *IN VIVO* IMAGING OF LIVER STAGES OF *PLASMODIUM YOELII*: GFP/LUCIFERASE REPORTER PARASITES

Agnes Mwakingwe[1], Li-Min Ting[1], Sarah Hochman[1], John Chen[2], Richard Novick[2], Photini Sinnis[3], Kami Kim[1]
[1]Albert Einstein College of Medicine, Bronx, NY, United States, [2]Skirball Institute, New York University School of Medicine, New York, NY, United States, [3]Medical Parasitology, New York University School of Medicine, New York, NY, United States

929

EFFECT OF CHLOROQUINE, METHYLENE BLUE AND ARTEMETHER ON THE HEPATIC OXIDATIVE STRESS AND ANTIOXIDANT DEFENCE SYSTEM OF *P. YOELII NIGERIENSIS*-INFECTED MICE

Chiaka M. Oguike, George O. Ademowo
University of Ibadan, Ibadan, Nigeria

930

ERYTHROCYTE INVASION AND VARIATION IN MEROZOITE LIGAND GENE EXPRESSION IN *PLASMODIUM FALCIPARUM*

Natalia Gomez-Escobar, Alfred Ngwa, Michael Walther, Joseph Okebe, Augustine Ebonyi, David Conway
MRC laboratories, Banjul, Gambia

931

HIGH-THROUGHPUT, QUANTITATIVE DISSECTION OF INTRA-ERYTHROCYTIC GROWTH OF THE HUMAN MALARIA PARASITE, *PLASMODIUM FALCIPARUM*, USING FLOWCYTOMETRY

Steven P. Maher, Bharath Balu, John H. Adams
University of South Florida, Tampa, FL, United States

932

GAMETOCYTOGENESIS IN *PLASMODIUM FALCIPARUM*

Katharine Trenholme
Queensland Institute of Medical Research, Brisbane, Australia

(ACMCIP Abstract)

933

DIVERSITY OF *PLASMODIUM FALCIPARUM* PLASTOME IN GAMBIAN ISOLATES

Alfred A. Ngwa, David J. Conway
Medical Research Council (UK) Laboratories, The Gambia, Banjul, Gambia

934

INFLUENCE OF THE PREGNANCY-ASSOCIATED HORMONE HUMAN CHORIONIC GONADOTROPHIN ON GROWTH OF *PLASMODIUM FALCIPARUM IN VITRO*

Audrey D. Thévenon[1], Clinton K. Pong[2], Diane W. Taylor[3]
[1]Georgetown University, Washington, DC, United States, [2]John A. Burns School of Medicine, Honolulu, HI, United States, [3]University of Hawaii, Honolulu, HI, United States

935

MALARIA IN PREGNANCY IN INDONESIA: CHARACTERIZATION OF VAR2CSA TRANSCRIPTS, ANTIBODY RESPONSE TO *PLASMODIUM FALCIPARUM* ERYTHROCYTE MEMBRANE PROTEIN (PFEMP1), AND PLACENTAL HISTOLOGY

Rintis Noviyanti[1], Leily Trianty[1], Michael Duffy[2], Jeanne Rini Poespoprodjo[3], Harsha Dadlani[1], Nugradzia Nursamsy[1], Juan Monintja[1], Andreas Kusuma[1], Hidayat Trimarsanto[1], Daniel Lampah[3], Enny Kenangalem[3], Emiliana Tjitra[4], Ric Price[5], Graham Brown[2], Nicholas Anstey[5], Stephen Rogerson[2]
[1]Eijkman Institute for Molecular Biology, Jakarta, Indonesia, [2]Department of Medicine, The University of Melbourne, Australia, [3]Timika Research Centre, Papua, Indonesia, [4]National Institutes of Health, Research and Development, Ministry of Health, Indonesia, [5]Menzies School of Health Research, Darwin, Australia

(ACMCIP Abstract)

936

INFLAMMATORY MEDIATORS AS BIOMARKERS FOR MALARIAL ANEMIA SEVERITY IN PEDIATRIC POPULATIONS RESIDING IN HOLOENDEMIC *P. FALCIPARUM* TRANSMISSION AREAS

John M. Ong'echa[1], Greg Davenport[2], Emmanuel O. Yamo[1], Tom Were[1], Collins Ouma[1], John M. Vulule[3], James B. Hittner[4], Douglas J. Perkins[5]
[1]University of New Mexico/KEMRI, Kisumu, Kenya, [2]University of Pittsburgh, Pittsburgh, PA, United States, [3]Kenya Medical Research Institute, Kisumu, Kenya, [4]College of Charleston, Charleston, SC, United States, [5]University of New Mexico, Albuquerque, NM, United States

(ACMCIP Abstract)

937

DECREASED PEDIATRIC SEVERE MALARIAL ANEMIA IS ASSOCIATED WITH REDUCED INTRA-MONOCYTIC HEMOZOIN DEPOSITION

Emmanuel O. Yamo[1], Collins Ouma[1], Tom Were[1], Greg C. Davenport[2], John M. Vulule[3], Jedidah Kongoro[4], John M. Ong'echa[1], Douglas J. Perkins[5]
[1]University of New Mexico/KEMRI, Kisian, Kenya, [2]University of Pittsburgh, Pittsburgh, PA, United States, [3]Centre for Global Health Research, Kenya Medical Research Institute, Kisian, Kenya, [4]Department of Zoological Sciences, Kenyatta University, Nairobi, Kenya, [5]Division of Infectious Diseases, University of New Mexico School of Medicine, New Mexico, NM, United States

(ACMCIP Abstract)

938

SPECIFIC INHIBITION OF THE PHOSPHOETHANOLAMINE METHYLTRANSFERASE OF THE HUMAN MALARIA PARASITE *PLASMODIUM FALCIPARUM* BY AMODIAQUINE

April M. Bobenchik, Arunima Mishra, Bing Hao, Iulian N. Rujan, Jeffrey C. Hoch, Choukri Ben Mamoun
University of Connecticut Health Center, Farmington, CT, United States

(ACMCIP Abstract)

939

PRODUCTION OF RETICULOCYTES FROM HEMATOPOIETIC STEM CELLS FOR DEVELOPMENT OF A CONTINUOUS *IN VITRO* CULTURE SYSTEM FOR *PLASMODIUM VIVAX*

Tetsuya Furuya[1], Jane M. Carlton[2], Thavamani Rajapandi[1], Timothy Stedman[1], Wu Ma[3]
[1]MR4, ATCC, Manassas, VA, United States, [2]Department of Medical Parasitology, New York University Langone Medical Center, New York, NY, United States, [3]Stem Cell Center, ATCC, Manassas, VA, United States

940

ANALYSES OF THE *PLASMODIUM FALCIPARUM VAR* GENE FAMILY IN PARASITE ISOLATES FROM ZAMBIA

Brenda Salumbides, Ralph LeBlanc, Godfree Mlambo, Nirbhay Kumar, Phil Thuma, **Susan M. Kraemer**
Johns Hopkins University, Baltimore, MD, United States

941

TYROSINE NITRATION OF PROTEINS BY A PUTATIVE NITRATE REDUCTASE IN SEXUAL AND ASEXUAL *P. FALCIPARUM* PARASITES

Graciela R. Ostera, Jose Ribeiro, Jennifer Hume, Fuyuki Tokumasu
National Institutes of Health, Rockville, MD, United States

942

GROWTH-INHIBITORY EFFECT OF A FUCOIDAN FROM BROWN SEAWEED UNDARIA PINNATIFIDA ON *PLASMODIUM* PARASITES

Junhu Chen[1], **Eun-Taek Han**[1], Jung-Dae Lim[2], Eun-Hwa Sohn[3], Yong-Soon Choi[4]
[1]Department of Parasitology, Kangwon National University College of Medicine, Chuncheon, Gangwon-do 200-701, Republic of Korea, [2]Department of Herbal Medicine Resource, College of Oriental Cure, Public Health & Welfare, Kangwon National University, Samcheok, Gangwon-do, Republic of Korea, [3]Department of Herbal Medicine Resource, College of Oriental Cure, Public Health & Welfare, Kangwon National University, Samcheok, Gangwon-do, Republic of Korea, [4]Department of Molecular Bio-science, School of Biotechnology, Kangwon National University, Chuncheon, Gangwon-do, Republic of Korea

943

HEMATOLOGICAL EFFECTS IN PATIENTS WITH *PLASMODIUM VIVAX*, TIERRALTA – CÓRDOBA, COLOMBIA

Maria F. Yasnot, Rossana Villegas, Agustina Noble, Eugenia Herrera, Juan D. Kerguelen, Cristian E. Mateus
Universidad de Cordoba, Monteria, Colombia

(ACMCIP Abstract)

Malaria – Chemotherapy

944

A RANDOMIZED CLINICAL TRIAL OF THE PROTECTIVE EFFICACY OF TRIMETHOPRIM-SULFAMETHOXAZOLE PROPHYLAXIS AGAINST MALARIA IN HIV-EXPOSED CHILDREN

Taylor Sandison[1], Jaco Homsy[2], Emmanuel Arinaitwe[3], Neil Vora[4], Abel Kakuru[3], Humphrey Wanzira[3], Julius Kalamya[2], Moses Kamya[5], Grant Dorsey[4], Jordan W. Tappero[2]
[1]University of Washington, Seattle, WA, United States, [2]Centers for Disease Control – Uganda, Entebbe, Uganda, [3]Makerere University – University of California, San Francisco Malaria Research Collaboration, Kampala, Uganda, [4]University of California, San Francisco, San Francisco, CA, United States, [5]Makerere University, Kampala, Uganda

945

THE COST-EFFECTIVENESS OF RECTAL ARTESUNATE FOR TREATING SEVERE CHILDHOOD MALARIA AT THE COMMUNITY LEVEL

Yesim Tozan[1], Joel G. Breman[2]
[1]Boston University School of Public Health, Boston, MA, United States, [2]Fogarty International Center, National Institutes of Health, Bethesda, MD, United States

946

IN VITRO ACTIVITY OF A DICHLOROMETHANE FRACTION OF LANSIUM DOMESTICUM LEAVES AGAINST *PLASMODIUM FALCIPARUM* CLONE 3D7

Angela Siner[1], Fasihuddin Badruddin Ahmad[1], Timothy M. Davis[2], Balbir Singh[1], Janet Cox-Singh[1]
[1]Malaria Research Centre, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, Kuching, Malaysia, [2]School of Medicine and Pharmacology, Fremantle Hospital, Fremantle, Australia

947

ADHERENCE TO ARTEMETHER LUMEFANTRINE AS FIRST-LINE TREATMENT FOR UNCOMPLICATED MALARIA IN TANZANIA

Abdunoor M. Kabanywanyi[1], Nathan Mulure[2], Christian Lengeler[3], Blaise Genton[4]
[1]Ifakara Health Research and Development Centre, Dar es Salaam, United Republic of Tanzania, [2]Novartis Pharma (EACA), Nairobi, Kenya, [3]Swiss Tropical Institute, Basel, Switzerland, [4]Ifakara Health Research and Development Centre & Swiss Tropical Institute, Basel, Switzerland

948

EVALUATION OF THE ANTIMALARIAL AND ANTIOXIDANT ACTIVITIES OF METHANOLIC EXTRACT OF *NIGELLA SATIVA* IN MICE INFECTED WITH *PLASMODIUM YOELLI NIGERIENSIS*

George O. Ademowo[1], Valeelat Okeola[2], Chiaka Nneji[3], Catherine Falade[4], Olatunde Farombi[5]
[1]Institute for Advanced Medical Research and TrainingCollege of Medicine, Ibadan, Nigeria, [2]Department of Biochemistry, College of Medicine, Ibadan, Nigeria, [3]Department of Pharmacology, Ibadan, Nigeria, [4]Department of Pharmacology, College of Medicine, Ibadan, Nigeria, [5]Department of Biochemistry, College of Medicine, University of Ibadan, Ibadan, Nigeria

949

PHARMACOKINETIC AND CLINICAL DETERMINANTS OF RESPONSE TO CHLOROQUINE TREATMENT IN NIGERIAN CHILDREN WITH ACUTE UNCOMPLICATED *FALCIPARUM* MALARIA

Gbotosho G.O[1], **Sijuade A**[1], Happi C[1], Sowunmi A[1], Oduola A.M[2]
[1]Department of Pharmacology and Therapeutics, College of Medicine, University of Ibadan, Ibadan, Nigeria, Malaria Research Laboratories, College of Medicine, University of Ibadan, Ibadan, Nigeria, [2]WHO/TDR, Geneva, Switzerland

950

PHARMACOKINETICS OF SULFADOXINE-PYRIMETHAMINE ADMINISTERED ALONE OR IN COMBINATION WITH AMODIAQUINE OR ARTESUNATE IN CHILDREN UNDER FIVE IN MALI

Mamadou Tekete[1], Sekou Toure[1], A. Hendricks[2], Abdoul H. Beavogui[1], Cheick P. Sangare[1], A. Evans[2], P. Smith[2], Hamma Maiga[1], Zoumana I. Traore[1], Ogobara K. Doumbo[1], K. I. Barnes[2], Abdoulaye A. Djimde[1]
[1]University of Bamako, Bamako, Mali, [2]University of Cape Town, Cape Town, South Africa

951

IMPACT OF PROGRAMMATIC USE OF A NEW FIXED-DOSE COMBINATION OF ARTESUNATE-MEFLOQUINE FOR THE TREATMENT OF *FALCIPARUM* MALARIA IN THE JURUÁ VALLEY, ACRE – BRAZIL

Ana Carolina F. Santelli[1], Marize C. Lucena[2], **Isabela Ribeiro**[3], Paola Marchesini Barbosa[4], Roseli La Corte dos Santos[5], André Daher[6], Izanelda Magalhães[2], Suiane do Valle[2], Walquiria Almeida[2], Marcos Boulos[7], José L. Ladislau[1]
[1]National Malaria Control Programme, Secretariat of Surveillance in Health, Ministry of Health, Brasília, Brazil, [2]Health State Secretary, Acre, Brazil, [3]Drugs for Neglected Disases Initiative, Rio de Janeiro, Brazil, [4]Pan American Health Organisation, Brasília, Brazil, [5]Federal University of Sergipe, Sergipe, Brazil, [6]Farmanguinhos, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, [7]Universtity of São Paulo, São Paulo, Brazil

952

EFFICACY AND SAFETY OF ARTESUNATE + AMODIAQUINE (AS+AQ) IN COMPARATIVE TRIALS IN SOUTH-SAHARAN AFRICA: A SYSTEMATIC REVIEW AND AN INDIVIDUAL PATIENT META-ANALYSIS

Piero L. Olliaro[1], Julien Zwang[2], Michel Vaillant[3], Walter (Bob) R. Taylor[4]
[1]World Health Organization (WHO) Special Programme for Research and Training in Tropical Diseases (TDR), Geneva, Switzerland, [2]Shoklo Malaria Research Unit (SMRU), Mae Sod, Thailand, [3]Centre de Recherches Publiques (CRP)- Santé, Luxembourg, Luxembourg, [4]Oxford University Clinical Research Unit, National Institute of Infectious and Tropical Diseases; Bach Mai Hospital, Hanoi, Vietnam

953

CLINDAMYCIN PLUS QUININE FOR TREATING UNCOMPLICATED *FALCIPARUM* MALARIA: A META-ANALYSIS

Charles O. Obonyo, Elizabeth A. Juma
Kenya Medical Research Institute, Kisumu, Kenya

Malaria – Diagnosis

954

APPLYING A REAL TIME PCR ASSAY TO THE ROUTINE LABORATORY DIAGNOSIS OF *FALCIPARUM* MALARIA

Anna Checkley[1], Martina Burke[2], Peter L. Chiodini[3], Debbie Nolder[2], Colin Sutherland[3]
[1]Hospital for Tropical Diseases, London, United Kingdom, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom, [3]Hospital for Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom

(ACMCIP Abstract)

955

DETECTION OF *PLASMODIUM KNOWLESI* BY REAL-TIME PCR

N. Esther Babady, Lynne M. Sloan, Bobbi S. Pritt, Jon E. Rosenblatt
Division of Clinical Microbiology, Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, MN, United States

956

VARIABLE SENSITIVITY OF MALARIA RAPID DIAGNOSTIC TESTS IN HOUSEHOLD SURVEYS – TANZANIA, 2006

Katia J. Bruxvoort[1], Rashid A. Khatib[2], Salim M. Abdulla[2], Elizeus Kahigwa[2], S. Patrick Kachur[3], Meredith L. McMorrow[3]
[1]Rollins School of Public Health, Emory University, Atlanta, GA, United States, [2]Ifakara Health Research and Development Centre, Ifakara, United Republic of Tanzania, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States

957

VALIDATION OF MICROSCOPE EQUIPPED WITH A VERSATILE ILLUMINATOR (THE EARL-LIGHT) IN DETECTING MALARIA PARASITES

Pongwit Bualombai[1], Ditthakorn Rodnak[1], Kanungnit Congpuong[1], Wichai Satimai[1], Samlit Boonpheng[2]
[1]Bureau of Vector Borne Disease, Muang District, Tiwanond Road, Nonthaburi, Thailand, [2]Office for Disease Prevention and Control, Mae Sod, Tak, Thailand

958

THE VALIDATION OF THE DMSC MALARIA *PF./PV.* RAPID DIAGNOSTIC DEVICE FOR THE DETECTION OF *FALCIPARUM* AND NON *FALCIPARUM* MALARIA IN THAILAND 2006

Pongwit Bualombai[1], Kruavon Balachandra[2], Panadda Dhepaksorn[2], Kanungnit Congpuong[1], Wichai Satimai[1]
[1]Bureau of Vector Borne Disease, Muang District, Tiwanond Road, Nonthaburi, Thailand, [2]Department of Medical Science, Muang District, Tiwanond Road, Nonthaburi, Thailand

959

MAPPING EPITOPES RECOGNISED BY MONOCLONAL ANTIBODIES AGAINST PFHRP2 AND IMPLICATIONS TOWARDS OPTIMISATION OF MALARIA RAPID DIAGNOSTIC TESTS

Nelson Lee[1], Joanne Baker[2], Martin Bubb[3], David Bell[3], Qin Cheng[2], James McCarthy[1]
[1]Queensland Institute of Medical Research, Brisbane, Australia, [2]Australian Army Malaria Institute, Brisbane, Australia, [3]World Health Organization, Western Pacific Region Office, Manila, Philippines

960

FIELD EVALUATION OF A RAPID MALARIA DIAGNOSTIC TEST (PARASCREEN™) FOR MALARIA DIAGNOSIS IN THE PERUVIAN AMAZON

Jorge Bendezu
Instituto de Medicina Tropical, Lima, Peru

961

ISOLATION AND CHARACTERIZATION OF THE MSP1 GENE FROM *PLASMODIUM MALARIAE* AND *OVALE*

Larry Birkenmeyer, Scott Muerhoff, George Dawson, Suresh Desai
Abbott Laboratories, Abbott Park, IL, United States

(ACMCIP Abstract)

962

SEROPREVALENCE OF *PLASMODIUM FALCIPARUM, VIVAX, MALARIAE* AND *OVALE* ANTIBODIES AMONG BLOOD DONORS FROM CAMEROON

Ruthie Coffey[1], Larry Birkenmeyer[1], Bruce Dille[1], Alla Haller[1], Dora Mbanya[2], Lazare Kaptue[3], Gerald Schochetman[1], George Dawson[1], Suresh Desai[1], Scott Muerhoff[1]
[1]Abbott Laboratories, Abbott Park, IL, United States, [2]Université de Yaoundé, Yaoundé, Cameroon, [3]Université des Montagnes, Bangangté, Cameroon

963

UTILITY OF MSP1-19 RECOMBINANT ANTIGENS FOR DETECTION OF ANTIBODIES TO *PLASMODIUM FALCIPARUM, OVALE, MALARIAE* AND *VIVAX*

Scott Muerhoff, Larry Birkenmeyer, Ruthie Coffey, Bruce Dille, Alla Haller, George Dawson, Suresh Desai
Abbott Laboratories, Abbott Park, IL, United States

964

OPTIMAL-IT® AS AN ALTERNATIVE TO MICROSCOPY FOR MALARIA DIAGNOSIS IN REMOTE AREAS UNABLE TO ACCESS GOOD LABORATORY SERVICES IN BURKINA FASO

Innocent Valea

Centre Muraz- Bobo-Dioulasso, Bobo-Dioulasso, Burkina Faso

965

PLASMODIUM FALCIPARUM HISTIDINE-RICH PROTEIN 2 ELISA FOR USE IN MALARIA INTERVENTION TRIALS

Carolyne M. Kifude[1], Ann Stewart[1], Carter Diggs[2], John N. Waitumbi[1]
[1]Walter Reed Project/KEMRI, Kisumu, Kenya, [2]Malaria Vaccine Development Program United States Agency for International Development, Washington, DC, United States

966

EVALUATION OF 3 RAPID DIAGNOSTIC TESTS (CARESTART™ MALARIA 3 LINE PLDH (PAN, PF), OPTIMAL-IT® PLDH (PAN, PF) AND CARESTART™ 2 LINE PLDH (PAN) FOR THE DIAGNOSIS OF MALARIA IN MYANMAR

Elisabeth A. Ashley[1], Malek Touabi[1], Margareta Ahrer[2], Robert Hutagalung[1], Khayae Htun[2], Myo Min Lwin[2], Alena Koscalova[2], Eric Comte[2], Prudence Hamade[3], Anne-Laure Page[1], Jennifer Luchavez[4], Stephane Proux[5], Francois Nosten[5], **Philippe J. Guerin**[1]
[1]Epicentre, Paris, France, [2]Médecins sans Frontières-Switzerland, Geneva, Switzerland, [3]Médecins sans Frontières Malaria Working Group, London, United Kingdom, [4]Research Institute for Tropical Medicine, Alabang, Muntinlupa City, Philippines, [5]Shoklo Malaria Research Unit, Maesod, Thailand

967

FEASIBILITY OF THE RAPID DIAGNOSTIC TESTS (RDTS) FIELD USE FOR MALARIA CASE MANAGEMENT IN SENEGAL

Faye Babacar[1], Jean L. Ndiaye[1], Ibrahima Diallo[2], Roger C. Tine[1], Ibrahima Seck[1], Fatou Ba-Fall[2], Aïcha Mbaye[1], Daouda Ndiaye[1], Sylla Thiam[2], Papa M. Thior[2], Oumar Gaye[1]
[1]Cheikh Anta Diop University, Dakar, Senegal, [2]National Malaria Control Program, Dakar, Senegal

968

DETECTION OF VIVAX MALARIA BY LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) METHOD IN THE REPUBLIC OF KOREA

Eun-Taek Han[1], Feng Lu[1], Junhu Chen[1], Chae-Seung Lim[2], Jung-Yeon Kim[3], Heui-June Ahn[4], Takafumi Tsuboi[5]
[1]Department of Parasitology Kangwon National University College of Medicine, Chuncheon, Gangwon-do, Republic of Korea, [2]Department of Laboratory Medicine, College of Medicine, Korea University, Ansan, Gyeonggi-do, Republic of Korea, [3]Division of Malaria and Parasitic Diseases, KNational Institutes of Health, KCenters for Disease Control and Prevention, Seoul, Republic of Korea, [4]Department of Internal Medicine, Korea Institute of Radiological and Medical Sciences, Seoul, Republic of Korea, [5]Cell-free Science and Technology Research Center and Venture Business Laboratory, Ehime University, Matsuyama, Ehime, Japan

969

MALARIA SLIDE-READING FOR QUANTITATION OF PARASITEMIA IN MALARIA INTERVENTION TRIALS: A BETTER TRANSITION POINT FROM THICK TO THIN FILMS

Kathryn Tucker[1], Carter Diggs[2], D. Gray Heppner[3], Elissa Malkin[4], Christian F. Ockenhouse[3], Bernhards R. Ogutu[5], Mark E. Polhemus[3], Lorraine A. Soisson[2], Mark R. Withers[6], Janet Wittes[1]
[1]Statistics Collaborative, Inc., Washington, DC, United States, [2]Malaria Vaccine Development Program, U.S. Agency for International Development, Washington, DC, United States, [3]Division of Malaria Vaccine Development, Walter Reed Army Institute of Research, Silver Spring, MD, United States, [4]The PATH Malaria Vaccine Initiative, Bethesda, MD, United States, [5]U.S. Army Medical Research Unit-Kenya and the Centre for Clinical Research, Kenya Medical Research Institute, Nairobi, Kenya, [6]Operational Medicine Department, Division of Medicine, U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, United States

Malaria – Drug Development

970

ANTIMALARIAL ACTIVITY OF PHENYLTHIAZOLYL-HYDROXAMATE-BASED HISTONE DEACETYLASE INHIBITORS

Geoffrey S. Dow[1], Yufeng Chen[2], Katherine T. Andrews[3], Lucia Gerena[1], Montip Gettayacamin[4], Jacob Johnson[1], Qigui Li[1], Victor Melendez[1], Nicanor Obaldia III[5], Thanh N. Tran[3], Alan Kozikowski[2]
[1]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]University of Illinois at Chicago, Chicago, IL, United States, [3]Queensland Institute of Medical Research, Brisbane, Australia, [4]Armed Forces Institute of Medical Sciences, Bangkok, Thailand, [5]Gorgas Memorial Institute, Panama City, Panama

971

IN VITRO ANTIMALARIAL ACTIVITY 4(1H) PYRIDONE DERIVATIVE GSK932121

Jaume Vidal-Mas, María Almela, María Roncalés, Pedro Torres, Sonia Lozano, Domingo Gargallo-Viola, Esperanza Herreros
GlaxoSmithKline, Tres Cantos, Spain

(ACMCIP Abstract)

972

ATORVASTATIN, A HMG-COA REDUCTASE INHIBITOR, AS A NEW THERAPEUTIC STRATEGY IN *PLASMODIUM FALCIPARUM* MALARIA

Bruno Pradines, Veronique Parquet, Sébastien Briolant, Lionel Almeras, Eric Baret, Rémy Amalvict, Thierry Fusai, Christophe Rogier
Institut de Médecine Tropicale du Service de Santé des Armées, Marseille, France

973

PRE-CLINICAL MOUSE TOXICITY STUDY OF THE THIRD GENERATION ANTIFOLATE, JPC-2056-I

Guy A. Schiehser[1], Jacek Terpinski[1], Arba L. Ager[2], Alan J. McGill[3], Wilbur K. Milhous[4], Dennis E. Kyle[4], Michael D. Edstein[5], Karl H. Rieckmann[5], G. Dennis Shanks[5], Carol H. Sibley[6], Craig J. Canfield[7], Laura R. Jacobus[1], David P. Jacobus[1]
[1]Jacobus Pharmaceutical Co., Inc., Princeton, NJ, United States, *[2]University of Miami School of Medicine, Miami, FL, United States, [3]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [4]University of South Florida, Tampa, FL, United States, [5]Australian Army Malaria Institute, Enoggera, Australia, [6]University of Washington, Seattle, WA, United States, [7]Pharmaceutical Systems, Inc., Talent, OR, United States*

974

COMPARISON OF SYBR GREEN I, PICO GREEN AND [^{3}H]-HYPOXANTHINE INCORPORATION ASSAY ASSAYS FOR *IN VITRO* ANTIMALARIAL SCREENING OF MEDICINAL PLANTS FROM NIGERIAN ETHNOMEDICINE

Oyindamola O. Abiodun[1], Grace O. Gbotosho[1], Sandra Hofer[2], Edith O. Ajaiyeoba[1], Christian T. Happi[1], Sergio Wittlin[2], Reto Brun[2], Ayoade M. Oduola[3]
[1]University of Ibadan, Ibadan, Nigeria, Ibadan, Oyo State, Nigeria, [2]Swiss Tropical Institute, Basel, Switzerland, [3]Basic and Strategic Research, Special Programme for Research and Training in Tropical Diseases (TDR), World Health Organization, Geneva, Switzerland

975

DEVELOPMENT OF REVERSED CHLOROQUINES AS ANTIMALARIAL DRUGS: EFFICACY IN AN ANIMAL MODEL

David H. Peyton[1], Jane X. Kelly[1], Steven J. Burgess[1], Katherine Liebman[1], Bornface Gunsaru[1], Cheryl Hodson[1], Sergio Wittlin[2], Reto Brun[2]
[1]Portland State University, Portland, OR, United States, [2]Swiss Tropical Institute, Basel, Switzerland

976

IN VITRO AND *IN VIVO* EVALUATION AND EARLY TRANSITIONING STUDIES OF NOVEL QUINOLIZIDINYL AND QUINOLIZIDINYLALKYL- DERIVATIVES OF 4-AMINOQUINOLINE WITH POTENT ANTIMALARIAL ACTIVITY

Donatella Taramelli[1], Nicoletta Basilico[1], Manolo Casagrande[2], Yolanda Corbett[1], Silvia Parapini[1], Sergio Romeo[2], Carla Rusconi[2], Alessia Tosi[2], Erika van den Bogaart[1], Livia Vivas[3], Daniela Jabes[4], Anna Sparatore[2]
[1]Department Public Health-Microbiology-Virology, University of Milan, Milan, Italy, [2]Institute of Medicinal Chemistry, University of Milan, Milan, Italy, [3]London School of Hygiene and Tropical Medicine, London, United Kingdom, [4]Need Pharmaceutical, Srl, Milan, Italy

977

USE OF THERMAL MELT ASSAYS TO IDENTIFY POSSIBLE CELLULAR TARGETS OF ANTI-*PLASMODIUM* COMPOUNDS

Gregory J. Crowther[1], Christopher J. Damman[1], Mary L. Baniecki[2], Joseph F. Cortese[2], Jeffrey M. Skerker[2], Zhongsheng Zhang[1], Alberto J. Napuli[1], Natascha Mueller[1], Angela M. Kelley[1], Lisa J. Castaneda[1], Kayode K. Ojo[1], Lynn K. Barrett[1], Dyann F. Wirth[2], Jon Clardy[2], Roger C. Wiegand[2], Erkang Fan[1], Wim G. Hol[1], Frederick S. Buckner[1], Michael H. Gelb[1], Wesley C. Van Voorhis[1]
[1]University of Washington, Seattle, WA, United States, [2]Broad Institute, Cambridge, MA, United States

978

IN VITRO HEPATIC METABOLISM STUDIES OF PRIMAQUINE AND RELATED ANTIMALARIAL COMPOUNDS

Xiannu Jin, Jason Sousa, Dustin Carroll, Raul Olmeda, Necole Reese, Constance Asher, Lalaine Anova, Michael P. Kozar, Victor Melendez
Division of Experimental Therapeutics, Walter Reed Army Institute of Research, Silver Spring, MD, United States

979

IN VITRO AND *IN VIVO* EVALUATIONS OF NEW QUINOLINE METHANOL ANALOGS OF MEFLOQUINE

Jason Sousa[1], Erin Milner[1], Xiannu Jin[1], Michael P. Kozar[1], William McCalmont[1], Charlotte Lanteri[1], Constace Asher[1], Raul Olmeda[1], Dustin Carroll[1], Necole Reese[1], Lalaine Anova[1], Normal Roncal[1], Lucia Gerena[1], Nicanor Obaldia[2], Geoffrey Dow[1], Victor Melendez[1]
[1]Division of Experimental Therapeutics, Walter Reed Army Institute of Research, Silver Spring, MD, United States, [2]Tropical Medicine Research/Gorgas Memorial Research Institute, Panama City, Panama

980

METABOLISM OF CYP450 MARKERS OF ENZYMATIC ACTIVITY AND PRIMAQUINE BY THE INDUCED HC-04 IMMORTALIZED HEPATIC CELL LINE

Ratawan Ubalee[1], Xiannu Jin[2], Constance Asher[2], Dustin Carroll[2], Rachaneeporn Jenwithisuk[1], Jetsumon Sattabongkot[1], Jason Richardson[1], Michael P. Kozar[2], Victor Melendez[2]
[1]U.S. Army Medical Component, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [2]Division of Experimental Therapeutics, Walter Reed Army Institute of Research, Silver Spring, MD, United States

981

ANTIMALARIAL ACTIVITY OF SEMISYNTHETIC ANALOGS OF STEROID ISOLATED FROM *SOLANUM NUDUM* (SOLANACEAE)

Adriana Pabón, Lina Zuluaga, Ana María Mesa, Gustavo Escobar, Fernando Echeverri, Silvia Blair
Universidad de Antioquia, Medellín, Colombia

Malaria- Drug Resistance

982

RISK FACTORS OF POOR TREATMENT OUTCOME IN PATIENTS TREATED WITH ARTEMETHER/LUMEFANTRINE (COARTEM®) AS FIRST-LINE TREATMENT FOR UNCOMPLICATED MALARIA IN SOUTH-EASTERN TANZANIA

Abdunoor M. Kabanywanyi[1], Selemani Mbuyita[1], Abdallah Baja[2], Salim Abdulla[3]
[1]Ifakara Health Research and Development Centre, Dar es Salaam, United Republic of Tanzania, [2]Ifakara Health Research and Development Centre, Ifakara, United Republic of Tanzania, [3]Ifakara Health Research and Development Centre, Bagamoyo, United Republic of Tanzania

983

***IN VITRO* ANTIMALARIAL DRUG SENSITIVITY TRENDS IN KENYAN *P. FALCIPARUM* ISOLATES USING NON-RADIOISOTOPIC SYBR GREEN I FLUORESCENCE ASSAY AND *PF*MDR COPY NUMBER ESTIMATION**

Hoseah Akala[1], Fred Eyase[1], Angela Omondi[1], Agnes Cheruiyot[1], John Waitumbi[1], Mark Polhemus[1], Bernhards Ogutu[1], Norman Waters[2], Jacob Johnson[3], David Schnabel[4], Douglas Walsh[1]
[1]Walter Reed Project, USAMRU-Kenya, Kisumu, Kenya, [2]Australian Army Malaria Institute, Enoggera, Australia, [3]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [4]Walter Reed Project, USAMRU-Kenya, Nairobi, Kenya

984

CHLOROQUINE AND SULPHADOXINE-PYRIMETHAMINE RESISTANT GENOTYPES OF *PLASMODIUM FALCIPARUM* IN MILD MALARIA AND CEREBRAL MALARIA PATIENTS IN INDIA WITH EVIDENCE OF SELECTIVE SWEEPS

Tonya Mixson-Hayden[1], Andrea M. McCollum[1], Vidhan Jain[2], Avinash C. Nagpal[3], Aditya P. Dash[2], Jonathan K. Stiles[4], Venkatachalam Udhayakumar[1], Neeru Singh[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]National Institute of Malaria Research, Jabalpur, India, [3]Nethaji Subash Chandra Bose Hospital, Jabalpur, India, [4]Morehouse School of Medicine, Atlanta, GA, United States

985

CLEARANCE OF DRUG RESISTANT MALARIA PARASITES IS ASSOCIATED WITH HOST GENETIC DETERMINANTS

Issaka Zongo[1], Mahamadou Diakité[2], Fabrice Somé[1], Jean-Bosco Ouédraogo[1]
[1]Institut de Recherche en Sciences de la Sante, Direction Regionale de l'Ouest, Bobo-Dioualasso, Burkina Faso, [2]MRTC BKO, Bamako, Mali

(ACMCIP Abstract)

986

STATUS OF THE ARTEMISININ RESISTANCE-ASSOCIATED *PF*ATPASE6 S769N MUTATION IN *PLASMODIUM FALCIPARUM* INFECTIONS OF LUSAKA URBAN DISTRICT, ZAMBIA

Enesia B. Chaponda[1], Cecilia Shinondo[1], Sungano Mharakurwa[2]
[1]University of Zambia, Lusaka, Zambia, [2]The Malaria Institute at Macha, Choma, Zambia

987

ARTEMISININ-BASED COMBINATIONS VERSUS AMODIAQUINE PLUS SULFADOXINE-PYRIMETHAMINE FOR THE TREATMENT OF UNCOMPLICATED MALARIA IN FALADJE, MALI

Kassoum Kayentao[1], Hamma Maiga[1], Robert D. Newman[2], Meredith L McMorrow[2], Oumar Yattara[1], Hamidou Traore[1], Younoussou Kone[1], Etienne Guirou[1], Reunion Saye[1], Boubacar Traore[1], Abdoulaye Djimde[1], Ogobara K Doumbo[1]
[1]MRTC/FMPOS, Bamako, Mali, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

988

THE PREVALENCE OF THE *PF*CRT-76 POINT MUTATION ON *PLASMODIUM FALCIPARUM* MALARIA INFECTIONS OF LUSAKA URBAN DISTRICT, ZAMBIA

Enesia B. Chaponda[1], Cecilia Shinondo[1], Philip E. Thuma[2], Sungano Mharakurwa[2]
[1]University of Zambia, Lusaka, Zambia, [2]The Malaria Institute at Macha, Choma, Zambia

989

REVERSED-PHASE HIGH-PERFORMANCE LIQUID CHROMATOGRAPHIC ASSAYS FOR DETERMINING CHLOROQUINE IN WHOLE BLOOD SPECIMENS

Fraction K. Dzinjalamala[1], Miriam K. Laufer[2], Phillip Thesing[1], Stephen A. Ward[3], John L. Reed[4], David M. Hughes[4], Gerry Forrest[4], Terrie E. Taylor[5], Christopher V. Plowe[2]
[1]Blantyre Malaria Project, Blantyre, Malawi, [2]Malaria Section, *Center for Vaccine Development, University of Maryland School of Medicine, Baltimore, MD, United States, [3]Molecular and Biochemical Parasitology Group, Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [4]Division of Cardiovascular and Medical Sciences, University of Glasgow, Glasgow, United Kingdom, [5]College of Osteopathic Medicine, Michigan State University, East Lansing, MI, United States*

990

INVESTIGATING THE GENETIC BASIS OF 8-AMINOQUINOLINE SENSITIVITIES IN A *PLASMODIUM FALCIPARUM* GENETIC CROSS

Lisa Checkley Needham[1], Jigar J. Patel[2], Asako Tan[1], Upeka Samarakoon[1], Michael T. Ferdig[1]
[1]Eck Family Center for Global Health and Diseases, University of *Notre Dame, Notre Dame, IN, United States, [2]Roche NimbleGen, Inc., Madison, WI, United States*

991

RELATIONSHIP BETWEEN PERSISTENCE OF SUBPATENT ASEXUAL *PLASMODIUM FALCIPARUM* INFECTIONS AND SUBSEQUENT RECRUDESCENCE AFTER ANTIMALARIAL TREATMENT

Judith Straimer[1], Philip Sasi[2], Abdi Abdulrahaman[2], Anja Rippert[1], Leah Mwai[2], Elise Schieck[1], Steve Ward[3], Steffen Borrmann[1]
[1]University of Heidelberg Medical School, Heidelberg, Germany, [2]Kenya Medical Research Institute/Wellcome Trust Research Programme, Kilifi, Kenya, [3]Department of Molecular and Biochemical Parasitology, Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Malaria – Epidemiology

992

MALARIA IN INDIA AND CONSEQUENCES OF CLIMATIC CHANGES

Aditya P. Dash
National Institute of Malaria Research, Delhi, India

993

NATURAL TRANSMISSION BLOCKING IMMUNITY TO MALARIA: SPECIFICITY AND DURATION OF EFFICACY

Steve Mwakalinga[1], **Will Roeffen**[2], Karina Teelen[2], P. Lushino[1], A. Masokoto[1], GeertJan van Gemert[2], Marga vande Vegte-Bolmer[2], Chris Drakeley[3], Robert Sauerwein[2]
[1]Joint Malaria Programme (JMP), Kilimanjaro Christian Medical Centre (KCMC), Moshi, United Republic of Tanzania, [2]Radboud University Nijmegen Medical Center, Nijmegen, Netherlands, [3]London School of Hygiene and Tropical Medicine, London, United Kingdom

994

MALARIA EPIDEMIOLOGY IN VIETNAM: LOW INTENSITY OF TRANSMISSION AND HIGHLY COMPLEX PARASITE POPULATION

Peter Van den Eede[1], Annette Erhart[1], Chantal Van Overmeir[1], Jozef Anné[2], Umberto D'Alessondro[1]
[1]Institute of Tropical Medicine Antwerp, Antwerp, Belgium, [2]Catholic University Leuven, Leuven, Belgium

995

DETECTABILITY OF ASYMPTOMATIC *P. FALCIPARUM* INFECTIONS AT 24H RESOLUTION: EXTENSIVE VARIATION, BUT NO PERIODICITY

Michael T. Bretscher[1], Francesca Valsanciacomo[1], Seth Owusu-Agyei[2], Ingrid Felger[1], Tom Smith[1]
[1]Swiss Tropical Institute, Basel, Switzerland, [2]Navrongo Health Research Center, Navrongo, Ghana

(ACMCIP Abstract)

996

EVIDENCE OF *PLASMODIUM* SPECIES INTERACTIONS IN AN ENDEMIC POPULATION IN COASTAL KENYA

Lia S. Florey[1], Melissa K. Van Dyke[1], Charles H. King[2], Eric M. Muchiri[3], Peter L. Mungai[4], Peter A. Zimmerman[2], Mark L. Wilson[1]
[1]University of Michigan, Ann Arbor, MI, United States, [2]Center for Global Health & Diseases, Case Western Reserve University, Cleveland, OH, United States, [3]Division of Vector-Borne Diseases, Ministry of Health, Nairobi, Kenya, [4]Msambweni Field Station, Msambweni, Kenya

997

VALIDATING SEROLOGICAL METHODS TO ESTIMATE MALARIA TRANSMISSION IN CAMBODIA

Jackie Cook[1], Patrick Corran[2], Duong Socheat[3], Sylvia Meek[4], Jane Bruce[4], Jon Cox[1], Jo Lines[1], Vohith Kohl[5], Jamie Griffin[6], Azra Ghani[6], Mark Fukuda[7], Eleanor Riley[1], Chris Drakeley[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]National Institute for Biological Standards and Control, London, United Kingdom, [3]London School of Hygiene and Tropical MedicineNational Malaria Centre, Ministry of Health, Pnomh Penh, Cambodia, [4]Malaria Consortium, London, United Kingdom, [5]National Institute of Public Health, Phnom Penh, Cambodia, [6]Imperial College, London, United Kingdom, [7]US Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand

998

THE TANZANIAN NATIONAL VOUCHER SCHEME (TNVS): EVIDENCE ON CORE BEDNET AND MALARIA INDICATORS FOR PREGNANT WOMEN AND INFANTS AFTER THREE YEARS OF IMPLEMENTATION

Tanya J. Marchant[1], Kara Hanson[1], Rose Nathan[2], Jane Bruce[1], Hadji Mponda[2], Caroline Jones[1], Joanna Armstrong Schellenberg[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]Ifakara Health Research and Development Centre, Dar es Salaam, United Republic of Tanzania

999

IFN-Γ AND IL-4 RESPONSES INDUCED BY PROMISCUOUS T-CELL EPITOPES OF *PLASMODIUM VIVAX* MEROZOITE SURFACE PROTEIN 9 (PVMSP9) IN MALARIA NATURALLY EXPOSED INDIVIDUALS IN BRAZIL

Josué C. Lima-Junior[1], Tuan Tran[2], Esmeralda V. Meyer[2], Salvatore G. De-Simone[3], Fatima Santos[4], Alberto Moreno[5], Luiz Cristovão S. Porto[6], Dalma M. Banic[1], John W. Barnwell[7], Mary R. Galinski[5], **Joseli Oliveira-Ferreira**[1]
[1]Laboratory of Malaria Reseach, Oswaldo Cruz Institute, FIOCRUZ, Rio de Janeiro, Brazil, [2]Emory Vaccine Center, Emory University, Atlanta, GA, United States, [3]Protein and Peptides Laboratory, Oswaldo Cruz Institute, Rio de Janeiro, Brazil, [4]Department of Entomology, FUNASA, Rondonia, Brazil, [5]Emory Vaccine Center, Division of Infectious Diseases, Emory University School of Medicine, Atlanta, GA, United States, [6]Histocompatibility Laboratory, UERJ, Rio de Janeiro, Brazil, [7]Division of Parasitic Diseases, Centers for Disease Control and Prevention, National Center for Infectious Diseases, Atlanta, GA, United States

(ACMCIP Abstract)

1000

MATERNAL MALARIA AND DOPPLER INTERROGATION OF FETOPLACENTAL CIRCULATION: A LONGITUDINAL STUDY

Jennifer B. Griffin[1], Sarah Landis[1], Victor Lokomba[2], Joseph Atibu[2], Cande Ananth[3], Kitoto Antoinette Tshefu[2], Steven Meshnick[1]
[1]University of North Carolina, School of Public Health, Chapel Hill, NC, United States, [2]University of North Carolina-DRC Project, Kinshasa, The Democratic Republic of the Congo, [3]University of Medicine and Dentistry of New Jersey – Robert Wood Johnson Medical School, New Brunswick, NJ, United States

1001

MALARIA MORTALITY AMONG UNITED STATES RESIDENTS, 1990-2005

Frank Sorvillo[1], Shira Shafir[2]
[1]*University of California at Los Angeles, Los Angeles County Department of Public Health, Los Angeles, CA, United States,* [2]*University of California at Los Angeles, Los Angeles, CA, United States*

1002

PREVALENCE AND LONGEVITY OF SUB-CLINICAL *PLASMODIUM FALCIPARUM* INFECTIONS AMONG SCHOOL CHILDREN FROM A HIGHLAND AREA OF KENYA

Frederick N. Baliraine[1], Mariangela Bonizzoni[1], Yaw Afrane[2], Daibin Zhong[1], Dolphin Amenya[1], Andrew Githeko[2], Guiyun Yan[1]
[1]*University of California, Irvine, Irvine, CA, United States,* [2]*Kenya Medical Research Institute, Kisumu, Kenya*

(ACMCIP Abstract)

1003

INDIVIDUAL, HOUSEHOLD, AND ENVIRONMENTAL RISK FACTORS FOR MALARIA INFECTION IN AMHARA, OROMIA AND SNNP REGIONS OF ETHIOPIA

Patricia M. Graves[1], Frank O. Richards[1], Jeremiah Ngondi[2], Paul M. Emerson[1], Estifanos Biru Shargie[3], Tekola Endeshaw[3], Pietro Ceccato[4], Yeshewamebrat Ejigsemahu[3], Aryc W. Mosher[1], Afework Hailemariam[5], Mulat Zerihun[3], Tesfaye Teferi[3], Berhan Ayele[3], Ayenew Messele[3], Gideon Yohannes[3], Abate Tilahun[3], Teshome Gebre[3], Daddi Jima[5], Tedros Adhanom Ghebreyesus[5]
[1]*The Carter Center, Atlanta, GA, United States,* [2]*University of Cambridge, Cambridge, United Kingdom,* [3]*The Carter Center, Addis Ababa, Ethiopia,* [4]*International Research Institute for Climate and Society, New York, NY, United States,* [5]*Ministry of Health, Addis Ababa, Ethiopia*

1004

DNA SEQUENCE ANALYSIS OF INTERGENIC SPACER REGIONS AMONG *ANOPHELES ARABIENSIS* POPULATIONS AT MULTIPLE GEOGRAPHIC SITES IN MALI

Ousmane A. Koita[1], Ousmane H. Cisse[1], Youssouf Sanogo[2], Sitan Traore[2], Mariam Sanogo[1], Ibrah Mahamadou[1], Mamadou W. Bagayoko[1], Youssouf Bore[1], Donald J. Krogstad[3]
[1]*Laboratory of Applied Molecular Biology, University of Bamako, Bamako, Mali,* [2]*National Malaria Control Program, Ministry of Health, Bamako, Mali,* [3]*Tulane University, New Orleans, LA, United States*

(ACMCIP Abstract)

1005

MALARIA INCIDENCE IN INFANTS IN BANCOUMANA, MALI

Mahamadou S. Sissoko[1], Mahamadoun H. Assadou[1], Mamady Kone[1], A. Diallo[1], Aldiouma Guindo[1], Issaka Sagara[1], Merapen A. Guindo[1], Renion Saye[1], Ruth D. Ellis[2], Alassane Dicko[1], Dapa Diallo[1], Ogobara Doumbo[1], Louis H. Miller[2], Mark A. Pierce[2]
[1]*Faculty of Medicine, Pharmacy and Odonto-Stomatology, University of Bamako, Malaria Research and Training Center, Bamako, Mali,* [2]*National Institutes of Health, National Institute of Allergy and Infectious Disease, Malaria Vaccine Development Branch, Rockville, MD, United States*

1006

BURDEN OF DISEASE DUE TO MALARIA IN PREGNANCY AMONG WOMEN ATTENDING ANTENATAL CLINICS AND HOSPITALIZED FOR MALARIA IN THE STATE OF JHARKHAND, INDIA

Davidson H. Hamer[1], Blair J. Wylie[2], Mrigendra P. Singh[3], Kojo Yeboah-Antwi[1], Jordan Tuchman[1], Priti Gupta[3], Mohamad I. Brooks[1], Man M. Shukla[3], Lora Sabin[1], Aditya P. Dash[4], Neeru Singh[3]
[1]*Center for International Health and Development, Boston, MA, United States,* [2]*Department of OB/GYN, Massachusetts General Hospital, Boston, MA, United States,* [3]*National Institute for Malaria Research Field Station, Jabalpur, Madhya Pradesh, India,* [4]*National Institute for Malaria Research, Delhi, India*

1007

CHANGES IN VECTOR DENSITY PREDICT MALARIA INCIDENCE IN HIGHLAND KENYA: IMPLICATIONS FOR MALARIA EARLY WARNING SYSTEMS

Melissa A. Riedesel[1], Kim A. Lindblade[2], Kelsey Johnson[1], Baolin Wu[3], John M. Vulule[4], Chandy C. John[1]
[1]*University of Minnesota, Medical School, Minneapolis, MN, United States,* [2]*Centers for Disease Control and Prevention Regional Office for Central America and Panama, Guatemala City, Guatemala,* [3]*University of Minnesota, School of Public Health, Minneapolis, MN, United States,* [4]*Kenya Medical Research Institute, Kisumu, Kenya*

1008

BURDEN OF DISEASE DUE TO MALARIA IN PREGNANCY AMONG PREGNANT WOMEN ATTENDING DELIVERY UNITS IN THE STATE OF JHARKHAND, INDIA

Davidson H. Hamer[1], Mrigendra P. Singh[2], Blair J. Wylie[3], Kojo Yeboah-Antwi[1], Jordan Tuchman[1], Man M. Shukla[2], Mohamad I. Brooks[1], Lora Sabin[1], Aditya P. Dash[4], Neeru Singh[2]
[1]*Center for International Health and Development, Boston, MA, United States,* [2]*National Institute for Malaria Research Field Station, Jabalpur, Madhya Pradesh, India,* [3]*Department of OB/GYN, Massachusetts General Hospital, Boston, MA, United States,* [4]*National Institute for Malaria Research, Delhi, India*

1009

MADAGASCAR DIAGONAL FUNDING STUDY

Ravi Goud, **Nelia Hoffman**, Erin Eckert
Macro International, Calverton, MD, United States

1010

CAMBODIA MALARIA SURVEY, 2007

Samphornarann Top
National Malaria Center, Phnom Penh, Cambodia

Malaria – Immunology

1011

ANTIBODY RESPONSES TO THE MEROZITE SURFACE PROTEIN (MSP) COMPLEX OF *PLASMODIUM FALCIPARUM* IN MALARIA PATIENTS FROM CENTRAL INDIA

Praveen Kumar Bharti[1], Puspendra Pal Singh[1], Vidhan Jain[1], Christian W. Kauth[2], Ute Woehlbier[2], Udhayakumar V[3], Yagya D. Sharma[4], Sant P. Gautam[5], Aditya P. Dash[6], Neeru Singh[7]
[1]National Institute of Malaria Research Field Station, Jabalpur, India, [2]Zentrum fuer Molekulare Biologie Heidelberg (ZMBH), Universitaet Heidelberg, Im Neuenheimer Feld, Heidelberg, Germany, [3]Malaria Branch, Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Department of Biotechnology, All India Institute of Medical Sciences, New Delhi, India, [5]Department of Biological Science, Rani Durgavati Vishwavidyala, Jabalpur, India, [6]National Institute of Malaria Research (ICMR), New Delhi, India, [7]Regional Medical Research Centre for Tribal (ICMR), Jabalpur, India

(ACMCIP Abstract)

1012

IS ACQUISITION OF ANTI-MEROZOITE SURFACE PROTEIN 3 ANTIBODIES RELATED TO PROTECTION AGAINST FALCIPARUM MALARIA?

Daniel T. Minja[1], Method D. Segeja[1], Misago D. Seth[1], Masunga C. Malimi[1], Jumaa A. Akida[1], Roma Chilengi[2], Pierre Druilhe[3], Martha M. Lemnge[1], John P. Lusingu[1]
[1]National Institute for Medical Research, Tanga Medical Reserch Centre, Tanga, United Republic of Tanzania, [2]African Malaria Network Trust, Dar Es Salaam, United Republic of Tanzania, [3]Pasteur Institute, Paris, France

(ACMCIP Abstract)

1013

MACROPHAGE MIGRATION INHIBITORY FACTOR IN PLACENTAL INTERVILLOUS BLOOD PLASMA AND ITS ASSOCIATION WITH BIRTH OUTCOMES IN *PLASMODIUM FALCIPARUM* INFECTED WOMEN IN CENTRAL INDIA

Puspendra Pal Singh[1], Naomi W. Lucchi[2], Rukshana Ahmed[3], Anja D. Terlouw[3], Feiko ter Kuile[3], Venkatachalam Udhayakumar[2], Neeru Singh[4]
[1]National Institute of Malaria Research, Field Station (ICMR), Jabalpur, India, [2]Malaria Branch, Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [3]Liverpool School of Tropical Medicine, Pembroke Place, Liverpool, United Kingdom, [4]Regional Medical Research Centre for Tribal (ICMR), Jabalpur, India

(ACMCIP Abstract)

1014

EVALUATION OF IGG AND IGM ANTIBODY RESPONSES THAT RECOGNIZE T AND B CELL EPITOPES IN SEVERAL VACCINE CANDIDATE ANTIGENS OF *PLASMODIUM FALCIPARUM* VACCINE STRAIN 3D7 IN SERA FROM PATIENTS WITH NATURALLY ACQUIRED MALARIA LIVING IN THE PERUVIAN AMAZON BASIN

Laura L. Tapia[1], Stella M. Chenet[1], Carmen M. Lucas[1], Richard S. Witzig[2], Benjamin J. Espinosa[1], David J. Bacon[1]
[1]Naval Medical Research CenterD, Lima, Peru, [2]Tulane University Medical School, New Orleans, LA, United States

1015

CELL MEDIATED IMMUNE RESPONSES TO *PLASMODIUM FALCIPARUM* ANTIGENS IN PREGNANT CAMEROONIAN WOMEN

Rose G. Leke[1], Ainong Zhou[2], Philomina Gwanmesia[3], Simon Metenou[4], Ababacar Diouf[4], Josephine Fogako[3], Grace Sama[3], **Diane Wallace Taylor**[5]
[1]University of Yaounde I, Yaounde, Cameroon, [2]AZ Data Clinic, Inc., Rockville, MD, United States, [3]Biotechnology Center, University of Yaounde, Yaounde, Cameroon, [4]Georgetown University, Washington, DC, United States, [5]University of Hawaii, Honolulu, HI, United States

(ACMCIP Abstract)

1016

ALTERED MALARIA ENDEMICITY IN RURAL COMMUNITIES IN THE GAMBIA AND IN GUINEA BISSAU

Judith S. Satoguina[1], Eniyou C. Oriero[1], Davis Nwakanma[1], Augustine Ebonyi[1], Joseph Okebe[1], Tim Vincent[1], Natalia Gomez-Escobar[1], Patrick Corran[2], Eleanor Riley[2], David Conway[1], Michael Walther[1]
[1]Medical Research Council (UK), The Gambia, Banjul, Gambia, [2]London School of Hygiene and Tropical Medicine, London, United Kingdom

(ACMCIP Abstract)

1017

IGG RESPONSES TO THE N- AND C- TERMINAL DOMAINS OF THE CS PROTEIN AND PROTECTION AGAINST CLINICAL MALARIA IN MALARIA ENDEMIC SETTING IN BURKINA FASO (WEST AFRICA)

Diarra Amidou[1], Alfred Tiono[1], Issa Nebie[1], Andre Lin Ouedraogo[1], Issiaka Soulama[1], Aalphonse Ouedraogo[1], Jean B. Yaro[1], Esperance Ouedraogo[1], Edith C. Bougouma[1], Souleymane Sanon[1], Amadou T. Konate[1], Adama Gansane[1], Giampietro Corradine[2], Sodiomon B. Sirima[3]
[1]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [2]University of Lausanne, Switzerland, [3]Centre National de Recherche et de Formation sur le Paludisme/Groupe de Recherche et d'Action en Santé, Ouagadougou, Burkina Faso

(ACMCIP Abstract)

1018

IMMUNIZATION WITH A SMALL PEPTIDE (CEL-1000) PROTECTS AGAINST RODENT MALARIA BY MODULATING INNATE IMMUNE RESPONSES IN LIVER

George Jiang[1], Thomas L. Richie[1], Yupin Charoenvit[1], Dan Zimmerman[2], **Sofia Casares**[1]
[1]Naval Medical Research Center, Silver Spring, MD, United States, [2]CEL-SCI CORP, Vienna, VA, United States

(ACMCIP Abstract)

1019

MULTIPLEX ANALYSIS OF CYTOKINE RESPONSES TO PRE-ERYTHROCYTIC AND ERYTHROCYTIC MALARIA ANTIGENS IN A HIGHLAND KENYA POPULATION

Gregory S. Noland[1], Gregory S. Park[1], Gideon N. Magak[2], Cyrus Ayieko[3], John M. Vulule[4], Chandy C. John[1]
[1]University of Minnesota Medical School, Minneapolis, MN, United States, [2]Moi University, Eldoret, Kenya, [3]Maseno University, Maseno, Kenya, [4]Kenya Medical Research Institute, Kisumu, Kenya

(ACMCIP Abstract)

1020

ANTIBODY MEDIATED BLOOD STAGE IMMUNITY AS MEASURED BY FUNCTIONAL GROWTH INHIBITION ASSAYS IS GREATER IN AREAS OF UNSTABLE AS COMPARED TO STABLE TRANSMISSION

Arlene E. Dent[1], John M. Vulule[2], Peter O. Sumba[2], Ann M. Moormann[1], James W. Kazura[1], Chandy C. John[3]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Kenya Medical Research Institute, Kisumu, Kenya, [3]University of Minnesota Medical School, Minneapolis, MN, United States

(ACMCIP Abstract)

1021

RESTRICTION OF SEROLOGICAL CROSS-REACTIVITY BETWEEN VARIANTS OF *PLASMODIUM VIVAX* DUFFY BINDING PROTEIN FOLLOWING SINGLE MALARIA INFECTION

Isabela Ceravolo, Bruno Antônio Sanchez, Taís Nóbrega de Sousa, Bruna Mazzoni Guerra, Cristiana Ferreira Brito, Luzia Helena Carvalho
Centro de Pesquisas René Rachou, Belo Horizonte, Brazil

(ACMCIP Abstract)

Malaria – Molecular Biology

1022

POLYMORPHIC VARIABILITY IN THE IL-4 -589T/C PROMOTER IS ASSOCIATED WITH INCREASED SUSCEPTIBILITY TO HIGH-DENSITY MALARIA PARASITEMIA

Henry Ndege[1], Collins Ouma[1], Greg C. Davenport[2], Tom Were[1], Samuel B. Anyona[1], Ayub V. Ofulla[3], John M. Vulule[4], Jeremy Martison[2], Robert E. Ferrell[2], John M. Ong'echa[1], Douglas J. Perkins[5]
[1]University of New Mexico/KEMRI, Kisumu, Kenya, [2]University of Pittsburgh, Pittsburgh, PA, United States, [3]Maseno University, Kisumu, Kenya, [4]Kenya Medical Research Institute, Kisumu, Kenya, [5]University of New Mexico, Albuquerque, PA, United States

(ACMCIP Abstract)

1023

IDENTIFICATION OF *PLASMODIUM YOELII* RBC MEMBRANE PROTEINS INVOLVED IN ADHERENCE TO A MURINE ENDOTHELIAL CELL LINE

Amy Cernetich Ott, Thomas M. Daly, Lawrence W. Bergman, James M. Burns, Jr.
Drexel University College of Medicine, Philadelphia, PA, United States

(ACMCIP Abstract)

1024

MECHANISMS OF DRUG INDUCED GENE EXPRESSION IN *PLASMODIUM FALCIPARUM*

David J. Johnson, Stephen A. Ward
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

1025

MOLECULAR CHARACTERIZATION OF POLYMORPHISMS IN THE *PLASMODIUM VIVAX* MDR1-LIKE GENE (PVMDR1) FROM THE AMAZON BASIN AND THE NORTH COAST OF PERU

Meddly L. Santolalla, Carola J. Salas, Benjamin Espinosa, David J. Bacon
U.S. Naval Medical Research Center Detachment, Lima, Peru

(ACMCIP Abstract)

1026

THE FREQUENCY OF DRUG RESISTANCE MUTATIONS IN *DHFR*, *DHPS*, AND *PFCRT*, ON THE PACIFIC COAST OF PERU

Nancy Arrospide[1], Sonia Gutierrez[1], Wilmer Marquino[2], Trent K. Ruebush[3]
[1]National Institutes of Health, Lima, Peru, [2]Organizacion Panamericana de Salud, San Jose, Costa Rica, [3]U.S. Agency for International Development, Washington, DC, United States

(ACMCIP Abstract)

1027

DOES *PLASMODIUM FALCIPARUM* INDUCE SPECIFIC GENE EXPRESSION? COMPARISON WITH OTHER PATHOGENS

Ousmane H. Cisse[1], Ousmane A. Koita[1], Donald J. Krogstad[2]
[1]Laboratory of Applied Molecular Biology, Faculty of Sciences, University of Bamako, Bamako, Mali, [2]Tulane University, New Orleans, LA, United States

(ACMCIP Abstract)

1028

GENETIC DIVERSITY STUDIES OF *PLASMODIUM FALCIPARUM* AND PLASMODIM VIVAX ISOLATES CIRCULATING IN PANAMANIAN ENDEMIC AREAS

Jose E. Calzada, Ana M. Santamaría, Franklyn Samudio, Aracelis Miranda, Giovanna Santamaria, Vanesa Pineda, Azael Saldaña
Gorgas Institute, Panama, Panama

(ACMCIP Abstract)

1029

TRANSCRIPTIONAL ANALYSIS OF PUTATIVE FOLATE TRANSPORTER GENES IN *PLASMODIUM FALCIPARUM*

Edwin Ochong[1], Enrique Salcedo[1], Pat Bray[1], Andrew Owen[2], Steve Ward[1]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]Department of Pharmacology, University of Liverpool, Liverpool, United Kingdom

(ACMCIP Abstract)

1030

STRAIN SPECIFICITY IN THE REQUIREMENT FOR MITOCHONDRIAL ELECTRON TRANSPORT IN ERYTHROCYTIC STAGE *PLASMODIUM FALCIPARUM*

Hangjun Ke, Joanne M. Morrisey, Michael W. Mather, Heather J. Painter, Akhil B. Vaidya
Drexel University College of Medicine, Philadelphia, PA, United States

(ACMCIP Abstract)

1031

PLASMODIUM FALCIPARUM ERYTHROCYTE BINDING ANTIGEN (EBA) 175 GENE DIVERSITY IN MALARIA ENDEMIC AREA WITH SEASONAL VARIATION IN BURKINA FASO

Issiaka Soulama[1], Issa Nébié[1], Edith Bougouma[1], Amidou Diarra[1], Souleymane Sanon[1], Alfred B. Tiono[1], Alphonse Ouédraogo[1], Jean Baptiste Yaro[1], Espérance Ouédraogo[1], Amadou T. Konaté[1], Adama Gansané[1], Sodiomon B. Sirima[2]
[1]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [2]Centre National de Recherche et de Formation sur le Paludisme, Groupe de Recherche et d'Action en Santé, Ouagadougou, Burkina Faso, Ouagadougou, Burkina Faso

(ACMCIP Abstract)

1032

GENETIC DIVERSITY OF THE CRITICAL BINDING MOTIF OF *P. VIVAX* DUFFY BINDING PROTEIN IN SRI LANKA

Prasad H. Premaratne[1], Sajani Dias[1], Aresha Manamperi[2], Shiroma M. Handunnetti[3], Preethi V. Randeniya[1]
[1]Department of Zoology, University of Colombo, Colombo, Sri Lanka, [2]Molecular Medicine Unit, Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka, [3]Malaria Research Unit, University of Colombo, Colombo, Sri Lanka

1033

EFFECT OF INSECTICIDE-TREATED BED NETS (ITNS) ON GENE POLYMORPHISMS OF *PLASMODIUM FALCIPARUM* VACCINE CANDIDATE ANTIGENS IN A MALARIA HOLOENDEMIC AREA OF WESTERN KENYA

Simon K. Kariuki[1], Ann M. Ndanu[2], James M. Njunge[2], Geoffrey M. Muluvi[2], Wangeci Gatei[3], Feiko O. ter Kuile[4], Dianne J. Terlouw[4], William A. Hawley[3], Penelope A. Phillips-Howard[3], Bernard L. Nahlen[5], John E. Gimnig[3], Kim A. Lindblade[3], Mary J. Hamel[3], John Williamson[3], Ananias Escalante[6], Laurence Slutsker[3], Ya Ping Shi[3]
[1]Kenya Medical Research Institute, Kisumu, Kenya, [2]Kenyatta University, Nairobi, Kenya, [3]Centers for Disease Control and Prevention, Atlanta, GA, United States, [4]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [5]President's Malaria Initiative, Washington, DC, United States, [6]Arizona State University, Tempe, AZ, United States

Malaria – Vaccines

1034

IMMUNOGENICITY OF TWO DOSES OF A MULTI-STAGE, MULTI-ANTIGEN ADENOVIRUS-VECTORED *P. FALCIPARUM* MALARIA VACCINE IN A PHASE 1 TRIAL

Martha Sedegah[1], Shannon McGrath[2], David Regis[1], Ilin Chuang[1], Harini Ganeshan[1], Stephen Abot[1], Glena Banania[1], Nalini Manohar[1], Denise Doolan[1], Keith Limbach[1], Brent House[1], Joao Aguiar[1], Carole Long[3], Joseph Bruder[4], Christopher King[4], Noelle Patterson[1], Cindy Tamminga[1], Judith Epstein[1], Jose Mendoza-Silveiras[1], Frank Williams[5], Lorraine Soisson[6], Carter Diggs[6], Christopher Ockenhouse[2], Thomas Richie[1]
[1]Naval Medical Research Center, Silver Spring, MD, United States, [2]Walter Reed Army Institute of Research, Silver Spring, MD, United States, [3]National Institutes of Health, Bethesda, MD, United States, [4]GenVec, Gaithersburg, MD, United States, [5]National Naval Medical Center, Bethesda, MD, United States, [6]U.S. Agency for International Development, Washington DC, United States

1035

DIFFERENT ASSESSMENT METHODS OF MALARIA MORBIDITY FOR FUTURE MALARIA VACCINE TRIAL IN A HIGH AND SEASONAL MALARIA TRANSMISSION AREA OF BURKINA FASO

Ouédraogo Alphonse[1], Tiono Alfred[1], Diarra Amidou[1], Ouédraogo Amathe[1], Sanou Souleymane[1], Yaro Jean Baptiste[1], Ouédraogo Espérance[1], Soulama Issiaka[1], Bougouma C. Edith[1], Konaté T. Amadou[1], Nébié Issa[1], Sirima B. Sodiomon[2]
[1]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [2]Groupe de Recherche et d'Action en Santé, Ouagadougou, Burkina Faso/Centre National de recherche et de formation sur le Paludisme, Ouagadougou, Burkina Faso

1036

RANDOMIZED, CONTROLLED, DOSE ESCALATION PHASE 1 CLINICAL TRIAL TO EVALUATE THE SAFETY AND IMMUNOGENICITY OF WALTER REED ARMY INSTITUTE OF RESEARCH'S AMA-1 MALARIA VACCINE (FMP2.1) ADJUVANTED IN GSK BIOLOGICALS' AS02 VS. RABIES VACCINE IN 1-6 YEAR OLD CHILDREN IN BANDIAGARA, MALI

Mahamadou A. Thera[1], Ogobara K. Doumbo[1], Drissa Coulibaly[1], **Matthew B. Laurens**[2], Abdoulaye K. Kone[1], Ando B. Guindo[1], Dapa A. Diallo[1], Karim Traore[1], Issa Diarra[1], Amadou Niangaly[1], Amagana Dolo[1], Modibo Daou[1], Mady Sissoko[1], Issaka Sagara[1], Mahamadou S. Sissoko[1], Bourema Kouriba[1], Kirsten E. Lyke[2], Shannon L. Takala[2], Olivier Godeaux[3], Lorraine Soisson[4], David E. Lanar[5], Sheetij Dutta[5], Brent House[5], D. Gray Heppner[5], Christopher V. Plowe[2], Mounirou Baby[1], Joelle Thonnard, Amanda Leach[3], Marie-Claude Dubois[3], Joe Cohen[3], W. Ripley Ballou[3], Carter Diggs[4], Lisa A. Ware[5], James F. Cummings[5], V. Ann Stewart[5]
[1]University of Bamako Faculty of Medicine, Bamako, Mali, [2]University of Maryland School of Medicine, Baltimore, MD, United States, [3]GlaxoSmithKline Biologicals, Rixensart, Belgium, [4]U.S. Agency for International Development, Washington, DC, United States, [5]Walter Reed Army Institute of Research, Silver Spring, MD, United States

1037

A *P. FALCIPARUM* MULTI-ANTIGEN MULTI-STAGE PLASMID DNA PRIME/ADENOVECTOR BOOST VACCINE, NAVAL MEDICAL RESEARCH CENTER-M3V-D/AD-PFCA, IS IMMUNOGENIC IN BALB/C MICE

Noelle B. Patterson[1], Harini Ganeshan[1], Esteban Abot[1], JoGlenna Banania[1], Jennylynn N. Lejano[1], Nalini Manohar[1], Kalpana Gowda[1], Keith Limbach[1], Shannon McGrath[1], Stephanie A. Marshall[1], Marilyn E. Ferrari[2], Joseph T. Bruder[3], C. Richter King[3], Denise L. Doolan[4], Thomas L. Richie[1], Martha Sedegah[1]
[1]U.S. Military Malaria Vaccine Program (Naval Medical Research Center & Walter Reed Army Institute of Research), Silver Spring, MD, United States, [2]Vical Incorporated, San Diego, CA, United States, [3]GenVec, Inc., Gaithersburg, MD, United States, [4]Queensland Institute of Medical Research, Brisbane, QLD, Australia

1038

PRODUCTION, CHARACTERIZATION AND IMMUNOLOGICAL EVALUATION OF AN *ESCHERICHIA COLI* EXPRESSED *PLASMODIUM FALCIPARUM* THROMBOSPONDIN RELATED APICAL MEROZOITE PROTEIN (PTRAMP), A PUTATIVE MALARIA VACCINE CANDIDATE

Onyinyechukwu Uchime, Karine Reiter, Vu Nguyen, Jacqueline Glen, Louis Miller, David L. Narum, Matthew L. Plassmeyer
National Institutes of Health, Rockville, MD, United States

1039

PHASE 1 SAFETY AND IMMUNOGENICITY TRIAL OF A BLOOD-STAGE MALARIA VACCINE AMA1-C1/ISA 720 IN AUSTRALIAN ADULTS

Mark Arden Pierce[1], Ruth D. Ellis[1], Elissa Malkin[2], Kazutoyo Miura[1], Joanne Marjason[3], Gregory E. Mullen[4], Carole A. Long[5], Louis H. Miller[1], Laura B. Martin[1]
[1]National Institutes of Health, National Institute of Allergy and Infectious Disease, Malaria Vaccine Development Branch, Rockville, MD, United States, [2]Malaria Vaccine Initiative, Bethesda, MD, United States, [3]Q-Pharm Pty Ltd Brisbane, Australia, [4]King's College, London, United Kingdom, [5]National Institutes of Health, National Institute of Allergy and Infectious Disease, Laboratory of Malaria and Vector Research, Rockville, MD, United States

1040

RATIONAL DESIGN OF A PAN-REACTIVE APICAL MEMBRANE ANTIGEN-1 BASED MALARIA VACCINE USING SEROTYPES AND EPITOPE MAPS

Sheetij Dutta, Joshua W. Clayton, Michele D. Spring, Lin H. Chow
Walter Reed Army Institute of Research, Silver Spring, MD, United States

1041

HEMATOLOGICAL PARAMETERS CHANGES IN CHILDREN LESS THAN SIX YEARS LIVING IN MALARIA ENDEMIC AREA: IMPLICATION FOR FUTURE MALARIA VACCINE TRIALS

Adama Gansane[1], Alfred Tiono[1], Amidou Diarra[1], Issiaka Soulama[1], Alphonse Ouedraogo[1], Jean Baptiste Yaro[1], Esperance Ouedraogo[1], Edith Bougouma[1], Souleymane Sanon[1], Amadou T. Konate[1], Issa Nebie[1], Sodiomon Sirima[2]
[1]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [2]Centre National de Recherche et de Formation sur le Paludisme/Groupe de Recherche et d'Action en Santé, Ouagadougou, Burkina Faso

1042

EXPRESSION AND LOCALIZATION OF *PLASMODIUM FALCIPARUM* MEROZOITE SURFACE PROTEIN 8 IN BLOOD STAGE MALARIA PARASITES

James R. Alaro, Shi Qifang, Amy Ott, Michelle M. Lynch, James M. Burns, Jr.
Drexel University College of Medicine, Philadelphia, PA, United States

(ACMCIP Abstract)

1043

IMMUNIZATION WITH RECOMBINANT PROTEINS OF A GAMETOCYTE PROTEIN PFS230 EXPRESSED USING WHEAT GERM CELL-FREE SYSTEM SUCCESSFULLY INDUCE TRANSMISSION-BLOCKING ANTIBODIES AGAINST *PLASMODIUM FALCIPARUM*

Mayumi Tachibana[1], Hideyuki Iriko[2], Olga Muratova[3], Guanhong Song[3], Yimin Wu[3], Jetsumon Sattabongkot[4], Satoru Takeo[5], Hitoshi Otsuki[1], Motomi Torii[1], Takafumi Tsuboi[5]
[1]Department of Molecular Parasitology, Ehime University Graduate School of Medicine, Toon, Ehime, Japan, [2]Division of Medical Zoology, Department of Microbiology and Immunology, Faculty of Medicine, Tottori University, Yonago, Tottori, Japan, [3]Malaria Vaccine Development Branch, National Institute of Allergy and Infectious Diseases, Rockville, MD, United States, [4]Department of Entomology, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, [5]Cell-Free Science and Technology Research Center, Ehime University, Matsuyama, Ehime, Japan

1044

NOVEL ANTIGENS AT *PLASMODIUM FALCIPARUM* SCHIZONT-MEROZOITE STAGES AS POTENTIAL VACCINE CANDIDATES

Satoru Takeo, Hirokazu Sakamoto, Naomi Hirabayashi, Motomi Torii, Takafumi Tsuboi
Ehime University, Matsuyama, Japan

1045

PLASMODIUM FALCIPARUM MEROZOITE SURFACE PROTEIN 6 AS A BLOOD STAGE VACCINE CANDIDATE: ASSESSING GENETIC DIVERSITY AND ANTIBODY SPECIFICITY

Ana L. de Oliveira, Aaron Neal, Stephen J. Jordan, Michael Crowley, OraLee H. Branch, Julian C. Rayner
University of Alabama at Birmingham, Birmingham, AL, United States

(ACMCIP Abstract)

1046

ASSESSING PARASITE BURDEN IN *P.KNOWLESI*/RHESUS MONKEY SPOROZOITE CHALLENGE MODEL BY QUANTITATIVE REAL-TIME PCR AND HISTOLOGY

Tupur Husain, Thomas L. Richie, Walter Weiss
Naval Medical Research Center/Walter Reed Army Institute of Research, Silver Spring, MD, United States

(ACMCIP Abstract)

1047

DIRECT ALUM FORMULATION IMMUNOASSAY (DAFIA): AN IMMUNOFLUORESCENT ASSAY THAT DIRECTLY DETERMINES THE CONTENT, IDENTITY AND INTEGRITY OF ANTIGENS FORMULATED ON ALHYDROGEL

Daming Zhu, Shuhui Huang, Elizabeth Gebregeorgis, Holly McClellan, Louis Miller, Allan Saul
Malaria Vaccine Development Branch, NIAID/National Institutes of Health, Rockville, MD, United States

Malaria/Mosquitoes – Prevention of Transmission

1048

REDUCTION IN THE BURDEN OF MALARIAL ANEMIA: CONFIRMATION OF AN ANTI-VECTOR APPROACH... SOMETIMES.

Kiersten B. Johnson, Jasbir K. Sangha
Macro International, Beltsville, MD, United States

1049

METABOLIC AND TARGET SITE INSECTICIDE RESISTANCE IN WILD *ANOPHELES VAGUS* IN CAMBODIA

Sovannaroth Siv
National Malaria Center, Phnom Penh, Cambodia

1050

THE EFFECT OF BREASTFEEDING ON THE RISK OF MALARIA AMONG CHILDREN BORN TO HIV-INFECTED MOTHERS

Neil Vora[1], Jaco Homsy[2], Emmanuel Arinaitwe[3], Taylor Sandison[4], Abel Kakuru[3], Humphrey Wanzira[3], Julius Kalamya[2], Moses Kamya[3], Jordan W. Tappero[2], Grant Dorsey[1]
[1]University of California-San Francisco, San Francisco, CA, United States, [2]Centers for Disease Control-Uganda, Entebbe, Uganda, [3]Makerere University, Kampala, Uganda, [4]University of Washington, Seattle, WA, United States

1051

LONG-LASTING INSECTICIDAL HAMMOCK NETS (LLIHN) FOR CONTROLLING FOREST MALARIA IN VIETNAM

Thang D. Ngo[1], Annette Erhart[2], Hung X. Le[1], Thuan K. Le[1], Nguyen X. Xa[1], Marc Coosemans[2], Umberto D'Alessandro[2]
[1]National Institute of Malariology, Parasitology and Entomollogy, Hanoi, Vietnam, [2]Institute of Tropical Medicine, Belgium, Antwerp, Belgium

1052

FIELD PERFORMANCE OF A WASH RESISTANT INSECTICIDE TREATMENT KIT FOR MOSQUITO NETS IN THREE DIFFERENT SETTINGS IN UGANDA AND MOZAMBIQUE

Albert Kilian[1], Susana Nery[2], Sonia Casimiro[3], Nelson Cuamba[3], Olivier Pigeon[4], John Gimnig[5]
[1]Malaria Consortium, Montagut, Spain, [2]Malaria Consortium, Maputo, Mozambique, [3]National Institutes of Health, Maputo, Mozambique, [4]Centre wallon de Recherches agronomiques, Gembloux, Belgium, [5]Centers for Disease Control and Prevention, Atlanta, GA, United States

1053

TARGETING SCHOOL CHILDREN FOR THE PREVENTION AND CONTROL OF COMMON ENDEMIC DISEASES IN SOUTHEAST NIGERIA

Amobi L. Ilika
Nnamdi Azikiwe University Teaching Hospital Nnewi Anambra State Nigeria, Nnewi, Nigeria

1054

IS MALARIAL PARASITEMIA RELATED TO THE NUMBER OF INSECTICIDE TREATED NETS IN A HOUSEHOLD? RESULTS FROM A NATIONAL POPULATION-BASED SURVEY IN ANGOLA

Erin Eckert, Shane Khan
Macro International Inc., Calverton, MD, United States

1055

TESTING COMPREHENSION AND ACCEPTABILITY OF PARASITE SYMBOLS TO STRENGTHEN ADHERENCE TO ANTIMALARIAL TREATMENT IN TANZANIA AND UGANDA

Ane E. Haaland[1], James P. Moloney[2]
[1]University of Oslo, Fjellstrand, Norway, [2]University of Oslo, Oslo, Norway

1056

BED NET COVERAGE, USAGE AND CONDITION IN FISHING VILLAGES OF SUBA DISTRICT, WESTERN KENYA

Go Dida[1], M. Horio[2], G. Sonye[3], K. Futami[2], S. Kaneko[2], M. Shimada[2], N. Minakawa[2]
[1]School of Public Health, Maseno University, Maseno, Kenya, [2]Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan, [3]International Centre for Insect Physiology and Ecology, Mbita, Kenya

Mosquitoes – Insecticide Resistance and Control

1057

DIFFERENTIAL INSECTICIDES SUSCEPTIBILITY OF THE MALARIA VECTOR *ANOPHELES ARABIENSIS* IN RURAL/URBAN SITES AT KHARTOUM CITY (SUDAN)

Osama Seidahmed
National Malaria Control Program, Khartoum, Sudan

1058

EVALUATING ULV MOSQUITO CONTROL APPLICATIONS IN A SOUTHERN CALIFORNIA DESERT HABITAT

Seth C. Britch[1], Kenneth J. Linthicum[1], Willard W. Wynn[1], Todd W. Walker[2], Muhammad Farooq[2], Branka B. Lothrop[3]
[1]USDA-ARS-Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL, United States, [2]U.S. Navy Entomology Center of Excellence, Jacksonville, FL, United States, [3]Coachella Valley Mosquito and Vector Control District, Indio, CA, United States

1059

MONOTORING OF PYRETHROID INSECTICIDES AND DDT AND THE KDR GENE ASSOCIATED IN *ANOPHELES GAMBIAE S.L.* IN FOUR VILLAGES OF BURKINA FASO

Athanase Badolo[1], Imael H. Bassolé[1], Wandaogo M. Guelbeogo[2], N'Falé Sagnon[2], Edith Ilboudo-Sanogo[2]
[1]University of Ouagadougou, Ouagadougou, Burkina Faso, [2]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso

1060

FREQUENCY OF *ACE*-1 ET *KDR* MUTATIONS WITHIN THE *ANOPHELES GAMBIAE* POPULATION COMPLEX IN WEST BURKINA FASO

Moussa Namountougou[1], Ali Ouari[2], Pierre Kengne[3], Jean-Bosco Ouedraogo[1], Roch K. Dabire[1]
[1]Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, [2]Centre Muraz, Bobo-Dioulasso, Burkina Faso, [3]Institut de Recherche pour le Développement, Montpellier, France

1061

DIFFERENTIAL EXPRESSION OF GENES IMPLICATED IN TEMEPHOS AND PERMETHRIN RESISTANCE ON MOSQUITO STRAINS OF *AE. AEGYPTI*

Karla L. Saavedra-Rodriguez[1], Adriana E. Flores[2], William C. Black IV[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Facultad de Ciencias Biologicas, San Nicolas de los Garza, Mexico

1062

SEQUENTIAL DEVELOPMENT OF INSECTICIDE RESISTANCE MECHANISMS IN LABORATORY SELECTED DELTAMETHRIN *ANOPHELES ALBIMANUS* RESISTANT STRAIN

Ana G. Catalan
Universidad del Valle de Guatemala, Guatemala, Guatemala

1063

SEARCH FOR MUTATIONS IN THE SUPER *KDR* REGION OF PARA IN *AEDES AEGYPTI* FROM LATIN AMERICA

Guadalupe C. Reyes-Solis[1], Karla L. Saavedra-Rodriguez[1], Ludmel Urdaneta-Marquez[1], Nydia A. Rodriguez-Neaves[2], Gustavo Ponce-Garcia[1], Adriana E. Flores-Suarez[2], William C. Black IV[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Universidad Autonoma de Nuevo Leon, San Nicolas de los Garza, Mexico

1064

DIFFERENTIAL SUSCEPTIBILITY OF PERMETHRIN-RESISTANT *ANOPHELES GAMBIAE* TO INDIVIDUAL TOXINS OF A NEW ISOLATE OF *BACILLUS THURINGIENSIS* SUBSP. *ISRAELENSIS*

Mohamed Ibrahim, Natalya Griko, Lee Bulla
Biological Targets, Inc., Pilot Point, TX, United States

1065

ACTIVITY OF ORAL INSECTICIDAL DRUGS AGAINST *AEDES AEGYPTI* AND *ANOPHELES GAMBIAE*

J. Jason Meckel, Kevin C. Kobylinski, Douglas E. Brackney, Massamba Sylla, Brian D. Foy
Colorado State University, Fort Collins, CO, United States

1066

AEDES AEGYPTI MONITORING IN PUBLIC AND PRIVATE BUILDINGS USING OVITRAPS, GPS AND A SIMPLE COMPUTER SYSTEM IN THE CITIES OF CHETUMAL AND PLAYA DEL CARMEN MEXICO

Pedro Mis-Avila[1], Marco Dominguez-Galera[1], William May[1], Ildefonso Fernandez-Salas[2], Lars Eisen[3], **Saul Lozano-Fuentes**[3]
[1]Secretaria de Salud, Quintana Roo, Chetumal, Mexico, [2]Universidad Autonoma de Nuevo Leon, Monterrey, Mexico, [3]Colorado State University, Fort Collins, CO, United States

1067

THE RISE OF A KDR MUTATION IN *AEDES AEGYPTI* (L) IN MÉXICO

Gustavo Ponce[1], Karla Saavedra[1], Saul Lozano[1], Guadalupe Reyes[1], Adriana E. Flores[2], William C. Black IV[1]
[1]Colorado State University, Fort Collins, CO, United States, [2]Universidad Autonoma de Nuevo León, Monterrey, Mexico

1068

GENETIC TECHNOLOGY FOR CONTROL OF DENGUE AND CHIKUNGUNYA

Luke Alphey, S. S. Vasan, Derric Nimmo
Oxitec Limited, Oxford, United Kingdom

Mosquitoes – Molecular Genetics

1069

MOLECULAR BASES OF POST-MATING BEHAVIOUR IN *ANOPHELES GAMBIAE*

David W. Rogers[1], Emiliano Mancini[2], Miranda M. Whitten[3], Francesco Baldini[4], Janis Thailayil[1], Alessandra della Torre[2], Elena Levashina[3], **Flaminia Catteruccia**[1]
[1]Imperial College London, London, United Kingdom, [2]Dip. Scienze di Sanità Pubblica, Università Sapienza, Rome, Italy, [3]IBMC, Strasbourg, France, [4]University of Perugia, Perugia, Italy

1070

IDENTIFICATION AND MOLECULAR CATALOGING OF HEMOCYTE SPECIFIC IMMUNE GENES FROM MALARIA VECTOR *A. GAMBIAE*

Rajnikant Dixit, Sanjeev Kumar, Lalita Gupta, Alvaro Molina-Cruz, Janneth Rodrigues, Jesus Valenzuela, Jose M. Ribeiro, Carolina Barillas-Mury
National Institutes of Health, Rockville, MD, United States

1071

DISSECTING *AEDES AEGYPTI* INNATE IMMUNE RESPONSES TO DENGUE VIRUS INFECTION

Jayme A. Souza-Neto[1], Jose L. Ramirez[1], Shuzhen Sim[1], Zhiyong Xi[2], George Dimopoulos[1]
[1]Johns Hopkins University – BSPH, Baltimore, MD, United States, [2]Michigan State University, East Lansing, MI, United States

1072

MEIOTIC DRIVE SYSTEM GENE EXPRESSION PROFILING IN *AEDES AEGYPTI*

Dongyoung Shin[1], Dave D. Chadee[2], Jeanne Romero-Severson[1], David W. Severson[1]
[1]The Eck Family Institute for Global Health and Infectious Diseases, Department of Biological Sciences, Notre Dame University, Notre Dame, IN, United States, [2]Department of Life Sciences, University of West Indies, St. Augustine, Trinidad and Tobago

1073

A PUZZLING PATTERN OF INTROGRESSION IN THE *CULEX PIPIENS* COMPLEX IN EAST ASIA

Emilie Cameron, Dina Fonseca
Rutgers University, New Brunswick, NJ, United States

1074

QTL ANALYSIS OF DENV-2 DISSEMINATION IN A FERAL POPULATION OF *AEDES AEGYPTI* FROM TRINIDAD, WEST INDIES

Ryan R. Hemme[1], Dave D. Chadee[2], David D. Severson[1]
[1]The Eck Family Institute for Global Health and Infectious Diseases, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States, [2]Department of Life Sciences, University of West Indies, St. Augustine, Trinidad and Tobago

1075

GUILT BY ASSOCIATION: GENE EXPRESSION DIFFERENCES IMPLICATED IN MATE RECOGNITION IN *ANOPHELES GAMBIAE* M AND S FORMS

Bryan J. Cassone[1], Zhong Guan[2], Bradley J. White[1], Karine Mouline[1], Nora J. Besansky[1]
[1]University of Notre Dame, Notre Dame, IN, United States, [2]University of Indiana, South Bend, IN, United States

1076

POPULATION STRUCTURE OF COLLECTIONS OF THE MOSQUITO *AEDES AEGYPTI* (DIPTERA: CULICIDAE) FROM COSTA RICA

Adrián E. Avendaño-López, Gustavo Gutiérrez-Espeleta, José *M. Gutiérrez, Adriana Duarte-Madrigal, Olger Calderón-Arguedas*
Universidad de Costa Rica, San José, Costa Rica

1077

POPULATION STRUCTURE OF THE MALARIA VECTOR *ANOPHELES ALBIMANUS* IN THE ATLANTIC AND PACIFIC REGIONS OF COLOMBIA BASED ON SEQUENCES OF THE MTDNA *COI* GENE

Lina A. Gutiérrez[1], Nelson Naranjo[1], Astrid V. Cienfuegos[1], Giovan F. Gomez[1], Shirley Luckhart[2], Jan E. Conn[3], **Margarita M. Correa**[1]
[1]Grupo de Microbiologia Molecular, Escuela de Microbiologia, Universidad de Antioquia, Medellin, Colombia, [2]Department of Medical Microbiology and Immunology, University of California, Davis, CA, United States, [3]Griffin Laboratory, Wadsworth Center, New York State Department of Health, Albany, NY, United States

1078

DEVELOPMENT OF A HIGH-DENSITY SNP GENOTYPING ARRAY FOR THE VECTOR MOSQUITO *ANOPHELES GAMBIAE*, BY THE AGSNP CONSORTIUM

Marc Muskavitch[1], Dan Neafsey[2], Mara Lawniczak[3], Daniel Park[2], Seth Redmond[3], Nora Besansky[4], George Christophides[3], Roger Wiegand[2], Frank Collins[4], Dyann Wirth[5], Fotis Kafatos[3]
[1]Boston College, Chestnut Hill, MA, United States, [2]Broad Institute, Cambridge, MA, United States, [3]Imperial College London, London, United Kingdom, [4]University of Notre Dame, South Bend, IN, United States, [5]Harvard School of Public Health, Boston, MA, United States

1079

GENETIC ASSOCIATION AND LINKAGE DISEQUILIBRIUM IN *ANOPHELES GAMBIAE* IMMUNE GENES

Caroline Harris[1], Isabelle Morlais[2], François Rousset[3], Luc Abate[1], Didier Fontenille[1], Anna Cohuet[1]
[1]Institut de Recherche pour le Developpement, Montpellier, France, [2]Laboratoire de Recherche sur le Paludisme IRD-OCEAC, Yaoundé, Cameroon, [3]University of Montpellier, Montpellier, France

Mosquitoes – Vector Biology – Epidemiology

1080

INTEGRATE MOSQUITO FORAGING IN ENVIRONMENTAL MANAGEMENT OF AQUATIC HABITATS FOR MALARIA CONTROL

Weidong Gu, Robert Novak
University of Alabama at Birmingham, Birmingham, AL, United States

1081

IDENTIFYING COVARIATES OF *ANOPHELES GAMBIAE* S.L. (DIPTERA: CULICIDAE) AQUATIC HABITAT DISTRIBUTION USING A POISSON REGRESSION MODEL, WITH A NON-CONSTANT, GAMMA-DISTRIBUTED MEAN

Benjamin G. Jacob, Robert Novak
University of Alabama, Birmingham, AL, United States

1082

ECOLOGICAL BASIS OF SWARMING AND MATING BEHAVIOUR IN NATURAL POPULATIONS OF *ANOPHELES GAMBIAE* S.S., IN BURKINA FASO

Simon P. Sawadogo[1], Antoine Sanon[2], Idrissa Dicko[3], Abdoulaye Diabate[1], Robert T. Guiguemde[4], Jean-Bosco Ouedraogo[1], Roch K. Dabire[1]
[1]Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, [2]University of Ouagadougou, Ouagadougou, Burkina Faso, [3]Polytechnical University of Bobo-Dioulasso, Bobo-Dioulasso, Burkina Faso, [4]Centre Muraz, Bobo-Dioulasso, Burkina Faso

1083

HOST-FEEDING PATTERNS OF *AEDES AEGYPTI* AND *AEDES ALBOPICTUS* IN NEW ORLEANS, LOUISIANA, 2006

Sarah R. Michaels[1], Jason W. Houdek[1], Brian D. Byrd[1], Mark A. Rider[1], Gabriela Estrada[2], Dawn M. Wesson[1]
[1]Tulane University, New Orleans, LA, United States, [2]Loyola University, New Orleans, LA, United States

1084

LARVAL ECOLOGY OF TWO CHROMOSOMAL FORMS OF *ANOPHELES FUNESTUS* IN WEST OF BURKINA FASO: LARVAE TRANSPLANTATION EXPERIENCE

Hyacinthe K. Toe[1], N'Falé Sagnon[2], Robert T. Guiguemde[3], Jean-Bosco Ouedraogo[1], Roch K. Dabire[1]
[1]Institut de Recherche en Sciences de la Santé, Bobo-Dioulasso, Burkina Faso, [2]Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso, [3]Centre Muraz, Bobo-Dioulasso, Burkina Faso

1085

THE ROLE OF THE RNAI PATHWAY IN THE MIDGUT OF *AEDES AEGYPTI* MOSQUITOES ON VECTOR COMPETENCE FOR ARBOVIRUSES

Cynthia C. Khoo, Joe Piper, Kenneth E. Olson, Alexander W. Franz
Colorado State University, Fort Collins, CO, United States

(ACMCIP Abstract)

1086

COMPARATIVE POPULATION GENETICS: *CULEX RESTUANS* VERSUS *CX. PIPIENS* IN THE EASTERN US

Dina M. Fonseca[1], Laura D. Kramer[2]
[1]Rutgers University, New Brunswick, NJ, United States, [2]Wadsworth Center, NYSDH, Albany, NY, United States

1087

EFFECTS OF SINGLE HOST ODORS AND ODOR COMBINATIONS ON FLIGHT CHARACTERISTICS OF *AEDES AEGYPTI* AND *AEDES ALBOPICTUS*

Sandra A. Allan[1], Ulrich R. Bernier[1], Daniel L. Kline[1], Miriam F. Cooperband[2]
[1]United States Department of Agriculture, Gainesville, FL, United States, [2]United States Department of Agriculture, Otis, MA, United States

1088

RISK FACTORS RELATED TO THE NUMBER OF *AEDES AEGYPTI* PUPAE IN THE DISTRICT OF COMAS, LIMA, PERU

Fanny Castro-Llanos[1], Carmen Flores-Mendoza[1], Fernando Chapilliquen[2], Luis Cubillas[2], Andrés G. Lescano[3], Juan Pérez[1], Karin Cruz[2], Julio Lacma[2], David Florin[1]
[1]Naval Medical Research Center Detachment, Callao, Peru, [2]Ministerio de Salud, Lima, Peru, [3]Naval Medical Research Center Detachment – UPCH, FASPA, Callao, Peru

1089

OVIPOSITION SITE SELECTION IN THE DENGUE VECTOR, *AEDES AEGYPTI*

Jacklyn Wong, Amy C. Morrison, Helvio Astete, Thomas W. Scott
University of California Davis, Davis, CA, United States

1090

DETERMINING FACTORS THAT PREDICT WEST NILE VIRUS POSITIVE MOSQUITO POOLS IN THREE LOUISIANA PARISHES

Rebecca C. Christofferson[1], Christopher N. Mores[1], Alma Roy[1], Dawn M. Wesson[2]
[1]Louisiana State University, Baton Rouge, LA, United States, [2]Tulane University, New Orleans, LA, United States

1091

SIMULATION MODELS WILL INFORM SITUATION-SPECIFIC DENGUE PREVENTION STRATEGIES

Tessa B. Knox[1], Dana A. Focks[2], Andres J. Garcia[2], Tadeusz J. Kochel[3], Amy C. Morrison[1], Thomas W. Scott[1]
[1]University of California, Davis, CA, United States, [2]Infectious Disease Analysis, Gainesville, FL, United States, [3]Naval Medical Research Center Detachment, Lima, Peru

1092

RAINFALL AND THE *CULEX PIPIENS* COMPLEX: HOW MUCH IS TOO MUCH?

Christopher M. Barker[1], William K. Reisen[1], Wesley O. Johnson[2], Bborie K. Park[1], Bruce F. Eldridge[1]
[1]University of California, Davis, CA, United States, [2]University of California, Irvine, CA, United States

1093

CHARACTERIZATION OF IMMUNOGENIC PROTEINS IN *AN. GAMBIAE* SALIVARY GLANDS AND THEIR POTENTIAL USE AS A MARKER OF EXPOSURE TO MALARIA

Sylvie Cornelie[1], MArie Senglat[1], Souleymane Doucoure[2], Edith Demettre[3], Franck Remoue[1]
[1]IRD, Montpellier, France, [2]IRD, Dakar, Senegal, [3]CNRS, Montpellier, France

1094

MALARIA VECTOR BREEDING SITES AND ASSESSING THEIR IMPACT ON LOCAL MALARIA RISK: PRELIMINARY DATA ON THE RISK FACTORS FOR MALARIA INFECTION

Themba Mzilahowa
Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi

1095

THE IMPACT OF IMPREGNATED SUDANESE THOBS ON HUMAN/VECTOR CONTACT OF *ANOPHELES ARABIENSIS* IN ENDEMIC AREA OF MALARIA – SUDAN

Raya A. El Awad[1], Samia Amin El Karib[2], Omer Zaid Baraka[3], Abdel Hameed Derdeery Nugud[1], Suad Mohamed Sulaiman[4]
[1]National Health Lab. M of H, Khartoum, Sudan, [2]The National Research Center, Khartoum, Sudan, [3]Faculity of Medicine, Khartoum, Sudan, [4]Nile Faculity Of Medical Science, Khartoum, Sudan

1096

ENTOMOLOGICAL SURVEY ON DENGUE VECTORS AS FOR BASIS ON PREVENTION AND CONTROL IN BARANGAY POBLACION, MUNTINLUPA CITY, 2008

Estrella Irlandez C ruz[1], Juancho Bunyi[2]
[1]Research Institute for Tropical Medicine, Metro Manila, Philippines, [2]Assistant City Health Officer, Munitnlupa City, Philippines

1097

CALCIUM ALGINATE FORMULATIONS OF BACTERIA FROM PLANT INFUSIONS PRODUCE OVIPOSITION ATTRACTANTS AND STIMULANTS FOR GRAVID *AEDES AEGYPTI* AND *AEDES ALBOPICTUS*

Loganathan Ponnusamy[1], Luma Abu Ayyash[1], Toshi Nojima[1], Philipp Kirsch[2], Dawn M. Wesson[3], Coby Schal[1], **Charles S. Apperson**[1]
[1]N.C. State University, Raleigh, NC, United States, [2]APTIV, Inc., Portland, OR, United States, [3]Tulane University, New Orleans, LA, United States

1098

MOSQUITOES, CATCH BASINS, HYDROLOGY, AND RISK OF WEST NILE VIRUS IN ILLINOIS

Marilyn O. Ruiz[1], Kelly DeBaene[1], Jane Messina[1], Murugesu Sivapalan[1], Hongyi Li[1], Gabe Hamer[2], William Brown[1], Edward Walker[2]
[1]University of Illinois – Urbana, Urbana, IL, United States, [2]Michigan State University, East Lansing, MI, United States

Viruses – Other

1099

VIRAL ETIOLOGY OF ACUTE FEBRILE ILLNESSES IN SOUTH AMERICA, 2000-2007

Brett M. Forshey[1], Carolina Guevara[1], V. Alberto Laguna[1], Luis Suarez[2], Paul Pachas[2], Jorge Gómez[2], Manuel Céspedes[3], Eduardo Gotuzzo[4], Nora Reyes[5], Roberto Agudo[6], Efrain Vallejo[6], Jorge Vargas[7], Yelin Roca[7], Nicolas Aguayo[8], Cesar Madrid[9], Franklin Delgado[9], Silvia Montano[1], Tadeusz J. Kochel[1], FSS Peruvian Working Team[1]
[1]U.S. Naval Medical Research Center Detachment, Lima, Peru, [2]General Directorate of Epidemiology, Ministry of Health, Lima, Peru, [3]National Institutes of Health, Ministry of Health, Lima, Peru, [4]Cayetano Heredia Peruvian University, Lima, Peru, [5]San Marcos National University, Lima, Peru, [6]Ministry of Health, Cochabamba, Bolivia, [7]National Center of Tropical Diseases, Santa Cruz, Bolivia, [8]NGO, Rayos de Sol, Asuncion, Paraguay, [9]Naval Hospital, Guayaquil, Ecuador

1100

REEMERGENCE OF BOLIVIAN HEMORRHAGIC FEVER IN BOLIVIA 2007 – 2008

Roxana Caceda[1], Patricia Aguilar[1], Vidal Felices[1], Alfredo Huaman[1], Carolina Guevara[1], Jorge Vargas[2], Tadeusz Kochel[1]
[1]U.S. Naval Medical Research Center Detachment, Lima, Peru, [2]National Center of Tropical Diseases, Santa Cruz, Bolivia

1101

RESISTANCE TO ADAMANTANES AND NEURAMINIDASE INHIBITORS AMONG INFLUENZA VIRUSES ISOLATED IN CENTRAL AND SOUTH AMERICA IN 2005-2007

Josefina Garcia[1], Merly Sovero[1], Alberto Laguna[1], Jorge Gómez[2], Richard Douce[3], Melvin Barrantes[4], Felix Sanchez[5], Mirna Jiménez[6], Guillermo Comach[7], Ivette de Rivera[8], Roberto Agudo[9], Tadeusz J. Kochel[1]
[1]U.S. Naval Medical Research Center Detachment, Lima, Peru, [2]Dirección General de Epidemiología, Ministerio de Salud, Lima, Peru, [3]Hospital Vozandes, Quito, Ecuador, [4]Hospital Solano, Buenos Aires, Argentina, [5]Hospital Infantil Manuel de Jesus Rivera, Managua, Nicaragua, [6]Hospital Nacional del Metapan, Metapan, El Salvador, [7]LARDIDEV-Biomed-UC, Maracay, Venezuela, [8]Universidad Nacional Autónoma de Honduras, Tegucigalpa, Honduras, [9]Dirección General de Epidemiología, Ministerio de Salud, Cochabamba, Bolivia

1102

DERMATOLOGIC CONDITIONS IN "HEALTHY HTLV-I CARRIERS"

Manuel Villaran[1], Eberth Quijano[2], Marie Wang[3], Silvia M. Montano[1], Joseph R. Zunt[4]
[1]U.S. Naval Medical Research Center Detachment, Lima, Peru, [2]Centro de Referencia para ETS "Alberto Barton", Lima, Peru, [3]University of Washington National Institutes of Health Fogarty Fellow, Seattle, WA, United States, [4]University of Washington, Seattle, WA, United States

1103

ANDES VIRAL RNA LOAD IN CHILEAN PATIENTS WITH HANTAVIRUS CARDIOPULMONARY SYNDROME

Vial A. Pablo[1], G. J. Mertz[2], M. Ferrés[3], H. Galeno[4], E. Belmar[1], R. Aldunate[3], C. Castillo[5], L. M. Noriega[1], M. Tapia[6], S. Donoso[6], C. Ortega[6], E. Navarro[6], J. J. Arriagada[6], L. A. Scholtz[6], Pablo Ferrer[4], P. Godoy[3], R. Ibañez[3], B. Hjelle[2]
[1]Clinica Alemana Universidad del Desarrollo, Santiago, Chile, [2]University of New Mexico, Albuquerque, NM, United States, [3]P Universidad Católica de Chile, Santiago, Chile, [4]Instituto de Salud Pública, Santiago, Chile, [5]Universidad de la Frontera, Temuco, Chile, [6]Ministerio de Salud, Santiago, Chile

1104

DETECTION OF HAMSTER CYTOKINE RESPONSES BY REAL-TIME PCR

Stephanie James, Tony Schountz
University of Northern Colorado, Greeley, CO, United States

1105

FIRST CHARACTERIZATION OF CYTOKINE GENES FROM A BAT, USING SEBA'S SHORT-TAILED BAT (*CAROLLIA PERSPICILLATA*)

Ann C. Cogswell[1], Charles H. Calisher[2], Rick Adams[1], Tony Schountz[1]
[1]University of Northern Colorado, Greeley, CO, United States, [2]Colorado State University, Fort Collins, CO, United States

1106

GENETIC VARIABILITY OF RVFV IN WEST AFRICA: IMPLICATIONS FOR VIRUS DISPERSAL AND DISTRIBUTION

Peinda O. Soumaré[1], Paolo M. Zanotto[2], Ousmane Faye[1], Mohamadou L. Soumaré[3], Mady Ndiaye[3], Mawlouth Diallo[1], Amadou A. Sall[1]
[1]Pasteur Institut, Dakar, Senegal, [2]University of Sao Paulo, Sao Paulo, Brazil, [3]Cheikh Anta Diop University, Dakar, Senegal

1107

EARLY DETECTION OF HANTAVIRUS ACUTE INFECTION AND ECOLOGY STUDIES IN TONOSI, PANAMA. 2007-2008

Blas Armien[1], Jamileth Mariñas[2], Carlos Muñoz[3], Anibal Armien[4], Juan M. Pascale[1], Ariosto Hernandez[2], Deyanira Sanchez[2], Mario Avila[5], Publio Gonzalez[1], Candida Broce[3], Ricardo Correa[1], Loyd Marchena[1], Fernando Gracia[6], Gregory E. Glass[7], Frederick Koster[8]
[1]ICGES, Panama, Panama, [2]Hospital de Tonosi, Los Santos, Panama, [3]Ministerio de Salud, Los Santos, Panama, [4]University of Minnesota, Minnesota, MN, United States, [5]Ministerio de Salud, Azuero, Panama, [6]Hsopital Santo Tomas, Panama, Panama, [7]The Johns Hopkins Bloomberg School of Public Health, Baltimore, MA, United States, [8]Lovelace Respiratory Research Institute, Albuquerque, NM, United States

1108

VECTOR COMPETENCE OF *ANOPHELES GAMBIAE SENSU STRICTU* FOR O'NYONG-NYONG VIRUS

Rodman D. Tompkins II, Corey L. Campbell, **Brian D. Foy**
Colorado State University, Fort Collins, CO, United States

1109

DISEASE BURDEN DUE TO DENGUE AND INFLUENZA IN AN INDONESIAN FACTORY WORKER COHORT

Nugroho H. Susanto[1], Ardini S. Raksanegara[2], Bachti Alisjahbana[3], Primal Sudjana[3], Hadi Jusuf[3], Pandji I. Rudiman[3], Haditya L. Mukhri[1], Maya Williams[1], Patrick J. Blair[1], Charmagne G. Beckett[4], Kevin R. Porter[4], Ratna I. Tan[1], Timothy H. Burgess[1], Herman Kosasih[1]
[1]Viral Diseases Program, United States Naval Medical Research Unit-2, Jakarta, Indonesia, [2]Public Health Department – Medical Faculty Padjadjaran University, Bandung, Indonesia, [3]Hasan Sadikin Hospital, Bandung, Indonesia, [4]Naval Medical Research Center, Silver Spring, MD, United States

1110

NOVEL METHODS OF DETECTION AND CHARACTERIZATION OF RNA VIRUS PATHOGENS AND THEIR HOSTS IN THE KYRGYZ REPUBLIC

Benjamin J. Briggs
University of Buffalo, Buffalo, NY, United States

1111

CHIKUNGUNYA VIRUS – MECHANISM OF ADAPTATION TO *AE. ALBOPICTUS* MOSQUITO

Konstantin A. Tsetsarkin, Dana Vanlandingham, Charles E. McGee, Stephen Higgs
University of Texas Medical Branch, Galveston, TX, United States

(ACMCIP Abstract)

Poster Session C ACMCIP Abstracts – Molecular, Cellular And Immunoparasitology

848, 860, 888, 915, 916, 917, 919, 920, 921, 922, 923, 924, 925, 926, 932, 935, 936, 937, 938, 943, 954, 961, 971, 985, 995, 999, 1002, 1004, 1011, 1012, 1013, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1042, 1045, 1046, 1085, 1111

Membership Committee Meeting

Salon 816
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.

Certificate Exam Committee Meeting

Salon 829
Wednesday, December 10, 12:15 p.m. – 1:15 p.m.

Mid-Day Session 135

Pediatric Tuberculosis: A Neglected Tropical Disease?

Rhythms II/III

Wednesday, December 10, 12:15 p.m. – 1:15 p.m.

The Speaker, a pediatric infectious diseases specialist with expertise in pediatric tuberculosis, will review the worldwide impact of this disease and the special challenges for diagnosing, treating and controlling tuberculosis in children.

CHAIR

Richard Oberhelman
Tulane School of Public Health, New Orleans, LA, United States

PEDIATRIC TUBERCULOSIS: A NEGLECTED TROPICAL DISEASE?

Jeffrey R. Starke
Baylor College of Medicine, Houston, TX, United States

Mid-Day Session 136

How Can We Tackle the Misuse of Science by Alarmists?

Waterbury

Wednesday, December 10, 12:15 p.m. – 1:15 p.m.

Alarmists are increasingly powerful in matters of public policy. At present, climate change is their defining moral and political issue, and vector-borne diseases feature high in their list of prophecies. These prophecies are couched in the language of science, but sidestep complexity by providing the media and the public with authoritative, clear-cut and intuitively plausible statements that omit all elements of doubt. Scientists who question them are denounced as an insignificant minority, often as stooges of industry. As a result, alarmists are highly influential in science-based issues, including the public funding of science. This session will present a statistical analysis of networks of authorship that have had a prominent impact on public perception of two issues in the climate change debate: (1) mean temperature changes in the northern hemisphere over the past millennium—the controversial "Hockey Stick" reconstruction, and (2) the impact of current and future climate change on the prevalence and incidence of vector-borne diseases. In both cases I demonstrate that the authors involved operate as a clique or "social group" that has little or no interaction with the mainstream of the respective fields, but are nevertheless pivotal players in the climate change debate, with substantial influence on authoritative bodies such as the Intergovernmental Panel on Climate Change (IPCC). The objective of the symposium is to promote discussion of strategies to counter alarmist tactics and the misuse of science.

CHAIR

Paul Reiter
Institut Pasteur, Paris, France

SPEAKER

Paul Reiter
Institut Pasteur, Paris, France

Mid-Day Session 136A

Video on Malaria: "Survival - The Plant That Cures Malaria"

Bayside BC

Wednesday, December 10, 12:15 p.m. - 1:15 p.m.

Malaria kills a child in Africa every 30 seconds. The disease is both the cause and effect of Africa's poverty. But in Uganda, a pioneering farmer, Clovis Kabaseke, believes he has an answer to both problems. Artemisia, a Chinese herb, produces chemicals in its leaves that can cure Malaria in just three days. These exciting new drugs – Artemisinin-based Combination Therapies, or ACTs - are one of the best new hopes for defeating Malaria. Clovis hopes that by encouraging African farmers to grow the plant in ever increasing amounts, he can cure both poverty and this deadly disease.

Meet the Professors 137

Meet the Professors C: Enigmatic and Teaching Cases

Grand Ballroom A

Wednesday, December 10, 12:15 p.m. – 1:15 p.m.

A panel of professors will each present one clinical case of a tropical disease specific to a particular region that they have found a challenge to manage or diagnose. If there is time, participants may be able to present enigmatic cases for the audience and panel to consider. An open discussion will be encouraged, with audience participation.

CHAIR

Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada

PRESENTERS

Alan Magill
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Anne McCarthy
Ottawa Hospital, Ottawa, ON, Canada

Mid-Day Session 138

Wellcome Trust Public Health and Tropical Medicine Fellowships Masterclass

Grand Ballroom D

Wednesday, December 10, 12:15 p.m. – 1:15 p.m.

At this symposium, speakers will discuss research opportunities, funding schemes and application tips for a successful research career in tropical medicine. If you are an aspiring scientist or a potential supervisor or sponsor of fellows, this Masterclass could provide the knowledge you need for success.

CHAIR

Michael Chew
The Wellcome Trust, London, United Kingdom

12:15 p.m.

TIPS FOR A SUCCESSFUL FELLOWSHIP APPLICATION

Michael Chew
The Wellcome Trust, London, United Kingdom

12:35 p.m.

THE INTERVIEW PROCESS – HOW TO MAXIMIZE YOUR CHANCES

Philip T. LoVerde
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

12:50 p.m.

RESEARCH OPPORTUNITIES AND FUNDING SCHEMES

Annabel Phillips
The Wellcome Trust, London, United Kingdom

1 p.m.

QUESTIONS AND ANSWERS

Poster Session C Viewing

Armstrong Ballroom

Wednesday, December 10, 1:30 p.m. – 7 p.m.

Symposium 139

Potentiation of Disease by Arthropod Saliva

Gallery

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

The topics of this symposium will be directed towards salivary immune modulation, potentiation of disease and disease pathogenesis by salivary components. Salivary components role in anti-arthropod vaccines will also be covered.

CHAIR

Richard Titus
Colorado State University, Fort Collins, CO, United States

William Wheat
Colorado State University, Fort Collins, CO, United States

1:30 p.m.

SALIVARY COMPONENT MAXADILAN AFFECTS MURINE DENDRITIC CELLS BY POTENTIALLY ENHANCING TYPE 2 IMMUNITY

William Wheat
Colorado State University, Fort Collins, CO, United States

1:55 p.m.

VARIABILITY IN THE SAND FLY SALIVARY PROTEIN MAXADILAN: IMPLICATIONS TO HOST IMMUNE RESPONSE AND LEISHMANIA PATHOGENESIS

Gregory C. Lanzaro
University of California, Davis, CA, United States

2:20 p.m.

HOW TO TURN POTENTIATION TO PROTECTION: IMPACT OF IMMUNITY TO SAND FLY SALIVA ON LEISHMANIASIS

Jesus G. Valenzuela
National Institute of Allergy and Infectious Disease, National Institutes of Health, Rockville, MD, United States

2:45 p.m.

TICKS, BORRELIA AND SALIVA: A TALE OF CYTOKINES AND CYTOTOXIC

Nordin Zeidner
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Scientific Session 140

Filariasis III – Epidemiology I

Rhythms I

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR

LeAnne M. Fox
Centers for Disease Control and Prevention, Atlanta, GA, United States

Dominique Kyelem
Lymphatic Filariasis Support Center, Decatur, GA, United States

1:30 p.m.

1112

DETERMINANTS AFFECTING OUTCOMES OF NATIONAL PROGRAMS TO ELIMINATE LYMPHATIC FILARIASIS (LF): DEFINING RESEARCHABLE PRIORITIES

Dominique Kyelem[1], Gautam Biswas[2], Moses Bockarie[3], Mark Bradley[4], Maged El-Setouhy El-Setouhy[5], Peter Fischer[6], Ralph Henderson[1], James Kazura[3], Patrick J. Lammie[7], Sammy M. Njenga[8], Eric A. Ottesen[1], Kapa Ramaiah[9], Frank Richards[10], Gary Weil[6], Steve Willliams[11]
[1]Lymphatic Filariasis Support Center, Decatur, GA, United States, [2]World Health Organization, Geneva, Switzerland, [3]Case Western Reserve University, Cleveland, OH, United States, [4]GlaxoSmith-Kline, London, United Kingdom, [5]Ain Shams University, Cairo, Egypt, [6]Washington University, St. Louis, MO, United States, [7]Centers for Disease Control and Prevention, Atlanta, GA, United States, [8]Kenya Medical Research Institute, Nairobi, Kenya, [9]Vector Control Reserach Centre, Pondicherry, India, [10]Carter Center, Atlanta, GA, United States, [11]Clark Science Center, Smith College, Northampton, MA, United States

1:45 p.m.

1113

EVALUATION OF DIAGNOSTIC TOOLS FOR BRUGIAN FILARIASIS ELIMINATION PROGRAMS

Taniawati Supali[1], Rahmah Noordin[2], Felix Liauw[1], Heri Wibowo[1], Tajul A. Awang Mohd[3], Kimberly Y. Wong[4], Peter U. Fischer[5], Gary J. Weil[5]
[1]University of Indonesia, Jakarta, Indonesia, [2]University Sains Malaysia, Penang, Malaysia, [3]Vector-Borne Disease Section, Sabah Health Office, Kota Kinabalu, Malaysia, [4]Centers for Disease Control, Atlanta, GA, United States, [5]Washington University School of Medicine, St. Louis, MO, United States

2 p.m.

1114

SPATIAL MODELING OF LYMPHATIC FILARIASIS RISK IN AMERICAN SAMOA BASED ON EPIDEMIOLOGICAL AND ENTOMOLOGICAL DATA

Eric W. Chambers[1], Janice Mladonicky[1], Jonathan D. King[1], Jennifer L. Liang[1], Shannon K. McClintock[1], Mark A. Schmaedick[2], Molisamoa Pa'au[3], Mark H. Bradley[4], Thomas R. Burkot[1], Patrick J. Lammie[1]
[1]Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Division of Community and Natural Resources, American Samoa Community College, Pago Pago, American Samoa, [3]American Samoa Department of Health, Pago Pago, American Samoa, [4]Global Community Partnerships, GlaxoSmithKline, Brentford, United Kingdom

2:15 p.m.

1115

COMPREHENSIVE MONITORING OF THE IMPACT OF A PILOT MASS DRUG ADMINISTRATION PROJECT FOR FILARIASIS IN PAPUA NEW GUINEA

Gary J. Weil[1], Will Kastens[2], Melinda Susapu[3], Sandra Laney[4], Steven A. Williams[4], Chrisopher L. King[2], James W. Kazura[2], Moses J. Bockarie[3]
[1]Washington University School of Medicine, St. Louis, MO, United States, [2]Case Western Reserve University, Cleveland, OH, United States, [3]Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, [4]Smith College, Northampton, MA, United States

2:30 p.m.

1116

IMPLEMENTATION AND MANAGEMENT OF LF CONTROL AND ELIMINATION PROGRAMMES: EIGHT YEARS OF EXPERIENCE FROM TANZANIA

Mwele N. Malecela[1], Peter Kilima[2], Charles D. Mackenzie[3]
[1]National Institute for Medical Research, Dar-es-salaam, United Republic of Tanzania, [2]Senior Consultant, Dar-es-salaam, United Republic of Tanzania, [3]Filarial Diseases Unit, Michigan State University, East Lansing, MI, United States

2:45 p.m.

1117

PROGRESS TOWARD LYMPHATIC FILARIASIS (LF) ELIMINATION IN PLATEAU AND NASARAWA STATES, NIGERIA: SENTINEL VILLAGE EPIDEMIOLOGICAL AND ENTOMOLOGICAL EVALUATIONS AFTER SIX YEARS OF ANNUAL MASS DRUG ADMINISTRATION WITH IVERMECTIN AND ALBENDAZOLE.

Frank O. Richards[1], Abel Eigege[2], Alphonsus Kal[2], Y. Sambo[2], J. Danboyi[2], B. Ibrahim[3], D. Kumbak[2], Gladys Ogah[4], D. Goshit[3], Ngozi A. Njepuome[5], John Umaru[2], Lindsay J. Rakers[1], Donald R. Hopkins[1], Emmanuel S. Miri[2]
[1]The Carter Center, Atlanta, GA, United States, [2]The Carter Center, Jos, Nigeria, [3]Plateau State Ministry of Health, Jos, Nigeria, [4]Nasarawa State Ministry of Health, Lafia, Nigeria, [5]Nigeria, Federal Ministry of Health, Abuja, Nigeria

3 p.m.

1118

INCREASING ADHERENCE TO MASS DRUG ADMINISTRATION FOR LYMPHATIC FILARIASIS – ORISSA STATE, INDIA

Paul T. Cantey[1], Jonathan Rout[2], Grace Rao[2], Soumendra Dhir[2], LeAnne Fox[1]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Church's Auxiliary for Social Action, Bhubaneswar, India

Symposium 141

Benign Tertian Malaria? Examining Severe Disease Caused by *Plasmodium vivax*

Rhythms II/III

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

Molecular diagnostics in a few clinical malaria studies in endemic areas ruled out falciparum malaria in patients experiencing otherwise typical severe and complicated falciparum malaria syndromes. Patients with hyperparasitemia, anemia, hypoglycemia, jaundice, respiratory distress, renal failure and seizures or coma had nested PCR findings negative for *P. falciparum* and positive for *P. vivax*. If more detailed studies of such patients also rule out infections like dengue, leptospirosis, viral encephalitides, the rickettsiae, bacterial sepsis and typhoid, the broad perception of infection by *P. vivax* as "benign" may require reassessment. This symposium examines the available evidence, both historic and contemporary, supporting the hypothesis that *P. vivax* mono-infection causes, at least occasionally and perhaps under specific conditions of exposure to infection(s), a spectrum of syndromes of severe & complicated malaria largely mirroring those of *P. falciparum*. Three separate research groups, all working at different sites on the island of New Guinea, report findings from recent or ongoing prospective hospital-based studies of vivax malaria from this heavily endemic zone. One group also presents pathophysiological studies of lung injury with vivax malaria. The symposium aims to provide clinicians & investigators with an understanding of the available evidence for a malignant vivax malaria, and, more importantly, the gaps in that body of evidence.

CHAIR

J. Kevin Baird
Oxford University, Jakarta, Indonesia

Nicholas J. White
Mahidol University, Bangkok, Thailand

1:30 p.m.

BENIGN TERTIAN MALARIA?

Robert W. Taylor
Oxford University Clinical Research Unit, Hanoi, Vietnam.

1:50 p.m.

SEVERE AND COMPLICATED *VIVAX* MALARIA: GOROKA, PAPUA NEW GUINEA

Blaise Genton
Swiss Tropical Institute, Basel, Switzerland

2:10 p.m.

SEVERE & COMPLICATED *VIVAX* MALARIA: TIMIKA, INDONESIAN PAPUA

Ric Price
Menzies School of Health Research and Charles Darwin University, Darwin, Australia

2:30 p.m.

SEVERE AND COMPLICATED *VIVAX* MALARIA: JAYAPURA, INDONESIAN PAPUA

Din Syafruddin
Eijkman Institute for Molecular Biology, Jakarta, Indonesia

2:50 p.m.

PATHOPHYSIOLOGY OF SEVERE *VIVAX* MALARIA

Nick Anstey
Menzies School of Health Research, Charles Darwin University, Darwin, Australia

Symposium 142

Global Enteric Multi-Center Study (GEMS): The Asian Sites And An Overall Progress Report

Waterbury
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

Diarrheal diseases remain the second most common cause of infant and young child deaths in developing countries. The Global Enteric Multi-Center Study funded by the Bill & Melinda Gates Foundation follows a common rigorous protocol to measure the burden of moderate and severe diarrheal illness and to identify etiologic agents (utilizing state of the art molecular diagnostic techniques) from cases and controls in three sites in Asia and five in sub-Saharan Africa. This symposium will provide descriptions and updates of data from the three Asian sites (Mirzapur, Bangladesh, Kolkata India and Sind Province, Pakistan), as well as an overview progress report and a compilation of data from all eight GEMS sites.

CHAIR

Myron M. Levine
University of Maryland School of Medicine, Baltimore, MD, United States

1:30 p.m.

PEDIATRIC DIARRHEAL DISEASE IN MIRZAPUR, BANGLADESH, A RURAL SETTING

ASG Faruque
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

1:55 p.m.

PEDIATRIC DIARRHEAL DISEASE IN SIND PROVINCE, PAKISTAN

Anita Zaidi
Aga Khan University Medical College, Karachi, Pakistan

2:20 p.m.

PEDIATRIC DIARRHEAL DISEASE IN KOLKATA, INDIA, AN URBAN SETTING

Dipika Sur
National Institute of Cholera and Enteric Diseases, Kolkata, India

2:45 p.m.

OVERVIEW OF THE FULL GEMS PROJECT AND INITIAL INSIGHTS ON BURDEN, CLINICAL PRESENTATIONS AND ETIOLOGY OF PEDIATRIC DIARRHEAL DISEASE IN DEVELOPING COUNTRIES IN ASIA AND SUB-SAHARAN AFRICA

Karen Kotloff
University of Maryland School of Medicine, Baltimore, MD, United States

Symposium 143

Information Technology for Research Collaboration and Training in Developing Countries

Napoleon A123
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

This symposium will explore how information technology is being used to facilitate research collaboration and training in developing countries in Africa, Asia and Latin America by infectious disease researchers supported by the Fogarty International Center's Global Infectious Research Training and the Informatics Training for Global Health programs. Presentations will describe the success and limitations of using currently available technologies for distance learning, internet conferencing, online curriculum and electronic data collection, analysis and exchange.

CHAIR

Barbara Sina
Fogarty International Center, National Institutes of Health, Bethesda, United States

1:30 p.m.

BUILDING RESEARCH AND HUMAN CAPACITY ONE LINK AT A TIME: THE NATIONAL LIBRARY OF MEDICINE'S INTERNATIONAL INFORMATION INTERVENTIONS

Julia Royall
National Library of Medicine/National Institutes of Health, Bethesda, MD, United States

1:55 p.m.

INTERNET CONFERENCING FOR INFECTIOUS DISEASE RESEARCH TRAINING IN COLOMBIA

Nancy Gore Saravia
CIDEIM, Cali, Colombia

2:20 p.m.

INFORMATICS TRAINING FOR MALARIA RESEARCH IN MALI

Frances Mather
Tulane University, New Orleans, LA, United States

2:45 p.m.

ONLINE CURRICULUM FOR PUBLIC HEALTH RESEARCH TRAINING IN INDIA

Gagandeep Kang
Christian Medical College, Vellore, India

Scientific Session 144

Malaria – Drug Resistance

Maurepas
Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR

Franka Teuscher
Queensland Institute of Medical Research, Enoggera, Brisbane, Australia

Chansuda Wongsrichanalai
USAID Regional Development Mission – Asia, Bangkok, Thailand

1:30 p.m.

1119

DELAYED *P. FALCIPARUM* PARASITE CLEARANCE FOLLOWING ARTESUNATE-MEFLOQUINE COMBINATION THERAPY IN THAILAND, 1997-2007

Saowanit Vijaykadga[1], Alisa P. Alker[2], Dokrak Tongkong[1], Malee Chansawang[1], Agat Nakavet[1], Thaiboonyong Puangpeeapichai[1], Sawat Cholpol[1], Arunya Pinyoratanachote[1], Sanya Sukkam[1], Wichai Satimai[1], Steven R. Meshnick[3], Chansuda Wongsrichanalai[4]
[1]Bureau of Vector Borne Diseases, Department of Diseases Control, Ministry of Public Health, Bangkok, Thailand, [2]Department of Medicine, University of North Carolina School of Medicine, Chapel Hill, NC, United States, [3]University of North Carolina School of Public Health, Chapel Hill, NC, United States, [4]USAID Regional Development Mission – Asia, Bangkok, Thailand

1:45 p.m.

1120

TREATMENT OF *P. FALCIPARUM* MALARIA WITH ARTESUNATE-MEFLOQUINE-PRIMAQUINE COMBINATION THERAPY IN TRAT PROVINCE, THAILAND

Wichai Satimai[1], Delia Bethell[2], Krisada Jongsakul[2], Bryan Smith[2], Sabaithip Sriwichai[2], Dokrak Tongkong[3], Mark Fukuda[2]
[1]Ministry of Public Health, Nonthaburi, Thailand, [2]Armed Forces Research Institute of the Medical Sciences, Bangkok, Thailand, [3]Office of Vector-Borne Disease Control, Maung, Thailand

2 p.m.

1121

DURATION AND RECOVERY RATES OF ARTEMISININ INDUCED DORMANCY IN *PLASMODIUM FALCIPARUM IN VITRO*

Franka Teuscher[1], Michelle Gatton[1], Nanhua Chen[2], Jennifer Peters[2], Dennis E. Kyle[3], Qin Cheng[2]
[1]Queensland Institute of Medical Research, Brisbane, Australia, [2]Australian Army Malaria Institute, Brisbane, Australia, [3]University of South Florida, Tampa, FL, United States

2:15 p.m.

1122

EXAMINATION OF THE MOLECULAR BASIS OF RESISTANCE TO ARTEMISININ DRUGS IN *PLASMODIUM FALCIPARUM*

Matthew S. Tucker[1], Jennifer Peters[2], Martin Nau[3], Zhinning Wang[3], Qin Cheng[4], Maryanne Vahey[3], Susan Lukas[1], Azliyati Azizan[1], Dennis E. Kyle[1]
[1]University of South Florida, Tampa, FL, United States, [2]Queensland Institute of Medical Research, Brisbane, Australia, [3]Walter Reed Army Institute of Research, Rockville, MD, United States, [4]Australian Army Malaria Institute, Enoggera, Australia

(ACMCIP Abstract)

2:30 p.m.

1123

ADAPTIVE COPY NUMBER EVOLUTION OF A KEY GENE IN THE FOLATE PATHWAY OF MALARIA PARASITES

Shalini Nair[1], Jigar Patel[2], Becky Miller[3], Marion Barends[4], Anchalee Jaidee[4], Mayfong Mayxay[5], Paul Newton[5], Francois Nosten[4], Mike Ferdig[3], Tim Anderson[1]
[1]Southwest Foundation for Biomedical Research, San Antonio, TX, United States, [2]Roche NimbleGen Inc, Madison, WI, United States, [3]University of Notre Dame, South Bend, IN, United States, [4]Shoklo Malaria Research Unit, Mae Sot, Thailand, [5]Wellcome Trust – Mahosot Hospital – Oxford Tropical Medicine Research Collaboration, Vientaine, Lao People's Democratic Republic

2:45 p.m.

1124

INTERMITTENT PRESUMPTIVE TREATMENT FOR MALARIA DURING PREGNANCY: REDUCED EFFICACY AND SELECTION FOR RESISTANCE

Whitney E. Harrington[1], Theonest K. Mutabingwa[2], Melissa Bolla[3], Bess Sorensen[3], Michal Fried[3], Patrick E. Duffy[3]
[1]University of Washington and Seattle Biomedical Research Institute, Seattle, WA, United States, [2]Muheza Designated District Hospital, Muheza, United Republic of Tanzania Tanzania, [3]Seattle Biomedical Research Institute, Seattle, WA, United States

3 p.m.

1125

ARTEMETHER-LUMEFANTRINE VERSUS DIHYDROARTEMISININ-PIPERAQUINE FOR TREATMENT OF UNCOMPLICATED FALCIPARUM MALARIA: A RANDOMIZED TRIAL TO GUIDE NATIONAL POLICY IN UGANDA

Yeka Adoke[1], Grant Dorsey[2], Moses R. Kamya[3], Ambrose Talisuna[4], Myers Lugemwa[4], John B. Rwakimari[4], Sarah G. Staedke[5], Philip J. Rosenthal[2], Fred W. Mangen[3], Hasifa Bukirwa[1]
[1]Uganda Malaria Surveillance Project, Kampala, Uganda, [2]University of California, San Francisco, CA, United States, [3]Makerere University, Kampala, Uganda, [4]Uganda Ministry of Health, Kampala, Uganda, [5]London School of Hygiene and Tropical Medicine, London, United Kingdom

Scientific Session 145

Viruses I

Bayside A

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR

Lina M. Moses
Tulane University, New Orleans, LA, United States

Rebeca Rico-Hesse
Southwest Foundation for Biomedical Research, San Antonio, TX, United States

1:30 p.m.

1126

CYTOKINE EXPRESSION IN A HAMSTER MODEL OF HANTAVIRUS PULMONARY SYNDROME

Martin H. Richter, Mary Louise Milazzo, Eduardo J. Eyzaguirre, Charles F. Fulhorst
University of Texas Medical Branch Galveston, Galveston, TX, United States

1:45 p.m.

1127

CLINICAL COURSE OF HANTAVIRUS CARDIOPULMONARY SYNDROME IN CHILEAN PATIENTS

Vial A. Pablo[1], M. Ferres[2], F. Valdivieso[1], I. Delgado[1], M. Calvo[3], C. Castillo[3], S. Donoso[3], E. Navarro[3], Y. Hernandez[3], R. Diaz[3], R. Riquelme[3], L. Scholtz[3], L. M. Noriega[1], V. Tomicic[1], E. Belmar[1], A. Cuiza[1], M. Tapia[3], J. J. Arriagada[3], E. Tassara[3], B. Hjelle[4], G. J. Mertz[4]
[1]Clinica Alemana Universidad del Desarrollo, Santiago, Chile, [2]Universidad Católica, Santiago, Chile, [3]Ministerio Salud, Santiago, Chile, [4]University of New Mexico, Albuquerque, NM, United States

2 p.m.

1128

GUAROA VIRUS: AN EMERGENT PATHOGEN AMONG HUMANS IN PERU

Patricia V. Aguilar[1], Cristhopher Cruz[1], Roxana Caceda[1], Carmen Lopez[1], William Mantilla[1], Alfredo Huaman[1], Douglas M. Watts[2], Carolina Guevara[1], Tadeusz Kochel[1]
[1]Naval Medical Research Center Detachment, Lima, Peru, [2]Center for Biodefense and Emerging Infectious Diseases University of Texas Medical Branch, Galveston, TX, United States

2:15 p.m.

1129

HTLV INFECTION IN AMAZONIAN COMMUNITIES IN PERU

Cesar Carcamo[1], Silvia M. Montano[2], Issac Alva[3], Roberto Orellana[1], Marina Chiappe[1], Patricia Garcia[1], Monica Nieto[2], Tadeusz Kochel[2], Antonio Bernabe[1], Joseph R. Zunt[4]
[1]Universidad Peruana Cayetano Heredia, Lima, Peru, [2]U.S. Naval Medical Research Center Detachment, Lima, Peru, [3]University of Washington National Institutes of Health Fogarty Fellow; Universidad Peruana Cayetano Heredia, Lima, Peru, [4]University of Washington, Seattle, WA, United States

2:30 p.m.

1130

KNOWLEDGE, ATTITUDES, AND PRACTICES REGARDING LASSA FEVER IN POST-CIVIL WAR SIERRA LEONE

Lina M. Moses[1], Chandra Carter[2], Kara Wilhite[2], Augustine Goba[3], Sheik Humarr Khan[3], Richard Fonnie[3], Sidiki Saffa[3], Lansana Kanneh[3], Victor Lungi[3], Willie Robert[3], Tiffany D. Imes[1], Hannah Duggan[4], Joshua Levy[4], Daniel G. Bausch[1]
[1]Tulane University Department of Tropical Medicine, New Orleans, LA, United States, [2]Xavier University, New Orleans, LA, United States, [3]Kenema Government Hospital and Lassa Laboratory, Kenema, Sierra Leone, [4]Tulane University School of Medicine, New Orleans, LA, United States

2:45 p.m.

1131

UNDERSTANDING BATS ACCESS TO DATE PALM SAP: IDENTIFYING PREVENTATIVE TECHNIQUES FOR NIPAH VIRUS TRANSMISSION

M.S.U. Khan, Nazmun Nahar, Rebeca Sultana, M. Jahangir Hossain, Emily S. Gurley, Stephen P. Luby
International Center for Diarrhoeal Disease Research, Dhaka, Bangladesh

3 p.m.

1132

RIFT VALLEY FEVER VIRUS INFECTION IN AFRICAN BUFFALO (*SYNCERUS CAFFER*) HERDS IN RURAL SOUTH AFRICA—EVIDENCE OF INTER-EPIZOOTIC TRANSMISSION

A. Desiree LaBeaud[1], Paul C. Cross[2], Wayne M. Getz[3], Charles H. King[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Northern Rocky Mountain Science Center, USGS, Bozeman, MT, United States, [3]University of California, Berkeley, CA, United States

Scientific Session 146

Mosquitoes – Biochemistry, Molecular Biology and Molecular Genetics I

Bayside BC

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR

William Black
Colorado State University, Fort Collins, CO, United States

Rollie Clem
Kansas State University, Manhattan, KS, United States

1:30 p.m.

1133

CHARACTERIZATION OF THE CELL DEATH MACHINERY IN *AEDES AEGYPTI*

Qingzhen Liu, **Rollie Clem**
Kansas State University, Manhattan, KS, United States

1:45 p.m.

1134

A ROLE FOR *AEDES AEGYPTI* DNR1 IN REGULATING APOPTOSIS

Casey Devore, John Means, Rollie Clem
Kansas State University, Manhattan, KS, United States

2 p.m.

1135

THE ROLE OF KEY PTEN SPLICE VARIANTS ON REPRODUCTION AND LIFESPAN IN THE MOSQUITO *AEDES AEGYPTI*

Anam Javed, Jessica Brown, Michael A. Riehle
University of Arizona, Tucson, AZ, United States

2:15 p.m.

1136

INSIGHT INTO METABOLIC PATHWAYS INVOLVED IN AMMONIA FIXATION, ASSIMILATION, AND EXCRETION IN *AEDES AEGYPTI* MOSQUITOES

Patricia Y. Scaraffia, Jun Isoe, Vicki H. Wysocki, Roger L. Miesfeld
University of Arizona, Tucson, AZ, United States

2:30 p.m.

1137

MOLECULAR ANALYSIS OF LIGHT PULSE STIMULATED BLOOD FEEDING INHIBITION IN *ANOPHELES GAMBIAE*

Suchismita Das, George Dimopoulos
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

2:45 p.m.

1138

RNA INTERFERENCE (RNAI) OF RIBOSOMAL PROTEIN S3A (RPS3A) SUGGESTS A LINK BETWEEN THIS GENE AND ARRESTED OVARIAN DEVELOPMENT DURING ADULT DIAPAUSE IN *CULEX PIPIENS*

Mijung Kim, David L. Denlinger
The Ohio State University, Columbus, OH, United States

3 p.m.

1139

TRANSCRIPTIONAL EFFECTS OF LONG-TERM BACTERIAL CHALLENGES DURING LARVAL DEVELOPMENT IN MOSQUITO VECTORS OF HUMAN DISEASE

Marco V. Neira Oviedo, Paul J. Linser
The Whitney Laboratory, University of Florida, St. Augustine, FL, United States

Symposium 147

Bridging Pathogenesis and Pathology in Malarial Immunity and Anemia

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom A

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

Linking parasite genomics and biology to disease pathologies and vaccines is urgently needed in malaria. This requires understanding the complexities of pathogenic mechanisms, acute and chronic disease pathologies and treatment strategies. This symposium will bring together strategies in the rational selection of malaria antigens for vaccine development, utilization of studies in model systems (murine, non human primates) and human infection and their role in disease pathologies such as anemia.

CHAIR

Kasturi Haldar
University of Notre Dame, Notre Dame, IN, United States

1:30 p.m.

MEROZOITE PARASITE PROTEINS LINKED TO INVASION, ANEMIA AND IMMUNITY

Anthony Holder
National Institute of Medical Research, London, United Kingdom

1:55 p.m.

RODENT MODELS OF IMMUNITY AND ANEMIA

Kasturi Haldar
University of Notre Dame, Notre Dame, United States

2:20 p.m.

HUMAN MALARIAL ANEMIA IN CONTEXT OF HUMAN ANEMIAS IN GENETIC DISORDERS

Mohan Narla
New York Blood Center, New York, NY, United States

2:45 p.m.

A NON HUMAN PRIMATE MODEL OF MALARIAL ANEMIA

Alberto Moreno
Emory University, Atlanta, GA, United States

Scientific Session 148

Protozoa

Grand Ballroom B

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR

Thaddeus Graczyk
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

1:30 p.m.

1140

UNDERSTANDING TRANSMISSION OF CRYPTOSPORIDIOSIS IN THE UNITED STATES, 2007: MOLECULAR ANALYSIS OF SPORADIC CRYPTOSPORIDIUM ISOLATES WITH A CASE REPORT OF A HUMAN INFECTION WITH *CRYPTOSPORIDIUM* HORSE GENOTYPE

Lihua Xiao[1], Michele Hlavsa[1], Jonathan Yoder[1], Christina Ewers[2], Theresa Dearen[1], Randall Nett[3], Stephanie Harris[4], Sarah Brend[5], Maghan Harris[5], Lisa Onischuk[2], Amy L. Valderrama[1], Shaun Cosgrove[6], Karen Xiavier[6], Nancy Hall[5], Sylvia Romero[7], Stephen Young[7], Stephanie P. Johnston[1], Michael Arrowood[1], Sharon Roy[1], Michael J. Beach[1]
[1]Centers for Disease Control and Prevention, Chamblee, GA, United States, [2]New Mexico Department of Health, Santa Fe, NM, United States, [3]Idaho Department of Health and Welfare, Boise, ID, United States, [4]EPA Region 10 Laboratory, Port Orchard, WA, United States, [5]Iowa Department of Public Health, Des Moines, IA, United States, [6]Colorado Department of Public Health and Environment, Denver, CO, United States, [7]Tricore Reference Laboratories, Albuquerque, NM, United States

1:45 p.m.

1141

TEMPOROSPATIAL DETERMINANTS OF CRYPTOSPORIDIOSIS IN UGANDAN CHILDREN

Siobhan M. Mor[1], Elena N. Naumova[2], James K. Tumwine[3], Saul Tzipori[1]
[1]Tufts Cummings School of Veterinary Medicine, North Grafton, MA, United States, [2]Tufts University School of Medicine, Boston, MA, United States, [3]Makerere University Medical School, Kampala, Uganda

2 p.m.

1142

SOURCES OF *TOXOPLASMA GONDII* INFECTION IN THE UNITED STATES

Jeffrey L. Jones[1], Valerie Dargelas[2], Jacquelin Roberts[1], Cynthia Press[2], Jack S. Remington[3], Jose G. Montoya[3]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Palo Alto Medical Foundation Research Institute, Palo Alto, CA, United States, [3]Palo Alto Medical Foundation Research Institute and Division of Infectious Diseases, Department of Medicine, Stanford University School of Medicine, Palo Alto and Stanford, CA, United States

2:15 p.m.

1143

URBAN FERAL PIGEONS (*COLUMBIA LIVIA*) AS A SOURCE FOR AIR-AND-WATERBORNE CONTAMINATION WITH *ENTEROCYTOZOON BIENEUSI* SPORES

Thaddeus Graczyk[1], Deirdre Sunderland[1], Ana Rule[1], Alexandre DaSilva[2], Iaci Moura[2], Autumn Girouard[1], Kellogg Schwab[1], Patrick Breysse[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, [2]Centers for Disease Control and Prevention, Atlanta, GA, United States

2:30 p.m.

1144

REDUCTION OF CEREBRAL INFECTION AND MORTALITY, AND EFFECTS ON TRANSPLACENTAL TRANSMISSION OF NEOSPORA CANINUM, UPON IMMUNIZATION OF MICE WITH RECOMBINANT NCROP2 ANTIGEN-BASED VACCINES

Andrew Hemphill, Karim Debache, Ferial Alaeddine, Christophe Guionaud Guionaud
University of Berne, Berne, Switzerland

2:45 p.m.

1145

THIOUREIDES OF 2-(PHENOXYMETHYL) BENZOIC ACID 4-R SUBSTITUTED: A NOVEL CLASS OF ANTI-MICROBIAL AND ANTI-PARASITIC AND ANTIMICROBIAL COMPOUNDS

Andrew Hemphill[1], Carmen Limban[2], Joachim Müller[1]
[1]University of Berne, Berne, Switzerland, [2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

3 p.m.

1146

EVALUATION OF THE CYTOTOXICITY OF MULTIPLE AMPHIPATHIC ANTI-MICROBIAL PEPTIDE COMBINATIONS TO POTENTIAL BACTERIAL HOSTS AND *TRYPANOSOMA CRUZI*

Annabeth Fieck, Ivy Hurwitz, Ravi Durvasula
University of New Mexico, Albuquerque, NM, United States

Symposium 149

Partnerships for the Development of Novel Vector Management Strategies (Part 1)

Grand Ballroom C

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

There is a pressing need to develop novel approaches for the management of vectors of human diseases such as malaria, dengue, yellow fever and others that are becoming more prevalent in many parts of the world. In response to this need, NIAID funded a series of projects focusing on diverse strategies to combat the vectors of malaria and arboviruses, domestically and abroad. During this symposium, the investigators heading each project will present the results of their work.

CHAIR

Adriana Costero
National Institutes of Health, Bethesda, MD, United States

1:30 p.m.

ENGINEERED RECOMBINANT BACTERIAL LARVICIDES WITH HIGHLY IMPROVED EFFICACY AGAINST MAJOR *ANOPHELINE* AND *CULEX* HUMAN DISEASE VECTORS

Brian Federici
University of California, Riverside, Riverside, CA, United States

1:55 p.m.

IMPACT OF LARVICIDING ON CLINICAL MALARIA IN THE GAMBIA

Steve W. Lindsay
Durham University, Durham, United Kingdom

2:20 p.m.

***ANOPHELES* BIOLOGY AND CONTROL IN A RICE ECOSYSTEM: A FIVE-YEAR REVIEW**

Robert J. Novak
University of Alabama, Birmingham, Birmingham, AL, United States

2:45 p.m.

MODE OF ACTION OF ITNS ON *ANOPHELES*: BEHAVIOR INTERACTS WITH LETHALITY

Edward Walker
Michigan State University, East Lansing, MI, United States

Symposium 150

Chagas Disease – *Trypanosoma cruzi* Infection. Women and Children, A Vulnerable Population

Grand Ballroom D

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

This symposium will address the diagnosis and management of *T. cruzi* infection among children and pregnant women. The focus on this population is based on the fact that a timely diagnosis of Chagas disease in children during the acute and chronic phase or as a result of congenital transmission allows us to prescribe effective treatment against infection. The goal of this symposium is to educate researchers and health care workers about Chagas disease, with a special focus on congenital transmission, which is one of the most important routes of *T. cruzi* tranmission in non-endemic countries, primarily in North America.

CHAIR

Pierre Buekens
School of Public Health and Tropical Medicine – Tulane University, New Orleans, LA, United States

James Maguire
Brigham and Women's Hospital, Boston, MA, United States

1:30 p.m.

PATHOGENY OF CONGENITAL TRANSMISSION OF *TRYPANOSOMA CRUZI*

Yves Carlier
Faculté de Médecine-CP 616, Brussels, Belgium

1:55 p.m.

MANAGEMENT OF PREGNANT WOMEN INFECTED WITH *TRYPANOSOMA CRUZI*

Faustino Torrico
San Simon University, School of Medicine, Cochabamba, Bolivia

2:20 p.m.

TIMELY DIAGNOSIS OF CONGENITAL *TRYPANOSOMA CRUZI* TRANSMISSION. ETIOLOGICAL TREATMENT, POSSIBILITIES AND DIFFICULTIES

Sergio Sosa-Estani
National Center for Research on Endemic Diseases, and Institute for Clinical Effectiveness and Health Policy, Buenos Aires, Argentina

2:45 p.m.

CONGENITAL TRANSMISSION OF *TRYPANOSOMA CRUZI* IN NORTH AMERICA

Pierre Buekens
Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Scientific Session 151

Intestinal and Tissue Helminths III: Nematodes

Grand Ballroom E

Wednesday, December 10, 1:30 p.m. – 3:15 p.m.

CHAIR

David Abraham
Thomas Jefferson University, Philadelphia, PA, United States

Mark Eberhard
Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States

1:30 p.m.

1147

LANDSCAPE GENETICS REVEALS FOCAL TRANSMISSION OF *ASCARIS LUMBRICOIDES*

Charles D. Criscione[1], Dan Sudimack[2], Joel D. Anderson[3], Janardan Subedi[4], Dev R. Rai[2], Ram P. Upadhayay[2], Bharat Jha[5], Kimberly D. Williams[6], Sarah Williams-Blangero[2], Timothy J. Anderson[2]
[1]Department of Biology, Texas A&M University, College Station, TX, United States, [2]Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio, TX, United States, [3]Perry R. Bass Marine Fisheries Research Station, Coastal Fisheries Division, Texas Parks and Wildlife Department, Palacios, TX, United States, [4]Department of Sociology and Gerontology, Miami University, Oxford, OH, United States, [5]Tribhuvan University Institute of Medicine, Kathmandu, Nepal, [6]Lifespan Health Research Center, Department of Community Health, Boonshoft School of Medicine, Wright State University, Dayton, OH, United States

1:45 p.m.

1148

FACTORS AFFECTING THE FECUNDITY OF *ASCARIS LUMBRICOIDES* AND THEIR IMPACT ON PATTERNS OF DENSITY DEPENDENCE

Martin Walker[1], Andrew Hall[2], Roy M. Anderson[1], Maria-Gloria Basáñez[1]
[1]Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom, [2]Centre for Public Health Nutrition, University of Westminster, London, United Kingdom

2 p.m.

1149

TEMPORAL DYNAMICS OF THE SEX RATIO OF *ASCARIS LUMBRICOIDES* AND ITS IMPLICATIONS FOR TRANSMISSION

Martin Walker[1], Maria-Gloria Basáñez[1], Andrew Hall[2], Roy M. Anderson[1]
[1]Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom, [2]Centre for Public Health Nutrition, University of Westminster, London, United Kingdom

2:15 p.m.

1150

EFFECT OF DEWORMING AND INTESTINAL HELMINTH (RE) INFECTIONS ON ATOPY AND ATOPIC DISEASE: LONGITUDINAL ANTHELMINTHIC TREATMENT STUDIES IN CUBAN SCHOOLCHILDREN

Meike Woerdemann[1], Joris Menten[1], Raquel Junco Diaz[2], Lenina Menocal Heredia[2], Aniran Ruiz Espinosa[3], Bruno Gryseels[1], Mariano Bonet Gorbea[2], **Katja Polman**[1]
[1]Institute of Tropical Medicine, Antwerp, Belgium, [2]National Institute of Hygiene, Epidemiology and Microbiology, Havana, Cuba, [3]Institute Pedro Kouri, Havana, Cuba

2:30 p.m.

1151

THE INTERPLAY BETWEEN HUMAN B CELLS, EOSINOPHILS AND HELMINTHS: A NOVEL ASPECT OF THE HYGIENE HYPOTHESIS

Ansu Mammen[1], Francis A. Farraye[1], YanMei Liang[1], William Harnett[2], Hyunjin Shin[1], Margaret Harnett[2], Barbara Nikolajczyk[1], **Lisa Ganley-Leal**[1]
[1]Boston University School of Medicine, Boston, MA, United States, [2]University of Strathclyde, Strathclyde, United Kingdom

2:45 p.m.

1152

NEUTROPHIL RECRUITMENT TO SOLUBLE EXTRACT FROM *STRONGYLOIDES STERCORALIS* IS IL-17 INDEPENDENT

David Abraham, Amy E. O'Connell, Kevin M. Redding
Thomas Jefferson University, Philadelphia, PA, United States

(ACMCIP Abstract)

3 p.m.

1153

DIFFERENTIAL GENE EXPRESSION BETWEEN INFECTIVE AND NON-INFECTIVE STAGE *STRONGYLOIDES STERCORALIS* LARVAE REVEALED BY MICROARRAY

Roshan Ramanathan[1], David Abraham[2], Timothy G. Myers[1], Thomas B. Nutman[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Thomas Jefferson University, Philadelphia, PA, United States

Break

Wednesday, December 10, 3:15 p.m. — 3:45 p.m.

Symposium 152

Progress and Challenges in Building an Antimalarial Drug Discovery Portfolio

Gallery

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

Medicines for Malaria Venture (MMV), a product development partnership, is supporting a number of discovery research projects aimed at designing new drugs targeting novel mechanisms for the treatment and prevention of malaria. MMV supports individual research projects and the mini-portfolios of a number of R&D organizations. These exciting projects aim to discover completely new ways of attacking the parasite. The aim of the symposium is to demonstrate how molecular biologists, parasitologists, biophysicists, medicinal chemists and pharmacists work together to seek to achieve their goals through new thinking and cutting-edge technologies. By illustrating how modern genomics, combinatorial chemistry and high throughput screening have revolutionized the process, we aim to push the research agenda to not only discovering novel ways of treating malaria, but ultimately also to developing tools to eradicate it.

CHAIR

Winston Gutteridge
Medicines for Malaria Venture, Geneva, Switzerland

Timothy Wells
Medicines for Malaria Venture, Geneva, Switzerland

3:45 p.m.

CHALLENGES IN DEVELOPING DHODH (DIHYDROOROTATE DEHYDROGENASE) AS AN ANTIMALARIAL DRUG TARGET

Margaret Phillips
University of Texas Southwestern Medical Center, Dallas, TX, United States

4:05 p.m.

MINING A NOVEL LEAD SERIES AND EXPLORING HOW CHEMISTRY CAN ALTER A DRUG'S PROPERTIES

José Garcia-Bustos
GlaxoSmithKline, Tres Cantos, Spain

4:25 p.m.

INVESTIGATING NATURAL PRODUCTS AND LARGE CHEMICAL LIBRARIES VIA HIGH THROUGHPUT SCREENING FOR POTENTIAL ANTIMALARIAL CANDIDATES

Thierry Diagana
Novartis – Institute for Tropical Diseases, Singapore, Singapore

4:45 p.m.

MAXIMIZING THE EXPERTISE AND INFRASTRUCTURE OF A PUBLIC-PRIVATE PARTNERSHIP IN ACCELERATING THE IDENTIFICATION OF ANTIMALARIAL CANDIDATES

Roger Wiegand
The Broad Institute of Harvard and MIT, Cambridge, MA, United States

5:05 p.m.

PANEL DISCUSSION AND CLOSING

Scientific Session 153

Filariasis IV – Epidemiology II

Rhythms I

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR

Yaya I. Coulibaly
MRTC, Bamako, Mali

Mwele N. Malecela
National Institute for Medical Research, Dar-es-salaam, United Republic of Tanzania.

3:45 p.m.

1154

ONE STEP FORWARD, TWO STEPS BACK? ASSESSING THE IMPACT OF A MISSED MDA CYCLE IN HAITI

Kimberly Y. Won[1], Madsen Beau de Rochars[2], Dominique Kyelem[3], Sandra J. Laney[4], Steven A. Williams[4], Thomas Streit[5], Patrick J. Lammie[1]
[1]Centers for Disease Control and Prevention, Division of Parasitic Diseases, Atlanta, GA, United States, [2]Hopital Sainte Croix, Leogane, Haiti, [3]Task Force for Child Survival and Development, Emory University, Decatur, GA, United States, [4]Clark Science Center, Department of Biological Sciences, Smith College, Northampton, MA, United States, [5]Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States

4 p.m.

1155

RATES OF MICROFILARIAL PRODUCTION BY *ONCHOCERCA VOLVULUS* ARE NOT CUMULATIVELY REDUCED BY MULTIPLE IVERMECTIN TREATMENTS

Christian Bottomley[1], Valerie Isham[2], Richard C. Collins[3], **Maria-Gloria Basáñez**[4]
[1]Department of Primary Care & Population Sciences, Royal Free Hospital, London, United Kingdom, [2]Department of Statistical Science, University College London, London, United Kingdom, [3]Sonoita, AZ, United States, [4]Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom

4:15 p.m.

1156

DYNAMICS OF *ONCHOCERCA VOLVULUS* MICROFILARIAL LOADS OF CAMEROONIAN PATIENTS SUBMITTED TO REPEATED (5 – 23) IVERMECTIN TREATMENTS OVER 14 YEARS (1994 – 2007)

Sebastien D. Pion[1], Hugues Nana-Djeunga[2], Catherine Bourguinat[3], Jacques Cabaret[4], Claude Charvet[4], Jacques Gardon[5], Joseph Kamgno[6], Flobert Njiokou[2], Roger Prichard[3], Samuel Wanji[7], Michel Boussinesq[1]
[1]Institut de recherche pour le Développement, Montpellier, France, [2]Université Yaoundé I, Yaoundé, Cameroon, [3]Institute of Parasitology, McGill University, Saint Anne de Bellevue, QC, Canada, [4]Institut National de la Recherche Agronomique, Tours – Nouzilly, France, [5]Institut de recherche pour le Développement, La Paz, Bolivia, [6]National Onchocerciasis Task Force, Yaoundé, Cameroon, [7]Faculté des Sciences, Université de Buéa, Buéa, Cameroon

4:30 p.m.

1157

PROGRESS TOWARD LYMPHATIC FILARIASIS (LF) ELIMINATION IN PLATEAU AND NASARAWA STATES, NIGERIA: INTEGRATED POPULATION-BASED PREVALENCE SURVEYS AFTER SIX YEARS MASS DRUG ADMINISTRATION

Jonathan D. King[1], Abel Eigege[2], John Umaru[2], Nimzing Jip[2], Emmanuel Miri[2], Paul Emerson[1], D. Danjuma Goshit[3], Gladys G. Ogah[4], N. Njepuome[5], Frank Richards[1]
[1]The Carter Center, Atlanta, GA, United States, [2]The Carter Center, Jos, Nigeria, [3]Plateau State Ministry of Health, Jos, Nigeria, [4]Nasarawa State Ministry of Health, Lafia, Nigeria, [5]Nigeria Federal Ministry of Health, Abuja, Nigeria

4:45 p.m.

1158

LONG TERM REDUCTION OF *WUCHERERIA BANCROFTI* TRANSMISSION IN PAPUA NEW GUINEA AFTER CESSATION OF MASS DRUG ADMINISTRATION

Moses J. Bockarie[1], Melinda Susapu[2], Steven Paniu[2], Henry Dagoro[2], Daniel Tisch[1], Thomas Adiguma[2], William Kastens[1], Peter A. Zimmerman[1], Peter Siba[3], James W. Kazura[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]PNG Institute of Medical Research, Madang, Papua New Guinea, [3]PNG Institute of Medical Research, Goroka, Papua New Guinea

5 p.m.

1159

PROGRESS TOWARDS ELIMINATION OF ONCHOCERCIASIS AS PUBLIC HEALTH PROBLEM IN PROBLEMATIC AREAS IN WEST AFRICA

Wilma A. Stolk[1], Sake J. de Vlas[1], Laurent Yaméogo[2], J. Dik Habbema[1]
[1]Erasmus Medical Center, Rotterdam, Netherlands, [2]African Program for Onchocerciasis Control, Ouagadougou, Burkina Faso

5:15 p.m.

1160

ONCHOCERCIASIS ELIMINATION IN AFRICA: THE POSSIBILITY OF SUCCESS IN AN ISOLATED FOCUS IN SUDAN

Tong Chor[1], **Charles Mackenzie**[2], Mahdi Shamad[1], Alia Bilal[1], Kamal Hashim[1], Moses Katabarwa[3], Frank Richards[3]
[1]Minstry of Health, Khartoum, Sudan, [2]Michigan State University, East Lansing, MI, United States, [3]The Carter Center, Atlanta, GA, United States

Symposium 154

Dengue in International Travelers

Rhythms II/III

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

Dengue virus infection is increasingly recognized as one of the world's major emerging infectious diseases. Dengue is endemic in most tropical and subtropical countries, many of which are popular tourist destinations. International travelers have the potential both to acquire and to spread dengue virus infection. It is paramount that health care providers have an understanding of the epidemiology and risk, clinical spectrum, diagnosis, management and prevention of dengue in travelers.

CHAIR

Annelies Wilder-Smith
National University of Singapore, Singapore, Singapore

David O. Freedman
University of Alabama Birmingham, Birmingham, AL, United States

3:45 p.m.

EPIDEMIOLOGY OF DENGUE INFECTIONS: REASONS FOR EXPANSION

Duane Gubler
Asia-Pacific Institute of Tropical Medicine and Infectious Disease, Honolulu, HI, United States

4:10 p.m.

EPIDEMIOLOGY AND PREVENTION OF DENGUE IN INTERNATIONAL TRAVELERS

Annelies Wilder-Smith
National University of Singapore, Singapore, Singapore

4:35 p.m.

MANAGEMENT OF DENGUE IN RETURNING TRAVELERS

Paul A. Tambyah
National University of Singapore, Singapore, Singapore

5 p.m.

DENGUE VACCINES: IS THERE HOPE FOR TRAVELERS?

Bill Letson
International Vaccine Institute, Seoul, Republic of Korea

Symposium 155

Heterogeneity in West Nile Virus Transmission

Waterbury

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

West Nile virus (WNV) spread across North and Central America in less than five years with the unprecedented consequence of establishing endemic transmission cycles in diverse ecosystems and biomes, dramatically altering the risk of arbovirus transmission to humans and wildlife. Unlike the closely related St. Louis encephalitis virus, native to the Americas, WNV is able to overwinter in temperate areas, generate intense avian epizootics with high mosquito infection rates (10-20 percent), and "spills over" to numerous urban mammals. The temporal and geographic variability in incidence of human cases in the United States supports the hypotheses that regional biotic and abiotic factors regulate the intensity of WNV transmission. This symposium addresses mechanisms that govern the observed heterogeneity, particularly host and vector abundance, composition, and competency; vector infection rates and host viremia; and vector feeding pattern on reservoir and incidental hosts. Roger Nasci (co-chair) briefly summarizes the regional differences in human incidence of WNV in the United States. John Anderson explores the enzootic and epizootic nature of West Nile virus transmission in the northeastern United States. Harry Savage reports on the vector competency and host-seeking patterns in the Culex pipiens complex within a hybrid zone (Memphis, Tenn.). Marm Kilpatrick reviews West Nile virus risk assessment and important vectors in Colorado and the mid-Atlantic. Bill Reisen discusses the factors associated with transmission of West Nile virus across diverse landscapes in California. Richard Lampman summarizes the various perspectives of how host and vector heterogeneity impacts transmission cycles. These talks provide a forum where ASTMH members can address the wide range of ecological hypotheses presented in the recent literature on the topic of WNV epidemiology.

CHAIR

Roger S. Nasci
Centers for Disease Control and Prevention, Fort Collins, CO, United States

3:45 p.m.

INTRODUCTION: SPATIAL AND TEMPORAL HETEROGENEITY IN HUMAN CASES OF WEST NILE VIRUS IN THE UNITED STATES

Roger S. Nasci
Centers for Disease Control and Prevention, Fort Collins, CO, United States

3:55 p.m.

EPIZOOTIOLOGY OF WEST NILE VIRUS IN THE NORTHEASTERN U.S. (CONNECTICUT)

John Anderson
The Connecticut Agricultural Experiment Station, New Haven, CT, United States

4:15 p.m.

VECTOR COMPETENCY AND HOST-SEEKING PATTERNS IN THE *CULEX PIPIENS* COMPLEX WITHIN A HYBRID ZONE (MEMPHIS, TENNESSEE)

Harry M. Savage
Centers for Disease Control and Prevention, Ft. Collins, CO, United States

4:35 p.m.

WEST NILE VIRUS RISK ASSESSMENT AND IMPORTANT VECTORS IN COLORADO AND THE MID-ATLANTIC

A. Marm Kilpatrick
University of California, Santa Cruz, CA, United States

4:55 p.m.

FACTORS ENABLING THE TRANSMISSION OF WEST NILE VIRUS ACROSS THE DIVERSE LANDSCAPES OF CALIFORNIA

William Reisen
University of California, Davis, Davis, CA, United States

5:15 p.m.

SUMMARY: REVIEW OF THE ENVIRONMENTAL MECHANISMS GOVERNING THE INTENSITY OF WEST NILE VIRUS TRANSMISSION

Richard L. Lampman
Illinois Natural History Survey, Champaign, IL, United States

Symposium 156

Adaptive Strategies of *Yersinia pestis* to Persist during Epizootic and Interepizootic Periods

Napoleon A123

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

For the survival and persistence of *Yersinia pestis* in nature, this pathogen faces diverse challenges. It must colonize and productively infect two very different host environments, that of the flea vector and the vertebrate host. In addition, this transmission cycle must be maintained during both epizootic and inter-epizootic periods for long term maintenance of *Yersinia pestis*. This symposium will review different aspects of the adaptations of *Yersinia pestis* to the vector-borne lifestyle, both at the organismal level and at the epidemiological landscape level.

CHAIR

Christopher F. Bosio
Rocky Mountain Laboratories, National Institutes of Health, Hamilton, MT, United States

Rebecca J. Eisen
Centers for Disease Control and Prevention, Fort Collins, CO, United States

3:45 p.m.

SURVIVAL OF *YERSINIA PESTIS* IN HOST CELLS

James B. Bliska
State University of New York, Stony Brook, Stony Brook, NY, United States

4:10 p.m.

INTERACTIONS OF *YERSINIA PESTIS* WITH ITS FLEA VECTOR THAT UNDERLIE STABLE PLAGUE TRANSMISSION CYCLES

B. Joseph Hinnebusch
Rocky Mountain Laboratories, National Institutes of Health, Hamilton, MT, United States

4:35 p.m.

EVOLUTIONARY HISTORY OF *YERSINIA PESTIS* IN NORTH AMERICA

David Wagner
Northern Arizona University, Flagstaff, AZ, United States

5 p.m.

THE EPIDEMIOLOGICAL IMPLICATIONS OF RECENT ADVANCES IN PLAGUE ECOLOGY

Kenneth L. Gage
Centers for Disease Control and Prevention, Fort Collins, CO, United States

Symposium 157

Stopping Vector-Borne Diseases at the Bite: Recent Progress in Anti-Vector and Transmission-Blocking Vaccines and Drugs

Maurepas
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

Exciting new discoveries and control strategies have recently emerged that are moving anti-vector and transmission-blocking research forward. Both research avenues aim to prevent community-transmission of vector-borne diseases by inducing host blood components to target vector survival and/or vector-pathogen interactions. Recent mathematical models confirm the power that this approach can have on stemming certain vector-borne diseases. Even more importantly, modern molecular, genetic, and immunological assays are being applied in vector-pathogen systems to discover and test novel molecular targets in a variety of different vectors (including ticks, mosquitoes, and sandflies). This symposium will highlight these recent advancements and will help to bring together those in diverse vector-pathogen systems to share their experiences in this research.

CHAIR

Brian D. Foy
Colorado State University, Fort Collins, CO, United States

Peter Billingsley
Sanaria Inc., Rockville, MD, United States

3:45 p.m.

RECENT PROGRESS IN IDENTIFYING NOVEL ACARICIDAL AND TRANSMISSION-BLOCKING TARGETS IN TICKS

Katherine M. Kocan
Oklahoma State University, Stillwater, OK, United States

4:10 p.m.

ENDECTOCIDES AND MOSQUITO ANTIGENS THAT HIGHLIGHT THE POSSIBILITY OF CONTROLLING MALARIA AND ARBOVIRUSES THROUGH MOSQUITOCIDAL APPROACHES

Brian D. Foy
Colorado State University, Fort Collins, CO, United States

4:35 p.m.

DISCOVERY OF MALARIA PARASITE RECEPTORS IN MOSQUITO MIDGUTS THAT COULD BE TARGETED BY TRANSMISSION-BLOCKING VACCINES

Rhoel R. Dinglasan
Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States

5 p.m.

DISCOVERY OF LEISHMANIA PARASITE-SANDFLY INTERACTION TARGETS FOR TRANSMISSION-BLOCKING AND/OR SANDFLY-KILLING VACCINES

Jesus G. Valenzuela
National Institute of Allergy and Infectious Disease, National Institutes of Health, Bethesda, MD, United States

Scientific Session 158

Viruses II

Bayside A
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR

Kevin Myles
Virginia Tech, Blacksburg, VA, United States

Jorge E. Osorio
University of Wisconsin, Madison, WI, United States

3:45 p.m.

1161

VISUALIZATION OF MONKEYPOX VIRUS PATHOGENESIS BY *IN VIVO* IMAGING

Jorge E. Osorio[1], Keith P. Iams[1], Carol Meteyer[2], Nicola Pussini[2], Elizabeth Falendyz[1], Angela Londono-Navas[1], Tonie E. Rocke[2]
[1]University of Wisconsin, Madison, WI, United States, [2]USGS-National Wildlife Health Center, Madison, WI, United States

4 p.m.

1162

IDENTIFICATION AND RELATIVE ABUNDANCE OF SMALL RNAS IN ALPHAVIRUS INFECTED MOSQUITOES

Elaine M. Morazzani, Zach N. Adelman, Kevin M. Myles
Virginia Tech, Blacksburg, VA, United States

4:15 p.m.

1163

ALPHAVIRUS DERIVED SMALL RNAS MODULATE PATHOGENESIS IN DISEASE VECTOR MOSQUITOES

Kevin M. Myles, Michael R. Wiley, Elaine M. Morazzani, Zach N. Adelman
Virginia Tech, Blacksburg, VA, United States

4:30 p.m.

1164

TEMPORAL PATTERNS OF ROTAVIRUS GENOTYPE VARIATION IN RURAL, NORTHERN ECUADOR

Owen D. Solberg[1], Maria Eloisa Hasing[2], Gabriel Trueba[2], Joseph N. Eisenberg[3]
[1]University of California Berkeley, Berkeley, CA, United States, [2]Universidad San Francisco de Quito, Quito, Ecuador, [3]University of Michigan, Ann Arbor, MI, United States

4:45 p.m.

1165

MOLECULAR EVOLUTION OF CHIKUNGUNYA VIRUS IN WEST AFRICA AND EPIDEMIOLOGICAL IMPLICATIONS

Cheikh O. Diene[1], Ousmane Faye[1], Paolo M. Zanotto[2], Ngor Faye[3], Mawlouth Diallo[1], **Amadou A. Sall**[1]
[1]Institut Pasteur Dakar, Dakar, Senegal, [2]University of Sao Paulo, Sao Paulo, Brazil, [3]University Cheikh Anta Diop, Dakar, Senegal

5 p.m.

1166

DOUBLE INTRODUCTION OF HIGHLY PATHOGENIC AVIAN INFLUENZA H5N1 IN GHANA IN 2007

Magdi D. Saad[1], William Ampofo[2], Greogry Raczniak[1], Marshall Monteville[3], Buhari A. Oyofo[1], Jeffrey A. Tjaden[1]
[1]U.S. Naval Medical Research Unit No. 3, Cairo, Egypt, [2]Noguchi Memorial Institute of Medical Research, Accra, Ghana, [3]Naval Environmental Health Center (NEHC), Portsmouth, VA, United States

5:15 p.m.

1167

CASE FATALITY OF SEVERE ACUTE RESPIRATORY SYNDROME (SARS) IN MAINLAND CHINA AND ASSOCIATED RISK FACTORS

Sake J. de Vlas[1], Na Jia[2], Dan Feng[2], Jan Hendrik Richardus[1], Wu-Chun Cao[2]
[1]Erasmus MC, Rotterdam, Netherlands, [2]Beijing Institute of Microbiology and Epidemiology, Beijing, China

Scientific Session 159

Mosquitoes – Biochemistry, Molecular Biology and Molecular Genetics II

Bayside BC
Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR

Carlo Costantini
IRD/OCEAC, Yaounde, Cameroon

Alessandra della Torre
Univerity of Rome, Rome, Italy

3:45 p.m.

1168

HIGH HYBRIDIZATION RATE BETWEEN *ANOPHELES GAMBIAE* MOLECULAR FORMS AT THE WESTERN EXTREME OF THEIR RANGE HIGHLIGHTS POSSIBLE GENE-FLOW IN THE X-CHROMOSOME "SPECIATION ISLAND"

Alessandra Della Torre[1], Federica Santolamazza[1], Beniamino Caputo[1], Emiliano Mancini[1], Katinka Palsson[2], Davis Nwakanama[3], Musa Jawara[3], David Conway[3], Zhijian Tu[4], Vincenzo Petrarca[5], Joao Pinto[6]
[1]Dip. Scienze di Sanità Pubblica, Università Sapienza, Rome, Italy, [2]Department of Systematic Zoology, Evolutionary Biology Center, Uppsala University, Norbyvägen, Sweden, [3]Medical Research Council, Fajara, Gambia, [4]Department of Biochemistry, Virginia Polytechnic Institute and State University of Blacksburg, Blacksburg, VA, United States, [5]Dip. Genetica e Biologia Molecolare, Università Sapienza, Rome, Italy, [6]Centro de Malaria e outras Doenças Tropicais, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, Lisbon, Portugal

4 p.m.

1169

ECOLOGICAL DIVERGENCE AND REPRODUCTIVE ISOLATION ALONG AN URBANIZATION GRADIENT: HABITAT SEGREGATION OF *ANOPHELES GAMBIAE* MOLECULAR FORMS IN A FOREST AREA OF CAMEROON

Colince Kamdem[1], **Carlo Costantini**[1], Joachim Etouna[1], Diego Ayala[2], Jean-Pierre Agbor[1], Christophe Antonio-Nkondjio[1], Didier Fontenille[2], Nora J. Besansky[3], Frederic Simard[4]
[1]Institut de Recherche pour le Developpement (IRD)/ Organisation de Coordination pour la lutte contre les grandes Endemies en Afrique Centrale (OCEAC), Yaounde, Cameroon, [2]Institut de Recherche pour le Developpement (IRD), Montpellier, France, [3]Eck Family Center for Global Health and Infectious Diseases, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN, United States, [4]Institut de Recherche pour le Developpement (IRD)/Institut de Recherche en Sciences de la Sante (IRSS), Bobo-Dioulasso, Burkina Faso

4:15 p.m.

1170

A TEP1 MEDIATED RESPONSE IS REQUIRED BUT NOT SUFFICIENT FOR MELANIZATION OF *PLASMODIUM FALCIPARUM* IN THE *ANOPHELES GAMBIAE* MIDGUT

Alvaro Molina-Cruz[1], Corrie Ortega[2], Randall DeJong[2], Janneth Rodrigues[2], Giovanna Jaramillo-Gutierrez[2], Ekua Abban[2], Carolina Barillas-Mury[2]
[1]National Institutes of Health, Bethesda, MD, United States, [2]National Institutes of Health, Rockville, MD, United States

4:30 p.m.

1171

LARVAL ANOPHELINE MOSQUITO RECTA EXHIBIT A DRAMATIC CHANGE IN ION TRANSPORT PROTEINS IN RESPONSE TO SHIFTING SALINITY

Kristin E. Smith[1], Leslie A. VanEkeris[1], William R. Harvey[1], Peter J. Smith[2], Paul J. Linser[1]
[1]University of Florida, Saint Augustine, FL, United States, [2]BioCurrents Research Center, Program in Molecular Physiology, Marine Biological Center, Woods Hole, MA, United States

4:45 p.m.

1172

FUNCTIONAL CHARACTERIZATION OF A PLATELET AGGREGATION INHIBITOR FROM THE SALIVARY GLANDS OF *AEDES AEGYPTI*

Saravanan Thangamani[1], Venkata D. Boppana[1], Francisco Alarcon-Chaidez[1], Jianxin Sun[2], José M.C Ribeiro[3], Stephen K. Wikel[1]
[1]University of Connecticut Health Center, Farmington, CT; Current address: Department of Pathology, University of Texas Medical Branch, Galveston, TX, United States, [2]University of Connecticut Health Center, Farmington, CT, United States, [3]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, MD, United States

(ACMCIP Abstract)

5 p.m.

1173

SURVIVAL AND REPLICATION OF *WOLBACHIA PIPIENTIS* IN *ANOPHELES GAMBIAE*

Chaoyang Jin
Johns Hopkins Malaria Research Institute, Baltimore, MD, United States

(ACMCIP Abstract)

5:15 p.m.

1174

THE ROLE OF SERPINS IN MELANIZATION AND TOLL IMMUNE PATHWAY IN THE MOSQUITO, *AEDES AEGYPTI*

Zhen Zou, Sang Woon Shin, Alexander S. Raikhel
University of California Riverside, Riverside, CA, United States

(ACMCIP Abstract)

Symposium 160

Update from the Intermittent Preventive Treatment in Infants (IPTi) Consortium: Community Effectiveness, Status of Policy Recommendations and Future Directions

Grand Ballroom A

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

The symposium will provide an update on the progress of the IPTi Consortium. Information will be presented regarding the community effectiveness of IPTi with sulfadoxine-pyrimethamine in Tanzania. The findings of the Institute of Medicine (IOM) review of IPTi will be presented. The status of the policy review process at WHO will be reviewed, and the future of IPT as a malaria control strategy (in both infants and children) will be discussed. The history of the IPTi Consortium will be discussed as a model for quickly generating evidence for public health interventions.

CHAIR

Robert D. Newman
Centers for Disease Control and Prevention, Atlanta, GA, United States

Pedro Alonso
Barcelona Center for International Health Research, Barcelona, Spain

3:45 p.m.

LESSONS LEARNED FROM PILOT IPTI IMPLEMENTATION IN SOUTHERN TANZANIA

David Schellenberg
London School of Hygiene and Tropical Medicine, London, United Kingdom

4 p.m.

REPORT FROM THE INSTITUTE OF MEDICINE (IOM) REVIEW OF IPTI WITH SP

Myron M. Levine
University of Maryland School of Medicine Center for Vaccine Research, Baltimore, MD, United States

4:15 p.m.

IPT AS A PREVENTION STRATEGY FOR INFANTS AND CHILDREN: WHERE DO WE GO FROM HERE?

Robert D. Newman
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:30 p.m.

THE IPTI CONSORTIUM – A MODEL FOR ACCELERATING PROGRAMMATICALLY RELEVANT SCIENCE

Pedro Alonso
Barcelona Center for International Health Research, Barcelona, Spain

4:45 p.m.

PANEL DISCUSSION

Symposium 161

New Insights on Predictors of Cerebral Malaria Severity

Grand Ballroom B

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

Plasmodium falciparum can cause a diffuse encephalopathy known as cerebral malaria (CM), a major contributor to malaria associated mortality. Despite treatment, mortality due to CM can be as high as 30 percent, while 10 percent of survivors of the disease may experience short- and long-term neurological complications. The pathogenesis of CM and other forms of severe malaria is multi-factorial and involve cytokine and chemokine homeostasis, inflammation and vascular injury/repair. Identification of prognostic markers that can predict CM severity is urgently needed to enable development of better intervention. This symposium will provide insights and updates on recent findings that identify factors mediating CM that may have utility in accurately predicting risk and management of CM.

CHAIR

Jonathan K. Stiles
Morehouse School of Medicine, Atlanta, GA, United States

3:45 p.m.

NEW INSIGHTS ON CEREBRAL MALARIA MANAGEMENT (CLINICAL OBSERVATIONS)

Charles Newton
KEMRI/Wellcome Trust Collaborative Programme, Kilifi, Kenya

4:10 p.m.

COGNITIVE IMPAIRMENT AFTER CEREBRAL MALARIA IN CHILDREN

Chandy C. John
University of Minnesota, Minneapolis, MN, United States

4:35 p.m.

CEREBROSPINAL FLUID AND SERUM BIOMARKERS OF CEREBRAL MALARIA MORTALITY (SURVEY OF INDIAN AND AFRICAN PATIENTS)

Jonathan K. Stiles
Morehouse School of Medicine, Atlanta, GA, United States

5 p.m.

CHEMOKINE RECEPTOR CXCR3 AND ITS LIGANDS CXCL9 AND CXCL10 IN CEREBRAL MALARIA DEVELOPMENT (MURINE FUNCTIONAL STUDIES)

Andrew Luster
Massachussetts General Hospital, Charlestown, MA, United States

Symposium 162

Partnerships for the Development of Novel Vector Management Strategies (Part 2)

Grand Ballroom C

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

There is a pressing need to develop novel approaches for the management of vectors of human diseases such as malaria, dengue, yellow fever and others, which are becoming more prevalent in many parts of the world. In response to this need, NIAID funded a series of projects focusing on diverse strategies to combat the vectors of malaria and Arboviruses, both domestically and abroad. During this symposium, the investigators heading each project will present the results of their work.

CHAIR

Adriana Costero
National Institutes of Health, Bethesda, MD, United States

3:45 p.m.

PROGRESS TOWARD DEVELOPMENT OF AN ATTRACTANT-BAITED LETHAL OVITRAP FOR *AEDES AEGYPTI* CONTROL

Dawn M. Wesson
Tulane University, New Orleans, LA, United States

4:10 p.m.

CONTROL OF URBAN AND PERI-URBAN *CULEX* MOSQUITOES

Gregory C. Lanzaro
University of California, Davis, Davis, CA, United States

4:35 p.m.

MOLECULAR AND GENETIC BASIS OF PYRETHROID RESISTANCE IN *ANOPHELES FUNESTUS*, MAJOR MALARIA VECTOR IN AFRICA

Charles S. Wondji
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

5 p.m.

BEHAVIOR MODIFYING COMPOUNDS FOR DISEASE VECTOR CONTROL

John P. Grieco
Uniformed Services University, Bethesda, MD, United States

Symposium 163

Chagas Disease in the U.S.: How Much is Autochthonous?

Grand Ballroom D

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

This symposium will describe the history and current knowledge of the epidemiology of the parasite *Trypanosoma cruzi* in the U.S., including the vector-reservoir host cycle and human epidemiology. New information on authochthonous transmission in people and the current distribution of all human infections will be presented. One presentation will describe the experiences of the Chagas disease clinical center of excellence in Los Angeles.

CHAIR

Susan Montgomery
Centers for Disease Control and Prevention, Atlanta, GA, United States

Caryn Bern
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

OVERVIEW OF EPIDEMIOLOGY AND ECOLOGY OF *TRYPANOSOMA CRUZI* IN THE U.S., INCLUDING VECTORS AND RESERVOIRS

Sonia Kjos
Centers for Disease Control and Prevention, Atlanta, GA, United States

4:15 p.m.

***TRYPANOSOMA CRUZI* STRAIN DIFFERENCES FROM U.S. ISOLATES**

Michael Yabsley
University of Georgia, Athens, GA, United States

4:30 p.m.

AUTOCHTHONOUS RISK OF CHAGAS DISEASE IN THE U.S.; BLOOD DONOR SCREENING AND IMMIGRANT INFECTIONS

Paul Cantey
Centers for Disease Control and Prevention, Atlanta, GA, United States

5:30 p.m.

MEDICAL AND CLINICAL ASPECTS OF CHAGAS DISEASE IN AN AREA OF RELATIVELY HIGH PREVALENCE IN THE U.S.

Sheba Meymandi
David Geffen School of Medicine at UCLA, Sylmar, CA, United States

Scientific Session 164

Intestinal and Tissue Helminths IV

Grand Ballroom E

Wednesday, December 10, 3:45 p.m. – 5:30 p.m.

CHAIR

Raffi V. Aroian
University of California San Diego, La Jolla, CA, United States

Alex DaSilva
Centers for Disease Control and Prevention, Atlanta, GA, United States

3:45 p.m.

1175

CLINICAL DEVELOPMENT OF THE NA-ASP-2 HOOKWORM VACCINE IN PREVIOUSLY-INFECTED BRAZILIAN ADULTS

David J. Diemert[1], Jeffrey M. Bethony[2], Antonio G. Pinto[3], Janaine Freire[3], Helton Santiago[2], Rodrigo Correa-Oliveira[3], Peter J. Hotez[2]
[1]Sabin Vaccine Institute, Washington, DC, United States, [2]George Washington University, Washington, DC, United States, [3]Centro de Pesquisas Rene Rachou – FIOCRUZ, Belo Horizonte, Brazil

4 p.m.

1176

DEVELOPMENT OF A REAL-TIME PCR ASSAY FOR SPECIFIC DETECTION OF *ANGIOSTRONGYLUS CANTONENSIS* IN CLINICAL AND ENVIRONMENTAL SAMPLES

Ana Cristina A. da Silva[1], Yvonne Qvarnstrom[2], Henry S. Bishop[2], Carlos Graeff-Teixeira[1], Alexandre J. da Silva[2]
[1]PUCRS, Porto Alegre, Brazil, [2]Centers for Disease Control and Prevention, Division of Parasitic Diseases, NCZVED, Atlanta, GA, United States

(ACMCIP Abstract)

4:15 p.m.

1177

CRYSTAL PROTEINS AS A NEW CLASS OF ANTHELMINTICS

Raffi V. Aroian[1], Edward G. Platzer[2], Yan Hu[1], Chang-Shi Chen[1]
[1]University of California San Diego, La Jolla, CA, United States, [2]Univ Cal Riverside, Riverside, CA, United States

4:30 p.m.

1178

STUDIES OF TRIBENDIMIDINE MECHANISM OF ACTION AND RESISTANCE IN *CAENORHABDITIS ELEGANS*

Yan Hu[1], Ray Assaf[1], Emily Manalastas[1], Li Chen[1], Shuhua Xiao[2], Raffi V. Aroian[1]
[1]University of California, San Diego, La Jolla, CA, United States, [2]National Institute of Parasitic Diseases, Chinese Center for Disease Control, Shanghai, China

4:45 p.m.

1179

IMPACT OF INTESTINAL PARASITIC INFECTIONS ON VITAMIN A STATUS AMONG ABORIGINAL SCHOOLCHILDREN IN RURAL PENINSULAR MALAYSIA

Hesham M. Al-Mekhlafi[1], Johari Surin[1], Atiya Sallam[1], Ariffin Abdullah[1], Mohammed Mahdy[1], Che Abdullah Hasan[2]
[1]University of Malaya, Kuala Lumpur, Malaysia, [2]Ministry of Health, Putrajaya, Malaysia

5 p.m.

1180

HOW DO MASS CAMPAIGNS AFFECT DISTRICT HEALTH SERVICES? THE CASE OF A NATIONAL CAMPAIGN FOR NEGLECTED TROPICAL DISEASES IN MALI

Anna Cavalli, Katja Polman, Marjan Pirard, Marleen Boelaert, Monique Van Dormael
Institute of Tropical Medicine, Antwerp, Belgium

5:15 p.m.

1181

PREVALENCE OF SOIL-TRANSMITTED HELMINTHS IN 50 RICE FARMING VILLAGES OF THE SAMAR PROVINCE OF THE PHILIPPINES

Mushfiqur R. Tarafder[1], Hélène Carabin[1], Ernesto Balolong Jr.[2], Remigio Olveda[2], Veronica Tallo[2], Stephen T. McGarvey[3]
[1]College of Public Health, University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, [2]Research Institute for Tropical Medicine, Muntinlupa City, Philippines, [3]International Health Institute, Brown University, Providence, RI, United States

Plenary Session 165

Plenary Session IV: Presidential Address and ASTMH Annual Business Meeting

Grand Ballroom C
Wednesday, December 10, 6 p.m. – 7:30 p.m.

ASTMH presidential address and annual business meeting.

CHAIR

George Hillyer
University of Puerto Rico School of Medicine, San Juan, PR, United States

Edward T. Ryan
Massachusetts General Hospital, Boston, MA, United States

6 p.m.

INTRODUCTION

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

6:15 p.m.

MINDSHARE: WHAT THE HECK IS IT? WHY DO WE NEED IT? HOW DO WE GET IT?

Claire Panosian
UCLA School of Medicine, Los Angeles, CA, United States

6:45 p.m.

ASTMH ANNUAL BUSINESS MEETING

George Hillyer
University of Puerto Rico School of Medicine, San Juan, PR, United States

Poster Session C Dismantle

Armstrong Ballroom
Wednesday, December 10, 7 p.m. – 8 p.m.

Thursday, December 11

Registration

Napoleon Ballroom
Thursday, December 11, 7 a.m. – 10:30 a.m.

Cyber Cafe

Lagniappe
Thursday, December 11, 7 a.m. – 10:30 a.m.

Speaker Ready Room

Nottoway
Thursday, December 11, 7 a.m. – Noon

ASTMH Council Meeting

Grand Couteau
Thursday, December 11, 7:30 a.m. – 9:30 a.m.

Press Room

Ellendale/Evergreen
Thursday, December 11, 8 a.m. – Noon

Symposium 166

Latin America: Confronting Dengue in the XXI Century

Gallery
Thursday, December 11, 8 a.m. – 9:45 a.m.

Dengue is among the fastest expanding urban infectious diseases of the present time, with no vaccine, no therapeutic available and overall lack of understanding of its severe outcome from the point of view of its molecular basis. This situation requires bridging expertise from large areas of knowledge, including geography, epidemiology, public health, entomology, immunology, vaccinology, genomics, and structure and molecular biology, to try to solve this urgent health problem. Among the affected dengue areas of the world, Latin America has a complex political, social and health situation that may aggravate disease outcome. Due to the large-scale and impact of dengue in the region, urgent measures are required in areas of basic research and applied sciences. Particularly, in clinical research, there is a need to redefine dengue fever as hemorrhagic fever syndrome, evaluate immune evasion mechanisms, propose new therapeutics, study neutralizing antibody responses in the light of new data on viral genome variations, etc. This session will exhibit the reality of dengue research in Latin America in order to project future interventions. In the light of this discussion, worldwide organizations need to move forward as axes of knowledge-gatherers, and most importantly, as action generators in this region. Five experts in the field speak about first-hand experiences and present results from their clinical studies.

CHAIR

Jorge L Munoz-Jordan
Centers For Disease Control and Prevention, San Juan, Puerto Rico

Irene Bosch Blumenfeld
University of Massachusetts Medical School, Worcester, MA, United States

Jorge Muñoz-Jordán
Center for Disease Control and Prevention, San Juan, PR, United States

8 a.m.

INTRODUCTION

Jorge Muñoz-Jordán
Center for Disease Control and Prevention, San Juan, PR, United States

8:10 a.m.

DENGUE, CHALLENGES OF TODAY AND TOMORROW

Duane J. Gubler
University of Hawai'i at Manoa, Honolulu, HI, United States

8:30 a.m.

DENGUE IN BRAZIL

Pedro Vasconcelos
Instituto Evandro Chagas, Ministry of Health, Belém, Para, Brazil

8:50 a.m.

CLINICAL STUDIES OF DENGUE IN VENEZUELA

Norma de Bosch
Banco de Sagre de Caracas, Caracas, Venezuela

9:10 a.m.

PEDIATRIC DENGUE VACCINE INITIATIVE IN THE AMERICAS

Harold S. Margolis
Pediatric Dengue Vaccine Initiative, Seul, Republic of Korea

Symposium 167

Nipah and Hendra Viruses: Transmission, Pathogenesis, and Treatment

Waterbury
Thursday, December 11, 8 a.m. – 9:45 a.m.

Over the last decade, several new zoonotic paramyxoviruses have emerged from fruit bats to cause serious disease outbreaks in man and livestock. Hendra virus was the cause of fatal infections of horses and man in Australia in 1994, 1999 and 2004. Nipah virus infection was first reported in peninsular Malaysia and Singapore in 1998-1999 when it caused an outbreak of severe respiratory disease in pigs and fatal encephalitis in humans with high mortality rates (~ 40 percent). Spillover events of human Nipah infection have continued in this region, with outbreaks sporadically occurring in Bangladesh and West Bengal, India The outbreaks in Bangladesh were associated with a higher incidence of acute respiratory distress syndrome in conjunction with encephalitis, person-to-person transmission, and appeared to be associated with higher case fatality rates (~75 percent) than the original Malaysian outbreak. Because of their genetic constitution, virulence and wide host range, these viruses have been given Biosafety Level 4 status in a new genus Henipavirus within the family Paramyxoviridae. This symposium will cover the current knowledge of Hendra and Nipah virus ecology and epidemiology, with an emphasis on the role of fruit bats as a reservoir and the potential importance of person-to-person transmission in fueling outbreaks. Speakers will also present new findings on the mechanisms of henipavirus pathogenesis and discuss newly developed animal models and candidate treatment modalities.

CHAIR

Thomas Geisbert
National Emerging Infectious Diseases Laboratories Institute, Boston, MA, United States

Christopher Broder
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

8 a.m.

ECOLOGY AND EMERGENCE OF HENIPAVIRUSES

Jonathan Epstein
The Consortium for Conservation Medicine, New York, NY, United States

8:25 a.m.

PATHOLOGY AND PATHOGENESIS OF NIPAH VIRUS INFECTION

Sherif Zaki
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:50 a.m.

NIPAH AND HENDRA VIRUS RECEPTOR BINDING AND ENTRY

Christopher Broder
Uniformed Services University of the Health Sciences, Bethesda, MD, United States

9:15 a.m.

PASSIVE PROTECTION IN A NONHUMAN PRIMATE MODEL OF NIPAH VIRUS

Thomas Geisbert
National Emerging Infectious Diseases Laboratories Institute, Boston, MA, United States

Scientific Session 168

Malaria – Biology and Pathogenesis I

Napoleon A123
Thursday, December 11, 8 a.m. – 9:45 a.m.

CHAIR

Fiona E. Lovegrove
University of Toronto, Toronto, ON, Canada

Demba Sarr
Pasteur Institute of Dakar, Dakar, Senegal

8 a.m.

1182

NITRIC OXIDE DEPLETION AND ENDOTHELIAL DYSFUNCTION IN CHILDREN WITH MALARIA AND MARKED ANEMIA

Jacqueline Janka[1], Ousmane A. Koita[2], Maya Josepha[2], Broulayé Traoré[3], Fawaz Mzayek[4], Lansana Sangare[2], Ousmane Cissé[2], Laurel Mendelsohn[1], Xunde Wang[1], Henry Masur[1], Mark Gladwin[1], Donald J. Krogstad[4]
[1]National Institutes of Health, Bethesda, MD, United States, [2]University of Bamako, Bamako, Mali, [3]Hôpital Gabriel Touré, Bamako, Mali, [4]Tulane University, New Orleans, LA, United States

8:15 a.m.

1183

ANGIOPOIETIN-2, AN AUTOCRINE MEDIATOR OF ENDOTHELIAL ACTIVATION IS ASSOCIATED WITH PARASITE BIOMASS, ENDOTHELIAL DYSFUNCTION AND MORTALITY IN SEVERE FALCIPARUM MALARIA

Tsin W. Yeo[1], Daniel Lampah[2], Emiliana Tjitra[3], Retno Gitawati[3], Enny Kenangalem[4], Kim Piera[1], Ric Price[1], Stephen Duffull[5], David Celermajer[6], **Nick Anstey**[1]
[1]Menzies School of Health Research, Darwin, Australia, [2]Menzies-National Institutes of HealthRD Timika Malaria Research Program and District Ministry of Health, Timika, Papua, Indonesia, [3]National Institutes of Health Research and Development, Jakarta, Indonesia, [4]Menzies-National Institutes of HealthRD Timika Malaria Research Program, Timika, Papua, Indonesia, [5]University of Otago, Dunedin, New Zealand, [6]University of Sydney, Sydney, Australia

8:30 a.m.

1184

ANGIOPOEITIN-1 AND -2 AS NOVEL BIOMARKERS OF CEREBRAL MALARIA

Fiona E. Lovegrove[1], Erin I. Lafferty[1], Andrea Conroy[1], Nimerta Rajwans[1], Noppadon Tangpukdee[2], Srivicha Krudsood[2], Robert O. Opoka[3], Chandy John[4], W. Conrad Liles[1], Kevin C. Kain[1]
[1]McLaughlin-Rotman Centre for Global Health, McLaughlin *Centre for Molecular Medicine, University Health Network, University of Toronto, Toronto, ON, Canada, [2]Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, [3]Department of Paediatrics and Child Health, Makerere University, Kampala, Uganda, [4]Department of Pediatrics, University of Minnesota Medical School, Minneapolis, MN, United States*

8:45 a.m.

1185

ADAMTS13 DEFICIENCY WITH ELEVATED LEVELS OF ULTRA-LARGE AND ACTIVE VON WILLEBRAND FACTOR IN MALARIA

Quirijn de Mast[1], Andre J. van der Ven[1], Puji B. Asih[2], Din Syafruddin[2], Silvie Sebastian[3], Evelyn Groot[3], Philip G. de Groot[3], Rob Fijnheer[3]
[1]Radboud University Nijmegen Medical Center, Nijmegen, Netherlands, [2]Eijkman Institute for Molecular Biology, Jakarta, Indonesia, [3]University Medical Center Utrecht, Utrecht, Netherlands

9 a.m.

1186

SINGLE MOLECULAR FORCE SPECTROSCOPY STUDY OF *PLASMODIUM FALCIPARUM*-INFECTED ERYTHROCYTE CYTOADHERENCE TO ENDOTHELIAL RECEPTORS

Ang Li, Tong Seng Lim, Hui Shi, Jing Yin, Shyong Wei Tan, Chwee Teck Lim
National University of Singapore, Singapore, Singapore

9:15 a.m.

1187

C5A POTENTIATES DYSREGULATED INFLAMMATORY AND ANGIOGENIC RESPONSES IN PREGNANCY-ASSOCIATED MALARIA

Andrea L. Conroy[1], Constance Finney[1], Lena Serghides[1], Simon O. Owino[2], D. Channe Gowda[3], W. Conrad Liles[1], Julie M. Moore[2], Kevin C. Kain[1]
[1]University of Toronto, Toronto, ON, Canada, [2]Center for Tropical and Emerging Global Diseases and Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, GA, United States, [3]Department of Biochemistry and Molecular Biology, Pennsylvania State University, College of Medicine, Hershey, PA, United States

9:30 a.m.

1188

DIFFERENTIAL IMMUNOPATHOGENIC OUTCOMES OF *PLASMODIUM CHABAUDI* AS INFECTION DURING PREGNANCY IN A/J AND B6 MICE

Demba Sarr[1], Jayakumar Poovassery[2], Geoffrey Smith[1], Tamas Nagy[1], Julie M. Moore[1]
[1]University of Georgia, Athens, GA, United States, [2]University of Iowa, Ames, IA, United States

(ACMCIP Abstract)

Symposium 169

Drug Resistance in Helminth Parasites: Fact, Fiction and Uncertainty

Bayside A

Thursday, December 11, 8 a.m. – 9:45 a.m.

There are increasing reports of decreased drug efficacy or sub-optimal responses to treatment in parasitic helminth infections of humans, as well as emerging evidence of genetic changes in parasite populations that have been subjected to multiple rounds of anthelmintic treatment, suggestive of treatment-induced selection. At the same time, there are unprecedented efforts to implement mass drug administration on a global scale to control helminth infections in human populations. Anthelmintic resistance is now widespread in parasitic helminths of livestock and lessons can be learned from that experience. The symposium will explore methods that can be employed to monitor for drug resistance, examine the evidence that resistance may or may not be developing, assess the current level of monitoring for resistance, discuss the implications of resistance development for control programs and consider how mathematical models of drug resistance can help determine research questions that need addressing and inform policy, such that parasite control can be achieved yet resistance be delayed or managed.

CHAIR

Roger K. Prichard
McGill University, Sainte Anne-de-Bellevue, QC, Canada

Ray M. Kaplan
University of Georgia, Athens, GA, United States

8 a.m.

ANTHELMINTIC RESISTANCE IN SOIL TRANSMITTED HELMINTHS? CURRENT EVIDENCE, TOOLS FOR MONITORING AND RESEARCH NEEDS

James McCarthy
University of Queensland, Herston, Australia

8:25 a.m.

SHOULD WE BE CONCERNED ABOUT DRUG RESISTANCE DEVELOPING IN LYMPHATIC FILARIA?

Patrick Lammie
Centers for Disease Control and Prevention, Atlanta, GA, United States

8:50 a.m.

SUB-OPTIMAL RESPONSES TO IVERMECTIN IN ONCHOCERCA VOLVULUS: CURRENT SITUATION, FUTURE PROSPECTS

Michel Boussinesq
Institut de Recherche en Developpement, Montpelier, France

9:15 a.m.

THE DETECTION AND SPREAD OF ANTHELMINTIC RESISTANCE: LESSONS FROM MODELING

María-Gloria Basáñez
Imperial College, London, United Kingdom

Symposium 170

Progress Towards Understanding Fitness of Transgenic Mosquitoes

Bayside BC

Thursday, December 11, 8 a.m. – 9:45 a.m.

Genetic modification of mosquitoes offers a promising strategy for the prevention and control of mosquito-borne diseases. Although various genetically modified strains have been designed and established in the laboratory, the debate about the potential effects of genetic modification on mosquito fitness, and deployment for success for disease control, is significant. In this symposium, speakers will present their latest findings on the ecology of genetically modified mosquitoes, with special emphasis on the role of fitness in experimental, field and modeling studies of *Aedes aegypti*.

CHAIR

Laura C. Harrington
Cornell University, Ithaca, NY, United States

Constantianus J.M. Koenraadt
Wageningen University, Wageningen, Netherlands

8 a.m.

COMPETITION AMONG THE LARVAL STAGES OF WILD, INBRED AND TRANSGENIC *AE. AEGYPTI*

Constantianus J.M. Koenraadt
Wageningen University, Wageningen, The Netherlands.

8:25 a.m.

MALE FITNESS AND MATING BIOLOGY OF TRANSGENIC *AE. AEGYPTI*

Laura C. Harrington
Cornell University, Ithaca, NY, United States

8:50 a.m.

ASSESSING POPULATION REPLACEMENT IN THE LABORATORY AND FIELD CAGES

William C. Black
Colorado State University, Fort Collins, CO, United States

9:15 a.m.

IMPACT OF FITNESS OF TRANSGENIC AND WILD-TYPE *AE. AEGYPTI* IN POPULATION MODELS

Mathieu Legros
North Carolina State University, Raleigh, NC, United States

Scientific Session 171

Clinical Tropical Medicine III

Grand Ballroom C

Thursday, December 11, 8 a.m. – 9:45 a.m.

CHAIR
Patrick Blair
Naval Health Research Center, San Diego, CA, United States

Geoffrey Pasvol
Imperial College London, Harrow, United Kingdom

8 a.m.

1189

CLINICAL SYNDROMES OF *PLASMODIUM FALCIPARUM* MALARIA INFECTION IN KAMPALA, UGANDA: INITIAL RESULTS FROM THE CYTOADHERENCE IN PEDIATRIC MALARIA (CPM) CASE-CONTROL STUDY

Christine M. Cserti-Gazdewich[1], **Arthur Mpimbaza**[2], Aggrey Dhabangi[3], Charles Musoke[4], Isaac Ssewanyana[5], Henry Ddungu[6], Nicolette Barungi-Nabukeera[7], Deborah Nakiboneka-Ssenabulya[7], Walter H. Dzik[8]
[1]University Health Network/University of Toronto, Toronto, ON, Canada, [2]Uganda Malaria Surveillance Project, Kampala, Uganda, [3]Makerere University, Faculty of Medicine, Department of Child Health & Development Centre, Kampala, Uganda, [4]Mulago Hospital Acute Care Unit, Kampala, Uganda, [5]Joint Clinical Research Centre, CTL Laboratory, Kampala, Uganda, [6]Mulago Hospital, Department of Haematology, Kampala, Uganda, [7]Makerere University, Faculty of Medicine, Department of Paediatrics & Child Health, Kampala, Uganda, [8]Massachusetts General Hospital, Harvard University, Boston, MA, United States

8:15 a.m.

1190

THE LAMBARÉNÉ-ORGAN-DYSFUNCTION SCORE (LODS) IS A SIMPLE CLINICAL PREDICTOR FOR FATAL MALARIA IN AFRICAN CHILDREN

Raimund Helbok[1], Eric Kendjo[2], Saadou Issifou[2], Peter Lackner[3], Charles R. Newton[4], Maryvonne Kombila[5], Tsiri Agbenyega[6], Klaus Dietz[7], Kalifa Bojang[8], Erich Schmutzhard[3], Peter G. Kremsner[2]
[1]Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon; Innsbruck Medical University, Clinical Department of Neurology, Austria, [2]Medical Research Unit, Albert Schweitzer Hospital, Lambaréné, Gabon; Department of Parasitology, Institute of Tropical Medicine, University of Tübingen, Tübingen, Germany, [3]Innsbruck Medical University, Clinical Department of Neurology, Innsbruck, Austria, [4]Centre for Geographical Medicine, Kenya Medical Research Institute Kilifi, Kilifi, Kenya; Neuroscience Unit, Institute of Child Health, University College London, London, United Kingdom, [5]Department of Parasitology, Mycology and Tropical Medicine, Faculty of Medicine, University of Health Sciences Libreville, Libreville, Gabon, Gabon, [6]University of Science and Technology, School of Medical Science, Kumasi, Ghana, [7]Department of Medical Biometry, University of Tübingen, Tübingen, Germany, [8]Medical Research Council Laboratories, Banjul, Banjul, Gambia

8:30 a.m.

1191

SULFADOXINE-PYRIMETHAMINE VERSUS UNSUPERVISED ARTEMETHER-LUMEFANTRINE VERSUS UNSUPERVISED AMODIAQUINE-ARTESUNATE FIXED-DOSE FORMULATION FOR UNCOMPLICATED FALCIPARUM MALARIA IN BENINESE CHILDREN: A RANDOMIZED EFFECTIVENESS NON-INFERIORITY TRIAL

Jean-François Faucher[1], Agnes Aubouy[1], Adicat Adeothy[1], Justin Doritchamou[1], Hortense Kossou[2], Hyacinthe Amedome[3], Achille Massougbodji[4], Michel Cot[5], Philippe Deloron[5]
[1]IRD, Cotonou, Benin, [2]PNLP, Cotonou, Benin, [3]Ministry of Public health, Cotonou, Benin, [4]FSS, Cotonou, Benin, [5]IRD, Paris, France

8:45 a.m.

1192

RISK FOR SEVERE DISEASE IN ADULTS WITH *FALCIPARUM* MALARIA

Geoffrey Pasvol[1], Anastasia Phillips[2], Paul Bassett[2], Sebastian Szeki[2], Stanton Newman[3]
[1]Imperial College London, Harrow, United Kingdom, [2]Northwick Park Hospital, Harrow, United Kingdom, [3]University College London, London, United Kingdom

9 a.m.

1193

ASSESSING THE CARDIAC EFFECTS OF ARTESUNATE (AS) AND AMODIAQUINE (AQ) IN HEALTHY VOLUNTEERS IN A SAFETY AND PK, SINGLE DOSE, RANDOMISED, TWO PHASE CROSS OVER STUDY OF A NEW FIXED DOSE AS/AQ COMBINATION AND LOOSE AS + AQ

Walter Taylor[1], Mohamed Suhaimi[2], Siew Gab[2], Suresh Ramanathan[3], Sharif Mansor[3], Michel Vaillant[4], NW Sit[3], Piero Olliaro[5], Jean-Rene Kiechel[6], Viswerwaran Navaratnam[3]
[1]Oxford University, Hanoi, Vietnam, [2]Universiti Sains Malaysia, Kubang Kerian, Malaysia, [3]Universiti Sains Malaysia, Penang, Malaysia, [4]Centre for Health Studies, Luxembourg, Luxembourg, [5]WHO/TDR, Geneva, Switzerland, [6]DNDi, Geneva, Switzerland

9:15 a.m.

1194

INTRAVASCULAR HEMOLYSIS: A NEGLECTED MECHANISM OF NITRIC OXIDE QUENCHING, ENDOTHELIAL DYSFUNCTION AND IMPAIRED PERFUSION IN SEVERE *FALCIPARUM* MALARIA?

Tsin W. Yeo[1], Daniel Lampah[2], Emiliana Tjitra[3], Retno Gitawati[3], Enny Kenangalem[4], Kim Piera[1], Bert Lopansri[5], Don Granger[5], J Brice Weinberg[6], Ric Price[1], David Celermajer[7], Stephen Duffull[8], **Nick Anstey**[1]
[1]Menzies School of Health Research, Darwin, Australia, [2]MSHR-National Institutes of HealthRD Research Program and District Health Authority, Timika, Papua, Indonesia, [3]National Institutes of Health Research and Development, Jakarta, Indonesia, [4]MSHR-National Institutes of HealthRD Timika Research Program and District Health Authority, Timika, Papua, Indonesia, [5]University of Utah, Salt Lake City, UT, United States, [6]Duke University, Durham, NC, United States, [7]University of Sydney, Sydney, Australia, [8]University of Otago, Dunedin, New Zealand

9:30 a.m.

1195

PHARMACOKINETIC PROPERTIES OF CHLOROQUINE AND SULFADOXINE-PYRIMETHAMINE IN PREGNANCY

Harin A. Karunajeewa[1], Ivo Mueller[2], Madhu Page-Sharpe[1], Irwin Law[1], Sam Salman[1], Gomorrai Servina[2], Jovitha Lammey[2], Stephen Rogerson[3], Peter Siba[2], Kenneth F. Ilett[1], Timothy M. Davis[1]
[1]University of Western Australia, Perth, Australia, [2]Papua New Guinea Institute of Medical Research, Goroka, Papua New Guinea, [3]University of Melbourne, Melbourne, Australia

Scientific Session 172

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Immunoparasitology I

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom D

Thursday, December 11, 8 a.m. – 9:45 a.m.

CHAIR

Matthew Collins
University of Georgia, Athens, GA, United States

Constance A. Finney
University of Toronto, Toronto, ON, Canada

8 a.m.

1240

THE ROLE OF TNF AND MYD88 IN THE INDUCTION OF B CELL PATHOLOGY FOLLOWING *TRYPANOSOMA BRUCEI* INFECTION

Viki Bockstal[1], Patrick Guirnalda[1], Deborah Frenkel[1], Stefan Magez[2], Samuel Black[1]
[1]University of Massachusetts, Department of Veterinary and Animal Sciences, Amherst, MA, United States; [2]Flanders Interuniversity Institute for Biotechnology (VIB), Vrije Universiteit Brussels Laboratory of Cellular and Molecular Immunology, Department of Molecular and Cellular Recognition, Brussels, Belgium

8:15 a.m.

1196

CD8+ T CELL RESPONSES IN NONLYMPHOID TISSUE AND PARASITE CONTROL DURING *TRYPANOSOMA CRUZI* INFECTION

Matthew H. Collins, Rick L. Tarleton
University of Georgia, Athens, GA, United States

8:30 a.m.

1241

NEUTROPHILS ARE THE PREDOMINANT INITIAL HOST CELL FOR LEISHMANIA MAJOR AND ARE ESSENTIAL FOR THE ESTABLISHMENT OF SAND FLY TRANSMITTED INFECTION

Nathan C. Peters[1], Jackson G. Egen[2], Naglia Secundino[1], Alain Debrabant[3], Nicola Kimblin[1], Shaden Kamhawi[1], Phillip Lawyer[1], Ronald N. Germain[2], David Sacks[1]
[1]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Parasitic Diseases, Bethesda, MD, United States, [2]National Institutes of Health, National Institute of Allergy and Infectious Diseases, Laboratory of Immunology, Bethesda, MD, United States, [3]Division of Emerging and Transfusion Transmitted Diseases, OBRR, CBER, Food and Drug Administration, Bethesda, MD, United States

8:45 a.m.

1197

***LEISHMANIA BRAZILIENSIS* INTERACTION WITH DENDRITIC CELLS: DISTINCT ROLES FOR TLR2 AND TLR3**

Diego A. Vargas-Inchaustegui, Lijun Xin, Lynn Soong
University of Texas Medical Branch, Galveston, TX, United States

9 a.m.

1198

TLR INVOLVEMENT DURING EXPERIMENTAL MALARIA: IMPLICATIONS FOR BOTH ENDS OF THE CLINICAL SPECTRUM OF HUMAN DISEASE

Constance A. Finney, Ziyue Lu, W. Conrad Liles, Kevin C. Kain
University of Toronto, Toronto, ON, Canada

9:15 a.m.

1199

MOSQUITO RUNX4 IN THE IMMUNE REGULATION OF PPO GENES AND ITS EFFECT ON AVIAN MALARIA INFECTION

Sang Woon Shin, Zhen Zou, Kanwal Alvarez, Vladimir Kokoza, Alexander Raikhel
University of California Riverside, Riverside, CA, United States

9:30 a.m.

1200

STIMULATION OF TOLL-LIKE RECEPTOR 2 BY *PLASMODIUM FALCIPARUM* GLYCOSYLPHOSPHATIDYLINOSITOLS ENHANCES MACROPHAGE INTERNALIZATION OF PARASITIZED AND UNINFECTED ERYTHROCYTES

Laura Erdman, Kevin C. Kain
University of Toronto, Toronto, ON, Canada

Scientific Session 173

Kinetoplastida II: Epidemiology, Diagnosis and Treatment

Grand Ballroom E

Thursday, December 11, 8 a.m. – 9:45 a.m.

CHAIR

Frederick S. Buckner
University of Washington, Seattle, WA, United States

Peter J. Weina
Walter Reed Army Institute of Research, Silver Spring, MD, United States

8 a.m.

1201

CONGENITAL CHAGAS DISEASE TRANSMISSION IN SANTA CRUZ, BOLIVIA

Caryn Bern[1], Maritza Calderon[2], Carlos LaFuente[3], Gerson Galdos[4], Maria del Carmen Abastorflor[3], Hugo Aparicio[5], Mark Brady[5], Lisbeth Ferrufino[3], Manuela Verastegui[2], Robert H. Gilman[6], Cesar Naquira[2]
[1]Centers for Disease Control and Prevention, Atlanta, GA, United States, [2]Universidad Peruana Cayetano Heredia, Lima, Peru, [3]Hospital Universitario Japones, Santa Cruz, Bolivia, [4]Asociacion Benefica PRISMA, Lima, Philippines, [5]Asociacion Benefica PRISMA, Lima, Peru, [6]Johns Hopkins University School of Public Health, Baltimore, MD, United States

8:15 a.m.

1202

DIAGNOSTIC ACCURACY OF *LEISHMANIA* OLIGOC-TEST FOR THE DIAGNOSIS OF CUTANEOUS LEISHMANIASIS IN PERU

Diego Espinosa[1], Andrea K. Boggild[2], Stijn Deborggraeve[3], Thierry Laurent[4], Cristian Valencia[1], César Miranda-Verástegui[1], Alejandro Llanos-Cuentas[1], Thierry Leclipteux[4], Jean-Claude Dujardin[3], Philippe Büscher[3], Jorge Arévalo[1]
[1]Instituto de Medicina Tropical Tropical "Alexander von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru, [2]Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada, [3]Department of Parasitology, Institute of Tropical Medicine, Antwerp, Belgium, [4]Coris BioConcept, Gembloux, Belgium

8:30 a.m.

1203

EQUIVALENCE STUDY USING REDUCED DOSES OF ANTIMONY PLUS RECOMBINANT HUMAN GM-CSF COMPARED WITH ANTIMONY IN STANDARD DOSES FOR CUTANEOUS LEISHMANIASIS: A RANDOMIZED, DOUBLE BLIND STUDY

Roque P. Almeida[1], Maria Elisa A. Rosa[2], Josiane S. Carvalho[2], Julia Ampuero[3], Luis Henrique Guimaraes[2], Paulo R. Machado[2], Edgar M. Carvalho[2]
[1]Federal University of Sergipe, Aracaju-SE, Brazil, [2]Federal University of Bahia, Salvador-BA, Brazil, [3]Federal University of Brasilia, Brasilia-DF, Brazil

8:45 a.m.

1204

A NOVEL AND HIGHLY POTENT CLASS OF COMPOUNDS FOR THE TREATMENT OF TRYPANOSOMIASIS

Richard C. Thompson[1], Tanya Armstrong[1], Wayne M. Best[2], Susan Charman[3], Robert Don[4], Caroline Laverty[3], Giuseppe Luna[2], Colette Colette[2]
[1]Murdoch University, Murdoch, Australia, [2]Epichem Pty Ltd Murdoch, Australia, [3]Centre for Drug Candidate Optimisation, Monash University, Melbourne, Australia, [4]Drugs for Neglected Diseases Initiative, Geneva, Switzerland

9 a.m.

1205

AN2920, A NOVEL OXABORALE, SHOWS *IN VITRO* AND *IN VIVO* ACTIVITY AGAINST *TRYPANOSOMA BRUCEI*

Yvonne R. Freund[1], Jacob Plattner[1], Maha Abdulla[2], James McKerrow[2], Tana Bowling[3], Luke Mercer[3], Bakela Nare[3], Steven Wring[3], Robert Jacobs[3], Nigel Yarlett[4], Cyrus Bacchi[4], Louis Maes[5], Robert Don[6]
[1]Anacor Pharmaceuticals, Inc., Palo Alto, CA, United States, [2]Sandler Center, University of California San Francisco, San Francisco, CA, United States, [3]Scynexis, Inc., Research Triangle Park, NC, United States, [4]Haskins Laboratory, Pace University, New York, NY, United States, [5]University of Antwerp, Antwerp, Belgium, [6]Drugs for Neglected Diseases initiative, Geneva, Switzerland

9:15 a.m.

1206

SCREENING FDA APPROVED DRUGS FOR ACTIVITY AGAINST *TRYPANOSOMA CRUZI*: LOOKING FOR COMBINATION CHEMOTHERAPY FOR CHAGAS DISEASE

Frederick S. Buckner, Joseph D. Planer
University of Washington, Seattle, WA, United States

(ACMCIP Abstract)

9:30 a.m.

1207

ANTILEISHMANIAL ACTIVITY OF SELECTED FDA-APPROVED DRUGS IN A MURINE CUTANEOUS LEISHMANIASIS MODEL

David Saunders, Qiqui Li, Carlson Misty, Lisa Xie, Qiang Zheng, Jing Zhang, Juan Mendez, John Tally, Alan Magill, Grogl Max, Suping Jiang, Peter Weina
Walter Reed Army Institute of Research, Silver Spring, MD, United States

Coffee Break

Napoleon Ballroom
Thursday, December 11, 9:45 a.m. – 10:15 a.m.

Symposium 174

Measuring Disease Burden and Cost of Illness of Neglected Tropical Diseases: Lessons from a Multi-Country Dengue Study

Gallery
Thursday, December 11, 10:15 a.m. – Noon

This session will review challenges and solutions for measuring health impact and quality of life during an acute illness episode that affects children or adults. Challenges and solutions for merging and extrapolating survey and incomplete surveillance data on illness cases and deaths will be discussed. Participants will study methodological challenges and approaches for estimating cost of illness including costs of medical care and productivity losses from patients' illness and death and the family's time in providing care. Finally, presenters will explore approaches for combining information on illness episodes with data on vector control to obtain the total cost of dengue, and the implications for other neglected tropical diseases.

CHAIR

Jose A. Suaya
Brandeis University, Waltham, MA, United States

Donald S. Shepard
Brandeis University, Waltham, MA, United States

Scott B. Halstead
Uniformed Services University of the Health Scienc, North Bethesda, MD, United States

10:15 a.m.

INTRODUCTION

Jose Suaya
Brandeis University, Waltham, MA, United States

10:25 a.m.

INTRODUCTION

Scott B. Halstead
Uniformed Services University of the Health Science, North Bethesda, MD, United States

10:40 a.m.

ANALYZING THE HEALTH IMPACT OF DENGUE

Celina T. Martelli
Federal University of Goias, Goiana, Brazil

10:55 a.m.

ASSESSING QUALITY OF LIFE DURING A DENGUE ILLNESS EPISODE

Lucy C. Lum
University Malaya, Kuala Lumpur, Malaysia

11:10 a.m.

ESTIMATING COST OF DENGUE TREATMENT

Sukhontha Kongsin
Mahidol University, Bangkok, Thailand

11:25 a.m.

ESTIMATING COST OF DENGUE IN PUERTO RICO: COST PER EPISODE

Hamish Mohammed
Centers for Disease Control and Prevention, San Juan, PR, United States

11:40 a.m.

ESTIMATING COST OF DENGUE IN PUERTO RICO: AGGREGATE COST

Donald S. Shepard
Brandeis University, Waltham, MA, United States

Symposium 175

Viral Hemorrhagic Fevers

Waterbury
Thursday, December 11, 10:15 a.m. – Noon

Hemorrhagic fever viruses pose threats to human health in populations in endemic areas, as well as through potential use as bioterrorist agents. Ebola, Marburg, Lassa, and Rift Valley fever virus are among the agents of particular concern. Recent field research has shed light on the natural reservoirs and modes of transmission of many of these agents. Furthermore, intensive laboratory research has begun to produce candidate diagnostics, treatments and vaccines with the potential to drastically reduce case fatality rates and curtail outbreaks. Recent progress in the field of viral hemorrhagic fevers will be discussed.

CHAIR

Daniel G. Bausch
Tulane School of Public Health and Tropical Medicine, New Orleans, LA, United States

Thomas Geisbert
Boston University School of Medicine, Boston, MA, United States

10:15 a.m.

IS THE MYSTERY OF THE FILOVIRUS RESERVOIR SOLVED?

Jonathan Towner
Centers for Disease Control and Prevention, Atlanta, GA, United States

10:40 a.m.

RECOMBINANT DIAGNOSTICS FOR THE ARENAVIRUSES

Joseph Fair
Southern Research Institute, Birmingham, AL, United States

11:05 a.m.

EXPERIMENTAL THERAPIES

Brian Gowen
Utah State University, Logan, UT, United States

11:30 a.m.

VACCINES

Heinz Feldmann
Public Health Agency of Canada, Winnipeg, MB, Canada

Scientific Session 176

Malaria – Biology and Pathogenesis II

Napoleon A123
Thursday, December 11, 10:15 a.m. – Noon

CHAIR

Amanda K. Lukens
Harvard School of Public Health, Boston, MA, United States

Kayla T. Wolofsky
University of Toronto, Toronto, ON, Canada

10:15 a.m.

1208

ROLE OF RED CELL COMPLEMENT REGULATORY PROTEINS IN ERYTHROPHAGOCYTOSIS DURING *PLASMODIUM CHABAUDI* INFECTION

Juliana V. Harris[1], Catherine N. Stracener[1], Xiaobo Wu[2], Dirk Spitzer[2], John P. Atkinson[2], José A. Stoute[1]
[1]Uniformed Services University, Bethesda, MD, United States, [2]Washington University, St. Louis, MO, United States

(ACMCIP Abstract)

10:30 a.m.

1209

ATP DEPLETION OF RED BLOOD CELLS RECAPITULATES THE PHENOTYPE ASSOCIATED WITH PYRUVATE KINASE DEFICIENCY AND PROTECTS AGAINST *PLASMODIUM FALCIPARUM* MALARIA

Kodjo Ayi[1], Conrad W. Conrad[2], Kevin C. Kain[3]
[1]Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health, University of Toronto, Toronto, ON, Canada, [2]Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine; Institute of Medical Sciences, Toronto, ON, Canada, [3]Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine; Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada

10:45 a.m.

1210

AFM STUDY OF THE EXTRACELLULAR AND THE CYTOPLASMIC SURFACES OF *PLASMODIUM FALCIPARUM* INFECTED ERYTHROCYTE MEMBRANES

Hui Shi, Ang Li, Jing Yin, Kavin Tan, Chwee Teck Lim
National University of Singapore, Singapore, Singapore

11 a.m.

1211

IDENTIFICATION OF A NOVEL FAMILY OF VARIANT SURFACE ANTIGENS IN *PLASMODIUM FALCIPARUM*

Amanda K. Lukens[1], Daniel E. Neafsey[2], Stephen F. Schaffner[2], Daniel J. Park[2], Philip Montgomery[2], Sarah K. Volkman[1], Pardis C. Sabeti[2], Danny A. Milner, Jr.[1], Johanna P. Daily[1], Ousmane Sarr[3], Daouda Ndiaye[3], Omar Ndir[3], Soulyemane Mboup[3], Nicole Stange-Thomann[2], Roger C. Wiegand[2], Bruce W. Birren[2], Daniel L. Hartl[4], James E. Galagan[2], Eric S. Lander[2], Dyann F. Wirth[1]
[1]Harvard School of Public Health, Boston, MA, United States, [2]The Broad Institute of MIT and Harvard, Cambridge, MA, United States, [3]Cheikh Anta Diop University, Dakar, Senegal, [4]Harvard University, Cambridge, MA, United States

(ACMCIP Abstract)

11:15 a.m.

1213

GENOTYPIC DIFFERENCES IN *PLASMODIUM FALCIPARUM* FROM DIFFERENT MALARIAL DISEASE STATES IN CHILDREN FROM UGANDA

David M. Menge[1], Robert O. Opoka[2], Chandy C. John[3]
[1]Center for Infectious Diseases and Microbiology Translational Research, University of Minnesota, Minneapolis, MN, United States, [2]Department of Paediatrics and Child Health, Makerere University Medical School and Mulago Hospital, Kampala, Uganda, [3]Global Pediatrics Program, University of Minnesota, Minneapolis, MN, United States

11:30 a.m.

1214

ABO POLYMORPHISM AND *PLASMODIUM FALCIPARUM* MALARIA

Kayla T. Wolofsky[1], Kodjo Ayi[2], Conrad W. Liles[3], Christine M. Cserti-Gazdewich[4], Kevin C. Kain[5]
[1]McLaughlin-Rotman Centre for Global Health; Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada, [2]Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health, University of Toronto, Toronto, ON, Canada, [3]Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine; Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada, [4]Blood Transfusion Laboratory, Toronto General Hospital; Department of Laboratory Hematology, University of Toronto, Toronto, ON, Canada, [5]Tropical Disease Unit, McLaughlin-Rotman Centre for Global Health and Molecular Medicine; Institute of Medical Science, University of Toronto, Toronto, ON, Canada

Symposium 177

Sepsis in the Tropics

Bayside A

Thursday, December 11, 10:15 a.m. – Noon

Sepsis is an increasingly recognized cause of death in the tropics, particularly in sub-Saharan Africa where the burden of HIV infection contributes to the susceptibility to invasive bacterial infections. However, the ability to treat critical illnesses, including sepsis, severe sepsis, and septic shock, is often limited by lack of human and material resources in tropical regions. A better understanding of the current state of intensive care in the tropics is needed to improve capacity to treat these illnesses. Furthermore, successful empirical treatment of sepsis relies upon an understanding of local microbiology and resistance patterns which differ geographically between tropical and non-tropical regions, as well as within the tropics. The interaction of malaria and HIV infection with invasive bacterial infections must also be considered. Additionally, due to lack of resources, different strategies regarding diagnosis and treatment of sepsis are required compared to resource rich regions where comprehensive but heavily resource dependent early goal-directed therapy and sepsis "bundles" are standard of care. This symposium will address these topics and strategies for managing the septic patient in the tropics.

CHAIR

Christopher C. Moore
University of Virginia, Charlottesville, VA, United States

W. Michael Scheld
University of Virginia, Charlottesville, VA, United States

10:15 a.m.

THE CURRENT STATE OF INTENSIVE CARE IN THE TROPICS

Patrick Banura
Masaka Regional Referral Hospital, Masaka, Uganda

10:40 a.m.

THE MICROBIOLOGY OF SEPSIS IN THE TROPICS

Christopher Moore
University of Virginia, Charlottesville, VA, United States

11:05 a.m.

SPECIAL CONSIDERATIONS FOR SEPSIS IN THE TROPICS: AGE, GEOGRAPHY, AND HIV IMMUNE RECONSTITUTION SYNDROME

David Boulware
University of Minnesota, Minneapolis, MN, United States

11:30 a.m.

THE DIAGNOSIS AND MANAGEMENT OF SEPSIS IN THE TROPICS

Shevin T. Jacob
University of Washington, Seattle, WA, United States

Scientific Session 178

Mosquitoes – Insecticide Resistance and Control

Bayside BC

Thursday, December 11, 10:15 a.m. – Noon

CHAIR

Audrey Lenhart
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Charles Wondji
Liverpool School of Tropical Medicine, Liverpool, United Kingdom

10:15 a.m.

1216

TOXICITY OF HIGHLY SELECTIVE CARBAMATES TOWARDS THE MALARIA MOSQUITO, *ANOPHELES GAMBIAE*

James M. Mutunga, Troy D. Anderson, Bryan T. Jackson, Joshua A. Hartsel, Sally L. Paulson, Paul R. Carlier, Jeffrey R. Bloomquist
Virginia Tech, Blacksburg, VA, United States

10:30 a.m.

1217

COMBINING ORGANOPHOSPHATES AND REPELLENTS ON FABRICS: A PROMISING STRATEGY TO BETTER CONTROL PYRETHROID RESISTANT MOSQUITOES

Cédric Pennetier[1], Costantini Carlo[2], Chabi Joseph[3], Dabiré Rock[4], Corbel Vincent[1], Lapied Bruno[5], Pagès Frédéric[6], Hougard Jean-Marc[3]
[1]Institut de Recherche pour le Développement, Montpellier, France, [2]Institut de Recherche pour le Développement, Bobo-Dioulasso, Burkina Faso, [3]Institut de Recherche pour le Développement, Cotonou, Benin, [4]Institut de Recherche en Sciences de la Santé (IRSS), Bobo-Dioulasso, Burkina Faso, [5]Université d'Angers, Angers, France, [6]Institut de Médecine Tropicale du service de Santé des Armées, Marseille, France

10:45 a.m.

1218

DEVELOPMENT OF A NOVEL FORMULATION FOR USE IN INDOOR RESIDUAL SPRAY PROGRAMS

John R. Lucas[1], Takaaki Itoh[2], Yoshinori Shono[2], Luc Djogbénou[3], Jean-Marc Hougard[3]
[1]Sumitomo Chemical Co. (UK) Plc, London, United Kingdom, [2]Sumitomo Chemical Co., Ltd., Environmental Health Division, Tokyo, Japan, [3]Centre de Recherches Entomologiques de Cotonou (CREC), Cotonou, Benin

11 a.m.

1220

EFFICACY OF INSECTICIDE TREATED MATERIALS (ITMS) FOR DENGUE CONTROL IN LATIN AMERICA AND ASIA: CLUSTER RANDOMIZED CONTROLLED TRIALS IN VENEZUELA AND THAILAND

Audrey Lenhart[1], Elci Villegas[2], Carmen Elena Castillo[2], Yuwadee Trongtokit[3], Chamnarn Apiwathnasorn[3], Neal Alexander[4], Philip J. McCall[1]
[1]Liverpool School of Tropical Medicine, Liverpool, United Kingdom, [2]Universidad de los Andes, Trujillo, Venezuela, [3]Mahidol University, Bangkok, Thailand, [4]London School of Hygiene and Tropical Medicine, London, United Kingdom

11:15 a.m.

1221

REDUCED EFFICACY OF PYRETHROID SPACE SPRAYS FOR DENGUE CONTROL IN PYRETHROID RESISTANCE AREA (MARTINIQUE)

Sebastien Marcombe[1], Alexandre Carron[2], Frédéric Darriet[1], Manuel Etienne Etienne[3], Michel Tolosa Tolosa[2], Marie-Michèle Yp-Tcha[3], Christophe Lagneau[2], André Yébakima[1], Vincent Corbel[1]
[1]Institut de Recherche pour le Développement, Montpellier, France, [2]Entente Interdépartementale pour la Démoustication du littoral méditerranéen (EID Meditérranée), Montpellier, France, [3]Centre de Démoustication, Fort de France, Martinique

Scientific Session 179

Clinical Tropical Medicine IV

Grand Ballroom C

Thursday, December 11, 10:15 a.m. – Noon

CHAIR

Christina Greenaway
SMBD Jewish General Hospital, Montréal, QC, Canada

Parsotam Hira
Kuwait University, Kuwait City, Kuwait

10:15 a.m.

1222

FATAL OUTBREAK FROM CONSUMING *XANTHIUM STRUMARIUM* SEEDLINGS DURING TIME OF FOOD SCARCITY IN NORTHEASTERN BANGLADESH

Emily S. Gurley[1], Mahmudur Rahman[2], M. Jahangir Hossain[1], Nazmun Nahar[1], Be-Nazir Ahmed[2], Rebeca Sultana[1], Selina Khatun[2], M. Sabbir Haider[2], M. Saiful Islam[1], Utpal K. Mondal[1], Stephen P. Luby[1]
[1]International Center for Diarrhoeal Disease Research, B, Dhaka, Bangladesh, [2]IEDCR, Ministry of Health and Family Welfare, Dhaka, Bangladesh

10:30 a.m.

1223

EFFECT OF READY-TO-USE-THERAPEUTIC FOOD SUPPLEMENTATION ON THE NUTRITIONAL STATUS, MORTALITY AND MORBIDITY OF CHILDREN 6 TO 60 MONTHS IN NIGER: A CLUSTER RANDOMIZED TRIAL

Sheila Isanaka[1], Nohelly Nombella[2], Ali Djibo[3], Marie Poupard[2], Dominique Van Beckhoven[2], Valerie Gaboulaud[2], Philippe J. Guerin[2], **Rebecca F. Grais**[2]
[1]Departments of Epidemiology and Nutrition, Harvard School of Public Health, Boston, MA, United States, [2]Epicentre, Paris, France, [3]Ministry of Health, Niamey, Niger

10:45 a.m.

1224

PATHOGENESIS OF HAEMORRHAGE ASSOCIATED WITH DENGUE INFECTION IN ADULTS IN VIETNAM

Dinh The Trung[1], Tran Tinh Hien[2], Le Thi Thu Thao[2], Nguyen Minh Dung[2], Tran Van Ngoc[2], Robert Goldin[3], Edward Tuddenham[4], Cameron Simmons[5], Jeremy Farrar[5], Bridget Wills[5]
[1]University of Medicine and Pharmacy of Ho Chi Minh City, Ho Chi Minh City, Vietnam, [2]Hospital for Tropical Diseases, Ho Chi Minh city, Vietnam, [3]Department of Investigative Sciences, Imperial College, London, United Kingdom, [4]Katherine Dormandy Haemophilia Centre and Thrombosis Unit University College, London, United Kingdom, [5]Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Ho Chi Minh city, Vietnam

11 a.m.

1225

IMPACT OF MASS AZITHROMYCIN TREATMENT ON THE PREVALENCE OF ACTIVE TRACHOMA AND OCULAR *CHLAMYDIA TRACHOMATIS* IN THE GAMBIA

Emma Harding-Esch[1], Martin J. Holland[1], Ansumana Sillah[2], Sandra Molina[1], Aura Aguirre-Andreasen[1], Paul Snell[3], Tansy Edwards[1], Robin L. Bailey[1], David C. Mabey[1]
[1]London School of Hygiene and Tropical Medicine, London, United Kingdom, [2]National Eye Care Programme, Banjul, Gambia, [3]Medical Research Council Laboratories, Fajara, Gambia

11:15 a.m.

1226

EXTRA-HEPATIC CYSTIC HYDATID DISEASE: A DIAGNOSTIC DILEMMA?

Parsotam R. Hira[1], Faiza Al-Ali[2], Fathma A. Al-Shelahi[2], Nabila Khalid[1], Nadia A. Al-Enezy[3], Santosh Hebbar[4], Deena Al-Rifaai[5], Mehraj Sheikh[6]
[1]Department of Microbiology, Faculty of Medicine, Kuwait City, Kuwait, [2]Department of Laboratories, Farwaniya Hospital, Kuwait City, Kuwait, [3]Department of Laboratories, Mubarak Al-Kabeer Hospital, Kuwait City, Kuwait, [4]Department of Radiology, Farwaniya. Hospital, Kuwait City, Kuwait, [5]Department of Radiology, Farwaniya. Hospital, Farwaniya, Kuwait City, Kuwait, [6]Department of Radiology, Faculty of Medicine, Kuwait City, Kuwait

11:30 a.m.

1227

SEROPREVALENCE OF STRONGYLOIDES IN NEWLY ARRIVED IMMIGRANTS AND REFUGEES

Christina A. Greenaway[1], J. Dick MacLean[2], Brian J. Ward[3], Momar Ndao[3]
[1]SMBD Jewish General Hospital, Montreal, QC, Canada, [2]McGill University Centre for Tropical Diseases, Montreal, QC, Canada, [3]National Reference Centre for Parasitiology, Montreal, QC, Canada

11:45 a.m.

1228

PHENOTYPIC AND GENOTYPIC EVIDENCE OF EMERGING IVERMECTIN RESISTANCE IN ONCHOCERCIASIS

Mike Y. Osei-Atweneboana[1], Simon K. Atta[2], Kwablah Awadzi[3], Daniel A. Boakye[4], John O. Gyapong[5], Roger K. Prichard[1]
[1]McGill University, Ste. Anne-De-Bellevue, QC, Canada, [2]Onchocerciasis Chemotherapy Research Center, Hohoe, Ghana, [3]Onchocerciasis Chemotherapy Research Center, Hohoe, Ghana, [4]Noguchi Memorial Institute for Medical Research, Accra, Ghana, [5]Health Research Center, Ghana Health Services, Accra, Ghana

Scientific Session 180

American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP): Immunoparasitology II

Supported with funding from The Burroughs Wellcome Fund

Grand Ballroom D

Thursday, December 11, 10:15 a.m. – Noon

CHAIR

Olivia Finney
London School of Hygiene and Tropical Medicine, Banjul, Gambia

Simon Metenou
National Institutes of Health, Bethesda, MD, United States

10:15 a.m.

1242

DENDRITIC CELL IL-23 PRODUCTION IN RESPONSE TO SCHISTOSOME EGGS INDUCES TH17 CELLS IN A MOUSE STRAIN PRONE TO SEVERE IMMUNOPATHOLOGY

Mara G. Shainheit, Patrick M. Smith, Lindsey E. Bazzone, Laura I. Rutitzky, Miguel J. Stadecker

Tufts University School of Medicine, Department of Pathology, Boston, MA, United States

10:30 a.m.

1229

CO-CULTURE WITH *P. FALCIPARUM*-INFECTED RED BLOOD CELLS INDUCES DIFFERENTIATION OF FUNCTIONALLY COMPETENT REGULATORY T CELLS FROM LYMPHOCYTES OF MALARIA-NAÏVE DONORS

Olivia Finney[1], Emma Lawrence[2], Judith Satoguina[3], David Conway[3], Eleanor Riley[1], Michael Walther[3]
[1]LSHTM, London, United Kingdom, [2]Manchester University, Manchester, United Kingdom, [3]MRC, Banjul, Gambia

10:45 a.m.

1230

FUNCTIONAL RELATIONSHIP BETWEEN IL-1BETA PROMOTER HAPLOTYPES (-31C/T AND -511A/G) AND PEDIATRIC SEVERE MALARIAL ANEMIA

Collins Ouma[1], Tom Were[1], Greg Davenport[2], Christopher Keller[3], Samuel Anyona[1], Henry Ndege[1], Michael Otieno[4], John Vulule[5], Jeremy Martinson[2], Robert Ferrell[2], John Michael Ong'echa[1], Douglas Perkins[6]
[1]University of New Mexico/KEMRI, Kisian, Kenya, [2]University of Pittsburgh, Pittsburgh, PA, United States, [3]Lake Erie College of Osteopathic Medicine, Erie, PA, United States, [4]Kenyatta University, Nairobi, Kenya, [5]KEMRI, Kisian, Kenya, [6]University of New Mexico, Albuquerque, NM, United States

11 a.m.

1231

INHIBITION OF *ANCYLOSTOMA CEYLANICUM* MACROPHAGE MIGRATION INHIBITORY FACTOR (ACEMIF): POTENTIAL FOR PREVENTING HOOKWORM-ASSOCIATED IMMUNOMODULATION AND DISEASE PATHOGENESIS

Jon J. Vermeire[1], Yoonsang Cho[2], Lin Leng[3], Elias Lolis[2], Richard Bucala[3], Michael Cappello[1]
[1]Program in International Child Health and Department of Pediatrics, Yale University School of Medicine, New Haven, CT, United States, [2]Department of Pharmacology, Yale University School of Medicine, New Haven, CT, United States, [3]Department of Medicine, Yale University School of Medicine, New Haven, CT, United States

11:15 a.m.

1243

PERIPHERAL TREG INDUCTION CAN BE DIRECTLY MEDIATED BY HELMINTH-DERIVED PRODUCTS

John R. Grainger, Henry J. McSorley, Yvonne M. Harcus, Edward J. Greenwood, Rick M. Maizels
Institute of Immunology and Infection Research, University of Edinburgh, Edinburgh, United Kingdom

11:30 a.m.

1232

PATENT FILARIAL INFECTION MODULATES MALARIA-SPECIFIC TYPE 1 CYTOKINE RESPONSES IN AN IL-10 DEPENDENT MANNER IN A FILARIA/MALARIA CO-INFECTED POPULATION

Simon Metenou[1], Benoit Dembele[2], Siaka Konate[2], Housseini Dolo[2], Lamine Soumaoro[2], Abdallah A. Diallo[2], Michel E. Coulibaly[2], Siaka Y. Coulibaly[2], Dramane Sanogo[2], Yaya I. Coulibaly[2], Sekou F. Traore[2], Amy Klion[1], Thomas B. Nutman[1], Siddhartha Mahanty[1]
[1]National Institutes of Health, Bethesda, MD, United States, [2]Filaria Unit, FMPOS, University of Bamako, Bamako, Mali

11:45 a.m.

1233

CO-INFECTION WITH HELMINTHS AND MALARIA DURING PREGNANCY EFFECT SUSCEPTIBILITY TO *FALCIPARUM* MALARIA DURING CHILDHOOD

Indu Malhotra[1], Peter Mungai[1], Alex Wamachi[2], John Ouma[3], Davy Koech[2], Eric Muchiri[4], Christopher L. King[1]
[1]Case Western Reserve University, Cleveland, OH, United States, [2]Kenya Medical Research Institute, Nairobi, Kenya, [3]Kenyatta University, Nairobi, Kenya, [4]Division Of Vector Born Diseases, Nairobi, Kenya

Symposium 181

Influenza in Tropical Countries: An Unrecognized Player

Grand Ballroom E

Thursday, December 11, 10:15 a.m. – Noon

While influenza has been widely studied in developed countries with temperate climates, little is known about the epidemiology and burden of disease of influenza in developing, tropical countries. This symposium will highlight findings from recent influenza surveillance in developing, tropical countries in Africa, Asia and Latin America.

CHAIR

Robert F. Breiman
Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya

10:15 a.m.

INTO AFRICA: INFLUENZA SURVEILLANCE IN KENYA

Mark A. Katz
Centers for Disease Control and Prevention-Kenya, Nairobi, Kenya

10:30 a.m.

SEVERE ACUTE RESPIRATORY INFECTION SURVEILLANCE IN THE MIDDLE EAST

Anthony A. Marfin
U.S. Naval Medical Research Unit – 3, Cairo, Egypt.

10:45 a.m.

HIGH PREVALENCE AND OFF AXIS SEASONALITY OF INFLUENZA IN BANGLADESH

Rashid Uz Zaman
International Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka, Bangladesh

11 a.m.

AN EARLY REPORT FROM A RANDOMIZED CONTROLLED TRIAL OF NONPHARMACEUTICAL INTERVENTIONS TO REDUCE HOUSEHOLD INFLUENZA TRANSMISSION: THE BANGKOK HITS STUDY

James Mark Simmerman
Centers for Disease Control and Prevention Thailand, Bangkok, Thailand

11:15 a.m.

INFLUENZA AND SEVERE ACUTE RESPIRATORY INFECTION IN GUATEMALA

Kim Lindblade
International Emerging Infections Program, Centers for Disease Control and Prevention Regional Office in Central America and Panama, Guatemala City, Guatemala

11:30 a.m.

QUESTION AND ANSWER SESSION

ASTMH 57th Annual Meeting Adjourns Thursday, December 11, Noon

See you next year in Washington, D.C.!

Author Index

The number(s) following author name refers to abstract number.

A

Author Index

The number(s) following author name refers to abstract number.

B

Author Index

The number(s) following author name refers to abstract number.

C

Author Index

The number(s) following author name refers to abstract number.

Author Index

The number(s) following author name refers to abstract number.

D

Author Index

The number(s) following author name refers to abstract number.

E

F

Author Index

The number(s) following author name refers to abstract number.

G

Author Index

The number(s) following author name refers to abstract number.

H

Author Index

The number(s) following author name refers to abstract number.

I

J

K

Author Index

The number(s) following author name refers to abstract number.

Author Index

The number(s) following author name refers to abstract number.

L

Author Index

The number(s) following author name refers to abstract number.

M

Author Index

The number(s) following author name refers to abstract number.

Author Index

The number(s) following author name refers to abstract number.

N

Author Index

The number(s) following author name refers to abstract number.

O

P

Author Index

The number(s) following author name refers to abstract number.

Q

R

Author Index

The number(s) following author name refers to abstract number.

S

Author Index

The number(s) following author name refers to abstract number.

Author Index

The number(s) following author name refers to abstract number.

T

Author Index

The number(s) following author name refers to abstract number.

U

V

Author Index

The number(s) following author name refers to abstract number.

W

X

Author Index

The number(s) following author name refers to abstract number.

Speaker and Session Chair Index for Plenary, Symposium, Meet the Professors and Mid-Day Sessions

The number(s) following individual's name refers to session number.

L

M

N

O

P

Q

R

S

T

Send to: American Society of Tropical Medicine and Hygiene, P.O. Box 71482, Chicago, IL 60694-1482, USA, +1-847-480-9592 Fax: +1-847-480-9282 info@astmh.org

ASTMH Membership Application

FIRST NAME (GIVEN NAME) LAST NAME (FAMILY NAME) DEGREES

COMPANY / ORGANIZATION

DEPARTMENT

ADDRESS

CITY STATE POSTAL CODE COUNTRY

TELEPHONE FAX E-MAIL

Dues

Dues are billed on a calendar year basis. The dues year is January through December.

☐ Regular Member ($195)		$_____
☐ Pre-Doctoral Student ($65)		$_____
☐ Post-Doctoral Student ($95)		$_____
☐ Life Membership ($3,900)		$_____
☐ Affiliate Membership *check 1*	■ Patron ($5,000 or more)	$_____
	■ Donor ($1,000 - $4,999)	$_____
	■ Contributor ($500 - $999)	$_____
☐ American Committee on Arthropod-Borne Viruses (ACAV)	■ Voluntary Dues ($10)	$_____
☐ American Committee of Medical Entomology (ACME)	■ Voluntary Dues ($5)	$_____
☐ Clinical Group (ACCTMTH) *check 1*	■ Dues ($30)	$_____
	■ Life Membership ($600)	$_____
☐ American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)	■ Dues ($10)	$_____
☐ Journal Subscription in Print ($20 US; $30 Canada; $40 All others) *Membership includes an electronic journal subscription*		$_____
TOTAL ENCLOSED		$_____

Payment

☐ AmEx ☐ VISA ☐ MasterCard ☐ Check enclosed

CARD# EXP. DATE

SIGNATURE OF CARDHOLDER NAME OF CARDHOLDER

Full payment must accompany this application. All checks must be made in U.S. dollars, drawn on U.S. banks. U.S. postal money orders, U.S. travelers checks, VISA, MasterCard and American Express will also be accepted.

Contributions and gifts to ASTMH may be deductible as charitable contributions for federal income tax purposes. Dues payments may be deductible by members as an ordinary and necessary business expense. Consult your tax advisor for further information.

Student Members

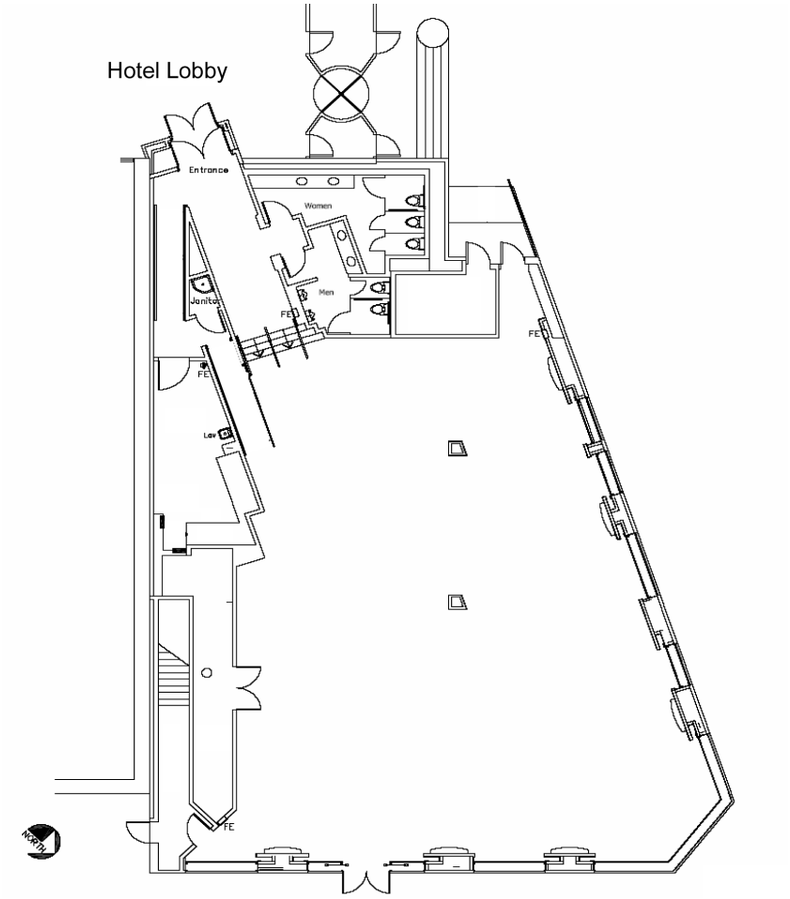
Complete the following or attach a registrar's letter as proof of full-time student status.

This is to certify that the above-named applicant is a full-time student at:

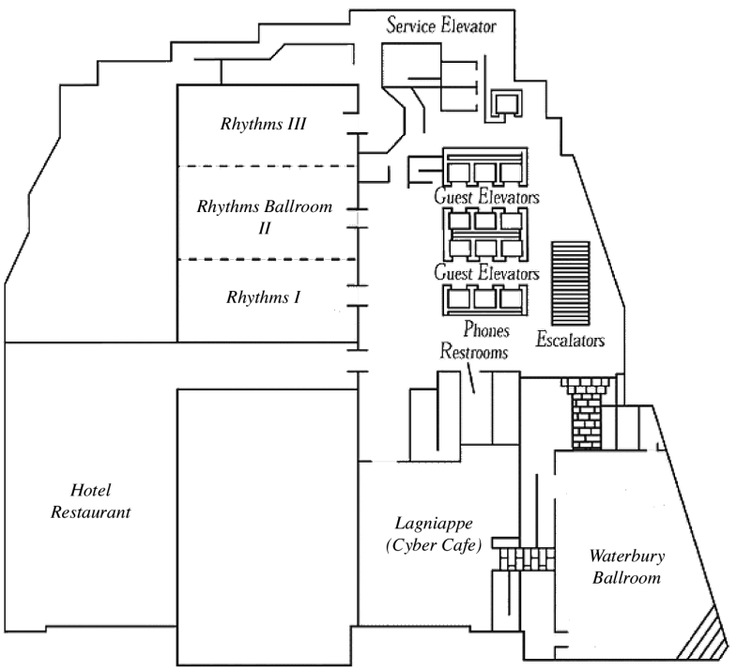
NAME OF INSTITUTION SIGNATURE OF DEAN OR DEPARTMENT CHAIR DATE

HOTEL FLOORPLAN

First Floor — Gallery Ballroom



Second Floor



Rhythms I

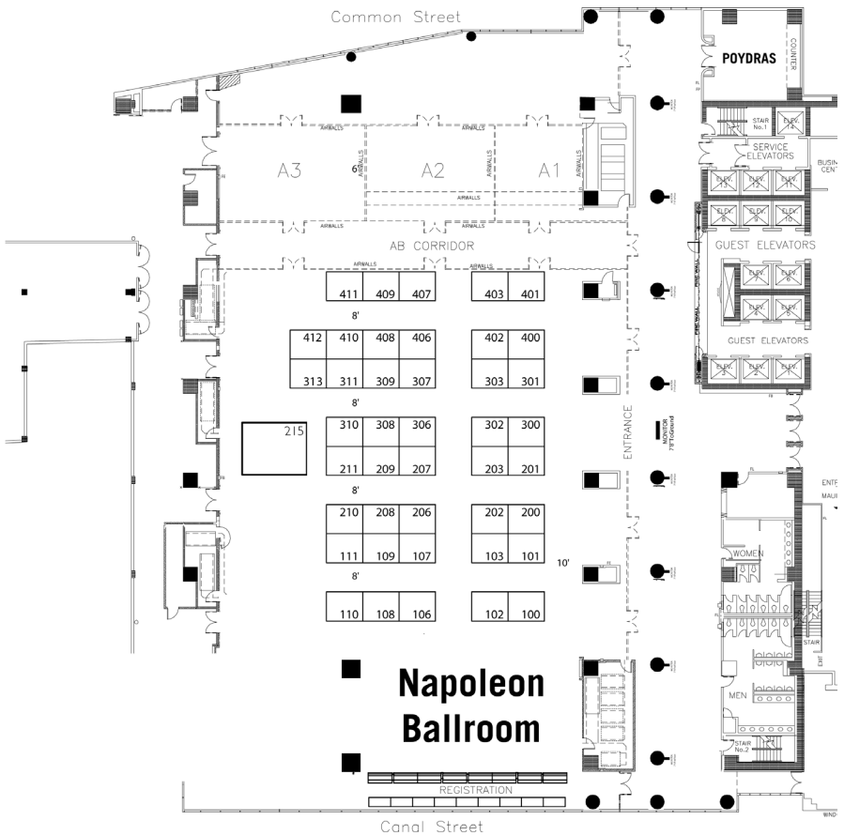
Rhythms II/III

Lagniappe
(Cyber Cafe)

Waterbury Ballroom

HOTEL FLOORPLAN

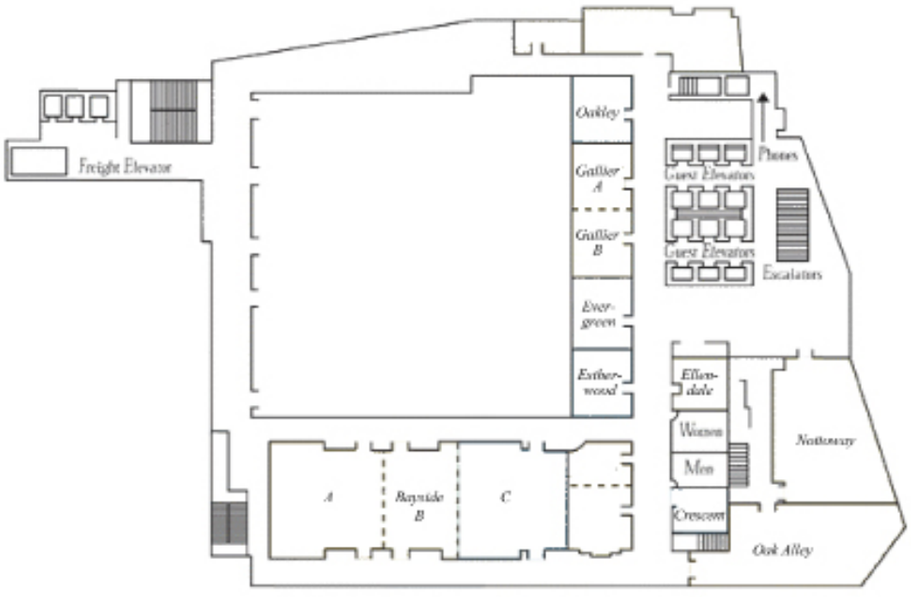
Third Floor



Maurepas

Napoleon Ballroom
(Exhibit Hall, Registration)

Fourth Floor



Bayside A

Bayside BC

Nottoway
(Speaker Ready Room)

Oak Alley

Crescent

Ellendale

Estherwood

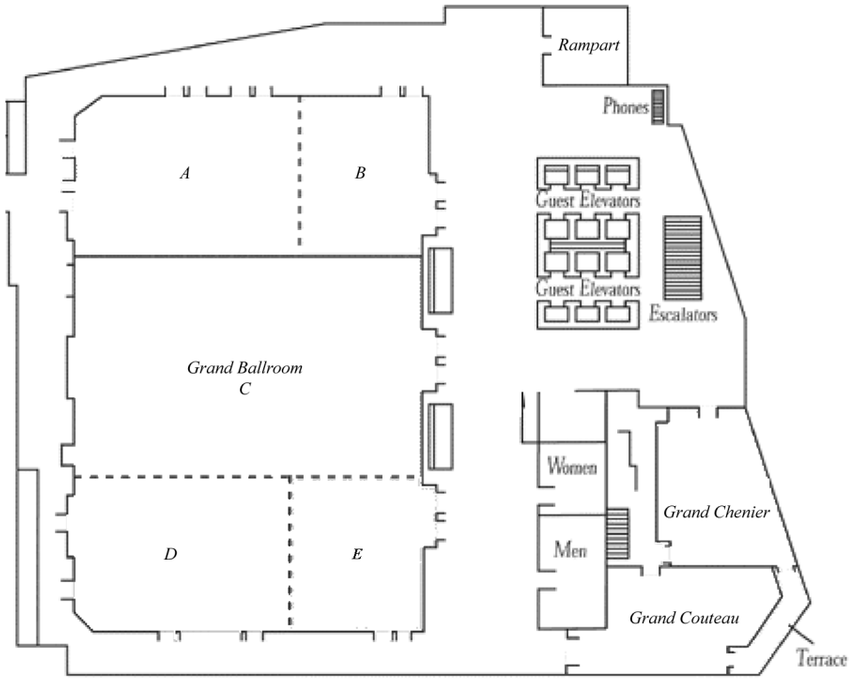
Evergreen

Gallier AB

Oakley

HOTEL FLOORPLAN

Fifth Floor



Grand Chenier

Grand Couteau

Rampart

Grand Ballroom A

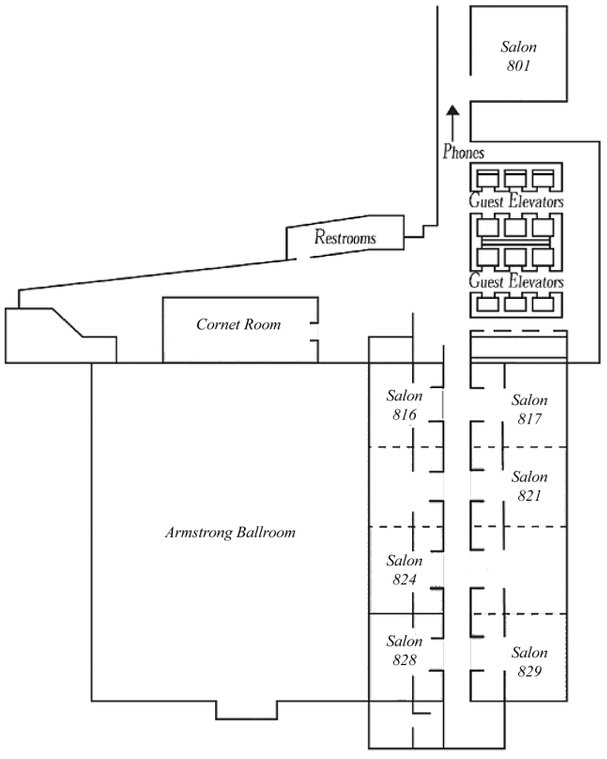
Grand Ballroom B

Grand Ballroom C

Grand Ballroom D

Grand Ballroom E

Eighth Floor



Armstrong Ballroom (Poster Hall)

Cornet (Poster Hall)

Salon 801

Salon 816 (Meeting Room Sign-Up)

Salon 817/821

Salon 824 (Meeting Room Sign-Up)

Salon 828

Salon 829