

ACME Newsletter



Highlights from the ASTMH 67th Annual Meeting, Oct. 28 – Nov. 1, 2018, New Orleans:

ACME organized two symposia, networking events for trainees, a pre-meeting course and an informal social time between symposia.

One of the ACME symposia included the Annual Business Meeting which served as a forum to hear several great talks and recognize several award recipients.

Christopher Gregory from *Centers for Disease Control and Prevention, Fort Collins* presented the keynote address on the emergence of vector-borne diseases in the U.S. and strategies to respond and control.



Photo: ACME Past-chair, Dr. Philip Armstrong, receives recognition for his service as the ACME Symposium from Chair, Dr. Matthew Thomas

ACME Executive Council

Matthew Thomas
Chair, Councilor

Ellen Dotson
Chair-elect, Councilor

Philip Armstrong
Past-chair, Councilor

Alvaro Molina-Cruz
Secretary/Treasurer, Councilor

Councilors:

Kate Aultman
Jason Richardson
Laura Harrington
Diana Ortiz
Christopher Barker
Ellen Dotson
Gabriel Hamer
Molly Duman Scheel
Audrey Lenhart
Douglas Norris

Student Representative:
Andrew Golnar



2018 Harry Hoogstraal Medal

We congratulate Dr. Thomas Scott as the 2017 recipient of the Hoogstraal Award for lifetime achievement in Medical Entomology. Dr. Scott received his award for his outstanding contributions to the study of mosquito ecology, evolution of mosquito-virus interactions, epidemiology of mosquito-borne disease and evaluation of novel products and strategies for mosquito control and disease prevention. He has published more than 175 research articles, reviews, and book chapters.



Photos: Dr. Thomas Scott receiving the 2018 Harry Hoogstraal Medal from Dr. Philip Armstrong and Dr. Amy Morrison during the ACME Symposium.

ACME Breakthrough in Medical Entomology Award

The ACME Breakthrough in Medical Entomology Award was given to Dr. Alvaro Molina-Cruz from the National Institutes of Health for his discovery of *Plasmodium* and *Anopheles* interactions. Dr. Molina-Cruz and colleagues discovered the Pfs47 protein which allows the *Plasmodium* parasites to evade the mosquito immune system and helps shape the global distribution of human malaria parasites (Molina-Cruz et al. 2015 Plasmodium evasion of mosquito immunity and global malaria transmission: the lock-and-key theory. PNAS 112: 15178-15183).

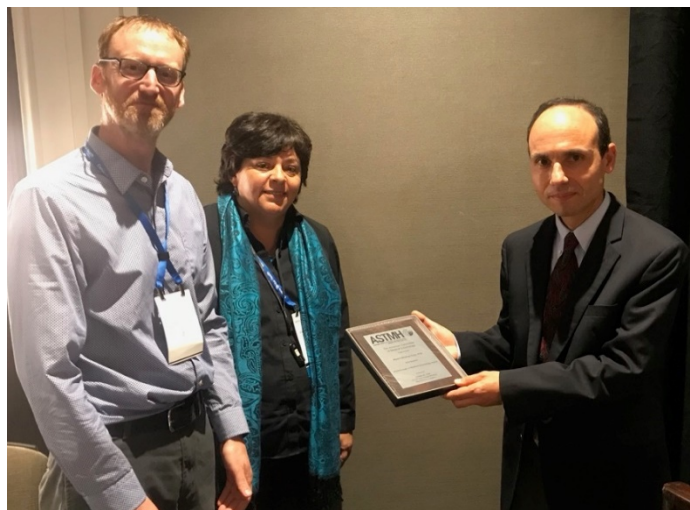
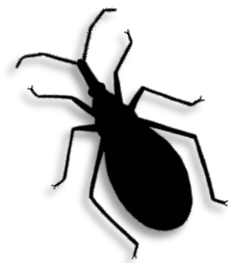


Photo: Dr. Alvaro Molina-Cruz receiving the ACME Breakthrough in Medical Entomology Award from Dr. Philip Armstrong and Dr. Carolina Barillas-Mury during the ACME Symposium.



ACME's Future Leaders Fellowship in International Medical Entomology

Congratulations to the two recipients of the 2018 Future Leader Awards: Dr. Mabel Taracena from the Universidad del Valle de Guatemala and Dr. Puja Tiwary from Banaras Hindu University.



Photos: Dr. Mabel Taracena and Dr. Puja Tiwary receiving ACME's Future Leaders Fellowship in International Medical Entomology during the ACME Symposium.



ACME's Travel Awards for Young Investigators

Four young investigators received travel awards for their outstanding abstracts presented at ASTMH.

Young Investigator Award - Graduate

Leticia Smith
Cornell University

Olivia Winokur
University of California Davis

Young Investigator Award - International

Fabien Aubry
Institut Pasteur

Young Investigator Award - Post Doc

Sarah Merkling
Institut Pasteur



Photos: Recipients of the 2018 ACME Travel Awards for Young Investigators (L to R: Fabien Aubry, Sarah Merkling, Phil Armstrong, Leticia Smith, Olivia Winokur, and Matt Thomas).

ACME sponsored two training events at the 2018 ASTMH meeting: ACME/ACAV Networking Lunch and Speed-Networking with the Experts. A big thanks to the organizers (Dr. Maria Luisa Simoes) and all the volunteer mentors that participated in these successful events.

ACME also organized a pre-meeting course called “Vector-Borne Disease Risk and Prevention for the Clinician”. PacVec, NEVBD, and MCE-VBD collaborated on the development of this content. The course was designed to help medical professionals advise their patients about the risks and prevention measures against biting insects and ticks. A total of 27 students participated in the pre-meeting course. In course assessments, 100% of students felt the course improved their knowledge of the basic biology and variety of arthropod vectors, and 90% felt the course increased their competence in advising patients about the risks of common vector-borne diseases. Philip Armstrong, Christopher Barker, and Laura Harrington organized and taught the course and speakers included Douglas MacQueen, Brian Foy, Sarah Hamer, and Christine Petersen.

ACME was involved in two ASTMH outreach activities: Engage: Global Health which was an event bringing NoLA high school students to learn about public health and entomology as well as Global Health By The Pint, an event with open discussions with the public. Thanks to Dr. Lyric Bartholomay and others for organizing and hosting.



Photo: Mr. Italo Zecca and Mrs. Alyssa Meyers (Texas A&M University) at the Engage: Global Health event during the ASTMH Annual Meeting in New Orleans for high school students.

ACME Awards

At the 2019 ASTMH annual meeting, we will announce the recipients of the following awards. Award application and nomination instructions can be found on the ACME website: <https://www.astmh.org/subgroups/acme>

ACME Breakthroughs in Medical Entomology Award

ACME seeks to award funding of \$1,000 to outstanding recent contributions (within the past 5 years) to the study and/or practice of Medical Entomology that ultimately will contribute to reducing the burden of human diseases transmitted by arthropods. This award is designed to encourage and acknowledge significant advances in the field by investigators at any career stage. Examples of such advances include breakthrough research findings in vector biochemistry, molecular biology, genetics, genomics, ecology, evolution or significant advances in technologies for vector surveillance or control.

ACME Future Leaders Fellowship in International Medical Entomology

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

ACME Travel Awards for Young Investigators

ACME now offers three Young Investigator Travel Awards: Masters, Doctoral and Post-doctoral and International. All research must involve arthropods of medical importance. Recipients will receive a complimentary registration to the Annual Meeting and *up to* \$900 to support travel and accommodation costs.

Hoogstraal Award

The Harry Hoogstraal Medal for Outstanding Achievement in Medical Entomology. Nominations for the Harry Hoogstraal Medal for outstanding Achievement in Medical Entomology may be submitted online during the Call for Nominations. Each year, the Executive Council shall consider all nominations so submitted as well as any nominations submitted during the previous three years, and decide whether to make an award at the business meeting to be held during the current year Annual Meeting. Any living medical entomologist not serving on the Executive Council is eligible to be selected to receive the award.

NIAID Funding Opportunities

1. [RFA-AI-19-028](#), Emerging Infectious Diseases Research Centers (U01, Clinical Trial Not Allowed)
2. [RFA-AI-19-029](#), Emerging Infectious Diseases Research Centers - Coordination Center (U01, Clinical Trial Not Allowed)
3. [RFA-AI-19-037](#), Targeted Prevention for Tickborne Diseases (R01, Clinical Trial Not Allowed)



Announcements

BEI Resources – Vector Resources, beyond the microbes

The Biological and Emerging Infections Resources Program (BEI Resources) was developed by the National Institute of Allergy and Infectious Diseases (NIAID) as a centralized bioresource for research reagents to the scientific community (www.beiresources.org) The primary role of BEI Resources is the acquisition and authentication of several categories of materials for registered scientists, with a focus on emerging and re-emerging infectious diseases.

BEI Resources has built a large repository of materials available to the vector resource community free of charge. The resources include over 60 colonies of [mosquitoes as well as adult and larval ticks, sand flies, and triatomines](#). These vectors are competent hosts for transmission of blood-borne arbovirus, parasitic and rickettsial diseases including Dengue, Zika, Rocky Mountain Spotted Fever, Lyme borreliosis, Chagas and malaria. The [Vector Resources page](#) hosts freely-downloadable insectary protocol manuals for each of these vector species, providing a rich array of insectary management, safety and experimental approaches for Vector Biology. These resources are available free of charge (shipping and handling may apply) to REGISTERED users in domestic and foreign institutions and NIH grant funding is not required. For information on all vector resources for researchers provided by DMID, visit the [DMID Resources for Researchers website](#).

BEI Resources would like to highlight phlebotomine sand flies resources for leishmaniasis, bartonellosis, and papatasi fever research. BEI Resources and NIAID have an established partnership with the Walter Reed Army Institute of Research to distribute a limited number of Sand Fly Larval Pots and Adult flies to qualified researchers. All vectors are competent for transmission studies. This valuable and limited resource will be offered to qualified researchers to promote the research and development of products to reduce the risk of vector-borne diseases.

For a complete list of sand fly vectors available, please visit our website at www.BEIResources.org.



Sand fly resources for leishmaniasis, bartonellosis, and papatasi fever research. *Lutzomyia longipalpis*. Foto: Ray Wilson, *Liverpool School of Tropical Medicine* [CC-BY-2.5], via Wikimedia Commons



ACME's booth at the 2018 ASTMH meeting was successful and maintained the reputation as a well-stocked booth with informational brochures and items for purchase. We appreciate the support from the ACME Executive Council and Members for volunteering time to be at the booth. We also appreciate all those who contributed or donated items to sell at the booth, which generated enough funds to provide an extra travel award for a young investigator.



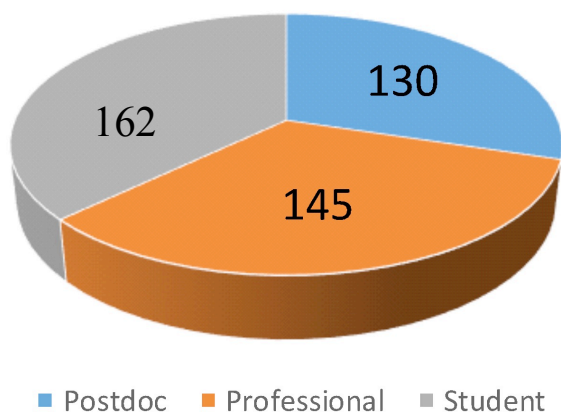
Photos:
Dr. Hamer (sitting) selling the last of the kissing bugs imbedded in resin to a member of ASTMH.
ACME Treasurer, Dr. Molina-Cruz counting up the earnings of the ACME booth while ACME Councilors Dr. Harrington, Dr. Armstrong, and Dr. Ortiz supervise.

Renew your membership

RENEW YOUR MEMBERSHIP! Your membership dues of \$25 are vital to support ACME activities including the ACME Young Investigators Travel Awards program and the ACME Symposia at the annual meeting. Look to the ASTMH website for full membership dues information. Membership in ACME connects you to a global community of Medical Entomologists both at the ASTMH annual meeting and throughout the year. Membership gives you access to ACME communications, including our bi-annual newsletter and email communications that include job postings and announcements about happenings that impact our research and practice as Medical Entomologists. Membership is free for students and post-doctoral trainees. We take great pride in fostering community for our trainees; through your membership, you will be kept in the loop on meeting events for trainees, job openings, and opportunities for awards to participate in the ASTMH meeting.

ACME membership remains strong, in 2018-2019 we have 437 members, evenly represented by students, postdocs and professional members. This represents an increase of 13% from previous year membership

2018-2019 ACME Membership
Total : 437



12th Annual Arthropod Genomics Symposium
June 12, 2019 to June 14, 2019
K-State Alumni Center, Kansas State University
Manhattan, Kansas 66506

<https://www.k-state.edu/agc/ags/index.html>
PRE-SYMPOSIUM WORKSHOP

CURATION CLINIC: Gene Annotation using Apollo

This *pre-symposium* workshop is designed to introduce researchers who are working with annotated arthropod genomes to the Apollo curation tool. This online genome browser allows users to check if their gene annotations are supported by the data and correct them if required. No prior knowledge of Apollo is needed. The practical parts of the workshop will require a laptop computer that can connect to the WiFi.

If interested in participating in this workshop, please complete the [google form](#).

When: Wednesday, June 12 at 4:00 - 6:00 PM CDT

Where: Purple Pride Conference Room, K-State Alumni Center - Manhattan, KS

Led by: Monica Poelchau and Robert Waterhouse

ACME in Action



Photo: Public health experts and University of Wisconsin-Madison students drag sampling for ticks as part of a workshop presented by the Midwest Center of Excellence for Vector-borne Disease.



Photo: Texas A&M University students and State Natural Area resource specialist sample *Ornithodoros turicata* soft ticks as part of the Methods in Vector-Borne Disease Ecology course at TAMU.