

ACME Newsletter Volume 6, Issue 1 October, 2018

Philip Armstrong Chair, Councilor

Matthew Thomas Chair-elect, Councilor

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# ACME participation at the ASTMH 67<sup>th</sup> Annual Meeting, Oct. 28 – Nov. 1, 2018 New Orleans:

This year, ACME will be sponsoring two symposia, networking events for trainees, a premeeting course and an informal social time between symposia. We hope that you can make it to these events!

American Committee of Medical Entomology (ACME) Symposium I: Annual Business Meeting, Awards and Hoogstraal Medal Presentations and Networking Reception Marriott - La Galerie 4/5/6 (2nd Floor)

Tuesday, October 30, 1:45 p.m. - 3:30 p.m.

This symposium provides a forum for exchange of information among people interested in research on arthropod vectors of disease. This session features a short ACME business meeting followed by presentation of and by the Hoogstraal medal recipient. The objective of both ACME symposia is to highlight the next generation of medical entomologists. Related to this theme, the session will include the 2018 ACME Innovation Award. The session will also feature a plenary address on renewed efforts to address vector-borne disease threats in the U.S. and conclude with an informal reception to foster conversations between trainees and professionals in academia, industry, government and military. CHAIR

Philip M. Armstrong

The Connecticut Agricultural Experiment Station, New Haven, CT, United States

Matthew Thomas

Pennsylvania State University, University Park, PA, United States

1:45 p.m.

**ACME Annual Business Meeting and Awards** 

Philip Armstrong

The Connecticut Agricultural Experiment Station, New Haven, CT, United States 2 p.m.

Harry Hoogstraal Medal Presentation

2:30 p.m.

SC Johnson (SCJ) Innovation Award

2:45 p.m.

Vector-borne Diseases in the U.S.: Can We Create a New Approach?

Christopher Gregory

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

3:15 p.m.

Networking and Social Time

Symposium 102

American Committee of Medical Entomology (ACME) Symposium II: The CDC Regional Centers of Excellence for Vector-Borne Disease

Marriott - La Galerie 4/5/6 (2nd Floor)

Tuesday, October 30, 4 p.m. - 5:45 p.m.

The recent establishment of the CDC Regional Centers of Excellence for Vector-Borne Disease represents one of the biggest single investments in vector-borne disease research and training in recent years. This symposium will provide an opportunity for the directors to provide a brief overview of their respective regional centers, including broad aims, objectives, and strategic approaches. Following these introductions, the session will feature the work of new and young investigators (graduate students, post-docs, and research fellows) who are working in the laboratories of ACME members, or are themselves ACME members, and are affiliated with one of the CDC Regional Centers. The goal is to provide an illustration of the diverse sub-disciplines in medical entomology and to increase the visibility of early-stage investigators.

#### **CHAIR**

Matthew Thomas

Pennsylvania State University, University Park, PA, United States

Philip Armstrong

The Connecticut Agricultural Experiment Station, New Haven, CT, United States 4 p.m.

**ACME Travel Awards Announcement** 

Northeast Center: Landscape and climate determinants of *Ae. albopictus* abundance at the northern limits of the species' range, United States

4:05 p.m.

Laura C. Harrington

Cornell University, Ithaca, NY, United States

4:10 p.m.

Pallavi Kache

Columbia University, New York, NY, United States

Southeastern Center: Association between ixodid ticks and the environment: Identifying underlying patterns of distribution in Florida

4:25 p.m.

Rhoel R. Dinglasan

University of Florida, Gainesville, FL, United States

4:30 p.m.

Claudia Ganser

University of Florida, Gainesville, FL, United States

Western Gulf Center: An eco-bio-social approach for the surveillance and control of *Aedes aegypti* in the Lower Rio Grande Valley, Texas

4:45 p.m.

Scott C. Weaver

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

4:50 p.m.

Jose Juarez

Texas A&M University, College Station, TX, United States

Pacific Southwest Center: Modeling the establishment and spread of *Aedes albopictus* in Los Angeles

5:05 p.m.

Christopher Barker

University of California Davis, Davis, CA, United States

5:10 p.m.

Matteo Marcantonio

University of California Davis, Davis, CA, United States

Midwest Center: Vector control and capacity regional survey for the Midwest Center of

Excellence for Vector-Borne Disease

5:25 p.m.

Lyric Bartholomay

University of Wisconsin Madison, Madison, WI, United States

5:30 p.m.

Trisha Dubie

Michigan State University, East Lansing, MI, United States

**ACME/ACAV Networking Lunch** Monday, October 29<sup>th</sup> from noon-1:00 pm at the Marriott – Preservation Hall Studio ½ (2<sup>nd</sup> Floor). Participants should pick up their lunch at the poster session and then join us for some informal networking.

**Speed-Networking with the Experts** Tuesday October 30, 2018 from 5:00-6:45 pm in the Sheraton- Armstrong Ballroom (8th floor).

ACME Pre-meeting Course- Vector-Borne Disease Risk and Prevention for the Clinician Sunday, October 28, 2018 form 7:30 am – 4:00 pm Sheraton New Orleans, New Orleans, LA USA

We are pleased to announce a pre-meeting course designed for clinicians and other healthcare professionals on vector-borne diseases. The focus will be on select vector-borne diseases (malaria, arboviral diseases, Lyme disease and other tick-borne threats, leishmaniasis, and Chagas disease) involving diverse arthropod vectors (mosquitoes, ticks, sandflies, and kissing bugs). Participants will earn CME credits for course activities designed to (1) describe insect and tick biology useful to the clinician; (2) learn about the geographic and behavioral risks associated with common vector-borne diseases; (3) review current recommendations for patient personal protection against biting insects and ticks. A Q&A session on common client questions, how to address them and where to find resources will be provided. Hands-on demonstrations will give participants a close look at the diverse arthropods involved in pathogen transmission.

## **ACME** Awards

At this year's ASTMH annual meeting, we will announce the recipients of the following awards.

#### **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 or insecticide resistance, or significant advances in technologies for vector surveillance or control. Nominees/applicants must be a member of ASTMH and ACME. Women are particularly encouraged to apply.

## **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.

One awardee will receive \$2,000 to be used towards attending the ASTMH annual conference and/or research supplies. The awardee must present their research at ASTMH and acknowledge the ACME Future Leaders Fellowship in their presentation and when publishing research supported by the fellowship. Women are encouraged to apply.

#### **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 (\$2000 international) 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.

#### News from NIH: National Institute of Allergy and Infectious Diseases

1. NIAID is currently supporting a funding opportunity (<a href="http://grants.nih.gov/grants/guide/pa-files/PAR-18-860.html">http://grants.nih.gov/grants/guide/pa-files/PAR-18-860.html</a>) for small grants (2 years, \$275,000 dollars direct costs) on the "Immune response to arthropod blood feeding". The purpose of this Funding Opportunity Announcement (FOA) is to support short-term exploratory, developmental, and transdisciplinary research to understand the immunologic events that occur during blood feeding by hematophagous arthropods. The scientific objectives of this initiative are (1) to

understand the immunological events in the vertebrate host, which occur during and after blood feeding by hematophagous arthropods, at the bite site (skin) and systemically; (2) to identify and characterize the immune modulatory properties of arthropod salivary components; and (3) to understand the immunological events in the hematophagous arthropods following a blood meal. **Application due dates** are: October 15, 2018; June 14, 2019; February 14, 2020; and October 15, 2020.

2. NIAID Council cleared concepts: September 2018 concept on tick-borne pathogens and ticks.... <a href="https://www.niaid.nih.gov/grants-contracts/potential-opportunities">https://www.niaid.nih.gov/grants-contracts/potential-opportunities</a> [the September 2018 cleared concepts have not been posted yet, but should be soon]

#### **Workshop Opportunity**

The Center for Health in the Human Ecosystem at the University of Idaho in Moscow, Idaho, is hosting its annual "Biology of Vector-borne Diseases" six-day course Sunday through Friday, June 23-28, 2019. This course provides accessible, condensed training and "knowledge networking" for advanced graduate



students, postdoctoral fellows, new faculty and current professionals in biology, cutting edge approaches, expertise and resources for U.S. and global vector-borne diseases of plants, animals and humans. We seek to train the next generation of scientists and help working professionals to more effectively address current and emerging threats with new tools and a strong network of collaborators and mentors. The course is both lecture- and discussion-based, delivered by internationally recognized experts, with case studies of emerging vector-borne pathogens to highlight parallels and key distinctions in biology, diagnostics, containment, control and cutting-edge technologies across plant, animal and human vector-borne diseases. This course sets an example of new vision, through leadership of the Center for Health in the Human Ecosystem, to create an enduring community of participants and instructors to expand the impact and sustainability of these approaches. Applications will be reviewed starting December 1, 2018. Registration for the course (USD \$1,500) includes housing, food, course materials and social activities. For more information and to apply online please visit: <a href="http://www.uidaho.edu/vector-borne-diseases">http://www.uidaho.edu/vector-borne-diseases</a> or may contact course directors: Shirley Luckhart, sluckhart@uidaho.edu and Ed Lewis, eelewis@uidaho.edu

VectorBase is holding a hands-on workshop as an independently organized pre-Entomological Society of America (ESA) event. Registration is still open, follow the link below for more details.

Canada, Saturday, November 10, 2018

https://www.vectorbase.org/workshops/2018-esa-esc-and-esbc-joint-annual-meeting-entomology-2018

#### **ACME Leadership Developments**

ACME welcomes new council members Dr. Molly Duman Scheel (University of Notre Dame), Dr. Audrey Lenhart (CDC), Dr. Douglas Norris (Johns Hopkins), and student council member-Mr. Andrew Golnar (Texas A&M University). This year, Dr. Michael Reddy, Dr. Philip Armstrong, and Dr. Michael Slotman will finish their terms on the ACME council. We thank all the members of the Executive Council (new, current and existing) for their service to ACME!

## **Get Involved!**

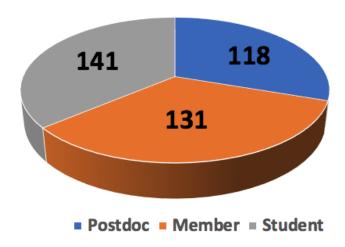
If you are interested in learning more about ACME activities or serving on the ACME Executive Council, please contact Matthew Thomas (<a href="mailto:mbt13@psu.edu">mbt13@psu.edu</a>).

#### **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 2017-2018 we had 390 members, evenly represented by students, postdocs and professional members





#### Support the ACME booth during 2018 ASTMH!

ACME sponsors a booth at the ASTMH meeting to promote its initiatives, raise funds, and attract new members. Take the opportunity to meet fellow medical entomologists or catch up with friends, stop at the ACME booth in New Orleans!

## **Financial Report**

The total net assets for all ACME funds were \$9,566 for the period ending in June 30, 2018. The revenue from memberships for the period July 2017- June 2018 was \$3,925. The ASTMH Council donated a \$10,000 grant to ACME toward its initiatives during 2017-2018. The Council donation was mainly used to cover 2017 Student Travel Awards, and 2018 Breakthrough in Medical Entomology Award and two Future Leaders in Medical Entomology Award. ACME was able to decrease substantially its expenses associated with the council meeting from \$3,748 in 2016 to \$406.80 in 2017, ACME will continue to minimize meeting costs. We thank the parent council for their continued support and all of our donors that enable awards for outstanding trainees to attend the meeting and for researchers that have made important contributions in medical entomology!

### **ACME in the Lab and Field**



Laura Harrington Lab members (Cornell University) conduct mosquito fieldwork in Medellín, Colombia. L to R: Field assistants Paulina Gutiérrez Arbeláez and Edison Trujillo Gil, and graduate students Talya Shragai, Ethan Degner, and Kara Fikrig.



Dr. Estelle Martin infecting *Aedes aegypti* with Zika virus in the Gabriel Hamer Lab (Texas A&M University).



Summer field team studying the ecology of *Aedes aegypti* in Madera, California. Pictured (left to right): Trinidad Reyes and Istvan Menyhay (Madera County Mosquito and Vector Control District), Kurt Cramer, Will Louie, and Matteo Marcantonio (member of Chris Barker and Lark Coffey Labs at the University of California, Davis).