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ACME Newsletter

Highlights from the ASTMH 68th Annual Meeting, Nov. 20-24, 2019, National Harbor, MD:

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.



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

The



ACME Executive Council Ellen Dotson Chair, Councilor

Gabriel Hamer Chair-elect, Councilor

Matthew Thomas Past-chair, Councilor

Molly Duman Scheel Secretary/Treasurer, Councilor

Councilors: Laura Harrington Matt Thomas Diana Ortiz Christopher Barker Ellen Dotson Gabriel Hamer Molly Duman Scheel Audrey Lenhart Douglas Norris Marco Neira Eleanore Sternberg Jennifer Stevenson

Student Representative: Olivia Winokur

ACME Awards

2019 Harry Hoogstraal Medal

We congratulate Dr. Frank Collins as the 2019 recipient of the Hoogstraal Award for lifetime achievement in Medical Entomology. Dr. Collins received his award for his outstanding contributions to mosquito field studies, refractoriness to malaria, rDNA assay development, *Anopheles gambiae* genome, and VectorBase. Prior trainees of the Collins Lab presented in a symposium to highlight these important contributions to mosquito research.



Photos: Dr. Frank Collins was not in attendance so speakers in the minisymposium speaking on behalf of his contributions to the field include (L to R): Dr. Tom Burkot, Dr. Matthew Thomas (ACME Chair), Dr. Nora Besansky (received medal on behalf of Dr. Collins), Dr. Patricia Graves, Dr. Alessandra Dellatorre, Dr. Carolina Barillas-Mury, and Dr. Catherine Hill.

ACME Breakthrough in Medical Entomology Award

The ACME Breakthrough in Medical Entomology Award was given to Dr. Stephanie James from the Foundation for the National Institutes of Health for her contributions to "Pathway to Deployment of Gene Drive Mosquitoes as a Potential Biocontrol Tool for Elimination of Malaria in Sub-Saharan Africa: Recommendations of a Scientific Working Group". *AJTMH* 2018 98(Suppl 6): 1-49.





Photo: Dr. Stephanie James receiving the ACME Breakthrough in Medical Entomology Award from Dr. Matthew Thomas during the ACME Symposium.

ACME Awards

ACME's Future Leader Fellowship in International Medical Entomology

Congratulations to the recipient of the 2019 Future Leader Award: Dr. Adélaïde Miarinjara, National Institutes of Health.





Photo: Dr. Adélaïde Miarinjara receiving ACME's Future Leaders Fellowship in International Medical Entomology during the ACME Symposium.

ACME's Travel Awards for Young Investigators

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



Young Investigator Award – Graduate Kristine Werling (Left) Harvard School of Public Health

Diana Nyanting'a (Right) Kenya Medical Research Institute Young Investigator Award – International Renee Ali (Left) University of West Indies

Marilyn Murindahabi (Right) *University of Rwanda* Young Investigator Award – Post doc Emily Gallichotte (Left) Colorado State University

Deepani Fernando (Right) University of Peradeniya, Sri Lanka

ACME During COVID-19 Pandemic

Many research labs of ACME members are in various stages of lab shut-downs with limitations to essential activities. Here is a list of resources relevant to ACME members:

Examples of Lab shut-down checklists:

MIT Laboratory Ramp-Down Checklist Cornell Laboratory Ramp-Down Checklist

Suggestions for arthropod colonies:

When assigning essential staff to critical tasks such as animal rearing, it is recommended that staff members work alternate shifts and maintain social distance. Group leaders should be prepared with a backup plan should essential staff members become quarantined or ill. Consider whether reducing insect rearing temperature will lighten essential staff's load. Try to plan ahead on ordering should procurement or deliveries be delayed. For those purchasing blood for membrane feedings, reach out to your vendors directly should you have concerns about blood availability or shipping. Hemotek has demonstrated a willingness to work with scientists, and other vendors are also likely willing to help. In a pinch: laboratory staff members have reported some success with freezing purchased blood in aliquots for a one-time thaw and successful membrane feeding of several mosquito species.

How is your lab group working from home? Here are some ideas from ACME labs:

- Pursue virtual data analysis and writing activities.
- Continue regular lab meetings to keep staff engaged.
- Explore different platforms for virtual meetings: Zoom, Microsoft Teams, Skype, WhatsApp, Facetime, etc.
- If folks are working outside their comfort zones, either due to shifts in projects or varying degrees of computer fluency, try to work in pairs or groups. This helps people get up to speed and makes them feel more connected.

ACME Awards

At the 2020 ASTMH Annual Meeting, we will announce the recipients of the following awards. Award application and nomination instructions can be found on the <u>ACME website</u>.

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.

News from NIH: National Institute of Allergy and Infectious Diseases

- 1. NIAID Funding Opportunities on Immune Response to Arthropod Blood Feeding, final due date October 15, 2020.
 - <u>R21 Exploratory/Developmental Research Grant</u>



National Institute of Allergy and Infectious Diseases

Announcements



NIAID's <u>BEI Resources</u> program provides Vector Biology resources for free to registered, approved researchers in domestic and foreign institutions with appropriate facilities and containment procedures for vector research. Our widely requested holdings include LIVE arthropod vectors of human disease, including anopheline and culicine mosquitoes, reduviids, ticks and sand flies, associated reagents and genomic materials for entomological research, along with insectary protocols. For the cost of nothing, recipients are only required to acknowledge the use of the individual resources in publications and presentations of the research in which the materials are used.

BEI Resources arthropod colonies are made available by the deposit contributions of investigators throughout the world. Deposited materials undergo review by NIAID prior to acceptance. Please notify BEI Resources through the <u>Suggest A Reagent Form</u> if you have a request for inclusion or the <u>Deposit Inquiry Contact Form</u> if you have a unique strain for consideration.

Vector Biology resources available through BEI Resources will remain available throughout the current coronavirus pandemic. Orders and/or shipping of certain live vectors may be delayed or temporarily on hold depending on the current operating status of individual insectaries for mosquitoes, ticks, reduviids and sand flies. As of early April 2020, live sand fly orders and shipments are temporarily on hold, but will resume as soon as possible.

Future Meeting:

Keystone Symposium, 'Vector Biology: Emerging Concepts and Novel Technologies' February 15-18, 2021 in Breckenridge, Colorado





ACME Departing Leadership



ACME's Past Chair, Matthew Thomas, and Chair, Ellen Dotson, give a thanks and congratulations to their many years of service to Alvaro Molina-Cruz (Outgoing Treasurer) and Phil Armstrong (Outgoing Chair).

Renew your Membership

PLEASE RENEW YOUR MEMBERSHIP AND ENCOURAGE OTHERS TO JOIN ACME! At the end of 2019, our membership dues assets were down 30% compared to last year. The \$25 membership fees collected from professional members are a vital source of support for ACME activities such as the Young Investigators Travel Awards program and the ACME Symposia at the Annual Meeting. Membership connects you to an active global community of medical entomologists both at the Annual Meeting and throughout the year. Membership is free for both student and post-doctoral trainees and gives them access to information on mentoring opportunities at the Annual Meeting, job openings, and travel awards. Please refer to the ASTMH website for full membership dues information.

ACME membership remains strong, in 2019-2020 we have 458 members, evenly represented by students, postdocs and professional members. This represents an increase of 5% from previous year membership.



2019-2020 ACME Membership (458 Total)



The total net assets for all ACME funds were \$24,075 for the period ending on December 31, 2019. Total revenue from membership dues for the period of July through December 2019 was \$2,725, during which time an additional \$628 in other total revenues accumulated. Many thanks for your contributions and pledges at the ACME booth, which totaled \$710 and will support travel scholarships; a gentle reminder to please forward your booth pledge checks if you have not done so already. As always, we are grateful to the parent Board and ACME donors for their continued support of our medical entomology initiatives! ACME is initiating new fundraising efforts to support trainee attendance at the ASTMH Annual Meeting and other ACME causes. If you are aware of potential donors or have fundraising ideas to share with the council, please forward them to Molly Duman Scheel (Secretary-Treasurer), mscheel@nd.edu, who will share them with our leadership.

ACME in Action (while practicing social distancing)



Photo: ACME member Kara Fikrig (Left; Cornell University PhD student in Laura Harrington Lab) evacuating out of the Iquitos, Peru airport during mosquito field work as the country shut down the borders in March due to the coronavirus outbreak. She safely made it home to New York.



Photo: The Sarah Hamer Lab Meeting at Texas A&M University; (L to R) Sujata Balasubramanian, Sarah Hamer, Rachel Busselman, Lisa Auckland and Jordan Salomon. Joined by Zoom includes Ed Davila, Juan Pablo Fimbres Macias, Italo Zecca.



Photo: Scheel Lab Meeting via Zoom. Top left to bottom right: Rachel Wiltshire, Molly Duman Scheel, Keshava Mysore, Ping Li, Joe Roethele, Joi Misenti, Longhua Sun, and John Kosmach.