

# ACME Newsletter



## A welcome from the Chair

### ACME Executive Council

Dear ACME members,

In this edition, we bring news of subgroup activities and plans for the 2023 Annual Meeting, Hyatt Regency, Chicago, October 18-22.

The ACME Executive Council continues to support the medical entomology community through the organization of symposia and awards, support for early career scientists, and science advocacy.

ACME is delighted to welcome 95 new members since April 1! Please join me in welcoming Serap Aksoy (FASTMH), Kingsley Badu, Maria Luisa Simões and Trainee rep, Akilah Stewart to the Executive Council and in thanking outgoing councilors Marco Neira, Eleanor Sternberg, and Jennifer Stevenson for their exceptional service to subgroup.



Please mark your calendars for ACME events at the Annual Meeting - Symposium I: Invasive Arthropods and their Impact on Public Health and Symposium II: ACME Business Meeting, Awards Ceremony, Hoogstraal Medal Presentation and Networking, Friday, October 20. Support our trainees at the ACME Trainee Networking Lunch, Thursday October 19, 12:15 -1:30 pm, and the Subgroup Speed Networking, Friday, October 20, 6:15 - 8 pm. Visit us at these events and the ACME booth in the Exhibits Hall; we will be offering prizes and ACME swag for trainees and new members!

In the past 12 months, ACME has embarked on several strategic goals to help bring greater value to members and ensure sustained support for awards. Please stay tuned for details on an ACME virtual seminar series focused on funding opportunities for early career and international members.

Please follow us on "X", and if you are a student member, check out the Trainee Corner below for information on trainee events and opportunities.

**Catherine Hill**  
*Chair, Councilor*

**Adriana Troyo**  
*Chair-elect*

**Douglas Norris**  
*Past (or Outgoing)-chair*

**Teresia Njoroge**  
*Trainee Representative*

**Berlin Londono**  
*Secretary/Treasurer*

**Marco Neira**  
**Eleanore Sternberg**  
**Jennifer Stevenson**  
**Lauren Cator**  
**Nsa Dada**  
**Pamela Pennington**  
**Zach Adelman**  
**Jewelna Akorli**  
**Sarah Hamer**

**We welcome our new councilors:**

**Maria Luísa Simões**  
**Serap Aksoy**  
**Akilah Stewart**

It has been a pleasure to serve ACME these past twelve months. To Adriana (Chair Elect), the Executive Council and all ACME members, I extend my very best for another great year ahead!

See you in Chicago!

Sincerely,

Cate

## ACME @ASTMH2023

We will have several ACME-related activities during the Annual Meeting at Chicago this year. Be sure to check out:

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

*Thursday, October 19, 2023, 12:00 noon - 1:00 pm. It will be held in Crystal Ballroom C - Lobby Level (West Tower) – Check our trainee section below for more information!*

### **Symposium 87: American Committee of Medical Entomology (ACME) Symposium I: Invasive Arthropods and their Impact on Public Health**

*Friday October 20 from 1:45 - 3:30 PM Central*

### **Symposium 99: American Committee of Medical Entomology (ACME) Symposium II: Annual Business Meeting, Awards and Hoogstraal Medal Presentations and Networking Reception**

*Friday October 20 from 4:00 - 5:45 PM Central*

### **ASTMH Subgroup Speed Networking**

*Friday, October 20, 2023, 6:15 pm - 8:00 pm  
Crystal Ballroom B - Lobby Level (West Tower)*

Another symposium you may be interested in:



### **Symposium 131:**

#### **The Influence of Arboviruses on the Mosquito's Journey from Host - Seeking to Blood - Feeding**

Saturday October 21 12:45 – 2:30 pm Central

### **Funding opportunities – NIH**

[Immune responses to arthropod feeding on vertebrate hosts NOT-AI-21-059](#)

[Notice of Special Interest \(NOSI\): Targeting the Pathogen within the Arthropod Vector](#)

[Notice of Special Interest \(NOSI\): Advancing Research for Tickborne Diseases \(TBDs\)](#)

[Climate Change and Health](#)

RFA:

[Exploratory Grants for Climate Change and Health Research Center Development \(P20 Clinical Trial Optional\)](#)

[NIH Climate Change and Health Initiative](#)

### Treasury News!

As of September 2023, ACME total funds sum a total of \$45,498. However, the amount collected from active member renewals is \$2,541 YTD which is \$959 less than what we reported in Spring 2023.

ACME expenditures supporting travel awards was \$2,036.

If you are aware of potential donors, have fundraising ideas, have interest in assisting with fundraising, or have suggestions about ways that ACME can support medical entomology training or mentoring endeavors, please contact Secretary/Treasurer [Berlin Londono](#).

Would **you** like to support ACME?

Visit ACME's [page](#) and click "Donate" to support activities like trainee awards and educational initiatives.



*We thank all our new ACME members!!*

This year, we welcome our **95 new members!!**  
Thanks for supporting this group.

## Trainee Corner

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

Thursday, October 19, 2023, 12:00 noon - 1:00 pm – Crystal Ballroom C - Lobby Level (West Tower)

ACME trainees and regular members: grab your boxed lunch at the poster session A and come join us to welcome our trainees and network with subgroup colleagues. Join the running to receive ACME-themed prizes and giveaways!

Please email your ACME trainee representative [Teresia Njoroge](#) if you are interested to learn how to be part of this vibrant community! Self-nominations accepted for this term by October 29th!

Also, please check the ASTMH Annual Meeting website for more information.

ACME is committed to engaging the future leaders of our field and fostering supportive relationships across career stages and international boundaries. Our ACME Trainee Leadership group is established! At the October Annual Meeting, **Akilah Stewart** will be appointed as the second trainee representative along with **Teresia Njoroge** and **Lauren Cator** as our trainee advisor.

**We want to feature you!** We want to highlight the success of our ACME trainees! Shoot us an email so that we can post on X (tweet) about your graduations, field work, or any and all accomplishments. You can also post your successes @ACME\_ASTMH

For more information, please email your ACME trainee representative, [Teresia Njoroge](#).

### Funding opportunities for trainees:

[PA-23-260](#), Ruth L. Kirschstein National Research Service Award (NRSA) Individual Fellowship for Students at Institutions with NIH-Funded Institutional Predoctoral Dual-Degree Training Programs (Parent F30)

[PA-23-272](#), Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (Parent F31)

## ACME Announcements

### Comment Form: Proposed Amendments to the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines)

"NIH is proposing to amend the *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines)*. One part of the proposal addresses specific considerations and requirements for conducting research involving gene drive modified organisms (GDMOs) in

contained research settings. The proposed amendments are in keeping with the recommendations of the Novel and Exceptional Technology and Research Advisory Committee (NExTRAC) as contained in its report, Gene Drives in Biomedical Research.

NIH also proposes to replace the term “helper viruses” with the term broader term “helper systems” and to harmonize the Risk Group categorization of West Nile Virus (WNV) and Saint Louis Encephalitis Virus (SLEV) to be consistent with the Biosafety in Microbiological and Biomedical Laboratories (BMBL). To view the full proposal, please see the [Federal Register](#) notice.” For more information, visit:

<https://osp.od.nih.gov/proposed-amendments-to-the-nih-guidelines-for-research-involving-recombinant-or-synthetic-nucleic-acid-molecules-nih-guidelines/>

<https://www.federalregister.gov/documents/2023/08/10/2023-17178/national-institutes-of-health-nih-office-of-science-policy-osp-proposed-changes-to-the-nih>

The open comment period ends **October 10, 2023**.

### **Council monthly meetings**

During our monthly meetings, the council discussed developing a multi-year strategic vision for ACME, including fundraising strategies and mechanisms to strengthen ACME membership and bring greater value to members. During this term, the ACME council established monthly council meetings, undertook planning for the annual meeting, selected ACME awardees, and expanded membership of the 6 ACME Taskforce groups.

### **ACME Awards 2023**

The names of the ACME award recipients will be announced during the ASTMH Annual Meeting. This year, we received nominations for the following awards:

#### *Young Investigator Travel Awards*

#### *ACME Future Leaders*

#### *ACME Award of Distinction*

#### *Hoogstraal Medal*

Unfortunately, we did not receive nominations for the ACME Breakthrough Award. We encourage our ACME community to submit your nomination once the 2024 period starts. We have the following categories.

**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 non-US citizens from an LMIC. **We will begin accepting applications in early 2024.**

**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. **We will begin accepting applications in early 2024.**

**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 submitted during the current call 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. **Will begin accepting nominations in April/May 2024.**

## Items of Interest

Please attend our ACME symposia I and II

### ACME symposium I: Invasive arthropods and their impact on public health

Chair: Adriana Troyo, PhD

Co-Chair: Catherine A. Hill, PhD

Friday October 20 from 1:45 - 3:30 PM Central Time

**Summary:** Among the current impacts of globalization and climate change is the introduction of arthropods to new areas, where they can thrive if the local conditions are adequate. Invasive arthropods can have a significant impact on human and animal health due to the establishment of ectoparasites, pathogen vectors, and vector borne diseases in new regions. The bed bugs *Cimex lectularius* and *Cimex hemipterus* are within the most important invasive pest ectoparasites that have resurged globally in the past decade, causing substantial human health impact and economic burden. In Africa, an Asian malaria vector, *Anopheles stephensi*, continues expanding its geographical range, with the subsequent impact on local mosquito surveillance and control programs, as well as potential effects on urban malaria epidemiology. Likewise, one of the most extensively dispersed ticks worldwide, the brown dog tick (*Rhipicephalus sanguineus* s. l.), is capable of reaching high densities in urban areas and can transmit important zoonotic pathogens to humans. Although these and other invasive arthropods may already be

established, tracking them is key for monitoring further expansion and controlling population densities. For this, there are successful citizen science initiatives underway, such as NASA's GLOBE Observer Mosquito Habitat Mapper, which could be adapted to different species and local contexts. This symposium aims to present updated information on invasive arthropods, their impact on public health, and available tracking tools, in order to raise awareness on the need to understand, detect, and monitor invasive species to improve their control and reduce disease burden.

### Featured talks:

- ***Cimex lectularius* and *Cimex hemipterus*: Public health impact of bed bugs.**  
*Jose E. Pietri, PhD*
- ***Anopheles stephensi* in Africa: Current distribution and potential impact on malaria.**  
*Fredros O. Okumu, PhD, MBA.*
- ***Rhipicephalus sanguineus sensu lato*: Current distribution and vector competence.**  
*Filipe Dantas-Torres, PhD.*
- **NASA's GLOBE Observer Mosquito Habitat Mapper: The role of citizen science in mosquito surveillance, vector research and local health.**  
*Russanne D. Low, PhD.*

### American Committee of Medical Entomology (ACME) Symposium II: Annual Business Meeting, Awards and Hoogstraal Medal Presentations and Networking Reception

Friday, October 20 from 4:00 - 5:45 PM U.S. Central Time

### Job Announcement

Assistant Professor of Insect Biology position in UC Davis's Department of Entomology/Nematology. The scope of the search is broad, and they are interested in a diverse array of candidates from all aspects of insect biology. You can find more information here: [Insect Biologist Advertisement](#).



The application deadline is Friday, Dec 1, 2023 at 11:59pm (Pacific Time).

### Other important items

**PacVec Seminars-** The Pacific Southwest Center of Excellence in Vector-Borne Diseases holds monthly seminars that convene public health and vector control professionals and feature the work of the center's researchers that are relevant to the center's mission. Seminars are held monthly during the academic year from October through June and are available both in-person and via Zoom. For more information visit the [website](#).

**BEI Resources** can now provide live black flies in addition to several species of mosquito, tick, triatomes, sand flies, and snails. For more information [click here](#).

**The Arthropod Containment Guidelines**, a guidance document that outlines best practices for research laboratories to safely handle arthropods of public health importance, was recently updated by ACME with a special [addendum](#) focused on gene drive.

## Connect with ACME

To keep up on all current announcements, please be sure to follow us on X (Twitter) at [ACME@ACME\\_ASTMH](#). We currently have 1,137 followers! We are hoping to build this as a primary means of communication between newsletters and conferences and have used this platform to facilitate interactions with other entomological communities worldwide.

Do you need to send a job ad, a webinar announcement, or other information out to the ACME community? You can direct message us on X (Twitter) or email your tweet information to [Adriana Troyo](#).

Please remember that you can still also post and receive announcements by subscribing to [My Communities](#). You can also provide items for the newsletter. Please send us any

announcements, events, or items for the April 2024 newsletter!

## ACME in Action



ACME Chair-elect, Adriana Troyo (standing sixth from left to right) collaborated in fieldwork with other investigators and students from University of Florida, Stanford University, University of Costa Rica (UCR), National University (Costa Rica), and UNED (Costa Rica), as part of a project on the ecology of mosquitoes (diversity, host associations, and viruses) at La Selva Research Station in Costa Rica. Photo Credit: Diana Rojas/Adriana Troyo.



Adriana Troyo is setting up traps! The fun of a medical entomologist! Photo Credit: Tatiana Murillo/Adriana Troyo.



Ms. Phurchhoki Sherpa (M.S. Cornell), Coordinator, Medical Entomology and Public Health Program, Department of Entomology, Purdue University (and member of the Hill program) searching mulch for fluorescently labelled *Ixodes scapularis* (black legged tick) as part of a project to develop new natural products for control of hard ticks, Midwest Center of Excellence, Vector-borne Diseases (MCEVBD). Photo Credit: Tom Campbell, Purdue University.



This beautiful giant kissing bug will be accompanying us at our ACME booth this year! Photo Credit: Sarah Hamer.



Students from the class 'Methods in Vector-borne Disease Ecology' at Texas A&M University learned about insect radio-telemetry using some of the tiniest transmitters on the market (0.15g)! Graduate and undergraduate students collected large arthropods and voted on the top 4 to which transmitters were deployed (monarch, scorpion, wolf spider, and ironclad beetle). These insects were released on campus and students took turns tracking their movement. Here you see an ironclad beetle, which moved about a large oak tree for several days, relocating to trees near a creek about 20yds away where the transmitter fell off. These transmitters have been used previously to track kissing bugs, and it will be exciting to see future developments in relation to medical entomology. The course is offered jointly by the Dept. of Entomology and the School of Veterinary Medicine and Biomedical Sciences at TAMU. Photo Credit: Sarah Hamer.