ACME Newsletter

Volume 4, Issue 1



Two New Awards Announced:

We proudly announced two new ACME awards for Breakthroughs in Medical Entomology and Future Leaders Fellowship in International Medical Entomology as described in the two documents that follow. Please look through these award details and consider nominating yourself or a colleague next year!

1. Breakthroughs in Medical Entomology Award

The American Committee of Medical Entomology seeks to award outstanding recent (within the past 5 years) contributions 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 was 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. Women are particularly encouraged to apply.

2. Future Leaders in International Medical Entomology Fellowship

ACME is pleased to announce a new fellowship for 2016 sponsored by a generous donation from SC Johnson: A Family Company. The Future Leaders fellowship is a competitive award that will be offered to an outstanding non-US citizen 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.

http://www.astmh.org/ASTMH/media/Documents/ BreakthroughsinMedicalEntomologyApplicationGuidelines.pdf

http://www.astmh.org/ASTMH/media/Documents/ FutureLeadersinInternationalMedicalEntomologyAppGuidelines.pdf Lyric Bartholomay Chair, Councilor

Gonzalo Vazquez Chair-elect, Councilor

Nicole Achee Past-chair, Councilor

Rebekah Kading Secretary/Treasurer, Councilor



ACME represented at the ASTMH Day on the Hill

ASTMH worked with the District Policy Group to organize another Day on the Hill where ASTMH council members and subcommittee chairs were invited to speak to senators and congressmen about funding matters related to Global and Tropical Health. This year, ACME Chair Lyric Bartholomay was grouped with incoming president of the ASTMH, Dr. Pat Walker, and Program

Committee Chair, Dr. Dan Bausch. The timing of this event was impeccable - our visit to the hill on May 16th immediately preceded consideration of three different plans to fund research on Zika virus. On Tuesday, May 17th, the Senate voted to grant over \$1 billion in funding toward research and control of Zika virus. The House and Senate still need to finalize a funding amount and vote on the resulting bill. Please watch for ASTMH press releases on this topic, and continue to respond to ASTMH Cap Wiz alert or other action alerts on critical matters of research and funding support.



Drs. Pat Walker, Lyric Bartholomay and Dan Bausch meet with a staffer in the office of Senator Tammy Baldwin (WI-D) at the ASTMH On the Hill Day 2016

ACME pre-meeting course 2015

The first ACME pre-meeting course was a great success. Lyric Bartholomay, Sam Telford and Mike Dunbar offered a day-long session on Entomology for the Clinician. The session was advertised as such: Beyond their well-known roles as vectors of infectious agents, arthropods directly injure people by biting or stinging or inducing allergic responses; further, perceptions of infestation may provoke emotional distress. This course reviews the main forms of injury or ill health due to arthropod exposure or infestation; discusses diagnostic and arthropod identification methods; provides current recommendations for treatment; and presents updated preventive options, including both personal protection and environmental control methods. Hands-on exercises and demonstrations provide a close look at diverse arthropods, with key points explained to facilitate identification of specimens that a clinician might see in practice. The Pre-Meeting course organizers were exceptionally grateful for presentations from invited speakers Drs. Scott Norton (Children's National Medical Center), Richard Pollack (Harvard University), Nancy Hinkle, University of Georgia and Justin Schmidt (Southwestern Biological Institute) on mites, bed bugs, lice, delusory parasitosis, mviasis and envenomization.

Hoogstraal Medal

Congratulations go to Dr. Durland Fish, the 2015 Hoogstraal Medal recipient for Outstanding Achievement in Medical Entomology. ACME was very pleased to see the award go to Durland, to acknowledge his enormous contributions to the understanding of the biology, ecology and epidemiology of ticks and tick-borne diseases, mosquitoes and mosquito-borne diseases, and to celebrate his legacy manifest in Medical Entomologists who now populate academic and public health institutes across the states.

Consider nominating someone next year for the Hoogstraal medal. See information at the following link: <u>http://www.astmh.org/</u> <u>subgroups/acme#hoogstraal</u>







http://www.astmh.org/ACME.htm

ACME pre-meeting course 2016

This year, the current ACME and ACAV chairs (Lyric Bartholomay and Kathryn Hanley) have joined efforts to envision a pre-meeting course entitled: Know Thine Enemy: Methods to Identify **Mosquitoes and the Viruses they Carry**. The course will take place on November 13, 2016; 7:30 a.m. – 3:45 p.m. at the Atlanta Marriott Marguis, Atlanta, GA USA. The concept for the course this year follows: In the wake of major outbreaks of arthropod-borne viruses in the Americas, we have joined forces and gathered expertise from both the American Committee of Medical Entomology and the American Committee on Arthropod-borne viruses to speak to the challenges of identifying the culprit vector and virus in a mosquito-borne disease epidemic. We will review the process of vector incrimination whereby the mosquito vector and viral etiologic agent are revealed. From the vector perspective, we will discuss methods for knowing thine enemy via arthropod identification, vector competence studies, targeted trapping informed by an understanding of vector biology and biogeography. From the virus perspective, we will discuss approaches to cast a broad net in order to identify and isolate a variety of arboviruses using classical and state-of-the art culture and sequencing approaches, along with field-applicable rapid diagnostics for particular virus species of interest. During the course, participants will have opportunities to see live mosquito specimens and receive basic training in mosquito identification. Select participants will have an additional opportunity to visit the CDC and MR4 laboratories to experience a hands-on clinic in mosquito identification and to see how mosquito colonies are maintained and mosquitoes are manipulated for vector competence studies. For more information, see the following link: http://www.astmh.org/ annual-meeting/registration



ACME presence in the response to Zika virus

The emergence of a Zika epidemic is an important global health issue and ACME's previous or current members have been at the forefront of the response. On February 16, 2016, the National Academies of Sciences, Engineering and Medicine convened a one-day workshop to discuss Research Priorities to Inform Public Health and Medical Practice for Domestic Zika Virus. Nine members of ASTMH, including ACME current and previous members (Stephen Higgs, Tom Monath an Nikos Vasilakis) offered informed perspectives and scientific insights. Click on the link to view a written summary of the workshop, including videos and speaker slides.

On 14–15 March 2016 the WHO Vector Control Advisory Group (VCAG) reviewed five potential vector control tools and existing tools for use in the context of the response to the Zika virus outbreak. ACME chair-elect Gonzalo Vazquez-Prokopec and previous member Thomas Scott participated in this important policy meeting. Please follow the <u>link</u> to see details about the meeting and the recommendations presented.

ACME's members in ASTMH leadership

In 2015 ASTMH elected Stephen Higgs as its president. Higgs is director of the Biosecurity Institute at Kansas State University. The Society also electected new coucilors including Nicole Achee, Medical Entomologiost and Research Associate Professor at the Department of Biological Science, University of Notre Dame and the Eck Institute for Global Health.

30th anniversary celebration

In 1985, Charlie Bailey (USAMRIID) asked Charlie Calisher (then at CDC and Chairman of ACAV) if the leadership of ACAV would consider the formation of a Medical Entomology Subcommittee. The projected goals of this subcommittee included (among other things) promoting medical entomology in tropical medicine, and encouraging young talented medical entomologists to become active participants in the ASTMH. The American Committee of Medical Entomology was formed. In anticipation of celebrating 30 years of ACME, we solicited photographs and narratives from our membership. The result was overwhelming; we now have an outstanding collection of photographs from members practicing their science and, thanks to incoming chair Gonzalo Vazguez-Prokopek, have archived those photos for posterity. At the 2015 ASTMH meeting, we celebrated this momentous event, 30 years later. The anniversary celebrations took place during the mixer between ACME symposia and involved a 30th anniversary slideshow of images of our members over the years, and a delicious, though heavily ectoparasite-infested cake. It was a great celebration with members new and old; many thanks for your participation in the event if you happened to be there!

From Walter Tabachnick about the inception of ACME

"I happened to be going to a medical entomology paper session at a Trop Med meeting around 1983. I think it was in DC. Anyway I wound up in the elevator with Charlie Bailey who I knew and the room for the session was in the basement of the hotel. Charlie quipped to me 'goodness couldn't they find a better place for us. How far down will we have to go." When we got to the room there were exposed pipes running on the ceiling. The room was appalling. Charlie said to me that we need to have a better presence in the society like a society subcommittee focused on medical entomology. I kind of recall he felt that otherwise the rooms for us would just get further below ground. And that was the real beginning of it all."

From Charlie Bailey

"It was very good to hear of your plans to celebrate 30 successful years of ACME. At the time that I first formulated the idea of ACME, I was very involved in Medical Entomology related research as the Chief of the Department of Arboviral Entomology at USAMRIID. Unfortunately, my bosses at the time felt that I could be better utilized in administrative positions and my career has evolved to the

point where I have not worked as an entomologist for 30 years. In addition to Charlie Calisher, I also spoke with other active members of ACAV such as Tom Monath and Phil Russell, all of whom encouraged me to proceed with this new organization. I then pulled together several entomologist, including Tom Scott, Duane Gubler, Mike Turrell and several others that were active in the ASTM&H. We quickly agreed that the medal to recognize outstanding accomplishment during a career should be named after Harry and the name of the group should be the American Committee on Medical Entomology. I decided to ask the Rockefeller foundation for financing to cast molds and produce several silver medals. If I recall correctly, they gave us \$3,500.00. Recently, the Deputy Commander of USAMRIID gave the molds to my daughter who delivered them to my house here in Virginia." Dr. Bailey very generously turned the Hoogstraal medals over to the ASTMH for the archives. ACME was most grateful to receive this piece of history – both the narrative and the medal molds!



This image of Harry Hoogstraal on an expedition in Africa ca. 1948 is one of many photos submitted and archived during the process of preparing for our ACME 30th anniversary celebration.



Young investigator Award-international

ACME now offers three Young Investigator Travel Awards: Masters, Doctoral and Postdoctoral 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. Consider applying!

RENEW YOUR ACME MEMBERSHIP!!

Your membership dues of \$25 are vital to support ACME activities such as 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 including reduced offerings! **To renew:** Visit the <u>member login page</u> at astmh.org; Login using your username and password (case sensitive). If you don't know your login and password, go to <u>"forgot your password"</u>; Click "Renew" on right side of screen and follow instructions

Sponsor ACME !

ACME is actively pursuing individual, foundation or corporate sponsorship to increase the number and amount of ACME Young Investigator Awards. ACME sees these awards as critical for strengthening the future of medical entomology research. ACME members who are interested in such sponsorship, or who have connections with foundations or corporations that may be interested in such sponsorship are encouraged to contact Nicole Achee (nachee@nd.edu) or Lyric Bartholomay (lbartholomay@wisc.edu).

Get involved !

If you are interested in learning more about ACME year-round activities or serving on the ACME Executive Council, please contact Lyric Bartholomay (<u>lyric.bartholomay@wisc.edu</u>).

ACME Membership (n = 386) **Membership** (as of April 27, 2016) Currently ACME is 386 members strong. We expect this number to grow as society membership renewals continue under the new ASTMH fiscal year system, and as the annual meeting approaches. Consistent with previous years, students and post-doctoral researchers comprise the majority of our membership. Thank you to returning members for your continued support of ACME, and Post-doc (26%) welcome new members! Life member (<1%)</p> Student Member (41%) Member (33%)

Want to make a donation to support the ACME Young Investigator Award? Please contact Lyric Bartholomay (lbartholomay@wisc.edu) for more information. For a list of previous award winners and additional application information, please go to:

ACME website (http://www.astmh.org/ACME.htm)

Financial report

For the period ending March 31, 2016, the total net assets for all ACME funds was \$14,729. This significant increase in our account is due primarily to funds secured from the SC Johnson Company by former ACME Chair, Nicole Achee. These funds will be used to support two new mid-career investigator awards over the next five years. Year-to-date for 2015-2016, ACME had \$3,170 in revenue from membership dues. A consistent financial goal of ACME has been to increase support for student travel awards. In realization of this goal, over the last couple years ACME has been very fortunate to be able to offer additional student travel support from the generous individual donations, and a \$1,500 grant from the ASTMH Council. ACME will again use these funds to support three Young Investigator travel awards for the 2016 annual meeting. We whole-heartedly thank the parent council for their continued support of our subgroup, as well as individual sponsorship of awards that enable our outstanding student members to attend the annual meeting!