



MUVE Quarterly Newsletter

Winter 2017

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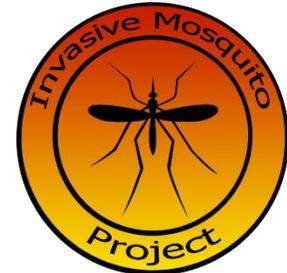
MUVE Initiatives

Medical Entomology Group

Focus: Outreach and Education

1) Citizen Science Projects, Initiative Leader: **Lee Cohnstaedt**

- www.citizenscience.us - Medical, Urban, or Veterinary entomology citizen science projects.
- Citizen science projects work with educators and local community leaders along with scientists and researchers to create community based science projects. One example is the Invasive Mosquito Project which is a mosquito surveillance lesson plan for teachers that meets next generation science standards.
- Additional citizen science projects for other organisms can be added to the www.citizenscience.us landing page. Contact Lee Cohnstaedt if you would like to add your project or if you would like help developing a citizen science project for your research.
- The projects should have the goal of: (1) A published peer reviewed lesson plan to follow, (2) Be a two-way information exchange where **both** the teachers and researchers for mutual benefit. (3) Have the objective of educating the community about science and possibly recruiting the next generation of scientists.
- Multiple examples of already established mosquito control outreach programs (Skeeter School Bus/Mobile Vector Units etc.) that could be used in combination with these lesson plans.



1) **STEM Bugs at ESA, Initiative Leader: **Kyndall Dye-Braumuller****

- STEM Bugs is an already established and working program during ESA meetings where local educators/teachers and students get to learn about insects.
- MUVE could easily become involved by creating our own medical (or veterinary/urban) entomology section for the teachers and students to learn about our specific pests and study organisms (which invariably affect their lives every day).
- STEM Bugs organizers have already discussed inviting the ESA Sections to participate in

- something similar to this.
 - d. MUVE members could easily bring mosquitoes, kissing bugs, ticks, biting flies, termites, ants, pest cockroaches, bed bugs, etc.
 - 2) **MUVE Emergency Response Entomologists, Initiative Leader: [Mustapha Debboun](#)**
 - a. Create a pool or database of medical entomologists who would be willing to be deployed to natural disaster-affected areas etc. for emergency mosquito control response.
 - b. MUVE would work with the CDC and other international agencies in order to develop this database.
 - c. This would help streamline emergency response when medical entomology expertise is needed globally.
 - 3) **Advocating for MUVE-related Funding, Initiative Leader: [Jennifer Henke](#)**
 - a. The Centers for Excellence grants funds will inevitably run out. What is going to happen to all of the research, outreach, and collaborative projects when this happens?
 - b. MUVE (and specifically medical entomology experts working in these Centers for Excellence) members should begin forming groups and materials to advocate for the continuation of these funds. MUVE should be extremely proactive in this process.
 - c. The Centers for Excellence are unprecedented and should continue as they foster collaborations that will accomplish a wide variety of vector-borne disease research projects and outreach programs.

Urban Entomology Group

Initiative Leaders: [Faith Oi](#), [Jennifer Gordon](#)

Stakeholders: Everyone- urban/structural pests have the potential to touch everyone's lives

2017/2018 Activity:

Respond to National Institute of Food and Agriculture solicitation for comments on strategic planning requesting some of their funding be dedicated to urban entomology.

- 1) Amplify awareness, appreciation and interest in the public health importance of urban insects
 - a. Urban pests affect everyone, so it is an easy way to foster interest in urban entomology and entomology in general
 - b. Recruit new cohort of young urban entomologists
- 2) Provide training information for food safety
 - a. Structural pest transmission of pathogens
 - b. Research proving passive transmission of pathogens
 - c. Create network for professionals working in food safety
 - d. Advise policy around importation and globalization of food.
- 3) Funding for urban entomology
 - a. Prevent loss of urban positions at universities
 - b. Foster opportunities for young urban professionals (grad students)
 - c. Create academic positions (research and extension professors)
 - d. Provide funds for research

Veterinary Entomology Group

- 1) Increase taxonomic and pest management training opportunities for veterinary entomologists (particularly ECPs). **Initiative Leaders: [Alec Gerry](#), [Amy Murillo](#)**
 - a. *Activity: Facilitate access to suitable training courses*
 - i. Identify currently available training courses in the U.S. and facilitate discovery of these courses by MUVE members through creation of a "training opportunities" landing page on the ESA-MUVE website.
 - ii. Determine gaps in training needs and facilitate development of new training courses developed by MUVE members to fill these gaps.

- b. *Activity: Develop a resource sharing library for on-line pictorial insect keys*
 - i. Identify currently available online insect ID keys
 - ii. Determine suitable method to share keys through ESA-MUVE website
- 2) Organize resource library for laboratory protocols, **Initiative Leaders: Dana Nayduch, Annie Rich**
 - a. *Activity: Facilitate publication of laboratory protocols*
 - i. Identify appropriate ESA Journal for publication of lab protocols
 - ii. Encourage MUVE members to publish protocols for future archiving by MUVE.
 - b. *Activity: Organize resource library available through ESA-MUVE website*

ESA 2017 MUVE Award Winners—Congratulations!

Session		1st Place	2nd Place
Undergraduate Ten Minute Paper Competition	MUVE and PBT	Jaclyn Everly	Makaylee Crone
Graduate Ten Minute Paper Competition	MUVE: Diptera-Flies	Ashleigh Faris	Jessica Thomson
	MUVE: Diptera-Mosquitoes 1	Casey Parker	Shelley Whitehead
	MUVE: Diptera-Mosquitoes 2	Karen Poh	Sarah Silverman
	MUVE: Termites and Urban Insects	Rachael Bonoan	Jeremiah Foley
	MUVE: Ticks and Urban Pests	Mackenzie Tietjen	Aaron Ashbrook
Undergraduate Student Poster Competition	MUVE and PBT	Korie Debardlabon	Vanessa Trivino
Graduate Student Poster Competition	MUVE: Blattodea, Hemiptera, and Others	Jayshree Patel	Sudip Gaire
	MUVE: Coleoptera and Diptera	Staci Dreyer	Annie Rich
Undergraduate Student Virtual Poster Competition	MUVE, P-IE, and SysEB	Rachel Wilkins	Matt Hamblin
Graduate Student Virtual Poster Competition	MUVE	Heather Coatsworth	Laura Harmon
Graduate Student Three-Minute Lightning Bug Talks	All Sections: Session 1	Emily Kraus	Grace Craigie
	All Sections: Session 2	Katherine Todd	Katlyn Catron

Lyme Disease CDC Report

The Centers for Disease Control and Prevention released their report on Lyme disease in the United States from 2008 – 2015. Lyme disease is the most commonly reported vector-borne disease in the United States. Most cases occur in the Northeast, mid-Atlantic, and Upper Midwest regions. During 2008–2015, a total of 275,589 confirmed and probable cases were reported to CDC through the National Notifiable Diseases Surveillance System. This report highlights the continuing public health challenge of Lyme disease in states with high incidence (=10 cases per 100,000 population) and demonstrates its emergence

in neighboring states that previously had few cases. The report can be found in the MMWR here: <https://www.cdc.gov/mmwr/volumes/66/ss/pdfs/ss6622-H.pdf>

Why Publish Your Research in the Journal of Medical Entomology?

ESA's portfolio of journals is broad, but Medical, Urban and Veterinary Entomology (MUVE) Section members benefit from an ESA journal that is specifically aimed at reaching and publishing the research of medical, urban, and veterinary entomologists—the Journal of Medical Entomology (JME).

History. JME was created in 1964 by the Bernice P. Bishop Museum in Hawaii to provide a venue for the publication of important international research on medically important arthropods as well as provide a forum for contemporary issues in medical entomology. I became the first permanent ESA appointed editor in 1989 soon after JME was acquired by ESA in 1988. Others have served as Editor-in-Chief following my initial term, while I stayed on as a subjected editor; I became editor-in-chief again in 2014. Since my first term as editor, the journal has expanded its scope to include arthropods of veterinary and then urban importance and has served as the flagship for Section D and now the MUVE Section. In 2014, ESA journals became published, distributed and marketed through Oxford University Press (OUP), greatly expanding the visibility of JME.

Scope. JME reports on all aspects of medical and veterinary entomology and acarology. Subject sections include: morphology, systematics, evolution; sampling, distribution, dispersal; development, life history; population and community ecology; behavior, chemical ecology; population biology/genetics; molecular biology/genomics; neurobiology, physiology, biochemistry; vector control, pest management, resistance, repellents; arthropod/host interaction, immunity; vector/pathogen/host interaction, transmission; vector-borne diseases, surveillance, prevention; direct injury, myiasis, forensics; modeling/GIS, risk assessment, economic impact. In addition to full-length research articles, the journal publishes Reviews, interpretive Forum articles, Short Communications, and Letters to the Editor.

Journal readership. Research published in JME is widely circulated and read due to ESA and OUP promotion. Under OUP, JME's total circulation has risen for the last three years to >2,500 institutions and individuals. In addition, approximately 5,500 sites in the developing world receive access to JME's content through Oxford initiatives. In 2016, JME papers averaged 38,278 full text downloads/month. JME published 7 of the top 25 most accessed papers in the ESA portfolio in 2017, including 4 in the top 10 papers. The JME article "Behavioral Responses of Nymph and Adult *Cimex lectularius* (Hemiptera: Cimicidae) to Colored Harborages" by McNeill et al. achieved one of the ten highest altmetric scores of 2016 out of all journal articles published by OUP. From its date of publication in April until the end of 2016, this article received 3,025 full text downloads and 5,830 views. Any interested scientist or reader can sign up to receive an email alert when papers are first published or a table of contents alert when a full issue is published. If you haven't signed up for JME content alerts yet, instructions are available at https://academic.oup.com/insect-science/pages/ESA_alerts.

Review and publication. In 2016, JME published 168 articles. Papers are published on line and then in print as soon as possible after the review and editing processes are completed. To ensure manuscript quality, submissions are reviewed anonymously by 2-3 scientists in the field as well as the JME subject editor for that area. Careful review has not slowed publication. In 2016, for accepted papers, the median time from receipt of the manuscript to acceptance was 10 weeks and to online publication was 15 weeks. JME and ESA work to create a positive and efficient publishing experience for authors. Published papers funded by the US NIH are automatically uploaded to PubMed and PubMed Central. JME has partnered with Dryad to simplify open access to data and a link to these data is included in the final paper. Although publication both on line and in print are cost free to ESA members, ESA also offers **open**

access to authors for a price comparable to competing journals such as PLoS. Issues of JME going back to volume 1 are archived and available to all ESA members.

In summary, things have changed markedly since I first became editor. Review and publication are faster, research is more widely disseminated and the profile of JME has been enhanced by OUP and ESA marketing efforts. Certainly submission to JME will ensure that your work effectively reaches your peers within the medical, urban and veterinary entomology community.

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IPM Symposium - Call for Posters

The 9th International Integrated Pest Management (IPM) Symposium Poster Committee is calling for additional posters, specifically from the MUVE Section of ESA. The International IPM Symposium is your premier global event for professional development, networking with colleagues and leading scientists, and learning the latest research and strategies for effectively managing pests in agriculture, communities, and natural areas. In 2018, we will organize around an important theme, *IPM: Improving Health, Environment and Global Sustainability*.

Plans for 2018 include mini-symposia featuring international experts addressing hot topics including management solutions for newly introduced pests, as well as sessions for agricultural and food company leaders, and increased opportunities for student participation and recognition. Also new in 2018 will be a coordinated opportunity to visit policymakers on Capitol Hill to educate them on IPM needs and benefits for your sector and clientele.

Participants will also enjoy the very best activities of previous symposia including concurrent sessions, posters, awards, exhibits, and plenty of opportunities to meet with cooperators and potential collaborators. Sessions will address IPM across disciplines, internationally, and in the market place, urban settings, greenhouses and more.

Past participants at this premier international IPM event have included researchers, teachers, Extension educators, independent consultants, the agriculture and food community, IPM practitioners, academics, government scientists and administrators, employees of non-governmental organizations, students, and business professionals from the U.S. and more than 30 countries.

Point of Contact: Dawn Gouge, Ph.D., dhgouge@email.arizona.edu
<https://ipmsymposium.org/2018/>

Upcoming Deadlines for ESA, ESC, & EBC Joint Annual Meeting 2018

Program Symposia Deadline	1 February 2018
2018 International Branch Virtual Symposium Virtual Poster Submissions Deadline	5 February 2018
Section & Member Symposia, Organized Meetings, and Workshops Deadlines	1 March 2018
Paper/Poster Submission and Lunch and Learns Deadlines	4 June 2018

Upcoming Meetings of Interest to MUVE Members

USDA S-1060 Multi-State Research Meeting	1/17 – 1/18/18
AMCA Annual Meeting	2/26 – 3/02/18
International Integrated Pest Management (IPM) Symposium	3/19 – 3/22/18
2018 International Branch Virtual Symposium of the ESA	4/16 – 4/18/18
National Conference on Urban Entomology and Invasive & Pest Ant Conference	5/20 – 5/23/18
James Steele Conference on Diseases in Nature Transmissible to Man	5/23 – 5/25/18