

MUVE NEWSLETTER

October 2023

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FROM THE PRESIDENT

Last Letter. It dawned on me the other day that this is my last letter from the President, so I will keep it brief. This pas year Section leadership has taken the time to prioritize our members over tradition. Specifically, we have attempted to outline a budget with plans stemming from our member-proposed initiatives to maintain relevancy for current and



future members. In our opinions, attending a meeting to give a presentation or poster should not be the primary reason to attend our national meeting or be a member of the society and section. Rather, we hope people will begin to attend meetings each year to network with one another and learn from each other.

For those attending the meeting in National Harbor, you will see some of these changes beginning to unfold with more opportunities built in for interacting with one another. Try to save a bit of time to attend our networking socials - I suggest going to the meeting website and clicking the star to identify the four following sessions as favorites:

- Sunday, 1-3:30 p.m. in Potomac 1-2, we will have a MUVE Networking Meeting to allow new and returning members the oopportunity to meet before the meeting really gets busy. We will spend the first few minutes discussing what we have done as a section and then what we plan to do for 2024. Opportunities for sharing ideas with Section leadership, joining a mentoring pod, and volunteering will also be available.
- Monday, 1:30-5:30 p.m. in Potomac C, we will have our MUVE Business Meeting with Highlights of Medical, Urban, and Veterinary Entomology which also includes award recognitions. A light social will be provided (light refreshments and a cash bar).
- Tuesday, 1-4 p.m. in Camellia 3-4, we will have a new MUVE Networking Event: Problem Solving Protocols with Popcorn session to allow anyone to share their problem and find a solution. We hope to pop at least one problem for everyone during this session. We ask that you (student, early-career professional, latecareer professional) be brave and pitch problems to the audience and that our audience will speak up and help pop thos problems with solutions and ideas. Please come with your technical, analytical, writing, and/or tangible problems in hand. No PowerPoint presentation or people problems allowed. This should be a fun opporunity to learn from one another and allow people to network solutions together. Examples of problems - best statistical approach, coding, finding samples, rearing colonies, where do we go now that BioQuip is gone, how should I format my CV for government jobs?
- Wednesday, 11:30-12:30 p.m. in Potomac C, we will have a MUVE Final Business Meeting where the President, Kyle Jordan, will help lead the membership into the next year with goals and accomplishments. A light lunch will be provided.

Thank you for reading this far and giving me the opportunity to lead y'all. I look forward to seeing you in National Harbor.

POLICY IN ACTION



In response to a need to expand our nation's capacity in vector-borne disease prevention and control priorities, the CDC established and funded five Regional Training and Evaluation Centers (TECs) this year. These five TECs include <u>Cornell University</u>, <u>Pennsylvania State University</u>, <u>Colorado State University</u>, the City of New Orleans Termite and Rodent Control Board, and the Puerto Rico Science, Technology, and Research Trust. Two additional awardees that will support specific evaluation projects include the American Mosquito Control Association and the University of Florida.

Goals of the TECs include increasing training opportunities for students and professionals on vectorborne disease prevention and control; evaluating the impact and effectiveness (non-research) of existing or commercially available vector-borne disease prevention and control tools, technologies, and programs; and building partnerships among institutions and organizations in the vector-borne disease community.

MUVE JOB OPPORTUNITIES

Michigan State University, Assistant Professor

The Department of Entomology at Michigan State University (MSU) invites <u>applications</u> for a full-time, 9-month tenure track Assistant Professor with 60% research and 40% teaching assignment. The position start date is anticipated to be August 16, 2024. MSU seeks candidates with expertise in arthropods of medical/veterinary significance that may include research from cellular to global scales; interactions of arthropod vectors with pathogens, symbionts and other bicrobes using state-of-the-art genomic and/or other technologies; basic and applied questions at the individual, population, community, or ecosystem levels; and big data modeling within a multidisciplinary, systems biology and One Health approach. The appointee will be expected to build an internationally prominent research program in this area and contribute to undergraduate and graduate teaching and department, college, and university service.

MEMBER SPOTLIGHT: MUVErs



Help us highlight MUVE members and bring their work into the spotlight! Please send any MUVErs news to be included in future newsletters and tweets to Mikenna Smith.



Jimmy Pitzer, Ph.D., Started a new position with the USDA-ARS Arthropod-Borne Animal Diseases Research Unit in Manhattan, KS as a Research Entomologist. Jimmy's research will focus on furthering our understanding of the behavior and physiology of filth flies and biting midges implicated as vectors of pathogens to livestock and other animals. His goal is to identify characteristics that can be exploited to improve integrated management programs for these pests and ultimately, improve animal health and stakeholder outcomes by disrupting pathogen transmission cycles.

The Southern Region Delusional Infestation Working Group was formed in March 2023 and includes 31 diagnosticians, extension urban entomologists, medical/veterinary entomologists, pest management professionals, undergraduates, a psychologist, and a psychiatrist. This Southern Region IPM Center-funded group represents twelve of thirteen southern states and includes 22 ESA members. Delusional infestation (DI) is a psychiatric disorder in which a person mistakenly believes they are infested with insects, mites or other organisms. Extension agents, entomologists, pest management and other professionals are often sought to help identify the cause of skin irritation. A needs assessment of the professionals led to the creation of working groups in Tennessee and the Southern Region to develop reliable resources and standardized procedures for these professionals to interact with DI sufferers and guide them safely and respectfully to medical care. Educational materials are still in development but will be shared with the Southern Region Extension personnel when completed. The group plans to present their projects at the National Conference on Urban Entomology in Mobile, AL in May, 2024.



Charity G. Owings, Ph.D., a forensic entomologist, recently began a position as a Research Assistant Professor in the Department of Entomology and Plant Pathology at the University of Tennessee. Dr. Owings' research interests focus on the application of molecular biology to better understand various filth fly species, with a special emphasis on blow flies. Dr. Owings aims to drastically increase the undergraduate enrollment in entomology courses at UTK by providing exciting opportunities in both coursework and research. Currently, Dr. Owings is developing three new courses for EPP, including two in forensic entomology (Eaters of the Dead: Introduction to Forensic Entomology,

and Advanced Forensic Entomology) and one general introduction to insect diversity (Bugs: Blzarre, Beautiful, and Beneficial). Before being hired by UTK, Dr. Owings obtained her BS in Forensic & Investigative Sciences, Entomology, and Physical Anthropology from Texas A&M University, where she also obtained her M.S. in Entomology under the supervision of Dr. Jeff Tomberlin. She then went on to obtain her Ph.D. in Biology, as well as postdoc, at Indiana University-Purdue University Indianapolis with Dr. Christine Picard. Finally, Dr. Owings spent three years as a Haslam postdoctoral fellow at the UTK Forensic Anthropology Center, where she conducted forensically important research on the arthropods colonizing human remains at the Anthropology Research Facility (known colloquially as "the Body Farm"). Dr. Owings was the only full-time entomologist to ever work at the FAC. Overall, Dr. Owings is enjoying her new role at UTK and is currently searching for graduate students to perform research related to vertabrate decomposition, forensic entomology, and insect agriculture.

NEWS BRIEFS



Photo by Matt Bertone

Blog Post Highlights from Entomology Today

- Public Health Entomology Interns, Fellows Gain Interdisciplinary Experience in 2023
- New Study Points to Management Strategies for Invasive Tick on Cattle Farms
- DIY Mosquito Feeder: How to Feed Blood-Sucking Insects on a Budget
- How a Life-Long Interest in Wildlife Brought One Entomologist to Vector-Borne Disease Ecology
- · Even at the Zoo, Mosquitoes Favor Local Wild Birds for Meals
- One Health: Where Entomology and a Host of Scientific Fields Intersect
- Master's Program in Vector-Borne Diseases Tackles Need for Medical Entomologists

Remember: For the latest breaking news items related to MUVE, please follow us on Twitter.

MUVE STUDENT SPOTLIGHT



Elise A Richardson, MS, is currently a Ph.D. candidate studying entomology at the Department of Entomology and Plant Pathology at NC State University. Her academic journey has exposed her to a diverse range of medically relevant arthropods including ticks, mites, mosquitoes, biting midges, and the vector-borne pathogens they transmit. Her Ph.D. research encompasses three distinct areas of study: a neglected species of *Rickettsia* transmitted by ticks, the use of novel minerals to control tick populations, and characterizing the microbiome of chiggers collected in the US. Elise completed her Master's degree at the University of Florida, where her thesis focused on the effect that infection with a pathogen has on tick host-seeking behaviors. She is a prolific writer, having published 10 manuscripts, six of which she has led as first author. During her Ph.D. she has been awarded four grants including one funded by CDC/NIOSH for a pilot project. Beyond her

academic pursuits, Elise is also passionate about outreach and science communication. She engages in activities like the "Skype a Scientist" program, where she connects with children to spark their enthusiasm for insects. Additionally, later this year she will be speaking in a symposium at ESA on her research on a Rickettsial tick-borne pathogen.

Students, what accomplishments would you like to highlight for the MUVE Section? Write a short (200 words or less) article explaining your achievements and include this as a non-refereed article on your CV! Please send your achievements to be included in future newsletters and tweets to Mikenna Smith.

VOLUNTEER & LEADERSHIP



Looking for ways to get involved with MUVE or ESA generally? Always feel free to <u>contact MUVE</u> <u>President Becky Trout Fryxell</u> with your interest.

MUVE Honors & Award Committee

The MUVE Honors & Award Committee is looking for volunteers to serve as judges. Contact Zach DeVries if you are interested in serving as a volunteer on this section.

Volunteers Needed for the Grand MUVE Library Initiative

Have you ever thought it would be great to have a one-stop-shop for MUVE-related resources? Are you interested in a common repository for information like MUVE related protocols, available awards and opportunities, and the emergency response entomologist list? ESA MUVE is looking for volunteers to assist with one of our new Section Initiatives, the Grand MUVE Library. If you are interested in assisting with this effort or want to learn more, please contact Alexis Kriete.

POLICY CORNER



MUVE editorial content is generated by and for MUVE members of the ESA and does not necessarily reflect policy of the broader organization.

In a Challenging Federal Funding Landscape, MUVE Priorities are a Potential Silver Lining

By Meredith Spence Beaulieu, Ph.D., BCE Class of 2020 ESA Science Policy Fellow and MUVE Science Policy Committee Representative University Program Manager, NC State Global One Health Academy

Congress is in a state of extreme dysfunction. Partisan divides have continually become more pronounced and have even permeated into intra-party dynamics, culminating in a historic vacancy in the position of Speaker of the House. Appropriations discussions have been in a gridlock and, after narrowly avoiding a government shutdown, we are currently operating under a continuing resolution which extends funding for essential programs at last year's levels - through November 17. Yet amidst this chaotic backdrop, there is reason for some optimism when it comes to MUVE priorities.

At the time of writing, the Senate Appropriations Committee has approved all of its fiscal year 2024 (FY24) bills but has not passed any in the full Senate, while the House Appropriations Committee has approved 10 of 12 and passed 4 (appropriations status can be tracked here). The two chambers present very different visions of what they want FY24 funding to look like, but both are constrained, with most relevant agencies (including NSF, CDC, EPA, and USGS) either funded flat or decreased from FY23 levels. These fiscal constraints are in line with the Fiscal Responsibility Act of 2023 that was enacted in June as part of the debt limit negotiations and set limits particularly on non-defense discretionary spending. Despite the belak funding outlook, vector-borne disease priorities have fared fairly well, with a proposed \$3 million increase in the Senate version.

Looking into the future, the Biden administration released its memorandum on research and development priorities for FY25. The memo maintained an emphasis on health priorities for next year, including support for environmental health programs, health equity, and general capacity to address current and emerging health threats. Vector-borne diseases clearly fall under these broad priority areas, but it will be critical to continue advocating for vector-borne disease specific funding and support mechanisms so that ingrastructure for MUVE research and control efforts can be maintained.

Beyond appropriations, Sen. Angus King (I-ME_ introduced the bipartisan <u>SMASH 2.0</u> <u>Act</u> (Strengthening Mosquito Abatement for Safety and Health), which is intended to help strengthen and expand the CDC vector management and response efforts. Some of the text from the bill was included in the <u>Senate version</u> of the reauthorization of the <u>Pandemic and All-Hazards Preparedness</u> Act (PAHPA). The House and the Senate both introduced versions of PAHPA reauthorization but have not begun the process to reconcile the two drafts. As a result, PAHPA expired on September 30, with some essential provisions remaining in place with the continuing resolution until a full authorization can occur either through a standalone bill or as an attachment to a larger bill.

One Health - the idea that the health of humans, animals, plants, and the invironment are interconnected and should be improved simultaneously - continues to gain attention at the federal level, as noted in a previous MUVE Policy Corner article. Vector-borne diseases align well with One Health, so this presents an opportunity to draw more attention to MUVE priorities. Through November 6, the CDC is seeking input on its draft "National One Health Framework to Address Zoonotic Diseases and Advance Public Health Preparedness in the United States," which aims to facilitate One Health-oriented collaboration across the government for zoonotic disease prevention and control.

Understanding and control of vectors and vector-borne diseases are recognized as important efforst, as evidenced by their relatively positive representation in FY24 appropriations, the White House's FY25 memo, language in other relevant legislation, and in the development of national frameworks that aim to emplement these legislative priorities. This is a silver lining, but it doesn't mean that we can stop our advocacy efforts. Sign up for ESA's action alerts to easily send letters that support our society's priorities. Contact your representatives directly to voice your support for vector-borne disease funding in appropriations, the inclusion of SMASH 2.0 Act language in PAHPA, or other things that will make a difference in your research or practice. Submit a comment on the draft One Health Framework to ensure that vector-borne diseases are specifically addressed. Now as much as ever, it is vital for the MUVE community to engage in policy conversations.





This section is taking a break this month but will return for our next newsletter.

OTHER ANNOUNCEMENTS

Participation Requests from MUVE Members

- Dr. Amy Murillo is conducting a <u>poultry mite survey</u>. The lab at UC Riverside is looking for commercial producers (via extension folks or veterinarians) to provide pests of poultry. This nationwide survey is open to all.
- Dr. Caleb Hubbard is conducting a house fly survey. Please contact <u>Dr. Hubbard</u> if you have recently colonized or wild caught house flies.
- Ms. Katy Smith from University of Tennessee is looking for images of ticks or flies on animals. If you think you can provide any fly-infested or tick-infested images, please volunteer via this short <u>Google Form</u>.

MUVE Members Invited to Become ESA Journals Peer Reviewers

The editors of the ESA Journals invite MUVE members of all backgrounds and experience levels to become peer reviewers.

By volunteerting as an ESA reviewer, MUVE members can improve their peer review skills, earn Web of Science (Publons) credit, and help curate and improve the latest science reported in the society's publications

The ESA's 7 peer reviewed Journals publish reports on a wide range of insect science. *Environmental Entomology* publishes reports on the interation of insects with the biological, chemical, and physical aspects of their environment. *Annals of the Entomological Society of America* publishes research, extension, teaching, policy, and public outreach concerning insects and related arthropods. *Journal of Medical Entomology* covers all phases of medical entomology and medical acarology, including the systematics and biology of insects, acarines, and other arthropods of public health and veterinary significance.

None of these journals would be possible without the dedication of our expert reviewers, who evaluate the manuscripts submitted for publication. To become a peer reviewer, please email

<u>pubs@entsoc.org</u> to express your interest. The Editorial Office will send you more information about how to create or update your ScholarOne account so that you can start receiving invitations to review.

To learn more about the review process see: Ethical Guidelines for Peer Reviewers



Getting the 'In' to Industry: An Interactive CV Building and Networking Workshop

The ECP Committee is hosting a workshop at the 2023 annual meeting (**Sunday, November 5, 2:30-5:30 p.m.**) that allows attendees to interact with industry representatives to help them prepare for the industry job market. Attendees will gain real-time feedback on their industry application packages from industry reps and have time to network with the reps after the workshop. <u>Registration for the workshop is open NOW</u> and limited to 30 attendees on a first come, first serve basis. Attendees should register and attend/watch the associated webinar prior to attending the workshop.

Biology of Vector-Borne Diseases Course, June 10-15, 2024, University of Idaho

University of Idaho's Institute for Health in the Human Ecosystem will host the sixth annual vector-borne disease course in Moscow, Idaho. This sex-day, in-person course provides accessible, condensed training and "knowledge networking" for advanced graduate students, postdoctoral fellows, faculty and professionals to ensure competency in basic biology, current trends and developments, and practical knowledge for U.S. and global vector-borne diseases of plants, animals and humans. The course application deadline is March 15, 2024 and thescholarship application deadline is December 31, 2023.

North American Black Fly Association Meeting and Taxonomic Short Course, Febrary 6-9, 2024, Harrisburg, Pennsylvania

The 20th annual North American Black Fly Association (NABFA) Meeting will take place **February 6-9, 2024, in Harrisburg, Pennsylvania**. A two-day taxonomic workshop will be led by Mr. Denny Keen, Ms. Carey LaMere, and Dr. Peter Adler on February 6-7.

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