Section Report to the ESA Governing Board

Title: MUVE Report

Submitter: Dr. Changlu Wang, President-MUVE

Date: October 21, 2019

Motion/Request for Action

None requested

Section Leadership

Changlu Wang	President			
Dana Nayduch	Vice-President			
Michael Reiskind	VP-Elect (& Chair of Awards Selection)			
Neil Spomer	Treasurer			
Mustapha Debboun	Past-President			
Chris Geden	Representative to Governing Board			
Cynthia Lord	Chair of MUVE Nominations Committee			
Glen Scoles	Representative to ESA Publications Council			
Pia Olafson	Representative to ESA Awards and Honors Committee			
Jennifer Gordon	Representative to ESA Science Policy Committee			
Kyle K. Jordan	Representative to ESA Diversity and Inclusion Committee			
Erika T. Machtinger	Representative to ESA Early Career Professionals Committee			
Meredith Spence Beaulieu	Representative to ESA Committee on Student Affairs			
Michael T. Bentley	Representative to Education and Outreach Committee			

Current Activities and Recent Accomplishments

- 1. The MUVE Section conducted five MUVE Officer Conference Calls in 2019. Quarterly newsletters have been distributed to MUVE members throughout the year and our final one of 2019 will be distributed in early November 2019. Judges and moderators for all MUVE presentations at the Annual ESA meeting have been identified.
- 2. We selected the following ESA annual meeting MUVE section award winners:
 - Recognition Award in Medical, Urban, & Veterinary Entomology was awarded to Laura Harrington.
 - Shripat Kamble Urban Entomology Graduate Student Award for Innovative Research was awarded to Aaron Ashbrook.

- Student Travel Awards were awarded to the following five students: Paula Castillo, Hannah Greenberg, Hannah Quellhorst, Shannon Sked, and Caixing Xiong.
- 3. The Nominations committee is working on replacing or renewing a few positions within the MUVE section before the annual meeting. Glen Scoles will continue for another term as ESA Publications Council member and Meaghan Pimsler replaced Jennifer Gordon as the Representative to ESA Science Policy Committee.
- 4. MUVE members provided input to the "2019 Draft Guidelines on the Prevention, Diagnosis, and Treatment of Lyme Disease" prepared by the Infectious Disease Society of America.

Section Business Meeting/Symposia Updates

- 1. The MUVE section will have Medical, Urban and Veterinary highlight presentations and Business Meeting during the annual ESA meeting on Monday, November 18, 2019 from 2:30-5:30 pm in Room 263. The final business meeting will be held on Wednesday, November 20, 2019 from 7-8 am.
- 2. MUVE section presentations for the annual ESA meeting.

# Section Symposia	#10-min papers	#Student 10- min papers	#Posters	#Student Posters	Total
7	87	83	35	39	251

The MUVE section had 1,569 members as of August 2019, which represented 23% of ESA members. However, the total MUVE related presentations at this year's annual meeting is only 15% of all presentations. We need to analyze whether a significantly lower proportion of MUVE members attend the annual meeting, or whether there is a lower proportion of MUVE members who attend the meeting but do not present, or some other reasons contributed to the lower percentage of MUVE presentations. Potential reasons are conflicting organizations (i.e., Society of Vector Ecology, American Mosquito Control Association, American Society of Tropical Medicine and Hygiene), and multi-disciplinary folks like Ecological Society of America, World Association for the Advancement of Veterinary Parasitology, molecular geneticists, etc.). Becky Anthony stated that MUVE members historically submit lower number of presentations.

Section Governing Council Capability Reporting

To aid the MUVE Section President in various duties, we proposed a new secretary position for MUVE. Chris Geden agreed to serve in this position as an initial appointment.

Wildly Important Goal #1: Medical Entomology Initiative

The **Invasive Mosquito Project** continues to receive samples and we are continuing to raise them and help schools. We are expanding to surveillance projects to zoos (Oklahoma, Kansas, Missouri, Arkansas, and Tennessee) to raise awareness of mosquitoes and the risks they pose. We have one zoo in each of the states mentioned above collecting mosquito abundance data on a monthly basis starting the spring of 2020.

The MUVE Vector Emergency Response Entomologists initiative continues to encourage and add to the pool of database of medical entomologists who are willing to be deployed to natural disaster-affected areas nationally or internationally for emergency vector control response and help streamline emergency response when medical entomology expertise is needed nationally or globally.

We will discuss new Medical Entomology initiatives during the annual ESA meeting.

Wildly Important Goal #2: Urban Entomology Initiative

IPM in low-income communities. The group held two conference calls to discuss funding opportunities, collaborative research, and engagement with government agencies. The group provided input on the new Real Estate Assessment Center (REAC) and National Standards for the Physical Inspection of Real Estate (NSPIRE) inspection process. A symposium on IPM in low-income housing was accepted by the 2020 National Conference on Urban Entomology (May 17-20, 2020, Mobile, Alabama).

Wildly Important Goal #3: Veterinary Entomology Initiatives

Identify existing training opportunities for veterinary entomologists.

Based upon MUVE member responses to the request for information on training courses (available and need) that was sent out in our previous newsletter and by ESA Central on our behalf, we compiled an excel spreadsheet listing training courses that are relevant to MUVE members and are currently available. The second tab of the spreadsheet includes member responses on "what training is needed". This list may be used to provide direction on what training opportunities MUVE members might consider developing in the future (see Appendix).

We added a few more online keys to the list of online material that is available.

Organize resource library for laboratory protocols. This initiative is completed. We will discuss new Veterinary Entomology initiatives during the annual ESA meeting.

ESA Section Self-Assessment: MUVE Reporting officer: Changlu Wang						
Capability	Self-analysis Question	Self- score (1-10)	Cumulative self-score			
Science/Public Policy	Has the SGC identified key topics/opportunities to influence?	9	8			
	Has the SGC identified key stakeholders?	9				
	Has the SGC developed tactics and goals?	7				
	What percentage of the activities are outside the AM Framework?	60%				
Continuing Education	Has the SGC identified key topics/opportunities to influence?	8				
	Has the SGC identified key stakeholders?	7	7.5			
	Has the SGC developed tactics and goals?	8				
	What percentage of the activities are outside the AM Framework?	70%				
Program and (Technical) Issue Management	Has the SGC identified key topics/opportunities to influence?	5				
	Has the SGC identified key stakeholders?	5	5			
	Has the SGC developed tactics and goals?	5				
	What percentage of the activities are outside the AM Framework?	10%				
Fostering Interest in Entomology (by Section)	Has the SGC identified key topics/opportunities to influence?	8				
	Has the SGC identified key stakeholders?	7	8			
	Has the SGC developed tactics and goals?	8				
	What percentage of the activities are outside the AM Framework?	80%				

Current Membership and Financial Status

The number of MUVE Section membership as of August 2019 is 1,569 (1,473 in 2018).

2018 Carryover Balance = \$13,070 2019 Allocation = \$10,300 Current MUVE Section Balance = \$23,370

Expected expense in 2019:

- o the Student Travel Awards ~ \$2,500
- Reimbursement of ESA Annual meeting registration for three speakers, i.e. Medical, Urban, and Veterinary Entomologists who will present MUVE highlights ~\$1500
- o Catering at the Annual Meeting for all MUVE members ~\$5,000

Other Information/Comments

See appendix below for results of a MUVE member survey conducted this year.

Motion/Request for Action Information

None

Appendix

Analysis of Current MUVE-related Educational Opportunities

In a survey to MUVE members conducted in summer of 2019, the following topics were identified as potential needs for educational training for section members:

- BASIC entomology/structural pest info for customer service professionals at pest
 control companies (not technicians, the people answering the phones). I think
 MUVE can do a service by making it easy for members to find existing training
 opportunities (rather than duplicating trainings that have been created by
 AMCA/NPMA/Pest industry, etc.
- Laboratory techniques, surveillance best practices, IVM, the basics of insecticide modes of action
- Proper vector surveillance for PMPs, other how-to's for PMPs-fit tests, etc.
- More information on murine typhus
- Methods for pest arthropod surveillance and management at animal facilities.
- Research methods for determining pesticide resistance in med/vet/urban insects.
- Application of insecticides and repellents to animals and animal facilities.
- Latest entomological research on ticks, invasive species, efforts to control invasive species and management practices
- Public health related medical entomology training, emergency response medical entomology
- Ant taxonomy/identification Academy
- An update on arthropod vectors of human pathogens in N.A. north of Mexico
- Changes in the taxonomy of arthropods of med-vet-urban importance in the N.A. north of Mexico
- Mite identification. It could address collection techniques, the tools needed (microscope specs, identification references) and the typical species encountered.

In the same survey, members were asked to identify any existing MUVE-related training opportunities in the U.S. The responses included:

- Advanced Mosquito Identification and Certification, (Hosted by University of Florida / IFAS Florida Medical Entomology Laboratory).
 - o Location Vero Beach, FL.
 - o Duration 2 weeks.
 - o Frequency: Annual (March).
 - o Certificate issued? Yes
 - o Fee: \$500.
 - o More information -- https://fmel.ifas.ufl.edu/fmel---gen---info---v3/fmel-advanced-mosquito-id-course/.
- Mosquito Surveillance and Control Program, (Hosted by AMCA).
 - o Location Various.
 - o Duration 2 days.
 - o Frequency: unknown
 - o Certificate issued? Yes

- o Fee: unknown
- o More information -- www.mosquito.org/general/custom.asp?page=training.
- **3-Day Master Vector Certification Course**, (Hosted by Western Gulf Center of Excellence for Vector-Borne Diseases).
 - Location Various.
 - o Duration 3 days.
 - o Frequency: unknown
 - o Certificate issued? Yes
 - o Fee: free.
 - o More information -- https://livestockvetento.tamu.edu/3-day-master-vector-certification-course/.
- **Acarology Summer Program**, (Hosted by University of Arkansas). Location Fayetteville, Arkansas.
 - o Duration 2 weeks.
 - o Frequency: Annual (June/July).
 - o Certificate issued? unknown
 - o Fee: \$375 student/\$525 non-student.
 - More information -- https://training.uark.edu/professionaldevelopment/courses/acarology-summer-program.php.
- **Biology of Vector-borne Diseases training course**, (Hosted by University of Idaho).
 - o Location Moscow, Idaho.
 - o Duration 1 week.
 - o Frequency: Annual (June).
 - o Certificate issued? unknown
 - o Fee: \$1.500.
 - More information -- https://www.uidaho.edu/cals/center-for-health-in-the-human-ecosystem/education/vector-borne-diseases.
- Mosquito Training Program, (Hosted by University of Florida).
 - o Location Online.
 - Duration unknown
 - o Frequency: unknown
 - o Certificate issued? Yes
 - o Fee: Free.
 - o More information -- https://ifas-mosquitoceus.catalog.instructure.com/.
- **Stop Pests in Housing**, (Hosted by Northeaster IPM Center).
 - o Location Online.
 - Duration unknown
 - o Frequency: unknown
 - o Certificate issued? unknown
 - o Fee: Free.
 - More information -- http://www.stoppests.org/ipm-training/trainingopportunities/.
- Various structural pest management training, (Hosted by National Pest Management Association).
 - Location Online.
 - Duration unknown

- o Frequency: unknown
- o Certificate issued? unknown
- o Fee: unknown
- More information -- https://npmapestworld.org/resourcecenter/online-training-resources/.
- Mosquito Control Dodd Short Courses, (Hosted by Florida Mosquito Control Association).
 - o Location Gainesville, FL.
 - o Duration 5 days.
 - o Frequency: Annual (Feb).
 - o Certificate issued? unknown
 - o Fee: unknown
 - More information --

www.floridamosquito.org/Public/Events/Event_Display.aspx?EventKey=ae 6d8d0d-a979-48d1-80b0-

5c5c6b0d0684&iSearchResult=true&WebsiteKey=2cf72c6c-20e7-4e18-9c4a-632639fee9ae.

- Various online and in-person educational opportunities available for medical and urban pests, (Hosted by New Orleans Mosquito, Termite and Rodent Control).
 - o Location Online & New Orleans, LA.
 - Duration unknown
 - o Frequency: unknown
 - o Certificate issued? unknown
 - o Fee: unknown
 - o More information -- https://nola.gov/mosquito/education/.
- Ants Of The Southwest, (Hosted by Cal Academy & American Museum of National History).
 - o Location Various.
 - o Duration unknown
 - o Frequency: unknown
 - o Certificate issued? unknown
 - o Fee: unknown
 - o More information -- https://www.amnh.org/research/southwestern-research-station/education/ants-of-the-southwest.
- **Tick-Borne Diseases of the United States**, (Hosted by North Carolina Institute for Public Health).
 - Location Online.
 - o Duration 25 min.
 - o Frequency: unknown
 - o Certificate issued? unknown
 - o Fee: Free.
 - o More information -- nciph.sph.unc.edu/tws/HEP_TICK/certificate.php.