

Volume 39, Number 5

February 2019

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| FACULTY SPONSORS: | Frank E. Hanson and Austin P. (Bob) Platt      |
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| WEBSITE:          | http://www.mdentsoc.org/                       |
|                   |  |

## **February Meeting Announcement**

The Maryland Entomological Society's **326<sup>th</sup>** regular meeting will be held **Friday**, **15** February **2019**, at **8:00 p.m.**, in **Room 004** (one floor below the street level), **Biological Sciences Building**, University of Maryland Baltimore County (UMBC). Bring a friend and specimens, observations, and books to share. Refreshments will be provided. Presentations are scheduled to begin at 8:15 p.m.

# Speaker:Patricia Nichols, Director of Education, Philadelphia Insectarium and Butterfly PavilionTitle:Adventures of an Entomologist and a Start-Up Insectarium

**Abstract.** The Philadelphia Insectarium and Butterfly Pavilion (IBP) opened in February of 2016 in Northeast Philadelphia. This is an interactive science museum where visitors come in to experience arthropods and other animals from around the world. It has a



7,000 square foot butterfly pavilion where butterflies fly year around. Trisha started working there in September of 2017 as the Director of Living Exhibits and switched over to Director of Education when the opportunity arose. Her passion is in teaching about insects and helping people, young and old, get over their innate fears. In the last two years, IBP has undergone a complete remodel of their two floors and has increased its impact on Northeast Philadelphia and surrounding areas. This includes starting a bug camp and expanding afterschool programs from 1 class per week to 9 classes per week. Their growth is unparalleled in the world of insectariums and they plan to continue growing and spreading a message of love and understanding of insects.

Bio. Patricia Nichols earned her Bachelor of Science in Entomology

from Michigan State University (MSU) in 2013. She worked as a full-time lab manager at MSU for three years researching classical biological control of the brown marmorated stink bug. During that time, she founded her own insect education business called, Insectopia. She traveled to schools, birthday parties, and museums to share her love of insects. She ended up leaving research to follow this passion. She now works as the Director of Education at the Philadelphia Insectarium and Butterfly Pavilion. The education department has doubled in the last year. Travel shows, after-school programs, and a brand new "Bug-U" camp are among her responsibilities. It is her goal to reach as many young minds as possible to share her love of insects and to create a healthy respect of the world around us in the minds of the next generation.

## Meet for Dinner before the Lectures

If you are interested in meeting for dinner before the lectures, you are invited to join the guest speaker and your fellow MES members at the Chef Paolino Café located at **726 Frederick Rd, Catonsville**, MD 21228. If you plan to go to dinner, please email Fred Paras at bugandrockman@msn.com by noon on the day of the lecture. Fred will make a reservation for the group. Please meet at the restaurant promptly at **6:00 p.m**.

#### \*\*\*DON'T FORGET TO RENEW\*\*\* \*\*\*IT'S MEMBERSHIP RENEWAL TIME\*\*\* OCT 2018 – SEP 2019 MEMBERSHIP YEAR

Membership renewal forms were inserted in the front of the September 2018 issue of *The Maryland Entomologist*. If the date on your address label reads 2018, it is time for you to renew for the "October 2018 – September 2019" membership year. Please check that your contact information is correct and return the form along with your check (made out to Maryland Entomological Society) to: **Edgar A. Cohen, Jr.** (MES Treasurer), 5454 Marsh Hawk Way, Columbia, MD 21045

#### HONORING MEMBER DONORS

MES wishes to honor the following members who made charitable donations along with their recent membership renewals. These donations help with the printing and mailing of *The Maryland Entomologist*.

> Curt W. Harden Michael J. Raupp

#### ENTOMOLOGICAL SOCIETY OF WASHINGTON PUBLIC MEETING

**Thu, 7 March 2019; 7:00 p.m.** Topic: TBA Speaker: TBA National Museum of Natural History, Smithsonian Institution, Washington, DC http://entsocwash.org/.



#### Central Maryland Beekeepers Association

Supporting and promoting beekeepers and the viability of honeybees in central Maryland

#### MEMBERS MEETINGS

#### Tue, 5 March 2019; 7:00 p.m.

David Papke and Jeremy Barnes give a presentation on "Darwinian Beekeeping."

Members meetings are held at the Oregon Ridge Nature Center, 13555 Beaver Dam Road, Cockeysville, Maryland. Additional information can be found at:

http://www.centralmarylandbees.org/meetings-3/membershipmeeting-schedule/

#### UNIVERSITY OF MARYLAND DEPARTMENT OF ENTOMOLOGY COLLOQUIA

#### Fri, 15 February 2019, 12:00 p.m.

"The Show Must Go On: Maintaining a Segmented Body Plan After Loss of a Key Developmental Gene"

Alys Jarvela (Postdoctoral Research Associate, Department of Entomology, University of Maryland

#### Fri, 22 February 2019, 12:00 p.m. "Gene drive and gene drive technologies as insect pest management tools"

David O'Brochta (Professor Emeritus, Department of Entomology, University of Maryland)

#### Fri, 1 March 2019, 12:00 p.m.

**"Fires and insect diversity in the Brazilian Amazon"** Rafael Barreto de Andrade (Postdoctoral Research Associate, Department of Entomology, University of Maryland)

Entomology colloquia take place in 1130 Plant Sciences Building, College Park, MD. For additional information, go to: http://entomology.umd.edu/calendar.html.

#### 2019 ALL BUGS GOOD AND BAD WEBINAR SERIES

This webinar series discusses troublesome insects such as invasive ants, landscape, vegetable and household pests, as well as beneficial insects such as native pollinators. Webinars are held on the first Friday of every month at 2PM EST.

#### Fri, 1 March 2019; 2:00 p.m.

Topic: Emerald Ash Borer Speaker: Lynne Womack, Georgia Forestry Commission

#### Fri, 5 April 2019; 2:00 p.m.

Topic: Snakes – Identification and Environmental Importance Speaker: TBA

Information about upcoming webinars and archives of previous recordings can be found at https://articles.extension.org/pages/74786/2019-all-bugs-good-and-bad-webinar-series

#### FREE ONLINE MEDICAL ENTOMOLOGY COURSE

Course: Medical Entomology Dates: Monday, March 18, 2019 – Sunday, April 28, 2019 Location: Online

About: Institut Pasteur launches a new session of the MOOC Medical Entomology, a free online course on insect and tick vectors and transmission of pathogens. This MOOC will start on March 18, 2019, and run for six weeks. The MOOC Medical Entomology will teach the role of vectors in the functioning of ecosystems and how to interrupt the vector transmission chain. It is organized from an entomological perspective, with each session devoted to a particular taxonomic group of insects and ticks. The MOOC is dedicated to students in biological or medical sciences, public health advisors (human and animal health), stakeholders in vector control, researchers and NGO members. It will be delivered by a team of experts from the Institut Pasteur, IRD and other well-known scientific institutions. It is organized in 6 weeks of 3-6 sequences. Each sequence is composed of a 10 minutes video and a multiple choice test to help students check their understanding. A certificate attesting successful completion of the course will be delivered. The videos are in English subtitled in French and English.

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For more information and to register, visit https://www.funmooc.fr/courses/course-v1:pasteur+96003+session02/about

## SUMMER 2019 CHESAPEAKE BAY REU

Summer 2019 Undergrad Research on Chesapeake Bay (REU), Deadline: Feb. 15

Are you looking for a summer research internship studying ocean, coastal or environmental science? I invite you to check out the Maryland Sea Grant Summer REU program. We bring upper-level undergraduate students to the Chesapeake Bay to conduct individual research projects with a scientist-mentor at the University of Maryland Center for Environmental Science. We select undergrads in many disciplines, including engineering, biology, chemistry, physics, mathematics, ecology and marine and environmental science.

Each REU fellow will receive: \$6,000 stipend Free housing at your research lab Round-trip travel expenses

In particular, we encourage students from colleges and universities where access to marine science and to research opportunities is limited and who are from groups traditionally underrepresented in science, technology, engineering and math. We believe bringing together students from many disciplines, backgrounds and parts of the country makes for a more interesting and educational summer experience.

Join us for our **12-week program from May 19 to August 11, 2019**. We are accepting applications through February 15. Please visit our website to find out more (www.mdsg.umd.edu/reu) or drop me a note at reu@mdsg.umd.edu.

Yours,

Mike Allen Maryland Sea Grant

#### KEY INFORMATION:

- Program Flyer download http://bit.ly/MDSGREU19

- 12-week program: May 19 to August 11, 2019

- \$6,000 stipend plus housing and travel support to and from host institution

- Funded by the National Science Foundation and thus limited to US citizens or permanent residents
- Applications due: February 15, 2019

- Application and

guidance http://ww2.mdsg.umd.edu/reu/apply/index.php

#### **RESEARCH HIGHLIGHT: DR. RONALD OCHOA**

Congratulations to MES member Dr. Ronald Ochoa on his recent publication in the Proceedings of the National Academy of Sciences, *Varroa destructor* feeds primarily on honey bee fat body tissue and not hemolymph.

Excerpt from a UMD press release:

For decades, researchers have assumed that varroa mites feed on blood, like many of their mite and tick cousins. But new University of Maryland-led research suggests that varroa mites instead have a voracious appetite for a honey bee organ called the fat body, which serves many of the same vital functions carried out by the human liver, while also storing food and contributing to bees' immune systems.

The research, published in the Proceedings of the National Academy of Sciences on January 14, 2019, could transform researchers' understanding of the primary threats to honey bees while pointing the way toward more effective mite treatments in the future.

"Bee researchers often refer to three Ps: parasites, pesticides and poor nutrition. Many studies have shown that varroa is the biggest issue. But when compromised by varroa, colonies are also more susceptible to the other two," said UMD alumnus Samuel Ramsey (Ph.D. '18, entomology), the lead author of the paper. "Now that we know that the fat body is varroa's target, this connection is now much more obvious. Losing fat body tissue impairs a bee's ability to detoxify pesticides and robs them of vital food stores. The fat body is absolutely essential to honey bee survival."

Read the entire press release here and the paper here.

#### 2018/2019 PROPOSED MES EVENT SCHEDULE

Regular MES lecture/meetings are held at the University of Maryland Baltimore County (UMBC) on the 3rd Friday of each of 6 months coinciding with UMBC's academic year. Proposed events for the upcoming MES membership year are: Sep 30: Potluck Picnic Oct 19: Dr. Mike Turrell Nov 16: Frederick Paras Feb 15: TBD Lecture Mar 15: TBD Lecture Apr 19: TBD Lecture May 17: Members' & Students' Presentations & Elections TBD Survey/Field Trip

### OCT 2018-SEP 2019 MES MEMBERSHIP YEAR OFFICERS

| President            | Frederick Paras                   |
|----------------------|-----------------------------------|
| Vice President       | Philip J. Kean                    |
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| Faculty Sponsors     | Frank E. Hanson & Austin P. Platt |
| Journal Editor       | Eugene J. Scarpulla               |
| E-newsletter Editors | Aditi Dubey                       |

## SUBMITTAL DEADLINES

March 2019 issue of the *Phaëton*:

Please send member news items by 8<sup>th</sup> March 2019. Send e-newsletter drafts to Addie at aditid26@gmail.com.

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<u>SEP 2019 issue of *The Maryland Entomologist*:</u> Please send first drafts of articles and notes by 1 April 2019. Send drafts to Gene Scarpulla at ejscarp@comcast.net.

## THE MOTHCATCHER

by Kim Fayer

I remember when I was young and playing under the afternoon sun. It's glow shines golden as it touched the ground where are the kids and moths are found. I ran to the outfield and saw flying bugs from brown to blue of no flaw. One pretty purple moth tapped my shoulder and called to me "don't you want to chase a moth for today?" I smiled wide and started to sprint after it, but it loved to skip too quick especially when I touched its wing tip. At last it grew tired and sat on a flower hoping I didn't see it take a sun shower. The dignified, daring Queen moth didn't see me creeping behind her like a sloth; just so she wouldn't leave so soon. I slipped my hands right on top of the queen as she flapped her wings like a dove in spring. I called to my friends "I caught one! I finally caught my first moth!" They grinned and screamed to me "Well done now let it go. They are rare to see so always remember to let it be." I pulled off my hands and it flew away leaving a special mark that would stay. A gift to never forget when we had first met; her treasured wing imprint, a sort of 'good luck' for me when I setted her free. I will forever remember when I was young and playing under the afternoon sun. As I step back, I understand the innate connection between nature and man. We lose our touch once we mature but now we want nature's allure: back to the lush fields and under the bliss light that shall irrevocable be our birth right.