

Spring 2024

#### FROM THE CHAIR

Photo Credit: Bill Ravlin

Department of Entomology

MICHIGAN STATE UNIVERSITY

The days are getting longer and, at least occasionally, warmer! Our friends in the Michigan Entomological Society call their annual spring meeting "Breaking Diapause", and that name feels spot on as a representation of the activity in MSU Entomology as well. As we enter this new season, there is a tremendous amount of excitement and activity in the department and our faculty programs!

#### **Driving Insect innovation.**

The Excellence in Insect Science (EIS) Symposium is only two months away! We have been working for over a year to bring insect innovators to East Lansing to push boundaries and leverage our science to impact Climate Resilience, One Health, and STEM Education. Our keynote speakers, MSU Entomology's own Rufus Isaacs (climate resilience), CDC's Ben Beard (One Health), the Bug Chicks (Kristie Reddick and Jessica Honaker, STEM Education), and May Berenbaum (Closing Session), are internationally known entomological leaders. Our One Health panelists include innovators in using insects to address important questions from diagnosing cancer (MSU Biomedical Engineering's Debajit Saha) to increasing food security (Jeff Tomberlin, Texas

A&M; Deborah Amulen, Center for Insect Research & Development; Joseph Yoon, Brooklyn Bugs).

I am excited for the energy that the EIS Symposium will bring to MSU Entomology! There's still time to be part of this event. Learn more and register here: <u>https://</u> <u>www.canr.msu.edu/ent/events/</u> <u>EIS-Symposium/</u>

#### **Recognizing Student Excellence.**

As we lead up to our April 25th Entomology Department Awards reception, I want to highlight two new opportunities we have to recognize student excellence. First. we are excited to offer the Larry Gut International Travel Award for students attending meetings, conducting research, or networking with collaborators outside the US. This award further expands the travel support our department provides to our students and helping us meet our commitment to enable students to attend at least one meeting per year with department support!

Second, in collaboration with the family of emeritus faculty member Fred Stehr, who recently passed away, the department will be awarding the first Fred Stehr & Family Fellowship for Service in Entomology. This new award will recognize outstanding service to the department, university, professional societies, and community. Students receiving this award will be further nominated for the national Entomological Society of America Student Activity Award, if they meet the eligibility criteria.

#### New Faces.

This spring, we will begin on campus interviews for two new positions. Assistant Professor of Medical Entomology and Academic Specialist - Applied Entomology Teaching. We hope to have both these positions filled by Fall 2024. We will also soon open a third new position, Assistant Professor in Aginformatics. This position was recently posted and we have further information in this newsletter, so please share widely with your networks!

I hope to see many of you at our Awards Reception, the Excellence in Insect Science Symposium, and at summer field days and meetings. Happy spring!

Hannah Burrack, Ph.D. Chairperson









Department of Entomology MICHIGAN STATE UNIVERSITY

As a leader in insect science, the MSU Department of Entomology strives to connect researchers, industry leaders and policymakers to address the challenges of Climate Resilience, STEM Education and One Health through the Excellence in Insect Science Symposium. Our panelists are noted experts in ther fields and bring broad perspective to the challenges at hand.

#### MAY 16-17, 2024 Kellogg Conference Center



STEM (ducatio EIS@MSU Se Excell

One realts EIS@MSU

and Feed

EIS 2-day schedule

Register

NOW!

**Insects as Food** 





### **Arthropods and Health**



#### K-12: Increasing Diversity and Access



istie Bugaiski, Ph D

Doug Gelick, Ph.D. Ana Chicas Mosier Ph.D. Eleanor Spicer-Rice.



#### **Science Communication** and Outreach





### **Biodiversity**



Alex Harmon-Threatt, Ph.D. Fatma Kaplan, Ph.D. Alisha Shah, Ph.D.



**Agriculture & Plant-Insect** Interactions



lordan Hesterman

Margarita Lopez-Unibe, Ph.D.

Jared Ali, Ph.D.

Todd DeKnyger, Ph.D

2 MSU ENTOMOLOGY BUGGED



### FEATURED UNDERGRAD JOSH STRIEGLE

Hometown: Grandville, MI Studies: Entomology major

#### What inspired your interest in entomology?

As a kid, I grew up in a house with a wild field and a small pond on our property. My parents introduced me to the world of bugs we lived within, and as a result, I spent every summer among mantises, garden spiders, dragonflies, monarchs, and so much more.

# What has been your best experience with entomology?

My best experience with entomology so far has been the aquatic entomology class taught by Dr. Eric Benbow. I had a lot of fun collecting in streams, rivers, and lakes with my peers and learned an extraordinary amount as my first entomology experience. I got the chance to curate a personal collection, give a scientific presentation, and become adept in identifying about 10 different aquatic insect families. The world of aquatic insects was something I was quite unfamiliar with going in, but I feel I now have a good grasp of.

### What is your favorite activity/way to spend your

#### time outside of your studies?

I love hosting board game nights, playing video games with friends, going on road trips to explore new places, and generally working on creative projects of all sorts. I feel it is important to keep your studies and hobbies separate; even though I love entomology, having other hobbies helps keep your mind active and gives you greater capabilities in problem solving and learning

#### What is your favorite thing about MSU?

My favorite thing about MSU so far is the community feeling. Everyone in the entomology program creates a friendly, tight knit, welcoming group, and I couldn't have asked for a better introduction to the college.

#### Do you have advice for anyone interested in an en-

#### tomology major or minor?

Be proactive! There are several opportunities for you to build your entomology niche as an undergrad, whether it's taking varied classes, volunteering at the Bug House, participating in Bug Club, attending seminars, or many other activities. All of these examples help build who you will become as an entomologist, which I feel is crucial to developing a career you enjoy

#### What is your favorite insect and why?

I currently hold a fondness for Madagascar Hissing Roaches. During my time volunteering for Bug House events and tours, these large insects have helped me teach countless people that although insects may seem scary, dangerous, or gross, many of them are simply gentle, harmless animals.

### FEATURED GRAD STUDENT SHARRON (RONNIE) MILLER

Hometown: Reno, NV Previous education: Wildlife Ecology and Conservation at UNR



## What or who inspired your interest in entomology?

I liked photographing flowers in undergrad and of course there were always bees/bugs around. I was then offered a job in a butterfly lab and later recommended to a bumble bee lab under postdoctoral researcher Dr. Sarah K. Richman. The work was on impacts of neonics and plant secondary compounds on bumble bees. I fell in love with watching the bees and knew it was my calling.

## What is your favorite activity as part of your graduate studies?

My favorite thing is field work, being outside in the sun with colorful flowers and the buzzing of pollinators.

#### What are you researching?

Connecting bumble bee communities, land management, and human interactions..

What is your favorite activity/way to spend your time outside of your studies? Traveling, photography, working out, or water activities!

Any other thoughts about your experience in Entomology? The pandemic lockdown limited a lot of my options for grad school. I was not considering Michigan, but my lab was one of the few labs accepting new students during that time. Hindsight 20/20, joining this lab was the best decision I could have made.

Ronnie was one of the main organizers who brought back MSU Bee Palooza in Augsut 2023.



# 2024 Distinguished Alumnus Award Daniel K. Young, Ph.D.

The MSU Department of Entomology is proud to announce the 2024 Distinguished Alumnus Award will go to Daniel K. Young, Ph.D., University of Wisconsin-Madison. Young received his bachelor, master's, and Ph.D. in Entomology from MSU. He has been on the faculty at the University of Wisconsin since 1982. Over the course of his 41-year career, Young has advanced the study of beetle biodiversity; directed the University of Wisconsin Insect Collection; led national and international scholarly societies; and perhaps

most significantly taught foundational entomology courses to countless college students.

Young is an internationally recognized expert in beetle taxonomy and systematics. He has also provided extensive service and leadership to professional societies including the Entomological Society of America, the Coleopterists Society, and a diversity of state and regional associations.

Although his record of service is extensive, Young's true passion lies in teaching. Former students were very vocal in their support for Young's nomination for this award.

MSU Entomology Chair Hannah Burrack reflected on her time learning from Young,

"As an undergraduate student at UW Madison, I was just one of those who were inspired by Dan to dive deeper into entomology, and I can think of no one else more deserving of this recognition. His passion spurred wonder, excitement, and kickstarted many entomology and biology careers."

Dr. Rachel Arango of the USDA Forest Products Laboratory said about Young, "I clearly remember so many nights where a few of us students would be working downstairs in the teaching labs and Dr. Young would peak his head into the lab, late into the evenings, just to check if we needed

. . . . . . . . . . . .

### We Value Your Support

Just as insects create the biological foundation for ecosystems, you provide the basis of support that allows our entomological work to continue. To show our apprecia-

tion for your generous support this year, we will send the first five commemoof rative coins, which features the Honeybee (Apis mellifera),



- Teamwork.

collection.



Daniel K. Young, Ph.D. D.K. Young!"

Each year, when you submit your annual

tax-deductible donation to the Entomology

Department, we will send you the next coin

in the series. Collect all five by committing

your support over five years and we will

send you a shadow box to display your

Entomology is a gateway to a more inclusive

scientific community. Not only does your

When asked to comment on the award, Young said, "Like Spock, my blood still runs green and I think frequently about my many years at MSU, trundling across the shores of the Red Cedar, collecting beetles in Baker and Sanford Woodlots, and in the halls of the Natural Science Building and the collection range. I am honored and humbled to be recognized in this manner by my precious Spartan alma mater."

help. He didn't care how many extra hours he put in during the day, he just wanted to help students learn if they were willing to put in the work."

Arango went on to add, "I can also attest to Dr. Young's support for diversity and equality in the workplace, particularly as an advocate for women. While doing my graduate research I was also working full time for the US Forest Service. During this time, I was experiencing continued

> harassment from my team leader. On a particularly bad day I confided some of what was happening to Dr. Young who really went out of his way to help resolve the problem."

> Cognato, MSU Anthony Ph.D., Department of Entomology, noted that, "Dr. Young received all his degrees in Entomology from the department under the guidance of Dr. Ronald Fischer. During this time, he was an avid collector and most of his specimens were deposited in The A.J. Cook Arthropod Research Collection. These specimens number in the 1000's and represent diverse taxa from many Michigan and national localities. They represent an important portion of the collection holdings - it seems that every other specimen was collected by

and represents the theme for this year gift support the department, but you are changing lives in the process.

Become a part of "Bugs Work!".

#### **DONATE TODAY!**





### **Faculty Awards/Recognition**

#### William J. Beal Outstanding Faculty Award

Deb McCullough, Ph.D. received the 2024 William J. Beal Outstanding Faculty Award. This university level award is made each year to members of the regular faculty for outstanding total service to the University. The nominations are based on teaching; advising; research; publications; committee work; public service including extension, outreach and work with government agencies and industry; or a combination of these activities.



Deb McCullough, Ph.D.

#### ESA North Central Branch Award for Excellence in Integrated Pest Management

McCullough was also awarded the 2024 North Central Branch, Entomological Society of American (ESA NCB) Award for Excellence in Integrated Pest Management. This award honors an individual ESA NCB Member that has made outstanding contributions that relate directly to Integrated Pest Management (IPM). Special consid-

#### Charles A. Gliozzo International Award for Public Diplomacy

Callista Rakhmatov, Ph.D. was recognized by International Studies and Programs for her significant contributions to public diplomacy through educating, training or promoting knowledge and understanding between MSU faculty and staff, community members and international students, scholars and visitors.



Callista Rakhmatov, Ph.D.

#### MSU International Special Recognition Award for Promoting International Understanding

George Bird, Ph.D. was recognized by International Studies and Programs for his work which contributed to internationalizing the campus and MSU programs globally.



George Bird, Ph.D.

#### **Provost Recognition**

David Mota-Sanchez, Ph.D. was recognized by Provost Thomas Jeitschko for his work supporting Latina/o farmers. During the March 25th luncheon event, MSU President Kevin Guskiewicz met with Mota-Sanchez and members of the Latino Leaders for the Enhancement of Advocacy and Development (LLEAD).



David Mota-Sanchez, Ph.D.

RYAN SCHOTZKO ENTOMOLOGY BUSINESS OFFICE ACCOUNTING CLERK

WELCOME



# Entomology Welcomed Commencement Speaker John Hildebrand, Ph.D.

The December 2023 Graduate Commencement speaker, Dr. John Hildebrand, is an internationally known neuroscientist and entomologist, and we were so excited to host a breakfast with him on Saturday, December 16, 2023.



L to R: Zinan Wang, David Mota-Sanchez, George Bird, John Hidebrand, DeShae Dillard, Rufus Isaacs, Hannah Burrack

### We Are Hiring! Assistant Professor of Aginformatics Entomology

We're thrilled to share that the MSU Department of Entomology is recruiting an Assistant Professor of Aginformatics Entomology! This 60% research/40% extension position will leverage big data and innovative tools to develop new pest management strategies. If you have experience with machine learning, remote sensing, AI in Agriculture, and other innovations and are passionate about solving agricultural problems, we want you!

#### Please share this posting with your extended networks!





For more information, see careers.msu.edu.

**Bugged** newsletter

NEWSLETTER PRODUCTION Judi Melena Smelser, editor smelserm@msu.edu

CONTACT MSU ENTOMOLOGY www.ent.msu.edu entnews@msu.edu 517-355-4663 LinkedIn or Instagram: @MSUEntomology

# Congratulations Class of 2024!



### Spring, 2024 Graduates

#### Master's Students

Max Ferguson advisor, Deborah McCullough

Laura Marmolejo advisor, Zsofia Szendrei

Matthew Schiffer advisor, Anthony Cognato

William Smith advisor, Anthony Cognato

### Summer, 2024 Graduates

#### Master's Students

Anthony Grigsby advisor, M. Eric Benbow

Jordy Hernandez advisor, Anthony Cognato

Andrew Jones advisor, Julianna Wilson

Rambika Thapa advisor, Marisol Quintanilla-Tornel

#### advisor, Anthony Cognato Nicholas Zoller

advisor, Deborah McCullough

### Ph.D. Students

Tianze (Jack) Xue

Luisa Parrado Guevara advisor, Marisol Quintanilla-Tornel

#### Ph.D. Students

Natalie Constancio advisor, Zsofia Szendrei

Brianna Foster advisor, Marianna Szucs

Kayleigh Hauri advisor, Zsofia Szendrei

Omar Posos-Parra advisor, David Mota-Sanchez

Jenna Walters advisor, Rufus Isaacs

### **Spring 2024 Undergraduates**

#### Entomology Majors

Roberto Bloom Coral Brock Emma Charney Nate Howder Claire Komarzec

### Entomology Minors

Shelby Marocco Alyssa Mollema Kasey Matusik Sydney Sharpe

### **Summer 2024 Undergraduates**

#### Entomology Majors

Jenna Byrne Kat Yoskowitz





Michigan State University Natural Science Building 288 Farm Lane Room 243 East Lansing, MI 48824

### Victory for MSU 2024 MSU Entomology Games Team Wins!

Congratulations to the MSU Entomology Games Team for a decisive win against Kansas State at the North Central Branch, Entomolgical Society of America (NCB ESA) meeting in Fort Collins, Colorado on March 25, 2024. The Entomology Games are a lively question-and-answer, college bowl-style competition on entomological facts played between university-sponsored student teams. MSU team members include: Chris Brown, Jordy Hernandez, Laura Marmolejo, Bill Smith and Coach Hannah Burrack. *WAY TO GO TEAM HONEY BEE!!* 





