

Bugged



Department of Entomology
MICHIGAN STATE UNIVERSITY

FROM THE CHAIR

This is a season for celebration! As Spring Semester 2023 concludes, we look forward to our department awards ceremony and graduation. During our department awards, we welcome back Distinguished Alumnus, Dr. Mary Gardiner, Professor of Entomology at The Ohio State University where she focuses on arthropod ecology in urban landscapes. Dr. Gardiner has conducted pioneering research in this area and has so much to share about her journey with our students and other department members.

We also congratulate our newest department graduates! These include seven undergraduate majors and minors in Entomology. One of these undergraduates, Taylor Hori, was honored with a Michigan State University Board of Trustees Award in recognition of her perfect grade point average—one of only 206 students in this year's spring graduating class. We will award 11 graduate degrees in Spring and Summer 2023. Many of these outstanding students have already moved on to their

next career stages, including as post-doctoral scholars, working with the NBA and Xerces Society, and in new roles with MSU Entomology. This cohort of graduates has been through unprecedented challenges in pursuit of their degrees. Many began school just before or just as the global pandemic changed the way universities, and everything else, operated. They have had to reimagine their research, build networks and connection remotely, and grapple with issues of racism and violence more directly than our country has in generations. I am so impressed with their resilience and so proud of the scientific and social impact of their efforts at MSU. I am grateful daily to work with these passionate, dedicated, and hardworking students.

In addition to celebrating our department awards and our graduates, we also celebrate the many other recognitions received by members of our department community. Dr. Amanda Lorenz, Dr. Rufus Isaacs, and Dr. Zsofia Szendrei were all selected as winners of North Central Branch ESA awards; Dr. Karim Maredia

and Jenna Walters received 'You Belong Here' Awards from the MSU CANR Office of Diversity, Equity, and Inclusion; Dr. Chris DiFonzo, Mark "Shep" Sheperdigian, and Dr. Stephan Tatter received awards from the CANR Alumni Association; Dr. Doug Landis was honored as the American Association for the Advancement of Science C.V. Riley Memorial Lecturer; Dr. Marisol Quintanilla-Tornel received the Syngenta Early Career Award from the Society for Nematology; and Heather Lenartson-Kluge was recognized with the Jack Breslin Staff Award, the highest honor bestowed to staff employees at MSU.

These and our department awards are the direct result of the hard work of our awards committee, this year chaired by Dr. Eric Benbow. I deeply appreciate their efforts to elevate and honor our MSU Entomology community. I hope that you will join me in celebrating a truly outstanding year!



Hannah Burrack, Ph.D.
Chairperson



ESA – North Central Branch Awards



Distinguished Achievement in Extension Award *Rufus Isaacs, Ph.D.*

“My extension program is primarily in berry crop pest management, and it has emphasized development of decision tools, conservation practices, and research-based recommendation for various controls to support IPM programs in these crops.” Isaacs said.

“We have provided statewide and regional leadership on the spotted wing Drosophila and how to respond. Our findings are extended to grower, extension, and industry stakeholders by talks, printed and online publications, websites, webinars and through on-farm evaluation and demonstration trials providing real-world experience with new practices. I include students and postdocs in planning and delivering extension activities, helping to ensure the availability of the next generation of entomologists with experience interacting with farming communities.”



Distinguished Achievement in Teaching Award *Amanda Lorenz, Ph.D.*

“I am an Academic specialist in teaching in the Entomology Department. I teach some large enrollment courses in entomology and environmental science. But I also advise our undergraduate students in entomology programs and direct the MSU Bug House.” Lorenz said.

“My favorite thing about teaching is opening people’s awareness to the marvelous aspects of our world. A lot of what I teach about are insects, and a lot of folks either dislike insects, or they don’t notice them very much. There’s also not a lot of attention that goes into the fact that they are super beneficial. They are worth conserving, they’re important to our ecosystems. The more that I can convey that to people, the more excited I get.”



Excellence in Integrated Pest Management Award *Zsafia Szendrei, Ph.D.*

“Chemical ecology and biological control offer sustainable approaches for suppressing insect pests; these themes have been a central focus in my research.” Szendrei explained. “In particular, I’m interested in developing pest management systems where these can be used in combination and as part of an integrated approach to manage pest populations.”

Szendrei went on to say, “My program has gained acceptance and recognition among peers for our work on local (field-scale) habitat management and biological control. We have contributed to our understanding of the interactions of habitat traits and arthropods in agroecosystems. In our investigations we use novel techniques that allows the growth of a field called ‘molecular detection of trophic interactions’.”

CANR Awards highlight Entomology's best



**Christina DiFonzo, Ph.D.
Distinguished Faculty Award**

Christina DiFonzo is a professor in the MSU Department of Entomology. Her appointment at MSU includes research, extension and teaching with specific crop responsibilities for insect pest problems in corn, soybean, dry beans, small grain, forages, sugarbeets and hemp. She also provides expertise in aphid biology and identification.

DiFonzo is a sought after collaborator and an intellectual leader on the role of genetically modified organisms in agriculture. DiFonzo is often the most senior-tenured-author on most recent publications. This serves as direct evidence of her mentorship of faculty peers at many other institutions—she has helped to guide the careers of young entomologists.

DiFonzo is a highly dedicated teacher providing the instruction for both graduate and undergraduate students for the past 26 years. While DiFonzo's activities in Extension, research, academic instruction and service are all outstanding, it is the integration and totality of these initiatives that make her a truly distinguished and model faculty member in Land Grant Institution philosophy. Her activities have had a major positive impact on Michigan's agriculture, MSU's students and the overall health of our environment.



**Stephen Tatter, M.D., Ph.D.
Honorary Alumni Award**

Dr. Tatter serves as the Dixie and Liang Yee Soo Professor of Neurosurgery at Wake Forest University where he both directs a research laboratory focused on the delivery of drugs to the human central nervous system and practices as a neurosurgeon at the Wake Forest Baptist Medical Center.

Tatter has continued a long tradition of family support of MSU and Michigan agriculture. His father, Jordan Tatter, was a fruit grower and a close friend of Entomology Professor and former MSU President Dr. Gordon Guyer. Jordan Tatter was renowned in Michigan's agricultural industry and within MSU Extension, Michigan Department of Natural Resources, and Michigan Department of Agriculture. Tatter's mother, Mary, was also a tremendous supporter of community and MSU programs.

Tatter has continued his parent's tradition of supporting MSU and Michigan agriculture by conceptualizing a recognition for discovery, learning, and engagement in entomology. In 2021, this vision led the Tatter family to establishing two endowments to encourage, support, and promote this excellence in entomology. This investment will honor previous and current faculty and students, and support the important future contributions of the Department of Entomology.



**Mark Sheperdigian
Outstanding Alumni Award**

A board-certified entomologist in urban and industrial entomology, Mark Sheperdigian has worked in the urban pest management industry since April 1983, after graduating from MSU in 1982 with a bachelor's degree in entomology. During that time, "Shep" has held a variety of positions in service, sales, management, and technical support. In January of 1987, he joined Rose Pest Solutions in Troy, where he currently serves as vice president of Technical Services.

He has excelled in urban and structural pest management, and created new job and professional development opportunities for other urban pest management professionals. He is also building connections between MSU Department of Entomology and urban pest control professionals.

Sheperdigian has distinguished himself as a creative innovator as the industry has transformed from a common perception of "exterminators" to the practice of integrated pest management. He hasn't simply followed, but led this transformation, including the adaptation of sampling and monitoring methodologies to pest problems, use of targeted bait systems, and the scientific responses to emergent problems.



**FEATURED
UNDERGRAD
JJ BIRD**

Hometown: Plymouth, MI
Studies: Entomology major

What inspired your interest in entomology?

I've been interested in insects pretty much since I can remember. They're just really fascinating to me, and when I was a kid, I would always be digging outside or looking for bugs underneath my mom's decorative landscaping rocks (she was less than thrilled about this).

What has been your most significant experience with Entomology outside of your classwork?

Probably my best experience with entomology outside of my classwork has been the collecting trips I've been able to go on this past year. I really love seeing insects in their natural habitats and being able to find cool stuff when I'm outside collecting. A few weeks ago, I went on a collecting trip with Bug Club and found a lot of different arthropods, including fairy shrimp, tabanid and tipulid larvae, a very angry larval megalopteran, and some stag beetle adults and larvae.

Do you have advice for anyone interested in an entomology major or minor?

I'd tell anyone interested in an entomology major or minor to go for it, and to also put themselves out there and explore as many areas of entomology as possible. There are a lot of different sub-disciplines and you never know what will really fascinate you until you explore a little.

What is your favorite activity/way to spend your time outside of your studies?

Outside of entomology, I like to play and listen to music, play card games and hang out with my friends, and spend time in nature.

What is your favorite thing about MSU?

My favorite thing about MSU is probably the amount of greenspace on campus. I really like spending time outside and the sheer number of trees and grassy open spaces is really nice when the weather isn't terrible.

**FEATURED
GRAD STUDENT
ANTHONY GRIGSBY**

Hometown: Perrysburg, Ohio
Previous education: B.S. in Microbiology, minor in Entomology, The Ohio State University



What or who inspired your interest in entomology?

Growing up in Arizona exposed me to a lot of invertebrates that most people might consider harmful and unwanted in the right context, but making opportunities for myself to rear them helped better my understanding of their roles in nature and society. Once you're sobered to the reality that there isn't a single place in nature that isn't their domain to some extent, it's hard to stop thinking about bugs. The chance to see what lives where and does what kind of drove me to make them a part of my life.

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

The fieldwork is by far the most enjoyable part of being a graduate student. It's an incredibly unique facet of entomological and forensic research I haven't had much experience with the past, and having our lab's focus effectively require it has been great.

What are you researching?

My research concerns the insects of forensic interest and their relationships with the carrion they inhabit—microbes and all. I focus largely on fly larvae as chief colonizers of cadavers and drivers of human decomposition, but also as incredibly valuable pieces of evidence in criminal investigations and forensic analysis.

What is your favorite thing about MSU?

My favorite thing about MSU is the campus. I don't think I'll ever get to see every inch of this campus at this rate, it's just so expansive.

What is most interesting about your experience becoming a student of entomology?

What stands out to me as being the most interesting part of becoming an entomology student has been the fact that I was able to at all. It just goes to show you that, no matter how niche or narrow your academic/professional interests might seem, there's always someone out there somewhere (inexplicably) researching that exact thing.

Mary Gardiner awarded 2023 Entomology Distinguished Alumnus Award

Mary Gardiner has been awarded the 2023 Michigan State University Department of Entomology Distinguished Alumnus Award. Gardiner received her Ph.D. in 2008 from the MSU Department of Entomology and is currently an Associate Professor in the Department of Entomology at The Ohio State University.



Mary Gardiner, Ph.D.

Gardiner's research program focuses on the ecological value of urban vacant land. This work is concentrated in Cleveland, Ohio - a city that has experienced significant economic and population decline. The Gardiner Lab examines how alternative vegetation designs and management regimes influence the value of vacant land for the conservation of biodiversity and the provision of ecosystem services.

Gardiner is also a State Specialist in Extension and works with

several stakeholder groups including home gardeners, Master Gardeners, Master Naturalists, and urban farmers. Her extension programming focuses on identifying and attracting beneficial insects to gardens and farms to promote conservation and ecosystem services. In 2015, she released a book focused on natural enemies and their role in biological control

in home gardens titled: Good Garden Bugs: Everything You Need to Know about Beneficial Predatory Insects. She has also embraced the use of citizen science in her research with the statewide program, Pollination Investigators, which engages volunteers in the study of pollination services.

MSU Entomology Chair Hannah Burrack said, "Mary has been at the forefront of applying ecological methods and questions to plant-insect interactions in urban environments and has gone the extra mile in delivering results to and connecting with the communities she works with."

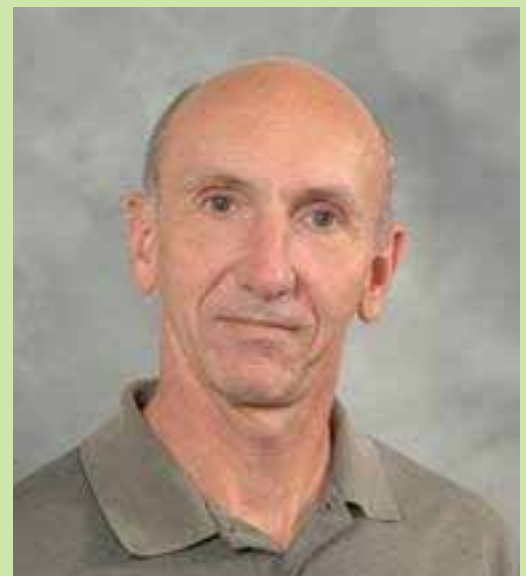
Gardiner received her award at the Entomology Awards Celebration on April 27, 2023.

MILESTONES AND RETIREMENTS

**Congratulations Deb McCullough
on 30 years of service!**



**Congratulations Dave Smitley
on retirement in 2022!**



Celebrate!



Congratulations, to the all the department award and external award recipients!

Graduate Student Awards

Gordon E. Guyer Endowed Fellowship in Aquatic Entomology

Kelly Waters

Merritt Endowed Fellowship in Entomology

Kelly Waters

Roger and Barbara Hoopingarner Endowed Graduate Fellowship in Entomology

Jennifer Roedel

Rhodes (Gene) Thompson Endowed Fellowship

Laura Marmolejo

Robert R. Dreisbach Endowed Memorial Fellowship

Haosu (Susu) Cong

J.E. and Jean M. McPherson Graduate Student Travel Award Recipients

Kayleigh Hauri
Jennifer Roedel
Jenna Walters
Nicole Wonderlin

Paul Wooley Endowed Fellowship

Laura Marmolejo

Research Proposal Awards

Scriber Scholar Award in Butterfly Biology & Conservation Research Proposal Award

William Smith

Ph.D. Hutson Endowment Research Proposal Award

Kayleigh Hauri
Luisa Parrado Guevara

M.S. Hutson Endowment Research Proposal Award

Jordy Hernandez
Nicholas Zoller

Department Awards

Outstanding Undergraduate Student Award

Taylor Hori

Outstanding M.S. Student Award

Bethany Mikles

Outstanding Ph.D. Student Award

Elisabeth Darling

Outstanding Graduate Student in Extension Award

Natalie Constancio

Outstanding Graduate Student in Teaching Award

Haosu (Susu) Cong

Outstanding Staff Award

Renee Graff

Outstanding Postdoc Award

Zinan Wang

Sara Elizabeth Klein Undergraduate Scholarship in Entomology Award

Zarifa Anwar
Cooper Krueger

Bug House Fellows

Bella Balabuszko-Reay
Jenna Byrne
Loren Campbell
Osten Eschedor
Sabrina Hobson
Taylor Hori
Matthew Schiffer
Jonathan Tharp
Dominic Westbrook
Jack Xue
Ali Zahorec

Outstanding Bug House Leader

Alyssa Garza

External Faculty/Staff Awards

2022

Charles Valentine Riley Memorial Lecturer
American Association for the Advancement of Science, the Charles Valentine Riley Memorial Foundation and the World Food Prize Foundation

Doug Landis

Honors Award for Dedicated Service
International Society of Arboriculture - Michigan Chapter

Deb McCullough

2023

Jack Breslin Distinguished Staff Award
Michigan State University

Heather Lenartson-Kluge

You Belong Here Award
CANR Office of Diversity, Equity, and Inclusion

Karim Maredia
Jenna Walters

Global Scholar in Extension
CANR International Programs Office

Callista Rakhmatov

CANR Alumni Association Awards

Distinguished Faculty Award

Christina DiFonzo

Honorary Alumnus

Stephan Tatter

Outstanding Alumni

Mark Sheperdigian

Entomological Society of America North Central Branch Awards

Distinguished Achievement Award in Teaching

Amanda Lorenz

Excellence in Integrated Pest Management

Zsafia Szendrei

Distinguished Achievement Award in Extension

Rufus Isaacs

Syngenta Crop Protection Award
Society of Nematologists

Marisol Quintanilla

External Graduate Student Awards

University Enrichment Fellowship

DeShae Dillard

USDA/NIFA Predoctoral Fellowship

Kayleigh Hauri

Dissertation Completion Fellowship

Nicole Wonderlin

Academic Achievement Graduate Assistantship 2023/2024 Academic Year
MSU Graduate School

DeShae Dillard
Jordy Hernandez
Ronnie Miller

Entomological Society of America (ESA) 2022 Student Awards - 10 Minute Paper Competition

First Place, MUVE and P-IE: Pollinators

Jennifer Roedel

Second Place, P-IE: Vectors of Plant Disease Section

Natalie Constancio

Second Place, P-IE: Biodiversity, Ecology, and Pollinators

Nicole Wonderlin

ESA - North Central Branch 2022 Student Awards

Second Place, 10 Minute Paper Competition, PhD Session 2 (P-IE)

Brianna Foster

Third Place, 10 Minute Virtual Poster Competition

Julie Michaelson





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

Time to Celebrate

La Cosecha (The Harvest) Honors Success

Participants in the La Cosecha (The Harvest) Program had a celebration event at the Michigan State University Federal Credit Union Club in Spartan Stadium on April 2, 2023.

This event marked the successful culmination of a multi-year project to train the next generation of Latino/a farmers in Michigan. The project, supported by the United States Department of Agriculture (USDA) National Institutes of Food and Agriculture (NIFA) Beginning Farmer and Rancher Development Program (BFRDP), was led by David Mota-Sanchez, Ph.D., Associate Professor of Entomology at Michigan State University.

