

# EntNem

## Sept - Oct Newsletter

UF/IFAS Entomology and  
Nematology Department

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## Letter from the Interim Chair



We are halfway through the Fall 2022 semester, and what an exciting (and excellent) semester it's been! Several of our faculty have won national awards that recognize their excellence and innovation in teaching (Andrea Lucky - Entomological Society of America Distinguished Achievement Award in Teaching; Marc Branham - NACTA Educator Award; and Rebecca Baldwin USDA National Teaching and Student Engagement Award. Oscar Liburd was honored with the Perry Adkisson Distinguished Seminar Speaker Award at Texas A&M University and Zane Grabau with the Syngenta Crop Production Award at the Society of Nematologists (SON) annual meeting. One of our graduate students, Clemen Oliveira, was honored with the John M. Webster Outstanding

Student Award, also at the SON meeting. Cumulative and sustained excellence in research, teaching, and extension programs was demonstrated in abundance in the tenure and/or promotion packages put forward by five of our faculty in September (Silvana Paula-Moraes, Xavier Martini, Zane Grabau, Thomas Chouvinc, and Faith Oi). Undoubtedly, there are many other examples of excellence among our faculty, students, and postdocs that I have missed. Follow our social media channels to keep abreast of their achievements.

As we count down to the joint meeting of the Entomological Societies of America, Canada, and British Columbia (Vancouver, Canada, Nov. 13-16), our Entomology Games team is practicing hard to compete for the national title, after qualifying at the regional meeting in March. I look forward to seeing our students' research talks and posters which I know will be similarly exceptional and reinforce the #1 ranking that the Entomology & Nematology Department earned in 2017 (World University Rankings)! I hope we all come back from Vancouver healthy and mentally reinvigorated after making new connections, renewing old ones, and learning about exciting new research, teaching, and extension at this almost fully face-to-face annual ESA convention.

Happy November everyone! As we enter this month of Thanksgiving, I want to express my gratitude to all faculty, staff, postdocs, and students for everything they do to make the Entomology & Nematology Department truly the best. Go #UFBugs (and worms)!

**Dr. Heather McAuslane**

Professor and Interim Department Chair

Please welcome our  
*Newest*  
staff members!

*Tameka Roberts*

Fiscal Assistant II



*Cameron Jacques*

Academic Assistant II



*Farewell*

Beth, as you move into your  
well-earned retirement, we wish  
you great success and happiness.



# Insect Images

Do you need insect images? The Entomology and Nematology Department has a large collection of insect images for use in your extension, teaching, and research work. A portion of the collection is available online (currently about 15,000 images). From the departmental homepage, go to 'About Us', then 'Resources'. About halfway down is a link for the 'Entomology and Nematology Insect Photography Database'. You'll need to login with your Gatorlink credentials.

If you prefer to take your own photos, we have some equipment that may help. Our Leica setup features a 20MP camera mounted on either a dissecting or compound microscope. The LAS X software has focus stacking capability to ensure that your subject is in sharp focus. This is a departmental resource, so talk to Lyle Buss (LJBuss@ufl.edu) if you'd like to try it out!



*Oligonychus ilicis*



*Minthea squamigera*

## Faculty and Staff News

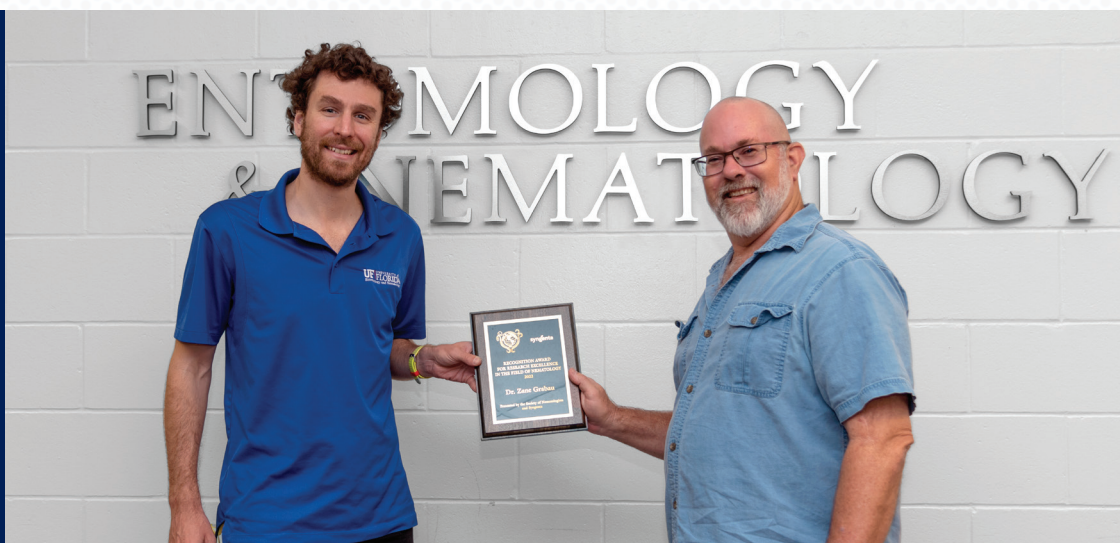
Dr. Maya Saar was presented with the Entomological News for Hebrew Speakers Award! She is a postdoctoral researcher at the University of Florida Entomology & Nematology Department, and works with Dr. Andrea Lucky's lab. For the past three years, Saar has volunteered for one of the largest Science Communication NPOs in Israel, Little Big Science, and has served in a leading role as a writer, reviewer, and scientific editor. Saar strives to bridge language barriers and bring exciting entomological science closer to her

Dr. Andrea Lucky was presented with the Distinguished Achievement Award in Teaching from ENTSOC. This award is presented annually to a member of the society deemed to be the most outstanding teacher of the year.



Dr. Oscar Liburd received the Extension Specialist of the year from IFAS, University of Florida, for research and extension activities in organic vegetables and small fruits. He also was honored to receive the Perry Adkisson Distinguished Professor award from Texas A&M University for more than two decades of research and contributions to agricultural entomology.

The annual meeting of the society of Nematologists (SON) was held in Anchorage, Alaska on September 26th. Dr. Zane Grabau received the Syngenta Excellence in Research Award. This is the SON award for research achievement in early-career nematologists.



From left to right: Drs. Zane Grabau and Billy Crow



From left to right: Dr. Saqib Mukhtar and Amy Vu

Amy Vu was awarded two communication awards by the National Association of County Agricultural Agents (NACAA) at the 2022 Extension Professional Association of Florida Conference in Panama City, Florida. She is the Florida state winner in the “Learning Module/Notebook,” category for “Welcome to the Hive! Honey Bee 4-H Project Book.” For the northeast region, she is the winner in the “Audio Recording,” category for “Two Bees in a Podcast.”



Amy also traveled to Arcadia, FL on October 8th Saturday to help distribute 40,000 lb of syrup feed to commercial beekeepers who were affected by Hurricane Ian.



From left to right: Drs. John Dole (CALS Dean), Adam Dale, Carolyn Young (Department Head), Chad Benton (Alumni Society President) Entomology and Plant Pathology.

Dr. Adam Dale was awarded the 2022 NC State University College of Agricultural and Life Sciences Outstanding Young Alumnus Award as a graduate of the Department of Entomology and Plant Pathology.

# 2023 ENSO



**Lillie Rooney**  
President



**Jasleen Kaur**  
Vice President



**Lyne Demesyeux**  
Secretary



**Robert Grosdidier**  
Treasurer



**Tasfir Rashed**  
Fundraising  
Chair



**Oshneil Baker**  
Seminar Lunch  
Coordinator



**Arden Lambert**  
Social Media  
Chair



**Cleveland Ivey**  
REC Liaison

# Halloween Door Contest



**1st  
Place**



# Halloween Costume Contest



**1st  
Place**

Joey Gonsiorek

Lillie Rooney

Dr. Jennifer Weeks



## Student News

Marcello De Giosa ([Dr. Alexandra Revynthi's Lab](#) – Tropical Research and Education Center - TREC) and Marielle de Moraes Berto ([Dr. Daniel Carrillo's Lab](#) – Tropical Research and Education Center - TREC) have both been awarded the Student Grant for their presentation at XVI International Congress of Acarology, Auckland, New Zealand.



Clemen Oliveira, Ph.D. student with [Dr. Johan Desaegeer](#) at Gulf Coast Research and Education Center, GCREC, received the Webster Outstanding Graduate Student Award. This is the SON's most prestigious graduate student award for excellence in all aspects of graduate student life. The awardee presents the Webster Cobb Foundation Paper, a 45-minute address. Clemen presented “Integrated nematode management in Florida strawberry – opportunities and limitations.”



Clemen Oliveira, Ph.D with Dr. Johan Desaegeer



From left to right: Laura Mayorga Santafe, Rebeca Sandoval-Ruiz, Lynhe Desmesyeux, Denis Gitonga

Several of our graduate students received travel awards to attend the Society of Nematologists, meeting at Alaska:

- Rebeca Sandoval-Ruiz  
Cobb Travel Award
- Lynhe Desmesyeux  
Bayer Travel Award
- Denis Gitonga  
Bayer Travel Award

## Student News



Emily Le Falchier

Emily Le Falchier from [Dr. Carey Minter's](#) lab was awarded the Florida Invasive Species Council's Julia Morton Research Grant to work on assessing the influence of microclimate on the establishment and persistence of *Pseudophilothrips ichini* on Brazilian peppertree in Florida.

Dr. Kelly Carruthers, a recent graduate from Dr. Carey Minter's lab, was awarded the 2022 Southern IPM Center Friends of IPM Doctoral Graduate Student Award. Congrats, Kelly!

On September 1st, PhD student Madison Gits was accepted as an intern for the National Pest Management Association's PestWorld 2022 in Boston, MA, from October 11-14. Gits presented the Impacts of bioassay type and source population size on insecticide resistance assessment in the German cockroach (*Blattella germanica*) on Thursday, October 11th.

A photo of an ant from Nikon's Small World Photography Competition has gone viral for its menacing look. Graduate research fellow, Miles Maxcer from Dr. Andrea Lucky's lab, is featured in [The Washington Post](#) article about the viral image of the carpenter ant.



Miles Maxcer

# EDUCATION & OUTREACH:



From left to right: Eloise Lamie, Cassandra Coulsey, and Sara Salgado at the 4-H State Insectathon.

The Minter lab hosted a 4-H Insectathon Workshop on October 5th. This workshop was attended by 35 children from St. Lucie, Okeechobee, Martin, and Indian River counties who wanted to learn about collecting, pinning, and identifying insects for the 4-H State Insectathon.



James Brown with Brownie Girl Scouts

Vashti Tatman hosted an event at Natural Area Teaching Lab (NATL) for the Brownie girl scouts. While touring NATL, the girl scouts learned about the different ecosystems within NATL, pet arthropods, and later created art using maggots as a medium. The girl scouts earned their Bug Badge for their participation that day.

If you have any questions or would like to volunteer, please email us.

[Vashti Tatman](#).  
Outreach Coordinator

Dr. Andrea Lucky and [Dr. Jiri Hulcr](#) facilitated a public Bug Walk with Alachua Conservation Trust at Tuscawilla Preserve on September 17th. Joined by a handful of ENY and SFFGS graduate students and with over 60 community members in attendance, the event was a success! This family-friendly event focused on hand collecting, sweep netting, and aquatic invertebrate collection. Attendees also learned about the critical roles insects play in our ecosystems!

[Dr. Alexandra Revynthi](#) from the Tropical Research and Education Center (TREC), presented in workshop about their hibiscus bud weevil (HBW), the hibiscus plant volatiles and the behavioral response of the HBW to them. She discussed monitoring and sanitation, contact insecticides and systemic insecticides, biological control using entomopathogenic nematodes, and provided hands-on activities with HBW colonies and traps.

On Sept. 20-22, 2022, the Ft Lauderdale Research and Education Center (FLREC) hosted a workshop about Structural Fumigation in collaboration with NPMA and ASPCRO. Five EPA Office of Pesticide Program staffers from three divisions (Pesticide Re-evaluation, Health Effects and Benefits and Economic Analysis Divisions) joined state regulators from Georgia, South Carolina and Florida for a 3-day workshop detailing the Structural Fumigation process. The workshop, which included expert instructors such as Sean Brantley, Dr. Ellen Thoms, John Sansone, and [Dr. Thomas Chouvenc](#) featured both classroom style education and an observation of a real-life fumigation in the UF “Hurricane House”. These experiences provided EPA staff with an opportunity to better understand the highly technical nature of fumigation and the risk mitigation procedures that are in place to ensure safety. This workshop will help inform EPA’s response to extensive industry comments submitted in September 2021 regarding proposed label changes as well as the ongoing Registration Review for sulfuryl fluoride. On September 12th, [Dr. Nan-Yao Su](#) and Dr. Thomas Chouvenc hosted the Urban Pest Management Technical Committee (UPMTC) in at the FLREC to discuss the current and future research about subterranean termite control.



# Student Highlights



A native of Coolidge, GA, Cleveland Ivey was raised by a family who made clear to him and his younger brother the importance of education and finding purpose in work. Unfortunately, Cleveland lacked aspirations. While a freshman at Fort Valley State University, Dr. George Mbata, whom Cleveland refers to as his “second father” took Cleveland under his wing. He soon began working under Dr. David Shapiro-Ilan as well at the nearby USDA-ARS. While working with these two mentors, Cleveland wrangled with post-harvest pests, parasitoids, and entomopathogens, and found his “first true scientific love”. Upon graduating, he worked under [Drs. Amanda Hodges](#), [Norman Leppla](#), and Joseph Eger in Gainesville, FL, where he worked on implementing a quality control-based rearing program for *Bagrada hilaris* Bagnall (Hemiptera: Pentatomidae) under maximum quarantine conditions at FDACS-DPI.

Cleveland refers to quality control as his “second true scientific love.” Cleveland has been working under [Dr. Hugh Smith](#) at the Gulf Coast REC in Wimauma, FL since spring 2021. His project focuses on monitoring and management approaches for *Megalurothrips usitatus* Bagnall (Thysanoptera: Thripidae), an invasive pest, threatening Florida’s important snap bean industry and specialty legumes. Cleveland feels blessed to be able to work with the Vegetable Entomology laboratory, growers, crop consultants, and a well-rounded committee.

## Fun Fact:

While a trombonist in the FVSU Blue Machine Marching Band, Cleveland marched in the Endymion and Orpheus parades at Mardi Gras in New Orleans, Louisiana (2016). An avid self-tie bow tie collector since high school, Cleveland currently owns more than 50.

# Instructor Highlights



[Dr. Georgette Kluiters](#) heads the department's online education as the Distance Education Coordinator. She's the primary point of contact for these students and helps to navigate them through their time at UF. As a department, we offer a range of courses for place-bound students, from undergraduate certificate programs, to graduate certificates and non-thesis MS programs. Students join us both from within the US and outside, and currently we have over 40 undergraduate students, 70 graduate certificate students, and over 100 non-thesis MS students. A large number of our distance students are employed within entomology professions, but many are often interested in changing careers to one with a stronger entomology focus.

There's a diverse range of backgrounds - from mosquito control district employees, to researchers and university faculty, school teachers, military personnel, and those involved in science communication - to name but a few!

Certificate and MS-specialization:

- Beekeeping - [Dr. Cameron Jack](#)
- Biosecurity - [Dr. Tolulope Agunbiade](#)

Starting this semester, Dr. Kluiters is offering a number of open house opportunities for applicants to learn more about our department and programs we offer - the last one took place on Wednesday October 19, and had over 60 attendees!

Our distance students are keen to be integrated further into Gator life, and Dr. Kluiters will be contacting both student and faculty groups, input on offerings for these students - particularly with regards to TA and internship opportunities, extension within the department, and a chance for these students to become more connected to ENSO.

Thank you to everyone for supporting our distance students, who are such an important part of our department's educational offerings!

## Publications

- **Adler, K., A. E. R. Schill, A. M. Stolberg, C. W. Miller, and M. Forthman. 2022.** First record of the bow-legged bug, *Hyalymenus subinermis* Van Duzee, 1923 (Hemiptera: Heteroptera: Alydidae), in California, with description of the mimetic immature stages. *Pan-Pacific Entomologist* [98\(2\): 138-149](#).
- **Beatty, N. L., C. J. Forsyth, N. Burkett-Cadena, and S. M. Wisely.** Our current understanding of chagas disease and *Trypanosoma cruzi* infection in the State of Florida - an update on research in this region of the USA. *Current Tropical Medicine Reports* [1 - 10](#).
- **Bloch, M., E. E. Helmick, and B. W. Bahder. 2022.** Differentiation of palm-infecting phytoplasmas in the Caribbean basin using high resolution melt curve analysis of the secA gene. *Plant Disease* [106: 2480-2489](#).
- **Bui, H. X., M. Gu, G. Riva, and J. A. Desaeger. 2022.** *Meloidogyne spp.* infecting Asian vegetables in central Florida, USA. *Nematropica* [52: 56-63](#).
- **Burkett-Cadena, N. D. 2022.** First records of species of the *Spissipes* Section (*Culex* (*Melanoconion*)) (Diptera, Culicidae) in Guainia Department, Colombia. *Check List* [18: 721-724](#).
- **Burkett-Cadena, N. D., E. M. Blosser, and L. E. Reeves. 2022.** Key to the adult females of species of *Culex* Subgenus *Melanoconion* in Florida, USA. *Journal of the American Mosquito Control Association* [38: 130-140](#).
- **Caragata, E. P., and S. M. Short. 2022.** Vector microbiota and immunity: modulating arthropod susceptibility to vertebrate pathogens. *Current Opinion in Insect Science* [50:100875](#).
- **Chen, X. D., D. Stockton, H. Gossett, J. A. Qureshi, F. Ibanez, K. S. Pelz-Stelinski, and L. L. Stelinski. 2022c.** Comparisons of economic thresholds for Asian citrus psyllid management suggest a revised approach to reduce management costs and improve yield. *Frontiers in Sustainable Food Systems* [6: 1-10](#).
- **Chouvenc, T. 2022.** Eusociality and the transition from biparental to alloparental care in termites. *Functional Ecology*. [00: 1-11](#).
- **Di Lella, B., D. F. Mou, E. E. Helmick, and B. W. Bahder. 2022.** First Report of 'Candidatus Phytoplasma brasiliense' in North America and in a New Host, Globe Sedge (*Cyperus globulosus*). *Plant Health Progress* [23: 336-338](#).

Click here to view the full list of publications. [Link](#).

## Grants



**Dr. Thomas Chouvenc** received a \$53,487 funding from the Florida Department of Agriculture and Consumer Services to study the long term efficacy of current subterranean termite control methods.



**Drs. Lauren Diepenbrock, Larry Duncan, and Lukasz Stelinski** were awarded a \$346,920 three-year grant from the Citrus Research and Development Foundation titled, “Getting to the root of the problem: Managing Diaprepes root weevil on trees with HLB”



**Drs. Lauren Diepenbrock and Nicole Quinn** were awarded a \$369,360 three-year grant from the Citrus Research and Development Foundation titled, “Developing management for *Bulimulus bonariensis* snails in Florida citrus.”



**Dr. Adam Wong** has received the Maximizing Investigators’ Research Award (MIRA) from the National Institute of Health (NIGMS). The \$1.86-million award will support the Wong lab over five years to investigate how gene regulation of behavior is influenced by the microbiome using the fly model. The research has the potential to advance fundamental knowledge on how the interplay of host genetics and microbiome contribute to complex behaviors. Drs. Chun Nin Adam Wong and Oscar Liburd were awarded a \$159,105 grant from the Florida Specialty Crop Block Grant program to develop microbial-based tools to improve the management of spotted wing drosophila in berry crops.

## Grants

Entomology & Nematology faculty received five of the 10 FNGLA Endowed Research Fund Awards this year! Congratulations to Adam Dale, Rachel Mallinger, Lance Osborne, Nicole Quinn, and Alexandra Revythni on funding to pursue research that will benefit the Florida Green Industry.



[Dr. Adam Dale](#) - Mitigating risk and developing more efficient management tactics for lethal bronzing” awarded \$6,500



[Rachel Mallinger](#) - “Developing water-efficient pollinator plants for Florida” \$6,500



[Lance Osborne](#) - “Monitoring and testing of management strategies for Thrips parvispinus (Karny) in Palm Beach County” \$5,500



[Nicole Quinn](#) - “Implementation of rapid testing kit in commercial nurseries to distinguish Lebbeck mealybug (*Nipaecoccus viridis*) from other mealybugs in Florida” \$5,000



[Alexandra Revythni](#) - “Evaluation of the commercial parasitoid *Catolaccus hunteri* as a biocontrol agent of the hibiscus bud weevil” \$6,500