

ENTOMOLOGY & NEMATOTOLOGY Department

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UF/IFAS Entomology and
Nematology Department

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Insect ID LAB

The Entomology and Nematology Department has a large collection of insect images available for use in your extension, teaching, and research work. The collection is available online and currently includes about 16,000 images. Starting 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](#) if you'd like to try it out!



Insect ID

The tussock moth *Orgyia detrita* is common in central and northern Florida, and in most years populations can be found at high levels somewhere in the state. This year it happened right here on the UF campus in Gainesville. Based on interview requests received at the Entomology & Nematology Dept., the caterpillars were a popular topic in journalism classes! The caterpillars feed on the leaves of oaks, and their hairs cause skin irritation in some of the people that encounter them.



Faculty and Staff News



Dr. Bryony Bonning

Congratulations to **Dr. Bryony Bonning** for being inducted as a Fellow of the National Academy of Inventors (NAI)! This prestigious professional honor is granted exclusively to inventors. Since its establishment in 2012, the NAI Fellows program has grown to encompass 1,898 outstanding researchers and innovators, who collectively held over 63,000 U.S. patents and 13,000 licensed technologies. NAI Fellows are renowned for the societal and economic impact of their inventions, contributing significantly to scientific and consumer technology advancements. Their innovations have generated over \$3 trillion in revenue and created 1 million jobs.

Dr. Bonning joins a cohort of 162 academic inventors recognized by the NAI in 2023, with the University of Florida proudly contributing two members to this esteemed group! Congratulations again to Dr. Bonning for this remarkable achievement!

Dr. Cameron Jack has been awarded the prestigious 2024 Educator Award by the Friends of IPM, as declared by the Southern IPM Center!

Dr. Jack's exceptional dedication to teaching Integrated Pest Management (IPM) techniques in beekeeping and apiculture has garnered well-deserved recognition from the panel. His commitment to practices previously underutilized and undercommunicated is truly commendable.

Dr. Jack has carved out a significant niche in the realm of beekeeping and apiculture, employing innovative IPM methods. His comprehensive educational initiatives have reached and inspired thousands of students, fostering a ripple effect of positive impact within the beekeeping, apiculture, and IPM communities. Furthermore, the panel acknowledges Dr. Jack's outstanding contribution through several high-impact extension articles focused on pest identification and management in bee colonies. Each article emphasizes the critical role of IPM, further solidifying Dr. Jack's invaluable influence in this field.



Dr. Cameron Jack



Dr. Estelle Martin

Dr. Estelle Martin was featured in [Entomology Today](#) for her published study titled '[Culex erraticus \(Diptera: Culicidae\) Utilizes Gopher Tortoise Burrows for Overwintering in North Central Florida.](#)' In the study, Dr. Martin and her team embarked on a burrow inspection adventure to uncover whether mosquitoes are seeking shelter in Gopher Tortoise burrows and, if so, the potential implications for future mosquito mitigation efforts.

Dr. Lisa Taylor and former UF undergraduate student Lauren Gawel recently sat down with NPR's Ira Flatow to delve into the intriguing topic of why they adorned termites with capes and what insights this provides into jumping spider decision-making. Their innovative approach involved crafting capes in two distinct styles: one striped and the other full. Be sure to check out [the article](#) to discover which style of cape is preferred by the jumping spiders!



Dr. Lisa Taylor



Dr. Matthew Thomas

Dr. Matthew Thomas has caught the attention of [WMNF](#) for his latest research on 'Phenotypic Adaptation to Temperature in the Mosquito Vector, *Aedes Aegypti*.' This study, as detailed by Lourdes Mederos from IFAS Communications, explores how mosquitoes adapt to temperature changes, providing valuable insights into predicting the spread of mosquito-borne diseases in different climates. [Here](#) is the link to read all the fascinating findings and implications for public health.

From Dr. Martin's lab, Daniel McNamara clinched **second place in the poster competition at the American Mosquito Control Association (AMCA) annual meeting.** He captivated the audience with his research on the influence of socioeconomic factors on mosquito community composition and abundance. This achievement underscores our commitment to pioneering studies that address critical issues in public health and entomology.



Daniel McNamara

We are thrilled to announce that our esteemed colleague, **Dr. Anthony Auletta**, has been **honored with the prestigious IFAS International Award for Early Career International Educator**. This esteemed recognition underscores Dr. Auletta's exceptional contributions to international education and underscores his unwavering commitment to teaching excellence.

This award specifically acknowledges Dr. Auletta's remarkable efforts in study abroad and virtual exchange programs. His work in study abroad has taken place in Florence, Italy, where he led a course exploring the influence of insects on human history and culture. Additionally, his virtual exchange project, integrated into the CURE course each semester, connects students with entomology researchers worldwide to delve into the global significance of insect research.

Furthermore, Dr. Auletta's receipt of this award positions him as a nominee for the CALS/IFAS university-wide UF International Educator Award in the junior educator category later this year.

Congratulations to **Dr. Sanghyeon Kim**, a postdoctoral researcher in **Dr. Daniel Swale's** lab, for winning **second place in the post-doctoral competition at EPI Research**.

Also from Daniel Swale's lab, **Dr. Louise Ball**, is on an adventure in the intricate world of tick-borne diseases. With a keen focus on understanding how diseases persist within ticks, Louise's research sheds light on the mechanisms that enable these arachnids to transmit diseases to humans. Watch how her curiosity led **her into her research in this captivating video** brought to you by Emerging Pathogens Institute.



Dr. Anthony Auletta



Dr. Sanghyeon Kim



Dr. Louise Ball

Employee Spotlight

Glinda Burnett, was honorably recognized and celebrated for her service during the staff appreciation reception held at Earl and Christy Powell University House in February. Vice President for Human Resources, Melissa Curry remarked on Glinda's incredible tenure here in Entomology and Nematology Department.

“Thank you, Glinda, for letting us walk down memory lane,” said Curry after highlighting some of the main events that happened in 1973, when Burnett joined the University of Florida.

“The time you have worked at University of Florida has coincided with its meteoric rise as a top public university in this country and the world,” said Parks. “Without a doubt, you can know that your efforts over decades have made a difference not only for you, your families and those who work closely with you, but also know that you have helped build a university that is impacting the lives of the people of this state, this nation and the world. You have much to be proud of and to celebrate.”



Melissa Curry and Glinda Burnett

Janice A. Stout has achieved the prestigious **2024 IFAS Superior Accomplishment Award in Finance, Research, and Compliance**, as well as the **2024 UF Superior Accomplishment Award** recognizing her exceptional and meritorious service! While both awards are highly commendable, the latter is of the highest honor. Notably, Janice was presented with a heavy gator plaque and a cash reward in recognition of her outstanding service.

Janice's remarkable tenure has been characterized by her exceptional ability to serve as a bridge between faculty, staff, and sponsors. Her instrumental role in providing invaluable guidance and support in proposal preparation and submission has elevated projects to new heights. Furthermore, her adeptness in meticulously reviewing documentation ensures unwavering compliance with University protocols, legal requisites, and cost accounting standards, among other guidelines. Cheers to Janice for her outstanding contributions and well-deserved recognition!



Janice Shott

ENSO

ENTOMOLOGY NEMATOLOGY STUDENT ORGANIZATION

ENSO organized a social event during the 2024 ESA-SEB meeting to facilitate interactions between REC students and Gainesville students, fostering and fortifying a social network while providing a platform to discuss expectations from ENSO. The event was highly successful, with participants enjoying engaging discussions and forming new connections. ENSO is committed to hosting similar social events at every ESA meeting in the future, so be sure to keep a lookout for updates.



Student News



Aria Deluna

We're excited to announce Aria Deluna's nomination by The Entomological Society of America's Physiology, Biochemistry, and Toxicology (PBT) for their Research Spotlight! Aria, from [Dr. Adam Wong's lab](#), conducts groundbreaking research on the microbiome of larval chironomids and *Vibrio cholera*, the bacterial pathogen causing cholera, making significant contributions to public health. Her spotlight article will be featured in PBT's upcoming newsletter and showcased at the ESA National meeting in Phoenix, Arizona. Congratulations to Aria, and we encourage everyone to explore her impactful work.



Jessica Griesheimer

We're thrilled to announce that Jessica Griesheimer has been chosen as the recipient of the **prestigious UF/IFAS Award of Excellence for Best Thesis in Agricultural Systems!** Join us in celebrating her remarkable achievement at the highly anticipated 17th Annual Florida Agricultural Experiment Station Research Awards Ceremony. Alongside esteemed colleagues Drs. **Xavier Martini** and **Carey Minter**, Jessica will be honored for her outstanding contributions to the Graduate Research program. Congratulations to Jessica and her fellow recipients on this well-deserved recognition!

Graduate teaching assistants at the University of Florida play a crucial role in enriching the educational experience for students. Each year, the UF Graduate School recognizes the most industrious and innovative among them with the Graduate Student Teaching Awards (GSTA), highlighting their exceptional work in classrooms and laboratories across campus. We're thrilled to announce that **James Boothroyd has been honored with the University-wide Graduate Student Teaching Award this year!**



James Boothroyd

Congratulations to Jasleen Kaur for her selection as a **member of the 2024 inaugural cohort of the University of Florida/Bayer University Mentoring Program.** This prestigious program, facilitated by Bayer, is a global initiative designed to foster one-on-one mentorship relationships between university partners, aimed at cultivating the talents of the next generation of scientists. Through this program, Jasleen will have the invaluable opportunity to receive personalized coaching in soft skills and career development advice, paving the way for their future success in the scientific community. We applaud Jasleen for her achievement and look forward to witnessing her continued growth and accomplishments in this esteemed program.



Jasleen Kaur

2024 ESA- SOUTHEASTERN BRANCH Awards

This year's event unfolded in Augusta, GA, from March 17th to 20th, 2024. A multitude of students showcased their research at the meeting, with several receiving recognition for their outstanding presentations. We're immensely proud of all our students for their hard work and dedication.

Undergraduate 10 - minute session

1st Place - Sacha Glynn from Adam Dale's Lab

Undergraduate Poster

2nd Place - Charlotte Dubose - Dr. Silvana Paula-Moraes Lab

PhD student, 10-minute, session I

Brynn Johnson - Dr. Julien Beuzelin

MS poster session

Yasmin Ortiz - Dr. Panpim Thongsripong



Tafsir Rashed, Madison Gits, Lillie Rooney, and Adam Pitcher showcased our department's prowess at the Entomology Games during the 2024 ESA-SEB meeting. Despite narrowly missing the final round, their performance was truly impressive, underscoring our team's dedication and skill. Congratulations to our talented representatives for their remarkable efforts! Estelle Marin and **Jason Williams** acted as their coach!



Lillie Rooney, Madison Gits, Dr. Estelle Martin, Tafsir Rashed, and Adam Pitcher

2024 ESA- SOUTHEASTERN BRANCH Awards



The 2024 SEB branch has honored **Dr. Daniel Carrillo** with the **Branch Recognition Award in Entomology!** Dr. Carrillo's expertise in insect research and his innovative approach to implementing sustainable pest management practices are widely acknowledged and highly valued. We are thrilled to celebrate Dr. Carrillo's continuous achievements and immense contributions to the field!

Dr. Thomas Chouvinc has been honored with the **Distinguished Achievement Award in Urban Entomology.** Specializing in subterranean termite research, Dr. Chouvinc's expertise and leadership in this field have been exemplary. His comprehensive training program, coupled with a diverse entomology extension program, unequivocally solidifies his deserving of this respected award.

Interested in learning more about their highlights at ESA - SEB? Check out their program book [here](#).



EDUCATION & OUTREACH:



Left to Right: Raquel Hill, Brianna Benítez, Olesya Malakhova and Adam Pitcher



Left to Right: Alexandor McMillian, Ariana Rollins, Adam Pitcher

Kanapaha Botanical Garden recently held its annual Spring Festival, featuring 100 vendor booths offering a diverse selection of native, eco-friendly, and visually appealing plants. Alongside these vendors, local gardening and environmental organizations provided valuable insights into the region's ecosystem. Notably, students from our **DPM program actively participated in these outreach efforts, engaging attendees with educational activities and contributing to plant sales that supported the program directly.**

In addition to their presence at the Spring Festival, these dedicated students organized their own February Flora and Fauna Festival, where they educated attendees about plant and wildlife symbiosis. They also hosted a captivating display at the Florida State Fair's Insect Encounters event, partnering with the Biosecurity Research and Extension Lab to share insights about insects and their impact on our lives. Through these initiatives, the DPM program continues to foster knowledge and enthusiasm for agriculture and environmental stewardship.

BUG FEST



Dr. Rebecca Baldwin hosted the maggot painting activity



On Saturday, April 6th, the Entomology & Nematology Department hosted BugFest 2024, captivating attendees with this year's theme, "Wish Upon and Instar," inspired by the lively activity of fireflies during spring. Drawing over 250 enthusiasts of all ages, the event provided an immersive exploration into the fascinating world of insects, arachnids, and other arthropods. From maggot paintings to face painting and cockroach art, the festivities offered a diverse range of engaging activities to entertain visitors, particularly the younger attendees.

Classrooms and labs underwent a metamorphosis into interactive insect experiences, with themes inspired by fables such as 'The Ant and the Grasshopper' and 'The Lion and the Gnat.' Participants embarked on a scent-based scavenger hunt in the courtyard to uncover the intriguing communication methods of ants, while also discovering diverse insect species from around the globe in our insect museum exhibit. Guests were warmly welcomed by students adorned as insects and invited to craft their own insect antennae, adding to the immersive experience. **With all the enthusiastic participants and support from volunteers representing the Entomology Club, Aquaculture Club, and Honey Bee Club, the event buzzed with energy.** Current and retired faculty, along with USDA scientists, were on hand to provide expert insights and promote our program.

A memorable highlight of the day was the esteemed presence of Dr. Dick Patterson, a world-renowned scientist, who, at 92 years young, graced BugFest with his visit.



Dr. Rebecca Baldwin, Bug Club and Volunteers



Erica Guri and Dr. Crow

Dr. Billy Crow has been keeping himself quite busy with a mix of travel and in-house work. In January, he co-taught a 4-hour nematode management workshop at the Golf Course Superintendents Association of America meeting in Phoenix, Arizona. Following that, in February, Dr. Crow presented a seminar for the School of Plant and Environmental Sciences at Virginia Tech University. Despite missing out on a full Spring break, he spent 10 days in Bermuda conducting a nematode survey in agriculture on the island.

On March 21st, the Bee Lab, Urban Entomology Lab, Nematode Assay Lab, and Insect Identification Lab played host to a group of over 20 Master Gardeners from Flagler County. Wrapping up his recent activities, on April 10th, Dr. Crow, along with his graduate students Erica Guri and Wade Davidson, presented their research to a group from the US Golf Association at the Plant Science Unit in Citra.

Student Outreach recently participated in two events aimed at educating attendees about beneficial insects and engaging them in hands-on activities. The first event was the annual **Master Gardener** festival in Marion County, Ocala, FLa., which drew a large turnout of 600 attendees. At this event, participants took part in seminars, arts and crafts, and a plant sale, while Student Outreach members provided educational sessions on beneficial insects.

The second event took place at Archer Elementary School during their school carnival, where Student Outreach engaged with 200 students in similar educational activities. Additionally, they organized a petting zoo and activities such as making antennae headbands and bug hunts.



Tracy Liesenfelt and Lynhe Demesyieux

Volunteer for the Student Outreach Program!

Are you passionate about education and outreach? Do you want to make a positive impact in the community? Join our Student Outreach Program led by our Outreach Coordinator, Vashti!

If you're interested in becoming a volunteer, please don't hesitate to reach out to Vashti via **email**. We'd love to have you on board!



17th annual

Bee College Spring 2024



Dr. Jamie Ellis smoking bee hive for Spring Bee College

Credit: Ayla M. Babanikos

The Seventeenth Annual Spring Bee College swarmed onto our campus on Friday, March 15th and Saturday, March 16th, 2024. While many spring break students were away from Gainesville, the **nearly 400 conference attendees came to the interactive workshop to learn all they could about apiculture, management techniques of *Apis mellifera* colonies, pests/diseases, value added products from the hive, business practices, and more.** Vendors from Florida, the apiculture industry, and other bee enthusiasts joined the 50 speakers to provide education and support to beekeepers from all over Florida and the region. With some attendees traveling from Canada and the Caribbean, their dedication to their hobbies/businesses was matched by the quality of workshops offered.

Speaker sessions included engaging titles such as, *Hot Topics in Beekeeping, Plants for Bees, Honey Extraction, Apiary Photography, and Accessible Beekeeping.* Many of the sessions were standing room



Julia St. Amant

only, emphasizing the popularity and importance of this signature UF/IFAS Extension program.

Department-wide contributions from faculty and staff (honey bee lab, graphics arts team, and Glinda!) ensured this Bee College was a resounding success -

thanks to all!