

CONNECTIONS

Department of Entomology and Plant Pathology Newsletter



Greetings from your Department of Entomology and Plant Pathology

Another busy and productive year is coming to a close in our department. Looking through this newsletter, you will see that ENPL research, extension and teaching programs continue to shine. There is no doubt that this continues because of the dedication and work from our outstanding faculty, staff and student team members. A highlight from the fall was our biennial Insect Festival, which hosted over 3,100 guests at the Washington County Fairgrounds in November. I am so thankful to work alongside such a strong group of people that are clearly committed to learning and service to others.

I hope you enjoy this update on the latest from your department. As alumni, friends and supporters, feel free to reach out to me any time (kkorth@uark.edu) to share information and updates, and to let us know how we are doing.

Best wishes,

Ken Korth
Department Head



SCAN ME

IN THIS ISSUE

GREETINGS FROM ENPL

ALUMNI UPDATE

RECENT EVENTS

AWARDS & RECOGNITION

IN REMEMBRANCE

RECENT GRADUATES

CONTACT US

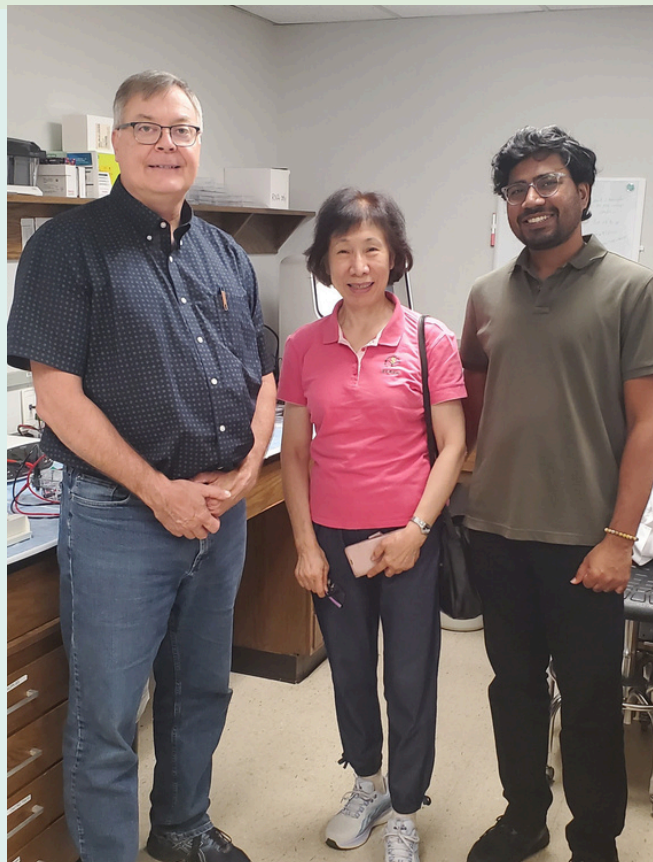


Ken Korth

Support our mission here: bit.ly/UAEntomology

Alumni Update

Distinguished Alumni Visitor



Dr. Yu at her old lab bench in room 221 of Plant Science building. Joined by Ken Korth and Chandan Maurya

We were honored to host Dr. Su-May Yu in September. Dr. Yu earned her Ph.D. in Plant Pathology in 1984 working under the direction of Dr. George Templeton on biocontrol of weeds. She is Professor and Distinguished Research Fellow at the Institute of Molecular Biology at Academia Sinica in Taiwan. Dr. Yu has had a distinguished career working in plant pathology and physiology of rice. She is an elected fellow of the American Association for the Advancement of Science and a member of Academia Sinica. We enjoyed showing Dr. Yu some of the many changes that have come to campus. We had a great conversation recalling her time as a student, and she was able to visit her old lab and find her name in the sidewalk. Dr. Yu's husband, Dr. Yu-Chan Chao, is also a graduate of our program having earned a Ph.D. in Entomology in 1984 with Dr. Seth Young. He previously visited Fayetteville in Fall 2023. Thank you for visiting Dr. Su-May Yu!

Recent Events

Ozark Bug Crawl

On August 24, the Ozark Bug Crawl took place in Cane Hill, offering participants a chance to discover the fascinating world of insects through a community BioBlitz. Experts from the University of Arkansas, the Scott Family Amazeum, NWACC's Living Laboratory, and the Illinois River Watershed Partnership guided attendees in identifying insect captures, sharing fun facts, and providing hands-on buggy activities. Friends and families joined in this free, nature-based adventure, competing for prizes like passes to the Scott Family Amazeum in Bentonville! There was a record turnout of over 250 participants. Special thanks to all of our volunteers, especially: Paige Cummins, Pateyn Privitt, Jason Cartwright, Chloe Cooper, Joshua Chavana, Maggie Herrmann, Lily Goggin, Austin Jones, Jon Zawislak, Ken Korth, and Carolyn Lewis.



Recent Events cont.

Staff Birthday Celebration

The Kariyat Lab recently celebrated the birthday of Devaney Crippen, a long-time departmental contributor and a vital part of the team. Known for his dedication and extraordinary contributions, Devaney has been instrumental in supporting various projects and fostering a collaborative environment within the department. The celebration was filled with heartfelt appreciation for his hard work, making it a memorable day for Dev and the entire Kariyat Lab.



Dev Crippen (seated) with the Kariyat Lab

End of Year Social Meeting



The end-of-year social on December 16th, 2024, was a lively and heartwarming way to wrap up the year! Held as a potluck, it was a feast for both the eyes and the taste buds, with tables brimming with dishes that showcased everyone's cooking skills. From creamy casseroles to decadent desserts, there was something for everyone—and no one left hungry!

The highlight of the event was the ever-popular White Elephant gift exchange. Laughter filled the room as people unwrapped quirky, hilarious, and sometimes surprisingly useful gifts, only to have them "stolen" moments later. Whether it was a set of stackable mugs, a fancy candle, or a Shrek T-shirt, each item carried its own story and charm. The atmosphere was relaxed, joyful, and full of good cheer—the perfect way to cap off 2024.

Here's to more good times and great memories in 2025!

Cheers! 🎉

Recent Events cont.

ENPL Staff Runs LeadAr Project

The leadership project took place on September 9, 2024, hosting 15 seniors from Harber High School. The event started on the main campus in the morning with welcome remarks by the Chair of the Department of Entomology and Plant Pathology, Dr. Ken Korth and Dr. Ioannis Tzanetakis provided a brief overview of the field of plant pathology. Drs. Tzanetakis, Joanna Kud, Jim Correll and Martin Egan presented their respective research programs and the career opportunities available in each specialized field, followed by a visit to each of their laboratories.

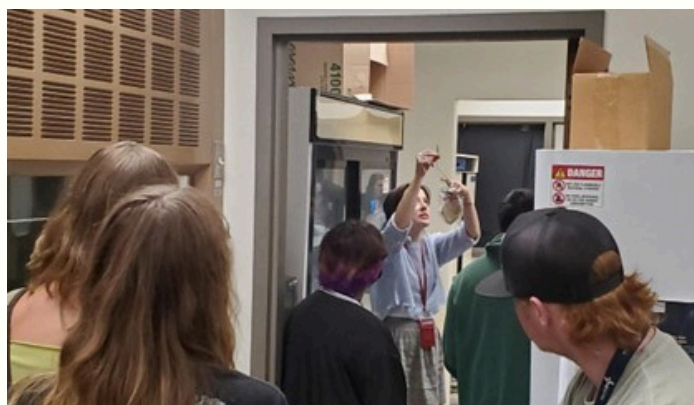
Before lunch, the group had toured the Rosen Center greenhouse courtesy of Mr. Brandon Wodka who also provided information on greenhouse management.

The afternoon part of the event started with a visit to the research program of Dr. Burt Bluhm, whose research lab is in the Milo J. Shult Agricultural Research & Extension Center. The students then visited the Plant Health Clinic, where Mr. Jason Pavel showed plant diseased specimens and described the career path to becoming a plant disease diagnostician. The next stop was to the Arkansas Clean Plant Center where Dan Villamor explained the purpose of the Center and Drs. Bolaji and Shivani toured the Center's laboratories and explained the research and activities.

This event provided valuable information for students considering careers in agriculture. Specifically, it introduced students to the specialized field of plant pathology and opportunities for them to pursue career in this field. Since there is no undergraduate program in Plant Pathology, this event gave students valuable exposure to the field and an opportunity to connect with various faculty and their research programs, providing necessary networking opportunities for the future. Additionally, the event serves as an excellent opportunity for ENPL to recruit students and train future plant pathologists in Arkansas and beyond.

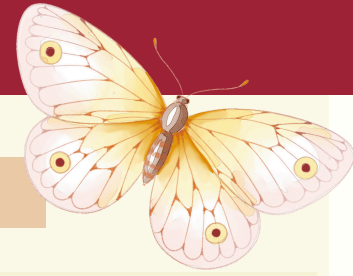


Dr. Asia Kud presenting to the students



Hannah Zima presenting to the students

Recent Events cont.



Insect Festival 2024

On November 5, 2024, over 3,000 visitors gathered to celebrate the fascinating world of insects at the biennial Insect Festival. Held at the Washington County Fairgrounds, the event featured interactive exhibits, live insect displays, educational workshops, and family-friendly activities that captivated entomology enthusiasts of all ages.

This year's festival highlighted the vital role insects play in ecosystems. Children delighted in the scavenger hunt, cockroach races, and craft booth, while adults had the chance to learn about insect related information from a variety of educational booths.

The Insect Festival has grown in popularity over the years, and the 2024 turnout reinforced the community's increasing interest in preserving biodiversity. Organizers hailed the event as a resounding success, already making plans for an even bigger celebration in 2026.

For many attendees, the festival was a reminder of the wonder and importance of insects in the natural world, sparking conversations about conservation and coexistence with nature's smallest creatures.

Here are some photos from the Insect Festival of 2024



Recent Events cont.

Welcome Back Jodi!

We are so glad that Jodi Swint has accepted a new position as a Project-Program Specialist in ENPL for Cooperative Extension. Jodi has a wealth of experience working in our department at the Lonoke Agriculture Center.

In addition to serving as administrative support for the Lonoke facility, she provides outstanding support for multiple ENPL faculty.



ENPL Faculty Retreat



The ENPL faculty held a retreat at the Winthrop Rockefeller Conference Center on December 5-6. In addition to fellowship, the group had productive discussions on our curriculum and strategic planning.

Recent Events cont.

ENPL Participants at Plant Health 2024!

The annual Plant Health meeting of the American Phytopathological Society (APS) was held in July in Memphis, TN. Several members of the department made the drive to Memphis for the meeting and presented their research. As usual, this meeting provided a fantastic opportunity to network with colleagues and connect with alumni.



Alumni and members group shot



Lou Hirsch and Kim Cochran



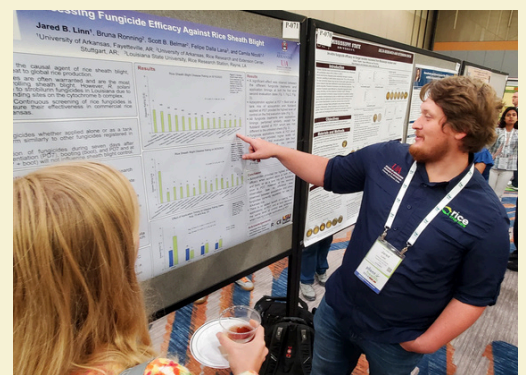
Tim Brennaman and John Rupe



Insha Shafi and Anmolpreet Kaur



Terry Spurlock, Tracy Hawk, and Kim Cochran



Jared Linn presents

Awards and Recognition

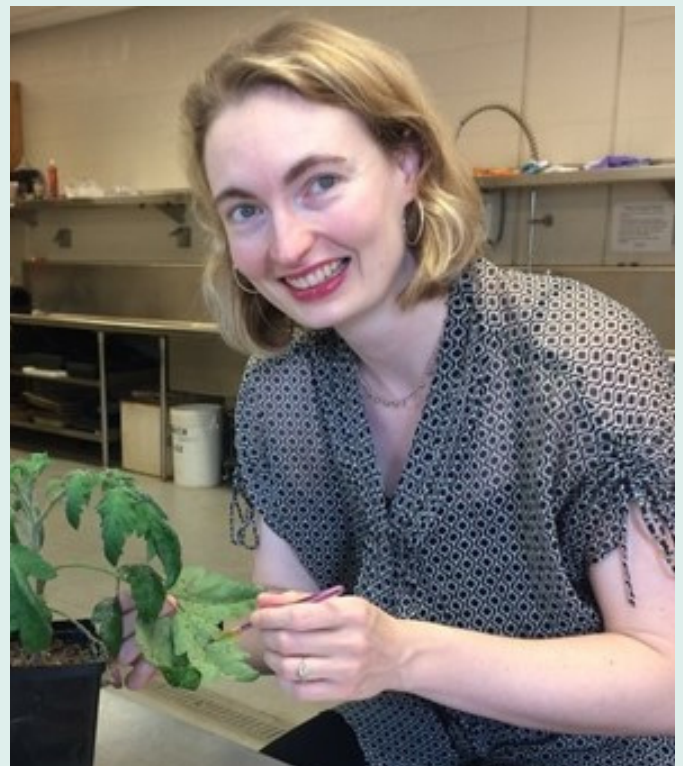
40 Years of Service Recognition



University Professor John Rupe was recognized at the Bumpers College Faculty Kickoff, for having served on the faculty of the University of Arkansas and Division of Agriculture for 40 years. John is a Fellow of the American Phytopathological Society. He is pictured here at the celebration, with his wife Linda Rupe. Congratulations Dr. Rupe!!

Faculty Named Provost Fellow

Fiona Goggin, Professor of Entomology and Plant Pathology, was named one of the U of A Provost's Fellow for the 2024-25 academic year. Goggin will serve as the Provost's Fellow for Mentoring. During her fellowship, Goggin will focus on assisting the Provost's Office in supporting the university's reputation as an employer of choice and by leveraging the current infrastructure of the Bridge Mentoring Program and the UA ENGAGE Leadership Exploration Program to expand and deepen faculty connections to faculty life on campus and with each other around research, teaching and leadership development.



Awards and Recognition cont.

Faculty Receives Entomology National Teaching Award

U of A faculty member Rupesh Kariyat has been named winner of the 2024 Distinguished Achievement Award in Teaching from the Entomological Society of America. The award is presented annually to the member regarded as ESA's most outstanding teacher of the year. Kariyat has graduated 14 M.S. students and currently advises four Ph.D., three M.S. and one honors student in Entomology.



Staff Receives RoPE Award



Jiamei Li, a Program Associate in the Entomology and Plant Pathology Department, is being recognized for her work supporting Experiment Station research. Li began her career with the Experiment Station as a Program Technician in 2017, shortly after completing her Ph.D., and has since taken on new responsibilities and impressed her supervisors and colleagues with her work ethic and collegial attitude. Li has managed the Arkansas Bioimaging Facility for Agricultural Research for the last two years. She also plays a key role in the Plant-Herbivore Interactions Laboratory, where she tracks chemical safety and compliance. Li is responsible for managing a 280-square-foot greenhouse and multiple growth chambers. In addition to her duties as a Program Associate, Li conducts her own experiments and contributes to research publications.

Awards and Recognition cont.

ENPL Faculty Awarded \$950,000 NSF grant

Dr. Natalie Clay, along with Dr. Michelle Evans-White, U of A Biological Sciences Department Chair and Professor, and Sally Entekin, Professor of Aquatic Entomology at Virginia TechVirginia, have recently recieved a National Science Foundation grant of \$950,000. Their work will consist of a three-year fact-finding mission to explore how salt impacts the movement of resources like carbon in riparian zones.



ENPL Student Wins Award at ACPA Research Conference



Pictured left to right: Anmolpreet Kaur, Noah Solomon, and Chandan Maurya

The Arkansas Crop Protection Association research conference is designed to promote the discussion, dissemination, and exchange of information on crop protection pesticides, biotechnology and products. This conference was an opportunity for undergraduate and graduate students to share their research. There was an oral presentation contest for each of the three student degree levels, and Noah Solomon won third place in undergraduates. Below is the title of the abstract that he submitted for his oral presentation:

Title:
Testing in planta accumulation and ability to suppress plant defenses by the soybean cyst nematode effector HgRHA1B

Authors:
Noah Solomon, Joanna Kud, Payal Sanadhya. University of Arkansas System Division of Agriculture.

Awards and Recognition cont.

ENPL Students Receive USDA-NIFA awards

Congrats to Blythe Lawson and Cassie Steele for both receiving \$120,000 for the USDA-NIFA AFRI Predoctoral Fellowships.

Further stats: They are the ONLY 2 winners in the state of Arkansas, and 2 of the 68 winners NATIONALLY!



Blythe Lawson



Cassie Steele

Way to go!!

Blythe's project is entitled: "The effects of sublethal larvicide exposure on *Culicoides* biting midge vector competence for bluetongue virus."

Project Summary: *Culicoides* biting midges develop in organically enriched habitats such as muddy ponds, manure, or wastewater produced by farms, and these larval development sites are prone to collect chemical run-offs, such as herbicides and pesticides used to treat animals (cattle pour-ons, etc.). Environmental stressors, such as pesticides, developmentally weaken arthropods when encountered as larvae, as resources are shunted towards detoxification mechanisms and away from immune pathways in an attempt to survive sublethal doses. We hypothesize that the differential gene expression profiles following exposure will play a fundamental role in *Culicoides* vector competence for BTV. Pesticide residues in larval midge habitats may lead to significantly higher BTV infection intensity and increased dissemination rates in vectors, putting livestock at increased disease risk.

Cassie's project is called "Bite-sized diversity: cataloging *Culicoides* and determining host associations." The goals of this project are to determine which host species *Culicoides* are feeding on using blood meal analysis, and creating voucher specimens and DNA barcodes for collected *Culicoides* species. This information will allow me to parse out host-vector relationships in Arkansas, and the voucher specimens can be used as a resource for future *Culicoides* research.

Awards and Recognition cont.

ENPL Attends SEB-ESA Meeting



ENPL was well represented at the Southeastern Branch ESA meeting held in Augusta, Georgia from March 17-20. Multiple students and faculty presented their work in oral and poster sessions. It was especially exciting that Rupesh Kariyat was presented with the Southeastern Branch 2024 Award for Distinguished Achievement in Teaching.



Cassie Steele and Joshua Chavana



Dr. Rupesh Kariyat receiving award



Cassie Steele, Joshua Chavana, and Blythe Lawson

In Remembrance

Dr. Robert Riggs

Dr. Robert Riggs passed away Oct. 21, 2024, at age 92. He was born in Pocahontas, Arkansas, and moved to Fayetteville to earn his bachelor's and master's degrees at the University of Arkansas. After marrying Jennie Lee Willis, Riggs went to North Carolina State University to earn his doctorate.

Ph.D. in hand, he and his wife returned to Arkansas in 1958, where Riggs worked as researcher and teacher in plant pathology at the University of Arkansas.

During his years at the university, Riggs' research and publications earned him many honors, as well as international recognition for his advances in controlling nematodes.

Dr. Robert "Bob" Robbins

Dr. Robert "Bob" T. Robbins was born Feb. 10, 1940, in Oskaloosa, Kan., to John Donald, Sr. and Lois (Johnson) Robbins, and passed away in Fayetteville, Ark., Nov. 26 2024.

In 1979, he accepted a position as an Associate Professor in Nematology at the University of Arkansas. It was here he became a leading expert in the field of Nematology. He was a fellow of the Society of Nematology and earned the prestigious title of University Professor.

Dr. Robbins authored and co-authored over 150 papers on the subject of Nematology, including 33 papers on identifying new species of nematodes.



Dr. Robert Riggs



Dr. Bob Robbins

Recent Graduates

Fall Graduates



2024

Graduates:

- Hannah Zima - M.S. PLPA, Advisor Jim Correll
- Rafael Zaia - M.S. PLPA, Advisor Terry Spurlock
- Parker Mullins - M.S. ENTO, Advisor Emily McDermott
- Samantha Rigo Segalin - Ph.D. PLPA, Advisor John Rupe
- Abeer Muhammedali Jasim Alnasrawi - Ph.D. CEMB, Advisor Fiona Goggin



Dr. Samantha Rigo Segalin



Rafael Zaia



Dr. Abeer Alnasrawi



Parker Mullins

WHAT WE STAND FOR



The Department is a global leader in entomology and plant pathology; promoting human, animal, and plant health, environmental sustainability and food security.

Our Mission:

The Department serves science and society through discovery, translation and dissemination of knowledge and resources to promote human, animal, and plant health, environmental sustainability and food security.

Authored and adopted by the faculty, March 2021

If you would like to contribute to the Department of Entomology and Plant Pathology, please visit us at: bit.ly/UAEntomology or scan the QR code to the right.



SCAN ME

CONNECT WITH US

Alumni, we would love to hear from you! Reach out to us with updates or let us know how you are using that ENPL degree at enpl@uark.edu. We would love to feature you in our department newsletter.

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