CONNECTIONS

Department of Entomology and Plant Pathology Newsletter



Greetings from your Department of Entomology and Plant Pathology

Just like our previous editions, this newsletter features an impressive summary of the latest achievements and news from our team in Entomology and Plant Pathology. Read on and get introduced to some of our newest members and see what we have been up to.

Over the past academic year we have been able to host a substantial number of guest seminar speakers. In addition to the several on-site faculty interviews we conducted, these events provide a fantastic learning opportunity for our students. We always ensure that students get quality time to meet with these professionals in various fields. During candidate interviews, students see what the process is like and how they might prepare for their own job interviews when the time comes. These are just several of the approaches we are using to enhance and teach life skills beyond our technical disciplines.

Learning in the field, classroom and laboratory continues to be the foundation of what we do. However, we also know that a multitude of other abilities can help determine the success of our students in their professional and personal lives well beyond graduation.

As alumni, former members, and friends of our department we welcome your input. Please reach out any time to share information or discuss what is going on in the department.

Best wishes,



Ken Korth Department Head kkorth@uark.edu

SCAN ME





IN THIS ISSUE

GREETINGS FROM ENPL

RECENT GRADS

MEET NEW FACULTY

RECENT EVENTS

AWARDS & RECOGNITION

RECENT RETIREMENTS

ENPL CLUBS

IN MEMORY

CONTACT US

Support our mission here: bit.ly/UAEntomology

As friends and alumni of our department, it is likely that you share in our mission and core values. Through study and application of entomology and plant pathology, we strive to promote human, animal, and plant health, environmental sustainability and food security. To achieve our goals, we rely on financial support for enhancement of student opportunities and program growth. Your generous contributions can help as we strengthen learning activities and dissemination of our research and extension. Click on the link here bit.ly/UAEntomology or scan the QR code to donate today. Thank you from all of us in the University of Arkansas Department of Entomology and Plant Pathology.



Ken Korth







Congratulations

Recent Graduates from ENPL

The Department of Entomology and Plant Pathology graduates from Fall 2022

Fall 2022

Dylan Cleary. Ph.D. ENTO

Faculty Advisor: Allen Szalanski

Thesis: Mitochondrial DNA Diversity, Pathogen Occurrence, and Potential Disease Vectors of Managed and Unmanaged Honey Bee, Apis mellifera L., Populations









Chase Floyd. Ph.D. ENTO Faculty Advisor: Gus Lorenz

Thesis: Biology, Monitoring, Sampling, and Management of Rice Billbug (Sphenophorous pertinax) in Furrow Irrigated Rice



Siyang Liu. Ph.D. ENTO

Faculty Advisor: Fiona Goggin

Thesis:The Effect of Plant Elicitor Peptides on

Nematode Infected Soybean





Caleb Rice. Ph.D. ENTO Faculty Advisor: Gus Lorenz

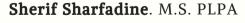
Thesis: Evaluation of Chrysodeixis includens Nucleopolyhedrovirus (ChinNPV) formulations for Soybean Looper (Chrysodeixis

incldudens) Control in Soybean









Faculty Advisor: Alejandro Rojas

Thesis: Evaluation of biological and chemical seed treatments for management of rice diseases



Meet New Faculty

We are fortunate to have outstanding new faculty join us this spring.



Richard Adams

Started at U of A:

January 2023

B.S. institution: Stephen F. Austin State

University
M.S. institution:

PhD. institution: University of Texas,

Arlington

About:

My wife and I love Fayetteville! We take our Boston Terrier (Lula–Mae) on walks along the Razorback Greenway often, and in my free time I enjoy listening to heavy metal and checking out the local brewery scene here in Northwest Arkansas.

Research/Extension areas of interest:

My lab studies fundamental questions about the origins and evolution of genome structure and function, and we develop new statistical methods to search for answers. Specifically, we are broadly-trained data scientists with diverse research in mathematical & algorithmic genomics, predictive genetics, and artificial intelligence-driven applications in computational biology—often with agricultural applications. Recently, we've been interested in developing and applying new statistical frameworks for understanding genomic ancestry and adaptation in several insect systems that have broad consequences for agriculture and global biodiversity. We are actively recruiting students interested in many areas: from statistics and machine learning, to genomics, bioinformatics, entomology, and beyond!



Camila Nicolli

Started at U of A:

February, 2023

B.S. institution: Federal University of Rio Grande do Sul (UFRGS), Brazil M.S. institution: Federal University of Rio Grande do Sul (UFRGS), Brazil PhD. institution: Federal University of Lavras (UFLA), Brazil; with a six-month exchange program at the Institute of Sciences of Food Production (ISPA) Bari, Italy

Research/Extension areas of interest:

I am an Extension Plant Pathologist responsible for managing rice diseases at the Rice Research and Extension Center in Stuttgart. I support and work also with rice growers in the Delta area in Arkansas. Corn and Soybean systems are also under the cope of my duties. Developing and validating new technologies for enhancing disease control on those crops is one of my research and extension program's goals. My research projects focus on better understanding the biology, ecology, and epidemiology of economically important pathogens, primarily in rice, to improve disease management in growing fields. My extension efforts focus on generating, evaluating, and disseminating solutions to many disease problems associated with field crops in Arkansas. My lab will work closely with county extension agents, crop advisors, agribusinesses, and commodity groups to improve the management of the major diseases affecting field crops and to build integrated pest management.

I am from a small town in the south of Brazil, Gaurama, in the state of Rio Grande do Sul. My husband and I love outside activities, including hiking and riding a bike, and I enjoy exploring new restaurants and visiting new places in my free time.

Recent Events

Faculty Member visits UAMS Little Rock



Dr. Austin Jones entomology instructor
showing the children
some insect specimens



A Kids First child showing excitement for a cockroach

At the end of February, instructor of entomology and outreach coordinator, Dr. Austin Jones, along with Dr. Carolyn Lewis paid a visit to UAMS Little Rock Kids First to talk with the children about insects.



Left to Right: UAMS Kids First Associate,
Drs. Carolyn Lewis, and Austin Jones

Faculty Member Speaks at India's Clean Plant Program for Horticulture

Prof. Ioannis Tzanetakis, Director, Arkansas Clean Plant Center & Dr. Dipak Poudyal, Program Lead, Department of Agriculture, Oregon, US discussed the governance of Clean Plant Program happens through integrated National Clean Plant Network during the consultation workshop.







Awards and Recognition



Faculty Member Receives Rice Industry Award



Left to Right: Drs. Yeshi Wamishe and Karen Moldenhauer

Colleagues have honored two faculty members from the University of Arkansas System Division of Agriculture — Karen Moldenhauer and Yeshi Wamishe — for their industry contributions through their work in rice breeding and rice pathology.

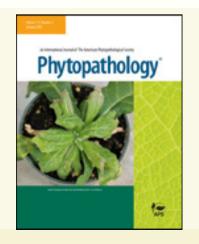
Moldenhauer, professor and rice breeder emeritus for the division's Arkansas Agricultural Experiment Station, was recognized with the Lifetime Achievement Award. Wamishe, an extension plant pathologist, was bestowed the Industry Award. Both were on hand Dec. 8 at the USA Rice Outlook Conference in Austin, Texas, to accept their awards. The Rice Awards are sponsored by Rice Farming magazine, Horizon Ag and USA Rice.

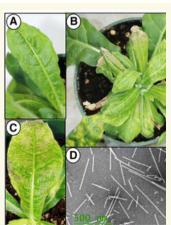
Read the full article here: https://tinyurl.com/3n3h43pe

Tzanetakis Lab Featured in Phytopathology

Ioannis Tzanetakis' lab is featured as a cover story of January Phytopathology. The publication details research by D.E.V. Villamor, Sierra Mejia & Ioannis Tzanetakis on use of infectious blueberry clone to study viruses.

Find the abstract here: https://tinyurl.com/4du67r3y





Phytopathology Vol. 113, No. 1

Awards and Recognition cont.

Travel Grant Awarded to Dr. Mohammad Hajizadeh

Dr. Mohammad Hajizadeh, a visiting scholar in Dr. Tzanetakis Lab has been chosen as a recipient of a 2023 travel award for Global Scholars to help offset his expenses in attending the 42nd Annual Meeting of the American Society for Virology (ASV 2023) at the Classic Center in Athens, Georgia and hosted by the University of Georgia, June 24th 28th. The award will cover his actual expenses of up to \$3,000, including airfare, registration, and housing. He will present a study entitled "Mixed infections of strawberry virus, strawberry mottle virus, strawberry pallidosis-associated virus, and strawberry crinivirus 3 and 4 in strawberry fields in Iran" in the meeting.



Dr. Mohammad Hajizadeh



• • • Left to Right: Drs. Nick Bateman and Stan De Guzman

Arkansas Ag Researchers Seek Climate-Resilient Rice as Part of USDA Grant

Scientists at the University of Arkansas System Division of Agriculture's Rice Research and Extension Center seek to develop rice that is more resilient in the face of climate change and usable water depletion.

Arkansas Agricultural Experiment Station scientists Nick Bateman, associate professor and extension entomologist, and Stan De Guzman, assistant professor and rice breeder, have been awarded \$547,842 as part of a four-year, \$10 million grant from the USDA's National Institute of Food and Agriculture. Louisiana State University is the lead institution on the grant to improve the sustainability and profitability of rice farming through research innovations.

The project's collaborating institutions include Clemson University, Mississippi State University, Texas A&M AgriLife, and the Arkansas Agricultural Experiment Station, the research arm of the Division of Agriculture. Jai Rohila, a research agronomist for USDA's Agricultural Research Service based at the Dale Bumpers National Rice Research Center in Stuttgart, is also involved in the grant.

Read the full article here: https://tinyurl.com/yc2hnamu

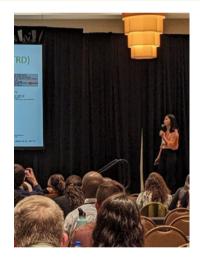
Awards and Recognition cont.

Entomology Students Create a Podcast

Blythe Lawson and Cassandra Steele, both Ph.D. students in entomology, created a podcast called *The Chatterbugs*. In it, they talk about graduate school topics and advice, as well as personal stories.



Left to Right: Cassandra Steele, Blythe Lawson.



Qiurong Fan, Ph.D. Student



Juanita Gil Bedoya, Ph.D. Student

Plant Pathology Students win Travel Awards

Travel Award Recipients for the 100th SD-APS Meeting:

- Qiurong Fan (Ph.D. student), University of Arkansas
- Juanita Gil Bedoya (Ph.D. student), University of Arkansas

Ph.D. student highlighted by the APS Office of International Programs:

"Qiurong [Fan] is a second year PhD student at the University of Arkansas and is advised by Dr. Alejandro Rojas. Her research is focused on studying an emergent disease in the Southern US called soybean taproot decline caused by Xylaria necrophora."

Read the full description here: https://tinyurl.com/y5eb6755

Entomology & Plant Pathology Clubs

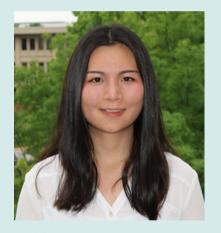
Isely-Baerg Entomology Club

Hi all! My name is Blythe and I am a Ph.D. student in Dr. McDermott's lab. I study Medical and Veterinary Entomology, but I also have the honor of serving as President of the Isely-Baerg Entomology Club! We are an active group, of both graduate and undergraduate students, that hosts many activities in addition to our coursework and research projects. Our club's goal is to share our enthusiasm for entomology with the NWA community, and in the past year our members have volunteered at events for school children and the public. We have a variety of outreach events, but one of our most successful for 2022 was the Arkansas Insect Festival which hosted over 4,000 visitors over the course of one day! Our club also sells pollinator-friendly items, such as native wildflower seeds and wooden bee houses, to promote healthy pollinator populations and education on their importance in our community. The funds we raise from these sales are then dedicated to bringing in guest speakers specializing in a variety of disciplines within Entomology!

You can catch us at the Fayetteville Farmer's Market on Square, but don't hesitate to reach out before then!



Blythe E. Lawson, M.S.
Ph.D. student
President, Isely-Baerg
Entomology Club



Qiurong Fan, M.S.
Ph.D. student
President, Plant Pathology GSA

Plant Pathology GSA

Greetings from the Plant Pathology Graduate Student Association (PLPA GSA)! My name is Qiurong Fan and I'm a Ph.D. student working in Soilborne Pathology and Ecology Lab with Dr. Rojas, and I have the privilege of serving as the President of PLPAGSA. Throughout the year, our club have organized several activities for students and others in the department, ranging from social events to volunteer efforts at the Fayetteville Farmers' Market. In 2022 we conducted a large garden-plant sale and used the proceeds to host special seminar guests and help pay for student travel to professional meetings including American Phytopathological Society annual meeting. All these activities help us to pursue our club mission, which is to develop a strong group that benefits students before, during, and after their studies, to further enhance their professionalism, and to promote the excellence of the Department of Entomology and Plant Pathology.

Recent Retirements

Dr. Yeshi Wamishe

Thank you for many years of service with the University of Arkansas and the Division of Agriculture

Numerous colleagues, friends and family all joined together on March 6th to wish a very special congratulations to Dr. Yeshi Wamishe on her retirement.

Dr. Wamishe served on the faculty of ENPL since 2012, as an Extension Rice Pathologist stationed at the Rice Research and Extension Center in Stuttgart.

Retired Director of Extension and rice pathologist Dr. Rick Cartwright joined the meeting via Zoom, as did Professor Emeritus and Yeshi's Ph.D. advisor Dr. Gene Milus.

Dr. Wamishe's whole family was also in attendance to celebrate.



Dr. Yeshi Wamishe



Celebrating with Dr. Wamishe upon her retirement were fellow ENPL faculty members (from left to right), Keny Korth, Nick Bateman, Terry Spurlock, John Rupe, Travis Faske, Camila Nicolli, Ben Thrash, Yeshi Wamishe, Glenn Studebaker, and Ioannis Tzanetakis.



In Remembrance

Dr. Kyung Soo Kim

Thank you for many years of service with the University of Arkansas and the Division of Agriculture

Kyung Soo Kim, a retired professor of plant pathology for the Arkansas Agricultural Experiment Station and the Dale Bumpers College of Agricultural, Food and Life Sciences at the University of Arkansas, died Feb. 8.

Kim was born in Seoul, Korea, in 1933 and raised in North Korea until fleeing to South Korea during the Korean conflict in 1950. After earning his bachelor's degree in biology from Kyung Puk National University in Korea, he earned a master's degree in zoology and a Ph.D. in plant pathology from the University of Arkansas.

He became assistant professor in what was then the department of plant pathology in 1974, was appointed University Professor in 1993 and retired in 2002.

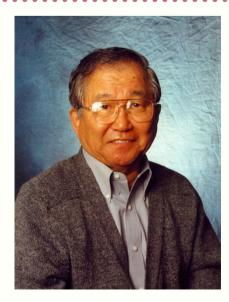
Ken Korth, head of the department of entomology and plant pathology, said, "Dr. Kim was an inspiration and role model to countless colleagues and students over the years. He was an established researcher and teacher when I first arrived at the University of Arkansas, and he was especially good to me when I had so much to learn as a new assistant professor.

"I remember being very impressed because he was so engaged in his research and knowledgeable about contemporary science," Korth said. "In more recent years it was always a true pleasure to see him and his wife, and his enthusiasm had not waned at all. His scientific contributions were internationally renowned and respected."

For more comments and tributes to Dr. Kim, go to: https://tinyurl.com/yc5um2xn



From Left to Right: Sung Boon Kim, alumna Kathryn Haydon, Dr. Kyung Soo Kim, alumna Tracy Hawk



Dr. Kyung Soo Kim

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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