PPCP news

LSU AgCenter
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LSU
College of Agriculture

February 2025

Department of Plant Pathology and Crop Physiology

FROM THE DEPARTMENT HEAD

Lawrence E. Datnoff

Happy 2025!

The department is doing well, and we are still going through faculty changes. In January 2024, **Dr. Madison Flasco** started as an assistant professor of virology. She has hit the ground running, already bringing new ideas and technologies to better detect vascular diseases of sugarcane. She also taught virology this past fall after a two-year hiatus. In addition, we are currently searching for an assistant/associate professor of computational biology/data science. Stay tuned! Lastly, we had our largest cohort of M.S. and Ph.D. students, 12, start in the fall semester.

Last year, faculty and students published several refereed manuscripts and extension articles; gave many presentations (poster and oral), locally, regionally, nationally and internationally; and competed for grants to support their research and outreach. They also won prestigious recognition for their efforts that include the American Phytopathological

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DALLA LANA AND DOYLE JOIN INTERNATIONAL COLLEAGUES TO STUDY FALSE SMUT OF RICE

Drs. Felipe Dalla Lana, left, and Vinson Doyle view other ongoing rice disease research at the International Rice Research Institute.

Drs. Felipe Dalla Lana and **Vinson Doyle** were invited to the International Rice Research Institute in the Philippines to work with scientists from more than 20 institutions to form the International Rice False Smut Consortium.

False smut, caused by *Ustilaginoidea virens*, has a geographic range that is expanding and posing a growing threat to global rice production. The pathogen replaces the kernels of rice plants subsequently reducing yields and quality. While this disease is present in Louisiana rice fields and has been in the state since at least the 1920s, it is not currently a major concern for Louisiana farmers, but this could change. This disease was first discovered in India in the late 1800s. It is now found in many rice-growing countries and is particularly problematic in China and India.

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Society (APS) William Boright Hewitt and Maybelle Ellen Ball Hewitt Award (**Dr. Jonathan Richards**), APS-Southern Division Outstanding Plant Pathologist Award (**Dr. Boyd Padgett**), Louisiana Soybean and Feed Grains and Promotion Board Distinguished Professorship (**Dr. Trey Price**), Ray and Dorothy Young Endowed Assistantship in Louisiana Row Crop Integrated Pest Management (**David Galo**) and Joseph W. Freeland Visiting Scholar Fund (**Iris Aguilar**). Our M.S. and Ph.D. graduate students were highly engaged professionally, and their efforts and outstanding contributions continue to infuse the department with vitality and enthusiasm, while helping to answer basic scientific questions along with solving plant disease problems of importance to the clientele of Louisiana.

In this newsletter, you'll see for yourself these wonderful professional activities and achievements of our faculty, postdocs, students and staff and their profound effects on the University and AgCenter's strategic missions, Louisiana agriculture and beyond.

Happy reading!

MINI-SYMPOSIUM ON CERCOSPORA RESEARCH

A Mini-Symposium on *Cercospora* Research was held in the Department of Plant Pathology and Crop Physiology (PPCP) on April 26. This symposium was sponsored by the department and the LSU AgCenter.

Species of *Cercospora* infect over 400 plant species and may cause significant reduction in yield and quality. In Louisiana, species of *Cercospora* have major impacts on rice and soybean production. PPCP faculty including **Drs. Zhi-Yuan Chen**, **Vinson Doyle**, **Chien-Yu Huang**, **Jonathan Richards** and **Sara Thomas-Sharma** have research programs addressing this pathogen and the diseases it causes. Consequently, PPCP plays a major role in addressing the biology and management of diseases caused by *Cercospora* through the research conducted by undergraduates and graduate students in the department.

To highlight the impacts of the department, build collaboration among the research groups and foster collaboration with the U.S. Department of Agriculture, Doyle brought faculty and students together to discuss topics of research that included diversity and life history, infection biology, population genetics, structural variation and effector biology. Dr. Nathan Wyatt, a USDA-Agricultural Research Service scientist from North Dakota, was invited to provide his expertise and research experience in addressing *Cercospora beticola* on sugar beets. Throughout the day, there were seven research talks from faculty and graduate students, five poster presentations and a group discussion to foster collaboration.

Dr. Nathan Wyatt presents his research at the Mini-Symposium on *Cercospora* Research.

Rice panicles infected with false smut.

Continued from Page 1 | Dalla Lana and Doyle

Dalla Lana and Doyle, along with their international research partners, want to understand why false smut has become problematic lately. Dalla Lana is researching the epidemiology and how edaphic factors, such as weather and soil type, as well as rice genotypes, might influence its development. Doyle plans to examine both historical and recent false smut-infected plant specimens to learn more about the pathogen, how it has changed over time and how it has spread around the world. These research approaches might provide valuable insights into disease development and possible management strategies.

Both hope the work of the international consortium will uncover much-needed information about this emerging disease threat and speed up the process of identifying solutions. First published in https://www.lsuagcenter.com/articles/page1733331941132.

VISITING STUDENT SCHOLARS, POSTDOCTORATES AND SCIENTISTS

Student Scholars

Naomi Cates, an undergraduate in the Department of Biological Sciences, conducted her honors research in **Dr. Imana Power**'s Sweetpotato Pathology Laboratory from fall 2023 to spring 2024, as part of the LSU Roger Hadfield Ogden Honors College. Her research project was entitled: "High-throughput method for identifying pathogenicity genes in the fungal plant pathogen *Rhizopus stolonifer* using dsiRNAs." Cates graduated in May 2024 and continued working in Power's lab. In 2025, she will start medical school.

William Jafet Cabezas Escobar is a visiting student scholar from El Salvador and Zamorano University. Escobar has helped with several research projects in **Dr. Andre Gama**'s lab that include the sugarcane brown rust project and the Sugarcane Disease Detection Lab, especially on the diagnosis of sugarcane yellow leaf disease.

Joselyn Vargas Medina, a student intern from Universidad Nacional de Agricultura in Honduras, joined the LSU AgCenter Plant Diagnostic Center in August 2024. She learned critical skills in accurate and timely diagnosis of plant health problems caused by abiotic and biotic stresses. She will be pursuing her M.S. in agricultural economics at LSU in the fall of 2025.

Isabella Oliveira Silva was a visiting student scholar from the Federal University of Uberlândia, Brazil. She studied in **Dr. Tristan Watson**'s lab until November 2024. She was involved in evaluating new nematicide chemistries and sources of host resistance for the management of nematodes on soybean and cotton. She also worked in the LSU AgCenter Nematode Advisory Service.

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HELP US TO ENSURE EXCELLENCE IN PLANT PATHOLOGY AND CROP PHYSIOLOGY

While the department receives monetary support for core research/extension programs (LSU AgCenter) and its teaching program (LSU College of Agriculture), these funds are not sufficient to provide the resources to move our programs to the next level of performance.

Private financial support is becoming a vital resource to enhance existing programs and begin new initiatives. Please consider contributing to help support our programs.

You may help to support the Plant Pathology and Crop Physiology Department by donating to one of the below listed funds:

#106098 – The Max and Leah Cohn Invited Lecture Endowment Fund
#100250 – Plant Pathology and Crop Physiology Excellence Fund
#100246 – Dr. C.W. Edgerton Memorial Fund
#100247 – Dr. Weston J. Martin Fellowship Fund
#105458 – M.C. "Chuck" Rush Plant Pathology Teaching Laboratory Fund
#106771 – Raymond W. Schneider Student Travel Fund
#104814 – Don Ferrin Student Teaching Fund

Donations can be made by accessing the LSU Foundation site at **www.lsufoundation.org/give** or by sending a personal check made out to the LSU Foundation with a letter stating which fund you would like to donate to. Address the letter to:

Department of Plant Pathology
and Crop Physiology
302 Life Sciences Building
LSU Campus
Baton Rouge, LA 70803

For more information contact: Lawrence E. Datnoff
Professor and Department Head
ldatnoff@agcenter.lsu.edu
or 225-578-1366

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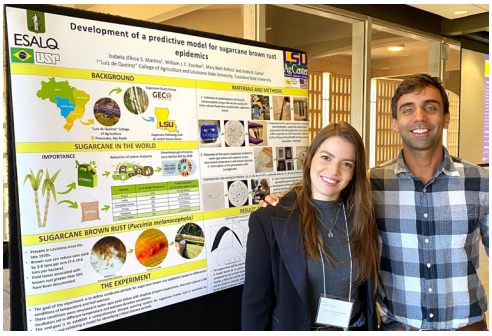
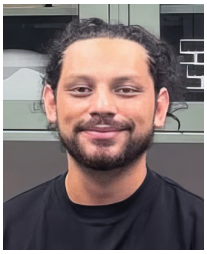
Isabela D'Arce Sodero Martins is a visiting scholar from Brazil, a student from the University of Sao Paulo where she worked with sugarcane for a few years. She joined **Dr. Andre Gam**a's lab to work on a sugarcane project to develop a model to identify conducive conditions for brown rust epidemics. In November, she competed in the LSU International Research Fair and was awarded first place for her poster presentation entitled "Development of a predictive model for sugarcane brown rust epidemics."



Isabela D'Arce Sodero Martins, left, stands with Dr. Andre Gama by her award-winning poster.



Marcos Urquia interned in **Dr. Vinson Doyle**'s lab and investigated different techniques for inoculating soybeans with *Xylaria necrophora*, the causal agent of taproot decline of soybean. He was looking for the best methods to obtain consistent disease development. Urquia received his degree in agronomic engineering from Universidad Nacional de Agricultura in Honduras.

Visiting Postdoctorates

Dr. Abdulkadir Dalha Isa is a postdoctoral research fellow in **Dr. Sara Thomas-Sharma**'s laboratory. His research focuses on fungicide resistance in Cercospora leaf blight, detection and quantification of frogeye leaf spot and integrated management of soybean diseases. Isa earned his M.Sc. in crop protection from Ahmadu Bello University in Nigeria and his Ph.D. in agricultural biology from Chungbuk National University in South Korea.

Dr. Haifen Li, a new postdoctorate, joined **Dr. Zhi-Yuan Chen**'s lab in late August. She received her Ph.D. from China and was an associate professor at the Crops Research Institute, Guangdong Academy of Agricultural Sciences, Guangzhou. She will be working on peanut breeding and identifying functional genes related to peanut pod size and resistance of peanut to aflatoxin contamination.

Visiting Scientists

Dr. Kellyn Andino is from Honduras and received her Ph.D. from Federal University of Pelotas/Emprapa, Brazil. She visited **Dr. Imana Power**'s Sweetpotato Pathology Laboratory from January to May 2024. During this time, she worked on reviving cultures of sweetpotato pathogens and extracting their nucleic acid.

Dr. Rebecca Sweany, a Ph.D. alumnus of the department, was a recent guest lecturer for the plant pathogen interactions course taught by **Dr. Ely Oliveira-Garcia**. Sweany provided a seminar on corn-*Aspergillus flavus* interactions. This included her work in aflatoxin control and the development of aflatoxin-resistant corn lines as a food and feed safety researcher in the U.S. Department of Agriculture-Agricultural Research Service Southern Regional Research Center, New Orleans. She also described her research findings in population studies of *A. flavus* and the potential virulence factors and regulators of aflatoxin production.


Dr. Rebecca Sweany, center back row, visited the plant pathogen interactions course.

Drs. Van Schepler-Luu and **Mary Jeanie Yanoria** from the International Rice Research Institute, Los Banos, Philippines, recently visited LSU for several days. They were invited to visit by **Dr. Felipe Dalla Lana**, assistant professor in the Department of Plant Pathology and Crop Physiology/H. Rouse Caffey Rice Research Station. While here, they visited rice field experiments at the station, met with other faculty to exchange research experiences and discuss potential collaborations and spoke to graduate students about career development. They also presented a seminar entitled, "Current Focus of Rice Disease Research at the International Rice Research Institute" to share their expertise in new plant breeding technologies, genome editing and microbiome.

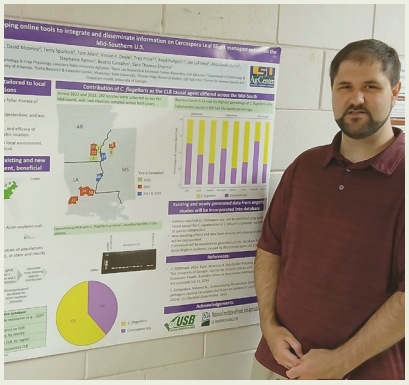

Drs. Van Schepler-Luu and Mary Jeanie Yanoria, both center, with PPCP graduate students.

Dr. Van Schepler-Luu presents her seminar regarding rice disease research at the International Rice Research Institute.

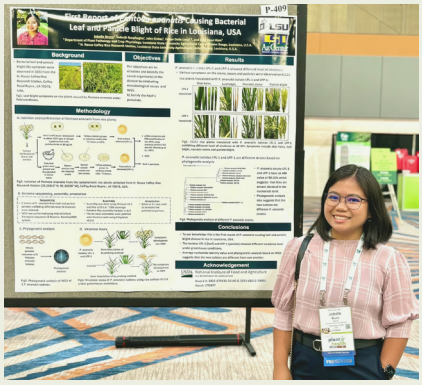
APS ANNUAL MEETING: PLANT HEALTH 2024

Current and Previous PPCP Members at the Alumni Networking Event

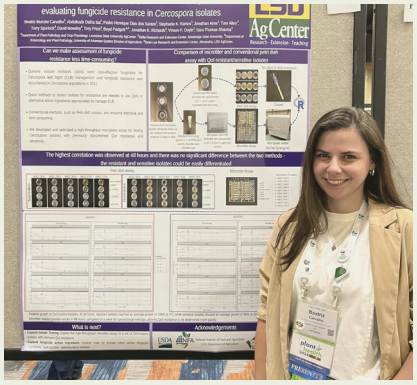
The American Phytopathological Society (APS) Plant Health meeting was held July 27-30 in Memphis, Tennessee. This year's theme was "Harnessing the Technology Revolution for a More Sustainable World." Many networking activities were available including the University Alumni Networking Event. Several PPCP students, postdocs, staff and faculty attended and provided poster and oral presentations. In addition, three students won competitive APS travel awards to attend this year's meeting: **Ernesto da Silva**, **Stephanie Ramos** and **Jonas Padilla**.



CLB knowledge hub: Developing online tools to integrate and disseminate information on Cercospora leaf blight management across the mid-Southern U.S., presented by **Jonathan Aime**.



First Report of *Pantoea ananatis* causing bacterial leaf and panicle blight of rice in Louisiana, USA, presented by **Jobelle Bruno**.



Developing a high-throughput microtiter assay for evaluating fungicide resistance in *Cercospora* isolates, presented by **Beatriz Carvalho**.

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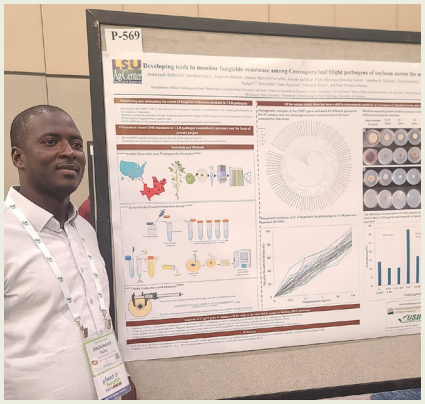
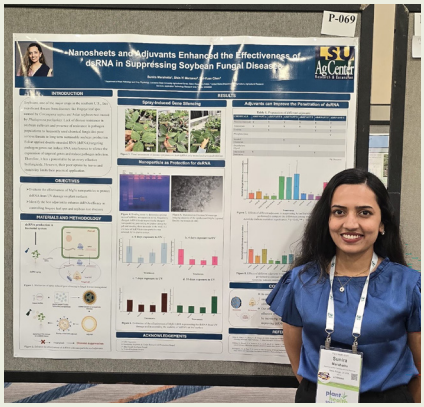
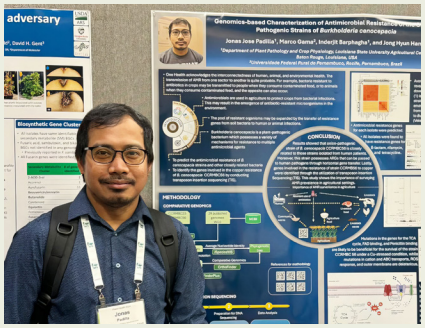


Developing tools to monitor fungicide resistance among Cercospora leaf blight pathogens of soybean across the mid-south U.S., presented by **Abdulkadir Dalha Isa**.

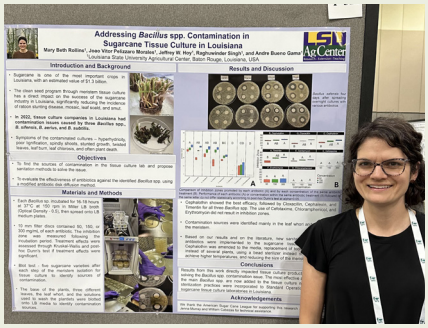


Nanosheets and adjuvants enhance the effectiveness of dsRNA in suppressing soybean fungal disease, presented by **Sunira Marahatta**.

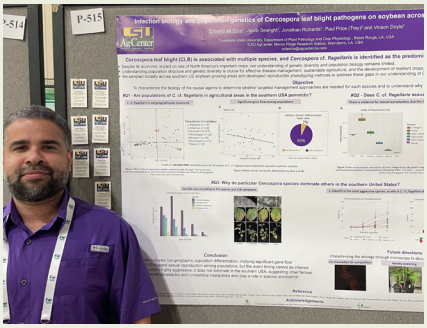
Evaluating the efficacy of topical application of double stranded RNA in reducing aflatoxin contamination in peanuts, presented by **Mamuna Mita**.



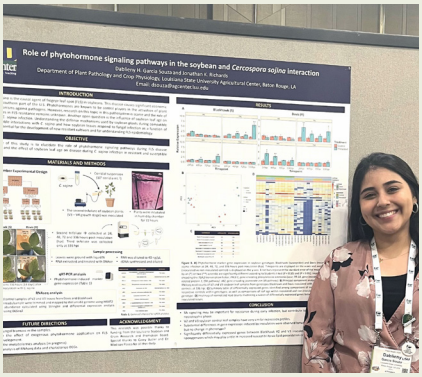
Genomics-based characterization of antimicrobial resistance of the onion-pathogenic strains of *Burkholderia cenocepacia*, presented by **Jonas Padilla**.



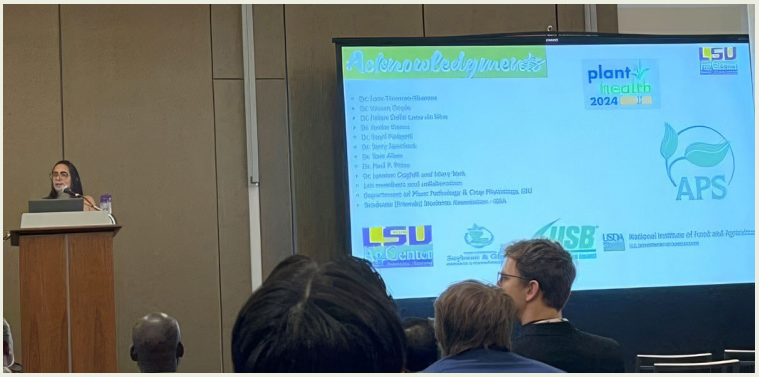
Addressing *Bacillus* spp. contamination in sugarcane tissue culture in Louisiana, presented by **Mary Beth Rollings**.



Infection biology and population genetics of Cercospora leaf blight pathogens on soybean across the southern USA, presented by **Ernesto da Silva**.



Role of phytohormones signaling pathways in soybean and *Cercospora sojina* interaction, presented by **Dablieny Souza**.



Addressing knowledge gaps in disease epidemiology and detection of fungicide resistance in Cercospora leaf blight of soybean, presented by **Stephanie Ramos**.

Graduate Student Updates

GRADUATES IN 2024

M.S. Degree

Jonas Padilla
Harmonizing soil-borne bacteria as seed-treating material for sustainable soybean cultivation, advised by **Dr. Jong Ham**.

Dr. Jong Ham, right, advised graduate student Jonas Padilla.

Francisco Valle
Enhancement of soybean growth and disease resistance through seed-priming strategy, advised by **Dr. Jong Ham**.

Francisco Valle, right, and Dr. John Ham at Valle's graduation.

Iris Aguilar
Evaluation of nematicides for management of plant-parasitic nematodes in sugarcane, advised by **Dr. Tristan Watson**.

Dr. Tristan Watson, right, advised Iris Aguilar.

Stephanie Ramos
Addressing knowledge gaps in disease epidemiology and detection of fungicide resistance in Cercospora leaf blight of soybean, advised by **Dr. Sara Thomas-Sharma**.

Ph.D. Degree

Nelomie Galagedara
Understanding the seasonal dynamics of pathogens causing Cercospora leaf blight on soybean in Louisiana, advised by **Dr. Sara Thomas-Sharma** and co-advised by **Dr. Vinson Doyle**.

Dr. Sara Thomas Sharma, right, advised Nelomie Galagedara.

David Galo
Identification of characterization of resistance to *Meloidogyne enterolobii* and *M. incognita* in sweetpotato genotypes, advised by **Dr. Tristan Watson**.

Dr. Tristan Watson, left, advised David Galo.

Waana Kaluwasha
Wound healing of sweetpotato storage roots in relation to variables that affect susceptibility to *Rhizopus* soft rot and its potential for disease management, advised by **Dr. Christopher Clark**.

Waana Kaluwasha, left, at graduation with Dr. Christopher Clark.

John Ontoy
Characterization of resistance to bacterial panicle blight in rice: Genetic insights and analysis, advised by **Dr. Jong Ham**.

John Ontoy, left, was advised by Dr. Jong Ham.

GRADUATE STUDENT HONORS AND AWARDS

Bruno chosen for Leadership LSU Cohort

Jobelle Bruno, a Ph.D. student advised by **Dr. Jong H. Ham**, was selected as a member of the 2024 Leadership LSU Cohort. Bruno was one of only 18 students chosen to participate in this program. The purpose of Leadership LSU is to bolster leadership skills by emphasizing authenticity, adaptability and introspection as essential components of their professional development.

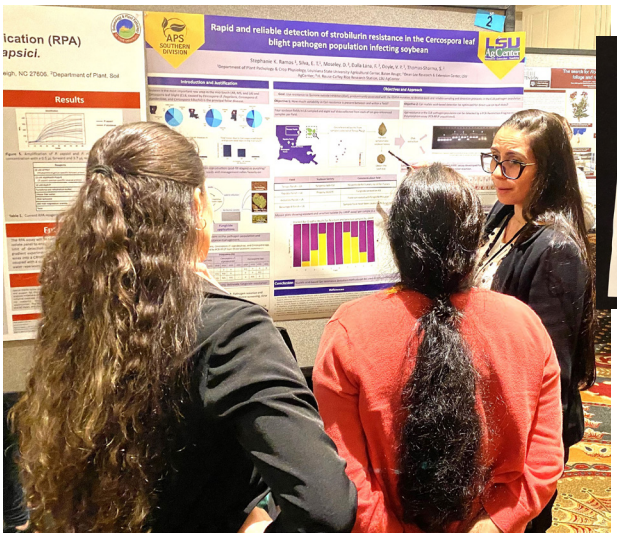
Ramos wins second place in Pitch 120

Stephanie Ramos, advised by **Dr. Sara Thomas-Sharma**, won second place in Pitch 120 at the American Phytopathological Society Plant Health 2024, Memphis, Tennessee. Fifteen students competed.

Graduate programs do a great job teaching students how to relay their research to others in the science community. However, there are other audiences that may not enjoy that style of communication. That's where Pitch120 comes in. The goal of the competition is to describe your research in two minutes but without the use of jargon, visual aids or cue cards. It's a great way to practice your answer to the ever-awkward question "What do you do?"

Ramos wins poster competition at the 2024 APS-SD meeting

The American Phytopathological Society-Southern Division meeting was held Feb. 26-28 in Columbia, South Carolina. During this meeting, a graduate student poster competition was held, and **Stephanie Ramos** won third place for her presentation entitled Rapid and reliable detection of strobilurin resistance in the Cercospora leaf blight pathogen population infecting soybean. Ramos pursued her M.S. degree under the guidance of **Dr. Sara Thomas-Sharma**.



Stephanie Ramos, right, explains her research to other students at the APS-SD meeting.

Aguilar and Vargas selected to participate in Corteva's intern program

Iris Aguilar, an M.S. candidate advised by **Dr. Tristan Watson**, and **Alejandra Vargas**, an M.S. candidate advised by **Dr. Jonathan Richards**, were chosen to participate in Corteva's summer intern program in the research and development (R&D) biotechnology area. This opportunity allowed them to participate in R&D, share their current research, network and develop professional soft skills that are essential for any industry career.

Aguilar, left, and Vargas.

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PPCP graduate students win APS Experiential Departmental Travel Award

The Plant Pathology and Crop Physiology Graduate Student Association won the competitive Departmental Plant Pathology Experiential Award from the American Phytopathological Society's Office of Private Sector Relations. The purpose of this award, valued at $4,000, is to enhance the awareness of business operations and potential career opportunities in institutions outside of academia. With this award, the students visited government, industry and academia in North Carolina, South Carolina and Georgia.

PPCP graduate students met with students from North Carolina State University's College of Agriculture and Life Sciences for dinner where they discussed the exciting research happening across their respective research programs.

The next day they visited BASF and Syngenta in Research Triangle Park touring their world-class facilities and engaging with industry leaders who provided a firsthand look at cutting-edge technologies in crop protection and crop trait development. This visit offered them valuable insights into industry-driven solutions and potential career paths beyond academia. Discussions with scientists and leaders emphasized the critical role of industry in advancing agricultural science and further solidified the importance of collaboration between industry and academia.

Their next stop was at the USDA-ARS Vegetable Research Lab in Charleston, South Carolina. They met with Drs. Shaker Kousik, a PPCP alumnus, and William Rutter to learn about innovative projects focused on enhancing vegetable crop genetics and developing integrated pest management systems using host resistance, biocontrol and natural compounds. They learned how USDA-ARS and Clemson University work together to solve real-world agricultural problems.

The trip concluded with a visit to the University of Georgia College of Agricultural and Environmental Sciences, Department of Plant Pathology. They met with graduate students and learned about their research, including ongoing projects at UGA's Tifton campus.

PPCP students gained a deeper appreciation for the interconnected roles of academia, industry and government in advancing agricultural sciences. The opportunity to network, share ideas and witness cutting-edge research firsthand expanded their professional knowledge and provided them with insights into other potential career opportunities.

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PPCP students visiting BASF.

PPCP students visiting the USDA-ARS Vegetable Research Lab in Charleston, South Carolina.

PPCP students visit UGA plant pathology students and faculty.

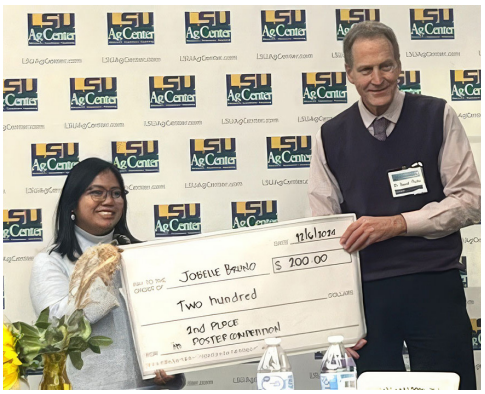
LSU's PPCP students joined North Carolina State University's plant pathology students.

Bruno and Marahatta win poster competition

Jobelle Bruno, advised by **Dr. Jong Ham** and **Sunira Marahatta**, advised by **Dr. Zhi-Yuan Chen**, won second and third place, respectively, in the poster competition at the Plant Science Symposium 2024 at LSU. The title of this symposium was "Across the Boot: Novel Approaches in Plant Science for Sustainable and Resilient Agriculture Amidst the AI Revolution" and was sponsored by Corteva Agriscience and the LSU AgCenter along with several local Louisiana industries including the American Society of Sugar Cane Technologies, American Sugar Cane League and John Deere.

Graduate students from the Department of Plant Pathology and Crop Physiology and the School of Plant, Soils and Environmental Sciences hosted this event dedicated to all areas of crop improvement. They gathered top scientists from many universities and industry that included Drs. Craig Yencho, North Carolina State University; Samira Daroub, University of Florida; Navdeep Mutti, Corteva Agriscience; Sydney Everhart, University of Connecticut; and Jeffrey Davis, LSU AgCenter, to discuss the future of AI in agricultural research, the importance of networking and other professional advice. In addition, **Ernesto Da Silva**, advised by **Dr. Vinson Doyle**, had the opportunity to orally present his research findings.

PPCP students that participated in the Plant Science Symposium 2024 include, from left, Jonas Padilla, Clayton Blake, Jose Rojas-Iracheta, Francella Arce, Sandeep Gouli, Dablieny Souza, Sunira Marahatta, David Galo, Jobelle Bruno, Iris Aguilar, Timothy Miller, Ernesto Da Silva and Bernard Budot.



Jobelle Bruno receives the second-place award from Dr. Dave Picha, director of School of Plant, Environmental and Soil Sciences, for her poster presentation entitled "First report of *Pantoea* sp. causing bacterial leaf and panicle blight of rice in Louisiana, USA."

Ernesto Da Silva presents his research findings entitled "Emerging from the shadows: Redefining the epidemiology and biology of *Cercospora* species associated with Cercospora leaf blight of soybean."

Sunira Marahatta receives the third-place award from Dr. Dave Picha, director of School of Plant, Environmental and Soil Sciences, for her poster presentation entitled "Nanosheets and adjuvants enhanced the effectiveness of dsRNA in suppressing soybean fungal disease."

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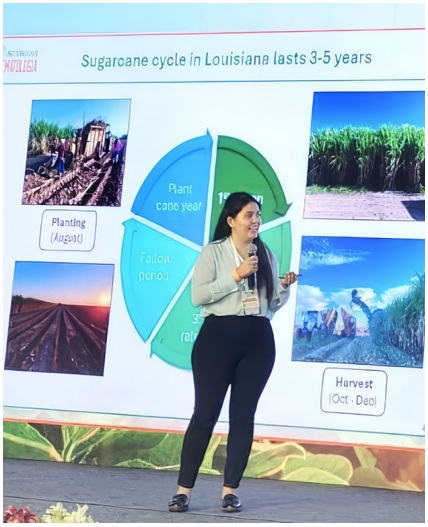
Bruno and Ramos selected for Student Professional Development Award

Jobelle Bruno, a Ph.D. student advised by **Dr. Jong Ham** and **Stephanie Ramos**, an M.S. student advised by **Dr. Sara Thomas-Sharma**, received the Student Professional Development Award to participate in the graduate student seminar exchange programs between LSU's Plant Pathology and Crop Physiology and the Department of Plant Pathology and Plant-Microbe Biology at Cornell University and the Department of Plant Pathology at the University of Minnesota, respectively. This is a competitive award in which the students present their research in a 20-minute format to faculty, postdocs, students and staff in the department.

Jobelle Bruno, front row left, with graduate students at Cornell University.

The winner is selected by faculty based on their presentation, answers to questions and abstract. At Cornell, Bruno presented a seminar entitled "Seed-Biopriming: An Innovative Approach to Induce Resistance Against Rice Diseases" and spent time meeting with graduate students and faculty. At Minnesota, Ramos presented a seminar entitled "Addressing Knowledge Gaps in Disease Epidemiology and Detection of Fungicide Resistance in Cercospora Leaf Blight of Soybean." She also visited with students and faculty to learn about their research programs.

Stephanie Ramos, front row, third from right, with graduate students at University of Minnesota.



Aguilar wins Joseph W. Freeland Travel Award

Iris Aguilar, an M.S. student advised by **Dr. Tristan Watson**, won the competitive Joseph W. Freeland Conference Travel Fund. This award supports high level research and training by funding travel for a Zamorano alumnus and current LSU graduate student to a training or conference of their choice. Aguilar attended the 39th Congress of Nematology in Foz do Iguacu, Brazil, and presented her research on "Evaluation of nematicides to manage plant-parasitic nematodes in sugarcane in Louisiana."

Galo receives the Ray and Dorothy Young Assistantship

David Galo won the 2024 Ray and Dorothy Young Endowed Graduate Student Award in Field Crop Integrated Pest Management. This endowed assistantship was established to honor Ray and Dorothy Young for their professional contributions and service to agricultural industries for more than 40 years as agricultural consultants. Galo is pursuing his Ph.D. under the direction of **Dr. Tristan Watson**.

Dorothy Young, left, presents David Galo with the award.

Student Awards

Bruno wins the Ferrin Teaching Award

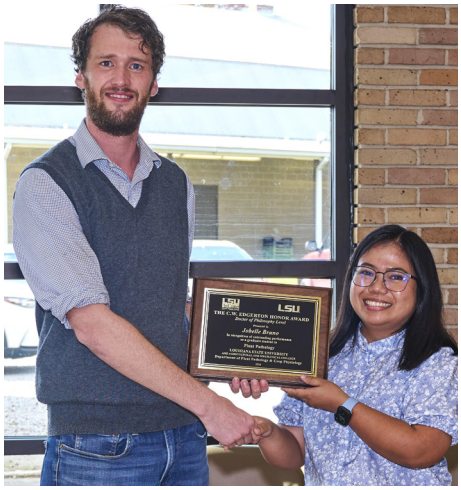
Jobelle Bruno won the Don Ferrin Student Teaching Award. This award was established by Pam Ferrin in 2013 to support Plant Pathology and Crop Physiology graduate student education in honor of her husband, Dr. Don Ferrin, and selection is based on academic/research efforts. Bruno is pursuing her Ph.D. under the direction of **Dr. Jong Ham**.

Dr. Tristan Watson, chair of the PPCP awards and honors committee, left, presents a plaque to Jobelle Bruno.

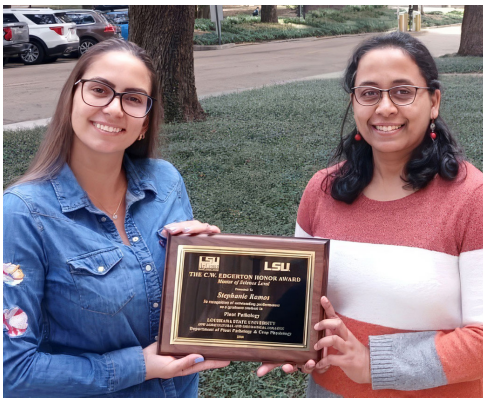
Ontoy receives PPCP Student Support Fund Award

John Ontoy, Ph.D. student advised by **Dr. Jong Ham**, was awarded the Cal Agri Products LLC Graduate and Undergraduate Student Support Fund. Selection for this award is based on academic standing, significance of research, and less importantly, nearness to completion of the degree.

John Ontoy receives the Student Support Fund award from Dr. Tristan Watson.



Jobelle Bruno, right, receives the C.W. Edgerton Honor Award from Dr. Tristan Watson.



Stephanie Ramos and Dr. Sara Thomas-Sharma.

Bruno and Ramos earn the prestigious C.W. Edgerton Honor Award

Jobelle Bruno, a Ph.D. student advised by **Dr. Jong Ham**, and **Stephanie Ramos**, an M.S. student advised by **Dr. Sara Thomas-Sharma**, received the prestigious C.W. Edgerton Honor Award at the departmental holiday gathering on Dec. 15. They won this award for their outstanding academic and professional achievements. This is the first year that the award has been given to both an M.S. and Ph.D. student.

Dr. C.W. Edgerton began his career as a plant pathologist at the Louisiana State Experiment Station, then rose within the botany, bacteriology and plant pathology department to professor and department head in 1924 and held this position until he retired in 1950. During that time his productivity in research was truly remarkable. He had a profound influence on his many graduate students. He also had a unique ability to stimulate and challenge students and to transmit his enthusiasm, dedication and zeal for excellence to his associates. For these reasons, Edgeton's sisters created this award to honor him by recognizing the outstanding performances of students who are in their last year of their M.S. or Ph.D. degree program.

Da Silva wins the Schneider Student Travel Fund Award

Ernesto da Silva, a Ph.D. student advised by **Dr. Vinson Doyle**, won the Raymond W. Schneider Student Travel Fund Award in recognition of outstanding performance as a graduate student in plant pathology. The family of Dr. Raymond W. Schneider established this fund in his honor to support travel by students in the Department of Plant Pathology and Crop Physiology. Schneider was a strong supporter of graduate students having the opportunity to network with other plant pathology faculty and students from academia and to gain exposure to the nature and diversity of agricultural industries. Da Silva used this award to attend the American Phytopathological Society's Plant Health 2024 in Memphis, Tennessee, and present his research entitled "Infection biology and population genetics of Cercospora leaf blight pathogens on soybean across the southern USA."

Ernesto da Silva, right, receives a travel award from Dr. Tristan Watson, chair of the PPCP awards and honors committee.

GRADUATE STUDENT ACTIVITIES

The 2024 Plant Pathology and Crop Physiology Graduate Student Association.

GSA holds International Luncheon

The PPCP Graduate Student Association organized an international luncheon for students, faculty, staff and friends to celebrate cultural diversity via food on Oct. 27. Participants enjoyed foods from numerous countries including Bangladesh, Brazil, Colombia, Ecuador, El Salvador, Honduras, Kenya, Philippines, Sri Lanka and Uganda. The students shared their diverse ethnic backgrounds through these dishes and the event provided a great networking opportunity for students, faculty and staff to discuss science and food.

GSA students serve their dishes at an international luncheon.

PPCP graduate students with Dr. Jason Stajich, fourth from right.

Stajich invited as PPCP-GSA speaker

The PPCP Graduate Student Association has the opportunity every year to invite a scientist of their choice as a spring seminar speaker to learn more about their research and professional experiences. This year, Dr. Jason Stajich, professor in the Department of Microbiology and Plant Pathology at the University of California-Riverside, was invited to visit the department from Feb. 6-8. Stajich has been researching genomic and transcriptomic sequencing to study the evolutionary history and changes in fungi through time. While here, Stajich presented a seminar entitled, “PAN, Population and Evolutionary Genomics of Fungal Pathogens *Aspergillus fumigatus* and Zygomycetes.”

Among the many activities, graduate students had the opportunity to connect one-on-one with Stajich to discuss research, graduate school and other professional experiences. The group also enjoyed a potluck dinner together.

Continued ▶

PPCP team shares knowledge with kids at AgMagic

Faculty, postdoctorates, graduate students, visiting scholars and staff helped children better understand the world of plant pathology at AgMagic. This LSU AgCenter annual event, designed to better educate Louisiana's youth about agriculture and wildlife, saw an estimated 10,000 visitors walk through the Parker Coliseum in Baton Rouge, and many of them stopped at the department's table to view their exhibit entitled Plants Get Sick Too.

Faculty, postdoctorates and students educate children about the world of plant pathology during AgMagic.

Graduate students organize online career workshop

Plant Pathology and Crop Physiology graduate students **Jobelle Bruno**, **Ernesto da Silva**, **Sandeep Gouli**, **Sunira Marahatta** and **Stephanie Ramos** recently organized an online professional development workshop led by Dr. Katia Xavier, assistant professor of plant pathology at University of Florida, focusing on the American Phytopathological Society's Career Development Series: Academia vs. Industry. Xavier shared her personal experiences and provided valuable insights and strategies to navigate the hiring process for these two different career paths.

Dr. Katia Xavier, on screen, led a career development workshop for PPCP students.

Graduate students showcase PPCP work to freshmen

PPCP graduate students **Bernard Budot** and **Jacob Searight** participated in the LSU College of Agriculture's Freshman Student Open House. They showcased ongoing experiments in the department while allowing students to observe plant diseases through a microscope and see the plant pathogens growing in culture. It was a great opportunity to introduce and discuss the importance of plant diseases with the freshmen in the Class of 2028.

Students tour USDA research center

The Plant Pathology and Crop Physiology's Graduate Student Association organized a professional tour to visit the U.S. Department of Agriculture Southern Regional Research Center in New Orleans on June 14 to learn about research being conducted on food safety and plant genetics as well as other current topics. While there, the students were guided by LSU and PPCP alumnus Dr. Rebecca Sweany and saw the Vintage Lab, Pilot Plant, experimental fields and greenhouses. Each stop highlighted current cutting-edge research being conducted by USDA scientists. This educational tour provided invaluable insights into the USDA's agricultural research in the Southern Region.

Faculty Updates

NEW FACULTY HIRE

Dr. Madison Flasco hired as assistant professor

Dr. Madison Flasco started at the LSU AgCenter on Jan. 15, 2024, as an Assistant professor with a 90% research and 10% teaching appointment in the Department of Plant Pathology and Crop Physiology. Her research will focus on developing an innovative program investigating plant viruses using applied and fundamental research methods.

She obtained her Ph.D. in plant pathology from Cornell University in December 2023 under the guidance of Dr. Marc Fuchs. During her graduate studies, she studied the epidemiology and transmission biology of grapevine red blotch virus (GRBV). Her work was paramount to identify the transmission mode of GRBV by its insect vector, *Spissistilus festinus*. Later work detailed vector behavior and virus transmission in vineyards in California. Epidemiological studies investigated symptom onset as it relates to the source of infection being either the rootstock, scion or insect feeding. Her work combined applied and fundamental research to provide evidence-based management strategies to grape growers. Flasco plans to utilize her expertise in epidemiology, ecology, vector biology, transmission biology and molecular detection methods to investigate plant-virus interactions. This work will ultimately better inform disease management strategies to combat plant viruses for crucial crops grown in Louisiana.

FACULTY HONORS AND AWARDS

Padgett wins APS-SD Outstanding Plant Pathologist Award

Dr. G. Boyd Padgett, professor in the Department of Plant Pathology and Crop Physiology and domiciled at Dean Lee Research Station, received the American Phytopathological Society's Southern Division Outstanding Plant Pathologist Award at their annual meeting held in Columbia, South Carolina, Feb. 26-28. This honor is granted to a member in recognition of distinguished contributions to plant pathology. Padgett received this award based on his long career in offering sound and timely disease management advisories to producers in Louisiana and beyond, his leadership to numerous commodity and industry groups regionally and nationally, and his meritorious APS service.

Continued ▶

NEW STAFF HIRE

LSU alumnus hired as accounting technician

Preston Thompson was hired as the new accounting technician in the business office and started in April. Thompson graduated from LSU with a B.S. in business administration. He grew up in Haughton, Louisiana, and recently returned to Louisiana after living in San Diego, California. While there, he worked as a fulfillment manager for a men's health clinic. In his free time, he enjoys playing golf with his friends and family.

Richards wins the APS Hewitt Award

Dr. Jonathan Richards, assistant professor in the Department of Plant Pathology and Crop Physiology, received the prestigious William Boright Hewitt and Maybelle Ellen Ball Hewitt Award at the American Phytopathological Society's Plant Health 2024 meeting in Memphis, Tennessee. This early career award recognizes APS members who are within seven years of receiving their Ph.D. and have made outstanding and innovative contributions directed towards the control of plant diseases.

Richards has emerged as an international leader in the molecular biology, genetics and genomics of host-pathogen interactions in the narrow brown leaf spot — rice pathosystem. By ushering this pathosystem into the genomics age, his research team has fine-mapped a major host resistance gene, identified tissue-specific and quantitative resistance, and used whole-genome sequencing to infer pathogen migration and reproduction. These fundamental discoveries, in addition to other facets of his program, have advanced the field of host-pathogen interactions and positively impacted Louisiana agriculture and beyond.

Price awarded Distinguished Professorship

Dr. Paul "Trey" Price III received the Louisiana Soybean and Feed Grains Research and Promotion Board Distinguished Professorship on Nov. 20 at the board's proposal meeting in Baton Rouge. He is the first recipient of the professorship.

The Louisiana Soybean and Feed Grains Research and Promotion Board established the endowment of $480,000 at LSU for the distinguished professorship in February of 2024. This grant qualifies for state matching funds from the LSU Board of Regents.

This distinguished professorship is awarded to a faculty member whose research program enhances the economic viability of Louisiana soybeans. This award supports the advancement of soybean research, promotion and dissemination of consumer and industry information. Price's outstanding research and extension work focuses on corn, cotton, oats, peanuts, rice, grain sorghum, soybean and wheat. He conducts seed treatment and in-furrow fungicide trials, foliar fungicide experiments and variety trials on all those crops to determine the best disease management options for producers. He also goes on field calls for producers, consultants and agents to solve their plant health issues.

This honor is on top of Price's list of awards that include the National County Agent Association Distinguished Service Award, Distinguished Tri-State Soybean Service Award, the Southern Soybean Disease Workers Distinguished Service Award, LSU AgCenter's Tipton Team Research Award for Cercospora leaf blight of soybean research and LSU AgCenter's Extension Excellence Award.

First published at https://www.lsuagcenter.com/articles/page1733334106741

Thomas-Sharma recognized by LSU undergraduates

LSU's Communication across the Curriculum sends out a call every fall to all LSU undergraduates asking which professor is doing an exceptional job communicating and connecting with the students that semester. There was an overwhelming response that **Dr. Sara Thomas-Sharma** had done so for General Plant Pathology (PLHL4000). Some of the student responses included: "She is a great teacher, she does a fantastic job explaining things, and her labs are super fun," and "Amazing communication and very helpful to students!"

Singh receives the Empowering Extension Excellence Award

Dr. Raj Singh received the Empowering Extension Excellence Career Achievement Award at the Louisiana Cooperative Extension Service Extension Summit held in Alexandra on Nov. 13-14. This prestigious recognition is given to exceptional individuals with at least 16 years of extension service who have dedicated their careers to empowering their constituency. Singh has worked tirelessly to develop and deliver outstanding educational programs for all horticultural crops as well as for agricultural and natural resource agents via oral or written media; developed a plethora of fact sheets, production and management guides; provided timely and accurate diagnosis of biotic and abiotic plant stress problems; and provided clinic training to professionals and the general public to increase their awareness and provide solutions regarding plant stress issues.

FACULTY ACTIVITIES

January – December 2024 Activities

Zhi-Yuan Chen

Invited Presentations

- XX International Plant Protection Congress, Athens, Greece. July 1-5, 2024. "Spray-induced gene silencing in managing soybean fungal diseases."
- Institute of Microbiology, Heilongjiang Academy of Sciences, China. April 8-15, 2024. "Application of RNA interference in managing various plant fungal diseases" and "New tools in biotechnology: genome editing and synthetic biology."
- Aflatoxin Mitigation Center of Excellence (AMCOE) and USDA-ARS Research Meeting, University of Texas AgriLife Research and Extension Center, Dallas, Texas. Sept. 25-27, 2024. "Developing aflatoxin resistant elite inbred corn lines through host induced gene silencing and plant breeding."
- Mid-South Soybean Board Meeting, University of Missouri Delta Center, Portageville, Missouri. Sept. 5-6, 2024. "Improving the efficacy of double stranded RNA (dsRNA) for practical field management of soybean diseases."
- American Phytopathological Society Annual Meeting, Memphis, Tennessee. July 27-30, 2024. "Pre- and post-harvest aflatoxin mitigation through RNA interference biotechnologies."
- 54th Southern Soybean Disease Workers Annual Meeting, at Pensacola, Florida. March 6-7, 2024. "The potential of managing soybean fungal diseases through the application of double stranded RNAs."
- 2024 Commodity Classic Meeting, Houston, Texas. Feb. 28, 2024. "Transgenic Control of Aflatoxin Contamination in Corn through Host Induced Gene Silencing."
- Mid-South Soybean Board Meeting, Red Wolf Conference Center, Jonesboro, Arkansas. Jan. 29, 2024. "Spray application of dsRNA for simultaneous management of multiple soybean fungal and insect diseases."

Other Presentations

- American Phytopathological Society Annual Meeting, Memphis, Tennessee. July 29, 2024. Oral presentation, "Evaluating the efficacy of topical application of double-stranded RNA in reducing aflatoxin contamination in peanuts" by Mamuna Mahjabin Mita et al.
- American Phytopathological Society Annual Meeting, Memphis, Tennessee. July 27-30, 2024. Poster presentation, "Nanosheets and adjuvants enhanced the effectiveness of dsRNA in suppressing soybean fungal diseases" by Sunira Marahatta and Z.-Y. Chen.

Referred Publications

- Omolehin, O., Raruang, Y., Hu, D., Han, Z.-Q., Promyou, S. Brown, R.L., Wei, Q., Rajasekaran, K., Cary, J.W., Wang, K., Jeffers, D., and Chen, Z.-Y. 2024. Host-induced gene silencing of the *Aspergillus flavus* O-methyl transferase gene enhanced maize aflatoxin resistance.

Committees

- PPCP Space Committee, chair
- PPCP Graduate Student Admission Committee, chair
- PPCP graduate adviser
- Member or chair of the mentoring committee for Drs. Jonathan Richards, Ely Garcia, Imana Power and Chien-Yu Huang
- Journal of Fungi, editor
- Degree Assessment/Program Impact Report Committee, member
- LSU Institutional Effectiveness Council, member

Grants and Contracts

- The USDA-ARS cooperative agreement award (58-6048-3-021, amendment #1), "Exploring double stranded (ds) RNAs based RNA interference approach to manage *Aspergillus flavus* infection and aflatoxin contamination in peanut." $26,744. July 2024 to September 2027. (ADODR: Dr. Baozhu Guo, USDA-ARS Tifton, Georgia).
- The AMCOE Aflatoxin Program grant, "Transgenic Control of Aflatoxin Contamination in Corn through Host Induced Gene Silencing." $99,112. June 2024 to May 2025.
- The Mid-South Soybean Board grant, "Spray application of double stranded RNA for simultaneous management of multiple soybean fungal and insect diseases." $48,324. March 2024 to May 2025.

Continued ▶

- The Louisiana Soybean and Grain Research and Promotion Board grant, "The potential of adjuvants and nanoparticles in enhancing the effectiveness of dsRNA in managing soybean fungal diseases." $57,467. April 2024 to March 2025.

Visiting Scientists/Students

- Henry Bueso Castro, Ph.D. student, Universidade Federal de Lavras, Brazil
- Dr. Haifen Li, associate professor, Crops Research Institute, Guangdong Academy of Agricultural Sciences, Guangzhou, China

New Graduate Students

- Jaliyah Nalubega, Uganda. M.S. student

New Collaborations

- Ishihara Sangyo Kaisha Ltd, Japan, on the possibility of testing their formulation with our dsRNAs
- Greenlight Biosciences on the potential to produce our dsRNA targeting soybean rust pathogen at large scale for potential field trials in Brazil
- Dr. Guixia Hao, Mycotoxin Prevention and Applied Microbiology Research, National Center for Agricultural Utilization Research, USDA-ARS, Peoria, Illinois, on analyzing fumonisin productions in our corn samples using their advanced mass spectrometry

Felipe Dalla Lana

Invited Presentations

- Louisiana Agricultural Technology and Management Conference, Marksville, Louisiana. Feb. 8, 2024. "Cercospora: Management and Epidemiology."
- Cornell Plant Pathology Seminars, online. March 26, 2024. "Development of Management Strategies for Rice Diseases in the Southern United States."
- 13th International Epidemiology Workshop (IEW13), Foz do Iguacu, Brazil. April 2024. "Disease Reaction Classification Considering Trial Accuracy and Phenotype Stability: A Case Study with Rice."
- International Rice False Smut Consortium: Inaugural Workshop, Los Baños, Philippines. October 2024. "Rice disease management in the South U.S.: Chronic and emerging problems."
- 2024 International Temperate Rice Conference (ITRC), New Orleans, Louisiana. June 2024. "Protocols to Estimate Stability and Accuracy of Rice Disease Reaction."
- Rice disease training, University of Arkansas System Division of Agriculture, Stuttgart, Arkansas. July 17, 2024. "Rice Disease in Louisiana."

Other Presentations

- Producer Meeting, Evangeline Parish Rice School, Mamou, Louisiana. Jan. 3, 2024. Rice pathology update.
- Producer Meeting, Acadia Parish Rice School, Crowley, Louisiana. Jan. 4, 2024. Rice pathology update.
- Southwest Louisiana Rice, Crawfish and Soybean Production Meeting, Welsh, Louisiana. Jan. 5, 2024. Rice pathology update.
- Producer Meeting, Avoyelles/Rapides Parish Rice Production Clinic, Mansura, Louisiana. Feb. 20, 2024. Rice pathology update.
- Recertification for Categories 4, 7C (1-3) Seed Treatment/Stored Grain, Alexandria, Louisiana. May 9, 2024. "Fungicidal Seed Treatment."
- Southwest Louisiana Rice Field Day, McNeese State University, Lake Charles, Louisiana. May 29, 2024.
- Central Region Rice Field Day, Bieber Farms, Mamou, Louisiana. May 30, 2024.
- Acadia/South Farm Field Day, H. Rouse Caffey Rice Research Station, LSU AgCenter, Crowley, Louisiana. June 12, 2024. Rice pathology overview.
- Field Day H. Rouse Caffey Rice Research Station, LSU AgCenter, Crowley, Louisiana. June 25, 2024. Rice pathology program updates.
- Field Day Rice Research and Extension Center, Arkansas Agricultural Experiment Station, Stuttgart, Arkansas. Aug. 1, 2024.

Referred Publications

- Angira, B., Linscombe, S.D., Webster, E.P., Webster, C., Harrell, D.L., Groth, D.E., Dalla-Lana, F., Zaunbrecher, R.E., Dartez, V., Williams, B., Theunissen, B., and Famoso, A. (2024). Registration of "CLL17" Rice. "Journal of Plant Registrations," 1-7. https://doi.org/10.1002/plr2.20332.
- Angira, B., Linscombe, S.D., Webster, E.P., Webster, C., Harrell, D.L., Groth, D.E., Dalla-Lana, F., Zaunbrecher, R.E., Dartez, V., Williams, B., Theunissen, B., and Famoso, A. (2024). Registration of "PVL03" rice. "Journal of Plant Registrations," 1-7. https://doi.org/10.1002/plr2.20333.
- Oliveira-Garcia, E., Budot, B.O., Manangkil, J., Dalla Lana, F., Angira, B., Famoso, A., and Jia, Y. 2024. An efficient method for screening rice breeding lines against races of *Magnaporthe oryzae*. "Plant Disease" 108:1179-1187. https://doi.org/10.1094/PDIS-05-23-0922-RE.

Continued ▶

Committees

- American Phytopathological Society, vice chair
  - Epidemiology Committee, member
  - Crop Loss Assessment and Risk Evaluation (CLARE), member
  - Chemical Control, member
  - Tropical Plant Pathology, member
- Brazilian Society of Plant Pathology Working Group, vice chair
- International Society of Plant Pathology, Epidemiology Committee, member
- Tropical Plant Pathology – Journal from Brazilian Phytopathology Society (SBF), editor
- Review Journals: Biochimie; Journal of Phytopathology; Landscape Ecology; Pest Management Science; Phytopathology; Plant Disease; Plant Health Progress; Plant Pathology, reviewer peer
- PPCP Award Committee
- PPCP Hiring Committee for Assistant Professor, Computational Biology/Data Science, member
- 2024 International Temperate Rice Conference, Plant Protection Panel, New Orleans, Louisiana, chair
- 2025 Rice Technical Work Group, Student Competition Panel, New Orleans, Louisiana, chair
- International Rice False Smut Consortium Steering Committee, member

Grants and Contracts

- Louisiana Rice Research Board, "Development of Disease Control Practices in Rice." $130,000.
- Louisiana Rice Research Board, "Growth Room (Equipment and Facility)." $25,000.
- Industry partners, $120,000.

Visiting Scientists/Students

- Anderson Cerutti

New Graduate Students

- Gustavo Escobar, PPCP-LSU; M.S. student, adviser
- Gustavo dos Santos, PPCP-LSU, Ph.D. student, co-adviser
- Bruno Borges, SPESS-LSU, M.S. student, co-adviser

New Collaborations

- International Rice Research Institution, Philippines

Vinson Doyle

Invited Presentations

- University of Arkansas, Department of Entomology and Plant Pathology, Fayetteville, Arkansas. Feb. 14, 2024. "Characterizing pathogen life history across multiple timescales and habitats to improve disease management."
- Royal Botanic Garden Victoria, Melbourne, Australia. Dec. 10, 2024. "Characterizing the life history and evolution of fungal mutualists, commensals, and pathogens across wild and agricultural habitats."
- International Rice False Smut Consortium Workshop, International Rice Research Institute, Los Banos, Philippines. Oct. 15, 2024. "Leveraging historical collections to understand the evolution of *Ustilaginoidea virens* over the last 120 years."

Other Presentations

- Southern Soybean Disease Workers Meeting, Pensacola, Florida. March 6, 2024. "The origin, evolution, and chemical ecology of *Xylaria necrophora*, causal agent of taproot decline of soybean."
- *Cercospora* Symposium, LSU, Baton Rouge, Louisiana. April 26, 2024. "Understanding the diversity and life history of CLB pathogens."
- Louisiana Soybean and Grain Research and Promotion Board Meeting, Baton Rouge, Louisiana. Nov. 21, 2024. "Integrating developments in taproot decline pathology to minimize yield loss."
- Louisiana Soybean and Grain Research and Promotion Board Meeting, Baton Rouge, Louisiana. Nov. 21, 2024. "Characterizing the environmental factors and host genetics that influence CLB disease severity to improve epidemiological modeling and cultivar selection."
- Louisiana Cotton Incorporated State Support Committee Meeting, Winnsboro, Louisiana. Nov. 15, 2024. "Characterizing the susceptibility and resistance to taproot decline, an emerging disease of cotton and soybean."

Refereed Publications

- Schultz, T.R., J. Sosa-Calvo, M.P. Kweskin, M.W. Lloyd, B. Dentinger, P.W. Kooij, E.C. Vellinga, S.A. Rehner, A. Rodrigues, Q. Montoya, H. Fernández-Marín, A. Ješovnik, T. Niskanen, K. Liimatainen, C.A. Leal-Dutra, S.E. Solomon, N.M. Gerardo, C.R. Currie, M. Bacci, Jr., H.L. Vasconcelos, C. Rabeling, B.C. Faircloth, V.P. Doyle. The coevolution of fungus-ant agriculture. "Science" 386 (6717), 105-110.

Continued ▶

- Costa de Novaes, M.I., C. Robertson, V.P. Doyle, D. Burk, S. Thomas-Sharma. 2024. The distribution and sequestration of cercosporin by *Cercospora* cf. *flagellaris*. "Phytopathology" First look: https://doi.org/10.1094/PHYTO-09-23-0310-R). Published online ahead of print, May 3, 2024.
- Rodriguez-Herrera, K.D., A. Vargas, L.D. Salgado, V.P. Doyle, P.P. Price, J.K. Richards, D. Moseley, A. Rojas, S. Thomas-Sharma. 2024. Development of a greenhouse assay to screen soybean varieties for resistance to aerial blight caused by *Rhizoctonia solani* AG1-IA. "Key Challenges" focus issue, "Phytopathology" 114 (5): 1039-1049. https://doi.org/10.1094/PHYTO-10-23-0390-KC.
- †Shrestha, B., B. Ward, T. Allen, **E. da Silva, *H. Zulli, *W. Dunford, V.P. Doyle, C. Bradley, B. Buckley, P. Chen, M. Clubb, H.M. Kelly, J. Koebernick, G.B. Padgett, J.C. Rupe, E. Sikora, T. Spurlock, S. Thomas-Sharma, A.C. Tolbert, X.G. Zhou, P.P. Price. 2024. Characterization of QoI-fungicide resistance in *Cercospora* isolates associated with Cercospora leaf blight of soybean from the southern United States. "Plant Disease" 108 (1): 149-161. https://doi.org/10.1094/PDIS-03-23-0588-RE.
- Silva, K.R., W.A.S. Vieira, M.P.S. Câmara, V.P. Doyle, M. Giongo, M.M. Santos, R.W.S. Aguiar, C.B. Moraes, C.A. Inácio, A.S.R. Cangussu, G.R. Santos. 2024. Colletotrichum siamense is responsible for anthracnose on *Hymenaea stigonocarpa* in Brazil. "Journal of Phytopathology" 172 (1): e13264. https://doi.org/10.1111/jph.13264.
- Manawasinghe, I.S.; K.D. Hyde; D. Wanasinghe; S.C. Karunarathna;...,V.P. Doyle,..., B. Xu. Fungal diversity notes 1818-1917: taxonomic and phylogenetic contributions on genera and species of fungi. "Fungal Diversity."
- Veloso, J.S., E.R.C. Nascimento, I.G. Duarte, W.A.S. Vieira, A.M.F. Silva, V.Q. Balbino, V.P. Doyle, M.P.S. Câmara. *Alternaria* brown spot: an emerging problem on annonaceous orchards in Brazil. "Plant Pathology."

*Lab members: *undergraduate advisee, **graduate advisee, †postdoctoral advisee*

Committees

- PPCP Courses and Curricula Committee, chair
- College of Agriculture Courses and Curricula Committee, chair
- PPCP Graduate Admissions
- PPCP Graduate Student Recruiting
- PPCP Space Committee
- College of Agriculture Undergraduate Research Grant Review Committee
- Mycological Society of America, counselor on symbiosis and pathology

Grants and Contracts

- Louisiana Soybean and Grains Research and Promotion Board (LSGRPB) Funding Program. "Tools for the management of taproot decline." $23,150. April 2024 to March 2025. PI: Vinson P. Doyle; Co-PIs: Trey Price, Jonathan Richards.
- Cotton Inc. "Characterizing susceptibility and resistance to taproot decline, an emerging disease of cotton and soybean." $23,409. Jan. 1, 2024, to Dec. 31, 2025. PI: Vinson P. Doyle.
- Louisiana Board of Regents, Departmental Enhancement. "Critical infrastructure for agricultural science: acquisition of plant growth and dew chambers for improved plant pathology research and education." $197,440. July 1, 2024, to June 30, 2025. PI: Jonathan Richards. Co-PIs: Vinson P. Doyle, Sara Thomas-Sharma.
- Louisiana Soybean and Grains Research and Promotion Board (LSGRPB) Funding Program. "Evaluation of fungicide application timing and cultivar resistance for management of Cercospora leaf blight on soybean." $47,500. April 1, 2024, to March 30, 2025. PI: Sara Thomas-Sharma. Co-PIs: Vinson P. Doyle, Trey Price, Boyd Padgett, Maria Bampasidou, L. Conor.
- Louisiana Soybean and Grains Research and Promotion Board (LSGRPB) Funding Program. "Soybean seed treatment with fungicide-loaded nanoparticles." $25,000. April 2024 to March 2025. PI: Cristina Sabilov; Co-PIs: Trey Price, Vinson P. Doyle, Jeff Davis.
- Louisiana Soybean and Grains Research and Promotion Board (LSGRPB) Funding Program. "A genetic and effector-based approach to manage fungal diseases of soybean." $20,000. April 1, 2024, to March 30, 2025. PI: Jonathan Richards. Co-PI: Vinson P. Doyle, Trey Price.

New Graduate Students

- Geona Miles, M.S. student
- Richard Rush, Ph.D. student co-advised with Jonathan Richards

New Collaborations

- Ignazio Carbone, North Carolina State University

Madison Flasco

Invited Presentations

- Entomology Society of America Annual Meeting, Pheonix, Arizona. November 2023. "The three-cornered alfalfa hopper, *Spissistilus festinus*, is an epidemiologically important vector of grapevine red blotch virus in northern California vineyards."

Continued ▶

Other Presentations

- International Society of Sugar Cane Technologists-Pathology and Entomology Workshops, Salta, Argentina. November 2024. "Development of a real-time singleplex and multiplex PCR diagnostic assay for detecting sugarcane pathogens through high-resolution melting analysis." Morales, J.V.P., Rollins, M.B., Miller, A., Flasco, M., and Gama, A.B.
- Annual Meeting of the American Society of Sugarcane Technologists, New Orleans, Louisiana. June 2024. "Development and validation of a diagnostic assay for quick detection of sugarcane pathogens using high-resolution melting (HRM) analysis." Morales, J.V.P., Rollins, M.B., Flasco, M., and Gama, A.B.

Referred Publications

- Gama, A.B. and Flasco, M.T. 2024. Sugarcane Yellow Leaf Virus – A Silent Threat? Plant Health Cases. https://doi.org/10.1079/planthealthcases.2024.0020.
- Flasco, M., Cieniewicz, E.J., Cooper, M.L., McLane, H., and Fuchs, M. 2024. "Investigating the latency period of grapevine red blotch virus in a diseased 'Cabernet franc' vineyard experiencing secondary spread. American Journal of Enology and Viticulture." https://doi.org/10.5344/ajev.2024.24008.

Committees

- American Phytopathological Society Virology Committee, vice chair
- PPCP Courses and Curricula Committee
- PPCP Graduate Student Recruiting Committee

New Graduate Students

- Annabel Miller, M.S. student

New Collaborations

- Dr. Kathy Warnke and Dr. Hannah Penn, USDA-ARS, Houma, Louisiana, Sugarcane Research Center
- Dr. Peter Abrahamian, USDA-ARS, Beltsville, Maryland, National Germplasm Resource Laboratory

Andre Bueno Gama

Invited Presentations

- Louisiana Agricultural Technology and Management Conference. "Introduction of Andre Gama, New Sugarcane Pathologist."
- 2024 Spring Research-Extension Meeting, St. Gabriel, Louisiana. Disease update.
- Sugar Research Station Field Day. Sugarcane pathology.
- Lafourche Parish Sugarcane Field Day. Sugarcane disease updates.
- Assumption Parish Sugarcane Field Day. Sugarcane disease updates.
- St. Martin/Acadia/Lafayette/St. Landry Sugarcane Field Day. Sugarcane disease updates.
- •Raceland Sugarcane Field Day. Sugarcane disease updates.
- Serviço Nacional de Aprendizagem Comercial – SP, virtual. "A nonlinear path in academia."

Other Presentations

- XIII Pathology and XI Entomology ISSCT Workshop, Salta, Argentina. "Development of a real-time singleplex and multiplex PCR diagnostic assay for detecting sugarcane pathogens."

Referred Publications

- Gama, A.B., and Flasco, M.T. 2024. Sugarcane Yellow Leaf Virus–A Silent Threat? "Plant Health Cases" https://doi.org/10.1079/planthealthcases.2024.0020.

Committees

- Iris Aguilar, M.S. student advised by Dr. Tristan Watson

Grants and Contracts

- LSU AgCenter, Development and validation of a predictive model for sugarcane brown rust epidemics. $30,000. 2024-2025.
- American Sugarcane League, LSUAG | Sugarcane Pathology and Epidemiology Research. $30,000. April 1, 2024, to March 30, 2025.
- Helena Agri-Enterprises LLC, Testing and Delivery of Experimental Sugarcane Cultivars 22-23. $20,000. 2023-2024.
- Certis USA LLC | 02, Agreement between and among Sugar Research Station and Certis USA LLC. $21,200. 2024-2025.

Visiting Scientists/Students

- William Jafet Cabezas Escobar (El Salvador), Zamorano University, Honduras
- Isabela D'Arce Sodero (Brazil), University of São Paulo, Brazil

New Graduate Students

- Joao Vitor Pelizzaro Morales, M.S. student
- Gustavo dos Santos, Ph.D. student

New Collaborations

- Peter Abrahamian, USDA's National Germplasm Resources Laboratory
- Emerson Del Ponte, Federal University of Viçosa
- Lilian Amorim, University of Sao Paulo

Continued ▶

- Tadeu Antonio Fernandes da Silva Junior, São Paulo State University
- BASF program support

Jong Hyun Ham

Invited Presentations

- Fourth Annual Congress on Plant Science and Biosecurity, virtual, keynote speaker, Barcelona, Spain. Aug. 19-20, 2024. "Deciphering and enhancement of rice disease resistance to bacterial panicle blight."
- Special online lecture, Federal Rural University of Pernambuco, Recife, Brazil. Oct. 23 and Oct. 30, 2024. "Genetics of Plant-(Bacterial) Pathogen Interactions."

Other Presentations

- APS Southern Division Meeting, Columbia, South Carolina. Feb. 26-29, 2024. "Exploring the impact of rice-associated *Pantoea ananatis* on bacterial panicle blight." J. Rojas-Iracheta, J. Bruno, J. Ontoy, and J.H. Ham.
- APS Southern Division Meeting, Columbia, South Carolina. Feb. 26-29, 2024. "Optimizing microbial consortia for enhanced soybean tolerance to drought stress." S. Gouli, R. Calderon, J. Padilla, and J.H. Ham.
- 2024 International Temperate Rice Conference, New Orleans, Louisiana. June 5-8, 2024. "Exploring QTLs for developing durable resistance to bacterial panicle blight in rice." J.C. Ontoy, J.D. Cortes, and J.H. Ham.
- APS Meeting, Memphis, Tennessee. July 27-30, 2024. "Investigation of the genomic architecture underlying the quantitative disease resistance of a rice mutant line, LM-1, to bacterial panicle blight." J.C. Ontoy and J.H. Ham.
- APS Meeting, Memphis, Tennessee. July 27-30, 2024. "Genomics-based characterization of antimicrobial resistance of the onion-pathogenic strains of *Burkholderia cenocepacia*." J.J. Padilla, M.Gama, I. Barphagha, and J.H. Ham.
- APS Meeting, Memphis, Tennessee. July 27-30, 2024. "First report of *Pantoea ananatis* causing bacterial leaf and panicle blight of rice in Louisiana, USA." J. Bruno, I. Barphagha, J. Ontoy, F. Dalla Lana, J.H. Ham.
- The Land Institute Perennial Crop Workshop, Salina, Kansas. Sept. 26-28, 2024. "Introgression of perennial trait to U.S. rice varieties." J. Cortes, J. Ontory, I. Barphagha, and J.H. Ham.

Referred Publications

- Lelis, T., J. Bruno, J. Padilla, I. Barphagha, John Ontoy, and J.H. Ham. 2024. qsmR encoding an IclR-family transcriptional factor is a core pathogenic determinant of *Burkholderia glumae* beyond the acyl-homoserine lactone-mediated quorum-sensing system. "PLOS Pathogens" DOI: http://doi.org/10.1371/journal.ppat.1011862.
- Bruno, J. and J.H. Ham. 2024. Seed-priming for defense-priming: An innovative approach to enhance the resilience of crop plants to biotic and abiotic stresses. "Plant Health Progress" 25: 228-231. https://doi.org/10.1094/PHP-09-23-0078-MR.
- Gouli, S., A. Majeed, J. Liu, D. Moseley, M.S. Mukhtar, and J.H. Ham. 2024. Microbiome structures and beneficial bacteria in soybean roots under field conditions of prolonged high temperatures and drought stress. "Microorganisms" 12:2630. https://doi.org/10.3390/microorganisms12122630 .

Committees

- PPCP Course and Curricula Committee
- PPCP Graduate Student Recruiting Committee
- PPCP Promotion and Tenure Committee
- PPCP Safety/Operational Committee, chair
- LSU/LSU AgCenter Interinstitutional Biological and Recombinational DNA Safety Committee (IBRDSC)
- APHIS Widely Prevalent Bacteria Committee

Grants and Contracts

- NSF EPSCoR Research Infrastructure Improvement Program RII Track-2 FEC: interdisciplinary Program of Advancing Climate Extreme Resilience in Soybean (iPACERS). $1,950,000 for LSU AgCenter out of the total funded amount $6M. September 2024 to August 2028. PI: Jong Hyun Ham; Co-PIs: Changyoon Jeong, Kevin Hoffseth, and David Moseley. (Lead Institute (Lead PI): Clemson University (Shahid Mukhtar)).
- Louisiana Soybean and Feed Grains Research and Promotion Board Grant, "Development of seed-priming agents that augment soybean growth and broad spectrum disease resistance." $25,000. April 2024 to March 2025. PI: Jong Hyun Ham; Co-PI: Changyoon Jeong.
- NIFA AFRI SAS (Sustainable Agriculture System) Program, "Climate Resilient Innovations for Sustainable Production of RICE (CRISP-RICE)." $690,644 out of the total $10M funded. April 1, 2023, to March 31, 2027. PI: Prasanta Subudhi; Co-PIs: Jong Hyun Ham et al.
- United Soybean Board Program, "Development of seed-treating biostimulants that protect soybean plants from biotic and abiotic stresses." $65,700. Oct. 1, 2022, to Sept. 30, 2024. PI: Jong Hyun Ham.

Continued ▶

- NIFA AFRI Foundation Program, "Deciphering the role of the quorum-sensing master regulator, qsmR, in social behaviors of *Burkholderia glumae* for bacterial pathogenesis in rice plants." $682,232. Jan. 1, 2022, to Dec. 31, 2025. PI: Jong Hyun Ham; Co-PI: Maheshi Dassanayake.
- The Land Institute Super Ratooning Rice Program. $50,000. January 2023 to December 2024. PI: Jong Hyun Ham.

New Graduate Students

- Francella Arce, M.S. student
- Ashmita Acharya, M.S. student
- Jose Rojas-Iracheta, M.S. student

New Collaborations

- Clemson University, Dr. Shahid Mukhtar
- Red River Research Station, LSU AgCenter, Dr. Chang Yoon Jeong
- Dean Lee Research Station, LSU AgCenter, Dr. David Moseley, Dr. G. Boyd Padgett
- Department of Biological Sciences, LSU, Dr. Maheshi Dassanayake, Dr. William Doerrler, Dr. Michal Brylinski
- International Rice Research Institute, Dr. Van Schepler-Luu
- The Land Institute, Dr. Timothy Crews, Dr. Ebony Murrell

Chien-Yu Huang

Other Presentations

- Plant Health 2024 conference, Memphis, Tennessee. 2024. Poster presentation, "Harnessing antimicrobial peptides for effective control of bacterial diseases in crops." Huang C.Y., Wei Y., Luna-Valdez L., Her N., Roper C., Godfrey K.E., and Jin H.
- Mini-Symposium on *Cercospora* Research at LSU, Baton Rouge, Louisiana. 2024. "Explore the conserved epigenetic regulatory machinery against Cercospora Leaf Blight in soybeans."

Committees

- APS Host Resistance Committee
- APS Seed Pathology Committee
- PPCP Departmental Safety/Operational Committee

Grants and Contracts

- Louisiana Soybean and Grain Research and Promotion Board. "Implement Plant-Derived Natural Molecules to Manage Important Fungal Diseases in Soybeans." $27,662. April 2025 to March 2026. PI: Chien-Yu Huang; Co-PI: Sara Thomas-Sharma.
- Louisiana Board of Regents (Support Fund). "Targeting Epigenetic Regulators of Plant Immunity to Enhance Host Defense against Crop Disease." $116,000. June 2024 to May 2027. PI: Chien-Yu Huang.
- USDA-NIFA-SCRI. "Generating non-transgenic citrus rootstocks and scions that constitutively express the stable antimicrobial peptide SAMP to control HLB." $1,500,000. September 2024 to August 2027. $200,216 subaward to Huang's lab. PI: Hailing Jin; Co-PIs: Svetlana Folimonova, Megan Dewdney, Chien-Yu Huang, Georgios Vidalakis.

Visiting Scientists/Students

- Shelby Bernard, February to April 2024

New Graduate Students

- Indira Poudel, M.S. student

New Collaborations

- Dr. Maheshi Dassanayake, Dr. Congliang Zhou, Dr. Mary Helen Ferguson, Louisiana State University
- Dr. Nicole Gauthier, University of Kentucky

Ely Oliveira-Garcia

Invited Presentations

- 4th Magnafest 2024, Pacific Grove, California. March 11, 2024. "On the mechanism of translocation of *Magnaporthe oryzae* cytoplasmic effectors into plant cells."
- The Queenstown Research Week 2024, Queenstown, New Zealand. Sept. 1, 2024. "Dissecting the mechanism of translocation of *Magnaporthe oryzae* cytoplasmic effectors into plant cells."

Referred Publications

- Oliveira-Garcia, E.*, Hamilton A.J. A pharmacological approach to investigating effector translocation in rice-*Magnaporthe oryzae* interactions. "Plant Signaling and Behavior" 2024 Dec 31;19(1):2350869. https://doi.org/10.1080/15592324.2024.2350869

Committees

- APS, Pathogen resistance, Host Resistance committee, Molecular and Cellular Phytopathology, Evolutionary Genetics and Genomics, Emerging Diseases and Pathogens
- Genetics Society of America, 2024 Magnafest (Magnaporthe research community meeting), chair

Visiting Scientists/Students

- Gustavo Escobar, El Salvador, under the Zamorano program, January to May 2023

Continued ▶

Boyd Padgett

Invited Presentations

- LACA Soybean Disease Management Using Genetic Resistance, Planting Date and Fungicides
- Soil Conservation District Meeting: Central Region Update
- Pesticide Recertification, Jan. 25, 2024, and Nov. 7, 2024
- Master Gardener

Other Presentations

- Parish production meetings (three)
- Soybean and Grain Board
- Agronomy School
- Wheat and Oat Field Day

Referred Publications

- Moseley, D., Reis, A., Gentimis, T., Campos, P., Copes, J., Netterville, M., Egbedi, P., Harrell, D., Kongchum, M., Levy, R., Padgett, B., Soignier, S., Scroggs, D., Sanders, J., Pankey, J., Fic, K. (2024). Soybean planting dates and maturity groups: maximizing yield potential and decreasing risk in Louisiana. "Agronomy Journal," 1-12. https://doi.org/10.1002/agj2.21626.

Abstracts

- Padgett, G.B., Dustin, E., Arceneaux, K., Price, P., Harrison, S., Collins, F. 2024. Evaluating genetic resistance, fungicides, and application timing to manage Fusarium head blight in soft red winter wheat in Louisiana. In: Proceedings 2006 APS National Meeting. Feb. 26-29, 2024. Columbia, South Carolina.
- Price, P., Ezell, D., Leonards, J., Collins, F., Lee, L., Hebert, J., Meaux, J., Padgett, G.B., and Purvis, M. 2024. Fungicide options for QoI-resistant aerial blight, caused by *Rhizoctonia solani*, in soybean. In: Proceedings 2006 APS National Meeting. Feb. 26-29, 2024. Columbia, South Carolina.
- Thomas-Sharma, S., Ramos, S., Galagedara, N.N., Amie, J., Doyle, V., Price, T., Padgett, B., Allen T., Spurlock, T., and Connor, L. 2024. Can targeting fungicide applications to spore peaks improve the efficacy and economics of Cercospora leaf blight management? In: Proceedings of the Southern Soybean Disease Workers 51st Annual Meeting. March 6-7, 2024. Pensacola, Florida.
- Padgett, G.B., Price, P., Moseley, D. 2024. Using data generated from on-farm and experiment station trials to help farmers manage soybean diseases. In: Proceedings of the Southern Soybean Disease Workers 51st Annual Meeting. March 6-7, 2024. Pensacola, Florida.

Extension Publications

- Padgett, Guy B., Singh, Raghuwinder, Hoy, Jeffrey W., Andre Gama, Monaghan, Tashia, Price, III, Paul P, Guelig, B., Ferguson, Mary Helen, Watson, Tristan, Dalla Lana, Felipe, and Power, I. "2024 Louisiana Plant Disease Management Guide" online store item. 2024 Publication No. 1802.
- Harrison, S.A.,...G.B. Padgett, et al. 2024 Small grain performance trials. LAES Research Summary 212.
- Price, P.,...G.B. Padgett, et al. 2024. Cotton varieties for Louisiana. LSU AgCenter. Publication No. 2135.
- Kerns, S.,...G.B. Padgett, et al. Corn Hybrids for Grain 2025. 2024. LSU AgCenter. Publication No. 2827.
- Moseley, D.,...G.B. Padgett, et al. 2024. 2024 Soybean variety yields and production practices. LAES/LCES Publication No. 2269. 1/24 Rev.
- Price, T. and B. Padgett. Corn disease update. 14(3). May 2024.
- Price, T. and B. Padgett. Rootless corn syndrome (RCS) reported in many Louisiana corn fields. 14(3). May 2024.
- Kerns, S.,...G.B. Padgett, et al. Potassium deficiency in cotton can lead to increased disease. Volume 14, Issue 5 - August 2024.
- Padgett, G.B. Crazy top in corn. Volume 14, Issue 2 - April 2024.

Awards and Honors

- APS Southern Division Outstanding Plant Pathologist 2024

Committees

- Graduate Students: Four
- Mentoring Committees: Eight (six as chair)
- Plant Pathology and Crop Physiology Awards Committee
- Plant Pathology Promotion and Tenure Committee, chair
- LSU AgCenter Outstanding Staff and Associate Awards Committee
- LSU AgCenter Awards Committee
- Ray and Dorothy Young Distinguished Assistantship Award
- FHB Tool Talk Advisory Committee (USWBSI)
- Louisiana Agricultural Consultants Assoc (LACA) Planning Committee
- LACA Executive Board, LSU AgCenter Rep
- FSA, LSU AgCenter Rep

Continued ▶

Grants and Contracts

- Louisiana Soybean and Feed Grain Research and Promotion Board: $65,000
- USDA-ARS USWBSI: $21,231
- Smithbucklin Industry: $30,000
- Industry: $14,000

Imana Power

Invited Presentations

- Louisiana Sweet Potato Association Educational Program, Winnsboro, Louisiana. 88th Annual Meeting of Louisiana Sweet Potato Advertising and Development (LSPA). Dec. 5, 2024. "Updates and Future Directions of the Sweetpotato Pathology Program."
- LSU AgCenter Sweetpotato Research Station Field Day, Chase, Louisiana. Celebrating 75 years of Research and Service. Aug. 29, 2024. "Clean Seed Update: Reducing Virus Infection with Crop Borders" and "Post Harvest and Disease Detection Update."
- Lamb Weston 2024 Sweetpotato Grower Meeting, Delhi, Louisiana. Feb. 26, 2024. "Sweetpotatoes From the Lab to the Field."
- USDA-APHIS National Clean Plant Network (NCPN) Quality Initiative Workshop, virtual. June 4, 2024. "Perspective of NCPN-Sweetpotato on Quality."

Other Presentations

- USDA-APHIS-NCPN Tier 2 Meeting, Raleigh, North Carolina. July 9, 2024. "Louisiana Sweetpotato Foundation Seed Program."
- LSU Department of Plant Pathology and Crop Physiology Seminar Series, Baton Rouge, Louisiana. Oct. 23, 2024. "Sustainable Diseases Management in Sweetpotato: Cold Cases and New Directions."

Refereed Publications

- La Bonte, D.R., Power, I., Watson, T., Smith, T.P., Villordon, A.Q., Gregorie, J.C., and Harvey, L. (2024). Avoyelles Sweetpotato. HortScience, 59(6), 796-798. https://doi.org/10.21273/HORTSCI17802-24.

Committees

- PPCP Safety/Operational Committee, member
- PPCP Equipment Room – A424, chair
- PPCP Graduate Student Association, faculty adviser
- National Clean Plant Network (NCPN) Quality Management Steering Committee, member
- APS, Tropical Plant Pathology Committee, member.
- APS, Soil and Microbiology and Root Diseases Committee, member
- APS, Disease Surveillance and Pathogen Detection Methods Committee, member

Grants and Contracts

- USDA-APHIS – NCPN, "NCPN – Sweetpotato Louisiana Cooperative Agreement FY2024-2025." $210,000 ($89,499 to Power lab). PI: Imana Power; Co-PI: Tara Smith.
- Louisiana Sweet Potato Commission, "Sweetpotato Disease Management in Louisiana." $15,000. PI: Imana Power.
- Barbados Ministry of Agriculture and Food and Nutritional Security – LSU AgCenter Fixed price agreement. "Training of Barbadian Officers at the LSU AgCenter Tissue Culture Lab." $18,075. PI: Jonathan Hubchen; Co-PI Imana Power.
- USDA – Crop Germplasm Committee. "Screening Sweetpotato Germplasm for Black Rot Resistance". $18,233. PI: Imana Power.
- Center of Research Excellence Enhancement of External Competitive Funding Program. LSU AgCenter. "Development of a Disease Management Strategy based on Natural Inhibitors of Spore Germination of the Sweetpotato Soil Rot Pathogen." $12,500 ($5,500 to Power lab). PI: Gregg Pettis; Co-PI: Imana Power.

Visiting Scientists/Students

- Kellyn Andino, January to May 2024

New Graduate Students

- Clayton Blake, spring 2024, M.S. program

New Collaborations

- Jonathan Hubchen, LSU AgCenter Agricultural and Extension Education and Evaluation Department
- Sophia Marshal, Assistant Director Home Agricultural Station, Barbados Ministry of Agriculture and Food and Nutritional Security
- Gregg Pettis, LSU A&M, Department of Biological Sciences
- Elizabeth S. Johnson, International Specialist Crop Production and Innovation, Inter-American Institute for Cooperation on Agriculture (IICA) Barbados

Trey Price

Invited Presentations

- University of Tennessee Milan No-Till Field Day, Milan, Tennessee. July 25, 2024. "Taproot decline of soybean."

Continued ▶

Other Presentations

- Wheat and Oat Field Day, Winnsboro, Louisiana. April 23, 2024. "Fusarium head blight (scab) nursery and OVT trials."
- Wheat and Oat Field Day. Winnsboro, Louisiana. April 23, 2024. SunGrains wheat breeders tour.
- Franklin Parish Production Meeting. Winnsboro, Louisiana. Feb. 6, 2024. "Corn and soybean disease management."
- Tensas Parish Production Meeting, St. Joseph, Louisiana. Jan. 22, 2024. "Corn and soybean disease management."
- Proc. Beltwide Cotton Conference, Fort Worth, Texas. Jan. 3-5, 2024. Price, P., M. Purvis, and D. Ezell. "Deciphering seed treatments for seedling disease management." 73-77.

Refereed Publications

- Anderson, N.R.,...P. Price, et al. 2024. Sensitivity of the causal agent of northern leaf blight of corn, *Exserohilum turcicum*, to the demethylase-inhibiting fungicide flutriafol. "Plant Health Progress." Ahead of Print. https://doi.org/10.1094/PHP-11-23-0098-RS.
- Hanna, E.A., C.E. Astete, T. Price, C. Tamez, O.E. Mendez, A. Garcia, F.V. Kewir, J.C. White, and C.M. Sabliov. 2024. Antifungal efficacy of nanodelivered azoxystrobin against *Rhizoctonia solani* in soybean (Glycine max). "Agricultural Science and Technology." https://doi.org/10.1021/acsagscitech.3c00469.
- Koebernick, J.C.,...P. Price, et al. 2024. Monitoring the distribution, incidence, and symptom expression associated with cotton leafroll dwarf virus in the southern United States using a sentinel plot system in the southern united states. "PhytoFrontiers." First Look. https://apsjournals.apsnet.org/doi/10.1094/PHYTOFR-02-24-0008-R.
- Miller, D.K., Campos, P., Copes, J.T., Netterville, M., Brown, S., Price, P.P., Moseley, D.O., Gentimis, T., Egbedi, P., and Parvej, M.R. 2024. Influence of fungicide on soybean seed quality from delayed harvest and environment. "Crop, Forage and Turfgrass Management," e70002. https://doi.org/10.1002/cft2.70002.
- Patel, J.,...P. Price, et al. 2024. Deciphering genetic factors contributing to enhanced resistance against Cercospora leaf blight in soybean (*Glycine max* L.) using GWAS analysis. "Frontiers in Genetics." https://doi.org/10.3389/fgene.2024.1377223.
- Rodriguez-Herrera, K.D., A. Vargas, J. Amie, P. Price, L.D. Salgado, V.P. Doyle, J.K. Richards, D. Moseley, A. Rojas, and S. Thomas-Sharma. 2024. Development of a greenhouse assay to screen soybean varieties for resistance to aerial blight caused by *Rhizoctonia solani* anastomosis group 1-IA. "Phytopathology." 14:1039-1049. https://doi.org/10.1094/PHYTO-10-23-0390-KC.
- Shrestha, B.K., B.M. Ward, T.W. Allen, E.T. da Silva, H. Zulli, W. Dunford, V. Doyle, C.A. Bradley, B. Buckley, P. Chen, M. Clubb, H. Kelly, J. Koebernick, B. Padgett, J.C. Rupe, E.J. Sikora, T.N. Spurlock, S. Thomas-Sharma, A. Tolbert, X. Zhou, and P. Price. 2024. Characterization of QoI-fungicide resistance in *Cercospora* isolates associated with Cercospora leaf blight of soybean from the southern United States. "Plant Disease." 108:149-161. https://doi.org/10.1094/PDIS-03-23-0588-RE.

Extension Publications

- Price, P., et al. 2024. 2024 Cotton varieties for Louisiana – official variety trials and on-farm demonstrations. LAES/LCES Publication No. 2135. Rev. 1/24.
- Padgett, G. B.,...P. Price, et al. 2024. Louisiana plant disease management guide – cotton, field crop seed treatment, and soybean sections. LSU AgCenter Publication No. 1802. 01/2024 Online: www.lsuagcenter.com.

Awards and Honors

- Louisiana Soybean and Feed Grains Research and Promotion Board Distinguished Professorship
- Distinguished Service Award, TriState Soybean Board
- Distinguished Service Award, National Association of County Agricultural Agents and Louisiana County Agricultural Agents Association

Committees

- Advisory and Planning Committees, Louisiana Agricultural Consultants Association
- Agronomy and Pest Management Committee, Louisiana County Agent Association
- Cotton Disease Loss Committee, Cotton Incorporated
- Cotton Seedling Disease Committee, Cotton Incorporated
- Cotton Target Spot Working Group, Cotton Incorporated
- Entomological Society of America
- Louisiana Agricultural Consultants Association, affiliate member
- Louisiana County Agricultural Agent Association
- Louisiana Farm Bureau, member
- Mid-South Association of Wheat and Feed Grain Scientists

Continued ▶

- National County Agent Association
- NCERA 137, North Central Region Soybean Disease Working Group
- NCERA 184, North Central Region Wheat Disease Working Group
- Ray and Dorothy Young Endowed Award in Field Crop Integrated Pest Management Committee
- Southern Soybean Disease Workers, Funding Czar
- Soybean Disease Loss Committee, Southern Soybean Disease Workers
- USDA, National Predictive Modeling Tool Initiative, Steering Committee
- Breeding and Screening Soybean for Resistance to Mature Seed Damage, United Soybean Board/Mid-South Soybean Board Project
- Corn Disease Working Group
- Cotton leaf roll dwarf virus Working Group, Cotton Incorporated
- Develop and Deliver Best Management Practices and Soybean Cultivars To Minimize Yield and Quality Losses from Cercospora Leaf Blight, United Soybean Board Project, multi-institution/state
- Developing Scab-Resistant Wheat Genotypes Adapted to the Gulf South, multi-institution/state
- Development of Prediction Tools for Diseases and Mycotoxins Affecting Corn to Better Inform Management Decisions, USDA-NPMTI, multi-institution/state
- Evaluating Fungicides for Managing Fusarium Head Blight in Louisiana, USDA-USWBSI, multi-institution/state
- Louisiana Cotton Disease Predictive Tool Development, USDA-NPMTI, multi-institution/state
- Mid-South Pathology Working Group, multi-institution/state
- S1085, Cover Crops for Sustainable Southern Agroecosystems

Grants and Contracts

- Cotton Incorporated (core projects), $39,500
- USDA National Predictive Modeling Tool Initiative, $95,666
- Louisiana Soybean and Grain Board, $113,500
- Louisiana Rice Board, $25,000

Jonathan Richards

Invited Presentations

- Universidad Peruana Cayetano Heredia. Lima, Peru. June 28, 2024. “Explorando la diversidad de patógenos y la resistencia en hospederos en el patosistema del arroz – *Cercospora janseana*.”
- Management of Invasive Species in Wetlands Workshop. Louisiana State University. April 12, 2024. “Exploring the genetic diversity and transcriptional response to stress in *Phragmites australis*.”
- Louisiana Agricultural Technology and Management Conference. Marksville, Louisiana. Feb. 8, 2024. “Understanding narrow brown leaf spot host resistance and population dynamics.”

Other Presentations

- Louisiana Soybean and Grain Research and Promotion Board Meeting. November 2024. “A genetic and effector-based approach to manage fungal diseases in soybean.”
- Louisiana Rice Research Board Meeting. October 2024. “Improvement of management strategies for narrow brown leaf spot and *Cercospora* net blotch of rice.”
- Roseau Cane Summit. LSU AgCenter. January 2024. “Genetic diversity and transcriptional responses to stress in *Phragmites australis*.”

Refereed Publications

- Li, J., Wyatt, N.A., Skiba, R.M., Kariyawasam, G.K., Richards, J.K., Effertz, K., Rehman, S., Liu, Z., Brueggeman, R.S., and Friesen, T.L. 2024. Variability in chromosome 1 of select Moroccan *Pyrenophora teres* f. *teres* isolates overcomes a highly effective barley chromosome 6H source of resistance. “Molecular Plant-Microbe Interactions.” 37(9): 676-687 DOI: 10.1094/MPMI-10-23-0159-R
- Rodriguez-Herrera, K.D., Vargas, A., Amie, J., Price, P.P., Salgado, L.D., Doyle, V.P., Richards, J.K., Moseley, D., Rojas, A., and Thomas-Sharma, S. 2024. Development of a greenhouse assay to screen soybean varieties for resistance to aerial blight caused by *Rhizoctonia solani* anastomosis group 1-IA. “Phytopathology.” 114(5): 1039-1049 DOI: 10.1094/PHYTO-10-23-0390-KC
- Richards, J.K., Li, J., Koladia, V., Wyatt, N.A., Rehman, S., Brueggeman, R.S., and Friesen, T.L. 2024. A Moroccan *Pyrenophora teres* f. *teres* population defeats the Rpt5 broad-spectrum resistance on barley chromosome 6H. “Phytopathology.” 114(1): 193-199 DOI: 10.1094/PHYTO-04-23-0117-R

Continued ▶

Awards and Honors

- William Boright Hewitt and Maybelle Ellen Ball Hewitt Award, American Phytopathological Society

Committees

- NCCC307: Biochemistry and Genetics of Plant-Fungal Interactions Multistate Research Coordinating Committee and Information Exchange Group, co-chair
- PPCP Graduate Student Recruiting Committee, chair
- PPCP Courses and Curricula Committee, member
- PPCP Newsletter/Website/Social Media Committee, member
- PPCP Social Activities Committee, chair
- Therapeutic Cannabis Research Committee, LSU AgCenter, member
- American Phytopathological Society Southern Division Awards Committee

Grants and Contracts

- Improvement of Management Strategies for Narrow Brown Leaf Spot of Rice. Louisiana Rice Research Board. $36,667. PI: Jonathan Richards; Co-PIs: Adam Famoso and Brijesh Angira.
- A Genetic and Effector-Based Approach to Manage Fungal Diseases of Soybean. Louisiana Soybean and Grain Promotion Board. $20,000. PI: Jonathan Richards; Co-PIs: Vinson Doyle and Trey Price.
- Critical Infrastructure for Agricultural Science: Acquisition of Plant Growth and Dew Chambers for Improved Plant Pathology Research and Education. Louisiana Board of Regents. $197,440. PI: Jonathan Richards; Co-PIs: Vinson Doyle and Sara Thomas-Sharma.
- The ecological and genetic drivers of adaptation in a generalist leaf pathogen in North America. USDA-AFRI Foundational and Applied Science Program. $240,656. PI: Jonathan Richards; Co-PI: Vinson Doyle.
- Narrow brown leaf spot resistance in rice: enhancing breeding strategies through fine mapping and dissection of quantitative resistance. USDA-AFRI Foundational and Applied Science Program. $500,000. PI: Jonathan Richards; Co-PIs: Adam Famoso, Brijesh Angira, and Niranjan Baisakh.
- Characterizing susceptibility and resistance to taproot decline, an emerging disease of cotton and soybean. Louisiana Soybean and Grain Promotion Board. $11,660. April 1, 2024, to March 31, 2025. PI: Vinson Doyle; Co-PIs: Trey Price, Jonathan Richards.
- Roseau cane dieback: integrating across disciplines, long-term monitoring, and public access to findings. USDA-APHIS. $1,611,263 ($152,273 subaward). Sept. 1, 2023, to Aug. 31, 2025. PIs: Rodrigo Diaz, Jonathan Richards, Vinson Doyle, James Cronin, Tracy Quirk, Xuelian Meng, Kory Konsoer, Andrew Nyman, Matthew Hiatt, Ehab Meselhe, Allison Mead, Kevin Hu, and Yadong Qi.
- Roseau Cane Die-Back: Multidisciplinary Approaches to Address Plant Decline and Opportunities for Restoration. USDA-APHIS. $1,611,263 ($101,646 subaward). Sept. 1, 2022, to Aug. 31, 2024. PIs: Rodrigo Diaz, Jonathan Richards, Vinson Doyle, James Cronin, Tracy Quirk, Xuelian Meng, Kory Konsoer, Andrew Nyman, Matthew Hiatt, Ehab Meselhe, Allison Mead, Kevin Hu, and Yadong Qi.

Visiting Scientists/Students

- Stephanie Peralta, UTEC, Lima, Peru

New Graduate Students

- Bernard Budot, Ph.D. student
- Richard Rush, Ph.D. student co-advised with Vinson Doyle

New Collaborations

- Michael Thomson, Texas A&M, Rice transformations and gene functional validation

Raj Singh

Invited Presentations

- Horticulture Inspection Society Southern Chapter Annual Meeting, Baton Rouge, Louisiana. Sept. 24, 2024. “Boxwood dieback.”
- LSU AgCenter Southeast Region Agent Training, Baton Rouge, Louisiana. July 22, 2024. “Plant Diseases and Disorders in Louisiana Landscapes.”
- Southern Plant Diagnostic Network Fall Virtual Meeting. Nov. 6, 2024. “New Plant Health Issues Detected in Louisiana.”
- LDAF CAPS Annual Meeting, Hammond, Louisiana. June 12, 2024. “New First Reports of Plant Diseases in Louisiana.”
- LSU AgCenter Tomato Field Day, Paulina, Louisiana. May 23, 2024. “Tomato Diseases and their Management.”
- LSU AgCenter Categories 7B, 7D, 8E Pesticide Recertification for Schools, Govt. Housing and Antimicrobial Pest Control, Alexandria, Louisiana. April 11, 2024. “Ornamental and Turfgrass Disease Identification and Management.”

Continued ▶

- Southwest Louisiana Garden Conference and Expo, Lake Charles, Louisiana. March 22, 2024. "Recognizing and Managing Diseases in Home Vegetable Garden."
- Landscape Professional Education Workshop, Baton Rouge, Louisiana. March 1, 2024.
- "Plant Diseases and Disorders in Louisiana Landscapes."
- Landscape Pest Management Workshop, Hammond, Louisiana. Feb. 22, 2024. "Insights for Landscape Diseases and Diagnostics."
- Louisiana Nursery and Landscape Association Monthly Webinar, virtual. Feb. 2, 2024. "Phytophthora Management in Nurseries."

Other Presentations

- LSU AgCenter Ornamental and Turfgrass Recertification Program, Kenner, Louisiana. Dec. 4, 2024. "Ornamental and Turfgrass Disease Identification and Management."
- Louisiana Master Gardener Training, Gonzales, Louisiana. Oct. 29, 2024. "Basics of Plant Pathology and Plant Diagnostics."
- LSU AgCenter Ornamental and Turfgrass Recertification Program, Opelousas, Louisiana. Oct. 3, 2024. "Ornamental and Turfgrass Disease Identification and Management."
- Louisiana Master Gardener Training, Covington, Louisiana. Sept. 5, 2024. "Basics of Plant Pathology and Plant Diagnostics."
- Louisiana Master Gardener Training, Lafayette, Louisiana. Aug. 29, 2024. "Basics of Plant Pathology and Plant Diagnostics.
- Louisiana Master Gardener Advanced Training, Microsoft Teams. Aug. 12, 2024. "Advanced Master Gardener Training."
- Louisiana Master Gardener Training, Natchitoches, Louisiana. May 13, 2024. "Basics of Plant Pathology and Plant Diagnostics."
- LSU AgCenter Ornamental and Turfgrass Recertification Program, Bossier City, Louisiana. March 20, 2024. "Ornamental and Turfgrass Disease Identification and Management."
- Louisiana Master Gardener Training, Bossier City, Louisiana. Feb. 15, 2024. "Basics of Plant Pathology and Plant Diagnostics."

Referred Publications

- Jung, T., Milenković, I., Balci, Y., Janoušek, J., Kudláček, T., Nagy, Z.Á., Baharuddin, B., Bakonyi, J. Broders, K.D., Cacciola, S.O., Chang, T.T., Chi, N.., Corcobado, T., Cravador, A., Đorđević, B., Durán, A., Ferreira, M., Fu, C.H., Garcia, L., Hieno, A., Ho, H.H., Hong, C., Junaid, M., Kageyama, K., Kuswinanti, T., Maia, C., Májek, T., Masuya, H., Magnano di San Lio, G., Mendieta-Araica, B., Nasri, N., Oliveira, L.S.S, Pane, A., Pérez-Sierra, A., Rosmana, A., Sanfuentes von Stowasser, E., Scanu, B., Singh, R., Stanivuković, Z., Tarigan, M., Thu, P.Q., Tomić, Z., Tomšovský, M., Uematsu, S., Webber, J.F., Zeng, H.C., Zheng, F.C., Brasier, C.M., Horta Jung, M. 2024. Worldwide forest surveys reveal forty-three new species in Phytophthora major Clade 2 with fundamental implications for the evolution and biogeography of the genus and global plant biosecurity. "Studies in Mycology" 107: 251-388. https://www.studiesinmycology.org/sim/Sim107/Vol107Art4.pdf

Awards and Honors

- Empowering Extension Excellence Award, LSU AgCenter Extension Summit

Committees

- National Plant Diagnostic Network Annual Meeting Program Committee
- National Plant Diagnostic Network Annual Meeting Awards Committee
- NACAA Southern Region Agronomy and Pest Management Professional Development Committee, vice chair
- Southern Hemp IPM Working Group
- Southeastern U.S. Vegetable Extension Working Group
- Southeaster U.S. Small Fruit Extension Working Group
- Plant Disease Journal, senior editor
- Citrus Clean Plant Network Tier II Governing Body
- Professional Excellence Recognition Committee, Louisiana County Agricultural Agents Association, chair
- Louisiana Citrus Growers Association, board member
- LSU COA Dean's Rep
- LSU COA Commencement Ceremony Marching Faculty
- LSU AgCenter Promotion and Tenure Committee
- LSU AgCenter Agricultural Faculty Council, member
- LSU AgCenter Horticulture Extension Committee
- LSU AgCenter Industrial Hemp Working Group
- PPCP Course and Curricula Committee

Continued ▶

- PPCP Graduate Student Admissions Committee
- PPCP Award and Publicity Committee
- PPCP Promotion and Tenure Committee

Grants and Contracts

- USDA NIFA Crop Protection and Pest Management Competitive Grants Program, IPM Extension Implementation Program for Louisiana. $281,116. Co-PD.
- USDA-NIFA, 2024 The Continental USA, Hawaii and Puerto Rico Citrus Clean Plant Network, National Clean Plant Network. $42,883. PI.
- USDA-NIFA-NPDN, 2024 Southern Plant Diagnostic Network, National Plant Diagnostic Network for the Food and Agriculture Initiative. $39,500. PI.
- Multistate USDA ARS SCRI, "TomSPOT, An Integrated Toolbox for Managing Tomato Bacterial Diseases in North America." $5,623,372 University of Florida Lead, Louisiana State University AgCenter $148,000, Ohio State University, Purdue University, University of Georgia, University of Puerto Rico. 2022-2026. Co-PI.

Visiting Scientists/Students

- Joselyn Madina, Zamorano University, August to December 2024

New Graduate Students

- Zoe Woody, M.S. student

Sara Thomas-Sharma

Invited Presentations

- 2024 Louisiana Agricultural Technology and Management Conference, Marksville, Louisiana. Feb. 8, 2024. "Translating spore peaks to soybean profits: Can targeted fungicide applications improve Cercospora leaf blight management?"

Other Presentations

- 2024 13th International Epidemiology Workshop, Foz do Iguaçu, Brazil. April 11, 2024. "One brick at a time: Building on epidemiological insights for improved management of Cercospora leaf blight on soybean in the mid-South."
- 2024 51st Annual Meeting of the Southern Soybean Disease Workers, Pensacola, Florida. March 7, 2024. "Can targeting fungicide applications to spore peaks improve the efficacy and economics of Cercospora leaf blight management?"
- 2024 Spring Seminar, Department of Plant Pathology and Crop Physiology, Baton Rouge, Louisiana. Feb. 28, 2024. "Micro- to macro-scale: Using epidemiological insights to improve soybean disease management."

Referred Publications

- Costa de Novaes, M.I., Robertson, C.L., Burk, D., Doyle, V.P., Thomas-Sharma, S. The distribution and sequestration of cercosporin by *Cercospora* cf. *flagellaris*. "Phytopathology." Published online: May 3, 2024. https://doi.org/10.1094/PHYTO-09-23-0310-R.
- Rodriguez-Herrera, K.D., Vargas, A., Doyle, V.P., Price, P.P., Moseley, D., Thomas-Sharma, S. 2024. Development of a greenhouse assay to screen soybean varieties for resistance to aerial blight caused by *Rhizoctonia solani* AG1-IA. "Key Challenges" focus issue, "Phytopathology" 114 (5): 1039-1049 https://doi.org/10.1094/PHYTO-10-23-0390-KC.
- Shrestha, B.K., Ward B., Allen, T., da Silva, E.T., Zulli, H., Dunford W., Doyle, V.P., Bradley, C.A., Buckley, B., Chen, P., Clubb, M., Kelly, H., Koebernick, J., Padgett, G.B., Rupe, J.C., Sikora, E.J., Spurlock, T.N., Thomas-Sharma, S., Tolbert, A.C., Zhou, X.-G., Price, P. 2024. Characterization of QoI-fungicide resistance in *Cercospora* isolates associated with Cercospora leaf blight of soybean from the southern United States. "Plant Disease" 108(1):149-161 https://doi.org/10.1094/PDIS-03-23-0588-RE.

Awards and Honors

- Selected to participate in the Hanover Grants Academy sponsored by the LSU AgCenter, 2024-2025.
- LSU's Communication Across the Curriculum

Committees

- Multi-State Hatch, S1083, Ecological and genetic diversity of soilborne pathogens and indigenous microflora, vice chair
- Southern Soybean Disease Workers, vice president

Grants and Contracts

- Louisiana Board of Regents, Departmental Enhancement proposal. "Critical infrastructure for agricultural science: acquisition of plant growth and dew chambers for improved plant pathology research and education.: $197,4000. July 1, 2024, to June 30, 2025. Richards, J., Doyle, V.P., and Thomas-Sharma, S.
- NCSRP, "Development and expansion of disease management decision-making tools across multiple soybean regions." Total funding: $315,000, Co-PI amount: $82,500. Jan. 1, 2024, to Dec. 31, 2024. Bradley, C., Smith, D., Thomas-Sharma., S., Price, T., Wilkerson, T., Allen, T., Kelly, H., Langston, D., Koehler, A., Faske, T., Esker, P., Collins, A., and Sikora, E.
- LSGRPB, "Evaluation of fungicide application timing and cultivar resistance for management of Cercospora leaf blight on soybean." $47,500. April 1, 2024, to

Continued ▶

March 30, 2025. Thomas-Sharma, S., Doyle, V., Price, T., Padgett, B., Bampasidou, M. and Conor, L. [

- LSGRPB, "Screening of soybean core block varieties for resistance to aerial blight." $33,060. April 1, 2024, to March 30, 2025. Thomas-Sharma, S., and Moseley, D.

Visiting Scientists/Students

- Shelby Bernard, intern, B.S., Sam Houston State University, Lafayette Frederick Diversity in Mentoring Award, spring 2024
- Dr. Abdulkadir Isa Dalha, Ph.D., Chungbuk National University, South Korea, 2024-present

Tristan Watson

Invited Presentations

- Brazilian Society of Nematologists, Foz de Iguacu, Brazil. September 2024. "Nematodes of sweetpotato in the United States."
- Pointe Coupee Sugarcane Variety Field Day, Morganza, Louisiana. May 2024. "Nematodes in sugarcane production."
- BASF Soybean Production Meeting, Port Allen, Louisiana. March 2024. "Things you may not know about nematodes... when and how to manage them."
- Louisiana Agricultural Technology and Management Conference, Marksville, Louisiana. February 2024. "Utilizing host resistance for reniform nematode management."
- Louisiana Agricultural Technology and Management Conference, Marksville, Louisiana. February 2024. "Nematode management in soybean."
- Louisiana Agricultural Technology and Management Conference, Marksville, Louisiana. February 2024. "Nematode management in sugarcane."
- Lamb Weston Grower Meeting, Poverty Pointe, Louisiana. February 2024. "Nematode management update for Louisiana."
- Avoyelles and Rapides Parish Sugarcane Production Clinic, Bunkie, Louisiana. February 2024. "Nematodes in sugarcane/soybean rotation."
- Cotton Consultants Conference, Fort Worth, Texas. January 2024. "Nematode management in cotton."

Other Presentations

- W5186 Multistate Project Meeting, Manoa, Hawaii. November 2024. "State Report: Louisiana."
- S1092 Multistate Project Meeting, Charleston, South Carolina. November 2024. "Reniform nematode management in Louisiana sweetpotato and cotton."
- Society of Nematologists Annual Meeting, Park City, Utah. August 2024. "From discovery to development of host resistance: the story of *Meloidogyne enterolobii* in Louisiana."
- AgPest Recertification Course, Alexandria, Louisiana. January 2024. "Nematode Management."

Referred Publications

- Faske, T.F., Watson, T.T., Desaeger, J., Duffeck, M., Eisenback, J., Floyd, Ch., Grabau, Z., Kelly, H., Kemerait, R., Lawrence, K., Mueller, J, Smith, M., Wheeler, T., Ye, Weimin. (2024) Summarized distribution of the reniform nematode, *Rotylenchulus reniformis*, in field crops in the United States. "Plant Health Progress" 25: 506-508.
- Galo, D., Santos Rezende, J., La Bonte, D.R., Watson, T.T. (2024) Identification of combined resistance to *Meloidogyne enterolobii* and *M. incognita* in sweetpotato genotypes. "Plant Disease" 108: 3092-3096.
- LaBonte, D.R., Power, I., Watson, T., Smith, T.P., Villordon, A.Q., Gregorie, J.C., Harvey, L. (2024) Avoyelles Sweetpotato. "HortScience" 59: 796-798.
- Watson, T.T. (2024) Cotton host resistance as a tool for managing *Rotylenchulus reniformis* in Louisiana. "Journal of Nematology" 56: e2024-1.
- Watson, T.T. (2024) On-farm evaluation of nematicides for *Rotylenchulus reniformis* management on sweetpotato in Louisiana, 2023. "Plant Disease Management Reports" 18: N0004

Committees

- Organization of Nematologists of Tropical America, president
- National Sweetpotato Collaborators Group, chair
- Nematropica, senior editor
- Plant Disease Management Reports, section editor
- Journal of Cotton Science, associate editor

Grants and Contracts

- Louisiana Sweet Potato Commission, "Evaluation of reniform nematode host resistance in sweetpotato cultivars." $5,500. 2024-2025. Watson, T.T.
- United Soybean Board, "Expanding the genetic base of southern root-knot nematode resistance in soybean." $282,920 total; $22,716 subgrant to LSU AgCenter. 2024-2025. Vieira, C., Grover, S., Nguyen, H., Faske, T., Watson T.T.
- USDA-NIFA, Crop Protection and Pest Management – Extension Implementation Program, "IPM extension implementation for Louisiana." $281,116. 2024-2025.

Continued ▶

Raghuwinder, S., Villegas, J.M., Watson, T.T., Ashbrook, A., Davis, J.A., Webster, C.

- Mid-South Soybean Board, "Southern root-knot nematode in maturity group 4 soybean: characterization of resistance mechanisms and breeding for resistance." $65,000 total; $15,000 subgrant to LSU AgCenter. 2024-2025. Faske, T., Feng, L., Vieira, C., Nguyen, H., Watson, T.T.
- American Sugar Cane League, "Establishment of an integrated nematode management program for sugarcane." $6,500. 2024-2025. Watson, T.T.
- Louisiana Soybean and Grain Research and Promotion Board, "Characterization and validation of reniform nematode resistance in soybean." $32,167. 2024-2025. Watson, T.T.
- Louisiana Soybean and Grain Research and Promotion Board, "Integrated approaches to southern root-knot nematode management in soybean." $32,667. 2024-2025. Watson, T.T.
- Cotton Incorporated – Louisiana State Support Committee, "Cotton host resistance and nematicides as tools for nematode management in Louisiana." $6,500. 2024. Watson, T.T.

Visiting Scientists/Students

- Natalia Freitas, Brazil
- Cira Rivera. Honduras
- Isabella Oliveira, Brazil

New Graduate Students

- Timothy Miller, M.S. student

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