

November and December PLP newsletter

The Spore Print (12/04/2023) Department of Plant Pathology September Newsletter

Please enjoy these updates from our department!

Best wishes

- Ko, representing the editorial team: Elliott, Madan, Kristen, Roshani, Katelyn, Joseph, Ninh, Sam, Anita, Monique, Xianming, and Cynthia.

<u>Click here to access the past newsletters!</u> You will also be able to download the PDF version there.

If you have any feedback, please fill out the <u>questionnaire</u> for the Spore Print!

Student Spotlight

Leah Morrison



Degree Sought: Master

Advisor: Dr. Cynthia Gleason

Academic Background: BA in Biology with a minor in environmental studies from Wartburg College, Waverly, Iowa in 2022.

Leah joined the Plant Pathology department as a Master student in Fall 2022. Her research focus is on root knot nematodes.

What made you interested in plant pathology?

• I learned about *Agrobacterium tumefaciens* in a microbiology course in my 3rd year of undergrad and that made me want to look into more plant pathogens!

What is your favorite plant pathogen?

• The root-knot nematode, obviously!

What are your hobbies?

• I love reading, hiking, watching movies, and spending time with my cat, Tilly.

Do you have any Pets?

• I have a cat named Tilly.

What is something interesting most people don't know about you?

• I'm a certified wildland firefighter.



1 - Tilly

Updates



Thank you Tammy!

Tammy Cunningham has served our department since 2019 as our Administrative Manager with her amazing work ethic, sense of service, efficiency, warmth, and incredible energy to help faculty, staff, and students.

Tammy won't be far away from us! She will serve as the admin for the Department of Crop and Soil Science, located in Clark Hall.

Good luck with your new position!



Thesis Defense and Prelim Results

Scott Anderson successfully passed his PhD defense on November 8, 2023. Dr. Cynthia Gleason led his committee. Congratulations Scott!

Marilen Nampijja successfully passed her preliminary exam on November 8, 2023. Her committee was lead by Dr. Lindsey du Toit. Congratulations Marilen!

Henry Hurt successfully passed his Masters Examination on November 9, 2023. His committee was led by Dr. Kiwamu Tanaka. Congratulations Henry!

Stephanie Crane successfully passed her Masters Examination on November 14th. Her committee was led by Dr. Lindsey du Toit. Congratulations Stephanie!



2 - Henry Hurt and Scott Anderson celebrate passing their defenses.

Diversity, Equity, and Inclusion Updates

Plant Pathology DEI Committee Releases Gaza Conflict Statement

"Recent events in Israel and the Gaza strip have resulted in the loss of thousands of innocent lives. Tensions have mounted globally as the conflict has grown. We categorically condemn the violence directed at innocent victims and mourn the loss of innocent life in Israel and Gaza. It is important to remember, in the face of these events, that antisemitism and islamophobia are unacceptable."

This statement was written, in large part, by Dr. Devin Rippner, USDA-ARS, in collaboration with other members of the Prosser IAREC DEI Committee.

Members of the Department of Plant Pathology DEI Committee fully endorse the statement written by the IAREC DEI Committee and stand firmly behind the assertion that antisemitism and islamophobia are unacceptable.

Hate flourishes in silence. Members of the Department of Plant Pathology support our community and stand against prejudice. Discrimination in any form has no place in our community.

See WSU President Schulz's related statement from October 17th, 2023, titled '<u>Caring for Cougs in times</u> of crisis' and WSU Chancellor Elizabeth Chilton's related statement on December 01, 2023, titled '<u>Cougs</u> help Everyone.'

- Lindsey du Toit, Chair of the Department of Plant Pathology, and members of the Department of Plant Pathology DEI Committee:
 - Dr. Maren Friesen, Chair
 - Dr. Jana U'ren, Vice-Chair
 - Dr. Sapinder Bali
 - Dr. Prabu Gnanasekaran
 - Samodya Jayasinghe
 - Ninh Khuu
 - Elliott Marston
 - Dr. George Vandermark

November 10, 2023

DEI Spotlight: BioRISE - Biological Resilience for Indigenous Systems Empowerment.

The BioRISE project "weaves together Indigenous Ways of Knowing with Western Science to address issues of molecular, organismal, regional, and global importance." BioRISE launches this fall at Washington State University and University of Idaho and plans to develop Tribal Nations projects designed to increase Native capacity and skills for scaling solutions to environmental and ecological challenges. Understanding and protecting the unique ecosystems of the Pacific Northwest unites college graduates, Native knowledge holders, and researchers, including our own **Dr. Maren Friesen**.

BioRISE is part of the NSF's Research and Mentoring for Postbaccalaureates (RaMP) program. The program will be lead by Tara Sullivan, WSU soil scientist, in partnership with the the Nimiipuu (Nez Perce) and Schitsu'umsh (Coeur d'Alene) Tribes. "Tribal communities have tens of thousands of years of ecosystem knowledge," said Sullivan, associate professor of soil microbiology at WSU's <u>Department of Crop and Soil Sciences</u>. "Through BioRISE, we're supporting a fundamentally different way of thinking about capacity building and supporting tribes. We're upholding tribal sovereignty and self-determination through co-creation of projects and shared knowledge systems," Sullivan said.

Read more about BioRISE in this WSU Insider article, their latest press release, or the BioRISE website.



Herbarium Happenings: Shaw Mycological Herbarium

WSU Anthropology Students Visit Herbarium - In early November a group of 3 graduate students (Haden Kingrey, Sonya Sobel & Jordan Thompson) and 1 undergrad student (Jackson Hammill) studying archaeology here at WSU Pullman came to the Shaw Herbarium for a special tour with Monique. They wanted to learn more about mycological specimens with relevance to early human cultures, so we spent a fascinating 2 hours viewing and discussing a wide variety of edible, medicinal, psychoactive and mythological fungi! They asked many in-depth questions and also provided insights from their own research and personal interest studies. Of particular interest to them were specimens of 2 of the same species of macrofungi found with the famous 5000+ year-old mummy Ötzi the Iceman, found in the Austrian Alps in 1991. They also enjoyed examining some Chinese medicinal species, corn smut, and examples of edible fungi found on our department's recent Fall Fungal Foray - in fact all 4 students expressed great interest in joining our next Foray, hopefully in the spring!



3 - Visiting WSU Anthropology students examine a specimen of Hericium, an edible fungus. L-R: Jackson, Jordan, Sonya, and Monique Slipher (Collections Manager) - photo by Haden.



Events in Pullman and REC Locations

Please contact the corresponding person for more details!

Pullman Events



Monday Coffee hours

Join us **every Monday at 3.00 pm - 4.00 pm in Clark 299** for coffee and snacks before seminar. All are invited!! The coffee hour on 12/4 will be the last one of the semester.

MPS Friday Coffee hour

MPS (Molecular Plant Sciences) coffee hour will be happening this **Friday from 1-2:30 every other week**. Free coffee and tea will be from the CUB Starbucks as it is free for graduate students on Fridays. We will be meeting outside in the shade in front of the CUB.

White Elephant Gift Exchange

Please join us for the upcoming White Elephant Gift Exchange on 12/6 from 11 am - 1 pm at Ensminger Pavilion! If you would like to volunteer to help with set up or tear down, please <u>sign up here</u>. If you need a reminder about how white elephant gift exchanges work, you can find an explanation <u>at this link</u>.

Dr. Gerald Holmes of the Cal Poly Strawberry Center visits WSU Plant Pathology Department as the Graduate Student Invited Speaker.

By Mary Steele

Dr. Gerald Holmes, Director of the Cal Poly Strawberry Center in San Luis Obispo, CA, visited the WSU Plant Pathology department in Pullman on Monday, November 6th as the Fall 2023 graduate studentinvited speaker, coordinated by the Plant Pathology Graduate Student Organization. Dr. Holmes met individually with several Plant Pathology faculty members and interacted with graduate students over the course of three meals. Dr. Holmes also presented a seminar to the department on his work at the Strawberry Center and how it serves as a model for applied research and extension in agriculture.



4 - Group picture with Dr. Holmes



5 - Dr. Holmes lunch with Graduate Students

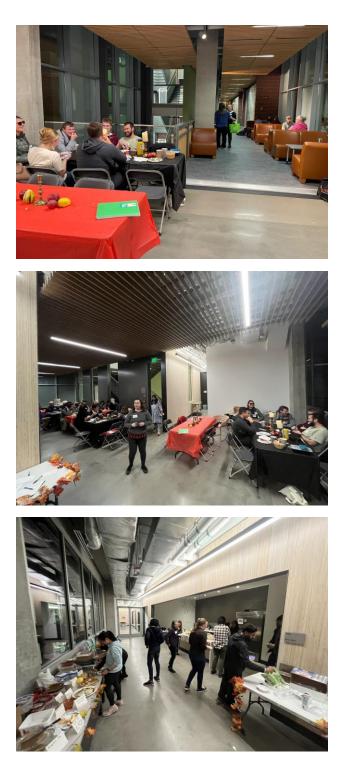


6 - Dr. Holmes touring department labs with Elliott Marston and Mary Steele



The Plant Pathology Graduate Student Organization is grateful to Dr. Holmes for taking the time to visit WSU and looks forward to continued collaboration with plant pathologists from around the country. The Plant Pathology Graduate Student Organization thanks the Department of Plant Pathology, WSU Graduate and Professional Student Association and CougParents Fund for funding this event.

Friendsgiving and Plant Exchange



Over 50 people attended this year's joint Thanksgiving event between the MPS, Horticulture, and Plant Pathology Department! Thank you to the PPGSO and the FUN committee, as well as the MPS GSO and the Horticulture department for contributing to a wonderful event. Attendees also participated in a plant swap. We had such a great time, we forgot to take proper pictures, haha.

Wenatchee Events

TFREC welcomes Dr. Lindsey du Toit

On November 1st 2023, Lindsey du Toit, the the first woman to lead Washington State University's Department of Plant Pathology as full chair, visited Washington State University- Tree Fruit Research and Extension Center (WSU- TFREC) at Wenatchee, Washington. She had a meeting with students, PostDocs and Scientific Assistants from Dr. Amiri's lab about the research works and also the problems students and PostDocs face while working at TFREC.

Dr. Lindsey du Toit is internationally recognized for her work in protecting vegetable seed crops from diseases and she is focused towards preventing threats in the global food supply from fungi, bacteria, virus and nematodes.



7 - Dr. Lindsey du Toit: Department Chair, Alfred Christianson Distinguished Professor of Vegetable Seed Pathology & Extension Plant Pathologist.

Mount Vernon Events

NWREC Tour to high school students

On November 3rd, 2023, NWREC welcomed 25 high school students from Aspire Academy to learn about the lab and field research works happening in the facility. Graduate student representatives from different labs showcased their research in simple terms. Roshani Baral and Purnima Puri also presented their research work, representing the Department of Plant Pathology and highlighting the importance of plant pathology in the field of agriculture.

Lunch and Learn Seminars

In November and December 2023, NWREC hosted two Lunch and Learn seminars.

On November 7th, 2023, **Dr. Nick Bond**, a climatologist for the state of Washington, discussed "Water Supplies in NW Washington State in Future Decades", providing valuable insights into the region's future challenges and opportunities.

On December 1st, 2023, **Dr. Cindy R. Elliser**, with over 20 years of expertise in marine mammal studies, presented 'The Secret Lives of Harbor Porpoises", shedding light on the mysterious world of these marine inhabitants.



8 - Roshani and Purnima along with their research demonstration set up.

Prosser Events

The fall leaves are giving way to blankets of snow as December hits!

Dr. Gary Grove has finished up a busy cherry canker field season. Dr. Grove has identified one bacterial and three fungal pathogens that cause cankers on cherry trees.

Dr. Scott Harper presented at the Entomological Society of America meeting in Maryland on Vector Borne Diseases as part of the One Health Initiative.

Dr. Frank Zhao was the plenary speaker at the Korean Society for Plant Pathology Fall Meeting in Jeju, Korea. Frank also visited Seoul National University in Seoul, Korea during his visit. Katelyn Kiick will be presenting her MS exit seminar and plans to defend in January. As Katie finishes up, Frank would like to welcome Sudeep Poudel as an incoming PhD student in his lab. Sudeep will be joining Harpreet Kaur and Mason Hoskins (Harper Lab) as the three new Plant Pathology grad student students in Prosser!



9 - Dr. Frank Zhao speaks at the KSPP Fall Meeting in Jeju, Korea.



10 - Snowy display tractors in front of IAREC

Postdoc (PRPA) Happenings

The Postdoctoral and Research Professional Association (PRPA) hosts Moscow-Pullman Science Happy Hour every Friday at 5:30-7:30sh. The venue changes every week. To stay updated, sign up <u>here</u>!

To be a part of PRPA, go here, and fill in your name and email.

Publications



Bali, S. and **Gleason, C**. Unveiling the diversity: Plant parasitic nematode effectors and their plant interaction partners. (2023). *Molecular Plant Microbe Interactions*. <u>https://doi.org/10.1094/MPMI-09-</u>23-0124-Fl

Basu, S., **Moroz, N**., Lee, B.W., **Tanaka, K**., Oeller, L., Baerlocher, C.W., and Crowder, D.W. Diversity and Traits of Multiple Biotic Stressors Elicit Differential Defense Responses in Legumes. (2023). *Agriculture*, 13(11). <u>https://doi.org/10.3390/agriculture13112093</u>

Brooks, R.K., Omdal, D., Brown, S., Marshall, C.J., **Hulbert, J.M.**, **Elliott, M.**, and **Chastagner, G**. *Cryptostroma corticale*, the causal agent of sooty bark disease of maple, appears widespread in western Washington State, USA. (2023). *Forest Pathology*, 00:e12835. <u>https://doi.org/10.1111/efp.12835</u>

Divya, K., Zhai, Y., Makeshkumar, T., Moriones, E., and **Pappu, H.R.** (2024). Chapter 6 - Genome Editing Strategies: A Way Forward for Developing Resistance Against Plant Viruses. In Chakrabarty, P.K., Mondal, K.K., Saharan, M.S., Mayee, C., and Kumar, J. (Eds), *Advances in Plant Disease Management: Volume I: Fundamental and Basic Research*. CRC Press. <u>https://doi.org/10.1201/9781003403142-6</u>

Lavagi-Craddock, I., **Harper, S.**, Krueger, R., Quija-Lamina, P., and Vidalaki, G. (2024). Chapter 18 - Policies, regulations, and production of viroid-free propagative plant materials for sustainable agriculture. In Adkar-Purushothama, C.R., Sano, T., Perreault, J.P., Yanjarappa, S.M., Di Serio, F., and Daros, J.A (Eds), *Fundamentals of Viroid Biology* (pp. 337-361). Academic Press. <u>https://doi.org/10.1016/B978-0-323-99688-4.00023-7</u>

Lowder, S., **Moyer, M.M**., Cooper, M.L., Pscheidt, J., and Mahaffee, W.F. Perspectives towards collective action for pest and disease management in vineyards in the western US. (2023). *PhytoFrontiers*. <u>https://doi.org/10.1094/PHYTOFR-07-23-0082-R</u>

Petipas, R.H., Antoch, A.A., **Eaker, A**., Kehlet-Delgado, H., and **Friesen, M**. Back to the future: Using herbarium specimens to isolate nodule associated bacteria. (2023). *Ecology and Evolution*, Preprint. <u>https://doi.org/10.22541/au.169901127.73904672/v1</u>

Shires, M.K., Molnar, C., Wright, A.A., Bishop, G., and **Harper, S.** Distribution and frequency of little cherry virus 2 genotypes in both production and ornamental fruit trees in the Pacific Northwest. (2023). *Plant Health Progress,* 0 0:ja. <u>https://doi.org/10.1094/PHP-09-23-0077-S</u>

Special Mention:

Scheuerman, K. Weaponizing Wheat: How Strategic Competition With Russia Could Threaten American Food Security. (2023). *Joint Force Quarterly*, 34-49. NDU Press. <u>https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-111/jfq-111.pdf</u>

Karl Scheuerman is currently a reservist in the Tri-Cities with an MS from the National Defense University. Karl is a native of the Palouse and his family is in <u>agriculture</u>. Drs. Tim Murray and Mike Pumphrey were interviewed by Karl and contributed information for his research paper on the weaponization of wheat. Karl submitted his paper to the annual <u>Secretary of Defense and National Security Essay Competition</u> and won first place.

Funding & Opportunities



• Western SARE Graduate Student Research and Education Grant

Find more information here. The grant application are Due on December 7th 2023

• American Phytopathological Society Funding (All students - must be an APS member)

APS has multiple applications for student fellowships open now. Student members are eligible to apply. Please find more information <u>here</u>.

• TA position opportunity in School of Biological Sciences

If you are interested in a TA position in the School of Biological Sciences this fall, please contact Kara McClanahan at <u>karamac@wsu.edu</u>

• 2024 Emerging Research Issues (ERI) grant program

The deadline for proposal submission is January 8th 2024. There will be two Q&A sessions in December as described in the RFP. (Please check the email from [auto_cahnrs_facu] ERI Grant Program RFP)

https://cahnrs.wsu.edu/research/grant-resources/internal-competitive-grants/

GPSA Travel Grants

GPSA travel grants are available all year round and are awarded as reimbursements post travel, for our of pocket travel costs. Pullman Service and Activity fee paying students are eligible to apply. Please see all information at GPSA grants website <u>here</u>. Contact <u>gpsa.granst@wsu.edu</u> if you have questions.

• Here is a list of all available fundings worldwide. Please login using your WSU account and refine the search.

https://pivot.proquest.com/session/login



Seminars

Dr. Jeff Anderson from Oregon State University (<u>https://bpp.oregonstate.edu/users/jeff-</u> <u>anderson</u>) will be our Student Invited Guest Speaker Spring 2024!



Dr. Jeff Anderson from Oregon State University (<u>https://bpp.oregonstate.edu/users/jeff-anderson</u>)

Dr. Xianming Chen will be leading the seminars this coming fall. Please direct all questions about seminar towards Dr. Chen at <u>xianming@wsu.edu</u>.

Department of Plant Pathology Seminar, Location: Clark Hall 149 (Every Monday, 4:10pm to 5:00pm)

Zoom link

Meeting ID: 951 0261 0389 Passcode: 4417 Call in number: 1 646 558 8656

December 4 - Katelyn Kiick

Molecular Plant Science seminar, Location: BLS402 (Every Wednesday, 12:10pm to 1:10pm)

Email molecular.plants@wsu.edu for the zoom link (or ask Ko!)

December 6- Itsuhiro Ko

Department of Horticulture seminar, (Every Thursdays, 2:55pm to 4:05pm)

Please use the <u>Seminar Registration</u> page to receive information to join the seminar remotely. Location: Pullman – Clark 151, Mount Vernon – Annex East, Puyallup – K109, Tri-Cities – WSC 201

December 7 Gustavo Teixiera Tropical fruit research-

Dept. of Crop and Soil Sciences Seminar, Location: FSHN 354 (Every Monday, 2:10pm to 3:00pm)

zoom link Meeting ID: 948 3236 9338. Passcode: 349823

December 4 Viviana Medina Rodriguez 'Climate-Smart Caribbean: Enabling climate-smart decisions for agriculture in Puerto Rico and the USVI'

IBC seminar

Location: BLS 402

December 15, 2023 Dr. Uta Paszkowski, Professor, Crop Science Centre, Cambridge University "TBD" To be held via Zoom, 9:00am – 9:50am

Jobs



Graduate Research Positions

• None at this time.

Post-Doctoral Positions

- Drs. Uehling and Grunwald at OSU have an open population and phylogenomics postdoc position. Start dates are flexible for the 12-month position based out of Corvallis, OR. Apply <u>here</u>.
- Dr. Gao with the USDA-ARS Small Grains and Potato Germplasm Research Unit in Aberdeen, Idaho has an open postdoc fellowship in barley genetics and bioinformatics. In interested, email a cover letter, CV, and 1-2 references to dongying.gao@usda.gov.

Technician, Industry, and Other Non-Academic Positions

 WSU Extension is recruiting an Extension Business Operations Team (EBOT) Manager to provide business support for the extension programs run by faculty and staff across the state. Learn more <u>here</u>.

Faculty Positions

- Cornell University, Section of Horticulture has an open Assistant Professor position in the area of Seed Biology and Technology. This is a tenure track; 60% research, 40% extension position. Apply <u>here</u>.
- There is a tenure track mycologist position available at the University of Hawai'i. The job requires 30% instruction, 35% research, and 35% extension with an 11-month appointment. Apply at this <u>link</u>.

Contact us



If you have an item you would like included in the newsletter, email it to Itsuhiro.ko@wsu.edu.

Also, please complete this questionnaire to help us improve our newsletter. We appreciate your feedback!

https://forms.gle/DubmGBiAjbEfyeqW9