



The Spore Print (2/26/2024) Department of Plant Pathology February 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

Henry Hurt



Degree: Master (Graduated in 2023 Fall)

Advisor: Dr. Kiwamu Tanaka

Academic Background: BA in Environmental Science from University of Richmond, Richmond VA in 2020. Henry Joined the Plant Pathology department in Fall 2021 as part of Dr. David Wheeler's lab before switching to Dr. Tanaka's lab in 2022. His research focus was on edible mushroom cultivation techniques.

- What made you interested in plant pathology? I started out interested in mycology and when I learned that >75% of plant pathogens are fungal, I was hooked.
- What is your favorite plant pathogen? *Puccinia graminis*. I think it exemplifies just how wacky and complicated some plant pathogen life cycles can be!
- What are your hobbies? I enjoy cooking, knitting, and painting models. Basically, making things!
- What is something interesting most people don't know about you? I was home schooled until 9th grade.

• What would you like to do after graduation? I'm trying to get a job in agricultural extension or research, and I'd like to grow rare mushrooms when I get the space.

Updates



WSU faculty presented at Washington & Oregon Potato Conference 2024

Dr. Hanu Pappu presented "A tale of two viruses: potato mop top and potato virus Y"

Dr. Kiwamu Tanaka presented "Silver scurf: modest threat yet significant cosmetic influencer"

Dr. Cynthia Gleason presented "**Update on the development of a systems approach to nematode control in U.S. potato**,"

Dr. Tim Paulitz presented "The underground world of the potato microbiome- from bacteria to nematodes"









Dr. Kayla Spawton hired as Seed Potato Germplasm Program Director at University of Idaho



After spending five years away from the Palouse, potatoes have brought Kayla back to the Palouse where she has been hired as the Director for Seed Potato Germplasm Program. You can find her office at the Seed Potato Germplasm Laboratory on the U of I campus. Stop by or give her office a call at 208-885-6663 to say hi!

You can find the website here or email Kayla at Kspawton@uidaho.edu

Thesis Defense and Prelim Results

Are you a Plant Pathology graduate student graduating in Spring or Summer 2024? Please fill out the form below to let us know your preferred graduation mud design. This will be a graduation gift to you from PLPGSO (no charge to you \bigcirc).

https://docs.google.com/forms/d/e/1FAIpQLSfMkwc287B_rEg5jwNWymnAGDyosqix1EnxFEr6oLrsfIUzqg_/viewform?usp=sf_link

Diversity, Equity, and Inclusion Corner (special two segment edition!)

"As part of Washington State University and the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS), the Department of Plant Pathology is committed to creating and maintaining a diverse, equitable, and inclusive learning and working environment for students, staff, faculty, and the communities we serve and in which we operate.."

You can read the rest of the Department's DEI statement and find links to resources here.



2 - Dr. George Washington Carver's mobile classroom, the Jesup Wagon.

February is Black History Month! First celebrated in February 1926 as "Negro History Week," the event was the brainchild of Dr. Carter G. Woodson, founder of the Association for the Study of Afro-American Life and History (ASALH). The goal of the celebration was to recognize the achievements in Black history and over the decades it has evolved into Black History Month. This change was made possible through nationwide protests around racial injustice and inequality that occurred alongside universities and colleges leading the charge to establish Black History Month at their campuses. Fifty years after the first celebration, President Gerald R. Ford was the first president to official recognize Black History Month to "seize the opportunity to honor the too-often neglected accomplishments of Black Americans in every area of endeavor throughout our history."

One such Black American is George Washington Carver, agricultural scientist, inventor, and professor. Born into slavery, Dr. Carver was a pioneer becoming the first black student at Iowa State, first black student to earn a masters degree at Iowa State, and then the first black faculty member at Iowa State before starting his career as the head of the Agriculture Department at Tuskegee University. Dr. Carver promoted the importance of crop rotation as a means of combating soil nutrient depletion while authoring 44 bulletins during his 47-year career at Tuskegee. Over his storied career, Dr. Carver kept his focus simple: provide farmers the means to improve their lives through improved farming techniques. He achieved this through an innovative mobile classroom called the Jesup Wagon that brought the advances from the University to farmers where they lived. One of Dr. Carver's many recognitions includes the USDA Agricultural Research Service headquarters being named in his honor. You can read more about Dr. Carver here.

For more resources, you can visit <u>blackhistorymonth.gov</u> or <u>WSU Libraries Black History Month</u> Resources.



3 - US Postage Stamp honoring Dr. Barbara McClintock

Similar to Black History Month, Women's History Month started off as National Women's History Week in 1980, but it was not until 1987 that March was recognized as Women's History Month. The month celebrates the contributions that women have made to the United States. Within our own department, Dr. Lindsey du Toit is the first woman to be appointed Chair (but we have not forgotten about Dr. Lori Carris's tenure as interim chair!). To quote WSU Vancouver, "In general, women constitute a majority of the U.S. population and earn more baccalaureate, graduate and doctoral degrees than men. Yet, women remain underrepresented in leadership positions...The gender wage gap is wide for women in general, and widest for women from historically excluded racial and ethnic groups." As we celebrate this March, we must also remain committed to the goal of eliminating these inequities through education and action throughout the year.

Nobel Laureate Barbara McClintock is one woman whose history is worth celebrating. She was a maverick in cytogenetics with discoveries that include experimentally demonstrating genetic recombination and transposable elements. Dr. McClintock's transposon work was awarded with a Nobel Prize, becoming the first (and remains the only) woman to earn a solo Nobel in Physiology or Medicine. Her scientific achievements broke many barriers, becoming the first woman to earn the National Medal of Science, MacArthur Genius Grant, Thomas Hunt Morgan Medal, and many more. Born at the turn of the 20th century, Dr. McClintock would have been part of the first group of women who were granted equal voting rights as men. It is this background that makes her scientific contributions even more amazing. Click here to read more or about transposable elements.

Starting in March, you can learn more <u>here</u>. In the meantime, you can learn about one inequity faced by women in the workplace called <u>Non-Promotable Tasks</u> (NPTs) and ask what can you do to help address this issue?

Herbarium Happenings: Shaw Mycological Herbarium



CELEBRATING BLACK HISTORY MONTH - George Washington Carver's contributions to Mycology

Many today recognize George Washington Carver as a renowned Black agricultural scientist and inventor (as described elsewhere in this newsletter), but few know that he was also an avid amateur mycologist who collected extensively throughout his career. He had a true talent for collecting fungi, and a particular gift for finding rare and new species. Since he lacked formal mycological training and sophisticated diagnostic equipment, Carver often sent his fungal finds to the noted mycologists of his day in exchange for help with identification questions. Thus many of Carver's specimens ended up in the exsiccati (sets of specimens for exchange) of other scientists like J.B. Ellis, B.M. Everhart, and F.S Earle - which in turn were shared with other institutions, including our Shaw Herbarium. Many of Carver's original collections are still housed at the NY Botanical Garden; to read more about his mycological achievements visit their web page: https://sciweb.nybg.org/science2/carver.asp.html

Our Herbarium holds 49 specimens originally collected by Carver between 1895 and 1910, mostly from Tuskegee Alabama. A few of those are highlighted in the attached photos, showing fungi affecting crops and garden plants common in the South. Opening one of these packets from Carver to see a leaf or stem he himself collected and studied feels like literally touching history!



4 - Carver collection of a Leaf Spot on Catalpa tree leaf portion



5 - Carver collection of a Leaf Spot on corn



6 - Carver collection of a Stem Rot on Cotton stems



7 - Carver collection of Violet Rust on a wild Viola sp.

Events for graduate students hosted by Graduate and Professional Student Association



by Anita Paneru (Plant Pathology GPSA Senator) <anita.paneru@wsu.edu>

Upcoming Professional Development Initiative Events:

- March 6 @ 10:00 am 12:00 pm <u>Secrets to Successful Public Speaking and Communications</u>
 Where: Butchs Den, CUB L60, Facilitated by Cindy Hollenbeck <u>REGISTER HERE</u>
- March 20 @ 11:00 am 1:00 pm <u>Graduate Writing Center Collaboration</u> Where: Zoom, Facilitated by Graduate Writing Center Team <u>REGISTER HERE</u>
- March 28 @ 10:00 am 12:00 pm Writing Steps & Tips for a Literature Review: A Graduate
 Writing Center Collaboration Where: Zoom, Facilitated by Graduate Writing Center REGISTER
 HERE

Upcoming GPSA Social Events:

- March 1 @ 11:00 AM Restaurant Fridays: Rico's Public House Location: Rico's Public House
- March 8 @ 6:00 PM GPSA Sexual Health Awareness Drag Bingo Location: CUB Senior Ballroom
- March 20 @ 5:00 PM Rock Climbing and Pickleball Event Location: UREC Climbing Wall
- March 25 @ 7:30 PM GPSA Full Moon Sound Bath Location: Library Atrium

More information on events and opportunities offered by GPSA can be found <u>here</u>.

Events in Pullman and REC Locations



Please contact the corresponding person for more details!

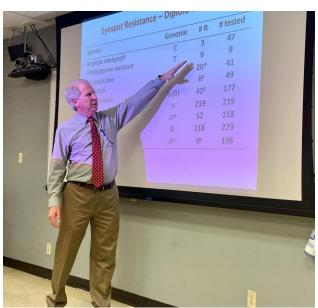
Pullman Events

In January we were honored to hear a seminar by Dr. Tim Murray on the course of his career in WSU's Department of Plant Pathology. Dr. Murray received both his MS and PhD from WSU and joined the faculty of the department of Plant Pathology in 1983 as a small grains pathologist. Since joining as faculty, Dr. Murray has had a huge impact on cereal production in Washington state through his research program while also taking the time to teach, mentor students and post-docs, and lead our department as Department Chair (twice!). The advice at the core of Dr. Murray's overview of his career as a research scientist was to enjoy your work and find pleasure in chasing the answers to your research question. He also urged the department to stay curious, and to never stop reading and learning outside of our own field of study. Special thanks to Dr. Hanu Pappu for the photos.



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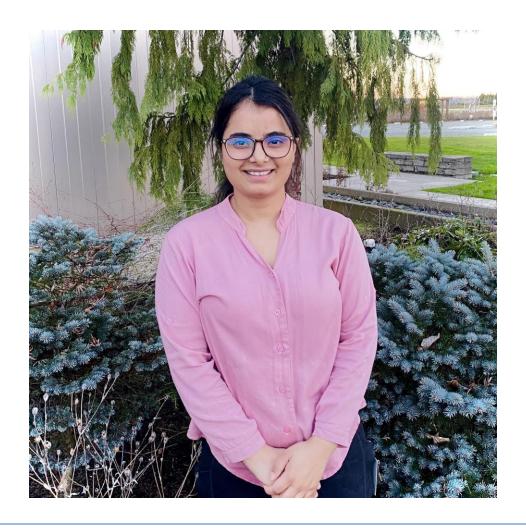
Wenatchee Events

February was a quiet month in Wenatchee

Mount Vernon Events



Congratulations to Roshani Baral and Purnima Puri who both won an <u>Alfred Mark Christianson Memorial</u>
<u>Fellowship</u>, which support their agricultural studies and their future farming or research careers. Their
names will be added to the plaque in the NWREC lobby in honor of Mark.



Congratulations to Mary Steele received a <u>Martin Stoner Travel Scholarship</u> to attend the 2024
Conference on Soilborne Plant Pathogens held jointly with the APS Pacific Division Meeting in Corvallis,
OR (March 26-28, 2024). She worked with her master's advisor (<u>Dr. Shashika Hewavitharana</u>) to submit
the scholarship application, and she will present findings from her master's research focused on soilborne
plant pathogens of strawberries.



Lunch and Learn with Karen Lackerman

Karen Lackerman, from Corteva Agriscience, shared invaluable insights at the Lunch and Learn seminar at Northwestern Washington Research and Extension Center on February 19, 2024. She provided practical advice on succeeding in industrial careers, emphasizing the importance of tailoring curriculum vitae for industrial job applications.

Western WA Potato Workshop

On February 23, 2024, stakeholders from various sectors, including potato growers, industry professionals, extension specialists, and researchers, gathered for the Western WA Potato Workshop at Sakuma Auditorium at Northwestern Washington Research and Extension Center, Mount Vernon. Dr. Chakradhar Mattupalli, along with his master's student Purnima Puri, presented the updates from the ongoing potato research conducted by the Berry and Potato Pathology Program.





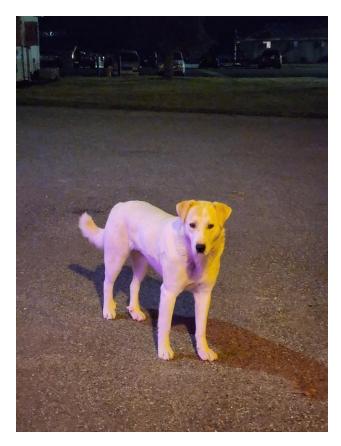
Prosser Events

February was a quiet month in Prosser. Mason has done a great job of setting up a coffee station for hosting our own pre-seminar Coffee Hour that is open to anyone! We have had faculty, post-docs, staff, and students from various departments.

Aside from that, we have local dogs roaming the campus.



9 - MS Student, Mason Hoskins, holding up our Coffee Station Donation Jar



10 - Bullet, one of the local dogs that appears on campus.

Postdoc (PRPA) Happenings

Publications



Basaid, K., Chebli, B., Bouharroud, R., Elaini, R., Furze, J. N., Filali alaoui, I., Kaoui, S., Zaidouni, S., **Paulitz, T.**, and Mayad, E. H. (2024). Synergy between plant essential oils and Pseudomonas isolate secondary metabolites against the two-spotted spider mite Tetranychus urticae Koch. PREPRINT. https://doi.org/10.21203/rs.3.rs-3911181/v1

Grunwald, N. J., Bock, C., Chang, J. H., Alves de Souza, A., Del Ponte, E., **du Toit, L. J.**, Dorrance, A. E., Dung, J. K. S., Gent, D. H., Goss, E. M., Lowe-Power, T., Madden, L. V., Martin, F. N., McDowell, J. M., Naegele, R., Potnis, N., Quesada-Ocampo, L., Sundin, G. W., Thiessen, L., Vinatzer, B., and Zeng, Q. (2024). Open access and reproducibility in plant pathology research: guidelines and best practices. *Phytopathology*, 0 0: ja. https://doi.org/10.1094/PHYTO-12-23-0483-IA

Parks, J. M., and **Friesen, M. L.** (2024). The role of plant-microbe interactions in legume non-legume intercropping success. *Plant Soil.* https://doi.org/10.1007/s11104-024-06550-9

Sowders, J. M., Jewell, J. B., and **Kiwamu, T.** (2024). CPK28 is a modulator of purinergic signaling in plant growth and defense. *Plant Journal*. https://doi.org/10.1111/tpj.16656

Funding & Opportunities



- Departmental travel grant to attend professional meetings from April 2024 through September 2024.
 - Please note that only graduate students and postdoctoral research associates (within 5 years of receiving a PhD degree) in the Department of Plant Pathology are eligible to apply for these awards. I encourage you to submit an application following all the guidelines outlined in the RFA. Should you have any questions, please feel free to contact me.
 - Application deadline: March 15, 2024.
 - Submission: Submit your proposal as a single PDF document by email to Chakradhar Mattupalli (c.mattupalli@wsu.edu) and your advisor (& co-advisor, when applicable).

• WSU general scholarship application

 The deadline has been extended to May 1. Some scholarships are available for CAHNRS students. Find the application and information here.

APS foundation funding

Multiple funding opportunities are available through the American Phytopathological Society to travel to the Plant Health 2024 conference and many more: find more info here

GPSA Travel Grants

- GPSA travel grants are available all year round and are awarded as reimbursements post travel for out-of-pocket travel costs. Pullman Service and Activity fee-paying students are eligible to apply. Please see all information at GPSA grants website here. Contact gpsa.granst@wsu.edu 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



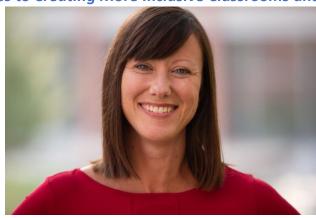
Dr. Achour Amiri will be leading the seminars this spring semester. Please direct all questions about the seminar to Dr. Amiri at a.amiri@wsu.edu

Department of Plant Pathology Seminar, Location: Clark Hall 151 (Every Monday, 4:10 pm to 5:00 pm)

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

February 26 Lora Keyte, Washington State University

March 4: "Approaches to Creating More Inclusive Classrooms and Labs."



Plant Pathology DEI Committee Invited Speaker: Dr. Holly Whittenburg

Assistant Professor, Special Education

WSU College of Education

March 11 Spring Break

March 18 Noah Ault, Washington State University

March 25 Megan Nickerson, Washington State University

April 1 Anita Paneru, Washington State University

April 8 Plant Pathology Graduate Student Organization invited speaker : Dr. Jeff Anderson, Assistant Professor in the Department of Botany and Plant Pathology at Oregon State University.

April 15 Dr. Michelle Moyer, Washington State University

April 22 Dr. Christina Hagerty, Oregon State University

Jobs



Graduate Research Positions

Post-Doctoral Positions

- WSU's Mt. Vernon NWREC is hiring a post-doctoral research associate in the vegetable seed pathology program. Position is a 12-month, 100% FTE opportunity. <u>Get more details or apply here</u>.
- A post-doctoral research associate position in wheat breeding and genetics is available at the University of Nebraska-Lincoln campus. Position is 12 month, 100% FTE. Get more details and apply here!

Technician, Industry, and Other Non-Academic Positions

Lynker is hiring multiple Conservation Planners who will be based in central and eastern WA.
 Junior and Senior openings for this position are available here and here, respectively. To learn more about Lynker as a company, click here.

Faculty Positions

- A tenure-track faculty position at Cornell University in the School of Integrative Plant Science is available. Appointment is 60% research and 40% teaching. Apply before March 10th here!
- A Research Plant Pathologist position is open in the Cereal Crops Research Unit at the Edward T.
 Schafer Ag. Research Center in Fargo, ND. Position is permanent and full time. Get more details and apply here!

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!

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