



October 2025

The Spore Print (10/27/25): Department of Plant Pathology October 2025 Newsletter



Please enjoy these updates from our department for October 2025.

Anita representing the editorial team: Mary, Nosheen, Jessica, Francely, Taylor, Mason, Arild, Sudeep, Monique, Jana, Cynthia, and Xianming.

If you have news you would like included in the *next newsletter*, please email anita.paneru@wsu.edu

[Click here to access past newsletters!](#) You will also be able to download the PDF version there.

If you have any feedback, please fill out the [questionnaire](#) for the Spore Print.

Thank you to Ninh Khuu for providing many of the photos seen in the newsletter headings.

Updates



Student invited speaker event

Every semester, the Plant Pathology Graduate Student Organization (PPGSO) hosts a Student-Invited Speaker as part of the departmental seminar series. This event allows students to connect with professionals in plant pathology and learn from their research and career experiences. Along with the seminar, students can meet the invited speaker during lunch and dinner discussions, while faculty have one-on-one meetings to exchange ideas and explore possible collaborations.

This semester, the invited speaker was **Dr. Erick DeWolf**, Professor of Plant Pathology at Kansas State University. Dr. DeWolf presented his seminar, ***“Development and Application of Infection Period Models for Wheat Stripe Rust”*** where he shared how weather conditions affect disease outbreaks and how forecasting models can help farmers manage wheat diseases.

During his visit, Dr. DeWolf met with members of the Plant Pathology WSU community through one-on-one meetings, a student lunch, and a networking dinner, giving everyone the chance to learn from his experience and ask questions. His visit encouraged meaningful discussions about plant diseases and how research can be applied to real agricultural challenges.



1 - Lunch with the invited speaker, **Dr. Erick DeWolf**, and students. Photo: Mary Steele



2 - WSU Cougar gifts to the invited speaker, **Dr. Erick DeWolf**. Photo: Anita Paneru



3 - Group photo with the invited speaker, **Dr. Erick DeWolf**, and the Plant Pathology community after the seminar. Photo: Dr. Xianming Chen

Thanks to all the Plant Pathology Graduate Student Organization (PPGSO) officers for their work and participation, and special thanks to **Francely Flores Pablo**, Secretary of the PPGSO, for all her hard work in organizing this event!

CAHNRS academic showcase undergraduate recruitment event



4 - Dr. Maren Friesen showcasing our department at the fall preview event.



5 - Dr. Tim Paulitz, Dr. Maren Friesen, and Francely Flores representing our department at the fall preview event.



6 - Dr. Tim Paulitz demonstrating diseased samples at the fall preview event.

As part of CAHNRS' fall recruitment efforts, the Department of Plant Pathology participated in the Fall Student Recruitment events held on **September 27** and **October 18, 2025**.

On **September 27**, **Dr. Tim Paulitz**, **Dr. Maren Friesen**, and **Francely Flores Pablo** hosted an information table and represented the department during the showcase. On **October 18**, **Megan Nickerson**, **Sasha Shabliy**, and **Dr. Jana U'Ren** continued the outreach by participating in the second recruitment day.

A display of plant disease samples was presented, giving prospective students and their families a closer look at the research and activities within the college.

Biology of vector-borne diseases course

Application process

- October 1, 2025
Applications accepted starting
- December 31, 2025
Deadline to be evaluated for scholarships
- February 16, 2026 *
Notification of scholarship recipients
- March 16, 2026
Final application deadline

* Accepted applicants without scholarships will be notified by email after February 16.

Biology of Vector-borne Diseases course
June 15-20, 2026

The University of Idaho Institute for Health in the Human Ecosystem 6-day **Biology of Vector-borne Diseases course** provides training for the next generation of professionals to understand plant, animal and human vector-borne diseases as interconnected pathosystems. Scholarships are funded by **National Science Foundation Ecology and Evolution of Infectious Diseases (NSF EEID) Program**.

Please email chhe@uidaho.edu with any questions

Institute for Health in the Human Ecosystem
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Email: chhe@uidaho.edu

Follow us on our social networks

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Facebook: @ui-ihhe.bsky.social
#IHHCommunity

Scan to apply

7 - Flyer of the Biology of Vector-borne Diseases Course. Photo source: Dr. Kiwamu Tanaka

The University of Idaho, Institute for Health in the Human Ecosystem (IHHE) is hosting its annual Biology of Vector-borne Diseases six-day course, Monday through Saturday, June 15-20, 2026, on the UI campus in Moscow, Idaho.

How to Apply: The application period started on October 1, 2025. To apply, fill out the application form and attach a 2-page CV at the following link: [Biology of Vector-borne Diseases Course Application 2026](#).

Scholarships: Individuals who submit their applications by **Dec. 31, 2025**, will be evaluated for scholarships. The National Science Foundation (NSF) funds our scholarships to support the course fee, which includes course materials, meals during the course, accommodation, and financial support toward travel. Accepted applicants who are awarded scholarships will be notified through email by February 16, 2026.

Many thanks to **Dr. Kiwamu Tanaka** for sharing this information.

Defense and preliminary exam updates

- **Mason Hoskins** successfully defended his **Master of Science** thesis on October 24th. His MS thesis project is titled "**Beyond the grove: Unveiling the ecology and diversity of X-disease, 'Candidatus Phytoplasma pruni', strains in extra-orchard environments**". His thesis committee members included Scott Harper (chair), Jana U'Ren, and Tobin Northfield (WSU Department of Entomology). We congratulate Mason and wish him success in getting his research published and starting the next chapter of his career.
- **Megan Nickerson** will give the PhD dissertation exit seminar from 8:00 to 9:00 a.m. on Friday, November 21st.

PPGSO bioinformatic consultations available by appointment

To better organize the PLP Bioinformatic Consultation Table, we decided to cancel our meeting hours on Thursday. Instead, we are open by appointment (15min - 30min, via Zoom or in

person). Please provide the time you want to meet and your bioinformatic questions to the consultants below.

Ko <itsuhiro.ko@wsu.edu> : Kamiak HPC, Transcriptome and Genome analysis, Sequencing, Python/Linux coding

Megan <megan.nickerson@wsu.edu> : R coding: Statistics and data visualization

Mason <mason.hoskins@wsu.edu> : Kamiak HPC, Gene co-expression network, Transcriptome (Mason is willing to provide help in person at the Prosser IAREC)

Student Spotlight: Mason Hoskins



8 - *Mason Hoskins, a Master's Student in Dr. Scott Harper's lab*



9 - Mason's dog named Willa.



10 - Mason's dog named Lieutenant Barkers.

Degree Sought: Master of Science in Plant Pathology

Advisor: Dr. Scott Harper

Academic Background: Received a Bachelor of Science in Environmental Biology at Pacific University in Forest Grove, OR

Hometown: Aloha, OR (Right outside of Portland, OR)

What made you interested in plant pathology/ microbiology?

During my last year in undergrad, I took the new Plant Pathology course that was being offered, and we got the opportunity to help as community scientists on the Western Red Cedar Dieback project being led by Dr. Joey Hulbert. It was one of the few courses that caught my attention while in undergrad. After graduating, I took a gap year to figure out what I wanted to do next, and in keeping close contact with the professor who taught the course, Dr. Kara Lanning (a former Cougar), she inspired me to pursue a degree in Plant Pathology.

What is your favorite plant pathogen?

Over the last two years, I have come to love 'Candidatus Phytoplasma pruni', particularly when affecting chokecherries. My partner and I now love to see how often we can see it on our drives or on hikes (it is very prominent in Montana, where he now lives).

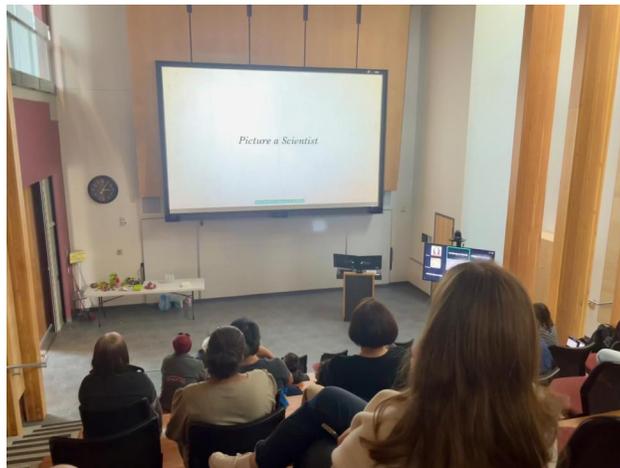
Hobbies: Gardening, tending to my indoor house plants, running, and sleeping :)

Pets: I have two dogs named Lieutenant Barkers and Willa.

What would you like to do after graduation?

I have an ultimate dream of starting a combined coffee and plant shop, but in the meantime, I plan to pursue a career teaching plant sciences/biology at a community college or K-12.

Community Corner



11 - Picture a Scientist event. Photo: Dr. Jana U'Ren.

On Friday, Oct 17th, the **Community Resource Committee** hosted the film "**Picture a Scientist**". The event was held in person in Pullman and at each REC. The CRC is grateful for the financial support provided by PLP and Dr. du Toit, as well as the logistical support provided by CAHNRS, PLP graduate students (Mason, Taylor, Mary), and Horticulture (Dr. Kate Evans at Wenatchee), who assisted with hosting and advertising the event.

In Pullman, >20 staff, students, and faculty representing both CAHNRS (Depts. of Plant Pathology, Horticulture, Entomology) and the College of Science (Chemistry, Biology) attended the event. If you were unable to attend the film, you can still watch it for free for the next year. On campus, users will be able to stream the films automatically from the [link](#). If off campus, users will need to use this [link](#) after logging into WSU with a VPN.

Statewide Updates



Pullman Updates

Join us for our **weekly departmental coffee hour**, held every Monday from 3:00 - 4:00 pm in Clark 299, right before the seminar.

A big thank-you to all the students who helped host this event!



12 - PLP coffee hour flyer. Photo: Francely Flores

Samodya Jayasinghe (Ph.D. candidate in Dr. Kiwamu Tanaka's lab) has been awarded a seed grant from the M.J. Murdock Charitable Trust to support the development of a project using the new Zeiss 980 Arysca 2 microscope. This advanced microscope will enhance spatial transcriptomics research on the potato defense response to *Spongospora subterranea f.sp. subterranea* at high spatial resolution.

Congratulations to Sam and Dr. Tanaka!

2025 WSU PLANT SCIENCE SYMPOSIUM			
Advancing Agriculture: Integrating Science, Technology, and Sustainability			
Senior Ballroom, CUB • WSU Pullman • Monday, November 17 • 9:00 AM–4:00 PM			
Time	Session	Speaker	Affiliation
8:30 AM	☺ Breakfast & Registration Opens		
9:00 AM	🎤 ✨ Opening Remarks CAHNRS & Corteva Representatives		
9:30 AM	📢 Harvesting Innovation and Research at the Washington Tree Fruit Research Commission	Dr. Ines Hanrahan	Washington State University
10:15 AM	📢 Potato Pathology and Regional Disease Management	Dr. Juliet Marshall	University Of Idaho
11:00 AM	📄 🍷 Poster Viewing / Break		
11:45 AM	📢 Probiotic Capsule that Boosts Potato Immunity Against Root-Knot Nematodes	Itsuhiro Ko	Washington State University
12:00 PM	📢 Seeding and "Feeding" Pea-Canola Intercrops in the Inland Pacific Northwest	Lauren Stubbs	Washington State University
12:15 PM	🍽️ Lunch (Provided)		
1:15 PM	📢 Barley Breeding and Molecular Genetics	Dr. Robert Bruggeman	Washington State University
2:00 PM	📢 Global Precision Phenotyping Validation	Dr. Sara Tirado Tolosa	Corteva Agriscience
2:30 PM	📄 🍷 Poster Viewing / Break		
3:45 PM	🏆 Closing Remarks & Awards Symposium Committee		
5:00 PM	🍷 Social with Pizza All Attendees		

Thank You to our Sponsors!



Agricultural Automation and Engineering Club at WSU
Washington State University
College of Agricultural, Human, and Natural Resource Sciences



WASHINGTON GRAIN COMMISSION
Dr. Drew Lyon



SYMPOSIA SERIES
CORTeva

13 - WSU Plant Science Symposium Schedule. Photo: Itsuhiro Ko.

Itsuhiro Ko (Ph.D. candidate in Dr. Cynthia Gleason's lab) will be giving a talk at the **WSU Plant Science Symposium** on November 17th. His presentation title is "**Probiotic Capsule that Boosts Potato Immunity Against Root-Knot Nematodes**".

Best wishes, Ko.

Save the date for the annual informal **Fall Mushroom Foray**, scheduled for November 1st from 8:45 am. Please RSVP using the QR code in the flyer (<https://forms.gle/fxvmTzzR6mQnUdsV9>) if you plan to attend!

**FALL 2025
MUSHROOM
FORAY**

Join us for mushroom
collection and
identification!
**SATURDAY,
NOVEMBER
1**

Meet at WSU Wilson St.
near Lighty Student
Services at **8:45am.**

We'll return to WSU
around **3 pm.**

**** This is an informal gathering of friends.
Collect and/or consume mushrooms at your own risk****



14 - Fall mushroom foray.

The Department of Horticulture, the Department of Plant Pathology, and the Institute of Biological Chemistry would like to cordially invite you to our cooperative **Friendsgiving Dinner Potluck!** Please join us to welcome newcomers and reconnect with old friends! Loved ones are welcome!

When:

Thursday, November 20th, 5:30 PM to 7:30 PM

Where:

PSB/REC5 3rd Floor

Please use the following link to RSVP and sign up to bring a dish!

[Friendsgiving RSVP](#)



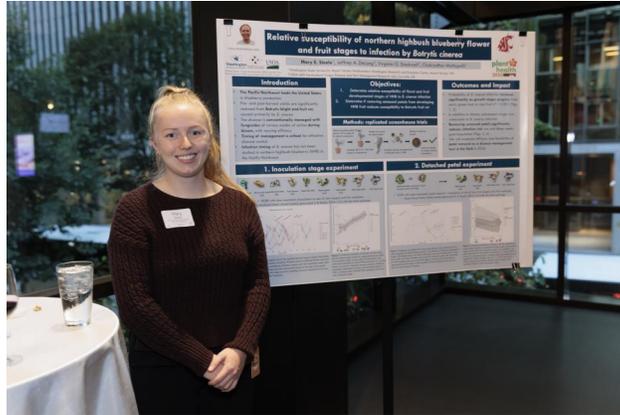
15 - Friendsgiving potluck event.

Mount Vernon Updates

Mary Steele (Ph.D. candidate co-advised by Dr. Chakradhar Mattupalli and Dr. Lindsey du Toit) attended and presented a poster at the **Achievement Rewards for College Scientists (ARCS) Night to Ignite Science** on Thursday, October 9, as a recipient of the ARCS Foundation (Seattle Chapter) Fellowship.

The Seattle Chapter hosted this annual event at the Amazon Meeting Center in Seattle to highlight the research of current ARCS fellows. Over \$1.3 million was raised during the event to fund future fellowships.

More information on ARCS can be found at arcsfoundation.org.



16 - Mary presented a poster titled: "Relative susceptibility of northern highbush blueberry flower and fruit stages to infection by Botrytis cinerea". Photo: Kristin Zwiers.



17 - The poster session was followed by a dinner and fundraiser. Photo: Kristin Zwiers.

Francely Flores volunteered to host the NWREC and PREC table at the **CAHNRS Top Scholars event** in Pullman on Wednesday evening, August 27, bringing plant disease samples to show the students. This event highlighted research, job, and internship opportunities for Top Scholars eligible for Ignite scholarships and who are strong potential graduate students.



18 - Francely Flores with Dr. Hanu Pappu at the CAHNRS Top Scholars event at Ensminger Pavilion in Pullman.



19 - Francely Flores with a student at the CAHNRS Top Scholars event at Ensminger Pavilion in Pullman.

Puyallup Updates

The CAHNRS Dean, Dr. Raj Khosla visited the WSU Puyallup REC to learn about that center and the various CAHNRS programs, people, and projects. **Dr. Gary Chastagner** described some of his research in ornamental plant pathology and the tremendous value of the ornamental industry (landscape, nursery, bulb, Christmas tree, and others) to the dean.



20 - Dr. Gary Chastagner, Professor Emeritus in our department, with the CAHNRS Dean, Dr. Raj Khosla. Photo Source: Dr. Lindsey du Toit.

Prosser Updates

Prosser graduate students came together this October to celebrate community, creativity, and culture at IAREC.

The PGSA hosted a **Fall Ice Cream Social** featuring Ferdinand's ice cream and a fun pumpkin carving activity at Hamilton Hall. Adding to the festive spirit, graduate students also participated in a **Diwali Rangoli Workshop** 🪔, creating vibrant Rangoli designs - a traditional Indian art form - including one featuring the **WSU logo**.



21 - PGSA Fall Ice Cream Social and pumpkin carving fun! 🍁



22 - Rangoli art featuring the WSU logo 🙌❤️



23 - Grad students and postdocs creating festive Rangoli art 🙌🎨

GPSA Updates

The **maximum funding cap for any RSO is \$2,500**. However, RSOs requesting more than \$1,000 are required to attend a Senate meeting to present their proposal/plans. The Senate will then vote on the amount to be awarded.

Please note that approximately **\$30,000** has already been allocated to RSOs this year, which may limit the remaining available budget.

Herbarium Happenings: Shaw Mycological Herbarium

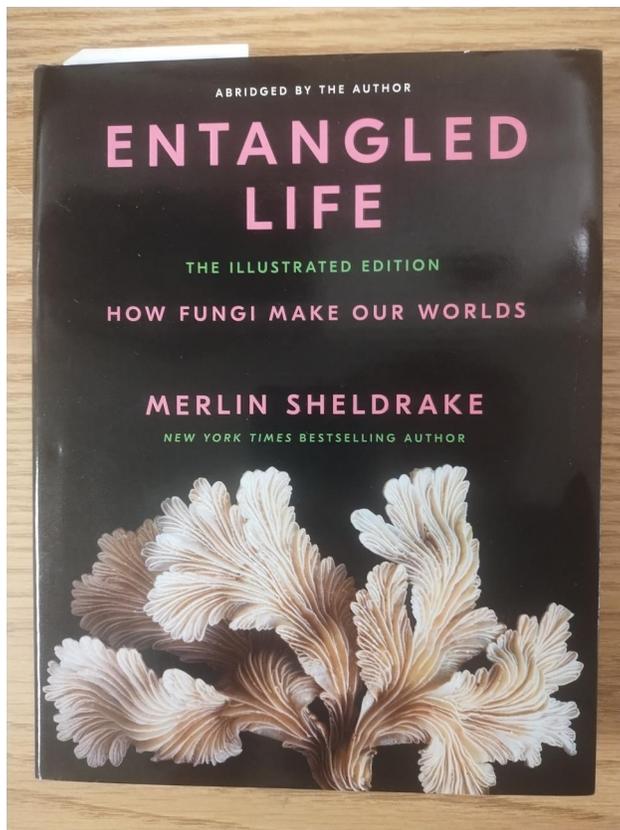


CENTURY-OLD PULLMAN BOOK CLUB VISITS HERBARIUM

Women of Pullman's Ingleside Club have shared their love of literature with each other and the local community for over 100 years. Recently their book club read and discussed British biologist Merlin Sheldrake's popular 2020 bestseller *Entangled Life: How Fungi Make Our Worlds, Change Our Minds and Shape Our Futures*, and contacted the Shaw Herbarium to get a hands-on tour of the fungal world right here at home. Seven of the members spent two hours on a recent October afternoon learning all about the past, present and future of the Shaw collections, herbarium work in general, and how mycological research is supported and informed by fungarium specimens worldwide. They also very kindly donated a copy of the abridged illustrated version of the book to the Herbarium library - its stunning photography and fascinating text make it a worthwhile read!



24 - Members of Pullman's Ingleside Club book group visit the Shaw Herbarium, hosted by Collections Manager Monique Slipher.



25 - Merlin Sheldrake's book Entangled Life - the Illustrated Edition: How Fungi Make Our Worlds, donated to the Shaw Herbarium library by the Ingleside Club of Pullman.

Publications



Crocker, L., Guo, J., **U'Ren, J. M.**, Gil-Loaiza, J., Pugliese, G., Ladd, N., Werner, C., and Meredith, L. K. 2025. Volatile organic compound (VOC) exchange in tropical leaf litter in response to rewetting: an automated scheme for classification of bi-directional flux pulse dynamics. *Journal of Geophysical Research: Biogeoscience*. doi: [10.1029/2025JG008774](https://doi.org/10.1029/2025JG008774)

Jewell, J. B., Carlton, A. S., Tolley, J. P., Bartley, L. E., and **Tanaka, K.** 2025. Jasmonate primes plant responses to extracellular ATP. *The Plant Journal*, 124(1): e70514. doi: [10.1111/tpj.70514](https://doi.org/10.1111/tpj.70514)

Harper, S. J., Pitino, M., Walker, W. B., Easterling, K. A., Marshall, A. T., Cowell, S. J., ... and Cooper, W. R. 2025. Differences in '*Candidatus* Phytoplasma pruni' Gene Expression when Infecting Sweet Cherry Versus Leafhoppers. *PhytoFrontiers*, (ja).
<https://doi.org/10.1094/PHYTOFR-06-25-0062-R>

Kehlet-Delgado, H., Petipas, R. H., Antoch, A. A., Norman, J. S., Li, X., White III, R. A., ... and **Friesen, M. L.** 2025. Draft genome sequences of *Burkholderia* and *Paraburkholderia* strains isolated from *Panicum virgatum* soil and roots at the Lux Arbor Reserve in Michigan, USA. *Microbiology Resource Announcements*, e00880-25.

Merrill, H. C., Zhan, G., **Wang, M.**, **Upadhaya, A.**, Jiang, B., Bai, Q., and **Chen, X.** 2025. Dynamics of *Cyp51* mutants in the *Puccinia striiformis* populations in the United States. Plant Disease. <https://doi.org/10.1094/PDIS-03-25-0578-RE>

Merrill, H., **Upadhaya, A.**, **Wang, M.**, Bai, Q., Jiang, B., Xia, C., ... and **Chen, X.** 2025. Development of KASP markers in association with avirulence genes of *Puccinia striiformis* f. sp. *tritici*, the wheat stripe rust pathogen. Phytopathology, (ja). <https://doi.org/10.1094/PHYTO-02-25-0074-R>

Rowe, S. L., Lopez, Z. C., Ross, D., Sackos, C., Porter, S. S., **Friesen, M. L.**, and Jack, C. N. 2025. Evidence of rapid evolution in herbivory defense responses with conserved trade-offs in populations of *Medicago polymorpha*. Ecology and Evolution, 15(10), e72220. <https://doi.org/10.1002/ece3.72220>

Please let us know if we missed your publication so we can include it next month.

Funding and Opportunities



Simons Postdoctoral Fellowship

The Simons Foundation's Life Sciences division is now accepting applications for its **Simons Postdoctoral Fellowships in Plant Biology awards**. The deadline for fellowship applications is December 4, 2025, 12:00 p.m. (noon) EST. The application can be found [here](#). Thank you, Dr. Kiwamu Tanaka, for sharing this information.

GPSA Travel Grant

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 the information on the GPSA grants website [here](#). Contact gpsa.granst@wsu.edu if you have questions.

[Here](#) is a list of all available funding worldwide. Log in using your WSU account and refine the search.

Seminars



Dr. Chakradhar Mattupalli is leading the seminar series in Fall 2025. The seminars are scheduled every Monday from 4:10 to 5 pm.

Thank you, Dr. Mattupalli, for providing the seminar schedule for the fall semester.

List of PL_P 515 speakers for Fall 2025 semester

Day	Speaker	Affiliation
Aug 18	Student Orientation (No seminar)	NA
Aug 25	Dr. Kiwamu Tanaka	Washington State University
Sep 1	Labor Day (HOLIDAY)	NA
Sep 8	Nosheen Fatima	Washington State University
Sep 15	Taylor McNees	Washington State University
Sep 22	Dr. Amy Charkowski	Colorado State University
Sep 29	Dr. Erick De Wolf (Student invited speaker)	Kansas State University
Oct 6	Harpreet Kaur	Washington State University
Oct 13	Kristen Bullough – Exit seminar	Washington State University
Oct 20	Mason Hoskins – Exit seminar	Washington State University
Oct 27	Dr. Ken Frost	Oregon State University
Nov 3	Mary Steele	Washington State University
Nov 10	Dr. Carolee Bull	The Pennsylvania State University
Nov 17	Dr. Tim Paulitz	USDA-ARS/Washington State University
Nov 24	Thanksgiving Break (HOLIDAY)	NA
Dec 1	Dr. Shawna Rowe	Washington State University

26 - Plant pathology seminar series for fall 2025

Jobs



Postdoctoral Positions

- The University of Connecticut is looking for a postdoc who will focus on interdisciplinary research on waterborne plant pathogens, algae, and biofilm in greenhouses and support extension programming on greenhouse production in Connecticut. The application can be found [here](#).
- The New York Botanical Garden (NYBG) is seeking an outstanding Mycologist or Cryptogamic Botanist for a career-track appointment in the Center for Biodiversity and Evolution. More details can be found [here](#).

Technician, Industry, and Other Non-Academic Positions

- The American Samoa Community College, a U.S. Land Grant institution, is hiring a full-time Plant Pathologist. The deadline is December 15, 2025. More details can be found [here](#).

Faculty Positions

- Montana State University is looking for a new tenure-track horticulture professor at the MSU Western-Ag Research Center. Here is the [link](#) to the job description and application portal.
- The University of Massachusetts Amherst is hiring for a new tenure-track faculty position in Plant Pathology. Details about the position can be found [here](#).
- The Department of Microbiology at the University of Tennessee at Knoxville is seeking candidates for tenure-track faculty appointment at the Assistant Professor level, applying quantitative approaches to study microbial effects on plant ecosystems. The application can be found [here](#).