



January 2026

The Spore Print (1/26/26): Department of Plant Pathology January 2026 Newsletter



Please enjoy these updates from our department for January 2026.

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



2026 Pacific Division Meeting

The **2026 Pacific Division meeting** will take place at the Washington State University campus in Pullman, WA, March 24-26, 2026.

The abstract submission is open and must be submitted by February 13. [Submit abstracts here.](#)

The deadline for the travel award application is February 2, 2026.

- [Postdoctoral Researcher Travel Grant](#)
- [Graduate Student Travel Grant](#)

The registration information can be found [here.](#)

2025 FWAA Annual Conference

Dr. Cynthia Gleason gave a presentation titled “Innovative approaches for nematode detection and control” at the **2025 Far West Agribusiness Association annual conference** at the Three Rivers Convention Center, Kennewick, WA, on December 18, 2025. The conference was attended by hundreds of farmers growing various crops and people from various agricultural business companies and organizations. The presentation focused on the Columbia root-knot

nematode (CRKN), one of the most damaging pests for Pacific Northwest potato production, by introducing the latest research and innovative tools being developed to combat CRKNs and highlighting how science is working to turn the tide against these underground invaders. She presented the latest research on novel methods for control of nematodes using litchi tomato (*Solanum sisymbriifolium*) as a trap crop, as well as the development of innovative diagnostic tools to detect nematodes quickly and accurately.



1 - Dr. Gleason presenting at the FWAA annual conference. Photo source: Dr. Kimawu Tanaka.

Dr. Gary Chastagner featured as 'Dr. Christmas Tree'

The **Spokane-Review** newspaper in Spokane published an article on December 21, titled ***“WSU researchers, including ‘Dr. Christmas Tree,’ are chipping in on a multi-million dollar project to develop the ideal Christmas tree,”*** written by Nick Gibson. **Dr. Gary Chastagner** is featured as ‘Dr. Christmas Tree’ in the article, along with other WSU faculty (Dr. Carolyn Ross) and researchers from 8 other institutions, on a USDA NIFA-funded grant of \$7.5M. You can read an article [here](#).

Thank you, Dr. Lindsey du Toit, for sharing this information.

New students for Spring 2026

Dr. Youfu Zhao welcomed a new graduate student, **Cherryl**, this Spring 2026 semester. She is originally from India and completed her Bachelor's degree from Punjab Agricultural University, Ludhiana, Punjab (India), 2024. She did her Master's from the University of Hawaii in Tropical Plant Pathology in 2025. She will be working on cherry and its disease management using machine learning and AI tools.

We are excited to welcome Cherryl to the department.

WSU Pullman Plant Diagnostic Clinic

We would like to thank **Cassandra Bates** for her dedicated service to **Washington State University** as the **Plant Diagnostician** for the **Pullman Plant Diagnostic Clinic (PPDC)** since June 2021. Cassandra's term of service concluded on December 31, 2025. We are grateful for her contributions and wish her the very best in her future endeavors.

The Pullman Plant Diagnostic Clinic (PPDC) is closed from December 31st.

For alternative diagnostic support, please contact a local WSU Extension specialist, Master Gardener Coordinator, or other diagnostic resources, such as:

- WSU Puyallup [Plant & Insect Diagnostic Lab](#) - Jenny Glass (jennyglass@wsu.edu, 253-445-4582)
- Oregon State University Hermiston Plant Disease Clinic - Cassandra Funke (cassandra.funke@oregonstate.edu, 541-567-8321 ext. 120)
- [Oregon State University Corvallis Plant Disease Clinic](#) – Mana Ohkura (Extpp@science.oregonstate.edu, 541-737-3821)
- University of Idaho Parma REC Diagnostic Lab - James Woodhall (jwoodhall@uidaho.edu)

Defense and preliminary exam updates

Dr. Samodya Jayasinghe and **Dr. Megan Nickerson**, the two Ph.D. graduates, received their degrees at the graduation ceremony on Saturday, December 6.

Congratulations, Sam and Megan.



2 - Dr. Megan Nickerson and Dr. Jana U'Ren attending the graduation ceremony on Saturday, December 6. Photo source: Megan Nickerson



3 - Dr. Samodya Jayasinghe and Dr. Kiwamu Tanaka attending the graduation ceremony on Saturday, December 6. Photo source: Samodya Jayasinghe



4 - Group photo from the graduation ceremony on Saturday, December 6. Photo source: Mason Hoskins

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

Student Spotlight: Francely Flores Pablo



5 - Francely at Lake Atitlán, Guatemala (2024).



6 - Francely collecting soil in Skagit, Washington (2025). Photo: Dr. Chakradhar Mattupalli

Learn more about Ph.D. student, **Francely Flores Pablo**, by clicking through the cards below. Use the arrows in the lower-right corner to expand each section for additional details.

Degree Sought: PhD in Plant Pathology

Advisor: Dr. Chakradhar Mattupalli

Academic background: BS in Agricultural Engineering (EARTH University, Costa Rica, 2020) and MS in Sustainable Tropical Agriculture (Zamorano University, Honduras, 2023).

Hometown: San Marcos, Guatemala

Hobbies: I enjoy playing badminton, drinking a good cup of coffee, going to the library, talking with my family and my partner, and listening to music.

Pets: My beautiful parrot, Emiliano. My mom gave him to me when I was 9 years old, and he still brings happiness to my family.

What made you interested in plant pathology/microbiology?

My interest in plant pathology began when I was in high school during my first field experience with Guatemalan growers. I visited a farmer with diseased tomatoes and could not help him. I knew then that I wanted to become someone who could help farmers with plant disease problems. Later, during my master's program, I met two inspiring plant pathologists, Dr. Carolina Avellaneda and Dr. Lourena Maxwell. I took plant protection classes with Dr. Avellaneda and later completed an internship in the plant pathology area at the World Vegetable Center (WVC) in Taiwan with Dr. Maxwell. These experiences made me decide to pursue a career in plant pathology.

What is your favorite plant pathogen?

I am especially interested in soilborne fungi that produce sclerotia or microsclerotia. During my internship at WVC, I worked with *Sclerotium rolfsii*, and now I work with *Verticillium dahliae*. I am fascinated by how these pathogens survive in the soil for long periods.

What would you like to do after graduation?

After graduation, I hope to continue building my experience in research and academia. In the future, I hope to contribute through research, extension, and teaching, helping farmers and future scientists. My long-term goal is to bring my knowledge back to Guatemala and support local farmers.

Community Corner



The **Fun Committee/Community Resource Committee**, together with the **PLPGSO**, hosted a **Welcome Back Potluck** on January 21, 2026, from 12:00-1:00 PM on the 3rd floor of the Plant Sciences Building (PSB). Thank you to the organizing committee and the setup and clean-up volunteers for making the event possible. **We had a great time kicking off the new semester!**



7 - Attendees at the Welcome Back Potluck Event. Photo: Megan Nickerson.

Statewide Updates



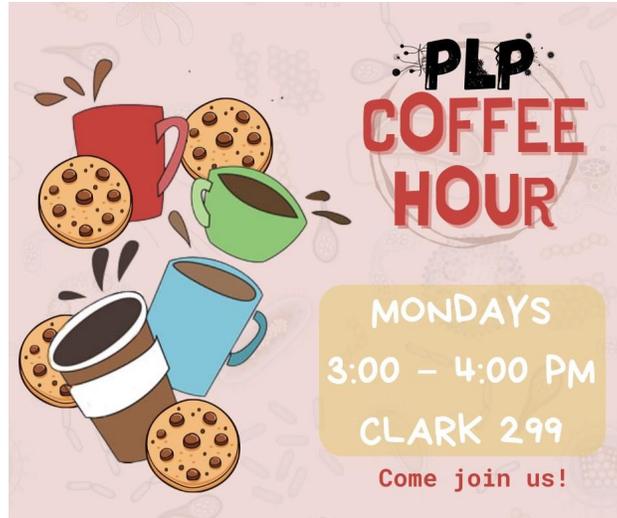
Pullman Updates

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!

Do you want to **host a PLP Coffee Hour** this semester? We're looking for **volunteers**. Sign up here:

https://docs.google.com/spreadsheets/d/1LafyV7ccu9pEbPtqG_iNG643oV2luPX0AULgeJEu34s/edit?usp=sharing



8 - PLP coffee hour flyer. Photo: Francely Flores

Congratulations to **Jessica Schallon** on receiving a \$1,200 travel grant from the **2026 Pulse Crops Working Group Annual Meeting**. The meeting will be held January 25-27 in Minot, North Dakota, where Jessica will deliver a 15-minute presentation on her PhD research. We wish her the best at the conference!

Bipin Neupane, a PhD Student (from Dr. Deven See's lab), has been selected to participate in the 2026 **Congressional Visits Day (CVD)**, held February 24-26 on Capitol Hill in Washington, D.C. Through this program, he will engage directly with policymakers to advocate for plant science and agricultural research at the national level. Best wishes, Bipin!

Kristen Bullough and her husband welcomed their third child, a baby boy named **Nicholas Royce Bullough**, on January 8th, 2026. He weighed 8 pounds, 3 ounces, and measured 21 inches long at birth. We extend our warmest congratulations to Kristen and her family.



9 - Welcome to the world, baby Nico. Photo: Kristen Bullough

Mount Vernon Updates

Dr. Chakradhar Mattupalli and several of his lab members attended the **2025 Lynden Ag Show**, which combines annual meetings of the Northwest Potato Conference and the Washington Small Fruit Conference, on December 4-5, 2025. Dr. Mattupalli presented a talk titled "WSU Berry Pathology Program Update", **lab technician Aidan Hostetler** presented a talk titled "Monitoring blueberry fields for blueberry scorch and shock viruses", **Ph.D. candidate Mary Steele** presented a talk titled "Improving management of Botrytis blight and fruit rot in highbush blueberry", and **Ph.D. student Francely Flores** showed a poster titled "Verticillium wilt management in potato production systems in western Washington".



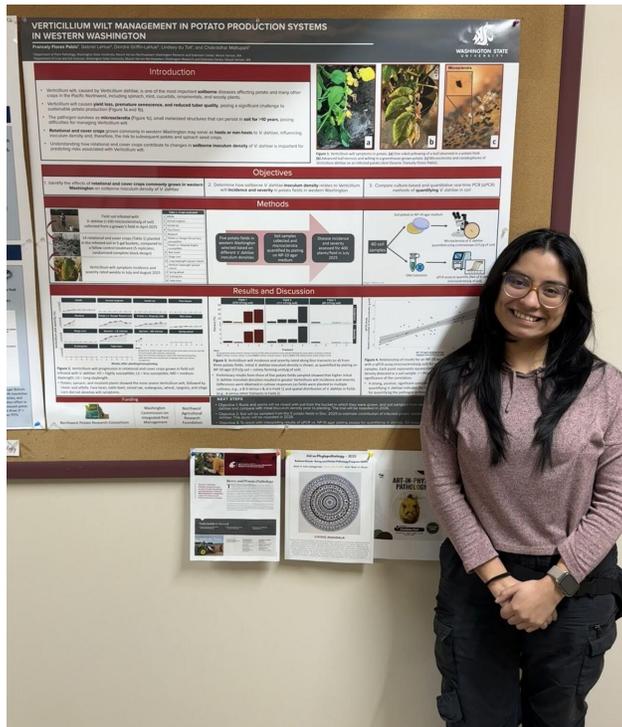
10 - Dr. Mattupalli presented a talk titled "WSU Berry Pathology Program Update".



11 - Lab technician Aidan Hostetler presented a talk titled "Monitoring blueberry fields for blueberry scorch and shock viruses".



12 - Ph.D. candidate Mary Steele presented a talk titled "Improving management of Botrytis blight and fruit rot in highbush blueberry".



13 - Ph.D. student Francely Flores showed a poster titled "Verticillium wilt management in potato production systems in western Washington".

Prosser Updates



14 - Dr. Amit Kumar Kesharwani

Dr. Amit Kumar Kesharwani (Postdoc with Dr. Youfu Zhao, IAREC-Washington State University, USA) was honored with the **Best Ph.D. Thesis and Best Oral Presentation Awards** for his research on “Characterization and Functional Analysis of avr Gene(s) of Indian Isolates of *Xanthomonas campestris* pv. *campestris* Causing Black Rot Disease in Cauliflower” at the **International Conference cum Expo 2025 (SHAASR-2025)**. The event was organized by Eco Fast Agri Solution and held at the Central Institute of Agricultural Engineering (CIAE), Bhopal, Madhya Pradesh, from 26th to 28th December 2025.

Faculty, postdoctoral researchers, and graduate students from the Department of Plant Pathology participated in the **Washington State Tree Fruit Association (WSTFA) 2025 Annual Meeting Research News Flash session**, held on December 9, 2025, in Wenatchee.



15 - **Dr. Youfu Zhao** presented a comprehensive overview of management strategies for fire blight in apple and bacterial canker in sweet cherry.



16 - **Dr. Scott Harper** discussing key principles for managing viral diseases in tree fruit systems, including diagnosis, spread mechanisms, and strategic tree removal decisions.



17 - **Dr. Amit Kumar Kesharwani (Dr. Zhao's lab)** presented his research on the development of a one-pot RPA/Cas12a-based detection assay for field-deployable diagnosis of cherry X-disease phytoplasma.



18 - Ph.D. student *Sudeep Poudel (Dr. Zhao's Lab)* presented his research on *Erwinia amylovora* population dynamics on apple stigmas and their modulation by temperature, relative humidity, and host susceptibility.



19 - Ph.D. candidate *Sheera Manna (Dr. Zhao's Lab)* presented her research on chemical efficacy and pruning strategies to prevent cut-wound infections and manage bacterial canker in newly established orchards under varying weather conditions.



20 - Ph.D. candidate Harpreet Kaur (Dr. Zhao's Lab) presented her research on the distribution of fire blight pathogen variants over time in Washington.

Wenatchee Updates

The Tree Fruit Pathology group welcomed **Aalok Mishra** and **Abu Tushar**, two PhD students under the supervision of **Dr. Achour Amiri**.

Aalok is originally from Nepal. He completed his Master's in Agriculture from Banaras Hindu University, India. For his Ph.D., he will be working on the applied epidemiology of pathogens in pome fruit orchards and their postharvest link.

Abu did his Bachelor's degree in Agriculture and a Master's degree in Plant Pathology from Bangladesh Agricultural University. For his Ph.D., he will be working on mycotoxin contamination in apples.

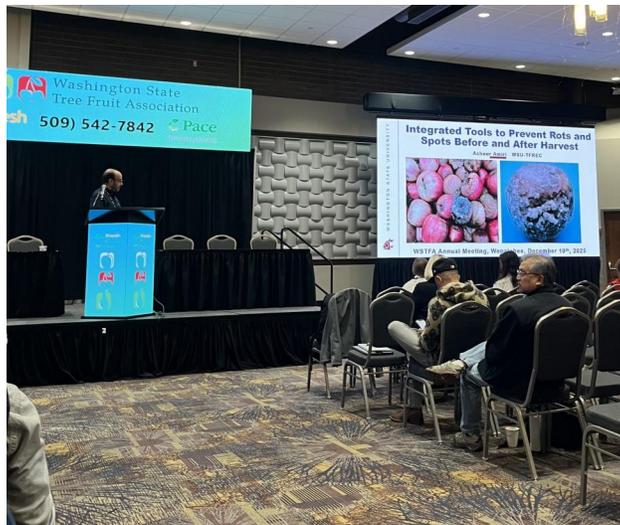


21 - Aalok Mishra, a new PhD student in Dr. Amiri's lab. Photo: Aalok Mishra.



22 - Abu Tushar, a new PhD student in Dr. Amiri's lab. Photo: Abu Tushar.

Dr. Achour Amiri gave a talk titled **"Integrated tools to prevent rots and spots before and after harvest"** at the 121st Washington State Tree Fruit Association Annual Meeting, Wenatchee Convention Center, on 10th December 2025.



23 - Dr. Achour Amiri presenting a talk titled *"Integrated tools to prevent rots and spots before and after harvest"* at the WSTFA annual meeting. Photo: Dr. Arild Arifin

Dr. Arild Arifin (representing Dr. Achour Amiri) gave a presentation titled "**How to minimize postharvest diseases in the orchard**" at the North Central Washington Tree Fruit Day, Wenatchee Convention Center. The event happened on 20th January, 2026.



24 - Dr. Arild Arifin gave a presentation titled "How to minimize postharvest diseases in the orchard" at the North Central Washington Tree Fruit Day. Photo source: Dr. Arild Arifin

Congratulations to **Dr. Achour Amiri** and his wife on the birth of their second child, **Noor**, on December 30th. We extend our warmest congratulations to Dr. Amiri and his family.



25 - Welcome to the world, baby Noor. Photo Credit: Dr. Achour Amiri.

GPSA Updates

No update.

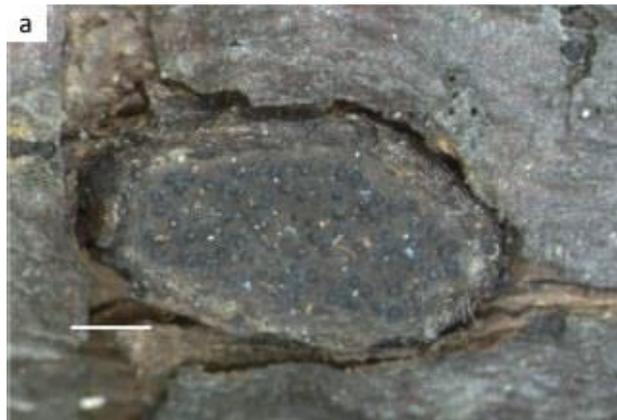
Herbarium Happenings: Shaw Mycological Herbarium



Shaw Herbarium specimens inform new phylogenetic revision in genus *Biscogniauxia*: A couple of years ago, researchers at the Julius Kühn Institute in Braunschweig, Germany, borrowed a number of our *Biscogniauxia* specimens for DNA analysis as part of their phylogenetic project. These included three of *B. repanda*, which had been collected by former WSU faculty Dr. Jack Rogers and Dr. Dean Glawe in previous years. This past November, Ann-Christin Brenken and Janett Riebesehl sent us their publication of this research and the annotations for those three specimens to *Biscogniauxia pezizoides*, formerly a synonym of *B. repanda*, but which they have now resurrected as a distinct species. Our Herbarium specimens continue to provide invaluable information for taxonomic and other mycological research worldwide.

Their paper is available with open access [here](#).

Abstract: Phylogenetic and morphological analyses suggest that *Biscogniauxia repanda*, typified on the basis of a specimen from Europe, differs from the North American *B. pezizoides*, although the latter has been synonymized under *B. repanda* shortly after it was newly described in 1889. The here provided evidence is based on ITS sequences and morphological characters of the ascocarp. As a consequence, *B. pezizoides* is resurrected, and both species are re-described. On the basis of earlier studies by others, it is inferred that *B. repanda* occurs mainly in Europe and Eastern Asia on *Sorbus aucuparia* and *B. pezizoides* mainly in North America and Eastern Asia on *Ulmus* spp. and *Acer* sp.



26 - One of the Shaw Herbarium specimens examined for this phylogenetic research: WSP 73520 *Biscogniauxia pezizoides* - ascocarp seen from above (Image from publication cited)



27 - Shaw Herbarium specimen WSP 73520 *Biscogniauxia pezizoides* - cross-section of ascocarp (image from publication cited)

Publications



Bali, S., Sobczak, M., Peng, H., and **Gleason, C.** 2025. *Solanum tuberosum* glucan synthase-like 05 is involved in root-knot nematode *Meloidogyne hapla* parasitism. *Scientific Reports*.

<https://doi.org/10.1038/s41598-025-33647-7>

Divyanth, L. G., Sabir, S. U. B., Rathore, D., Khot, L. R., **Mattupalli, C.,** and Karkee, M. 2025. Design, integration, and evaluation of a dual-arm robotic system for high throughput sampling from potato tubers. *Computers and Electronics in Agriculture* 241:111266.

<https://doi.org/10.1016/j.compag.2025.111266>

Duarte, A., Sheng, H., Schroeder, B. K., and **Murray, T. D.** 2025. Genome resource of *Afrina sporoboliae* for the analyses of gall-forming nematodes of the family Anguinidae. *PhytoFrontiers*, (ja). <https://doi.org/10.1094/PHYTOFR-09-25-0106-A>

Gnanasekaran, P., Zhai, Y., and **Pappu, H. R.** 2026. Genome sequence of dahlia mosaic virus revisited: molecular characterization and genetic diversity of DMV and dahlia common mosaic virus. *Archives of Virology*, 171(1), 31.

Mattupalli, C., Ingram, J. T., Fulladolsa, A. C., Filiatrault, M. J., and Charkowski, A. O. 2026. New PVY detection potential - Project probes benefits of direct tuber testing. Spudman. January issue. Pages 56-57.

Mnguni, F.C., Shin, G.Y., Aegerter, B., **du Toit, L. J.**, Derie, M.L., and Coutinho, T. 2025. Draft genome sequences of *Rahnella perminowiae*, *R. aceris*, and *R. aquatilis* isolated from onion bulbs (*Allium cepa* L.) displaying symptoms of bacterial rot. Journal of Plant Pathology: <https://doi.org/10.1007/s42161-025-02038-2>

Ocaña-Gallegos, C., Puri, P., and **Mattupalli, C.** 2025. A mummy berry update from northwestern Washington blueberry fields: spore trapping and assessing the sensitivity of *Monilinia vaccinii-corymbosi* to DMI fungicides. Plant Health Progress. <https://doi.org/10.1094/PHP-07-25-0187-RS>

Parks, J. M., Stiffler, B. J., and **Friesen, M. L.** 2025. Pea and canola enrich distinct rhizosphere bacterial communities even under intercropping. *Ecosphere*, (ja). <https://doi.org/10.1002/ecs2.70511>

Santander, R. D., Sabé, A. B., Dupont, T., and **Zhao, Y.** 2025. Evaluation of rhamnolipids and chitosan-based products for managing shoot trauma blight in apple trees. *Plant Disease*. <https://doi.org/10.1094/PDIS-07-25-1382-RE>

Schlatter, D. C., Yin, C., Hansen, J. C., Schillinger, W. F., and **Paulitz, T. C.** 2026. Canola alters rhizosphere and root microbiomes of following wheat crops. *Applied Soil Ecology*, 218, 106694. <https://doi.org/10.1016/j.apsoil.2025.106694>

Teixeira, M., **Clements, K. S.**, Chandler, K. O., and **Gleason, C.** 2026. Evaluation of *Meloidogyne chitwoodi* Race 1 and Pathotype Roza in *Arabidopsis thaliana* and tomato plants. *Journal of Nematology*, 57(1), 20250061. <https://doi.org/10.2478/jofnem-2025-0061>

Zhai, Y., Peng, H., **Gnanasekaran, P.**, Roy, A., and **Pappu, H. R.** 2025. Proteomic analysis of plant interactors with the RNA silencing suppressor V2 encoded by croton yellow vein mosaic virus. *Virology*, 110773. <https://doi.org/10.1016/j.virol.2025.110773>

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

Funding and Opportunities



WSU General Scholarship Application

The 2026-27 academic year priority deadline for the general scholarship application is January 31. More details can be found [here](#).

SoilCon 2026

The Washington Soil Health Initiative, organizer of the 2026 Virtual SoilCon, has opened submissions for lightning talks. The event is happening on February 12, 2026. Registration can be found [here](#).

APS Foundation Awards and Funding Opportunities

Several APS Foundation awards are now open for the year. The deadline for many applications is February 28. More details can be found [here](#).

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. Cynthia Gleason is leading the seminar in Spring 2026, on most Mondays from 4:00 to 5:00 p.m.

Zoom Meeting ID: 959 0545 7360

Zoom Password: 2488

- January 26: **Cynthia Gleason** (Seminar Instructor, WSU)
- February 2: **Sudeep Poudel** (Student Speaker)
- February 9: **Prabu Gnanasekaran** (Guest Speaker, WSU)
- February 16- Holiday
- February 23: **Anthony DeLuca** (Student Speaker)
- March 2: **Eric Holmes** (Guest Speaker, University of Idaho)
- March 9: **Francely Flores** (Student Speaker)
- March 16: Spring Break

- March 23: **Elaine Larsen** (Student Speaker)
- March 30: **Kylie Swisher Grimm** (Guest Speaker, USDA)
- April 6: **Chakradhar Mattupalli** (Guest Speaker, WSU)
- April 13: **Jeremy Johnson** (Student Speaker)
- April 20: **Kara Lanning** (Student Invited Speaker, Pacific University, Oregon)
- April 27- **Oleksandra Shabliy** (Student Speaker)

Jobs



Postdoctoral Positions

- The [USDA-ARS Corn & Soybean Virus Lab](#) is seeking a postdoctoral fellow focused on corn stunt, an insect-transmitted disease of maize caused by several pathogens. The application can be found [here](#).

- A postdoctoral research fellowship in seed pathology is available at the **Foreign Disease-Weed Science Research Unit (FDWSRU)** at Fort Detrick in Frederick, Maryland. For full details and to apply, visit [here](#).

Technician, Industry, and Other Non-Academic Positions

- The **University of Delaware** seeks applications for the position of Associate Dean & Director of Cooperative Extension and Outreach in the College of Agriculture and Natural Resources (CANR). More information can be found [here](#).
- **Rutgers, the State University of New Jersey**, is seeking a vegetable IPM state program leader, specifically focused on commercial vegetable production. The application details can be found [here](#).

Faculty Positions

- The **University of Idaho** is seeking applicants for the Potato Variety Development position in Aberdeen. More information can be found [here](#).
- The **University of Wisconsin-Madison** Department of Plant Pathology is seeking candidates for the Ethel and O.N. Allen Chair of Phytobacteriology at the Assistant, Associate, or Full Professor level. More details can be found [here](#).
- The **University of Arkansas** is seeking candidates to develop an active integrated extension and research program focusing on the management of diseases impacting production and quality in rice and other major Arkansas crops. The application can be found [here](#).