



March 2026

The Spore Print (3/30/26): Department of Plant Pathology March 2026 Newsletter



Please enjoy these updates from our department for March 2026.

Anita representing the editorial team: Mary, Nosheen, Jessica, Francely, Taylor, Mason, Aalok, 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



APS Pacific Division Meeting: March 24-26, Pullman, WA

We had the pleasure of hosting the American Phytopathological Society (APS) Pacific Division meeting in Pullman, WA, from March 24-26, 2026.

We had a strong showing from the department: Ph.D. student **Ninh Khuu** was the "official" meeting photographer; Ph.D. student **Mary Steele** led a department campus tour following the field trip on Tuesday; **Dr. Lindsey du Toit** gave opening remarks on Wednesday; **12 department graduate students and postdocs** gave oral presentations and **13** department members presented posters; **Dr. Scot Hulbert** gave the keynote address on Thursday; and **Dr. Kiwamu Tanaka** received the torch as the new President of the APS Pacific Division.

Additional highlights include postdoc **Dr. Samodya Jayasinghe** winning the **postdoc oral presentation competition**. In the graduate student competition category, **Sudeep Poudel** placed **3rd in the oral presentation**, while **Ninh Khuu** and **Anthony DeLuca** secured **2nd and 3rd places**, respectively, in the poster competition.

A big thank you and congratulations to the department for representing us well and hosting a productive and community-building meeting!

**** The photos below are a "First Look" - Ninh is processing all the photos he took and will send them to meeting organizers soon (thank you!). If we missed you, please let us know, and we're happy to share a follow-up in April's Spore Print! ****



1 - A snapshot of the department campus tour on Tuesday, led by Mary Steele, when participants visited Dr. Xianming Chen's research greenhouse where Peter Messerlie and Kent Evans shared about their stripe rust resistance trials. Photo: Jessica Schallon



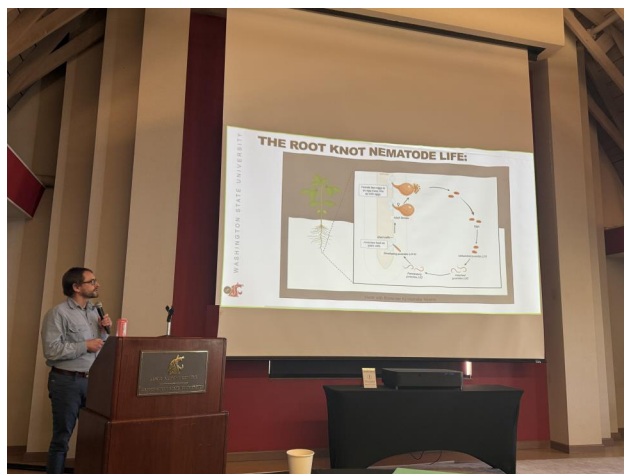
2 - Ph.D. candidate Sheersa Manna (advisor: Dr. Frank Zhao) during her oral presentation: "Evaluating the efficacy of chemical treatments and determining cutting depths for cherry bacterial canker management in young orchards in Washington". Photo: Dr. Hanu Pappu



3 - Ph.D. student Sudeep Poudel (advisor: Dr. Frank Zhao) during his oral presentation: "Interactions among environmental factors, host, and pathogen shape *Erwinia amylovora* population dynamics on apple blossoms". Photo: Dr. Hanu Pappu



4 - Ph.D. candidate Harpreet Kaur (advisor: Dr. Frank Zhao) during her oral presentation: "Tracking the genome structural diversity of *Erwinia amylovora* isolates through large-scale chromosomal rearrangements in Washington state". Photo: Dr. Hanu Pappu



5 - Postdoc Dr. Sean McCotter (advisor: Dr. Cynthia Gleason) during his oral presentation: "Knotty Little Nematodes: Bioprospecting for Green-Alternative Nematicides to Control Root Knot Nematode in the Pacific Northwest". Photo: Dr. Hanu Pappu



6 - Postdoc Dr. Sridhar Jarugula (advisor: Dr. Naidu Rayapati) during his oral presentation: "Co-infection of distinct viruses in grapevines highlights the importance of vector-driven epidemiology in grapevine leafroll disease". Photo: Dr. Hanu Pappu



7 - Postdoc Dr. Kuppuraj Jagadeesan (advisors: Dr. Hanu Pappu and Dr. David Gang) during his oral presentation: "Identification and whole genome characterization of beet mild curly top virus infection of common bean (*Phaseolus vulgaris*) in Washington State". Photo: Dr. Hanu Pappu



8 - Postdoc Dr. Samodya Jayasinghe (advisor: Dr. Kiwamu Tanaka) during her first-place-winning oral presentation: "Spatial Transcriptomics: A Powerful Tool for Understanding Host Defense Against Powdery Scab in Potato". Photo: Hanu Pappu

2026-2027 PPGSO Officer Election Results

On behalf of the Plant Pathology Graduate Student Organization (PPGSO), Mary (outgoing President) is happy to share the results below for 2026-2027 PPGSO officers as nominated and elected by graduate students:

President: Taylor Mcnees (Ph.D. / Dr. Jana U'Ren and Dr. Joey Hulbert)

Vice President: Anthony DeLuca (Ph.D. / Dr. Kiwamu Tanaka)

Treasurer: Abu Tushar (Tushar) (Ph.D. / Dr. Weidong Chen and Dr. Chakradhar Mattupalli)

Secretary: Aalok Mishra (Ph.D. / Dr. Jana U'Ren)

Spore Print / Communications: Francely Flores (Ph.D. / Dr. Chakradhar Mattupalli)

Faculty Liaison: Jeremy Johnson (MS / Dr. Weidong Chen and Dr. George Vandemark)

GPSA Representative (as voted for previously through GPSA): Sudeep Poudel (Ph.D. / Dr. Frank Zhao)

Mount Vernon Representative: Francely Flores

Puyallup Representative: Taylor Mcnees

Prosser Representative: Cheryl (Ph.D. / Dr. Frank Zhao)

Congratulations to all elected officers, and thank you for offering your time to serve our department! Incoming officers will transition with current officers during April and May, and their tenure will officially begin following the conclusion of the Spring 2026 semester.

2026 WSU Plant Science Symposium

Dr. Hanu Pappu's lab was well-represented at the **2026 WSU Plant Science Symposium**, organized by the WSU Molecular Plant Sciences Graduate Program. The symposium was held in CUE on February 21, 2026. Lab members, **Drs. Dipinte Gupta, Kuppuraj Jagadeesan, and Prabu Gnanasekaran** presented posters to share results from their ongoing research.

- Gorayeb et al: Viruses without Borders: Tracking the Transboundary Spread of a New Virus of Vegetables.
- Gnanasekaran et al: Potato virus Y Reprograms Host's Primary Metabolism to Promote Development.

- Gnanasekaran et al: What is in a name? That which we call a rose...: Genetic Diversity of Two Closely Related DNA Viruses of Dahlia and the Impact on Disease Management and Trade.
- Gupta et al: Triggering RNAi-mediated Resistance against Potato virus Y Infection in Potato.
- Jagadeesan et al: Toward Developing Disease-Resistant Beans: Molecular Characterization of Beet mild curly top virus from Beans in WA State.
- Kigaru et al: Enhanced Rice yellow mottle virus Resistance via CRISPR/Ca9-mediated Mutagenesis of the Rice eIF(iso)4G Gene.
- Zhai et al: Proteomic Analysis of Plant Interactors with an RNA Silencing Suppressor Coded by a DNA Virus.



9 - From left: Back row: Kuppuraj Jagadeesan, Prabu Gnanasekaran, Olga Mamontova, and Dipinte Gupta. Front row: Budding plant virologist, Yasmyna Mamontova. Photo Source: Dr. Hanu Pappu

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: Anthony DeLuca



10 - Anthony DeLuca

Name: Anthony DeLuca

Degree sought: Ph.D. in Plant Pathology

Advisor: Dr. Kiwamu Tanaka

Academic background: Bachelor's degree in Agricultural Biotechnology, with a minor in Horticulture

Hometown: Pittsburgh, Pennsylvania

What made you interested in plant pathology/microbiology? I've always been fascinated by plant-microbe interactions, and I love learning about plants and the diseases that affect them.

What is your favorite plant pathogen?

Spongospora subterranea f. sp. *subterranea*

Hobbies: Backpacking, fly fishing, hiking, camping, playing guitar and bass, chess, and archery

What would you like to do after graduation? I'm still figuring that out. I feel like I have a lot more to learn and experience, and I think my path after graduation will become clearer over time.

Community Corner

Upcoming FUN Committee Events:

Ricos, Friday, April 3: Beverages, food, and conversation starting at 5:30 at Ricos.

Learning Lunch, Friday, April 17th: Presentation by Dr. Svetlana Yurgel, Research Scientist, USDA ARS Grain Legume Research Unit (12-1 pm, PSB 405 or [Zoom](#) Meeting ID: 988 7129 9216 Passcode: 913598)

Learning Lunch, Friday, April 24th: Presentation by Dr. Dmitri Mavrodi, Research Scientist, USDA-ARS Wheat Health, Genetics and Quality Research Unit (12-1 pm, PSB 405 or [Zoom](#) Meeting ID: 948 7827 3300 Passcode: 018123)

FUN Facts: March is Women's History Month

Women's History Month was created to honor women's accomplishments, promote gender equality, and highlight women who have paved the way in the fight for equity. While we have many excellent female scientists at WSU and in our department, overall, the number of women STEM faculty members at WSU has remained below 21%, which is significantly lower than the national average of 34%*. The number of female STEM faculty members is even lower in certain WSU departments – especially computer science, math, and engineering, and women of color make up <2% of STEM faculty nationally (no data available for WSU). This disparity is consistent across fields, even though ~45% of STEM PhD recipients were women in 2020.*

As a community, one way we can promote change is by educating ourselves on the numerous factors that contribute to the issue of female scientists leaving academia, including microaggressions, harassment, poor mentorship, and a lack of childcare. Some of the issues facing women in STEM were part of the film "Picture a Scientist," which we screened at WSU last semester. If you were unable to attend that screening, you can still stream the film for free via this [link](#). If off campus, you will need to log into WSU using a VPN first.

--**The Community Resource and FUN Committee** (Chairs Jana U'Ren and Tim Paulitz)

*Information from [Daily Evergreen](#) and [Science Policy Review](#) articles.

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



11 - PLP coffee hour flyer. Photo: Francely Flores

Bipin Neupane, a PhD student in Dr. Deven See's lab, **represented Washington State** on behalf of the American Society of Agronomy and helped advocate for increased USDA research funding with senators and representatives from the state.

Bipin has been selected for the **2026 Bayer University Mentorship Program (B4U)**, where he will be paired with a scientist from Bayer to receive mentorship and professional development opportunities in agricultural research and industry.

Kudos to Bipin!



12 - From left to right: Jack Bridgewater (staff to Rep. Michael Baumgartner), Dr. Colin Campbell (Adjunct Professor, WSU Crop & Soil Sciences Department), and Bipin Neupane at Capitol Hill representing Washington State for the American Society of Agronomy.



13 - From left to right: Bipin Neupane, Dr. Colin Campbell, Hannah Albert, and Declan Sklut (staff from Senator Patty Murray).

Congratulations to **Dr. Hira Kamal**, Research Associate in Dr. Kiwamu Tanaka's lab, on receiving the **2022-26 Student/Early Career Fellowship from the Western Integrated Pest Management Center**. This competitive award supports early-career professionals in expanding their expertise and professional networks in integrated pest management (IPM). The fellowship will support attendance at a professional meeting in 2026, providing valuable opportunities for continued learning, collaboration, and engagement with leaders in research, extension, and industry.



14 - Dr. Hira Kamal.

The **Washington State Potato Commission (WSPC)** has provided funds toward the purchase of a new autoclave for use by the Pullman-based Virology Program of Dr. Hanu Pappu and the Potato Pathology Program of Dr. Vini Garnica.

Thank you, WSPC!



15 - Olga Mamontova in Pappu lab operating the new autoclave purchased with funds from the Washington State Potato Commission. Photo Source: Dr. Hanu Pappu



16 - New autoclave. Photo Source: Dr. Hanu Pappu

Mount Vernon Updates

44th Annual Western Washington Potato Workshop (February 20, 2026)

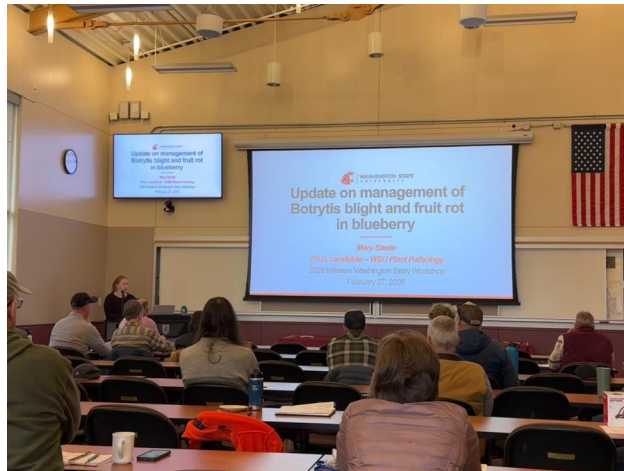


17 - Dr. Chakradhar Mattupalli, Updates from the Berry and Potato Pathology Program. Photo credit: Francely Flores

2026 Western Washington Berry Workshop (February 27, 2026)



18 - Dr. Chakradhar Mattupalli, Ongoing Blueberry Projects. Photo credit: Francely Flores



19 - Mary Steele, PhD candidate, Ongoing Blueberry Projects. Photo credit: Francely Flores

Prosser Updates

On the 19th and 20th of February, the **Clean Plant Center Northwest (CPCNW)** hosted a visit by **Dr. Cristian Olaya** (Oregon State University) and **Ms. Amanda Lake** (USDA-ARS). Cristian is a WSU Plant Pathology graduate (out of Dr. Hanu Pappu's lab) who has recently taken over the Directorship of the Corvallis-based clean berry program. Their visit was to learn how to build and manage all aspects of a clean plant center: from setting up and maintaining infrastructure, developing workflows and SOPs, establishing contracts and business processes, as well as training staff. They also enjoyed exchanging diagnostic experiences and sharing hands-on tissue culture tips and techniques.



20 - The people in the photo are (from left to right): Juan Casas-Vargas (CPCNW), Dr. Cristian Olaya (OSU), Dr. Scott Harper (WSU), and Amanda Lake (USDA-ARS). Photo Credit: Scott Harper

APS Outreach Highlights Sudeep's Research

The article titled “**How Washington scientists are working toward a more reliable fire blight forecasting approach,**” by Sudeep Poudel and Dr. Youfu Zhao, was featured in **AGDaily** by the American Phytopathological Society on March 5.

For more information, please visit the [article](#).

GPSA Updates

Ph.D. student **Sudeep Poudel** will continue to serve as the college GPSA Representative for the 2026-2027 academic year. Thank you, Sudeep!

Herbarium Happenings: Shaw Mycological Herbarium



Shaw Herbarium Hosts International Guest for Research Visit

The Shaw Mycological Herbarium was honored recently to host Pedro-Pablo Parra, the Manager & Deputy Director of the European Union Reference Laboratory (EURL) for Fungi and Oomycetes in Malzéville, France for his visit to our department and herbarium from Feb. 17 - 20. Pablo asked to spend time at the Shaw with the goal of obtaining reference material from a selection of our rust fungi specimens, and for the opportunity to receive in-person training on managing and curating a fungal herbarium from Collections Manager Monique Slipher. In addition, he has colleagues and friends who graduated from WSU's Plant Pathology program in past years, so was also eager to meet some of our faculty, staff and students for himself.

Pablo examined dozens of rust specimens over the week from taxa that are of quarantine concern in the European Union, including a wide variety of *Gymnosporangium* and *Cronartium* species, plus a few *Chrysomyxa* and *Phyllosticta* species. We gifted him small extracted amounts of material from over fifty that he selected, which he then sent back to his laboratory in France for further study. Most were part of our WSP accessioned collections, but he also

found very useful a variety of specimens from both of our historic teaching collections. That was a welcome validation of our recent past efforts to preserve those collections for their still-relevant scientific value!

Pablo also presented a seminar to our department on "The European Union Reference Laboratory (EURL): Working toward harmonizing detection capacities across the EU" that was well attended both in person and virtually, with a number of excellent follow-up questions from the attendees.

Pablo's week was not all work and no fun, however - we took him to visit the WSU Ownbey Herbarium (botany) across campus and the UI Stillinger Herbarium (botany & fungi) in Moscow, treated him to Ferdinand's ice cream, and took him to dinner at Nayarit in downtown Pullman on his last evening here with several faculty and graduate students.

Reflecting on his visit in a recent email to Monique, Pablo said: *"Visiting the Shaw Mycological Herbarium was a great experience to me. I had never had the opportunity to study this many specimens of rust fungi in such a short period of time. Every single specimen that was collected decades or even a century ago told me a story. A story not only about the fungal species and its host but about their collectors, identifiers and curators. Thanks to their dedication and passion I was able to accomplish my objective. Only after I returned to my Lab in France, I realized how much reference material I was able to gather in a short visit and how much it will contribute to the knowledge we have on Cronartium and Gymnosporangium species in Europe. I am grateful to the WSU - Department of Plant Pathology and to the members of the Shaw Mycological Herbarium for the warm welcome and their willingness to teach me and help me."*

He added in closing: *" Not sure if it was strange, but it seems that the "weather gods" were waiting for my arrival so they could send 10 cm of snow every night... that according to several of you... had not happened in a long time. 😊"*



21 - Pablo Parra from the EURL, France, selecting specimens in the Shaw Herbarium



22 - Pablo Parra examines rust fungi on a specimen from the Shaw Herbarium collections

Publications



Chen, X., Wan, A., and **Wang, M.** 2026. Virulence characterization of the *Puccinia striiformis* f. sp. *hordei* populations of 2010-2020 in the United States. *Plant Disease*, (ja).

<https://doi.org/10.1094/PDIS-12-25-2562-RE>

Chen, X., Evans, C. K., & Messerlie, P. M. 2026. Efficacy of foliar fungicides for control of stripe rust on winter wheat in Pullman, WA, 2025. *Plant Health Progress*, (ja).

<https://doi.org/10.1094/PHP-02-26-0031-PDMR>

Baral, R., DeLong, J. A., Steele, M. E., Stockwell, V. O., and **Mattupalli, C.** 2026. Fungicide sensitivity profiles of *Botrytis* isolates from blueberry and red raspberry fields in Washington and Oregon. *Plant Disease*. <https://doi.org/10.1094/PDIS-01-26-0162-RE>

Baral, R., Steele, M. E., DeLong, J. A., Stockwell, V. O., and **Mattupalli, C.** 2026. Differential responses of *Botrytis* isolates to Pristine, Luna Tranquility, Switch, and their active ingredients. *Plant Disease* <https://doi.org/10.1094/PDIS-12-25-2509-SC>

Franco, M. E. E., Singer, E., Roux, S., Meredith, L. K., and **U'Ren, J. M.** 2026. Genomic and metagenomic survey of microbial carbonic anhydrase genes reveals novel clades, high diversity, and biome-specificity. *ISME Communications*. <https://doi.org/10.1093/ismeco/ycag054>

Khan, M. A. U., Gnanasekaran, P., Sathuvalli, V., and Pappu, H. R. 2026. Replication and movement of in vitro-generated infectious RNAs of potato mop-top virus RNAs in two mechanically inoculated potato cultivars. *PhytoFrontiers*. <https://doi.org/10.1094/PHYTOFR-07-25-0067-SC>

Kim, W. J., Bozyel, I., Ay, S., **Friesen, M.**, and Beyenal, H. 2026. A custom soil electrochemical profiling system for detecting electrochemical activity changes in soil. *Research Square*. <https://doi.org/10.21203/rs.3.rs-8981935/v1>

Moroz, N., Puri, P., Mora-Romero, G. A., Mattupalli, C., and Tanaka, K. 2026. Sustainable alternatives for managing silver scurf on potato microtubers and minitubers. *Plant Health Progress*, PHP-07. <https://doi.org/10.1094/PHP-07-25-0195-RS>

Nickerson, M.N., Tfaily, M.M., Meredith, L.K., and **U'Ren, J.M.** 2026. Fungal microbiome-metabolome relationships in *Sphagnum* and two co-occurring Alaskan mosses. *Molecular Ecology*. 35(2):e70242. <https://doi.org/10.1111/mec.70242>

Puri, P., LaHue, G. T., Frost, K. E., and **Mattupalli, C.** 2026. Effect of geographic location and soil moisture on in-field development of silver scurf of potato. *Plant Disease*. <https://doi.org/10.1094/PDIS-12-25-2622-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>

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

Funding and Opportunities



Western Seed Association (WSA) Scholarship

- The Western Seed Association awards seven \$8,000 scholarships each year to students pursuing a degree in Agriculture/Agronomy for undergraduate and graduate students. The deadline to apply is May 1st. The details can be found [here](#).

NOMIS and the *Science* Young Explorer Award

- The NOMIS Foundation and Science are accepting essays for the Young Explorer Award, recognizing "bold young researchers who ask fundamental questions at the intersection of the life and social sciences". Cash prizes up to \$15,000 will be awarded, and essays will be published in Science. Applications are due May 15, 2026. More information [here](#).

GPSA Travel Grant

- GPSA travel grants are available year-round and are awarded as post-travel reimbursements 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: **Chakradhar Mattupalli** (Guest Speaker, WSU)
- April 6: **Kylie Swisher Grimm** (Guest Speaker, USDA)
- 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 Department of Plant Pathology and Ecology at the **Connecticut Agricultural Experiment Station** (CAES) in New Haven, CT, is seeking applications for a postdoctoral researcher position in Molecular Nematology. The application can be found [here](#).

- The **Virginia State University (VSU)** is seeking a postdoctoral researcher to work on the identification, characterization, and integrated management of major seed-piece and soil-borne diseases of ginger. The application details can be found [here](#).

Industry, and Other Non-Academic Positions

- The **Great Lakes Basin Forest Health Collaborative** seeks a forest health coordinator to support resistance-breeding programs for ash, elm, hemlock, and beech. For more details and the application, visit [here](#).

Faculty Positions

- **Washington State University (WSU)** is looking for a Distinguished Endowed Chair in Soil Health for Potato Cropping Systems. This position is posted on the WSU Jobs site at <https://hrs.wsu.edu/careers/>. The deadline is May 15, 2026.
- The **California Polytechnic State University (Cal Poly)** is seeking a full-time 12-month department head (Instructional faculty – tenured/tenure-track) for its Plant Sciences Department (PLSC). More details can be found [here](#).
- **University of Hawaii at Manoa (UHM)** is seeking a tenure-track faculty position in Weed Science to support equitable, sustainable, and resilient food and agriculture systems, natural resources, and rural communities. To apply, visit [here](#).