



November 2025

The Spore Print (11/24/25): Department of Plant Pathology November 2025 Newsletter



Please enjoy these updates from our department for November 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



Dr. Carolee Bull's Visit to WSU

Dr. Carolee Bull, Professor of Systematic Bacteriology and Plant Pathology in the Department of Plant Pathology and Environmental Microbiology at Penn State, was invited to give a seminar as part of the 2025 Fall Departmental Seminar Series on November 10, 2025. Her talk was titled "**Pseudos on seeds: Diversity of *Pseudomonas syringae* pv. *aptata* on chenopod (beet and chard) seeds worldwide.**" During this visit, Dr. Bull provided graduate students, postdocs, and faculty with a 3-hour professional development training on "***How to become your own best mentor.***" She provided attendees with excellent tools for self-assessment of core competencies and stressed the importance of developing a personal mission statement to get a sense of direction and purpose in both professional and personal fronts. Training materials from this workshop can be accessed [here](#). Dr. Bull enjoyed dinner with faculty members, reminiscing about her experiences living in Pullman and working in Dr. David Weller's lab in the late 1980s. **Her visit, seminar, and professional development training were organized by Dr. Chakradhar Mattupalli.**

Thank you so much, Dr. Mattupalli, for organizing this insightful training session and seminar.



1 - Dr. Carolee Bull with “How to become your own best mentor” workshop attendees. This hybrid workshop was held at the Lewis Alumni Center in Pullman on November 10, 2025. Photo: Dr. Chakradhar Mattupalli.



2 - Dr. Carolee Bull enjoying dinner with the department faculty members and their families. Photo: Dr. Chakradhar Mattupalli.



3 - Francely Flores presenting a PPGSO-designed t-shirt and thanking Dr. Carolee Bull for leading the 3-hour professional development workshop. Photo: Dr. Chakradhar Mattupalli.



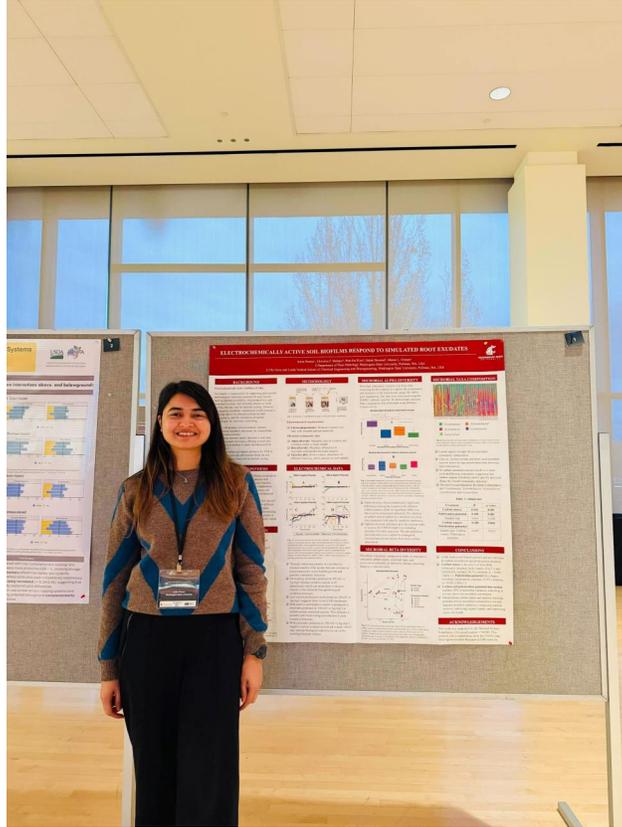
4 - Dr. Carolee Bull receiving WSU's famous Cougar Gold cheese from Dr. Lindsey du Toit. Photo: Dr. Chakradhar Mattupalli.

Plant Science Symposium

Itsuhiro Ko (Ph.D. candidate in Dr. Cynthia Gleason's lab) gave a talk at the **WSU Plant Science Symposium** on November 17th. His presentation is titled "Probiotic Capsule that Boosts Potato Immunity Against Root-Knot Nematodes". **Anita Paneru** (Ph.D. candidate in Dr. Maren Friesen's lab) presented her poster titled "Electrochemically Active Soil Biofilms Respond to Simulated Root Exudates". **Vincent James** (Ph.D. candidate in Dr. Maren Friesen's lab) presented his poster, "Environmental and Phylogenetic Regulation of Nitrogenase Diversity across Washington State".



5 - **Itsuhiro Ko**, a Ph.D. candidate in Dr. Cynthia Gleason's lab, giving a talk on a Probiotic Capsule that Boosts Potato Immunity Against Root-Knot Nematodes. Photo: Anita Paneru



6 - *Anita Paneru, a Ph.D. candidate in Dr. Maren Friesen's lab, presenting her poster titled "Electrochemically Active Soil Biofilms Respond to Simulated Root Exudates". Photo: Sadikshya Poudel.*

Friendsgiving Event

The **Department of Plant Pathology**, the **Department of Horticulture**, and the **Institute of Biological Chemistry** jointly hosted a **Friendsgiving Dinner Potluck** on Thursday, November 20. The event served as an occasion for faculty, students, staff, and their loved ones to come together for an evening of engaging conversations and delicious dishes to celebrate the holiday season.

Special thanks to those who put in extra work to make this event happen:

PLP Fun Committee: Tim, Kiwamu, Megan, Mason

PPGSO: Jessica, Francely, Anita

Department of Horticulture: Cheryl Rajcich

Institute of Biological Chemistry: Tana Arlynn, Liam Vance, Nick Neumann (set up)

Plant Science Building (IBC) Admin: Jeff Bowman

Thank you all for attending!



7 - Faculty, postdocs, and students in plant pathology, IBC, and horticulture are enjoying dinner.

Photo: Francely Flores



8 - Jeremy digs in.

Photo: Francely Flores



9 - Faculty, postdocs, and students in plant pathology, IBC, and horticulture enjoying dinner.

Photo: Francely Flores



10 - Kristen and Koy with their family.

Photo: Francely Flores



11 - Megan, Elaine, Ray, Vincent, and Janice look happy after dinner.

Photo: Francely Flores



12 - Attendees from plant pathology, IBC, and horticulture departments gather to enjoy a friendsgiving potluck event.

Photo: Francely Flores

Defense and preliminary exam updates

Ninh Khuu successfully passed his **PhD preliminary examination** on October 29th. Ninh's PhD committee members include Scott Harper (chair), Cynthia Gleason, Michelle Moyer, Dmitre Mollov, and David Gent (USDA ARS and OSU Adjunct Professor). We congratulate Ninh and wish him continued success as he progresses in his doctoral studies.

Harpreet Kaur passed her **PhD preliminary examination** on November 18th. Harpreet's PhD advisory committee includes Frank Zhao (chair), Maren Friesen, Hanu Pappu, and Kiwamu Tanaka. We congratulate Harpreet and wish her continued achievements as she advances in her doctoral degree.

Samodya Jayasinghe successfully defended her **PhD dissertation** on November 19th. Her dissertation is titled "**Molecular Mechanisms of Host Defense to Potato Powdery Scab Disease**" and her PhD advisory committee members were Kiwamu Tanaka (chair), Stephen Ficklin (Department of Horticulture), Cynthia Gleason, and Hanu Pappu. We congratulate Dr. Jayasinghe on this remarkable academic milestone and wish her every success as she embarks on the next chapter of her career in plant pathology.

Kristen Bullough successfully defended her MS thesis defense examination on November 20th. Her thesis is titled "**Monitoring inoculum density of the stripe rust pathogen of wheat and evaluating weather variables in relation to disease severity in eastern Washington.**" Her advisory committee members include Timothy Murray (chair), Xianming Chen (co-chair), Tim

Paulitz, and Chakradhar Mattupalli. We congratulate Kristen and wish her success in getting her research published and starting the next chapter of her career.

Megan Nickerson successfully defended her PhD dissertation on November 21st. Her dissertation is titled "**Diversity, composition, and functional interactions between the moss metabolome and fungal communities in Alaska.**" Megan's advisor committee members included Jana U'Ren (chair), Maren Friesen, Tim Paulitz, and Malak Tfaily (University of Arizona). We congratulate Dr. Nickerson on this major academic accomplishment; we wish her continued success as she moves into the next phase of her career in the field of mycology and plant pathology."

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)

Research Associate Spotlight: Dr. Natalia Moroz



13 - Dr. Natalia Moroz

Position/Title: Research Associate

Advisor/PI: Kiwamu Tanaka

Academic/Professional background: PhD in Chemistry (major in Chemical Enzymology & Biotechnology) awarded by the School of Chemical Enzymology, Department of Chemistry, Moscow State University, Russia. BS in Chemistry awarded by the Chemistry Department, Kyrgyz State University, Frunze (now Bishkek), the capital of Kyrgyzstan.

Hometown: I was born and grew up in Frunze (now Bishkek), Kyrgyzstan.

Hobbies: I enjoy spending time with my family and friends, hiking, camping, reading books, and handcrafting.

Pets: I've never had my own pets; however, 2 years ago, I met my son's puppy, Echo, who became our family's favorite member.

What made you interested in plant pathology/microbiology?

My plant pathology career started in 2015 when I joined the Kiwamu Tanaka lab. Despite having a strong background and expertise in protein biochemistry, biophysics, biotechnology, and molecular biology, I had never worked with plants and plant pathogens before. I am glad that my professional track made such a turn and opened new opportunities to study plant immunity.

What is your favorite plant pathogen?

I would highlight *Spongospora subterranea* f. sp. *subterranea*. However, the plant pathogens' world is so diverse, and the more I learn about the rational mechanisms of their "communications" with plants, the more admiration I have for Mother Nature and its "natural intelligence".

What is the most rewarding part of your job?

I am happy that my job is about studying and acquiring new knowledge in a multidisciplinary field. Another exciting side of my job is the everyday contacts with smart, bright colleagues, and the chance to work with students, helping them to achieve their goals.

Community Corner



The end of the semester has brought some turnover among members of the PLP Community Resource Committee. We want to thank Mason Hoskin for his valuable contributions to the CRC and we wish him good luck in his future endeavors! We also want to welcome the three new PLP members who will be joining the CRC. New members are Sasha Shabliy from Dr. Mavrodi's lab, Elaine Larsen from the U'Ren lab, and Dr. Hongyan Sheng. Following up on our successful Fall Film "Picture a Scientist" the CRC will be organizing and planning a spring event or seminar speaker. If you have suggestions for this event or would like to join our committee, please email Dr. U'Ren (jana.uren@wsu.edu).

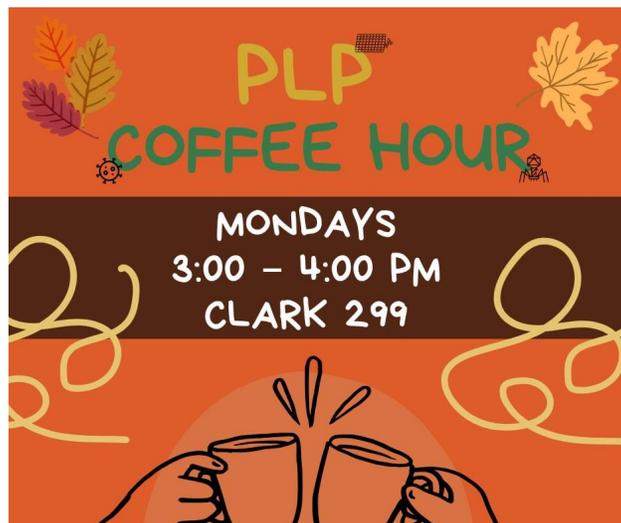
Statewide Updates



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!



14 - PLP coffee hour flyer. Photo: Francely Flores

On November 14th, Dr. **Maren Friesen** gave a talk on "**How Do You Brew? Exploring Compost Tea and Extracts in the PNW**" at Tilth Conference. The work was done in collaboration with Dr. Lynne Carpenter Boggs (Department of Crop and Soil Sciences, WSU), Carol McFarland, METER Group, and Josh Riddle, Farm It, LLC. **Hanna Kehlet Delgado** (a staff scientist from Dr. Maren Friesen's lab) also attended the conference.



15 - Dr. Maren Friesen giving a talk at the Tilth conference. Photo Credit: Hanna Kehlet Delgado



16 - Josh Riddle, a collaborator with Dr. Maren Friesen's project demonstrating how to make compost tea. Photo: Dr. Maren Friesen

Bipin Neupane, a Ph.D. student from Dr. Deven See's lab, has been invited to present his research at the **International Wheat Genome Sequencing Consortium (IWGSC) Workshop** during the **Plant and Animal Genome Conference (PAG 33)** in January 2026. He will also present a poster at the same conference.

Dr. Hira Kamal, a postdoc in Dr. Kiwamu Tanaka's lab, gave a talk titled "**Colorful Chaos by a Necrotrophic Pathogen Reprogramming Plant Defense and Photosynthesis**" at the **Molecular**

Plant Science Hatch Umbrella Retreat 2025, held on October 28th. **Itsuhiro Ko**, a PhD candidate in Dr. Cynthia Gleason's lab, gave a talk titled "**Engineering Molecular Immunity for Root-Knot Nematode Resistance in Potato.**"



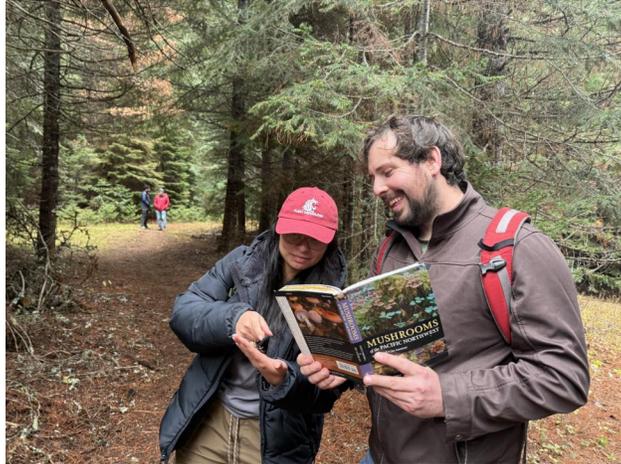
17 - Itsuhiro Ko giving a talk at the Molecular Plant Science Hatch Umbrella Retreat 2025.

Members of the Department of Plant Pathology, Molecular Plant Sciences, and the Pullman community joined for the **Annual Fall Foray** on November 1st.

Thanks to all who assisted in the planning and execution of this event, including Andrei Smertenko, Monique Slipher, Ray Van Court, Mary Steele, and Megan Nickerson.



18 - Members of the Plant Pathology department, Molecular Plant Sciences department, and broader community pose with their finds from the fungal foray. Photo Credit: Megan Nickerson.



19 - Graduate students Francely Flores and Jeremy Johnson work on identifying a specimen. Photo Credit: Megan Nickerson.



20 - Dr. Ray Van Court and Monique Slipher help Dr. Weidong Chen identify specimens he collected during the foray. Photo Credit: Megan Nickerson.

Mount Vernon Updates

The **Annual Conference of the Northwest Center for Small Fruit Research (NCSFR)** was held in The Dalles, Oregon, from November 18-19, 2025. The NCSFR is a collaboration of researchers and stakeholders in Washington, Oregon, and Idaho focused on small fruits and grapes. **Dr. Chakradhar Mattupalli** and **Mary Steele** were among the attendees, and Dr. Mattupalli

presented a talk as the final presentation of a two-year grant, titled "**Determining critical stages for *Botrytis* infection in highbush blueberries**".



21 - Dr. Chakradhar Mattupalli presents "Determining critical stages for Botrytis infection in highbush blueberries" at the NCSFR Annual Conference in The Dalles, Oregon.

Prosser Updates

PGSA and **Coug'n Up** hosted a Thanksgiving Community Lunch on **Friday, November 21**, at **Prosser IAREC, Hamilton Hall**. Students, postdocs, and faculty came together to enjoy lunch and connect in a warm, festive atmosphere in celebration of the holiday season.



22 - Attendees from plant pathology gather and enjoy lunch.

Photo: Sudeep Poudel



23 - Attendees from plant pathology gather and enjoy lunch.

Photo: Sudeep Poudel



24 - Attendees from plant pathology gather and enjoy lunch.

Photo: Sudeep Poudel

GPSA Updates

GPSA approved reallocating **\$1,600 from Communications to Travel Grants** for this year.

The Dissertation Grant opened for applications on **November 1, 2025**.

Herbarium Happenings: Shaw Mycological Herbarium



In November, 28 graduate and undergraduate students in Dr. U'Ren's PLP 421/521 General Mycology class visited the herbarium. The students were given an excellent and educational tour of the herbarium by our Collections Manager, Monique Slipher, who provided them with key information about the role and importance of herbaria in science, the daily operations of a herbarium curator, and historical and taxonomic information about our collection. Additionally, students examined eight fungal specimens from the herbarium's teaching collection, which represented different mushroom genera and fruiting body types. With these hands-on activities, students reinforced their knowledge and understanding of the ecology, morphology, and evolution of fungi in the Agaricomycotina taught by Dr U'Ren during lectures. The students all expressed their interest in the herbarium and appreciation for the collection. Overall, the Shaw Mycological Herbarium remains a valuable resource for outreach, education, and research at WSU and within the Department of Plant Pathology.

Publications



Khan, M. A. U., Gnanasekaran, P., Sathuvalli, V., and Pappu, H. R. 2025. Replication and movement of in vitro-generated infectious RNAs of potato mop-top virus RNAs in mechanically inoculated two potato cultivars. *PhytoFrontiers*, (ja). <https://doi.org/10.1094/PHYTOFR-07-25-0067-SC>

Mavrodi, D. V., Blankenfeldt, W., Mavrodi, O. V., Weller, D. M., and Thomashow, L. S. 2025. Microbial phenazines: biosynthesis, structural diversity, evolution, regulation, and biological significance. *Microbiology and Molecular Biology Reviews*.
<https://doi.org/10.1128/membr.00147-23>

Moroz, N., Puri, P., Mora-Romero, G. A., Mattupalli, C., and Tanaka, K. 2025. Sustainable alternatives for managing silver scurf on potato microtubers and minitubers. *Plant Health Progress*. <https://doi.org/10.1094/PHP-07-25-0195-RS>

Parveen, A., **Tanaka, K.,** and Khan, M. 2025. Biocontrol efficacy of *Pochonia chlamydosporia* against root-knot nematode *Meloidogyne javanica* in eggplant and its impact on plant growth. *Scientific Reports* 15, 36990. <https://doi.org/10.1038/s41598-025-99527-2>

Shires, M., Molnar, C., **Hoskins, M. C.**, and **Harper, S.** 2025. First report of a '*Candidatus* *Phytoplasma pruni*'-related strain associated with chlorosis and decline of *Artemisia tridentata* in Washington State. *Plant Disease*, (ja). <https://doi.org/10.1094/PDIS-08-25-1663-PDN>

Teixeira, M., Ko, I., Bali, S., Vieira, P., Maier, T. R., Baum, T. J., and **Gleason, C.** 2025. Genome reannotation and gland-specific transcriptome analysis identify new effector candidates in *Meloidogyne chitwoodi*. *PLoS Pathogens*, 21(11). <https://doi.org/10.1371/journal.ppat.1013075>

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

Funding and Opportunities



Western Sustainable Agriculture Research and Education

- [Sabbatical Research & Education](#): Western SARE sabbatical grants provide an opportunity for faculty around the world to partner with farmers, ranchers, agricultural professionals, and researchers of the Western U.S. region for conducting research, education, and extension activities. The application can be found [here](#).
- [Graduate Student Research & Education](#): This grant program involves full-time graduate students enrolled in an accredited university of the Western U.S., their academic advisor, and at least one producer implementing projects to address identified needs in sustainable agriculture. Projects must integrate rigorous research and education, aiming to advance the three components of sustainable agriculture- environmental, economic, and social. More details can be found [here](#). **The deadline for both grants is March 5, 2026.**

Martin Stoner Travel Scholarship

The 71st Annual Conference on Soilborne Plant Pathogens and the 56th California Nematology Workshop will be held on March 24-26, 2026, at the Kearney Research and Extension Center, Parlier, CA. There is an opening for two students \$750 travel scholarships. More details can be found [here](#).

FFAR Fellow 2026-2029 Cohort Recruitment

North Carolina State University and the Foundation for Food & Agriculture Research (FFAR) have announced that the [FFAR Fellows](#) program is accepting applications for the 2026-2029 cohort. More details [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. 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

Jobs



Postdoctoral Positions

- **Purdue University** is seeking a postdoctoral researcher to work on basic and translational nematology research, developing novel methodologies for effective nematode management. The application can be found [here](#).
- The **University of Wisconsin-Madison** is looking for a postdoctoral researcher focusing on the molecular basis of plant disease resistance to cyst nematodes. More details can be found [here](#).

Technician, Industry, and Other Non-Academic Positions

- The University of California, Agriculture and Natural Resources (UC ANR) invites applications for a **UC Cooperative Extension (UCCE) Orchard Systems Advisor, in the Assistant Rank, serving San Joaquin and Stanislaus Counties**. The successful candidate will develop and implement an innovative applied research and extension education program that will focus on walnut and sweet cherry production. More information can be found [here](#).

- New Leaf Symbiotics (NLS), an agricultural biologicals company, is looking for a Senior Research Associate with experience in the management and analysis of greenhouse and field agricultural efficacy data. More details can be found [here](#).

Faculty Positions

- The College of Agricultural Sciences at **Pennsylvania State University** is accepting applications for a 48-week, non-tenure track faculty position at the rank of **assistant research professor** with expertise in diseases of grapevines and potatoes, integrated crop management, and development of educational programming serving extension needs. More details can be found [here](#).
- The Department of Entomology and Plant Pathology at **Auburn University** is looking for a plant virologist. This 9-month, tenure-track position (60% research, 40% teaching) is open for applicants at the Assistant or Associate Professor level. The position announcement and application details can be found [here](#).
- The Department of Plant Pathology and Microbiology at the **National Taiwan University** invites applications for a tenure-track appointment at the assistant professor, associate professor, and professor levels. More information can be found [here](#).