



July/Summer special newsletter

[The Spore Print \(07/31/2023\) Department of Plant Pathology April Newsletter](#)

Thanks for waiting! and Welcome to our Summer Special departmental newsletter!

Please enjoy these updates from our department!

Best wishes

- Ko, representing the editorial team: Elliott, Kayla, Joseph, Ninh, Sam, Anita, Tammy, and Cynthia.

[Click here to access the 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!

Updates



New students for Fall 2023!

We would like to welcome the following new students!

- 1) **Mary Steele.** She will be co-advised by Drs. Mattupalli and du Toit. Mary just graduated with an MSci in Ag student at Cal Poly, SLO.
- 2) **Megan Nickerson.** Megan is currently a student in Dr. Jana U'Ren's lab in Univ of Arizona, Tucson. She will be joining Dr. U'Ren this Fall as a PhD student!
- 3) **Harpreet Kaur.** Harpreet will be joining Dr. Frank Zhao's lab this Fall. Harpreet finished an MS at Tennessee State University.
- 4) **Lora Keyte.** Lora will be joining Dr. Kiwamu Tanaka's lab this Fall. Lora is graduating from UW Seattle with a B.S. in Plant Biology.
- 5) **Bipin Neupane.** Bipin will be joining Dr. Deven See's lab this Fall. Bipin just finished an MS at North Dakota State University.
- 6) **Mason Hoskins.** Mason will be joining Dr. Scott Harper's lab this Fall. Mason graduated from Pacific University and is currently living in Australia.

7) **Koy Chandler**. Koy will be joining Dr. Cynthia Gleason's lab this Fall. Koy just graduated with an undergraduate degree from BYU Idaho.

8) **Zephyr Papin-Tillery**. Zephyr will be receiving an MS in Agriculture and will be co-advised by Dr. Lindsey du Toit.

9) **Olivia Sterantino**. Olivia will be working on an MS with Dr. Maren Friesen's lab this Fall.

10) **Sasha Zvenigorodsky**. Sasha will be joining Dr. Weidong Chen's program to work on a MS. Sasha is coming from the University of Illinois at Urbana-Champaign with a bachelor's in Crop Sciences.

11) **Noah Nilson**. Noah will be continuing with a PhD under Dr. Naidu Rayapati completing his MS with Dr. Rayapati in July.

Faculty, please let us know if you are expecting students this Fall/Spring or if you have prospective students who still had questions! We'd love to meet them and tell them about grad school at WSU.

For new students: If you have not joined yet, please use the following link to join the informal student group chat: <https://chat.whatsapp.com/LtHCbbdHiTELFK8q4ae4ib>

Please also sign up for the NEB student starter pack: <https://www.neb.com/promoting-science-education/new-student-starter-pack>. :)

It's freeeee swag and also some cool info (plus NEB marketing)

Welcome our new PPGSO officers and Thank you for the past officers!

Please welcome our new PPGSO officers !

***Sam Jayasinghe** – President*

***Itsuhiro Ko** – Vice President*

***Roshani Baral** – Secretary/Mount Vernon Rep*

***Kristen Bullough** – Treasurer*

***Elliott Marston** – Faculty Liaison*

***Anita Paneru** – GPSA representative*

Madan Pandey – Wenatchee Rep

Katelyn Kiick – Prosser Rep (Until Jan 2024)

Dr. Cynthia Gleason -- PPGSO advisor

Please contact us by using the following email: < PLPGSO@wsu.edu >

And Please say thank you to our out-going officers.

Ninh Khuu - President

Joseph Mellow - Vice President / Wenatchee Rep

Sudha Upadhaya - Secretary

Katelyn Kiick - Treasurer / Prosser rep

Kayla Spawton - GPSA Rep

Sam Jayasinghe - GPSA College Rep

Marilen Nampijja - Mount Vernon Rep

We can't thank our advisor, Dr. Cynthia Gleason, or our department's Administrative Manager, enough!

Without everyone's efforts, we could not have such a fun and active year. Again, thank you all for your service! ----- Ko

Thesis Defense and Prelim Results

Noah Nilson successfully passed his Masters Examination on July 19, 2023. Dr. Naidu Rayapati led his committee. Noah will begin his PhD with Dr. Rayapati this fall.

Congratulations Noah!

Congratulations to PhD Candidate Sam Jayasinghe for a USDA NIFA grant!

Congratulations to Samodya Jayasinghe, who was awarded a USDA NIFA predoctoral grant. Her dissertation research focuses on the molecular basis of interactions among potato, *Spongospora subterranea* and Potato mop top virus. Her dissertation committee is led by Dr. Kiwamu Tanaka and includes Dr. Ficklin, Pappu, and Gleason.

PhD student Ninh Khuu receives GPSA Excellence Award for Senator of the Year.

The Graduate and Professional Student Association conducts the GPSA Excellence Awards each year. Ninh Khuu received Senator of the Year. Congratulations, Ninh!

Dr. Jenny Broome visited us in Spring 2023 as an Invited Speaker



1 - Graduate students stand with Dr. Jenny Broome after her seminar while she holds up a Plant Pathology T-Shirt. Pictured from left to right: Sudha Upadhaya, Anita Paneru, Nosheen Fatima, Leah Morrison, Dr. Jenny Broome, Scott Anderson, Janice Parks, Sam Jayasinghe, Elliott Marston. Photo credit: Dr. Xianming Chen

Dr. Jenny Broome, Plant Health Department Manager and Scientist in Global Research from Driscoll's Inc. in Watsonville, CA gave a seminar titled, "New Tools for Safe Guarding Berry Plant Health: From the Nursery to the Consumer" on April 24th, 2023 for our department.

Drs. Gary Chastagner and Joey Hulbert were featured in WSU Insider

Check out the WSU Insider article titled, "[Sentinel Plantings to guard against invasive pests, diseases at Washington ports](#)" by Seth Trunscott featuring Drs. Gary Chastagner and Joey Hulbert. Dr. Chastagner gives details about how sentinel plantings are used in plant pathology, while Dr. Hulbert talks about his work with the Forest Health Watch community science program.

If you're interested in learning more about the Forest Health Watch and how to participate in monitoring pests and diseases in the PNW forests, [click here](#).

PLP researchers presented at WSU Potato Field Day – Thursday June 22, 2023



2 - Dr. Cynthia Gleason (left) presenting on nematode controls in potato while Scott Anderson (right) holds the poster.



3 - Sudha Upadhaya (left) and Scott Anderson (right) holds another visual aid.

WSU Scientists gave a talk to the potato growers at WSU Othello Research Unit

Dr. Cynthia Gleason gave a talk of "**Systems approach to controlling nematodes in U.S. potato production**"

Dr. *Chakradhar Mattupalli* gave a talk of "**Grower supported direct tuber testing approach for detecting potato pathogens**"

Sudha Upadhaya, a PhD candidate, gave a talk of "**Comparative analysis of soil health status in agricultural and native soils in PNW region**"

Special thanks to Scott for holding the posters!

Events in Pullman and REC Locations



Please contact the corresponding person for more details!

Pullman Events



By Elliott Marston <elliott.j.marston@wsu.edu>, Sam Jayasinghe <samodya.jayasinghe@wsu.edu>, and Itsuhiro Ko <itsuhiro.ko@wsu.edu>

Welcome Back Departmental Potluck

Bring your family and your favorite dish and join us for a potluck to welcome in a new academic year and all of the new faces in our department. **The potluck will be at Sunnyside Park on September 10, 2023 from 11 AM - 3 PM.** The potluck sign-up sheet can be seen [here](#).

Monday Coffee hours

This upcoming Fall semester, join us **every Monday at 3.00 pm - 4.00 pm in Clark 299** for coffee and snacks before seminar. All are invited!!

MPS Friday Coffee hour

MPS (Molecular Plant Sciences) coffee hour will be happening this **Friday from 1-2:30 every other week.** Free coffee and tea will be from the CUB Starbucks as it is free for graduate students on Fridays. We will be meeting outside in the shade in front of the CUB

Fall 2023 Lab Crawl

Tour labs in Vogel, Clark Hall, and the Plant Science Building with your GSO officers and new and incoming students! This is a great opportunity to tour all the plant pathology facilities, including the [Charles Gardner Shaw Mycological Herbarium](#). Tour will be on **August 21 at 2:30 PM in the Green 1 parking lot between the FSHN building and Clark Hall** and we will end at Ferdinand's around 4:00 PM. Please feel free to join the tour as a current student, postdoc, staff, or faculty member, the more the merrier!

Lab Crawl Agenda:

<i>2:30 pm</i>	<i>Clark Hall</i>	<i>Cassandra Bates (Plant Diagnostic Lab)</i>
<i>2:45 pm</i>	<i>Clark Hall</i>	<i>Elliott Marston (Western Regional Small Grains Genotyping Lab)</i>
<i>3:05 pm</i>	<i>PSB</i>	<i>Itsuhiro Ko (Gleason Lab)</i>
<i>3:20 pm</i>	<i>Vogel</i>	<i>Monique Slipher (CGS Mycological Herbarium)</i>
<i>3:35 pm</i>	<i>Vogel</i>	<i>Prabu Gnanasekaran (Pappu Lab)</i>
<i>3.45 pm</i>	<i>Ice cream at Ferdinand's !</i>	



4 - Please sign the QR Code to access the potluck signup sheet :)

Wenatchee Events



Please contact Joseph Mellow <joseph.mellow@wsu.edu> for more infos

Mount Vernon Events



by Kayla Spawton <kayla.spawton@wsu.edu>

On July 13th, the WSU Skagit Co. Extension Master Gardener Program celebrated the 50th anniversary of the WSU Master Gardener program, with an event at the WSU Mount Vernon NWREC that was attended by ~200 people. Part of the celebration included a tour of the NWREC to learn about the various research programs.

For Dr. Lindsey du Toit's Vegetable Seed Pathology program, Marilen Nampijja shared how she uses tobacco plants to test whether *Pseudomonas syringae* isolates obtained from beet and chard seed and leaves, as well as weeds, crop residues, and water sources are plant pathogens. The tobacco hypersensitivity test helps her identify which isolates to test further for pathogenicity on table beet and Swiss chard, to confirm if they are able to cause bacterial leaf spot. Kayla Spawton shared how spinach seed can carry a variety of pathogenic and non-pathogenic fungi, including the causal agents of Stemphylium leaf spot of spinach (*Stemphylium beticola* and *Stemphylium vesicarium*). The two PhD students also highlighted the work other members of the Vegetable Seed Pathology program have done on a diversity of vegetable seed crop diseases, including a demonstration of bacterial rot of onion caused by species of the genera *Burkholderia*, *Pantoea*, and *Enterobacter*, and research by former students on Fusarium wilt of spinach seed crops.

For Dr. Chakradhar Mattupalli's Berry and Potato Pathology program, MS student Roshani Baral presented a demonstration on fungicide resistance of *Botrytis cinerea* isolates from blueberry, and highlighted the importance of identifying the fungicide sensitivity status of isolates for effective control of gray mold in fields using fungicide programs. MS student Purnima Puri presented a demonstration and information on the biology and management of silver scurf of potato caused by *Helminthosporium solani*. She emphasized the contrasting behavior of this disease between western and eastern Washington, highlighting the greater prevalence of the disease in western Washington potato crops.



5 - Marilen and Kayla with the Vegetable Seed Pathology's table for the event.



6 - Purnima showing the audience potatoes with silver scurf.



7 - Roshani showing the audience differences in the growth of Botrytis isolates on fungicide-amended medium depending on their sensitivities to fungicides.

Prosser Events



by Ninh Khuu <ninh.khuu@wsu.edu>

The soil is starting to warm up and projects are starting to ramp up. The Swisher-Grimm lab is prepping to plant potatoes. The Harper lab is starting field season and testing weeds as alternate hosts for little cherry disease.

The Harper lab would also like to welcome Dr. AJ Johnson as our newest Post-Doc and Mason Hoskins as a masters student starting in Fall.

Postdoc (PRPA) Happenings

The Postdoctoral and Research Professional Association (PRPA) hosts Moscow-Pullman Science Happy Hour every Friday at 5:30-7:30sh. The venue changes every week. To stay updated, sign up [here](#)!

To be a part of PRPA, go [here](#), and fill in your name and email.

Publications



Cifizzari, K.C.P., **Moyer, M.M.**, and Cheeke, T.E. Growth Responses of Potted *Vitis vinifera* Cultivars Differ to a Mycorrhizal Inoculant and Phosphorus Fertilizer. (2023). *HortScience*: **58**:6, 643-650.

<https://doi.org/10.21273/HORTSCI17114-23>

Feng, J., Yao, F., **Wang, M.**, **See, D.R.**, and **Chen, X.** Molecular Mapping of Yr85 and Comparison with Other Genes for Resistance to Stripe Rust on Wheat Chromosome 1B. (2023). *Plant Disease*, 0(0):ja.

<https://doi.org/10.1094/PDIS-11-22-2600-RE>

Harper, S., Northfield, T.D., Nottingham, L.R., **Dupont, T.**, Thompson, A.A., Sallato, B.V., Serban, C.F., Shires, M.K., Wright, A.A., Catron, K.A., Marshall, A.T., Molnar, C., and Cooper, W.R. Recovery Plan for X-disease in Stonefruit Caused by Candidatus *Phytoplasma pruni*. (2023). *Plant Health Progress*, First Look.

<https://doi.org/10.1094/PHP-02-23-0016-RP>

Hobbs, M.B., Vengco, S.M., Bolton, S.L., Bettiga, L.J., **Moyer, M.M.**, and Cooper, M.L. Meeting the Challenge of Viral Disease Management in the US Wine Grape Industries of California and Washington: Demystifying Decision Making, Fostering Agricultural Networks, and Optimizing Educational Resources. (2023). *Australian Journal of Grape and Wine Research*, vol.2023.

<https://doi.org/10.1155/2023/7534116>

Li, L., Zheng, X., Wang, J., Zhang, X., He, X., Xiong, L., Song, S., Su, J., Diao, Y., Yuan, Z., **Zhang, Z.**, and Hu, Z. Joint analysis of phenotype-effect-generation identifies loci associated with grain quality traits in rice hybrids. (2023). *Nature Communications*: 14: 3930. <https://doi.org/10.1038/s41467-023-39534-x>

Lowder, S.R., Neill, T., Peetz, A., Miles, T.D., **Moyer, M.**, Oliver, C., Stergiopoulos, I., Ding, S., and Mahaffee, W.F. A rapid glove-based inoculum sampling technique to monitor *Erysiphe necator* in commercial vineyards. (2023). *Plant Disease*, vol. 0, ja. <https://doi.org/10.1094/PDIS-02-23-0216-RE>

Spawton, K.A., Peever, T., and du Toit, L.J. Genome resource for *Stemphylium beticola*, one of the causal agents of Stemphylium leaf spot of spinach (*Spinacia oleracea*). (2023). *PhytoFrontiers*, 0(0):ja. <https://doi.org/10.1094/PHYTOFR-03-23-0035-A>

Tanaka, K., Mudgil, Y., and Tunc-Ozdemir, M. Editorial: Abiotic stress and plant immunity – a challenge in climate change. (2023). *Frontiers in Plant Science*: **14**. <https://doi.org/10.3389/fpls.2023.1197435>

Tang, Z. and **Zhang, Z.** Ladder: A software to label images, detect objects and deploy models recurrently for object detection. (2023). *arXiv:2306.10372* (cs). <https://doi.org/10.48550/arXiv.2306.10372>

Wang, X., **Mattupalli, C., Chastagner, G., Tymon, L.,** Wu, Z., Jung, S., Liu, H., and DeVetter, L.W. Physical characteristics of soil-biodegradable and nonbiodegradable plastic mulches impact conidial splash dispersal of *Botrytis cinerea*. (2023). *PLOS One*, **18**(5): e0285094. <https://doi.org/10.1371/journal.pone.0285094>

Funding & Opportunities



Department of Plant Pathology travel grant (Open to all PLP students)

Please contact Tammy Cunningham (t.cunningham@wsu.edu) for more info.

American Phytopathological Society Funding (US students)

APS has multiple applications for student fellowships open now. Student members are eligible to apply. Please find more information [here](#).

TA position opportunity in School of Biological Sciences

If you are interested in a TA position in the School of Biological Sciences this fall, please contact Kara McClanahan at karamac@wsu.edu

GPSA Travel Grants

GPSA travel grants are available all year round and are awarded as reimbursements post travel, for our of pocket travel costs. Pullman Service and Activity fee paying students are eligible to apply. Please see all information at GPSA grants website [here](#). Contact gpsa.granst@wsu.edu if you have questions.

Here is a website that has 572 funding sources you can look for

<https://research.jhu.edu/rdt/funding-opportunities/early-career/>

Seminars



Dr. Xianming Chen will be leading the seminars this coming fall. Please direct all questions about seminar towards Dr. Chen at xianming@wsu.edu.

Dr. Claude W. dePamphilis will visit Pullman to give a talk on Aug 23rd, 2023.



Dr. [Claude W. dePamphilis](#) is the Director of the Center for Parasitic and Carnivorous Plants; Huck Distinguished Chair in Plant Biology and Evolutionary Genomics; Professor of Biology at the Pennsylvania State University

His research focuses on Genetics, Genome, Gene, Phylogenetics and Botany. His research is interdisciplinary, bridging the disciplines of Small RNA and Genome. His Phylogenetics research incorporates elements of Evolutionary biology, Cell cycle, Cyclin and Phylogenetic tree. Claude will give a talk at Molecular Plant Sciences student invited seminar on Aug 23rd !

I will send out an seminar flyer next month. --- Ko

Dr. Gerald Holmes will be our Student Invited Guest Speaker Fall 2023!



Dr. Gerald Holmes is the Director of the Strawberry Center at Cal Poly State University in San Luis Obispo, California. The Center is a partnership between Cal Poly and the California Strawberry Commission. The mission of the Center is to increase the sustainability of the California strawberry industry through research and education. Gerald got his Ph.D. in Plant Pathology from UC Riverside in 1994 then worked as a University of California Cooperative Extension Farm Advisor in Imperial County for three years. For the next 12 years he was an Extension Vegetable Pathologist and Associate Professor at NC State University then worked six years as Product Development Manager for Valent USA Corporation before becoming Director of the Center in 2014.

Dr. Holmes will give a seminar at November 6th, 2023! Details will be released in fall 2023.

Thank to Roshani, Tammy, and all PPGSO officers's effort and Special thanks to GPSA and Department of PLP for the funding.

Jobs



Graduate Research Positions

- PhD Research Assistant position is available at the **University of Illinois-Urbana** in the molecular physiology program under Dr. Dean Riechers. Interested applicants should send an email stating their academic and research interests, professional background, and current resume (PDF) to Dr. Dean E. Riechers, Professor of Crop Sciences (riechers@illinois.edu).
- PhD Research Assistantship in molecular plant breeding is available in the Department of Plant and Environmental Sciences at **Clemson University Pee Dee Research and Education Center in Florence, SC**. Interested applicants should contact Dr. Sachin Rustgi at srustgi@clermson.edu with their CV, research interest, unofficial copies of transcripts, and GRE and TOEFL scores (if applicable) as a single pdf file. Also, forward three references' contact information (email, phone number, name, and designation).
- TA position opportunity in **WSU's School of Biological Sciences**. If you are interested in a TA position in the School of Biological Sciences this fall, please contact Kara McClanahan at karamac@wsu.edu

Post-Doctoral Positions

- Postdoctoral Scholar in Cropping Systems, Agronomy, Soil Science, Precision Agriculture, or Plant Pathology at the **Columbia Basin Agricultural Research Center (CBARC) at Pendleton, OR**. More info is [here](#)
- Postdoctoral Fellow (Breeder/Pre-breeder for Food and Forage Legumes) at the International Center for Agricultural Research in Dry Areas (**ICARDA**) in **Rabat, Morocco**. Applications due by August 16, 2023. [More details here](#).
- Postdoctoral researcher fellow position is available at the laboratory of Dr. Ayele at the **University of Manitoba** in the area of hormonal regulation of traits of economic importance, including abiotic stress tolerance in cereals. Interested candidates should send: a cover letter explaining the research interests, CV, and contact information (including phone numbers) for 3 references by email to Dr. Ayele at belay.ayele@umanitoba.ca

Technician and Industry Positions

- Assistant Carrot Breeder for **Bejo Seeds, Inc. in Weiser, ID**. Contact Tracie Stricklin at t.stricklin@bejoseeds.com for more info.
- Pesticide Safety Education Program Coordinator, at the **Michigan State University Entomology Department**. Position open until filled. [More details](#).
- Scientist / Seed System Specialist position is open at the International Center for Agricultural Research in Dry Areas (**ICARDA**) in **Lebanon, Morocco OR Ethiopia**. Only shortlisted candidates will be contacted. More info [here](#).

Faculty Positions

- Assistant Professor in Urban and Controlled-Environment Plant Pathology at The **University of Georgia (UGA)**. Anticipated Start Date: January 1, 2024. Applications received by 21 August 2023 are assured full consideration. [More info](#)
- Research Plant Pathologist with the **Soybean Genomics and Improvement Laboratory** at the USDA-ARS station in **Beltsville, MD**. Application closes August 14, 2023. Get more details and apply [here](#).
- Research Fellow position at the School of Agriculture and Environmental Science in the area of Genomics. At the **Toowoomba Campus of the University of Southern Queensland**; closes August 11, 2023. More details [here](#).

Ongoing Job postings:

[ASPB Job Board](#)

[Plantae Jobs](#)

Check out the following twitter thread that actively listing any opening positions in life science (MS, PhD, Postdoc, and faculty)

<https://twitter.com/genscientists/status/1677390591057969152?s=21>

Contact us



If you have an item you would like included in the newsletter, email it to Itsuhiro.ko@wsu.edu.

Also, please complete this questionnaire to help us improve our newsletter. We appreciate your feedback!

<https://forms.gle/DubmGBiAjbEfyeqW9>