



SUBJECT MATTER EXPERTISE & CAREER PATHWAY COMMITTEES

Prepared by Councilors-at-Large: Olufemi Alabi, Nicole Donofrio, Jerry Weiland *December 2024*

Overall Annual Report Themes

1. Expenses for Plant Health 2025 in Hawaii

Council should expect an increase in requested funds for the 2025 meeting. Some committees are requesting funds to offset registration for speakers from the government (potentially other organizations as well) to maintain a breadth of diverse speakers and to cover increased costs of attendance in Hawaii.

2. Renewing memberships in a timely manner

Committee members tend to lapse in their membership resulting in them missing committee meetings and other important reminders.

3. Low attendance at virtual committee meetings

It is difficult to gauge the level of participation/engagement as not all committees provided data on membership attendance at their meetings. For those who provided data, more than half reported low attendance/engagement of members.

- Online meetings seem to be held only when required and are sparsely attended.
- Many committees blamed poor attendance on fully virtual committee meetings and advocated for a return to in-person committee meetings at the annual Plant Health program.
- Most committees still mention that they miss having in-person meetings and the camaraderie that comes with in-person interactions. Some committees do not see the Committee Connections as a viable alternative.
 - Per the 2023 Annual Report: Committees are missing out on people that used to drop in on in-person meetings because online meeting invites are only sent to people on the committee member roster.
 - 2024 Committee Connections were made available to all APS members to attend, and the information was shared on the APS website, Community, through other APS communication channels.

4. Transfer of knowledge from member to Vice-Chair, and from Vice-Chair to Chair

In several committees, there is little to no transfer of knowledge on how to lead committees and run meetings from the Immediate Past Chair (IPC) to the Chair (C) to the Vice-Chair (VC). For example, on committee the IPC no longer responds to email from the incoming C, who wants guidance about how to lead the group. How much are VC and C working together during the year to transfer knowledge? This is also an issue in committees where Cs don't do much of anything during the year, thus providing no mentoring for incoming C and creating a repeating cycle of mediocrity.

- Per the 2023 Annual Report: There is an interest in a regular meeting between Chairs and Vice Chairs to learn from each other and more experienced committee members. This is because no one is mentoring within the committee.
- Vice-Chair onboarding training offered this past fall (2024) may be too vague. Would it help to provide more real-life examples in the training? Noted during some of the live sessions had limited interactions between the attendees.

5. Engagement within the committees

- Per the 2023 Annual Report: Engagement hard to maintain for committees meeting only once a year on topics that aren't of interest to the members. Identify issues that matter to many committee members, do work that makes a difference, and make involvement fun.
- How do committees move beyond just submitting special sessions?
 - Would real life examples be useful?
 - What are the duties of Councilors-at-Large (CALs), Leadership Institute (LI), and the ICO in working together and guiding engagement? The Leadership Institute will have a new charge

6. Plant Health programming decisions

Multiple committees (e.g., Extension, CDEI) with organized (paid) events during the annual Plant Health program expressed concern about the lack of involvement in the planning process for those events. They would like to be involved in the decision-making process for the timing, cost and location of their events.

7. Visibility concern

A smaller subject area in the APS community brought up an issue of <u>visibility</u>; members of an organization related to this subject area did not know that this APS committee existed or did not see any benefits to joining.

2024 Committee Report Summaries from Councilor-at-Large Liaison

Nicole Donofrio

Bacteriology

- Three Committee connections Nov. 2023, Jan. 2024, and July 2024.
- Shaista Karim is a member on the Rapid Response Task Force.
- Organized a webinar: Unlock Your Future: Career Pathways for Early Professionals.
- Community service by updating the list of prokaryotic plant pathogens with USDA- APHIS BRS.
- They continue to be active in their APS community space about important announcements on bacterial plant pathogens.
- Plant Health 2024: co-sponsored two sessions.

Industry

- Continuation of 1:1 mentorships for ECPs and grad students; worked with PPB; had two committee meetings.
- Plant Health: Industry-student networking event and Industry-extension networking social; these are highly attended and desirable events. Each had close to 150 attendees and are run by the chair/vice chairs, respectively.
- Organized the New Products and Services special session they rolled out a new format this year having the session in two parts, and they will send a survey on how well that worked.
- Committee Connection hours not as good as they wanted due to confusion over the tables, and their time overlapped with one of their sponsored sessions.

Chemical Control

- Webinar on the ESA and impact on fungicide registrations; they will continue to expand on this topic to pitch a session for Plant Health 2025 and how Hawaii will be dealing with this.
- Plant Health: Cosponsored a meeting on the ESA.

Biological Control

- Four committee connections two in fall 2023 and two in 2024, during these meetings they added on a secretary position, now have a social media presence, and formed a subcommittee to organize a collection/list of biocontrol agents, which they completed.
- One of their goals is to increase adoption of biopesticides through education and their social media sites. Pitching session for 2025, possibly with Extension and Industry.
- Plant Health 2024: They co-sponsored a session and organized an Idea Café.

Mycology

- Met two times at January and July committee connections; discussed the importance of mycology in education!
- Helped update the USDA-APHIS BRS fungal list of plant pathogens; contacted members of MSA.
- Plant Health: They sponsored one special session; co-sponsored two special sessions.

Phyllosphere Microbiology

- Met twice over the past year (committee connections) developed a grad student competition on effectively presenting microbiome data and work with the grad student committee; they plan to conduct monthly meetings.
- Plant Health: Organized and ran a workshop on bioinformatic platforms for microbiome data (they mention they have had "repeat attendees" from their 2023 meeting).

Crop Loss Assessment and Risk Association (CLARE)

- Had one virtual committee meeting in January and committee connections in July; they
 discussed highlighting members' research on social media and have more discussions.
- Plant Health: co-sponsored two special sessions; pitched another that got postponed to Plant Health 2025.

Office of Private Sector Relations (OPSR)

- OPSR had four virtual, well-attended meetings; one of the major activities was planning for the 2025 Industry Tours, and in 2024.
- Helped support the PPB intern during various travels. They are clearly hitting the strategic goal of training the workforce.
- Plant Health: hosted a working luncheon that was well-attended and included Linda Kinkel (PPB); there was an important discussion of what losing some fungicides will mean, and Crop Life America's commentary.

Mycotoxicology

- Held two virtual meetings in January and July to identify topics of interest they held a survey, and climate change and IPM of mycotoxin management came out on top in terms of hot topics; will likely be the topics for 2025 special sessions.
- Held a webinar on mycotoxins in a changing climate.
- They have numerous objectives, but some important ones include advocacy for mycotoxin mitigation, increase in DEI and ECP recruitment and committee engagement.

• Plant Health: Organized and sponsored one special session on the forefront of mycotoxin management; met for committee connections hour.

Early Career Professionals

- Leadership team meets twice/year to discuss upcoming opportunities and proposed events.
- Hosted the Schroth Faces of the Future at Plant Health 2024 with a focus on Bacteriology.
- Hosted social networking hour and First Timer's Orientation at Plant health 2024; both were well attended
- Will be hosting "honorable mentions" for Schroth Faces, throughout fall 2024 and spring 2025, webinar series.

Epidemiology

- Sponsored a special session at Plant Health 2024.
- Hosted the Melhus Graduate Symposium at Plant Health 2024.
- The committee met twice (January and July), and the sub-committee met two additional times for pre-conference planning.
- Ongoing: they are organizing and planning to submit an article from their Plant Health 2024 Symposium proceedings.
- They are developing workshops and webinars for the coming year and are currently planning one that focuses on transitioning statistical models.

Emerging Pathogens

- Sponsored two special sessions (including Schroth) at Plant Health 2024.
- Held an Idea Café on vascular streak dieback at Plant Health 2024.
- Facilitated panel discussion at Jacque Fletcher's Agrosecurity session at Plant Health 2024.
- The committee met twice (January and July).
- Ongoing: they plan to host an online "career panel" for graduate students.
- They are developing special sessions for Plant health 2025 on APHIS Permitting.

Jerry Weiland

Bioengineering Applications

- One online committee meeting.
- Webinar on career pathways in biotech with about 50 attendees. The event helped raise awareness about differences in interview questions between industry, academia, and government (May 2024, also occurred in 2023). Aiming to repeat spring 2025.

Collections & Germplasm

- Organizing webinar on microbe collections that are historic, non-endemic, or quarantined.
- Conducted survey to gain understanding of awareness about microbe and plant collections, how they are being used, current challenges, and what can be done to improve collection usefulness and sustainability. 88 respondents. Will present results in a review article.
 - o Germplasm collections potentially closing or closed in 2024 include Ft. Detrick, World Phytophthora collection at UC-Riverside, and the Duke Herbarium.

Diseases of Ornamental Plants

- Organized field trip at Plant Health 2024. Organized Special session on disease surveillance and pathogen detection methods. Organized Idea Café on Vascular Streak dieback.
- Many committee members are working as editors or coauthors on the Diseases of Woody Ornamentals and Trees in Nurseries book.
- Looking to organize webinars about ornamental plant diseases.

Graduate Student

- Co-organized (with Teaching Committee) Undergraduate Prime event for undergrads attending Plant Health for the first time. Agenda and activities for fun.
- Networking hour at Plant Health 2024.
- Monthly online social meetings.
- Five awards for Art-in-Phytopathology contest.
- Monthly spotlight on graduate students in *Phytopathology News*.
- Organized reviews for Student Award Travel Applications.
- Posts on social media platforms.
- Will be asking Early Career Researchers to present at monthly meeting. Trying to get an extension professional to talk about relating to and communicating with growers.

Evolutionary Genetics & Genomics

- Held a Committee Connections meeting and a Roundtable at Plant Health 2024.
- Met in July with productive discussions about an educational module about sequencing technology and analysis; discussed the importance of phages and how climate change impacts their interactions with hosts.
- Interest in developing a genomic tool development/data management/bioinformatics information session, webinar, and networking session.

Leadership Institute

- Leadership training in collaboration with Jim Meffert, Council, and APS Staff. Deployed survey and feedback was positive. Will continue training in 2025.
- Publishing "Leader spotlights" in Phytopathology News.
- Active on twitter with 1000+ followers. Working to strengthen social media presence.

Molecular & Cellular Phytopathology

- Interested in collaborating with the Bioengineering Applications Committee to host webinars to provide early career researchers opportunities to present.
- Interested in working with committee members to submit Special Session or workshop ideas for Plant Health 2025.

Nematology

- Discussed webinar for nematode identification.
- Interest in hosting symposium on management of plant parasitic nematodes or emerging diseases (beech leaf disease or guava root knot nematode) at Plant Health 2025.
- Want to highlight student and postdoc activity in *Phytopathology News* and other APS social media.

Pathogen Resistance

- Three sessions and one workshop for Plant Health 2024.
- Working on webinar series for pesticide resistance. Deciding on topics. Planning to hold series during January – April 2025 with a certificate upon completion. Cohost with Industry Committee. Working with APS Staff on deadlines.

Postharvest Pathology

- Working on two review papers (root crops, fruit crops).
- Interested in potentially establishing a federal working group for postharvest pesticides due to increased scrutiny by EPA.

Seed Pathology

- Special Session at Plant Health on testing seeds with high throughput sequencing technologies. >200 attendees. \$2000 sponsorship.
- 4-hour workshop at Plant Health on pospiviroid biology, epidemiology, and seed transmission. \$2756 sponsorship.
- Co-sponsored Special Session on high throughput sequencing for virus detection at Plant Health, organized by the Virology Committee.
- Discussion about proposed EPA mitigations for captan and thiram as seed treatments.
 Issue brought to the attention of APS Public Policy Board.
- Discussions about seedborne pathogens of emerging concern, particularly Tomato brown rugose fruit virus, which is considered an emergency/quarantine pest.
- Working on a new series for spring 2025 about principles and practices for seed testing protocols (assay development, techniques, quality control, and regulatory considerations).
- Also working on an online course to address methods and practical applications of high throughput sequencing technologies. Planning initiated with Megan Boatman.
- Seeking funds to cover Seed Pathology Breakfast, which could not be held at Plant Health 2024 due to a lack of funds. This means they may not be able to cover travel expenses for invited speakers at special sessions or workshops approved for Plant Health 2025.
- Working on several ideas for Plant Health 2025 sessions and workshops.

Tropical Plant Pathology

- Idea Café and Committee Networking Hour discussion at Plant Health about the effect of climate change on pathogen movement and how to detect pathogens with newer technologies.
- Working on field trips, special sessions, and/or workshop related to tropical plant pathology for Plant Health 2025.
- Looking to conduct a joint Tropical Plant Pathogen Committee and APS-Caribbean Division webinar series. Submitted APS Educational Content Form.
- Working to write profiles for tropical plant pathologists on social media platforms.
- Development of a Tropical Plant Pathology collaborator website. Potentially partner with the Office of International Programs to promote professional collaborations and sharing of information.

Vector-Pathogen Complexes

- Held Yoga event at Plant Health 2024. Would like it to be a recurring event.
- Added a secretary position to VPC committee to increase VPC presence on social media platforms.
- Revising special session on technology and vector-borne disease management with Bioengineering Applications Committee and the Office of International Programs.
- Working on fundraising and social interaction activities, such as a 5k run/walk. Funds to be allocated towards special events, travel awards, and social gatherings for VPC.
- Re-establishing collaboration with the APHIDS Genome Group.

Olufemi Alabi

Diagnosticians

- Organized an idea café on funding for diagnostic labs attended by approximately 20 participants ranging from diagnosticians, department heads, plant pathologists and industry. The ideas from this session will be published in the NPDN Communicator newsletter later in 2024.
- Numerous proposals for special sessions and field trips were co-sponsored.
- Met 3 times during the year including during the committee connections week; attendance data not provided.
- Committee leadership met with Disease Surveillance Committee leadership to discuss. The committee will focus on training for diagnosticians including a diagnostician's course focused on bridging the gap between traditional and molecular diagnostics.
- Webinars on commodity-focused diagnostics are being planned.

Forest Pathology

- Organized a special session on the topic "Engineering Solutions to Forest Pathogen Invasions" and co-sponsored another session on the topic "Applications of Nanotechnology, Biosensor, and Microfluidics in Plant Pathogen Detection" during the Plant Health 2024 meeting.
- Held a social gathering at Memphis Botanic Gardens, looking for tree diseases along the way.
- Soliciting donations from members toward meeting the additional \$1,300 to meet the \$20,000 threshold for The McNabb funds for student travel award.

Soil Microbiology and Root Diseases (SMRD)

- Met 3 times during 2023, but no data provided on the number of meeting attendees.
- Held a special seminar by Dr. Sharon Doty of WSU on 03/19/24 on "the Power of the Plant Microbiome". The seminar highlighted Dr. Doty's diverse work in this field and was inspirational for the ~30 attendees.

Teaching

- Organized a Special Session titled "Hands-on Approaches for Teaching Plant Pathology to Undergraduates in Generation Z" at the Plant Health 2024 meeting, which was the first Teaching Committee sponsored session in a couple of years. About 80 attendees; positive feedback received.
- Took over leadership of the Undergraduate Student Primer, an event that was organized collaboratively with the Graduate Student Committee and redesigned with a greater focus on networking. Poorly attended (n=4).
- Co-sponsored the Plant Health 2024 Special Session "Agrosecurity in a Global Economy".
- Held mid-year committee meeting with improved attendance (n=20) compared to 2022 (n=10).
- Occasionally the committee assists with the APS Education Center activities (website redesign), but for the most part, the committee is focused on conference activities.

Turfgrass Pathology

 Planned a pre-meeting workshop at Plant Health 2024 titled "Turfgrass Disease Diagnostics Workshop", but unable to meet the minimum registration threshold to hold it; 12 of 15 required registrants. Poor registration likely due to diagnosticians forgoing Plant Health

- 2024 for the National Plant Diagnostic Network's conference being held September 2024. The workshop will be redesigned for Plant Health 2025.
- Held multiple virtual committee meetings throughout the year, including mid-year committee connection, annual general meeting, and two unique ad-hoc committee meetings. In one of the meetings, a graduate student was allowed to present their top-ranked turfgrass pathology-related paper at the Crop Science Society of America annual conference to the committee. In another, a 'happy hour' was held in honor of the passing of Joe Vargas, a longtime turfgrass pathologist at Michigan State University.
- Created a new position for Graduate Student Representative to foster interaction and contribution from graduate students working in turfgrass pathology to impact the decisions and efforts of the committee.

Disease Surveillance Plant Pathology Detection Methods

- Held three committee meetings during the year with less than 20 attendees per meeting.
- Hosted a Plant Health 2024 Special Session titled "Applications of Nanotechnology, Biosensors, and Microfluidics for Plant Pathogen Detection" with over 100 attendees.

Family and Caregiver Support

- Held monthly committee meetings.
- Worked with APS staff to arrange and prepare supplies for Sprout's Corner (activity room for kids with their families), and Lactation Room.
- Provided two travel awards from the APS funding to support caregivers participating in Plant Health 2024; hope to increase it to 3 awards for Plant Health 2025.
- Proposed a special session titled "Caregiver Support: For You, For Me, and the Next Generation of Plant Pathologists" for Plant Health 2024 to raise awareness of caregiving challenges within the Plant Pathology field. Proposal not selected but would be repurposed into a webinar.

Virology

- Two fully virtual meetings held during the year.
- Continued to organize a webinar series called "Virology Then & Now" for engagement of committee members throughout the year; two sessions (3rd and 4th editions) were held during this reporting period; each featured two panelists, one early career and one late career scientist: One was a panel discussion on the topic "Engaging with stakeholders: Lessons from across eras in plant virus-vector interactions" and the other a panel discussion on the topic "Bridging Generations of Expertise in Teaching Plant Virology".
- Sponsored a Special Session titled "With great power comes great responsibility: the
 challenges and ramifications of using high throughput sequencing for virus discovery". Cosponsored another titled "Translating the science of high throughput sequencing to seeds"
 and co-sponsored a pre-meeting workshop titled "Understanding risk pathways of viroid
 transmission in vegetable seed and potato production".
- Members also organized/co-organized other technical sessions, an Idea Café, and a Working Group meeting during the Plant Health 2024 meeting.

Extension

 Organized a Special Session titled, "To AI or Not to AI: The Future of Educational Outreach and Extension in Modern Times," during Plant Health 2024.

- Organized two networking events during Plant Health 2024: "Extension Industry Breakfast" which was well attended by extension members with a few industry members, and "Extension Industry mixer at the Fishbowl".
- Plan to resurrect the "Day in a Life of an Extension Professional" to create a series of short stories that could be featured in *Phytopathology News* and work more closely with the Public Policy Board to provide a connection between current issues and in the field experiences.

Committee for Diversity, Equity, and Inclusion (CDEI)

- Held one mid-year committee meeting with only 10% of members in attendance and the Committee Connections meeting that was also poorly attended.
- CDEI Leadership met severally with APS staff on a variety of topics, including the society's involvement with Roots and Shoots, and with Leadership Institute to discuss ways in which they can improve member engagement.
- During Plant Health 2024, CDEI organized, supported, and/or hosted 3 events. One was a successful field trip with Out Memphis in collaboration with APS staff and leadership where APS member volunteers contributed by sorting clothes and other personal items for unhoused and resource-limited members of the Memphis community. Another was the recurring and well attended LGBTQIA+ social that fosters networking, community, and peer support for both new and returning members, with sponsorships from Bayer, Corteva and Valent BioSciences). The CDEI has opinions and suggestions for improvement of this event, which are enumerated in the 'Request for Council' section. The third was the APS Sherwood Initiative meeting for which CDEI was involved in the planning discussions, but did not take an active role in organizing the event itself.

Integrated Plant Disease Management

- Met five times during the year; attendance information not provided.
- Organized a webinar on "Alternatives to Methyl Bromide" with 46 attendees.
- Opened a new Twitter handle, "APS-Integrated Plant Disease Management Committee," which currently has 32 followers.
- Compiled a list of six reviewers from the committee for APS journals.
- Submitted a Plant Health 2024 Special Session proposal titled "Collaboration Among Plant Pathologists from Universities, Industries, and USDA in the Management of Emerging Plant Diseases: Challenges and Opportunities" which was not accepted. Plan to repurpose this as a webinar in the current year.

Regulatory Plant Pathology

- Held their annual committee meeting during the committee connections week.
- Past-Chair (Emma Wallace, term 2022-2024) and current chair (Da-Young Lee, term 2024-2026) were invited to be part of the APS Regulatory Issues Fast Response Team.