Traditionally, APS presidents have used this space to describe the theme for the year and provide an update on our priorities and activities. The APS presidency comes with an important perk—the chance to stand on a soapbox and highlight issues in which one believes strongly. I chose the theme “Science to Practice” because I firmly believe that what we do in the laboratory and the field matters to the world.

Basic research discoveries in plant pathology are being translated every day into solutions for critical problems in food security, food safety, and environmental sustainability. While we did not invent the term “translational”—it comes from the field of human medicine—our discipline exemplifies the translational approach to plant health science. I have been fortunate to spend most of my career in a department that values both basic and applied research in plant pathology, from the minute details of host-pathogen interactions and mathematical modeling to field diagnostics and disease management. I have also seen firsthand the suffering caused by food insecurity in the developing world, which can be attributed in part to the failure to properly manage endemic and invasive plant diseases. “Science to Practice” celebrates the role of plant pathologists in identifying, understanding, and solving critical problems in plant health worldwide. We have a year of APS initiatives that reflect this theme, culminating in the APS Annual Meeting in Tampa, where the full spectrum of plant health research, teaching, and outreach will be showcased.

If you are a regular reader of the APS President Blog (www.apsnet.org/members/apsleadership/presblog), you are already aware of many of our goals and initiatives. We have revised our strategic plan, which contains three strategic goals that relate to 1) knowledge dissemination through our publications, 2) member services, and 3) innovation in our annual and division meetings. Last month, APS Publications Board Chair Nik Grünwald described the outcome of the Journals Strategy Task Force, particularly the planned launch of a new open-access journal to be called *Phytobiomes*. This new journal is both a natural outgrowth of our Phytobiomes Initiative (phytobiomes.org), led by the APS Public Policy Board, and the recognition that the landscape of scientific journal publishing is changing rapidly. We need to innovate to remain current in this new environment.

Other publishing initiatives include integration of the Plant Management Network into APS now that we are the sole “owners” of this valuable resource, updating *Plant Disease Management Reports*, and a new APS PRESS digital strategy.

With nearly 5,000 members, APS is a vibrant and financially healthy organization. We are first and foremost a society of volunteers working together to ensure that knowledge on plant health is disseminated worldwide and to support each other and our discipline. One of our major initiatives is to increase APS membership among plant health professionals living and working outside the United States. Now colleagues from World Bank-designated lower- and lower-middle-income economies may join APS at a substantially reduced rate and have full voting privileges. We are also developing strategic relationships with sister societies in Brazil, India, and Latin America that will lead to greater communication, collaboration, and knowledge sharing. Another major priority is to increase engagement among early career professionals in APS. It is important for APS to provide services, such as career development training and networking opportunities, for our younger members and at the same time encourage their involvement in APS.

**Science to Practice, continued on page 18**

---

**Call for Abstracts Now Open**

The abstract submission period opens February 1 for the APS Annual Meeting in Tampa, FL. A few changes have been made to the submission guidelines and a list of hints and a helpful checklist are included in this issue on page 18 to help you navigate the process. Why submit an abstract? Presenters have the opportunity to share their critical research and meet and converse with meeting attendees. The annual meeting website (www.apsnet.org/meet) includes the criteria for acceptance, submission instructions, and guidelines.

Abstracts are due no later than March 15. Be a part of the meeting this year! What are you waiting for? ■
In addition to specific initiatives targeting undergraduates, such as Borlaug’s Army, we are represented in a National Academies Workshop on the Future Agricultural Workforce and the Plant Science Research Collaboration Network. The Office of Public Relations and Outreach has several initiatives to introduce plant pathology to high-school science teachers and their students. The APS Office of Education is taking on the important role of coordinating the many educational and development activities conducted by our boards, offices, and committees. While I will devote a future blog post to the APS Foundation, I want to mention the great work it does to encourage active participation of both our young professionals and international colleagues in APS. The foundation is an organization very worthy of the support of us all.

Finally, we recognize the need for innovation around our annual and division meetings. We will increase our efforts to find new ways to present and promote our science and provide networking and engagement opportunities during these meetings. We started two years ago with a couple of new approaches—Poster Huddles, PhytoViews sessions, and Idea Cafés—that were highly successful and will be back again in Tampa. We are also taking advantage of advancements in technology, increasing live streaming of special events and selected sessions. The Annual Meeting Board, under Amy Charkowski’s leadership, seeks to raise awareness of gender and ethnic diversity in selecting speakers for special sessions. Lastly, we have begun planning for the International Congress of Plant Pathology, which will be held jointly with our annual meeting in Boston in 2018.

It has been both a pleasure and a privilege to serve as APS president, and in many ways it is hard to believe that my year has already reached the halfway mark. Thank you for this wonderful opportunity. In your spare time, please check out the APS President Blog. As a social media platform, it allows for your input in the comments section—which is easy and appreciated. I would love to hear from you! ⚫

**Hints and Tips for a Successful Abstract Submission**

At our APS annual meeting, our tradition has been to accept the first 200 abstracts submitted for 15-minute contributed oral presentations and require all other submitters to present posters. In 2016, we changed our policy for choosing abstracts, with the goal of improving the contributed oral sessions. The Annual Meeting Board will review abstracts for all presenters who wish to give a contributed talk and will choose the presentations based mainly on scientific quality. The board will also consider other factors, such as topic, so that each session has a cohesive focus giving the annual meeting a broad representation of plant pathology. ⚫

**Abstract Checklist**

Here is a checklist to help abstract writers present their work clearly for the reviewers.

**GENERAL**

✔ The title and abstract has been thoroughly checked to eliminate spelling and grammar errors.

✔ All authors listed have contributed to the work being presented.

✔ All authors listed have read and approved of the final version of the abstract.

✔ The abstract has been proofread by at least two colleagues who are not authors on the abstract.

**TITLE**

✔ The abstract title does not include abbreviations.

✔ If a scientific binomial is in the title, both the genus and species names are fully written (for example, *Phytophthora infestans*, not *P. infestans*).

**ABSTRACT TEXT DESCRIBES THE FOLLOWING**

✔ Research significance.

✔ Hypothesis tested or research objective.

✔ Methods used.

✔ Experimental results, with as much quantitative specificity as possible.

✔ Conclusions of the work presented.
APS Annual Meeting Heads to Tampa in 2016
Tim Murray, Annual Meeting Program Chair and APS President-Elect, tim.murray@wsu.edu

By the time you read this, the 2016 APS Annual Meeting abstract submission period will be underway, closing March 15, 2016. As program chair, I’m very excited about the lineup for this year’s program, which includes over 20 special sessions, multiple technical sessions, as well as several workshops and field trips that are being planned for our meeting in Tampa, FL. I encourage everyone to submit an abstract and attend the meeting if possible; you won’t be disappointed. In addition to the scientific program, you and the estimated 1,500 other attendees will have plenty of opportunities to communicate your science and strengthen and expand your professional networks formally and informally.

APS President Sally Miller selected “Science to Practice” as this year’s theme to reflect the nature of our discipline, which ranges from basic to translational to applied research and extension, and ultimately solves real-world problems. Several of the special sessions reflect this theme, including Disease Management in the Genomics Era, Emerging Nano Materials for Disease Management and Pathogen Diagnostics, Role of Phytophobies in Plant Disease Management, Science to Practice: A Multidisciplinary Approach to Combating Rose Rosette Disease, The Microbiome: A New Frontier in Turfgrass Disease Management, and Translational Research for the Management of Corn Ear Rot Diseases and Mycotoxin Contamination, to name just a few.

Returning to this year’s meeting are the increasingly popular Poster Huddles and Idea Cafés, both of which have been expanded from last year to provide more topics and opportunities for interaction. If you have a great idea for a topic, feel free to send it to me—there’s still time for it to be included. Hot Topics and PhytoViews, which are intended to provide a forum for discussion of late-breaking and possibly controversial topics, will also return. Those topics will be announced later this spring.

Last, please pay attention to the guidelines for abstract and oral technical presentation submissions because there are a couple of important changes. First, oral technical submissions will not be limited to the first 200 submissions as in the past; all submissions for oral presentation will be reviewed and selected based on abstract quality and topic. Second, authors need to certify that their abstract has been reviewed by two other people who are not authors. These changes were implemented to improve the overall quality of oral presentations and meeting quality. If you’re curious about what makes a good abstract, read the Update from Divisional Forum Representatives Jay Pscheidt and Ron French in the APS Pacific Division winter-spring newsletter at www.apsnet.org/members/divisions/pac. I look forward to seeing you in August!

---

bioAPT Microbial + Carriers
Use the industry standard for granular Rhizobia formulations to carry your technology to the soil.

- Microorganisms and other biologicals
- Micronutrients
- LCOs

Three peat forms to choose from:
- Granular crumble
- Spherical prill
- Powdered

American Peat Technology
877-257-5906 info@americanpeatttech.com

www.AmericanPeatTech.com
**APS Image Database Collection Expands by Nearly 1,000 Images!**

More than 800 images from our popular *Plant Diseases Caused by Bacteria* image CD, as well as nearly 180 images from the *Compendium of Rhododendron and Azalea Diseases and Pests, Second Edition*, have been added to the online APS Image Database. This fast-growing resource now has 4,000-plus images covering diseases, pests, and disorders on a range of hosts, from large field crops like wheat to specialty crops like radishes and rutabagas. What's best? You can subscribe to the APS Image Database for just $49 yearly and conveniently renew it with your membership!

The APS Image Database is an excellent resource for speakers who give PowerPoint-based presentations in the classroom, at extension talks, and at industry meetings. Plus, with just one click, these images can be converted into fact sheets full of peer-reviewed scientific information ready-made for students and grower groups.

Make sure to take advantage of unlimited access to high-quality images for educational use, 24/7 accessibility, and our easy-to-use search interface by subscribing today. Visit www.apsnet.org/imageDB to try this resource for free.

**Note:** Subscribers may freely use unlimited images in their PowerPoints from the APS Image Database for educational, noncommercial use. Images may also be used in extension bulletins with certain restrictions. A separate fee and written request for commercial use is required.

---

**FINAL REMINDER**

**Applications Due May 1 for 2016 Storkan-Hanes-McCaslin Foundation Awards**

The Storkan-Hanes-McCaslin Foundation was established to support graduate student research. To date, more than $461,000 has been awarded to 74 promising scientists. In addition to unrestricted cash awards (which range from $5,000 to $10,000 and can be used for any purpose that will benefit the education of the student, including personal expenses), new awardees will also receive round-trip fares to the APS Annual Meeting and are presented their awards at a luncheon attended by their research advisors, previous awardees, and members of the Foundation Committee. A major aim of the foundation is to encourage research by offering financial assistance to graduate students who are working on soilborne diseases of plants. The research must be done in the United States, Canada, or Mexico. The research for which the award is given is expected to be performed by the applicant during the academic year 2015–2016 and a one-page progress report is due one year from the date of the award. Funding will begin September 1, 2016.

To be considered for funding, each proposal should be carefully prepared in accordance with the instructions given below and submitted electronically by May 1, 2016, to Michael Stanghellini (chair of the Selection Committee) at michael.stanghellini@ucr.edu. Please submit a short, two- to three-page research proposal containing a concise statement of the objectives, methods and materials, and projected impact of the proposed research (note: a budget is not required), a one-page resume (i.e., a brief education and research background, including a telephone number and e-mail address), and a letter from the applicant’s major professor or research director.

---

**What Do Asian Citrus Psyllids and Gray Leaf Spot Have in Common?**

These and many other topics have been featured in grant outreach communications viewed collectively by tens of thousands of researchers and practitioners in agriculture and horticulture. For more than three years, APS and the Plant Management Network (PMN) have been working with some of the world’s top plant scientists to develop communications that not only facilitate technology transfer to the industry, but also simultaneously promote other outreach efforts, such as eXtension sites, subject-specific websites developed by research groups, and articles produced by principal investigators and group cohorts.

APS and PMN offer various communications tools, including webcasts, live online events, themed online information hubs, symposium proceedings, effective print communications, and onsite representation at local or national conferences, that can help you...

- Augment your reach to key audiences
- Ensure permanence of your outreach materials even long after a grant period is over
- Save money, allowing you to take your outreach efforts even further!

Before or during your proposal-writing period, contact Phil Bogdan at +1.651.994.3859 or pbogdan@scisoc.org. Our process is as simple as 1-2-3:

1. Contact us to discuss your outreach interests, needs, and ideas.
2. We will suggest complementary strategies and communications tactics.
3. We will write and send a letter of intent, which you can insert in our proposal package.

---

**Sign-Up for Job Center Alerts!**

We recently revamped the APS Job Center alert system so you can receive weekly alerts about job openings. If you would like to be notified of the latest postings, sign-up today. If you were previously signed up to receive alerts, you will need to resubscribe. Sign-up at www.apsnet.org/careers/jobcenter today!
Featured New APS PRESS Bookstore
Title: Handbook of Plant Nutrition, Second Edition

An excellent complement to our best-selling title: Mineral Nutrition and Plant Disease

Many readers of the APS PRESS best-seller, Mineral Nutrition and Plant Disease, know there are close ties between nutrient levels and their effects on plant diseases. But what about diagnosing mineral nutrition deficiencies, which can sometimes be mistaken for plant diseases? And for that matter, what about researching nutritional levels in plants and the best practices for applying them?

Enter the Handbook of Plant Nutrition, Second Edition to fill that gap. This important new title in the APS PRESS bookstore expands your knowledge of nutrients further by offering science-based research, diagnostic information, and management recommendations. And like Mineral Nutrition and Plant Disease, chapters in the Handbook of Plant Nutrition, Second Edition are broken down by nutrient, making it even easier to harmonize your work between these complementary references.

Each of these chapters covers essential or beneficial effects of the element uptake and assimilation, physiological responses of plants to the element, genetics of its acquisition by plants, concentrations of the element and its derivatives and metabolites in plants, interaction of the element with uptake of other elements, diagnosis of concentrations of the element in plants, forms and concentrations of the element in soils and its availability to plants, and soil tests and fertilizers used to supply the element.

This latest edition was updated to reflect the most recent advances. Each chapter is extensively updated, written by a new team of experts. New chapters, such as the one on lanthanides, which have gained importance in plant nutrition in recent years, only add to this book’s importance.

The Handbook of Plant Nutrition, Second Edition demonstrates how the appearance and composition of plants can be used to assess nutritional status and the value of soil tests for assessing that status. It also includes recommendations of fertilizers that can be applied to remedy nutritional deficiencies. These features and more make this book a practical, easy-to-use reference for determining, monitoring, and improving the nutritional profiles of plants worldwide.

Those who use Mineral Nutrition and Plant Disease will find Handbook of Plant Nutrition, Second Edition very complementary. Both titles are available in the APS PRESS bookstore. Visit www.shopapspress.org to learn more about these and more than 350 other books for researchers and practitioners working in plant pathology and other crop sciences.

UMN Releases Video Project on Plant Pathology

The University of Minnesota (UMN) Department of Plant Pathology staff, students, and faculty members are as diverse as the science itself, but how did they becoming interested in solving plant health and disease issues? Find out in these videos how an interest in science often leads to a passion for plant pathology. View a video project that UMN conducted at plpa.cfans.umn.edu/about-plant-path/my-plant-path.

Meeting

First International Soilborne Oomycete Conference Held in December

The 1st International Soilborne Oomycete Conference was held December 8–10, 2015, in Duck Key, FL. The conference was organized by Alex Csinos and Pingsheng Ji (University of Georgia) and Pam Roberts (University of Florida). Scientific researchers, students, and industry representatives from seven countries and 22 states in the United States attended the conference. Mike Matheron (University of Arizona) gave a keynote presentation entitled “Phytophthora, the plant destroyer: Past, present, and future.” Scientists working on oomycete pathogens of a variety of crops presented and discussed recent advancements in various aspects of oomycetes, including biology, epidemiology, taxonomy, genetics, diversity, host resistance, chemical control, and integrated disease management. Representatives from world-leading companies, including Syngenta, DuPont, and Bayer, presented updates on new product development and registration. The meeting provided a great platform for the global scientific community to network and discuss collaborations to combat plant diseases caused by oomycete pathogens. More information about speakers and presentations at the conference can be found at the meeting website www.oomyceteconference.org.
The PPB Early Career Internship—Informative and Fascinating

Laura Felice, PPB Early Career Intern, felic005@umn.edu

Are you an early career scientist who has always wanted to learn more about public policy? Have you ever wondered how decisions are made about the allocation of research funding? As a Ph.D. student at the University of Minnesota, I had the opportunity to participate in the early career internship with the APS Public Policy Board (PPB). It was an informative experience for me and a chance to gain an understanding of the ways that decision-making about spending on agricultural research happens. Interns serve on PPB for a two-year term, starting and ending with the PPB business meetings at the APS Annual Meetings. Interns participate in monthly conference calls with the board and attend a PPB trip to Washington, DC, in addition to other projects.

One of the most exciting aspects of the internship for me was seeing the PhytoViews Initiative of APS go from the planning stages to its present form. I had the opportunity to participate in the planning meeting at APS Headquarters in Minnesota, where the idea was floated and gelled. Over the past two years, the initiative has continued to gain shape and momentum as input from a wide variety of stakeholders has been incorporated and the concept has been publicized. I was able to participate in the PhytoViews Meeting in Washington, DC, where scientists at all levels, spanning academia, biotechnology, and government, came together to present their phytoviews-related ideas and work and provide input to shape the direction of the initiative. This process was continued at the APS Annual Meeting in Pasadena, where a phytoviews-focused symposium and “PhytoViews” session brought together yet more scientists and audience questions.

Another aspect of the internship that has forever changed my perspective was the annual PPB trip to Washington, DC. It was fascinating to hear directly from policy-makers in NSF and various branches of USDA about their priorities and decision-making processes. I feel lucky to have had this experience so early in my career. Attending a House of Representatives Agricultural Appropriations Committee hearing and learning about how elected officials think about funding for agricultural research in their states was also fascinating. I was surprised by the extent to which lawmakers were aware of specific programs within their states.

In conclusion, I would highly recommend the experience for early career plant pathologists—graduate students later in their programs, post-doctoral researchers, or those in the early stages of their career. The experience is valuable for those with a particular interest in public policy and even those who wish to better understand how research funding decisions are made and better connect their work with larger policy objectives. Applications open up every June, so check on the APS website for details!

Put Your Science into Practice at the Annual Meeting—Apply for a Student Travel Award

Online applications open February 12

The APS Foundation seeks to recognize and reward the best and brightest APS undergraduate and graduate student members with travel awards of $500 to support travel to the 2016 APS Annual Meeting in Tampa, FL.

APS Foundation student travel awards are open to all APS student members giving oral or poster presentations at the 2016 Annual Meeting. Students pursuing research in plant pathology and allied fields are encouraged to apply. Students who received a student travel award in 2015 are not eligible to apply again until 2017.

“Receiving the Roger C. Pearson Student Travel Award covered the cost of my travel from Pennsylvania to Pasadena, CA. Without it, I would not have been able to attend the APS Annual Meeting where I was able to connect with researchers from around the world.”

—Sarah Bardesly, Ph.D. Student, Penn State Department of Plant Pathology

Application Requirements:
The application has three parts:
1. The student’s formal APS abstract for an intended oral or poster presentation for the 2016 APS Annual Meeting.
2. A special session proposal for a “hot topic” that would be suitable for presentation at a future APS Annual Meeting.
3. A letter of recommendation from the student’s current advisor (due March 25, 2016).

It is recommended that you compose your responses via a word processor prior to completing the online form. Once ready, you can copy and paste your materials into the appropriate text box in the online application. Complete details can be found on the application website (www.apsnet.org/members/foundation/apply/Pages/StudentTravelAwards.aspx).

Applications are due by noon Central Time on March 21, 2016, and advisor letters are due by noon Central Time on March 25, 2016. Applications or advisor letters submitted after the posted deadline will not be accepted as the deadline is strictly enforced.

All students are encouraged to apply for this excellent opportunity to highlight their research efforts!
Information Is Not Communication!

Janna Beckerman, Purdue University, jbeckerm@purdue.edu

It doesn’t seem to matter whether I am working with undergraduate students, graduate students, early career scientists, or long-serving administrators—scientists across the board seem to confuse the words “information” and “communication.” The journalist Sydney J. Harris actually clarifies this distinction better than anyone: “Information is giving out; communication is getting through.”

When phrased so succinctly, the difference seems quite obvious. And yet, the problem persists: How do we, as scientists, “get through” to our audience? As scientists, we continue to provide information (e.g., “GMOs are safe; vaccines do not cause autism; managing plant disease is important”), followed up with more information, and don’t understand why our ideas haven’t been accepted. How much data (information) do we need to give the audience?

Stop. To quote a classic, “Begin with the end in mind.” Who are you trying to communicate with? Clarify who your audience is—the writing for a grant panel will change depending upon the focus of the RFP; an audience of scientists is different from an audience of master gardeners, which is different from an audience of farmers. You are communicating for the audience—this isn’t about you, and clear for you is not necessarily clear enough for your audience! This is particularly important when writing for publication, or a grant proposal, or trying to use data to inform decision making. The best way to persuade someone to your point of view is by helping them to understand and also by developing your own understanding of their point of view. We live in a multicultural society. This makes arriving at understanding a complicated proposition! We may talk to each other, and even use identical vocabulary, but we quickly learn that our words don’t necessarily mean the same things.

After you’ve determined whom you are communicating with, you need to determine what you are trying to communicate. More importantly, how is it important to them? It doesn’t matter how clear you are if your audience or reader doesn’t care. How do you make them care? A very good place to start is with explaining why it is important to your audience. And although it is tempting to talk about the genetic plasticity of the genus Phytophthora, most people (other than other scientists) simply want to know how to protect their plants. Any interest you wish to share about Phytophthora may be more successfully communicated by focusing on plant protection.

Once you have clarified the “why,” you can move on to communication. When trying to communicate, especially something complex, make sure what you are trying to say is clear to the reader/audience from the beginning. Review what you are trying to communicate, evaluate how you did, edit. There are degrees to understanding (it’s not always just a black-and-white proposition) and you can always improve your own understanding of a topic. You may need to repeat this process, but you should not be repeating your words. Try to explain with less, especially if it is complicated. Providing additional information is not going to suddenly transport the reader/audience to understanding.

Most importantly, remember that you are trying to create a connection. As scientists, we want to give the audience all the information, with perfect accuracy. In fact, this is where giving the audience just enough information to be useful may be a better strategy. Data and information aren’t inherently helpful and are rarely persuasive. It’s the context and connections to who and why that make them so. Beginning with the end (your goal) often has this paradoxical way of bringing you back to the beginning (who am I communicating with).

So, how do you clarify and develop understanding in 700 words or less? There are no secrets or shortcuts—it takes time, patience, thought, and practice. There are a number of helpful books on the topic. Communication is hard work. It forces you to challenge yourself about what you think you know and your assumptions about information. But in the end, there is no more powerful persuasion than causing people to understand something that is important—to them.

---

1 Explanatory footnotes provide material that is related to the topic but is not necessary for inclusion. Its use here is ironic.

2 Two excellent books on writing include Style: Toward Clarity and Grace by Joseph Williams and Scientific Writing—Thinking in Words by David Lindsey. For presentations, Even a Geek Can Speak by Joey Asher provides excellent advice on how to formulate presentations.

---

Read the latest blog post at www.apsnet.org/members/apsleadership/presblog. Make sure to log in to comment on posts and to sign-up for alerts.

Recent posts...

• New Year’s Resolutions
• An Update from Council
• Why I Ran
• How Our Students View Their Graduate Training
• Calling All World Travelers
• Let’s Talk About Careers
People

Student Degrees

Zane Grabau completed his M.S. (2013) and Ph.D. (2015) degrees from the Department of Plant Pathology at the University of Minnesota (UMN) advised by Senyu Chen. Both of his degrees focused on plant-parasitic nematodes. His master’s thesis was entitled “Management Strategies for Control of Soybean Cyst Nematode and Their Effect on the Nematode Community” and his Ph.D. dissertation was entitled “Determining the Role of Plant-Parasitic Nematodes in the Crop Rotation Yield Effect, and the Influence of Crop Rotation and Nematicide Application on the Nematode Community.” The focus of his research was on investigating management strategies for plant-parasitic nematodes in corn and soybean systems. He also investigated the impact of these agricultural management practices on soil ecology using the nematode community. Grabau is now a post-doctoral research associate with Haddish Melakeberhan at Michigan State University.

Peng Zhou Peng completed his Ph.D. degree in 2015 under the advisement of Nevin Young. His dissertation was entitled “Defense-Related Gene Families in the Model Legume, Medicago truncatula: Computational Analysis, Pan-Genome Characterization, and Structural Variation.” His research entailed the development of a computational pipeline to scan and annotate defense-related genes in plant genomes and analyze the complex structural variation in these gene families, contributing to the construction of a *Medicago* pan-genome. Peng is currently a post-doctoral research associate in Young’s lab. His research focuses on genomic analysis of complex gene families in *Medicago truncatula*. He is interested in the exploration of the genetic architecture of genes and gene families important in plant-microbe interactions and developing informatics tools and resources for discovering members of complex gene families and analyzing their variation in natural populations.

New Positions

Rachel Bomberger has recently joined Washington State University (WSU) as the new diagnostician/manager of the Plant Pest Diagnostic Clinic in Pullman, WA. Bomberger received her M.S. degree from Oregon State University (OSU) working with Cynthia M. Ocamb. While at OSU, she was inspired to pursue diagnostics because of the work and mentorship of Melodie Putnam and Maryna Serdani. In 2013, she joined Shouhua Wang’s Plant Pathology Laboratory with the Nevada Department of Agriculture in Sparks, NV. Bomberger developed a system for timely, accurate, and reliable diagnostics (STAR-D) quality management system auditor and was able to take advantage of many other trainings through the National Plant Diagnostics Network (NPDN). Wang and Bomberger became USDA APHIS PPQ CPHST National Plant Protection Laboratory Accreditation Program certified diagnosticians for citrus greening and sudden oak death and became the first state department of agriculture lab to receive the STAR-D quality management system accreditation. Bomberger is actively involved in the APS Career Advancement and Development Resources and Education (CADRE) website.

The Executive Board of Wageningen University and Research Center has appointed Gert Kema as professor (by special appointment) of tropical phytopathology. The appointment, which took effect on January 1, 2016, is for five years. The special chair will be funded by Stichting Dianaphte, a donor-advised fund that supports charities in six countries: the Netherlands, Ethiopia, Kenya, Uganda, South Sudan, and Malawi. Kema will study the interaction between tropical crops and pathogenic microorganisms. Kema is currently researching the global problems of disease in bananas from various disciplines, with a particular focus on genetic diversity and how it affects crop protection. The coming period he will be exploring the opportunities of this multidisciplinary approach for other crops, particularly cacao and coffee.

YE (SUMMER) XIA joined the faculty as assistant professor, biochemistry of plant pathogenesis and immunity, in the Department of Plant Pathology at The Ohio State University (OSU) in Columbus. Xia will lead a research and teaching program encompassing the biochemical, genetic, and molecular mechanisms of plant disease resistance and beneficial plant-microbe/microbiome interactions. Prior to joining OSU, Xia was a post-doctoral research associate at the University of Kentucky in Seth Debolt’s laboratory. She earned her Ph.D. degree in plant pathology at the University of Kentucky, advised by Pradeep Kachroo, an M.S. degree from Northeast Agricultural University (NEAU) and Chinese Academy of Agricultural Sciences, and a B.S. degree from NEAU in China.

Collaboration

Sumaira Farrakh, a Fulbright scholar and assistant professor from the Department of Biosciences, COMSATS Institute of Information Technology, Islamabad, Pakistan, is visiting the laboratory of Xianming Chen, research plant pathologist of USDA ARS and adjunct professor of the Department of Plant Pathology, Washington State University (WSU), from December 2015 to November 2016. Farrakh received her B.S. degree in zoology/botany/psychology from Punjab University in 1998, M.S. degree in zoology from Arid Agriculture University, Rawalpindi, in 2000, M.Phil. degree in cell biology in 2003, and a Ph.D. degree in cell biology in 2009 from Quaid-I-Azam University, Pakistan. She has worked on stripe rust and wheat improvement. During her visit at WSU, Farrakh is conducting research on molecular mechanisms of interactions between wheat and the stripe rust pathogen.

Awards

Jong Ham, associate professor, Department of Plant Pathology and Crop Physiology and Don Groth, professor, Department of Plant Pathology and Crop Physiology and H. Rouse Caffey Rice Experiment Station, along with Steve Linscombe, professor and director of the Rice Experiment Station, and Jim Oard, professor, School of Plant, Soil, and Environmental Sciences, were recipients of the Louisiana State University AgCenter’s Tipton Team Research Award presented in December 2015. This award was established to recognize significant contributions to Louisiana agriculture by a team of at least three scientists who have been participants in exceptional collaborative research efforts especially in the past five years. This team won this prestigious award for developing new rice cultivars that are tolerant to sheath blight caused by *Rhizoctonia solani*, the most common and prevalent disease found in rice produced throughout the southern United States. The team also developed cultural and fungicidal recommendations that helped to dramatically reduce sheath blight development.

24 February 2016
sensor arrays, including the electronic-nose applications utilizing gas-sensing devices to detect and identify human diseases, was featured in a BBC online publication written by journalist William Kremer, entitled “Sniffing out cancer with electronic noses,” available at www.bbc.com/news/magazine-26472225. Wilson is a recognized international authority of electronic-nose technologies for gas-sensing devices to detect and identify human diseases, and he has written numerous review articles on electronic-nose applications utilizing gas-sensor arrays, including the Sensors article.

**Presentation**

Jim Bradeen, professor and head of Plant Pathology at the University of Minnesota (UMN), presented a keynote lecture as part of the 18th Triennial European Association for Potato Research “Breeding and Varietal Assessment” Meeting. The conference, held in Vico Equense, Italy, attracted about 100 leading potato researchers from around the world. Bradeen’s talk “Borrowing from Neighbors: Comparative Genomics Approaches for Resistance Gene Discovery and Deployment” described new informatics approaches for visualizing and interpreting evolutionary patterns of R genes across plant families with direct implications for use of genebank collections in research and breeding. This line of research, led by post-doctoral fellow and lead author on this study, Leon Van Eck, has identified R genes that may be involved in non-host or abiotic stress resistance and R genes associated with defense against specific pathogens. This work is being pursued in the Solanaceae, with an emphasis on identifying novel late blight resistance alleles, and in the Rosaceae, with an emphasis on identifying loci effective against apple scab and rose blackspot diseases.

**Retirement**

Ken Eastwell, Washington State University (WSU) virologist and director of the Clean Plant Center Northwest, which he created, retired in January. Eastwell, a native of Alberta, Canada, developed an interest in plant disease viruses while pursuing his doctorate in biochemistry, which he received in 1981 at the University of Alberta. His career in plant disease virology spans 34 years, beginning with a post-doctoral position at the University of California (UC)-Davis. From 1984 to 1988, he continued his virus research at Simon Fraser University in British Columbia. From 1988 to 1997, he directed the little cherry disease control program at the Pacific Agri-Food Research Center in Summerland, British Columbia, and was a board member of the B.C. Certified Budwood Society. In addition, he investigated biocontrol strategies for crown gall disease in grapes and a virus that infects apple codling moth.

In 1997, he succeeded retiring tree fruit virus specialist Gaylord Mink at WSU’s Irrigated Agriculture Research and Extension Center in Prosser. At WSU, Eastwell quickly went to work to develop a program to detect, identify, and eliminate viruses and other disease agents of fruit trees and grapevines. He continued his work on crown gall disease and took on additional administrative duties, managing the federally funded clean plant foundation program for fruit trees, then known as the National Research Support Project 5 (NRSP-005). This program develops and distributes virus-tested fruit trees to researchers and growers within the United States. Plant materials brought into the program come from foreign or domestic sources. They are propagated and maintained in greenhouses and tested for the presence of disease agents. Once they are deemed free of these pathogens, they are made available to tree fruit growers. All new introductions of fruit tree planting materials into the country must first pass through this protocol.

Eastwell played a leadership role in the National Clean Plant Network (NCPN) initiative, a plan to network existing clean plant centers in the country to facilitate the introduction, virus-testing, and eventual release of clean plant materials to the growers. In the year 2000, Eastwell assumed management of the foundational hop program, and in 2008, he became director of the Northwest Grape Foundation Service with Markus Keller.

In 2011, he brought together the three WSU foundational programs of fruit trees, grapes, and hops, and the ELISA diagnostic testing laboratory under one management and named it the Clean Plant Center Northwest (CPCNW). Eastwell used novel molecular approaches to improve detection and identification of viruses and virus-like agents and maintained a special focus on cherry diseases, especially cherry leafroll and little cherry disease. In 2013, he received the USDA APHIS PPQ Deputy Administrator’s Safeguarding Award for serving on the Farm Bill Management Team. In 2014, he received the APS Award for Excellence in Regulatory Affairs and Crop Security. The CPCNW will continue its mission to serve the tree fruit, grape, and hop industries through virus-testing services and propagation, maintenance, and distribution of virus-free plant materials. Gary Grove, director of the WSU-Prosser research and extension center, will serve as interim director of the center until a new director is hired.

After he retires, Eastwell plans to return to WSU on emeritus status to continue ongoing research projects in cherries and hops. In particular, he is interested in continuing his work toward improved management strategies for little cherry disease, which has been a major concern for Washington cherry growers over the past five years. (This article was originally published in the December 2015 issue of Good Fruit Grower.)

**In Memory**

Dr. Gary W. Simone’s passion for plants began when he was a child in Stamford, CT, and ultimately it shaped his professional career. Gary attended the University of Connecticut, earning his bachelor’s degree in biological sciences, then his master’s and doctorate degrees in plant pathology from the University of Illinois. There he managed the Plant Disease Clinic, and in 1977, began his professional career working for the Institute of Agricultural Sciences at the University of
Florida (UF) in Gainesville. As a full professor, Gary wore three hats at the university. He simultaneously conducted scholarly research, served as extension plant pathologist with responsibility for the statewide Plant Disease Clinic, and taught classes. In addition to full-time students, he educated extension agents and diagnosticians, who served clientele at county, state, and national levels. At UF, he had responsibility for disease control on vegetables, fruits, ornamentals, and turfgrass statewide. He authored technical books, articles, disease control guides, book chapters, and extension publications. In his career, extension publications alone numbered over 500. In addition, he presented 95 invited lectures, 725 extension lectures, and served as the editor of the Plant Diagnostics Quarterly (PDQ). As a researcher, he was the recipient of multiple grants.

Gary traveled internationally with a focus on the Caribbean and Central and South America. His colleagues honored him with numerous awards, including the Outstanding Faculty Achievement and Performance Award (national) and several Distinguished Service Awards from the Florida Association of County Agricultural Agents.

When he retired to Oregon, as professor emeritus, he pursued his passion for teaching as an instructor in horticulture at Mt. Hood Community College. He also organized and taught Gardening Study School under the auspices of the Oregon State Federation of Garden Clubs. He was thrilled to see a light in a student’s eyes when she or he finally “got” the information he was sharing. Never one to be idle, he built his dream greenhouse, created gardens on his property, signed on as their president twice, and joined the Oregon Association of Nurseries as a director. During his tenure, he established the Blue Star Memorial Highway Marker “Garden” at Multnomah Falls, and contributed thousands of plants to the club’s plant sale. In his “spare” time, he continued as a technical writer, established his Simone’s Plant Disease Solutions business, and as a plant pathologist, served as an expert witness in court trials.

His penchant for collecting one of every plant was well known. To accomplish this goal, he spent each day propagating. Over time, he nurtured thousands of cuttings into mature plants. He would experiment with growth media, watering schedules, light conditions, color, and texture. In his gardens, he was both a scientist and an artist. Gary was constantly aware of the fragile nature of our environment and was an avid recycler and conservationist. He was always at peace when walking in the woods, along the shore, or strolling in gardens. One of his favorite local places to visit was Leach Botanical Garden in Portland. He consulted with Leach staff and volunteers to diagnose potential disease issues, and he created an artist’s bazaar as a successful fundraiser.

Gary’s intellect, creativity, analytical skills, and enthusiasm were boundless as he sought to gain knowledge each day. His raison d’être was to share his vast knowledge and watch his audiences discover just how astonishing the universe can be. During his life, which ended unexpectedly in January 2015, he never once stopped creating and growing.

Classifieds

Classified Policy: You can process your job listing at www.apnet.org/careers/jobcenter. Please note: Your online job listing may be edited by newsletter staff to approximately 200 words for the print listing in Phytopathology News. Fees for posting online are $25 member/$50 nonmember for graduate or post-doc positions and $200 member/$250 nonmember for all other positions. To have your job listing included in Phytopathology News, simply select the option on the online form (there is an additional $55 fee). If you have any questions, contact the APS Placement Coordinator (apsplacement@scisoc.org).

Professor and Head of the Department of Plant Pathology

The University of Georgia (UGA) department head will administer and coordinate high-quality research, extension, and teaching programs for the department. The successful candidate will provide leadership, promote professional development of departmental personnel and graduate students, and relate effectively to and work with members of the agricultural community. Specific responsibilities include personnel recruitment and performance evaluations, coordination of promotion and tenure processes, program planning and implementation, budget allocation and accountability, and management of physical facilities. The individual is encouraged to continue an active teaching, research, and/or extension program. The department head will be expected to work effectively with and represent faculty to university administrators, state and federal agency personnel, commodity groups, and other stakeholders. This is a 12-month, tenure-track position. The Department of Plant Pathology is a vibrant and diverse unit consisting of 22 faculty and eight adjunct faculty members, 43 support staff, and 45 graduate students. The department has faculty, staff, and graduate students at three campuses (Athens, Tifton, and Griffin) with an annual budget of approximately $4.3 million. The teaching, research, and extension programs are comprehensive and include plant disease diagnosis and management, mycology, nematology, bacteriology, virology, epidemiology, molecular biology, and genetics of host-pathogen interactions, and strong applied programs for the major agricultural and horticultural crops. A Ph.D. degree in plant pathology or closely related discipline and demonstrated excellence in research, teaching, and/or extension are required. Administrative experience is desirable and evidence of leadership potential is required. Applicant screening will begin immediately. The application packet should include a cover letter detailing how the applicant’s credentials and experience meet the needs, responsibilities, and qualifications stated above; CV; a statement of leadership philosophy and vision for the department; and contact information for four references (who will not be contacted without further correspondence with the applicant). Applications should be sent via e-mail with the heading “Plant Pathology Department Head Application” to Search Committee Chair, Rakesh Singh; e-mail: rsingh@uga.edu; phone: +1.706.542.2286. UGA is an EEO/AA/Vet/Disability Institution. As such, UGA is especially interested in candidates who can contribute to the diversity and excellence of the academic community. We not only strongly encourage women, minorities, and other diverse candidates to consider applying for this position, but we also maintain that all candidates should share our commitment to diversity and inclusion.
Bacterial Wilt of Dry-Edible Beans in the Central High Plains of the U.S.: Past, Present, and Future
Robert M. Harveson, Howard F. Schwartz, Carlos A. Urrea, and C. Dean Yonts

Fusarium Wilt of Banana
Randy C. Ploetz

Plasmolysis and Vital Staining Reveal Viable Oospores of Peronospora effusa in Spinach Seed Lots
Sridhara G. Kunjeti, Amy Anchieta, Krishna V. Subbarao, Steven T. Koike, and Steven J. Klosterman

The Effect of Delayed-Dormant Chemical Treatments on Demethylation Inhibitor (DMI) Sensitivity in a DMI-resistant Population of Venturia inaequalis
Zachary A. Frederick, Sara M. Villani, and Kerik D. Cox

Multilaboratory Comparison of Quantitative PCR Assays for Detection and Quantification of Fusarium virguliforme from Soybean Roots and Soil

Genome-Wide Association of Rice Blast Disease Resistance and Yield-Related Components of Rice
Xueyan Wang, Melissa H. Jia, Pooja Ghai, Fleet N. Lee, and Yulin Jia

Reaction of Sorghum Lines to Zonate Leaf Spot and Rough Leaf Spot

SPOTLIGHT

Editor’s Picks

Research Notebook

TRENDING

Phytopathology

• Does the P Value Have a Future in Plant Pathology?
L. V. Madden, D. A. Shah, and P. D. Esker

• Pseudomonas Biocontrol Agents of Soilborne Pathogens: Looking Back Over 30 Years
David M. Weller

• Induced Resistance for Plant Disease Control: Maximizing the Efficacy of Resistance Elicitors
Dale Walters, David Walsh, Adrian Newton, and Gary Lyon

Plant Disease

• How Do Plant Diseases Caused by Xylella fastidiosa Emerge?
Rodrigo P. P. Almeida and Leonard Nunney

• Pseudomonas syringae Diseases of Fruit Trees: Progress Toward Understanding and Control
Megan M. Kennelly, Francisco M. Cazorla, Antonio de Vicente, Cayo Ramos, and George W. Sundin

• First Report of Bacterial Stem and Pith Necrosis of Tomato Caused by Pseudomonas viridiflava in Spain
M. C. Cañizares and M. D. García-Pedrajas

MPMI

• Bacterial Endophytes and Their Interactions with Hosts
Mónica Rosenblueth and Esperanza Martínez-Romero

• Nicotiana benthamiana: Its History and Future as a Model for Plant–Pathogen Interactions
Michael M. Goodin, David Zaitlin, Rayapati A. Naidu, and Steven A. Lommel

• Horizontal Gene Transfer in Nematodes: A Catalyst for Plant Parasitism?
Annelies Haegeman, John T. Jones, and Etienne G. J. Danchin

Plant Health Progress

• Using Recombinant Inbred Lines to Monitor Changes in the Race Structure of Phytophthora capsici in Chile Pepper in New Mexico
L. Jiang, S. Sanogo, and P. W. Bosland
## Calendar of Events

### APS-Sponsored Events

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Location</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEBRUARY</td>
<td>Southern Division Meeting</td>
<td>Balm, FL.</td>
<td><a href="http://www.apsnet.org/members/divisions/south">www.apsnet.org/members/divisions/south</a></td>
</tr>
<tr>
<td>MARCH</td>
<td>2016 Rust Symposium</td>
<td>Pensacola, FL.</td>
<td><a href="http://www.apsnet.org/meetings/topicalmeetings/Pages/2016RustSymposium.aspx">www.apsnet.org/meetings/topicalmeetings/Pages/2016RustSymposium.aspx</a></td>
</tr>
<tr>
<td></td>
<td>Potomac Division Meeting</td>
<td>Richmond, VA.</td>
<td><a href="http://www.apsnet.org/members/divisions/pot">www.apsnet.org/members/divisions/pot</a></td>
</tr>
<tr>
<td>JUNE</td>
<td>North Central Division Meeting</td>
<td>Roseville, MN.</td>
<td><a href="http://www.apsnet.org/members/divisions/nc">www.apsnet.org/members/divisions/nc</a></td>
</tr>
<tr>
<td></td>
<td>Pacific Division Meeting</td>
<td>LaConner, WA.</td>
<td><a href="http://www.apsnet.org/members/divisions/pac">www.apsnet.org/members/divisions/pac</a></td>
</tr>
<tr>
<td>JULY</td>
<td>APS Annual Meeting</td>
<td>Tampa, FL.</td>
<td><a href="http://www.apsnet.org/meet">www.apsnet.org/meet</a></td>
</tr>
</tbody>
</table>

### Other Upcoming Events

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Location</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23-24 Emerging Plant Disease and Global Food Security</td>
<td>Raleigh, NC.</td>
<td><a href="http://www.go.ncsu/epd">www.go.ncsu/epd</a></td>
</tr>
<tr>
<td></td>
<td>30-Apr 2 Genetics of Maize-Microbe Interactions Workshop</td>
<td>College Station, TX.</td>
<td><a href="https://gmdw.tamu.edu">https://gmdw.tamu.edu</a></td>
</tr>
<tr>
<td>APRIL</td>
<td>11-12 The 3rd Plant Genomics Congress: Asia</td>
<td>Kuala Lumpur, Malaysia.</td>
<td><a href="http://www.globalengage.co.uk/plantgenomicsasia.html">www.globalengage.co.uk/plantgenomicsasia.html</a></td>
</tr>
<tr>
<td></td>
<td>24-28 18th Reinhardsbrunn-Symposium on Modern Fungicides and Antifungal Compounds</td>
<td>Friedrichroda, Germany.</td>
<td><a href="http://www.reinhardsbrunn-symposium.de/">www.reinhardsbrunn-symposium.de/</a></td>
</tr>
<tr>
<td>MAY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22-25 Plant and Microbe Adaptation to Cold</td>
<td>Seattle, WA.</td>
<td><a href="http://cm.wsu.edu/chome/pmac">http://cm.wsu.edu/chome/pmac</a></td>
</tr>
<tr>
<td>JUNE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13-16 Fifth International Symposium on Tomato Diseases: Perspectives and Future Directions in Tomato Protection</td>
<td>Málaga, Spain.</td>
<td><a href="http://www.tomatodiseases2016.es">www.tomatodiseases2016.es</a></td>
</tr>
<tr>
<td></td>
<td>26-29 6th International Conference on Algal Biomass, Biofuels, and Bioproducts</td>
<td>San Diego, CA.</td>
<td><a href="http://www.algalbbb.com">www.algalbbb.com</a></td>
</tr>
<tr>
<td>JULY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEPTEMBER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12-14 Euro-Mediterranean Agrobacterium Meeting</td>
<td>Gif-sur-Yvette, France.</td>
<td></td>
</tr>
</tbody>
</table>

### Important APS Dates to Remember

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Due Date</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEBRUARY</td>
<td>Phytopathology Focus Issue submissions due</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Abstract submission process opens for 2016 APS Annual Meeting</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tampa Student Travel Award applications process opens</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>MARCH</td>
<td>APS Annual Meeting Abstracts due</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New Products &amp; Services application due</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APS Student Travel Award applications due</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>MARCH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCTOBER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVEMBER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DECEMBER</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>