Serving as APS president is a great honor and an opportunity to give back to the profession that has given us so much satisfaction. I’ve served in many different capacities as an APS volunteer over the years and thought I had a pretty good understanding of APS, but one of the things I’ve come to appreciate even more since joining the presidential team is just how many moving parts there are to our organization! I’ve attended many meetings in this role, but I was surprised to learn there is a “transition” meeting where the president and president-elect meet for a day in late spring to discuss the transition into the president’s position. I naïvely thought, “What’s the big deal? I’ve watched my colleagues Rick Bennett and Sally Miller do the job, and figure I know what comes next!” During that meeting, we discussed the budget and every APS office, board, and ad hoc committee in detail to learn their priorities and the issues they’re facing. We discussed the APS strategic plan, its goals and priorities in the short and long term, and then the question: What are your goals and priorities for the next year? Have you decided on a theme for the annual meeting? And then the reality and challenge of how to articulate the things that are important to me professionally, and for APS, sinks in. I would like to use this space to share some of the things I think are important for APS, starting with the theme for our upcoming annual meeting and then some of our strategic priorities.

The theme for the 2017 APS Annual Meeting, “Changing Landscapes of Plant Pathology,” highlights two factors, some might call disruptive forces, that are and will continue to have a profound impact on the science and practice of plant pathology: new technologies and the next generation of plant pathologists who will employ them in their pursuit of solutions to plant health problems. One example is the advent of faster and less expensive nucleic acid sequencing technologies, which have provided opportunities to answer questions not previously possible to answer. Within APS, this resulted in the development of the Phytobiomes Initiative, an effort to help attract new research funds for this developing field, and the new open-access *Phytobiomes* journal, which is expected to attract a broad cross-section of scientists working in the field. *Phytobiomes* has moved from concept to publishing its first paper in less than 18 months, a truly remarkable accomplishment! I have every confidence that developing a greater understanding of the phytobiomes will lead to transformative new approaches to improving plant health and productivity that will be required to meet the increased demand for food projected by 2050.

Other potentially transformative technologies are already on the horizon and also have the potential to fundamentally change the way we look at our science. In addition to these new tools, we will be looking to the millennial generation of plant pathologists, who will soon be the largest generation in the workforce, to meet the challenges and demands associated with food production of the future. They bring with them new attitudes, values, and expectations of life and the workplace that will result in an exciting landscape for plant pathology. As a society, we need to ensure that the professional resources and infrastructure are in place to support their needs, much as our predecessors did for us.

Every APS president inherits activities initiated by past leaders and initiates some of their own. Each of these activities falls into one of the three overarching goals of the APS strategic plan (www.apsnet.org/about/governance/Documents/APSStrategicPlanOverview2016-2017.pdf). These goals, which have been unchanged over the past few years, include:

- Strengthening APS as the premier professional organization for plant health science
- Fostering an innovative conference strategy to meet member needs and expectations for knowledge exchange and networking
- Initiatives in progress under our goal to be the premiere source of plant health knowledge (in addition to the *Phytobiomes* journal) include a task force led by Cristi Palmer to evaluate and make recommendations for the Plant Management Network (PMN). PMN is almost 15 years old and has undergone several changes since its inception. Initially operated as a multidisciplinary source of plant-health-related information supported by subscriptions and multiple professional societies, APS is now the sole society supporting it. This is a good time to decide what PMN should look like and how it should operate going forward. Another task force, led President, continued on page 19

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The natural host range of the parasite is limited to sugar beets, spinach, chard, and related weed species, such as pigweed, lambquarters, and Kochia. Without infection by this soil-inhabiting vector, disease cannot occur; however, the parasite does not always contain the virus. The vector itself causes little damage unless it is harboring the virus, transmitting it to the plant roots after infection.

New Reports

Due to the fear of this disease and the potential damage to sugar beet production, my predecessor, Eric Kerr (University of Nebraska [UN], Panhandle REC) and Willem Langenberg (USDA-ARS, UN-Lincoln), proactively conducted a survey in 1976 from western Nebraska sugar beet fields searching for root infections by the vector, but found none. To the best of my knowledge, this was the first attempt to identify the vector/pathogen/disease system in sugar beet production in the Americas.

The following year, Polymyxa betae was detected for the first time in the Western Hemisphere by Bryce Faulk and Jim Duffus, although it was not found directly infecting sugar beet roots in the field. It was identified in the greenhouse from beet plants grown in soil samples collected from two California fields where previous beet crops had exhibited yellowing symptoms. Furthermore, no evidence of the virus or symptoms of the disease (rhizomania) was observed, only the presence of the vector (P. betae) in the baited plants from the field soil samples.

Curiously, the virus pathogen (BNYVV) was first encountered in North America in 1981 from a location having nothing to do with sugar beet production—a cherry orchard in Washington State. In the attempt to correlate a potential soilborne virus with the stem-pitting disease of sweet cherry, Abdullah Al Musa and Gaylord Mink identified BNYVV from the roots of Gomphrena globosa (globe amaranth) grown in soil samples collected from beneath diseased cherry trees.

Due to these new reports of both the vector and virus from California and Washington, respectively, Kerr and Langenberg conducted another search in 1981, examining sugar beet and redroot pigweed plants from low-lying areas of Scotts Bluff County, NE, sugar beet fields. In five of six fields inspected, P. betae was present in the roots of all plants that were collected and tested. This was the first evidence showing the vector directly infecting sugar beets in the field from North America. However, the virus causing rhizomania was not detected from this search. The pathogen and disease would not be found affecting sugar beets in Nebraska for another decade. Ironically, I was incidentally involved with that first detection of rhizomania in Nebraska and several other states, and that is the rest of the story.

My Unlikely Role

Finding rhizomania in the United States was an alarming development to the industry due to its well-documented damage elsewhere and with no management options available. It also placed an unwarranted pariah-like stigma on those unfortunate farms of first identification from each new state or region. Therefore any new reports were of great importance and concern. In July 1992, I was working as a research technician in the program of Charlie Rush with the Texas Agricultural Experiment Station in Bushland, TX, one of only two labs in the Western Hemisphere that were capable of testing for rhizomania at that time. The other lab with this ability was that of Duffus (USDA, Salinas, CA), who had first found the disease in U.S. sugar beet production in California in 1983 and Texas in 1985.

I personally ran the tests on sugar beet samples sent to us by Kerr that confirmed the presence of the disease in Nebraska. I also processed additional samples that same summer identifying the disease from Wyoming and Idaho as well. I later learned that our tests were a second corroboration after first being confirmed by Duffus several days earlier, thus
More to the Story: Johanna Westerdijk

Dear Dr. Seebold,

With interest I read the article in Phytopathology News about women plant pathologists written by Dr. Harveson. I just wanted to inform you that there is more to tell your readers about Johanna Westerdijk.

This year, we celebrate the Westerdijk Year. Westerdijk was the first female professor in the Netherlands, and there are quite some activities related to this. One of the titles of APS PRESS is a book edited by Jean Ristaino entitled Pioneering Women in Plant Pathology, which contains a chapter about Westerdijk.

First, is the opening of the Westerdijk Year at the University of Utrecht where Westerdijk gave her inaugural address 100 years ago on February 10 (see, www.uu.nl/en/events/westerdijk-anniversary-2017-100-years-of-female-professorship).


Finally, in the framework of the Westerdijk year, the Royal Netherlands Academy of Arts and Sciences has the intention of increasing the number of female members by having a special round of nominations where only female scientists are considered as potential new members of the royal academy (www.scienmag.org/news/2016/11/bold-new-step-dutch-science-academy-holds-women-only-elections).

Best regards,
Francine Govers, Wageningen University

Harveson, continued from page 18

making my role a very minor one. Nevertheless, it was a foreshadowing, landmark event in my career. Never in my wildest dreams could I have imagined then that seven years later I would replace Kerr as the extension plant pathologist in Scottsbluff—it is indeed a small world.

Now you know the rest of the story.

REFERENCES
INTERNATIONAL YEAR OF PLANT HEALTH IN 2020

Raising Public Awareness, Support for Plant Protection

In March 2016, the International Plant Protection Convention (IPPC), including plant protection officials from 182 member governments, reached an agreement to seek a United Nations (UN) proclamation for an International Year of Plant Health (IYPH) in 2020. The purpose of an IYPH is to raise public awareness and support for plant protection going into the next decade. An IYPH will improve the public’s understanding of the importance and impacts of plant health in addressing issues of global importance, including food security, threats to the environment, and economic development.

The approval process for this IYPH in 2020 is currently underway at the UN Food and Agriculture Organization (FAO). The UN FAO will vote in July 2017 whether to move this forward to the UN General Body, formally requesting proclamation of the IYPH 2020.

Many of you have asked about what you can do to support this important initiative. You can write a letter of support to your country’s official representative or delegate to the FAO before the FAO conference meeting in July 2017. We have provided a sample letter to get you started at http://bit.ly/2jfWtih. Contact Stephanie Dubon (USDA APHIS PPQ) at stephanie.m.dubon@aphis.usda.gov or Stephanie Bloem (executive director of the North American Plant Protection Organization) at stephanie.bloem@nappo.org if you have any questions about IYPH or if you need assistance in finding the appropriate contact to send a letter of support.

Phytobiomes Editors Now Handling a Steady Stream of Article Submissions

Still time to save big on page charges!

The all-new Phytobiomes journal is quickly gaining a steady stream of manuscript submissions, nearly 25 of them as of this month. This is an excellent time to submit your paper, as the APC fee for Phytobiomes’ fully open-access articles has been reduced to just $1,350 for each accepted manuscript. This offer is scheduled to end on March 1, 2017.

The new Phytobiomes journal is the first and only dedicated journal in the fast-growing area of phytobiomes research. It is expected to be well read and highly cited by researchers in the many sub-disciplines of plant pathology; agronomy, soil science, entomology, animal science; and other scientific fields such as ecology, chemistry, computational biology, and climatology. Phytobiomes is an excellent venue for publishing research papers, review articles, perspectives, and various short communications. The journal's editorial board is delivering fast decisions and helpful feedback as they evaluate the early papers for this new journal.

Phytobiomes shares the same online delivery platform as the other APS journals. Papers are published online quickly in full-text html and PDF formats and include Altmetrics, CrossRef citation linking, article alerts, and more. Phytobiomes and the other APS journals offer Creative Commons licenses in two forms, CC BY and CC BY-NC-ND, allowing broader use of the research upon publication and meeting compliance guidelines with grant-funding organizations.

Be among the history-makers by publishing your manuscript in the very first yearly volume of Phytobiomes. Learn more and submit your manuscript at http://phytobiomesjournal.org.

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

The deadline is approaching for you to submit your application for the Storkan-Hanes-McCaslin Foundation Awards, named in honor of Richard C. Storkan, Gerald L. Hanes, and Robert L. McCaslin.

To date, more than $495,000 has been awarded to 78 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. To be considered for funding, each proposal should be carefully prepared in accordance with the instructions published in the January Issue of Phytopathology News and submitted electronically, no later than May 1, 2017, 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); one-page resume; and a letter of recommendation from the applicant’s major professor or research director.
Nearly five hours of footage comprising seven talks and two panel discussions covered policy and regulation updates, legal issues, pest management, unmanned aerial vehicles, and more. These presentations and the speakers’ accompanying slides are freely available through PMN’s Focus on Cotton webcast resource.

Session topics and speakers include:

- **EPA’s Revisions to the Applicator Certification Rule** (28 minutes)—This presentation provides an overview of proposed changes to the EPA’s pesticide certification and training requirements, discussing rationale behind the revisions and potential future amendments. Speaker: **Dale Scott**, Texas Department of Agriculture.

- **UAV Use in Agriculture: Practical, Legal, and Technological Considerations** (45 minutes)—This talk discusses several key considerations for adoption and use of unmanned aerial vehicles (drones) to collect field imagery data. Speaker: **Austin Bontrager**, Servi-Tech Expanded Premium Services.

- **Understanding the EPA Product Registration Review Process** (33 minutes)—This talk discusses how the EPA approaches risk evaluation, toxicity testing, exposure, and other factors when evaluating and approving new active ingredients proposed for registration. Speakers: **Jerry Wells** and **Cherilyn Moore**, Syngenta Crop Protection, LLC.

- **Politics and Policy Update** (17 minutes)—This presentation covers the state of the current political climate, including key issues such as farm bill appropriations, the Trans Pacific Partnership, loan programs, and more. Speaker: **Kody Bessent**, Plains Cotton Growers, Inc.

- **Handling Agriculture-Related Legal Issues** (40 minutes)—This discussion helps producers and practitioners navigate the legal complexities related to statutory agriculture liens, government farm programs, spray drift, property rights, and aerial management techniques. Speaker: **Amber S. Miller**, Crenshaw, Dupree, & Milam, LLP.

- **Old World Bollworm: Assessing a Potential New Threat** (39 minutes)—This presentation describes the biology, distribution, and management of old world bollworm and discusses the potential of microbe research to improve plant health and performance—specifically new findings about fungal endophytes. Speaker: **Gregory A. Sword**, Texas A&M University (TAMU).

- **Integrating Mobile Technology in Agriculture** (36 minutes)—This talk discusses the value and utility of several agriculture mobile applications, including Barchart, Farm Futures, CattleFax, Farm Logs, Tank Mix Calculator, and others. Speaker: **Blake Bennett**, Texas A&M AgriLife Extension.

- **Crop Management Update** (33 minutes)—This panel discussion provides an update of the 2016 growing season and discusses key issues such as irrigation, soil fertility, and weed control. Moderator: **Wayne Keeling**, Texas AgriLife Research Center; contributors: **Katie Lewis**, Jim Bordovsky, and **Seth Byrd**.

- **IPM Panel Discussion** (34 minutes)—This panel discussion covers important integrated pest management topics of the 2016 growing season, including bollworms, stink bugs, nematodes, cultural practices, sugarcane aphid, and Cloverworm. Moderator: **Blayne Reed**, Hale/Swisher; contributors: **Pat Porter**, **Katelyn Kowles**, **Kerry Siders**, and **Suhas Vyavhare**.

Also included are recordings of the 2016 award and scholarship presentations hosted by **Jane Denver** (TAMU) and **Glen Ritchie** (Texas Tech University and Texas A&M AgriLife Research).

Focus on Cotton contains more than 50 webcasts on various aspects of cotton crop management. The site also features Cotton Cultivated, a new resource from Cotton Incorporated that helps users quickly find the most current cotton production information available. These and other resources are freely available courtesy of Cotton Incorporated at www.plantmanagementnetwork.org/foco.
OPRO Spreads the Word at FFA, AFA, and NABT

The APS Office of Public Relations and Outreach (OPRO) was busy this past autumn, reaching out to students and teachers at three major events: the FFA National Convention and Expo, Agriculture Future of America (AFA) Leaders Conference, and the National Association of Biology Teachers (NABT) conference.

The FFA National Convention and Expo was held at the Indianapolis Convention Center, October 19–21. With more than 60,000 attendees, this event enables us to reach high-school and college students and teachers with strong agricultural interests. Dominique Tate (The Ohio State University [OSU]), Tim Durham (Ferrum College), and Monica Lewandowski (OSU) staffed the APS exhibit, which was part of the event’s expo, that included over 400 exhibitors. Attendees were engaged with the popular “Which Plant Disease Are You?” game and APS members distributed information cards and posters on plant pathology careers (available on http://plantdisease.org). It was also a good opportunity to network with other exhibitors that included agricultural businesses and companies, federal agencies, and dozens of universities.

AFA hosted 1,200 students and professionals for the 20th AFA Leaders Conference, November 3–6 at the Sheraton Crown Center Hotel in Kansas City, MO. Doug Jardine (Kansas State University) staffed the APS booth, visiting with undergraduate students from around the United States about opportunities for graduate degrees in plant pathology. For land-grant university students, Jardine provide names of APS members they could contact for more information when they returned home. For students from liberal arts schools, he provided them the names of contacts at universities where they might be interested in applying to graduate school.

The 2016 Professional Development conference, sponsored by NABT, was held November 3–6 at the Denver Sheraton-Downtown in Denver, CO. The conference joined more than 1,000 biology and life sciences educators with the goal of providing the best possible biology education materials, including pedagogy, hands-on workshops, and informative sessions. Kari Peter (The Pennsylvania State University), Alejandra I. Huerta (Colorado State University [CSU]), and Mary Ortiz-Castro (CSU) staffed the APS booth. Here they promoted educational plant pathology activites and materials with instructors by engaging them in the “Which Plant Pathogen Are You?” board game. Instructors were encouraged to incorporate plant pathology into the classroom by using this simple, educational, and fun board game or other materials at www.apsnet.org/EDCENTER/K-12.

Apply for the Tour of Private Sector Relations

The application for the Tour of Private Sector Relations, June 13–15, 2017, is now open. If you are a graduate student or post-doc interested in learning more about career opportunities in private sector and government organizations, this opportunity is for you! Registration is open until February 16 and costs $50. More information is available at www.apsnet.org/members/outreach/opsr.
Plant Cyberinfrastructure 10-Year Plan Released for Public Comment

The Plant Science Research Network is an NSF-funded consortium of plant science societies in the United States, including APS, that is developing a 10-year strategic plan for plant systems research (from molecules to ecosystems) over the coming decade. This plan, entitled the Plant Systems Research Initiative (PSRI), is closely aligned with APS’ Phytoproteomics Initiative.

APS representative Brett Tyler is coordinating the PSRN’s development of cyberinfrastructure component of this plan. It is intended that the PSRI, and in particular the cyberinfrastructure plan, will guide community activity, policy, and funding broadly over the next five to 10 years, for example via the U.S. interagency National Plant Genome Initiative.

The development of the cyberinfrastructure plan began at the January 2016 Plant and Animal Genome meeting and culminated with a 2-day visioning workshop in Washington DC in October that included the chair of APS’ Evolutionary Genetics and Genomics Committee, Lijun Ma.

From the workshop discussions, an extended Executive Summary of the Cyberinfrastructure Plan has been drafted, including recommendations as the framework for writing a full-length plan this coming spring. This has been refined by input so far from over 50 scientists in the fields of plant systems and cyberinfrastructure research.

The plan encompasses six elements of cyberinfrastructure, namely data, tools, platforms, communication and collaboration, training, and outreach. The plan, subtitled “Connections,” strongly emphasizes the need to improve the interoperability of data, tools, and platforms; new models for training the current and next generations of plant scientists; as well as promoting collaboration and communication among plant and data scientists, educators, stakeholders, farmers, and the general public. The report also points to the need for rethinking professional incentives for the kinds of synergistic activities needed to improve connectivity, as well as the need for a broader range of funding models.

The PSRN is now seeking input from the broader community interested in plant systems research and life sciences cyberinfrastructure, including scientists interested in plant–microbe interactions at all levels of scale and application.

To provide input on the cyberinfrastructure plan, go to the plant research community site, www.plantae.org, register, then go to the Big Data and Cyberinfrastructure group to download the document and post your comments. Input will be most valuable if received by February 28.

APS Foundation

2017 APS ANNUAL MEETING
Show Off Your Research—Apply for a Student Travel Award

The application has three parts:

1. A copy of the student’s formal APS abstract already submitted for an intended oral or poster presentation for the 2017 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 24, 2017).

It is recommended that you compose your responses 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, 2017, and advisor letters are due by noon Central Time on March 24, 2017. 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!

Do You Want an APS Foundation Award? We Want to Give You One!

The APS Foundation is currently accepting applications for the following awards. Learn more about these funding opportunities at www.apsnet.org/members/foundation/apply.

International Travel Award
Provides $1,500 in support of early or midcareer international members to participate in an APS Annual Meeting.

John and Ann Niederhauser Endowment (JANE) Award
A $3,000 award supports proposals that involve international cooperation between a person/institution in the United States and a person/institution outside of the United States. Projects should have positive impacts and practical applications for the developing country.

Plant Pathology Experiential Awards
The award provides $500 to both a department and an individual graduate student or post-doctorate to visit a nonacademic organization for the purpose of promoting career and research development experiences.

Schroth Faces of the Future Awards
Four early career members will receive $500 to present on host resistance and host/pathogen interactions at the 2017 Annual Meeting “Faces of the Future” symposium.
Interdisciplinary Research Shines in 2016 Symposium on Phytobiomes

Alejandra Huerta, Colorado State University, alejandraihuerta@gmail.com

Phytobiomes research offers the opportunity to integrate findings from a wide diversity of disciplines, promoting new fundamental information on our cropping systems with a constant eye on translating that information into practice. This opportunity for crossdisciplinary exchange and interdisciplinary research was strongly evident in the recent Keystone Symposium “Phytobiomes: From Microbes to Plant Ecosystems.” This symposium drew together a community of 143 participants from 20 countries in the lovely city of Santa Fe, NM, November 8–12, 2016. The scientific program was organized by Jan Leach, Kelly Eversole, Jonathan Eisen, and Gwyn Beattie. The breadth of expertise among the participants made for an exciting program, as participants learned about such diverse topics as modeling technologies to understand how root hairs extract phosphate from soils, how crop and economic models can link to climate and weather scenarios, and how the AgData Coalition is helping growers get the most out of their farm data, as well as applications of plant nanobionics, the rapidly developing industry of agricultural biologicals, and the many fascinating interactions among plants, insects, microbes, and the environment that influence our cropping systems.

The scientific program was designed to address advances in systems biology approaches and supporting technologies to better understand phytobiomes, including their functional networks and activities. The program showcased novel findings in eight sessions: community assembly and functions, signaling mechanisms within phytobiomes, multi-trophic interactions in phytobiomes, imaging and modeling of phytobiomes, promising prospects for phytobiome engineering, and the application of phytobiomes research for agricultural sustainability. Two vibrant (and packed) poster sessions provided an open platform for active discussion among conference attendees. The keynote address, “The rice phytobiome: Exploring the rice response to microbes and environmental stress,” by Pamela Ronald, from the University of California-Davis outlined the complexity, perspectives, and successes of phytobiomes research. Ronald demonstrated the power of a predictive computational network for understanding stress responses in rice and illustrated the value of international collaborations to enhance crop resilience and educating and engaging the public on scientific advancements.

In addition to the scientific research presentations, three workshops were held that addressed distinct efforts to advance the vision of phytobiomes as a new approach to agriculture. The first workshop highlighted the importance of developing a broad-based scientific workforce; it gave an opportunity for eight selected early career scientists (graduate students, research scientists, and assistant professors) to present their research. The second workshop highlighted the need for coordinated, collaborative efforts in phytobiomes; it gave the opportunity for the International Alliance for Phytobiomes Research to debut its supporters. This alliance of industry and academic entities is dedicated to building a phytobiomes-based foundation for accelerating the sustainable production of food, feed, and fiber. The third workshop highlighted one of the first coordinated efforts of the alliance and that is to help identify and address challenges in characterizing soil- and plant-associated microbiomes. Participants discussed topics such as the need to identify best practices in sampling, processing, and data analysis to generate reporting standards for metadata and to ensure publicly accessible, high-quality databases.

The symposium concluded with a dynamic session on phytobiomes and the vision for tomorrow’s agriculture. During this session the participants openly discussed meeting outcomes and perspectives for future phytobiomes conferences. These discussions underscored the need for integrating public outreach, education, and effective communication strategies as our knowledge of phytobiomes advances; engaging experts in an even broader array of fields relevant to phytobiomes advances; nutritionists, economists, sociologists, extension agents, farmers, and statisticians in addition to the many agricultural and life scientists present; and continuing to increase the interdisciplinary and global nature of phytobiomes research and translation. The meeting highlights were shared via social media using Twitter and the hashtag #KSphytobiome.
**People**

**Student Awards & Degrees**

Sara Bratsch was awarded her Ph.D. degree this October from the Department of Plant Pathology at the University of Minnesota. Bratsch’s thesis defense was titled “Investigation of virus-like disorders of agronomically important plants” and her title was “Detection, diagnostics, and characterization of virus-like organisms and conformational disease-like proteins in plants.” After being awarded her Ph.D. degree, Bratsch is now leading a USDA-funded post-doc project, “Integrated Management and Diagnostics of Emerging Viruses in Fresh Tomato Production.” This is a two-year post-doctoral research project addressing plant health and production with a split focus on 80% research and 20% extension to study yield-reducing viruses in fresh tomato production in Minnesota. Bratsch will be conducting surveys of Minnesota high tunnels and community gardens to identify and characterize the virus(es) present by transmission electron microscopy, serological, and molecular methods. Bratsch will also be conducting experiments to study the epidemiology of the viruses identified. The project will culminate with the production of virus disease management reports.

Charles S. Krasnow earned his Ph.D. degree under the guidance of Mary Hausebeck in the Department of Plant, Soil, and Microbial Sciences at Michigan State University. The title of his dissertation is “Effects of host resistance, fungicides, and cover crops on Phytophthora capsici.” His research focused on fungicide management strategies, the susceptibility of Brassica vegetables and cover crops to Phytophthora capsici, and the histology of squash root rot. Krasnow provided multiple extension talks to growers and industry representatives over the course of his graduate program. In 2015, he received the Michigan Vegetable Council Industry Scholarship for his research and extension work with vegetable growers in Michigan. He is currently employed by Syngenta AG in Vero Beach, FL, in the lawn and garden division. His responsibilities include fungicide efficacy trials and evaluating new products for market performance.

Kathleen Mary McKeever recently completed all requirements for her Ph.D. degree in plant pathology from Washington State University (WSU) under the supervision of Gary Chastagner. Her dissertation was entitled “Assessing status of and resistance to Phytophthora root rot on true fir (Abies spp.).” Her Ph.D. program committee also included Dennis Johnson, Mark Mazzola, and Ned Klopfenstein. McKeever grew up in the Hudson Valley of New York State and received her B.S. degree in forest health from the College of Environmental Science and Forestry, State University of New York in Syracuse in 2008 and an M.S. degree in plant pathology from WSU in 2010. During her Ph.D. program at WSU, McKeever received numerous scholarships, awards, and recognitions, including WSU Heald Scholarship (2011–2012), S. O. Graham Research Fellowship (2011–2012), Achievement Rewards for College Scientists Fellowship (2012–2015), Martin Stoner Memorial Scholarship (2015), WSU CAHNRs Honor Student (2011), president of the WSU Plant Pathology Graduate Student Organization, Student Presentation Award at the 59th Annual Conferences on Soilborne Plant Pathogens (2013), advisor for ISEF/FFA Student Science Project (2014), and student travel awards to the 62nd Annual WIFDWC Conference (2014), APS Pacific Division Annual Meeting (2015), and the 64th Annual WIFDWC Conference (2016). She worked as a forest health technician with the New York State Department of Environmental Conservation in the summer of 2008 and field forestry technician with the Manomet Center for Conservation Sciences, Brunswick, ME, in the summer 2011. She has worked as a forest pathologist with the Montana Department of Natural Resources and Conservation since September 2016.

Swarnalatha Moparthi recently completed all requirements for her Ph.D. degree in plant pathology from Washington State University. Her thesis, entitled “Epidemiology and management of sweet cherry powdery mildew in Washington nurseries.” Gary Grove was her major professor and Dennis Johnson, Weidong Chen, and Scott Hulbert were her other committee members. Powdery mildew of sweet cherry caused by Podosphaera prunicola is a major problem in cherry nursery production. She conducted various studies and found
that chokecherry and sweet cherry can be infected by two different Podosphaera species, and the chokecherry powdery mildew fungus is Podosphaera tridactyla. She determined the source of initial inoculum for powdery mildew in cherry nurseries, time and duration of infection, and viability of conidia, chasmothecia, and ascospores. She also determined the effectiveness of electrolyzed oxidized water in reducing disease severity and number of chasmothecia formation. Moparthi grew up in the State of Andhra Pradesh. She received her B.S. degree in botany, genetics, and chemistry from Acharya Nagarjuna University, India, in 2002 and M.S. degree in biology from Youngstown State University, OH, in 2011. She received the best poster presentation award at the APS Pacific Division Annual Meeting in 2016. After her Ph.D. degree, she is interested in working as a plant pathologist in the area of extension.

New Position

Marty Draper has been appointed as department head and professor of the Department of Plant Pathology at Kansas State University. Draper holds a B.S. degree in plant pathology and pest management from Iowa State University and M.S. and Ph.D. degrees from North Dakota State University (NDSU). Following graduation, he served as the plant pathologist for the North Dakota State Seed Department and then as an instructor and director of the Plant Pest Diagnostic and Seed Health Testing Lab at NDSU. He left NDSU to become an extension plant pathologist at South Dakota State University. For the past 10 years he has been national program leader for plant pathology and integrated pest management with the National Institute of Food and Agriculture. Draper left Washington, DC, and began his role in Manhattan, KS, in July.

Collaboration

During the dates of July 18–21, 2016, 24 plant pathology, entomology, and weed sciences graduate students from the University of Georgia (UGA) attended a trip to participate in a UGA Career Day hosted by research scientists, such as Javier Delgado (Dow AgroSciences), at their headquarters in Indianapolis, IN, and a midseason diagnostic workshop hosted by instructors, including Kiersten Wise (Purdue University Crop Diagnostic Training and Research Center). This trip, planned by students of the Department of Plant Pathology, was designed to address the ongoing trend in industry to hire crop protection professionals that are broadly trained across the three main crop protection disciplines by providing an opportunity for technical training as well as information on the skill and experiential needs of industry. During the visit to Dow AgroSciences, students were given the opportunity to speak with representatives from HR about career preparation, representatives from the summer internship committee on the internship experience and application process, research scientists on job responsibilities and personal career track, and a panel discussion on what it is like to work in industry with all of the aforementioned. By providing this information/training to students early in their educational career, our program aimed to give graduate students the opportunity to design a program of study that will provide the background needed to be competitive in the current and future job market. Through the generous support from the Dow Aid-to-Education Program, UGA Society of Aspiring Plant Pathologists, and departmental contributions, the total cost to students for the four-day, three-night trip was only $50 per person.

University of Georgia students on career trip to Dow Agrosciences.

What’s Going On?

Have you recently graduated, received an award, or been promoted? Is something noteworthy happening in your department? We want to hear from you! Share your news with the APS community! Submit your news online at www.apsnet.org/publications/phytopathologynews/_layouts/apsforms/phytosubform.aspx.
Phenomic Approaches and Tools for Phytopathologists
Ivan Simko, Jose A. Jimenez-Berni, and Xavier R. R. Sirault

Mining the Gap: Assessing Leadership Needs to Improve 21st Century Plant Pathology
J. Beckerman and W. Schneider

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Phytopathology

Phytopathology News 27

Phytopathology • Soybean Resistance to the Soybean Cyst Nematode Heterodera glycines: An Update
Melissa G. Mitchum

• Plant Disease Severity Assessment—How Rater Bias, Assessment Method, and Experimental Design Affect Hypothesis Testing and Resource Use Efficiency
Kuo-Szu Chiang, Clive H. Bock, I-Hsuan Lee, Moussa El Jarroudi, Philippe Delfosse

• Characterization of Colletotrichum Species Causing Bitter Rot of Apple in Kentucky Orchards
M. Munir, B. Amsden, E. Dixon, L. Vaillancourt, N. A. Ward Gauthier

• Phytoplasma in Association with Rubber Tree (Hevea brasiliensis) Stem Fasciation in China
Y. Yang, L. Jiang, H.-Y. Che, X.-R. Cao, D.-Q. Luo

• Ethylene Biosynthesis and Signaling Is Required for Rice Immune Response and Basal Resistance Against Magnaporthe oryzae Infection
Emily E. Hellwell, Qin Wang, Yinong Yang

• Rice Plasma Membrane Proteomics Reveals Magnaporthe oryzae Promotes Susceptibility by Sequential Activation of Host Hormone Signaling Pathways
Jidong Cao, Chao Yang, Lingjuan Li, Lan Jiang, Yao Wu, et al.

Phytobiomes Journal

A Proposal for a Genome Similarity-Based Taxonomy for Plant-Pathogenic Bacteria that Is Sufficiently Precise to Reflect Phylogeny, Host Range, and Outbreak Affiliation Applied to Pseudomonas syringae sensu lato as a Proof of Concept

An Immuno-Suppressive Aphid Saliva Protein Is Delivered into the Cytosol of Plant Mesophyll Cells During Feeding
Sam T. Mugford, Elaine Barclay, Claire Drurey, Kim C. Findlay, and Saskia A. Hogenhout

Paraphoma Crown Rot of Pyrethrum (Tanacetum cinerariifolium)

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F. M. Dugan and S. Everhart

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Calendar of Events

APS-Sponsored Events

FEBRUARY 2017
17-20 Southern Division Meeting. College Station, TX. www.apsnet.org/members/divisions/south
26-March 2 Caribbean Division Meeting. San Jose, Costa Rica. www.apsnet.org/members/divisions/carib

MARCH 2017
22-24 Potomac Division Meeting. Morgantown, WV. www.apsnet.org/members/divisions/pot

JUNE 2017
14-16 North Central Division Meeting. Champaign, IL. www.apsnet.org/members/divisions/nc
26-29 Pacific Division Meeting. Riverside, CA. www.apsnet.org/members/divisions/pac

AUGUST 2017
5-9 APS Annual Meeting. San Antonio, TX. www.apsnet.org/meet

NOVEMBER 2017
1-3 Northeastern Division Meeting. Quebec City, Canada. www.apsnet.org/members/divisions/ne

JULY 2018

Other Upcoming Events

FEBRUARY 2017

MARCH 2017

MAY 2017

JUNE 2017
18-21 Seventh International Conference on Algal Biomass, Biofuels, and Bioproducts. Miami, FL. www.algalbbb.com

JULY 2017

DECEMBER 2017
4-7 miCROPe 2017—Microbe-Assisted Crop Production: Opportunities, Challenges, and Needs. Vienna, Austria. www.micropc.org

Important APS Dates to Remember

FEBRUARY 2017
16 Applications for APS Foundation Awards due
16 OPSR Tour registration closes

MARCH 2017
15 APS Annual Meeting abstracts due