Elizabeth Stulberg Confirmed as APS Fellow at OSTP

After a review of several excellent candidates, the APS Public Policy Board (PPB) selected Elizabeth Stulberg as their fellow for 2014–2015. Stulberg has joined the White House Office of Science and Technology Policy (OSTP) in Washington, DC. Stulberg follows Mary Palm (OSTP), John Sherwood (OSTP), and Angela Records (USAID) as the fourth APS PPB fellow and the third to work at OSTP. Her position is sponsored by PPB and is funded in part by PPB and the APS Foundation Public Policy Endowment with significant support from APS Council. The mission of OSTP is to provide the president and his staff with timely and accurate scientific and technical advice, ensure that the policies of the executive branch are informed by sound science, and coordinate the scientific and technical work of the executive branch so as to provide the greatest benefit to society (www.whitehouse.gov/administration/eop/ostp). Because of OSTP’s central role in the development of U.S. science policies, programs, and funding priorities, PPB is sponsoring this fellowship with the aim of helping to bring agricultural science considerations into policy-making on a continuing and consistent basis. Stulberg will provide input to OSTP and the administration on agricultural issues related to science and technology.

While serving the past year as an AAAS congressional fellow, Stulberg led policy efforts on food safety and security, genetics, and animal agriculture and issued policy recommendations on agricultural issues from genetic engineering to poultry slaughter. Working directly under the leadership of OSTP’s Science Division Associate Director Jo Handelsman, Stulberg will be involved in the microbiome project, an interagency initiative to elucidate common principles that govern the behaviors of microbial communities, including those associated with phytobiomes. In addition, Stulberg will explore opportunities to build Joint Innovation Centers focused on the food–health–environment nexus, participate in activities related to the 2015 International Year of Soil, and drive other issues related to agriculture and the scientific community.

To ensure the continuation of the PPB fellowship in future years, please support the APS Foundation Public Policy Endowment at www.apsnet.org/members/foundation/donate.

APS Heads West for Crossroads in Science

“Plant pathology is at the intersection of multifaceted science focused on the needs of a growing world population,” said APS President Rick Bennett. That sentiment is captured in this year’s theme—Crossroads in Science—and will guide the 2015 Annual Meeting Program Team as it builds a balanced scientific program focused on an integrated systems approach to science.

Submissions for both oral technical and poster presentations will be accepted February 2 through March 16, 2015. APS encourages high-quality research and concepts that will contribute to interdisciplinary collaboration with the downstream goal of increasing the available amount of safe and nutritious food, feed, and fiber to sustain the planet. The first installment of scientific programming—23 special sessions—are online at www.apsnet.org/meet.
I was searching for an idea for this month’s column when the November 10th issue of Time arrived in my mailbox. The cover featured a photo of president and main actors in the feature film Interstellar. The film has not been released yet in Manhattan, KS, so as I write this column, I haven’t actually seen the movie, but I promise I will.

In a review of the movie, “The Wonder of Worlds Beyond,” by Richard Corliss, he writes, “In the near future, a crop disease has pushed the Earth from the 21st century back to the agrarian 1930s: The world’s a dust bowl, and we’re all Okies.”

I began to wonder what kind of plant disease would have such a broad host range. A virus, a fungus, or maybe a bacterium? If it were a fungus or bacterium, wouldn’t we have fungicides or bactericides that might be useful?

Upon further research, I was pointed toward the Fort Macleod Gazette, which revealed the motivation behind the mission to find a wormhole, leading them to a new habitable place for our species to live. “That motivation is… climate change! More specifically, a crop famine that has been brought about by the effects of climate change, with corn as the last crop to be cultivated. The scientists who lead through the wormhole aren’t looking for alien life or Unobtainium—they just need a planet with a few decent fields.” That got me wondering. What gene(s)—would they have that would make it immune to such an otherwise devastating disease?

The beginning of the film is apparently set in a time when 1930s dust-bowl conditions have returned on a global scale. Where does one go to film a 1930s-style dust-bowl scene? The director chose Fort Macleod, Alberta, Canada. Maybe our Canadian members can confirm, or deny, that Fort Macleod would be a good place to film this.

As I further pondered this global plant disease epidemic, I wondered if some future plant pathologists, realizing corn was unaffected, would be able to find the responsible genes, clone them, and move them into at least some of the major susceptible crops? Maybe the epidemic is moving too fast for this approach. Or, just maybe, it isn’t as sexy as interstellar space travel as a means to solve the problem.

In looking at real plant disease epidemics, we know that a potato disease in Ireland resulted in starvation that killed an estimated one million people, other diseases have made it difficult to find chestnut and elm trees in much of the United States, and coffee rust changed the economy of England, forcing them to adopt tea as a preferred beverage. Even today, UG99 stem rust has plant pathologists working overtime to find resistant genes and move them into commercial varieties.

So, while the premise of the film may be a little farfetched to plant pathologists, at least crop disease is being featured in a major Hollywood production. Unfortunately, it may lead credence to Leonard Francis’s quote that appeared in last month’s column, “My personal world view is that plant pathology is just an infrequent blip on the communal radar screen… Too often, the blips that do appear have negative undertones.” I think the loss of our planet to a crop disease definitely qualifies as a negative undertone.
Wear and Share the Phytobiomes Initiative

Would you like to help spread the word about the new Phytobiomes Initiative? Then buy a T-shirt! You may have noticed APS Public Policy Board (PPB) members wearing @Phytobiomes Twitter shirts during the 2014 APS-CPS Joint Meeting in Minneapolis, and now you can join them. Help get the message out by sporting the Twitter handle wherever you go. Visit www.apsnet.org/apsstore/shopapspress/Pages/90304.aspx to order your shirt today in the APS Bookstore for $10!

Tweets from @Phytobiomes

Here are just a few of the headlines you missed from the APS Twitter feed.

Our Plant Health App is now available for Apple AND Android. Be among the first to download #TurfMD and #TomatoMD! http://dld.bz/dzPYU

- Tree diseases can help forests: What’s bad for a seedling can be good for biodiversity http://bit.ly/1ur4Kyu
- Be on the lookout for stripe rust, diseases in your shirt this fall http://bit.ly/1uhDbbq
- Our wine owes a debt to ancient viruses http://bit.ly/1499i9A
- USDA ARS researchers isolate stripe rust resistance markers in barley http://bit.ly/1zy0i4s
- The Love Life of Plants http://bit.ly/1ur4tMk
- New viral disease discovered in south Florida zucchini http://shar.es/10K7Qv
- Different strain behind Idaho late blight http://bit.ly/14jSPyY

www.twitter.com/plantdisease

New Plant Pathology Experiential Awards Available for 2015

The APS Office of Private Sector Relations (OPSR) with support from the APS Foundation is sponsoring two newly established experiential awards. The awards were created with seed funding from the Don and Judy Mathre Education Endowment and funding from private sector companies to support both a department and an individual graduate student or post-doctorate on-site visit to a nonacademic organization for the purpose of promoting career and research development experiences.

Individual graduate students and post-doctorates are invited to apply for funding in support of a short-term experience with a government or private institution outside of academia. The purpose of this award is to support professional development to learn about career opportunities and/or gain technical expertise in support of current research endeavors. One award of $500 is available to subsidize travel to the host institution. Applications must include 1) a one-page essay describing the objectives, approximate dates, and expected outcomes of the experience; 2) current CV; 3) acknowledgement from the company or organization of the willingness to serve as host; and 4) approval of the advisor of the student or post-doctorate for the short-term visit to the host institution or company.

Plant pathology departments are invited to apply for funding in support of an on-site visit to one or multiple nonacademic organizations. The purpose of this award is to enhance the awareness of business operations and potential career opportunities in institutions outside of academia. This award may contribute toward participation in the OPSR Private and Public Sectors Plant Pathology Tour scheduled for July 2015 (see details below). One award of $1,000 is available to subsidize travel to the host institution(s). Applications must include 1) a letter describing the institution or company to be visited, approximate dates of the visit, estimated number of students/faculty/post-doctoral scientists/technical staff that might participate in the visit, and how the experience will add value to the department; 2) a letter of approval from the head or chair of the university department for the visit; and 3) acknowledgement from the host organization of willingness to accommodate a visit from that university department.

To apply for this award, applicants must submit all documents as a single PDF file to Courtney Gallup at cagallup@dow.com. Letters of approval may be sent separately if preferred. The winner will be chosen by a selection committee chaired by Gallup and comprised of members of OPSR and the APS Foundation. The deadline for both applications is January 29, 2015. Details are also posted at www.apsnet.org/members/foundation/apply/pages/plantpathologyexperientialaward.aspx.

Participate in the First Private and Public Sectors Plant Pathology Tour

The APS Office of Private Sector Relations (formerly the Office of Industry Relations) is hosting the first biennial Tour of Private Sector and Government Institutions, July 14–15, 2015. This event is open to graduate students and post-docs who are interested in understanding how organizations in the private sector operate and what types of career opportunities may be available. The tour will also include a stop at a USDA facility to gain perspectives on opportunities in the government sector. The tour will encompass two full days in Research Triangle Park, NC, near Raleigh, covering a broad range of activities and potential career opportunities in the private sector. Topics will cover biotechnology, crop protection, discovery research, seed health, and plant health regulations, among others. Participants are responsible for their own travel and accommodations. OPSR will provide local travel and meals. Sponsoring/organizing faculty are also welcome. Registration will be limited, on a first-come, first-served basis, and will be open on the APS website March 20 through April 10, 2015. Stay tuned for further details on the application process in upcoming APS News Capsules.
Publishing Efficacy Trials in *PDMR* Is Now Easier!

Not long ago, the efficacy trials published in *Plant Disease Management Reports (PDMR)* adhered to a strict format based on print versions of its preceding titles: *F&N Tests* and *B&C Tests*. Recognizing the need for an updated approach, *PDMR* Editor Kenny Seebold led an effort to make publication in *PDMR* an easier process. These changes include more streamlined instructions; a shorter, more simplified editorial quality and style guide with fewer and more flexible rules; a printable sample report that includes formatting guidelines in the margins; new text formatting buttons incorporated into submission pages; and a more flexible payment process.

If you have not published in *PDMR* recently, consider taking advantage of this new and simpler process as we produce Volume 9 of *PDMR* this year. Visit [www.plantmanagementnetwork.org/pub/trial/pdmr](http://www.plantmanagementnetwork.org/pub/trial/pdmr) for more information.

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**Key PDMR Submission Dates (VOLUME 9)**

- First submission form closes .............. December 8, 2014
- Final report for first submission due .... February 13, 2015
- Payment for first submission due ......... February 20, 2015

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Call for Applications for 2015 Storkan-Hanes-McCaslin Foundation Awards

The Storkan-Hanes-McCaslin Foundation Awards are named in honor of Richard C. Storkan, Gerald L. Hanes, and Robert L. McCaslin. Each had a long history of cooperation with the scientific community, and they were pioneers in developing effective soil fumigation through experimental research.

The foundation was established in 1987 to support graduate student research. To date, more than $431,000 has been awarded to 71 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. The 2014 winners were Timothy Frey, The Ohio State University; Peter Henry, University of California-Davis; and He (Helen) Jiang, University of Maine.

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. Foundation policy is to contribute to the education of the student. Grants are made on a yearly basis and may be renewed upon review by the committee. Since the award is highly competitive, we encourage unsuccessful applicants to update their proposal for future consideration. 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. It would be appreciated if the Foundation were acknowledged in research publications stemming from this award.

To be considered for funding, each proposal should be carefully prepared in accordance with the instructions given below and submitted electronically, no later than May 1, 2015, 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. Funding will begin September 1, 2015.

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“*How wonderful that no one need wait a single moment to improve the world.*”

– Anne Frank

If you would like to get involved with APS, please contact APS Headquarters at +1.651.454.7250. There are many ways to get engaged!
A big part of leadership is motivating others to work toward fulfilling common goals and objectives. But really, how much do we know about effectively motivating others? The analogy about the carrot and the stick comes to mind. If you need a donkey to move (not a bad analogy for motivating scientists), you either have to inspire the donkey to want to move with the carrot (positive reinforcement) or drive the donkey forward with the stick (negative reinforcement). Motivating others to work toward a common goal can be especially difficult in scientific societies (like APS), where the work is done by volunteers and the options for incentives are very limited.

Put down the stick and back away.

Negative reinforcement (i.e., “the stick”) is widely considered the least effective tool in the motivation toolbox. Sure, criticism and penalties can have short-term effects. Nobody likes to be the object of scorn, and this can serve as powerful short-term motivation. However, the law of diminishing returns rapidly takes effect, and negative reinforcement quickly becomes a significant de-motivator. This is especially true for a volunteer society, like APS. If your primary means of getting committee members or volunteers to do things is haranguing and harassing, you’ll rapidly lose your committee and nothing will be accomplished.

So how about those carrots?

Most people equate carrots with incentives: monetary or other bonuses, praise, or a nice plaque or certificate. Our cultural norms and practices tell us that incentives are great motivators, but is this true? Is the lack of carrots a problem for APS, where reward options are limited to gratitude and recognition? Sam Glucksberg, a Princeton scientist, took two groups of people and gave them a problem. One group was offered no reward to solve the problem, they were simply told we’re interested in how fast you can solve our challenge. The second group was offered monetary rewards for solving the problem, with large rewards for the fastest. On average, the group that received monetary rewards took longer to solve the problem, a result consistently replicated in studies around the globe for nearly 40 years. In fact, unless the task involves strictly mechanical skills with little or no creativity, there is a negative correlation between performance and incentive level: the higher the reward, the worse the performance.

A better carrot.

Good news, there’s more than one type of carrot. The typical incentives (money, bonuses, etc…) that we associate with positive reinforcement are called extrinsic motivators, rewards provided from the outside. However, there is another type of reward based on intrinsic motivators, motivation from within. People really like solving problems, and if you give them reason to motivate themselves the results are better than anything achieved with extrinsic rewards. Current research indicates that the best motivators are based on autonomy, mastery, and purpose. Essentially, if you give people challenges that they feel have significance and purpose, allow them to tackle the problem in their own way (autonomy) and their own desire to get better results (mastery) will motivate them to work hard and effectively to solve the problem. Bottom line, better motivation is not a bigger stick or more carrots. The solution is getting people to understand the importance of a problem, and then giving them a sense of control and mastery. There are ways to motivate APS volunteers, even with limited incentives!

Applying the carrot to your own donkeys.

The trick to applying intrinsic awards comes in helping people achieve purpose, autonomy, and mastery. Communicating purpose is critical; people must understand the importance of the task to have any motivation. Giving people a sense of autonomy sounds easy, but in practice is not trivial. Avoid micromanaging, even if it appeals to your own

The solution is getting people to understand the importance of a problem, and then giving them a sense of control and mastery.
Become a Perennial Member of APS!

APS members can now enroll in our new Auto-Renew program, which enables you to renew your membership year after year automatically without the hassle of remembering to pay each year. Perennial Members enjoy continuous membership benefits and avoid lapsed membership. Perennial membership is also environmentally friendly, as you will no longer receive a paper invoice.

Becoming a Perennial Member is easy! Visit your member profile on the APS website and sign up for Auto-Renew. Information on accepted forms of payment and other commonly asked questions are available on the APS website. Thank you to those who are already Perennial Members!

New Edition of *Exercises in Plant Disease Epidemiology* Is a Good Fit for Educators and Practitioners.

*Online access to supplemental materials included with purchase*

Epidemiology is a critically important discipline in the biology and industry of crops. Understanding the cause, effects, and spread of plant diseases is key to developing effective strategies before they can cause heavy economic losses. In this constantly evolving field, cutting-edge resources are required to keep current and future plant pathologists one step ahead of the game.

Enter *Exercises in Plant Disease Epidemiology, Second Edition*, a new title from APS PRESS that helps students learn and practice the latest, most advanced theories and methods in plant disease epidemiology.

The book offers critical background information, practical exercises, and suggestions for further reading. A special online portal in the APS Education Center offers users hands-on statistical and quantitative exercises that simulate real-world practice in the statistical computation, quantitative analysis, and mathematical modeling of plant disease epidemics.

Discounted student pricing for this book is also available for those who require this text for classes. Contact apspress@scisoc.org to secure a discounted rate for your students. To learn more about *Exercises in Plant Disease Epidemiology, Second Edition* and the dozens of other educational titles in the APS PRESS Bookstore, visit www.shopapspress.org. Click on “Teaching” under the “Browse by Subject” section.
“Plant pathology is at the intersection of multifaceted science focused on the needs of a growing world population. Join us at the crossroads of a new frontier of science.”

Rick Bennett, President
The American Phytopathological Society

apsnet.org/meet
This year’s competition was organized by ISU Extension and Outreach staff, among others. This allows teams to get hands-on experience outside the classroom. Stations run by ISU extension faculty and included components on scouting apps and unmanned aerial vehicles. Other parts of the competition focused on more traditional scouting tasks, including corn and soybean disease resistance. Garrett received an M.S. degree in plant pathology and statistics from Colorado State University and a Ph.D. degree in botany and plant pathology from Oregon State University. From 1991 to 1996, she was a statistical consultant for the University of Georgia, and from 2000 to the present time she has been an assistant/associate/full professor in the Department of Plant Pathology at Kansas State University (KSU). White received M.S. and Ph.D. degrees in microbiology/immunology from the University of Washington in 1978 and 1981, respectively. From 1982 to 1985, he was a post-doctoral fellow at the University of Washington in Seattle, and from 1985 to the present time, he has been an associate/full professor in the Department of Plant Pathology at KSU. He is also a fellow of the American Phytopathological Society.

Ten student teams from Iowa high schools competed in the fourth annual Iowa State University (ISU) Extension and Outreach Crop Scouting competition on August 5. The competition was created to increase high school students’ awareness of Iowa agriculture using hands-on learning and teamwork. Students gained corn- and soybean-scouting experience based on integrated pest management (IPM) principles by participating in and preparing for the competition. This year’s competition was themed “Innovation” and included components on scouting apps and unmanned aerial vehicles. Students developed a creative component before the competition, documenting an innovative idea they developed to help with scouting. One of the strengths of the competition is that it involves teams working at outdoor field stations run by ISU extension faculty and staff, among others. This allows teams to get hands-on experience outside the classroom. This year’s competition was organized by ISU Assistant Professor and Extension Plant Pathologist Darren Mueller and Adam Sisson, who were also leaders of the ISU IPM team. First place was awarded to a team from Clayton County, led by Joe and Suzanne Shirbourn. Pioneer independent sales representatives from Farmersburg, IA. The Shirbourns also brought another team who placed second. Third place was awarded to the student team from Clarion-Goldfield, led by Angela Charleton, Clarion-Goldfield FFA advisor, and John Holmes, agronomist with North Central Cooperative.

New Positions
Karen Garrett and Frank White will join the Department of Plant Pathology, University of Florida (UF) in Gainesville in early 2015. These hires are in conjunction with UF’s Preeminence Plan in which highly accomplished scientists are being hired in 27 strategic research areas. Garrett will be part of the Food Security, Safety, and Distribution Systems initiative, in which she will provide expertise on plant disease modeling. White will be a member of the Plant Genomics initiative and will contribute to research on plant disease resistance. Garrett received an M.S. degree in plant pathology and statistics from Colorado State University and a Ph.D. degree in botany and plant pathology from Oregon State University. From 1991 to 1996, she was a statistical consultant for the University of Georgia, and from 2000 to the present

Dalphy Harteveld, has recently joined Tobin Peever’s laboratory in the Department of Plant Pathology, Washington State University (WSU). Harteveld received her Ph.D. degree in plant pathology from the University of Queensland, Australia, where she studied the biology and epidemiology of Alternaria diseases of apple under the supervision of Andre Drenth. On October 6, 2014, she presented a seminar to the faculty and graduate students of the WSU Department of Plant Pathology entitled “The disease cycle of Alternaria leaf blotch and fruit spot of apple in Australia.” At WSU, Harteveld is studying the epidemiology and control of mummyberry of blueberry and host specificity and gene flow among Botrytis cinerea populations infecting blueberry and raspberry.
Martin F. Stoner passed away on April 17, 2014, after a short battle with brain cancer at the age of 72. He is survived by Darleen K. Stoner, to whom he was married for 50 years, and a sister, Roberta (Bobbie) Stoner Shier. Martin was born on January 19, 1942, in Pasadena, CA. Marty or Mart, as he was known to friends, received his B.S. degree in 1963 in biological sciences from California State Polytechnic University (CSPU), Kellogg-Voorhis Campus, and his Ph.D. degree in 1967 in plant pathology, with a concentration on mycology, from Washington State University. He joined CSPU, Pomona, in 1967, and served 40 years as a professor of plant pathology, mycology, and economic botany in the Department of Biological Sciences, until his retirement in 2007. Martin was a codeveloper and first administrator of the graduate program in the Department of Biological Sciences (1972–1975), served as coordinator of the Botany section of the department, and was a founder of the Interdisciplinary Program for Food Science and Technology. He was curator of the C. J. Humphrey Mycological Herbarium with more than 20,000 specimens, one of the three largest mycological herbaria in the West.

Over his career, Martin taught thousands of undergraduate and graduate students in his classes, but his real passion was in mentoring students and sharing his excitement of plant pathology and mycology.

Martin had a holistic knowledge of plants, pathogens, and insects. He was a sought-after consultant and forensic expert in southern California for his knowledge of wood-rott ing fungi, toxigenic molds in buildings, identifying mushrooms (especially in poisoning cases), and food-spoilage fungi. He worked with the nursery, horticulture, landscape (urban and native), and turfgrass industry to identify diseases and pathogens and to develop management programs. He consulted with insurance companies, parks, botanical gardens, and the U.S. Forest Service.

Besides his extensive knowledge of plants in southern California, he was active in research in Hawaii beginning in 1969. His research on the Big Island of Hawaii during the summers of 1972–1976 as part of an NSF project (International Biological Program, Hawaii Island Ecosystems, Integrated Research Program) provided significant contributions to understanding the ecology of soilborne fungi. He was acting director of the Plant Disease Clinic, University of Hawaii, Manoa, in 1981.

Martin shared his leadership and organizational skills with numerous university and state organizations, organizing mycological forays and the first annual statewide California Plant Disease Conference in 1979. He served as president of APS Pacific Division from 1980 to 1981. A member of the Western Conference on Soil Fungi (renamed Conference on Soilborne Plant Pathogens) since 1976, he served as the administrator and organizer of this conference from 1995 to 2008. This group, which played a pioneering role in the science of soilborne fungi and biological control, recently celebrated its 60th Anniversary meeting in March 2014, during which Martin received a Lifetime Achievement Award.

Martin had a passion for camellias. In 2006, he registered a cranberry-coral-colored variety, resulting from one of his crosses, named ‘Darleen Stoner’, which is now being grown by Monterey Nursery for sale in nurseries. His efforts in retirement (2008–2014) focused on documenting and preserving heritage camellias brought to the Big Island of Hawaii by the Japanese in the early 20th century.

In 1982, Martin was honored to be selected as the Distinguished Alumnus, College of Science, at CSPU, Pomona. To honor Martin’s life, you can support the Dr. Martin F. Stoner Student Travel Scholarship Fund of the Conference on Soilborne Plant Pathogens. Contact Steven Koike (srtkoike@ucdavis.edu) for details.

Maurice Vernon Carter was born at Victor Harbour in South Australia on March 20, 1926. He attended Scotch College, Adelaide, as a boarder from 1935 to 1944 following which he enlisted with the RAAF as a radio operator and was stationed at Wilson’s Promontory, Victoria, and on an island north of Darwin, before being discharged in 1946. He then spent two years on the family farm in Western Victoria before enrolling at the University of Adelaide and graduating with a bachelor of agricultural science degree with honors in 1952. He then worked at CSIRO in Canberra for two years before joining the Waite Agricultural Research Institute of the University of Adelaide in 1953 as a research officer in the Department of Plant Pathology and was appointed a lecturer in 1956.

Maurice’s early research concentrated on genes for resistance to barley powdery mildew. In 1960, he spent a sabbatical leave at Rothamsted Experimental Station in the United Kingdom, where he was greatly influenced by the expertise of Philip Gregory and Jim Hirst on aerial and splash dispersal
of fungal pathogens and worked with them on the development of spore trapping devices. Maurice pioneered the use of spore traps to study the epidemiology of Ascochyta blight in peas. This work contributed greatly to an understanding of the epidemiology of the disease. He established the pattern of ascospore release by Mycosphaerella pinodes, was promoted to senior lecturer in 1963, and was awarded a Ph.D. degree for his work by the University of Adelaide in 1964. He contributed to the development of the Burkard seven day recording volumetric spore trap and the Burkard quadruple ascospore liberation tunnels. These traps are routinely used around the world by epidemiologists studying aerobiology, including collecting ascospores liberated from Mycosphaerella pathogens of eucalypt leaves. He built an open circuit wind tunnel to observe the liberation, dispersal, and deposition of uredospores of prune and snapdragon rusts as well as spores of various fungal pathogens causing barley scald and leaf spotting of tree, ornamental, and vegetable crops, and was responsible for establishing a Hirst spore trap at the South Australian Department of Health for the quantification of pollen and spore counts for asthma sufferers.

Maurice established a lifelong research interest and obtained international recognition for his studies of apricot gummosis disease, the causal pathogen, and its control. His Ph.D. student William Moller proved that E. lata is the cause of dieback and what was previously termed “dead arm” of grapevines. In collaboration with virologist colleague Richard Francki, Maurice used serological methods to identify mycelial isolates of E. lata from overseas, and isolates from barberry and grapes were also shown to be serologically related to isolates from apricot. The possibility of integrated biological and chemical control of the disease was tested and in collaboration with an engineer he developed a pneumatic-powered spraying secatour for use in commercial orchards and vineyards.

Maurice retired from the University of Adelaide in July 1987 but he continued his interest in and enthusiasm for eutypa dieback during retirement. He was well respected as a kind, considerate, and inspirational teacher by both his undergraduate and post-graduate students and his laboratory assistants. He willingly gave of his time to impart his knowledge and skills in plant disease epidemiology to post-graduate students working on lettuce anthracnose disease, snapdragon rust, and barley scald and to other plant pathologists/disease epidemiologists from other Australian States. His studies provided the framework for extensive studies in Victoria on ascochyta disease of field peas.

EDITOR’S NOTE: The full-length versions of these notices can be viewed online at the APS website. In addition, the full obituary on Maurice Carter is available online at: link.springer.com/journal/13313 (Australasian Plant Pathol. DOI10.1007/s13313-014-0320-9) published online October 18, 2014.

Classifieds

Classified Policy: You can process your job listing at www.apsnet.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).

Assistant or Associate Professor—Phytobiome—Plant Bacteriology

The University of Arkansas (UA) Department of Plant Pathology invites applications to fill a nine-month, tenure-track faculty position (60% research, 40% teaching) in molecular plant-microbe interactions with an emphasis on plant bacteriology. The successful candidate will develop a vigorous and innovative, nationally recognized, extramurally funded research program that contributes to UA’s plant pathology and plant molecular biology programs with leadership in plant-bacterial interactions, host resistance mechanisms, functional genomics, population genomics, infectious growth and development, and/or bioinformatics. The desired research specialization within plant bacteriology is open, including but not limited to molecular mechanisms of bacterial virulence and/or host resistance to bacterial pathogens; the genetic, molecular, and evolutionary basis of bacterial pathogenesis; beneficial associations between bacteria and plants; population dynamics of bacteria in the context of agricultural ecosystems; or the development and deployment of bacterial biological control agents. This position is not associated with a specific agricultural commodity, and thus applicants utilizing diverse plant-bacterial study systems, including model systems to gain a better understanding of the complex networks and interactions that exist within the Phytobiome, are encouraged to apply.

The successful candidate will be expected to demonstrate excellence in grantmanship; present research results in peer-reviewed publications; teach a graduate-level plant bacteriology course and an undergraduate course involving prokaryotic organisms; advise and mentor graduate students; provide service to the department, college, university, and state as appropriate for his/her expertise; and collaborate effectively with departmental faculty as well as colleagues in related disciplines. Required: Ph.D. degree in plant pathology, plant biology, microbiology, or a related field with emphasis on experience in bacteriology and/or plant-bacterial interactions. Post-doctoral experience is strongly preferred. Strong communication skills and the ability to conduct independent and collaborative research are required.

Preference will be given to candidates with a demonstrated ability to work effectively across disciplines in fields of plant pathology, plant biology, genomics, microbiology, and bioinformatics. Women and minorities are encouraged to apply. Interested candidates should submit electronically: a statement of research interests, a statement of teaching philosophy and interests, CV, graduate academic transcripts, and names and addresses of three professional references to Burt Bluhm, 217 Plant Sciences Building, Department of Plant Pathology, University of Arkansas, Fayetteville, AR 72701, bbluhm@uark.edu. Applications received by December 10, 2014, are assured full consideration. Applications will be accepted until the position is filled.
Phytopathology

December 2014, Volume 104, Number 12
Mixtures as a Fungicide Resistance Management Tactic.
Definition of Plant-Pathogenic Pseudomonas Genomospecies of the Pseudomonas syringae Complex Through Multiple Comparative Approaches.
Abscistic Acid–Cytokinin Antagonism Modulates Resistance Against Pseudomonas syringae in Tobacco.
Potential of Pseudomonas chlororaphis subsp. aurantiaca Strain Pch101 as a Biocontrol Agent Against Fusarium graminearum.
Streptomyces avermitilis Produces a Multiantibiotic Complex with Ionophoric Properties to Control Botrytis cinerea.
Identification of the Infection Route of a Fusarium Seed Pathogen into Nondormant Bromus tectorum Seeds.
Synergistic Effect of Dazomet Soil Fumigation and Clavostactylus roseus Against Cucumber Fusarium Wilt.
Genetic Analysis of Leaf Rust Resistance in Six Durum Wheat Genotypes.
Genotypic and Phenotypic Characterization of Fungi in the Fusarium oxysporum Species Complex from Soybean Roots.
Lipoxygenase Activation in Peanut Seed Cultivars Resistant and Susceptible to Aspergillus parasiticus Colonization.
Coupling Spore Traps and Quantitative PCR Assays for Detection of the Downy Mildew Pathogens of Spinach (Peronospora effusa) and Beet (P. schachtii).
Viruses in Maize and Johnsongrass in Southern Ohio.

Plant Disease

December 2014, Volume 98, Number 12
Xanthomonas arboricola Diseases of Stone Fruit, Almond, and Walnut Trees: Progress Toward Understanding and Management.
Pythium brassicae sp. nov: A Novel Plant Family-Specific Root Pathogen.
An Improved Leaf Disc Bioassay for Detecting Caloecinia pseudovaccinata in Soil and Potting Media.
A Zoospore Inoculation Method with Phytophthora sojae to Assess the Prophylactic Role of Silicon on Soybean Cultivars.
The Effect of Open-Ended High Tunnels in Western Washington on Late Blight and Physiological Leaf Roll Among Five Tomato Cultivars.
Fungicide Resistance of Two Species of Alternaria from Potato in the Columbia Basin of Washington.
Occurrence and Development of the Cereal Cyst Nematode (Heterodera avenae) in Shandong, China.
Co-infection and Disease Severity of Ohio Maize dwarf mosaic virus and Maize chlorotic dwarf virus Strains.
Spatial and Temporal Analysis of Squash vein yellowing virus Infections in Watermelon.
Allele-Specific PCR for the Detection of Azoxystrobin Resistance in Didymella bryoniae.

Mycelial Compatibility and Pathogenic Diversity Among Sclerotium rolfsii Isolates in the Southern United States.
Phylogenetic Diversity of Rhizoctonia solani Associated with Canola and Wheat in Alberta, Manitoba, and Saskatchewan.
Pathogenicity, Fungicide Resistance, and Genetic Variability of Phyllosticta ruhii Isolates from Raspberry (Rubus idaeus) in the Western United States.
An Automatic Method to Detect and Measure Leaf Disease Symptoms Using Digital Image Processing.
Lineage, Temperature, and Host Species have Interacting Effects on Lesion Development in Phylllosticta ranarum.
Variability in Puccinia melanosepala Pathogenicity and Resistance in Sugarcane Cultivars.
Fusarium poae Pathogenicity and Mycotoxin Accumulation on Selected Wheat and Barley Genotypes at a Single Location in Argentina.
First Report of Goss’s Cabbage Leaf Blight and Wilt of Corn Caused by Clavibacter michiganensis subsp. neurenkohli in North Dakota.
First Report of Candidatus Phytoplasma solani Associated with Potato Plants in Greece.
First Report of Xanthomonas citri pv. mangiferaeindicae Causing Mango Bacterial Canker on Mangifera indica in Ivory Coast.
First Report of Curvularia richardiae Causing Leaf Blight on Richardia brasiliensis in Brazil.
First Report of Cladosporium Leaf Spot of Spinach Caused by Cladosporium variabile in North Carolina.
First Report of Cabbage Head Rot Caused by Fusariumavenaceum in Poland.
First Report of Leaf Spot Disease in Coconut Seedling Caused by Bipolaris setariae in China.
First Report of Alternaria longipes Causing Leaf Spot of Potato Cultivar Sante in Pakistan.
First Report of Postharvest Rot of Chestnuts Caused by Mucoarum sphaerophrum in Korea.
Target Spot on Menthaeruleum dauricum Caused by Streptotricha (? Streptoselina) caulophylli, a New Disease in China.
First Report of Botrytis pseudocinerea Causing Gray Mold on Blueberry in North America.
First Report of Wilt of Eucalyptus Caused by Ceratocystis fimbriata in China.
First Record of Dolistromata pini on Pinus nigra in Switzerland.
First Report of Neosporonpora vasonitica var. vasonitica Causing Soybean Stem Rot in South Korea.
First Report of Seedborne Fusarium sphinctinum and its Pathogenicity on Soybean (Glycine max) in the United States.
First Report of Bursaphelenchus mucronatus kolymensi Associated with Pinus sylvestris in Serbia.
First Report of Meloidogyne javanica Parasitizing Duboisia sp. in Paraná State, Brazil.
First Report of Euphorbia leaf curl virus and Papaya leaf curl Guangdong virus on Passion Fruit in Taiwan.
First Report of Kudzu (Pueraria montana) Infections by Tobacco ringspot virus in Mississippi.
First Report of Citrus yellow vein clearing virus on Lemon in Yunnan, China.
First Report of Maize chlorotic mosaic virus on Sweet Corn in Taiwan.
Natural Infection of Citrullus colocynthis by Papaya ringspot virus-W in Iran.
First Report of Broad bean wilt virus 2 in Leonurus sibiricus in Korea.
First Report of Watermelon mosaic virus Infecting Melon and Watermelon in Bosnia and Herzegovina.
Occurrence of Cucumber mosaic virus Subgroups IA and IB isolates in Tomatoes in Nigeria.

PMPI

December 2014, Volume 27, Number 12
Exopolysaccharide Production in Response to Medium Acidification Is Correlated With an Increase in Competition for Nodule Occupancy.
Nucleopoly 75 is Involved in the Ethylene-Mediated Production of Phytoalexins for the Resistance of Nicotiana benthamiana to Phytophthora infestans.
Potato virus Y HCP/Pro Localization at Distinct, Dynamically Related and Environment-Influenced Structures in the Cell Cytosplasm.
Multifaceted Capsid Proteins: Multiple Interactions Suggest Multiple Roles for Pepino mosaic virus Capsid Protein.
Interactions of Rice Tungro Bacilliform Pararetrovirus and Its Protein P4 with Plant RNA-Silencing Machinery.
Phytophthora Suppressor of RNA Silencing 2 Is a Conserved RXLR Effector that Promotes Infection in Soybean and Arabidopsis thaliana.
Phenotypic Analyses of Arabidopsis T-DNA Insertion Lines and Expression Profiling Reveal That Multiple L-Type Lectin Receptor Kinases Are Involved in Plant Immunity.
Arbuscular Mycorrhiza-Induced Shifts in Foliar Metabolism and Photosynthesis Mirror the Developmental Stage of the Symbiosis and Are Only Partly Driven by Improved Phosphate Uptake.

Plant Health Progress

Genusithia morbida Found on Weevil Species Sienomimus pellucidus in Indiana.
Detection of Tobacco rust mite virus (TRV) in Ploemia lepontica L.: A New Native Plant Host of TRV in Minnesota.
Onion ipmPIPE: A Coordinated Effort to Improve the Management of Onion Thrips and Iris yellow spot virus for the U.S. Onion Industry.
## Calendar of Events

### APS Sponsored Events

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Location</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td><strong>Southern Division Meeting</strong>. Atlanta, GA.</td>
<td><a href="http://www.apsnet.org/members/divisions/south">www.apsnet.org/members/divisions/south</a></td>
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<tr>
<td>March 2015</td>
<td><strong>2015 APS Potomac Division Meeting</strong>. Rehoboth Beach, DE.</td>
<td><a href="http://www.apsnet.org/members/divisions/pot">www.apsnet.org/members/divisions/pot</a></td>
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<tr>
<td>July 2015</td>
<td><strong>Caribbean Division Meeting</strong>. Mexico City, Mexico</td>
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<tr>
<td>August 2015</td>
<td><strong>APS Annual Meeting</strong>. Pasadena, CA.</td>
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<tr>
<td>August 2015</td>
<td><strong>Pacific Division Meeting</strong>, (in conjunction with APS Annual Meeting)</td>
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<tr>
<td>July 2016</td>
<td><strong>APS Annual Meeting</strong>. Tampa, FL.</td>
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</tbody>
</table>

### Other Upcoming Events

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Location</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>December</td>
<td><strong>2014 National Fusarium Head Blight Forum</strong>. St. Louis, MO.</td>
<td></td>
<td><a href="http://scabusa.org/forum14">http://scabusa.org/forum14</a></td>
</tr>
<tr>
<td>February</td>
<td><strong>Research Conference on Huanglongbing (IRCHLB IV)</strong>. Orlando, FL.</td>
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<td><a href="http://www.irchlb.org">www.irchlb.org</a></td>
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<tr>
<td>March 2015</td>
<td><strong>2015 Gordon Research Conference and Seminar on Chemical and Biological Terrorism</strong>. Ventura, CA.</td>
<td><a href="http://www.grc.org">www.grc.org</a></td>
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</tr>
<tr>
<td>March 2015</td>
<td><strong>Eighth International IPM Symposium, IPM: Solutions for a Changing World.</strong> Salt Lake City, UT.</td>
<td><a href="http://www.ipmcenters.org/IPMSymposium15">www.ipmcenters.org/IPMSymposium15</a></td>
<td></td>
</tr>
<tr>
<td>June 2015</td>
<td><strong>23rd International Conference on Virus and Other Graft-Transmissible Diseases of Fruit Crops.</strong> Morioka, Japan.</td>
<td><a href="http://www.icvf23.jp">www.icvf23.jp</a></td>
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<tr>
<td>August 2015</td>
<td><strong>XVII International Plant Protection Congress</strong>. Berlin, Germany.</td>
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<td><a href="http://www.ippc2015.de">www.ippc2015.de</a></td>
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<tr>
<td>September</td>
<td><strong>Australian Plant Pathology Conference</strong>. Fremantle, Western Australia.</td>
<td><a href="http://www.apps2015.com.au">www.apps2015.com.au</a></td>
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</tbody>
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