New J. Artie and Arra Browning Plant Medicine and Health Travel Fund Established, Applications Now Being Accepted

The APS Foundation is pleased to announce a new graduate student travel fund established by the generous gift from Past President J. Artie Browning and his wife, Arra. The new J. Artie and Arra Browning Plant Medicine and Health Travel Fund is established specifically to assist graduate students majoring in the Doctor of Plant Medicine (DPM), Doctor of Plant Health (DPH), and similar programs to attend and participate in a professional meeting or conference appropriate to their interests. All other APS Foundation graduate student travel funds are restricted to support travel to the APS Annual Meetings. This new travel fund will allow students to participate in other professional society meetings, in addition to APS’s, such as the Entomological Society of America, the Crop Science Society of America, the Agronomy Society of America, the Weed Science Society of America, and others. Additionally, there is no restriction as to where the meeting or conference is held, domestically or internationally. This new fund is in addition to the existing J. Artie and Arra Browning Student Travel Fund, in which support is restricted to the APS Annual Meeting.

Artie is a native Texan and graduated from Baylor University with a B.S. degree in biology in 1947, which also is where he met his wife Arra. He received his Ph.D. degree in plant pathology from Cornell University in 1953 and began a long career on the faculty at Iowa State University, conducting seminal research on the epidemiology and management of diseases of cereal crops, primarily oats. In 1981, Artie and Arra moved to College Station, TX, where Artie was head of the Department of Plant Pathology and Microbiology until his retirement in 1991.

Artie has been a member of APS since 1950 and has held many elected and appointed offices, including serving as the North Central Division councilor and councilor-at-large and president of APS. During his presidential address in 1982, Artie recommended that APS form a study committee about fostering DPH degree programs that would focus not on research, but rather on the applied and clinical aspects of plant production systems, similar to clinical human and veterinary medicine. This concept, while slow to catch on, is now recognized as a viable and important part of agricultural sustainability and food security.

See page 39 for details on the application process.

Your Video Could Be Worth $500!

The APS Office of Public Relations and Outreach (OPRO) is excited to announce the 2011 Video Contest! Let your creative juices flow and help educate the public about the importance of plant diseases, and how tiny, microscopic beasties can be the scourge of plants! This year, we have two categories to choose from:

- It’s a Microbial World After All: If you wish to create a film based on the pathogen of your choice, choose this category!
- Central Concepts in Plant Pathology: Can you make an entertaining and informative film on a central theme or concept in plant pathology? What is important for the general public to know?

Once again, the membership will vote for their favorite videos! Each APS member will be allowed to vote one time (details to follow in upcoming newsletters). One winning entry will be selected from each category. All entries will then be submitted to the ChloroFilms video contest (www.chlorofilms.org). From last year’s contest, we currently have four entries in ChloroFilms contest #4 — they should be announcing the winner any day now, so stay tuned for updates! In 2011, a special panel of judges will select the Grand Prize Winner, who will take home $500, and the runner-up will take home an APS logo Flip camera to help capture more of those amazing plant pathology moments! Video entries are due June 1, 2011, by 5 p.m. C.S.T.
Editor’s Corner

Celebrating St. Patrick’s Day

Doug Jardine, Kansas State University, PhytoNewsEditor@scisoc.org

While spring may have sprung in much of the southern United States, in many northern areas of the country, March can still be a dreary, wintry month. Right in the middle of the month, however, is one of the most celebrated holidays of the year, St. Patrick’s Day. Of course, St. Patrick is the patron saint of Ireland. So why is St. Patrick’s Day so heartily celebrated some 3,000 miles away from the Emerald Island? The answer to that question, of course, relates directly to plant pathology.

E. C. Large, author of The Advance of the Fungi, begins his treatise with the following account taken from the August 23, 1845, editorial column of the Gardeners’ Chronicle and Agricultural Gazette. “A fatal malady has broken out amongst the potato crop. On all sides we hear of destruction. In Belgium the fields are said to have been completely desolated. There is hardly a sound sample in Convent Garden Market....As for a cure for this distemper, there is none.” It was reported that it struck down plants like frost in summer. What was not understood then was that this was the sounding alarm of what has since come to be known as the Irish Potato Famine, or in Gaelic, an Gorta Mór, meaning “the Great Hunger.”

Large goes on to describe the ongoing debate between John Lindley, editor of the Gardeners’ Chronicle, and M. J. Berkeley as to the cause of the problem, with Lindley hypothesizing that it was caused by excess water in the plants accumulating during a long period of gloomy, wet weather, and Berkeley just as sure that it was associated with a mold he observed on the tubers. Of course, Berkeley was correct and the “mold” was later identified as what we now know as the fungal-like Oomycete, Phytophthora infestans. The Irish Potato Famine lasted nearly seven years. During that time, approximately one million people died and another million or more emigrated from Ireland, many to the United States and Australia. While many of these Irish immigrants came to work more with not much more than the clothes on their backs, they did bring their religion, which included a love for St. Patrick. What began as purely a Catholic holiday in the United States has gradually become a secular celebration of all things Irish.

I would encourage all plant pathologists, if you have not already done so, to read or reread The Advance of the Fungi. The first two chapters, The Potato Murrain and Famine in Ireland, are a wonderful account of how Berkeley and C. Montagne, an amateur cryptogamic botanist, made the connection between the Potato Blight and the fungus Montagne described as B. infestans. For those interested, The Advance of the Fungi has been reprinted and is available through APS PRESS.

—Doug Jardine
Applications Now Accepted for Browning Plant Medicine and Health Travel Award

Applications for the Browning Plant Medicine and Health Travel Award are now being accepted. Applications are due by April 26, 2011 (see below); however, travel may be at any time within a 12-month period. Recipients will be selected competitively by an external committee, separate from the existing named graduate student travel awards committee.

Amount of Award: Typically in the range of $500–$600.

Criteria for Award: This APS Foundation Travel Award is limited to full-time graduate students in good standing who are enrolled in a program leading to the DPM, DPH, or similar degree. The student must have completed one full year of studies and at least one internship prior to application. Award recipients will be selected on a competitive basis by an external committee. Travel grants will be awarded for the purpose of assisting students to attend and participate in a professional meeting or conference appropriate to their interests. There is no restriction as to where the meeting or conference takes place (i.e., U.S. or international). Students who have received another APS Foundation Travel Award are not eligible to apply for this award during the same calendar year in which they received the other award.

Application Details: The application will consist of a narrative statement of no more than 1,000 words describing the student’s academic interests and career goals, current academic status (courses taken, internships completed), grade point average (GPA), and professional, leadership, and service activities. Descriptions of innovative projects, internships, and/or research that the student has conducted or participated in are also encouraged. The applicant should state what meeting he or she wishes to attend, including the location and dates, and state how participation in the conference will lead toward achievement of professional goals. A confidential letter of recommendation from the student’s advisor must be submitted approving the proposed conference and validating the student’s academic status and GPA. While contributed presentations at the meeting are not a requirement for the award, when the applicant intends to make an oral or poster presentation, an abstract of the presentation also should be submitted. Within a month of attending the conference, the awardee will be required to submit a brief (one- to two-page) summary describing the experience and the benefit(s) received to their program and career to the APS Foundation chair.

Application Submission Process: Applicants must complete the PDF application form at www.apsnet.org/members/foundation/apply/Documents/BrowningApplication.pdf and submit it along with all other application materials as a single PDF file to Anne Alvarez via e-mail to alvarez@hawaii.edu by 5 p.m. Central time on Tuesday, April 26, 2011. Confidential letters of recommendation are due by 5 p.m. Central time on April 29, 2011. Applicants should request that recommendation letters also be sent as a PDF file to Alvarez by April 29, 2011. Applicants will be notified as to whether or not they received the award by May 6, 2011.

Questions: Visit www.apsnet.org/members/foundation/apply and click on the Browning Plant Medicine and Health Travel Award link or contact Alvarez via phone (+1.808.956.7764) or e-mail (alvarez@hawaii.edu).

Applications for Student Travel Awards Due This Month!

The APS Foundation is now accepting applications for its 2011 Student Travel Awards. Awards of $600 each will be available to APS student members giving oral or poster presentations at the 2011 APS-IPPC Joint Meeting in Honolulu, HI, August 6–10. Students who received an award in 2010 will not be eligible for another award until 2012. If you are interested in applying, go to www.apsnet.org/members/foundation/apply/Pages/StudentTravelAwards.aspx to access the online form. If you have any questions about this process, please contact Graduate Student Committee Chair Kestrel R. Lannon (krlannon@ncsu.edu). Applications for Student Travel Awards are due March 22.
Plant Management Network Develops Two “Focus On” Resource Prototypes

The Plant Management Network (PMN) has developed two new prototypes for its growing family of commodity-specific webcast resources. Growers, consultants, and crop scientists involved with corn and peanut crop production may soon be able to utilize two new titles: Focus on Corn and Focus on Peanut.

Like the already successful Focus on Soybean and Focus on Potato resources, webcasts in these corn- and peanut-specific sites will provide science-based information on crop protection and crop production, all of which are applicable in the field.

These two new prototypes both have editorial committees in place.

Leadership for Focus on Corn includes Carl Bradley, assistant professor of crop sciences at the University of Illinois; William Hutchison, professor and head, Department of Entomology, University of Minnesota; and Harold Reetz, principal of Reetz Agronomics.

Focus on Peanut’s Editorial Committee includes Albert K. Culbreath, professor of plant pathology at the University of Georgia; John P. Beasley, Jr., professor and extension peanut agronomist, University of Georgia; and Todd Baughman, professor and extension agronomist, Texas A&M University.

Webcasts currently featured in the prototypes include Burrower Bug of Peanut, 2011 Southeast U.S.A. Peanut Production, and Plant-Parasitic Nematodes of Corn. The Focus on Corn and Focus on Peanut prototypes are also fully functional and include links to other PMN resources used by practitioners. These include PMN’s searchable Partner Extension Search resource, which allows growers to search PMN’s 38 land-grant university partner extension sites by keyword; Plant Disease Management Reports; Arthropod Management Tests; PMN’s Image Database; and a journal article search by keyword.

These resources will be launched once fully funded through sponsorships.

Agribusiness companies, commodity organizations, and other stakeholders may help corn and peanut producers through their support of PMN’s quality science-based webcasts. To sponsor Focus on Corn, contact Bradley at carlbrad@illinois.edu; for Focus on Peanut, contact Culbreath at spotwilt@uga.edu; or contact Phil Bogdan, communications manager, PMN, at pbogdan@scisoc.org.

Public Policy Update

Research Funded by USDA-NIFA in the Area of Human Pathogen–Plant Interactions

Jeri Barak, PPB member, barak@plantpath.wisc.edu, and Melanie Lewis Ivey, PPB intern, ivey.14@osu.edu

In FY2010, the National Institute of Food and Agriculture (NIFA) invited research project applications in the food safety, nutrition, and health areas to generate data that could be used to update food safety policy. This call for proposals was timely in light of the Food Safety Modernization Act that would ultimately become law in December 2010. This law, for the first time, will give the Food and Drug Administration (FDA) the power to order food recalls. Previously, FDA was limited to requesting a recall even when there is evidence that contaminated food has made people sick. This law also gives FDA the ability to set nationwide standards for growing and harvesting produce, with the goal of reducing the chances of preharvest contamination. The first step in the law is for FDA, in concert with USDA, to publish a proposed food safety rule for fresh fruits and vegetables. This regulation will establish minimum science-based standards for fruits and vegetables based on known safety risks, including the commodity’s likelihood to cause foodborne illness outbreaks. It is in this area where Agriculture and Food Research Initiative (AFRI)-funded research and pathogen-host studies undertaken by plant pathologists can contribute significantly to the development of science-based standards for many commodities.

NIFA requested applications to generate fundamental and basic information pertaining to the physical and molecular mechanisms that enable human pathogens to attach, internalize, grow, and survive in fresh produce. The program requested applications to generate information on how plants, plant pathogens, and plant-associated microbiota interact with foodborne pathogens and if these associations affect the attachment and fate of human pathogens on fresh crops. Gaining an understanding of the mechanisms by which human pathogens attach, internalize, travel, survive, and multiply within a plant will greatly improve our ability to develop effective pathogen control and mitigation strategies. The composition of the research team had to include both a microbiologist and a plant scientist, bringing the combined expertise with the targeted foodborne pathogen(s) and food crop(s), respectively.

Funded proposals focused on Salmonella enterica, Escherichia coli O157:H7, and enteric caliciviruses (noroviruses). S. enterica is the leading bacterial foodborne pathogen in the United States and fresh produce is the most implicated food source. Salmonellosis caused by S. enterica is a gastrointestinal disease that causes diarrhea, fever, vomiting, and abdominal cramps 12 to 72 hours after infection. Illness can last four to seven days, and most people recover without treatment. However, in past salmonellosis outbreaks caused by contaminated fresh produce, some patients needed hospitalization. In these patients, the S. enterica infection spread to other body sites and, in some cases, caused death. S. enterica has caused produce-related outbreaks most often on sprouted seeds, tomato, cantaloupe, and pepper. However, salmonellosis outbreaks have occurred through contaminated lettuce and basil. E. coli O157:H7 is one of the Shiga toxin-producing E. coli (STEC). Symptoms of an STEC infection vary, but often include severe stomach cramps, bloody diarrhea, and vomiting. Usually 5–10% of those with a STEC infection develop a potentially life-threatening complication known as hemolytic uremic syndrome (HUS). During the 2006 spinach outbreak, 30% of patients were hospitalized. One to three percent of HUS patients die. Produce-related outbreaks caused by STEC have been limited to leafy greens, predominately lettuce and spinach. Noroviruses (NoV) cause more than 90% of human nonbacterial gastroenteritis outbreaks worldwide and cause approximately 23 million cases of illnesses annually. The disease is characterized by nausea, vomiting, diarrhea, and abdominal pain and is often called “winter vomiting disease,” “stomach flu,” or “cruise ship sickness.” Although NoV infection is usually self-limiting, it can cause persistent infection for months and even death in the young, the elderly, and immuno-compromised patients. From 1973 to 2006, 58.3% of foodborne outbreaks associated with leafy greens were caused by NoV.
Three areas of fundamental research that will be funded by this NIFA program include 1) identifying the specific set of genes required for plant colonization, 2) characterization of the interaction between plant and human pathogens on plants, and 3) elucidation of the plant's role in this pathogen-plant interaction. Both tomato and pepper will be studied with *S. enterica*. Research on leafy greens will include *S. enterica*, STECs, and NoV.

A few genes have been identified for either *S. enterica* or STECs that are required for life on a plant. FY2010-funded proposals will expand this list by a variety of approaches, including a recombinase-based system and microarrays. Genetic screens will attempt to identify genes induced in plants and the mechanisms used to attach to and get established on leaves in the face of the various phyllosphere stresses present. Previously identified genes required for attachment or fitness on one crop will be examined in others, and those identified in *S. enterica* will be examined in STECs. Preliminary studies have shown that murine NoVs attach to the surface, penetrate cuts, and are internalized into the stomata of lettuce. It is known that plant viruses can enter a plant via damaged areas or insect vectors and that their presence can affect the metabolic and defense mechanisms of plants. A FY2010-funded proposal will study whether or not physical damage, physiological stress, or plant pathogen infection of leafy greens can enhance the attachment and internalization of NoVs into the plant. Results from each of these projects will identify crucial mechanisms required for plant attachment, colonization, and persistence by *S. enterica*, STECS, and/or NoV that subsequently could be key targets for intervention strategies.

*S. enterica* and STECs fail to grow in the field on crop plants. However, plant disease has been identified as a risk factor to produce contamination. Diseased plants offer nutrients not readily available to nonpathogenic plant-associated microflora. Interactions of plant and human pathogens prior to plant disease have recently been discovered. Research to address how human pathogens are helped or hindered by plant pathogens has been funded. The results from this research will ascertain the need to mitigate human pathogen contamination in the face of plant disease.

The role of the plant in human pathogen-plant interactions has scarcely been addressed. Several funded proposals seek to determine the role of pathogen-associated molecular pattern (PAMP) immunity and induce systemic acquired resistance (SAR) in suppressing the growth of human pathogens on plants. Some studies will focus on preharvest while others will investigate plant defenses in damaged tissue due to postharvest processing. PAMP-triggered immunity responses by the plant, PAMPs of the bacterium, and chemical inducers that trigger the plant immune response will be examined. Knowledge of how plants control human pathogen growth on plants is a step toward using plants to mitigate human disease. Plant resistance against plant pathogens has been used successfully throughout agriculture's history; similar techniques may prove useful to this human health crisis.

Each of these areas of fundamental research is necessary to ensure a safe food supply. These basic research studies set the foundation on which a science-based regulation can be formulated by FDA. Given more research funding, USDA could be an active partner of the FDA, providing the necessary science on which to build the coming rule. The APS Public Policy Board continues to help or hinder the plant pathogens has been funded. The results from this research will ascertain the need to mitigate human pathogen contamination in the face of plant disease.

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If you can pronounce *Phytophthora* [fayh-tof-ther-uh], you’re probably a plant pathologist.

*And if you’re a plant pathologist, you belong with APS.*

Share this distinctive community of scientists with others. Tell your colleagues to visit the new APSnet so they can find out what you already know—if you’re a plant pathologist, you belong here.
Graduate Funding Opportunity

Graduate-Level Research Fellowship Now Available from USB and Soybean Checkoff

The United Soybean Board (USB) and Soybean Checkoff have announced the opening of the application period for their graduate-level research fellowship. The USB research fellowship promotes graduate education in the area of plant sciences, focusing on improved ways to grow soybeans. USB encourages graduate students focusing on agronomy, phytopathology, weed science, molecular biology, extension service, and other disciplines intended to improve the ways to grow soybeans to apply for the fellowship. The fellowship provides a $25,000 annual stipend to the student for up to four years, provided the student makes satisfactory progress toward degree completion. USB provides the funds through the American Society of Agronomy. Some eligibility requirements include 1) the applicant will have applied to become a doctoral candidate in plant sciences, focusing on improving ways to grow U.S. soybeans; 2) the applicant must be a U.S. citizen; and 3) the applicant will submit proof of graduate school acceptance in the plant science/soybean area before receiving the fellowship. More information on eligibility requirements, nominee qualifications, and the application process are available online at www.agronomy.org/awards/award. Nominations/applications for the fellowship are due March 22, 2011, with all materials due by March 29.

First International Conference on Climate Change and Plant Disease Management

A group of more than 30 invited plant pathologists, climatologists, crop modelers, and social scientists came together for the First International Conference on Climate Change and Plant Disease Management, held in the historical city of Évora, Portugal, November 10–13, 2010. This working conference was organized by Piet Boonekamp and Kees Booij (Plant Research International, the Netherlands) and emerged from a joint initiative of the Royal Netherlands Society for Plant Pathology (KNPV) and the European Foundation of Plant Pathology (EFPP), supported by APS, the British Phytopathological Society (BSPP), the International Society for Plant Pathology (ISPP), and the Sociedade Portuguesa de Fitopatologia (SPF). Maria Ivone Esteves da Clara (SPF/EFPP) and Annemarie Carola Meierrose de Araújo (University of Évora) served as the hosts and managed the local arrangements. The overall goal of the conference was to begin to bridge the gap between climate change science and plant disease management by developing research recommendations to ensure sustainable regional food production in a warming world. Plenary and breakout sections focused on the impact of climate variability and climate change on food security and the risk of crop failures, threats to forestry and natural ecosystems, and the role of crop protection in mitigating climate change by enhancing carbon sequestration (a factor that is commonly overlooked in science and policy discussions). APS was represented by members Greg Boland, Mark Boudreau, Sukumar Chakraborty, Karen Garrett, Michael Jeger, Jean Ristaino, Harald Scherm, Michael Shaw, Rona Sturrock, and Jonathan Yuen.

Participants in the First International Conference on Climate Change and Plant Disease Management in Évora, Portugal.
OIP News & Views

Use Your Language Skills for the APSnet Education Center

The APSnet Education Center features a wide array of teaching resources for K-12, undergraduate, and graduate levels. Translations for several publications are available in Chinese, Spanish, and Portuguese. You can access them online at www.apsnet.org/edcenter/translations.

The Office of International Programs (OIP) and the Education Center are teaming up in an attempt to increase the materials with foreign translations. If you are willing to serve as a translator or reviewer, contact OIP member Megan Kennelly (Kennelly@ksu.edu) or the editor-in-chief of the Education Center, Anton Baudoin (abaudoin@vt.edu). Be sure to contact someone before you start a translation project to avoid any duplication of efforts.

You’re Invited to the Seventh Annual OIP Silent Auction

The Office of International Programs (OIP) will be holding its seventh annual Silent Auction on Sunday, August 7, 2011, from noon to 6 p.m. We invite members to join us for this one-of-a-kind fundraising event. All proceeds raised from the auction will support OIP’s Global Experience Program. This program aims to connect APS plant pathologists with scientists and extension personnel in developing countries in training and outreach efforts. Funds raised will support graduate students, post-doctoral associates, faculty, and staff in conducting short courses, workshops, or training programs in collaboration with a host country cooperating institution. Since its inception, the Silent Auction has raised nearly $20,000. Let’s make this year our best yet!

To participate in this year’s Silent Auction, we request that you gather fun and unique cultural items from around the world to be part of the auction. Popular donations in the past have included jewelry, fabrics, wine, wood carvings, regional food specialties, books, and other items that reflect your culture or cultures you have visited. When travelling, please keep us in mind and donate your unique, cultural souvenir to a great cause.

This year, given the meeting’s location in Hawaii, items should be brought with you with a completed donation form (available online) or sent directly to an APS contact in Hawaii. More details are available online at www.apsnet.org/members/outreach/oip/Pages/SilentAuction.aspx.

Why Did You Choose to Study Science?

An international online survey is being conducted by Colin Hanbury, Graduate School of Education, University of Western Australia, as part of his research on why people chose to study in science and science-related areas. They are particularly trying to get responses from international scientists. The survey’s aim is to make comparisons across countries and cultures on the reasons that people choose to study science. The survey is for anyone who completed college-level science (and applied science) studies after leaving school—the greater the diversity of the respondents, the better the results will be. You don’t have to be currently working in science-related areas. If you want your country and discipline to be represented, then please participate, and please send colleagues in science-related areas the survey link, www.surveygizmo.com/s3/409857/Science. All responses are anonymous and the individual responses will remain confidential. Following statistical analysis, the overall results will be published in 2011. The report will be available as a PDF at www.communicatingscience.org. Please respond by March 15, 2011.

People

Student Degrees/Awards

Wilmer Barrera, Department of Plant Pathology and Crop Physiology, Louisiana State University (LSU) and LSU AgCenter, successfully defended his master’s thesis entitled “Effects of environmental variables and crop growth on development of brown rust epidemics in sugarcane.” His major professor was Jeffrey Hoy. Wilmer will pursue a Ph.D. degree in horticulture in the Department of Soil, Plant, and Environmental Sciences at LSU.

Emmanuel Byamukama has accepted a post-doctoral research associate position at the University of Nebraska, working with Stephen Wegulo, Gary Hein, Satyanarayana Tatinneri, and Roy French. The project “Regional Distribution and Host Range of Triticum mosaic virus: An Emerging Virus of Wheat and Its Potential Impact on Wheat Production” is being funded by NIFA-AFRI. Byamukama received his Ph.D. degree from Iowa State University under the direction of Forrest W. Nutter, Jr. His research focused on the temporal and spatial dynamics of Bean pod mottle virus at several spatial scales.

Hari Sharan Karki, Department of Plant Pathology and Crop Physiology, Louisiana State University (LSU) and LSU AgCenter, successfully defended his master’s thesis in fall 2010 under the direction of Jong Hyun Ham. The title of his thesis was “Physiological, biochemical, and molecular characteristics associated with virulence of Burkholderia glumae: The major causative agent of bacterial panicle blight of rice.” He recently received a highly competitive and prestigious economic development assistantship from the graduate school to continue with his Ph.D. program focusing on B. glumae/rice host-pathogen interaction.

People continued on page 44

Phytopathology News 43
Lu Liu recently completed requirements for her M.Sc. degree in plant pathology from Iowa State University (ISU), Ames, IA. Her thesis “Quantifying the aggressiveness, temporal, and spatial spread of Pantoea stewartii” in sweet corn was conducted under the direction of Forrest W. Nutter, Jr. Liu is currently working on a graduate degree in statistics at ISU.

Michelle M. Moyer has been awarded a Ph.D. degree in plant pathology from Cornell University (CU). Her research on the epidemiology and modeling of grapevine powdery mildew was conducted at CU’s New York State Agricultural Experiment Station at Geneva under the supervision of Robert Seem and David Gadoury. Excerpts of her work have appeared in Phytopathology (100:1240-1249) and Plant Health Progress (doi:10.1094/PHP-2010-0526-02-SY). More about Moyer’s work at Geneva can be seen at www.cals.cornell.edu/cals/plpath/directory/moyer-m.cfm. In addition, Moyer has recently accepted a position as an assistant professor in viticulture research and extension at Washington State University’s Irrigated Agriculture Research and Extension Center at Prosser.

Jonathan Oliver was the 2010 recipient of the Robert Gilmer Graduate Student Award. The award is named in honor of Robert M. Gilmer, a member of Cornell University’s (CU’s) Department of Plant Pathology at the Geneva Experiment Station from 1950 to 1975. Gilmer is remembered as an outstanding plant pathologist, colleague, and mentor, internationally respected for his contributions to our knowledge of virus diseases of fruit crops. His generous gift created the endowment that bears his name. Oliver received the award in recognition of his excellence in academics, research, and service to the Department of Plant Pathology. His Ph.D. research on Grapevine fanleaf virus was conducted at CU’s Department of Plant Pathology and Plant-Microbe Biology at Geneva under the direction of Marc Fuchs. More about Oliver’s work at Geneva can be seen at www.cals.cornell.edu/cals/plpath/directory/oliver-j.cfm.

Awards

Marty Dickman, the Christine Richardson professor of agriculture in Texas A&M University’s Plant Pathology and Microbiology Department and the director of the Institute of Plant Genomics and Biotechnology, has been named a fellow of the American Association for the Advancement of Science. Dickman’s research program is focused primarily on fundamental studies in fungal diseases of plants. The overall goals of his studies are understanding the mechanisms that regulate programmed cell death and implementing intervention or alternative strategies to generate transgenic plants with novel mechanisms of pathogen resistance. He is a fellow of APS and has served as chair of the former Biochemistry, Physiology, and Molecular Biology Committee and chair of the Scientific Program Board. He is a former senior editor for APS PRESS and is currently a senior editor for Physiological and Molecular Plant Pathology.

Collaboration

Ralf G. Dietzgen, associate professor at the University of Queensland, Australia, is spending a sabbatical with Michael M. Goodin, associate professor at the Department of Plant Pathology, University of Kentucky, Lexington, until mid-May 2011. His visit is facilitated by a Queensland International Fellowship Award from the Queensland Government Department of Employment, Economic Development, and Innovation. Dietzgen will be engaged in collaborative research using live plant cell imaging to visualize protein-protein interactions aimed at identifying novel targets for viral disease control.

Retirement

Ram P. Thakur, principal scientist (plant pathology) and head, Plant Quarantine Laboratory, at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, India, retired on November 30, 2010. Born in Bihar, Thakur joined as a scientist at ICRISAT in January 1976 soon after completing his Ph.D. degree at the Indian Agricultural Research Institute, New Delhi, India. During his 35 years of service at ICRISAT, Thakur distinguished himself as a consummate plant pathologist through his novel and pioneering investigations on ergot, smut, and downy mildew diseases of pearl millet and grain mold and antracnose of sorghum. Thakur’s focus on these diseases was pathogen biology, epidemiology, genetics, mechanisms of disease resistance, and disease management. As a productive scientist, Thakur supervised thesis research of seven Ph.D. candidates and one master’s student registered in agricultural universities in India.

From 1986 to 1987, Thakur worked as a visiting scientist at North Carolina State University, Raleigh, with Kurt Leonard on epidemiology of turcicum blight and smut of corn. Thakur was invited as an international fellow at the University of Western Sydney during 2004 to help develop a project on crop disease risk management. Thakur had a collaborative project with X. B. Yang at Iowa State University, Ames, IA, under the USAID-linkage program on sorghum grain mold risk assessment (2002–2004).


Thakur has published more than 140 journal articles in several national and international journals, including Phytopathology and Plant Disease. His research contributions and professional competence has been recognized nationally and internationally. He is one of the very few plant pathologists of the CGIAR Centers who has been honored as a fellow of APS.

In addition to being a good scientist and a very good research team member, he had very cordial relationships with partners in India and abroad. Thakur can be contacted at thakur.rp08@gmail.com.
In Memory

John Samuel Boyle passed away at his home in State College, PA, on June 12, 2010. He was born on June 7, 1917, on a farm near Laverne, OK, and moved to Wichita, KS, with his seven brothers and sisters at the age of 5. He received his B.A. degree with a major in botany and minors in chemistry and zoology in 1939 from Wichita State University. In 1942, he received his M.S. degree in mycology from the University of Iowa, where he also served as executive director of the YMCA. He served in the U.S. Navy in World War II, beginning in 1942 as pharmacist mate second class and ending his service in 1945 as commanding officer of the hospital ship USS APL 58. He received his Ph.D. degree in plant pathology from the University of Wisconsin-Madison in 1949 under the direction of G. W. Keitt and J. D. Moore. In 1949, Boyle joined the botany faculty of the then Pennsylvania State College (now The Pennsylvania State University [PSU]) as assistant professor of plant pathology. After 33 years of service at PSU, he retired in 1982 as professor emeritus of plant pathology. John was an expert on viral diseases of fruit and vegetable crops who pioneered experimental work on the transmission of viruses from woody to herbaceous plants. John established the first formal course on plant virus diseases at PSU, and his research focused on understanding and developing strategies for the control of plant virus diseases.

Throughout much of his career, Boyle focused his research efforts on the problem of abnormal ripening of tomato fruit. Three terms—blotchy ripening, graywall, and internal browning—described the most commonly encountered fruit disorders of disputed etiology. Considerable confusion and controversy existed until the work of Boyle showed the importance of the timing of infection by Tobacco mosaic virus (TMV) on symptom expression in the host plant. In a classic paper “Abnormal ripening of tomato fruit,” published in Plant Disease (1994), John was able to explain symptom development of fruit ripening abnormalities as being the outcome of an interaction involving the time of TMV infection and subsequent colonization of affected tissues by bacteria. Boyle demonstrated the importance of infecting the plant with tomato strains of TMV after full fruit set in inducing the internal browning—graywall syndrome. From 1964 to 1965, Boyle was a Fulbright lecturer at Assiut University in upper Egypt and, in 1975, was a visiting Fulbright scholar at the Kinsealy Research Centre, Dublin, Ireland. Other foreign assignments included teaching in Sri Lanka and twice with vegetable evaluation and control programs in Uruguay. John was an avid collector of rare and unusual books. He amassed a collection that filled nearly two bays of a garage. He especially enjoyed reading philosophy and country sayings and quotes. John had two sons, John David (1943) and Stephen Garrett (2007), who preceded him in death. His daughters, Elizabeth Boyle Taylor and Margaret Boyle White, four grandchildren, one great-grandson, and his wife Nellie survive him.

Maria de Lourdes Vieira Borges was born on June 24, 1916, in Lisbon, and died on December 11, 2010. She received a degree in biology from the University of Lisbon in 1940. After concluding her degree, she taught and performed research, dividing her time between lecturing in high school and doing some research. In 1945, she began to dedicate the majority of her time to research in plant virology, in the Plant Pathology Department of the Estação Agronómica Nacional (EAN) (National Agricultural Research Station). In 1958 and 1959, she published the first papers in Portugal on the application of electron microscopy to the study of plant viruses, specifically Potato virus X and Potato virus Y. Borges also studied the effects of viral pathogens on their plant hosts. She did Portugal’s first studies on metabolic and physiological changes as well as ultrastructural abnormalities caused by the virus infection. After 1968, she expanded her work to other areas of plant pathology, including phytoplasmology, quarantine, and integrated pest management with particular attention to soil solarization. In addition to the research work, Borges taught plant virology to students from Instituto Superior de Agronomia (ISA) (College of Agriculture in the Technical University of Lisbon); students from the Faculty of Science, University of Lisbon; and from several other universities in Porto, the Azores, Mozambique, and Angola. She also supervised the research work carried out by students to obtain university degrees. A large number of Portuguese plant virologists did their post-graduate training work at the EAN under her supervision.

In June 2005, she finished the publication of a book entitled Viruses, Viroids, and Plant Diseases in Portuguese, especially for Portuguese-speaking countries.

Maria de Lourdes Vieira Borges has participated in several significant developments in Portuguese science and agriculture, including her work on integrated pest management and her decisive role in the implementation of soil solarization in Portugal. The research she conducted, reflected in more than 120 scientific papers, made her one of the most important plant pathologists in Portugal.

Blair F. Janson, professor emeritus in the Department of Plant Pathology at The Ohio State University (OSU), died on October 5, 2010, at the age of 93. Janson was hired as an extension plant pathologist in 1950 and for a number of years was solely responsible for all extension plant pathology duties in Ohio. He wrote extension publications for several plant diseases, particularly fruit and vegetable diseases, and worked closely with research faculty in these areas. He wrote numerous articles on plant disease management for trade journals and agricultural organizations. Janson and colleagues also published annual recommendations for disease and insect control of fruit crops for both homeowners and commercial growers. Janson was active in the Ohio Pesticide Institute and the Ohio Pesticide Education Association.

Janson earned his B.S. degree from OSU in 1940. He taught high school in Andover, OH, and then served in the Air Force during World War II from 1942 to 1946. After his service, he returned to OSU to earn his M.S. and Ph.D. degrees in plant pathology under the guidance of Wilmer G. Stover. His graduate research included studies on Victoria blight, a new and serious disease of oats, and Fusarium wilt and root rot of dill, a new disease at the time. Janson served on the faculty in the Department of Plant Pathology from 1950 to 1976.

Janson was a life-long supporter of education. In 2008, Janson established the Blair F. Janson and Wilmer G. Stover Scholarship Fund to support travel grants for undergraduate and graduate students in the Department of Plant Pathology. He was a special guest of the department on July 24, 2008, where a plaque was unveiled that bears the names of the scholarship recipients. Janson resided in Columbus, OH, until his passing.
Post-Doctoral Research Associate, Plant Disease Epidemiology
The University of Wisconsin-Madison Department of Plant Pathology seeks a post-doctoral research associate in the Field Crops Plant Pathology Program. This position is focused on modeling the impact of field crop diseases of corn, soybean, and wheat. Candidate should have a strong background in plant disease ecology and epidemiology, statistics, and mathematical modeling. Proficiency with either SAS or R is desirable. The incumbent is expected to publish research in refereed journals and contribute to extension knowledge transfer through various channels and work with established faculty members to develop research/extension interests, including grant writing. Initial funding is available for one year, with renewal potential. Job requirements: a Ph.D. degree in plant pathology or closely related field, with experience in plant disease ecology and epidemiology; strong interest in interdisciplinary research; and the ability to conduct research independently but also contribute in a collaborative/collegial environment. Desired: excellent oral/written communication skills, detail oriented, and excel at record keeping. Submit letter of application describing research interests/professional goals, addressing qualifications; CV; transcripts; and names/contact information for three references to Paul Esker, Department of Plant Pathology, University of Wisconsin-Madison, 1630 Linden Dr., Madison, WI 53706 U.S.A.; e-mail: esker@wisc.edu; phone: +1.608.890.1999; web: www.uwex.edu/ces/croppathology. This position is open until a qualified candidate is identified.

Assistant Professor in Sustainable Plant Pest Management
The University of Hawaii at Manoa seeks an assistant professor to collaborate with instructors, researchers, specialists, extension agents, state and federal agencies, and the agricultural industry to design, deliver, and facilitate implementation of integrated pest management (IPM) programs for pests/diseases threatening Hawaii’s agricultural and urban/natural environments. Contribute to departmental undergraduate and graduate programs by teaching courses in various subject areas. Develop and deliver dynamic online courses to attract distance education students. Advise/mentor graduate and undergraduate students. Conduct research with an emphasis on IPM. Provide service to the college, university, and the community. Minimum qualifications: Ph.D. degree in plant pathology, entomology, weed science, or a related agricultural or biological science from an accredited college or university. Experience in agricultural pest management, as evidenced by publications in peer-reviewed journals. Experience in university instruction, as evidenced by evaluations from previous courses taught. Desired: experience in the development/implementation of a research program and demonstrated success in obtaining extramural funding. Submit application letter; CV; transcripts; names and contact information for at least three professionals references to Plant & Environmental Protection Sciences, College of Tropical Agriculture & Human Resources, University of Hawaii at Manoa, 3050 Maile Way, Gilmore 310, Honolulu, HI 96822 U.S.A., attention: Brent Sipes; phone: +1.808.956.7813; e-mail: sipes@hawaii.edu. This position will remain open until filled.

Professor and Chair, Plant Pathology Department
The University of Florida seeks nominations and applicants for a department chair position. The principal responsibilities of the chair are to provide leadership, coordination, and administrative support for teaching, research, and extension programs in Gainesville and at several research and education centers statewide. Requires a Ph.D. degree, record of distinction, and effectiveness at communication and administration. More information is available at https://jobs.ufl.edu by entering requisition number 0806950, or by contacting the Search Committee Chair Tim White; phone: +1.352.846.0850; e-mail: tlwhite@ufl.edu. Submit nominations by February 15, 2011, and applications by March 15 for full consideration. This position will remain open until filled. Apply online at https://jobs.ufl.edu using requisition number.

Assistant Professor, Cropping Systems Disease Management Specialist
The Department of Plant Pathology at the University of Nebraska-Lincoln invites applications for a 12-month tenure-track faculty position at the assistant professor level. This position is 50% research/50% extension located at the West Central Research and Extension Center in North Platte, NE. We seek candidates interested in research that is focused on pathogens on multiple field crops. Candidate will serve as a member of an interactive extension plant pathology team and work with other faculty to develop grant proposals/publish research and extension results. A Ph.D. degree in plant pathology or closely related field and good verbal/written communication skills are required. A demonstrated research record consisting of publications in peer-reviewed journals and the ability to attract grant funds required. Relevant post-doctoral-extension experience preferred. To apply, go to http://employment.unl.edu (requisition #110016) and complete the faculty academic administrative information form. Attach a letter of application, CV, transcripts, and a two-page-description of research/extension interests. In addition, arrange to have three letters of recommendation sent to: Search Committee Chair, Department of Plant Pathology, Rm. 406 Plant Science Hall, University of Nebraska-Lincoln, Lincoln, NE 68583-0722 U.S.A. Review of applications will commence on May 2, 2011, and will continue until the position is filled or the search is closed. Contact James Steadman at +1.402.472.2858 or jsteadman1@unl.edu with questions.
Phytophthora-ID.org: A Sequence-Based Phytophthora 2b-Deficient Mutant Causes Cucumber mosaic virus

Effect of Postsymptom Application of Fungicides on Effects of Silicon Applications on Soybean Rust

Greeneria uvicola Identification of Sources of Resistance to Field Evaluations of Leaf Spot Resistance and Yield in A Rapid Colorimetric Microtiter Bioassay to Evaluate Plant Age Affects Root Infection and Development March 2011, Volume 95, Number 3

Phytophthora capsici Infecting Tobacco Crops in China.

A Sida sp. Is a New Host for “Candidatus Phytoplasma brasilienne” in Brazil.

MPMI March 2011, Volume 24, Number 3

The Evolutionary Genetics of Emerging Plant RNA Viruses. Identification and Validation of Reference Genes for Normalization of Transcripts from Virus-Infected Arabidopsis thaliana. Expression of Xanthomonas campestris pv. vesicatoria Type III Effectors in Yeast Affects Cell Growth and Viability. Light Quantity and Photosystem Function Mediate Host Susceptibility to Turnip mosaic virus Via a Salicylic Acid–Independent Mechanism. Biocontrol Treatments Confer Protection Against Verticillium dahliae Infection of Potato by Inducing Antimicrobial Metabolites. Endophytic Trichoderma isolates from Tropical Environments Delay Disease Onset and Induce Resistance Against Phytophthora capsici in Hot Pepper Using Multiple Mechanisms. Plants Respond to Pathogen Infection by Enhancing the Antifungal Gene Expression of Root-Associated Bacteria. Pyrenochaeta bronii, Causal Agent of Brownspot of Bromegrass, Expresses a Gene Encoding a Protein with Homology and Similar Activity to Pto ToxI, a Host-Selective Toxin of Wheat. An ABC Transporter and a Cytochrome P450 of Nectria haematococca MPV1 Are Virulence Factors on pea and Are the Major Tolerance Mechanisms to the Phytoalexin Pisatin. Transcription Factor AtMYB44 Regulates Induced Expression of the ETHYLENE INSENSITIVE2 Gene in Arabidopsis Responding to a Harpin Protein.

Plant Management Network www.plantmanagementnetwork.org


Plant Disease March 2011, Volume 95, Number 3


Exogenous Controls Increase Negative Call Veracity in Multiplexed, Quantitative PCR Assays for Phytophthora cambivora.
Calendar of Events

**APS Sponsored Events**

**March 2011**
9-11 — APS Potomac Division Meeting.
Rehoboth Beach, DE. www.apsnet.org/members/divisions/pot

19-22 — APS Caribbean Division Meeting.
San Juan, Puerto Rico. www.apsnet.org/members/divisions/carib

**June 2011**
15-17 — APS North Central Division Meeting.
Omaha, NE. www.apsnet.org/members/divisions/nc

**August 2011**
6-10 — APS-IPPC Joint Meeting.
Honolulu, HI. www.apsnet.org/meetings/ippc

6-10 — APS Pacific Division Meeting.
Honolulu, HI. www.apsnet.org/members/divisions/pac

**Upcoming APS Annual Meetings**

August 4-8, 2013 — Providence, RI.
August 10-14, 2013 — Austin, TX.
August 9-13, 2014 — Minneapolis, MN.

**Other Upcoming Events**

**March 2011**
21-23 — Joint Meeting of the 57th Annual Conference on Soilborne Plant Pathogens and the 43rd Annual California Nematology Workshop. University of California, Davis, CA. paulitz@wsu.edu

**April 2011**
4-7 — Sixth IOBC Working Group Meeting on Multitrophic Interactions in Soil. Cordoba, Spain. Cordobamultitrophic2011@izes.csic.es


**May 2011**

**June 2011**

**July 2011**
18-21 — VII Latin American Mycological Congress. San Jose, Costa Rica. www.almic.org


24-29 — The 18th Triennial Conference of the European Association for Potato Research. Oulu, Finland. www.eapr2011.com

**August 2011**


**September 2011**
5-7 — Resistance 2011. Rothamsted Research, United Kingdom. bart.fraaije@bbsrc.ac.uk


**October 2011**

**August 2013**

For the most current listing go to www.apsnet.org/meetings/meetingcalendar.