Issue No. 3, 2013

IS-MPMI Reporter

International Society for Molecular Plant-Microbe Interactions

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Recent Tweets

- This week in molecular biology and evolution http://bit.ly/1fVK0J0
- Nice article in the Washington Post on environmental friendly farming...and GMOs: http://tinyurl.com/mzmmaoe
- Microbes facilitate the persistence, spread of invasive plant species by changing soil chemistry: http://bit.ly/1fwWp3k
- Biochar quiets microbes, including some plant pathogens: http://bit.ly/17qLMbO
- RT @CoffeeGenomics Expo Especiales - Café de Colombia includes a Rust Seminar examining the situation of this disease in Latinamerica www.feriaexpoespeciales.com
- RT @pjacock #NextGenBUG Martin Jones http://nematodes.org/martin/ @martinthecoder Blobology & Blobspotter multi-species sequence data pic.twitter.com/gpBGELtZNz
- Scientists Present Plan to Use Microbiology in Agriculture to Multiply Global Yields via http://bit.ly/1dXxrdx

Check out
Twitter.com/ISMPMI
for the latest updates!

New Details Announced for the XVI International Congress on MPMI

Several new details have been announced for the XVI International Congress on the congress website, including speakers, session topics, abstract submission information, and registration. Visit www.mpmi2014rhodes-hellas.gr to keep up with all the latest developments as we get closer to next year's event.

Fred Ausubel, professor of genetics in the Department of Genetics at Harvard Medical School, Massachusetts, U.S.A., was recently chosen to give the Opening Lecture for the XVI International Congress. Ausubel's lecture will be on the topic of signaling in host-pathogen interactions. While Ausubel currently works at Harvard Medical School, he is also a molecular biologist at Massachusetts General Hospital. His most recent research in his current positions is on molecular genetics of nitrogen fixation genes and the *Rhizobium*-legume symbiosis; molecular genetics of *Arabidopsis thaliana*; and molecular genetics of host-pathogen interactions.

Speakers for the Plenary Sessions and Concurrent Sessions have also been confirmed. More information on the Opening Lecturer, Plenary Session topics/speakers, and Concurrent Session topics/speakers is available at www.mpmi2014rhodes-hellas.gr/

Satellite Sessions: Congress organizers are seeking proposals for precongress satellite sessions, which will take place on Sunday, July 6, 2014. Sessions will fall into two categories. The first focuses on the promotion of funding vehicles for financing basic research through international organizations. The second category of sessions will address the utilization and contribution of molecular plant-microbe interactions research to solve major phytopathological problems in agriculture. Go to www.mpmi2014rhodes-hellas.gr/index.php?pid=99 to find out more.

Abstract Submission: We are now accepting abstracts for the XVI International Congress. There are at least 28 session categories for abstract submission, and more will be considered after all abstracts have been submitted. If you would like to submit an abstract, please follow all instructions carefully. **The deadline to submit is March 15, 2014**. Presenting authors must register for the meeting prior to submitting their abstract. Presenters will be notified by May 6, 2014, of abstract acceptance status. More information and a detailed list of instructions is located at www.mpmi2014rhodes-hellas.gr/index.php?pid=10.

Registration: Registration for the XVI International Congress is now open! Register before March 31, 2014, to receive the early bird discount. Registration fees include:

- Admission to the Congress
- Admission to the Congress Exhibition Area
- Congress Material
- Congress Editions
- Welcome Cocktail
- Seven Coffee Breaks
- Four Buffet Lunches
- Welcome Service at the Rhodes Airport
- Coach Transfer from Rhodes Diagoras Airport to the Congress

You can register online now at www.mpmi2014rhodes-hellas.gr/index.php?pid=6. ■

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IS-MPMI REPORTER DEADLINE

The deadline for submitting items for the next issue is January 24, 2014.
Share your news, accomplishments, and up-coming meeting details with your colleagues. Submit articles, announcements, and any ideas you may have for the next issue. You can send an e-mail (ismpmireportereditor@scisoc.org) or submit your item online (www.ismpminet.org/newsletter/submissionform.asp).

Send items to:
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Sophien Kamoun, President

A Letter from the President

A Most Honorable Legacy

Sophien Kamoun, The Sainsbury Laboratory
sophien.kamoun@tsl.ac.uk

This issue brings with it very sad news. On September 28, my friend and colleague Professor **Ko Shimamoto** passed away at the age of 63 following a recent illness. Ko made notable contributions to the fields of flowering and plant immunity that brought him respect and recognition worldwide. He was also renowned for his kind and gentle character.

Dr. Ko Shimamoto

We will remember Ko for his service as the chair and main organizer of the XV International Congress of Molecular Plant-Microbe Interactions that was held in Kyoto in 2012. During the congress, Ko was already struggling with illness, yet he labored hard to ensure that the event was a memorable success. And what a success it was. Despite the setback due to the tsunami of March 11, 2011, Ko and his co-organizers delivered one of the best organized and most exciting congresses in recent memory.

Dr. Ko Shimamoto presents at the XV International Congress in Kyoto in 2012.

International Society for Molecular Plant-Microbe Interactions (IS-MPMI) Director **Ken Shirasu** and I have expressed the condolences of the MPMI community to Ko's family, friends, and many colleagues in the plant biology world in Japan and elsewhere. We will honor Professor Ko Shimamoto and his contributions at IS-MPMI's XVI International Congress in Rhodes, Greece. In this issue of the *IS-MPMI Reporter*, Ko's colleagues **Yoji Kawano** and **Tsutomu Kawasaki** wrote a touching memoriam that is also available in Japanese. They highlight Ko's contributions to our science as well as to other fields of plant biology. They emphasize his dedication to his students and his role as an inspiring and caring mentor. These comments should give us all pause for thought. Isn't mentorship of young scientists the most honorable legacy we could aspire to? Ko's exemplary tutelage of young scientists is an inspiration to all of us.

Ko played a critical role in promoting and developing MPMI research in Asia. The Kyoto Congress, which he so successfully organized, was the first that our society held in Asia. Asian scientists are playing an ever-increasing role in the science of plant-microbe interactions. About one-fifth of the plenary speakers selected by **Eris Tjamos** and the organizers of the XVI International Congress are either based in Asia or are of Asian origin. This issue of the *IS-MPMI Reporter* includes summaries by **Brad Day** and **Andrew Bent** about major international conferences that took place in Beijing last August. We will remember Ko for his science and his caring mentorship, but his legacy also includes his pioneering role in promoting and expanding the global reach of the MPMI community. ■

Plant Pathology Converges on China

Brad Day, IS-MPMI Reporter, *Editor-in-Chief, Michigan State University, bday@msu.edu*

Summer Palace

Terra Cotta

At the end of August, plant pathologists from around the world attended a series of meetings in Yangling and Beijing, China, to discuss recent advances in the molecular-genetic interactions between plant pathogens and their hosts. At the forefront of these meetings were IS-MPMI members from more than 15 countries, highlighting recent research in the areas of cell biology, genomics, and biochemistry. The first in this series—**The 3rd International Conference on Biotic Plant Interactions**—was held in Yangling and offered a broad understanding of the biological and agricultural complexity of plant pathology in the twenty-first century. While research using traditional "model" systems delivered exciting new data in the field of cell signaling and pathogen recognition, recent forays into more complex interactions between cereal crops and viral pathogens detailed new challenges facing food safety and security. The second meeting—**The 2nd Beijing International Symposium on Molecular Plant Pathology**—offered an in-depth update on the complexity of signaling between plants, pathogens, and their environment. With researchers and IS-MPMI members from the United States, Canada, China, and the United Kingdom in attendance, the general theme of signal convergence and the link between abiotic and biotic signaling emanated throughout most of the talks. While the topic of plant biology was certainly at the forefront of the agenda, the clear centerpiece of the 2nd Beijing meeting was pathogen biology! From viruses to fungi, topics detailing how pathogens regulate virulence pre-, during, and postplant interactions offered insight into gene regulation and the impact of environment. As highlighted in the guest article by IS-MPMI member **Andrew Bent** on page 5, a new charge for the future of our disciple is emerging—one that requires each of us to look beyond the sterile applications of single-plant and single-pathogen interactions and to integrate the complexity of population biology, environment, and global change to address, and solve, problems facing agriculture. ■

Member Spotlight

Member Spotlights highlight the recent successes of our colleagues. If you have a colleague you think should be featured please submit a brief article to ISMPMIReporterEditor@scisoc.org.

Ehren Whigham

Ehren Whigham recently completed an M.S. degree in plant pathology and microbiology with a minor in genetics at Iowa State University (ISU) under the direction of **Roger Wise**. The focus of his research was the discovery and functional characterization of an effector from *Blumeria graminis* f. sp. *hordei* (barley powdery mildew), which is important for virulence, suppresses host defenses, and is evolutionarily conserved among at least 96 other diverse fungi, including obligate plant pathogens, necrotrophic animal pathogens, and free-living nonpathogens. Whigham's thesis manuscript was entitled "An Effector Broadly Conserved Across the Fungal Kingdom Suppresses Plant Cell Death" and he received a ISU graduate college Research Excellence Award based on his work. Whigham also led an NSF-sponsored Research Experience for Teachers (RET), impacting more than 600 high school students in 25 classrooms. He started a new position as an AP biology teacher at Roosevelt High School in Des Moines, IA, in fall 2013. ■

People

APS President Mike Boehm (left) presents Sophien Kamoun (right), with the Noel T. Keen Award at the APS–MSA Joint Meeting.

IS-MPMI President **Sophien Kamoun**, The Sainsbury Laboratory, recently received the 2013 Noel T. Keen Award for Research Excellence in Molecular Plant Pathology from The American Phytopathological Society. The awardees have made outstanding contributions and demonstrated sustained excellence and leadership in research that significantly advances the understanding of molecular aspects of host–pathogen interactions, plant pathogens or plant-associated microbes, or molecular biology of disease development or defense mechanisms. Kamoun is a pioneer and leader in the modern fields of effector biology and genomics of eukaryotic plant pathogens, publishing the first and most influential papers on these topics. Kamoun's research has centered on the Irish potato famine organism *Phytophthora infestans*, a pathogen of great historical significance that continues to threaten subsistence and commercial potato production worldwide. Kamoun is currently a senior scientist and head at The Sainsbury Laboratory, Norwich, United Kingdom. He also holds a professor of biology chair at The University of East Anglia, Norwich, United Kingdom.

Loving Memories of Dr. Ko Shimamoto

Dr. Ko Shimamoto

The plant community was deeply saddened by the sudden death of Dr. Ko Shimamoto on September 28, 2013. Dr. Shimamoto was a professor of plant molecular genetics at the Nara Institute of Science and Technology (NAIST), Nara, Japan. He is survived by his wife Taiko Shimamoto and two adult sons.

Dr. Shimamoto was born on October 19, 1949, in Wakayama Prefecture, Japan. He received his B.S. degree in 1974 from Kyoto University and his Ph.D. degree in genetics from the University of Wisconsin-Madison in 1980. From 1980 to 1983, he carried out post-doctoral training at the Friedrich Miescher Institute in Basel, Switzerland. In 1983, he joined the Plantech Research Institute established by Mitsubishi Chemical Corporation and was promoted to a senior scientist in 1988. In 1994, he was offered a professor position in the Graduate School of Biological Sciences, NAIST, where he was head of the Laboratory of Plant Molecular Genetics.

Dr. Shimamoto developed a strong interest in plant genetics when he was an undergraduate student at Kyoto University. He was fascinated by the novel and powerful molecular genetic techniques. He applied these methods to the study of somatic cell genetics of maize when he was a Ph.D. student in Madison. During his post-doctoral training in Basel, he continued working on maize cell genetics and auxotrophic mutants of plants. After returning to Japan in 1983, Dr. Shimamoto began his work on rice and developed rice transformation methods in 1989. During his 20-year career at NAIST, he worked in various areas of rice molecular biology, including disease resistance, flower development, functional genomics, and pre-mRNA splicing.

Dr. Shimamoto made many seminal and breakthrough achievements in plant molecular biology, particularly in rice transformation, flowering, and disease resistance. In 1989, he was the first to successfully introduce transgenes into rice, paving the way for the genetic improvement of this important staple food for half of the world's population. Most of today's rice geneticists were inspired by his work and benefited from his personal and enthusiastic encouragement. "Ko was always ahead of his times, one of the first to propose rice as an experimental system that caught my attention and of many others," said Andy Pereira.

In 2007, he discovered the flowering hormone "florigen," which had been a mystery for more than 70 years. Furthermore, in 2011, he identified the florigen receptor, revealing the control mechanism for flowering in rice. Dr. Shimamoto also made significant contributions to our understanding of innate immunity of rice to pathogens. In 1999, he identified OsRAC1, an important molecule controlling disease resistance in rice, He subsequently discovered several OsRAC1-associated proteins that play roles in PAMP- and effector-triggered immunities. Based on these results, he proposed the defensome complex model to illustrate the immune signaling networks in rice. Dr. Shimamoto developed useful tools for plant functional genomics, such as the pANDA vectors developed in his laboratory, which are being used worldwide by many plant scientists. His many seminal papers were published in high-impact international journals, such as *Nature*, *Science*, *PNAS*, and *The Plant Cell*.

Dr. Shimamoto devoted himself to training, teaching, and educational activities. Many of his graduate students play leading roles in different fields of plant sciences in Japan and abroad. During 2007–2011, he lead the Global COE (Centers of Excellence) Program at NAIST's Graduate School of Biological Sciences, a program that enabled young scientists in Japan, China, and the United States to visit each other and exchange new research findings. This project led to close collaborations with leading universities and research institutes in the three countries.

Dr. Shimamoto was an amazing citizen of the plant science community. He served as an editor for *Plant Cell Reports* (1992–1995), *The Plant Journal* (1995–1998), *Plant and Cell Physiology* (2000–2013), and *Plant Physiology* (2000–2013) and as a member of the Advisory Editorial Board of *Trends in Plant Sciences*. He was the organizer of the International Congress on Molecular Plant-Microbe Interactions held in Kyoto, Japan, in 2012.

Dr. Shimamoto received the Distinguished Research Award from the Genetics Society of Japan (1990), the Society Award

from the Japanese Society of Breeding (1993), the Kihara Memorial Foundation Prize (2000), and the Prize for Science and Technology from Japan's Ministry of Education, Culture, Sports, Science, and Technology (2011). In 2012, he was awarded the prestigious Purple Ribbon Medal of Honor from the Japanese Government.

Dr. Shimamoto was a superb violin player. When he was a child, his parents asked him to practice violin 30 minutes every day after school before going out to play with his friends. A lab tradition was for Dr. Shimamoto to play violin at parties held after the fall rice harvest. Many of us remember Dr. Shimamoto happily dancing to celebrate the end of the productive International Symposia on Molecular Plant-Microbe Interactions. He liked to ski and read books (his favorite writer was Haruki Murakami) when he had time to relax.

Dr. Shimamoto's death is a tremendous loss to the plant community. In an e-mail statement, Takeshi Itoh reflects the loss that all of us feel, "I still can't believe we can't see him again." He will be always remembered as an outstanding scientist, patient mentor, excellent collaborator, and a loving husband and father.

A Japanese version of this memorial is available online at www.ismpminet.org/members/KoShimamoto.

By Yoji Kawano, NAIST and Tsutomu Kawasaki, Kinki University ■

Can IS-MPMI Researchers Help Feed the World?

Andrew Bent, University of Wisconsin-Madison

The International Congress of Plant Pathology (ICPP), in Beijing, China, in August 2013, was a strikingly diverse success. The ICPP is held only once every five years and it fills an important niche in the scientific meeting landscape. Across five days, more than 1,800 attendees broadly representing all continents (except Antarctica) provided very deep coverage of the full range of plant pathology topics from molecular to field to regional/political. The worldwide coverage of diseases, agricultural systems, and scientists was truly inspiring for an IS-MPMI lifer like myself. One message was clear: It would be exciting, broadly appreciated, and beneficial to the overall flow of grant dollars if more MPMI researcher efforts were devoted to translational plant pathology and focused agricultural problem-solving.

Food security and globalized agriculture were the meeting themes, and a wide and well-chosen range of plenary session speakers provided much more than a superficial nod to this central topic for the future of our discipline and our world. In the afternoon concurrent sessions as well, leaders of the various fields were recruited to give about half of the talks, along with speakers chosen from top poster submissions, making for a high-quality smorgasbord of talk choices to browse over the course of the meeting. There is a huge world of plant pathology out there, and it was a real pleasure to spend the day mixing updates on the latest molecular plant-microbe interactions findings (and social time among familiar friends) with exposure to the best work outside of our subdiscipline. Both the international organizers and the local organizers deserve compliments for a logistically and intellectually successful effort.

The next ICPP meeting will be in 2018 in Boston, MA. It may be premature to mark your calendars, but make a mental note. For newcomers or the very experienced, ICPP is an excellent place to broaden your thinking, learn outside of your specialty, gain a worldwide view of plant pathology and agriculture, and discover many areas where you or your trainee's molecular bioscience skills might very beneficially be applied. ■

The End of the Year Is Approaching—Don't Forget to Renew!

As a member of IS-MPMI, you have created connections with colleagues from more than 40 different countries and formed a community which allows you to meet and discuss recent developments within your science! Continue receiving all of the benefits that IS-MPMI has to offer by renewing your membership. Benefits include a discount on registration for the XVI International Congress on MPMI, savings on publications covering the latest research on molecular plant-microbe interactions, and access to the IS-MPMI online directory, and the IS-MPMI Job Center. Your collaboration with and involvement in IS-MPMI are valued and essential to not only our society but our science as a whole. Thank you for your dedication to IS-MPMI and we look forward to your continued participation in the coming year. Renew online now (www.ismpminet.org/members/pdf/ISMPMIrenewal.pdf) or by phone at +1.651.994.3806. Renew for two years and save 20%! ■

COMING EVENTS

February 25–26, 2014
Crop Protection in Northern Britain 2014: The Dundee Conference
Dundee, United Kingdom
www.cpnb.org

July 6–10, 2014
XVI International Congress on MPMI
Rhodes, Greece
www.mpmi2014rhodes-hellas.gr

August 9–13, 2014
APS-CPS Joint Meeting
Minneapolis, MN
www.apsnet.org/meet

Include your meeting in IS-MPMI's printed and online event calendar. Submit online at **www.ismpminet.org/meetings/calsubmit.asp**.

Recently published research in *Molecular Plant-Microbe Interactions*

Find complete abstracts online with links to full-text articles at http://apsjournals.apsnet.org/loi/mpmi.

July 2013, Volume 26, Number 7

Two RxLR Avirulence Genes in *Phytophthora sojae* Determine Soybean *Rps*1k-Mediated Disease Resistance.

Mutation of a Short Variable Region in HCpro Protein of *Potato virus A* Affects Interactions with a Microtubule-Associated Protein and Induces Necrotic Responses in Tobacco.

Interaction of the Microtubule-Associated Host Protein HIP2 with Viral Helper Component Proteinase Is Important in Infection with *Potato virus A*.

In Planta Effector Competition Assays Detect *Hyaloperonospora arabidopsidis* Effectors That Contribute to Virulence and Localize to Different Plant Subcellular Compartments.

Analyses of *wrky18 wrky40* Plants Reveal Critical Roles of SA/EDS1 Signaling and Indole-Glucosinolate Biosynthesis for *Golovinomyces orontii* Resistance and a Loss-of Resistance Towards *Pseudomonas syringae* pv. *tomato* AvrRPS4.

Peroxysomal Carnitine Acetyl Transferase Influences Host Colonization Capacity in *Sclerotinia sclerotiorum*.

Functional Characterization of Two Clusters of *Brachypodium distachyon* UDP-Glycosyltransferases Encoding Putative Deoxynivalenol Detoxification Genes.

Differential Regulation of *Salmonella* Typhimurium Genes Involved in O-Antigen Capsule Production and Their Role in Persistence Within Tomato Fruit.

Deep Sequencing of Recombinant Virus Populations in Transgenic and Nontransgenic Plants Infected with *Cucumber mosaic virus*.

An Sfp-Type PPTase and Associated Polyketide and Nonribosomal Peptide Synthases in *Agrobacterium vitis* Are Essential for Induction of Tobacco Hypersensitive Response and Grape Necrosis.

The Efficiency of *Arabidopsis thaliana* Floral Dip Transformation Is Determined Not Only by the *Agrobacterium* Strain Used but Also by the Physiology and the Ecotype of the Dipped Plant.

August 2013, Volume 26, Number 8

CURRENT REVIEW—Sniffing on Microbes: Diverse Roles of Microbial Volatile Organic Compounds in Plant Health.

TECHNICAL ADVANCE—Guard Cell Purification and RNA Isolation Suitable for High-Throughput Transcriptional Analysis of Cell-Type Responses to Biotic Stresses.

Stabilization of Cytokinin Levels Enhances Arabidopsis Resistance Against *Verticillium longisporum*.

Induction and Suppression of PEN3 Focal Accumulation During *Pseudomonas syringae* pv. *tomato* DC3000 Infection of *Arabidopsis*.

Ethylene-Responsive AP2/ERF Transcription Factor MACD1 Participates in Phytotoxin-Triggered Programmed Cell Death.

Nicotiana benthamiana Calreticulin 3a Is Required for the Ethylene-Mediated Production of Phytoalexins and Disease Resistance Against Oomycete Pathogen *Phytophthora infestans*.

Medicago truncatula esn1 Defines a Genetic Locus Involved in Nodule Senescence and Symbiotic Nitrogen Fixation.

Characterization of the *LOV1*-Mediated, Victorin-Induced, Cell-Death Response with Virus-Induced Gene Silencing.

The Endophytic Strain *Fusarium oxysporum* Fo47: A Good Candidate for Priming the Defense Responses in Tomato Roots.

Rice yellow stunt rhabdovirus Protein 6 Suppresses Systemic RNA Silencing by Blocking RDR6-Mediated Secondary siRNA Synthesis.

The Bacterial Superoxide Dismutase and Glutathione Reductase Are Crucial for Endophytic Colonization of Rice Roots by *Gluconacetobacter diazotrophicus* PAL5.

Infection of *Brachypodium distachyon* with Selected Grass Rust Pathogens.

The *Phytophthora sojae Avr1d* Gene Encodes an RxLR-dEER Effector with Presence and Absence Polymorphisms Among Pathogen Strains.

Deletion of the *Phytophthora sojae* Avirulence Gene *Avr1d* Causes Gain of Virulence on *Rps*1d.

Expression of α-*DIOXYGENASE 1* in Tomato and *Arabidopsis* Contributes to Plant Defenses Against Aphids.

September 2013, Volume 26, Number 9

The Role of *Arabidopsis* Heterotrimeric G-Protein Subunits in MLO2 Function and MAMP-Triggered Immunity.

Effects of the Crinivirus Coat Protein–Interacting Plant Protein SAHH on Post-Transcriptional RNA Silencing and Its Suppression.

Subcellular Dynamics and Role of *Arabidopsis* β-1,3-Glucanases in Cell-to-Cell Movement of Tobamoviruses.

Global Regulatory Networks Control the Hrp Regulon of the Gall-Forming Bacterium *Pantoea agglomerans* pv. *gypsophilae*.

The Exopolysaccharide of *Xylella fastidiosa* Is Essential for Biofilm Formation, Plant Virulence, and Vector Transmission.

Lipolytic System of the Tomato Pathogen *Fusarium oxysporum* f. sp. *lycopersici*.

Expression Analysis of Aquaporins from Desert Truffle Mycorrhizal Symbiosis Reveals a Fine-Tuned Regulation Under Drought.

Arabidopsis thaliana FLOWERING LOCUS D Is Required for Systemic Acquired Resistance.

The Succinoglycan Endoglycanase Encoded by *exoK* Is Required for Efficient Symbiosis of *Sinorhizobium meliloti* 1021 with the Host Plants *Medicago truncatula* and *Medicago sativa* (Alfalfa).

A Replicase of *Potato virus X* Acts as the Resistance-Breaking Determinant for JAX1-Mediated Resistance.

October 2013, Volume 26, Number 10
CURRENT REVIEW—Harpins, Multifunctional Proteins Secreted by Gram-Negative Plant-Pathogenic Bacteria.

CURRENT REVIEW—Bound to Succeed: Transcription Factor Binding-site Prediction and Its Contribution to Understanding Virulence and Environmental Adaptation in Bacterial Plant Pathogens.

Proteomics Analysis of the Regulatory Role of Rpf/DSF Cell-to-Cell Signaling System in the Virulence of *Xanthomonas campestris*.

Host Cell Entry of Powdery Mildew Is Correlated with Endosomal Transport of Antagonistically Acting VvPEN1 and VvMLO to the Papilla.

Molecular Characterization of the NADPH Oxidase Complex in the Ergot Fungus *Claviceps purpurea*: CpNox2 and CpPls1 Are Important for a Balanced Host-Pathogen Interaction.

Root-Specific Role for *Nicotiana benthamiana* RDR6 in the Inhibition of *Chinese wheat mosaic virus* Accumulation at Higher Temperatures.

The Inner Membrane Protein HrcV from *Xanthomonas* spp. Is Involved in Substrate Docking During Type III Secretion.

Increased Resistance Against Citrus Canker Mediated by a Citrus Mitogen-Activated Protein Kinase.

Xanthomonas albilineans OmpA1 Appears to be Functionally Modular and Both the OMC and C-like Domains Are Necessary for Leaf Scald Disease of Sugarcane.

Diverse Amino Acid Changes at Specific Positions in the N-Terminal Region of the Coat Protein Allow *Plum pox virus* to Adapt to New Hosts.

Bioactive Cytokinins Are Selectively Secreted by *Sinorhizobium meliloti* Nodulating and Nonnodulating Strains.

Rhizobial Synthesized Cytokinins Contribute to But Are Not Essential for the Symbiotic Interaction Between Photosynthetic Bradyrhizobia and *Aeschynomene* Legumes.

The Rice Bacterial Pathogen *Xanthomonas oryzae* pv. *oryzae* Produces 3-Hydroxybenzoic Acid and 4-Hydroxybenzoic Acid via XanB2 for Use in Xanthomonadin, Ubiquinone, and Exopolysaccharide Biosynthesis.

Tomato Below Ground–Above Ground Interactions: *Trichoderma longibrachiatum* Affects the Performance of *Macrosiphum euphorbiae* and Its Natural Antagonists. ■

Welcome New Members

We have had 10 people join IS-MPMI between June 1 and September 30, 2013.
Please join us in welcoming them to the society!

Spela Baebler
National Institute of Biology
Ljubljana, Slovenia

Karthikeyan Dharmaraj
University of Auckland
Auckland, New Zealand

Leonardo Furci
University of Sheffield
Sheffield, United Kingdom

Richard Harrison
East Malling Research
East Malling, United Kingdom

Hannah Kuhn
RWTH Aachen University,
Institute for Biology I
Aachen, Germany

Stefan Kusch
RWTH Aachen University,
Institute for Biology I
Aachen, Germany

Laura A. Lewis
East Malling Research
East Malling, United Kingdom

William M. Rooney
The Sainsbury Laboratory
Norwich, United Kingdom

Nirodha S. Weeraratne
Charles Sturt University
Wagga Wagga, Australia

Xiaoxiao Zhang
University of Queensland, St. Lucia
Brisbane, Australia

International Society for Molecular Plant-Microbe Interactions
3340 Pilot Knob Road
St. Paul, MN 55121
United States of America

DON'T FORGET— renew your membership today!

COUNTDOWN TO GREECE

Photo courtesy of www.mpmi2014rhodes-hellas.gr/index.php?pid=18

XVI International Congress on Molecular Plant-Microbe Interactions

July 6–10, 2014, Rhodes Island, Greece

Currently Proposed Topics

- Bacterial pathogenesis
- Cell Biology Dynamics of Plant-Microbe Interactions
- Ecology and population biology of plant-associated microbes
- Effector proteins
- Functional Genomics and Proteomics
- Fungal pathogenesis
- Gene silencing
- Local/Systemic Resistance
- Molecular diagnostics of plant pathogens
- Mycotoxins
- Novel Plant-Microbe Relationships
- Plant immunity
- Plant Microbiome
- Plant hormones and defense responses
- Plant-Virus Interactions
- Plant-Nematode Interactions
- Programmed Cell Death
- Recognition of Pathogens by Plants - Bacteria and Phytoplasmas
- Recognition of Pathogens by Plants - Fungi and Oomycetes
- Recognition of Pathogens by Plants - Viruses and Viroids
- Secondary metabolites
- Signaling and Molecular dialogues
- Symbiotic Plant-Microbe Interactions
- Symbiotic interactions Biological Control – Bioinoculants
- Quorum sensing

More at **www.mpmi2014rhodes-hellas.gr/index.php**