

# IS-MPMI Reporter

International Society for  
Molecular Plant-Microbe Interactions

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## IS-MPMI Reporter DEADLINE Deadline for submitting items for the next issue is December 15, 2008.

Submission of materials as electronic files, on disk or as e-mail attachments, will speed processing. For information on submitting electronic images contact Joel Berg at [jberg@scisoc.org](mailto:jberg@scisoc.org).

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## MPMI Journal Impact Factor Rises Above 4.0



MPMI's impact factor rose significantly from 3.936 to 4.275 in the most recent (2007) rankings from ISI Web of Knowledge. This is strong evidence that the journal is doing well and that it is competing effectively even against journals that cover a broader range of scientific topics. "The impact factor of MPMI continues to rank tenth overall among all 152 journals in the category of Plant Sciences and seventh among plant science journals that publish original, peer-reviewed research," according to **Jonathan Walton**, editor-in-chief of MPMI. Editorial changes that could have contributed to this rise in impact factor include reducing the open access period from 2 years to 1 year, the addition of a "linkout" icon to PubMed, and the publication of more reviews. "However, the most important reason for our strong impact factor has been and continues to be the strength of our field and the quality of the work that we publish," said Walton. Authors, reviewers, and editors deserve tremendous credit for the impact that MPMI continues to have on international scientific research. Visit <http://apsjournals.apsnet.org> to learn more about publishing in MPMI.

## Brett Tyler Recipient of the Noel T. Keen Award



Brett Tyler

The Noel T. Keen Award for Research in Molecular Plant Pathology, awarded by The American Phytopathological Society (APS), recognizes individuals who have made outstanding contributions in host-pathogen interactions, plant pathogens or plant-associated microbes, or molecular biology of disease development or defense mechanisms. This year's award was given to **Brett Tyler** during the APS Centennial Meeting Awards & Honors Ceremony on July 29 in Minneapolis, MN.

Tyler received his B.Sc. (Hons) degree from Monash University, Australia, in 1977 and his Ph.D. degree in medical biology from the University of Melbourne, Australia, in 1981. He was a post-doctoral fellow from 1982 to 1984 at the University of Georgia and a research fellow at the Australian National University, Australia, from 1984 to 1988. He was appointed an associate professor in the Department of Plant Pathology at the University of California, Davis in 1988 and promoted to full professor in 1994. In 2002, he accepted a position at the Virginia Polytechnic Institute and State University as professor in the Virginia Bioinformatics Institute and in the Department of Plant Pathology, Physiology and Weed Science.

Tyler's research in plant pathology has focused on understanding the molecular mechanisms by which oomycete pathogens, such as *Phytophthora*, overcome plants' defense mechanisms, and his research into the biology of oomycetes has made major contributions to understanding the molecular basis of recognition between *Phytophthora* species and their hosts.

A hallmark of Tyler's visionary leadership has been his determination that the oomycete molecular genetics community should have a strong spirit of collaboration, that tools and knowledge should be rapidly shared prior to publication, and that the careers of new entrants to the community should be actively fostered.

## A Message from the President



Federico Sanchez

### A Scientific and Cultural Celebration: The XIV International Congress on Molecular Plant-Microbe Interactions, Québec City, Québec, Canada - July 19–23, 2009

In 2008, the city of Québec is celebrating its 400th anniversary. In 1608, the French explorer **Samuel de Champlain** established an early settlement on the banks of the St.-Lawrence River, founding what would become the city of Québec. The commemoration includes a full calendar of events highlighting the city's history, culture, food, theatre, music, art, and outdoor recreation opportunities. In anticipation of the yearlong celebration, the federal, provincial, and city governments invested \$151 million in infrastructure projects, including improved access to the St.-Lawrence River with a new 1.5-mile riverside park and a gathering place and performance site that will be at the heart of many commemorative activities—Espace 400°. Québec is divided into the Lower Town and the Upper Town, connected by steep streets, funiculars, and staircases; one of them, near the picturesque Hotel Frontenac, has the peculiar nickname of the Breakneck Staircase. Old Québec, with many restaurants and shops, is in the part of the city within the walls of the old fortifications, in Upper Town, as is the Quartier Petit Champlain. Narrow streets and limited parking make these areas ideal for promenades and chatting at the petit cafés. Indeed, the Old Town has been designated a UNESCO World Heritage site as “one of the best examples of a fortified colonial city.” There are several notable museums in Québec: the Musée National des Beaux-Arts du Québec, the Musée de la Civilisation, the Musée de l'Amérique Française, the Maison Chavalier, and Place-Royale Interpretation Center. Just outside the gates, a public park called the Plains of Abraham offers walking trails and fantastic river views. This was the site of a battle in 1759 that resulted in the French ceding Québec to the British. Nearby, the Lower Town neighbourhood of St. Roch, which used to be an industrial area, has recently been revived by young artists and entrepreneurs, offering the city's most cutting-edge cuisine, theatre, art installations, and clothiers. A ferry ride across the St.-Lawrence offers a breathtaking view of the city and the majesty of the St.-Lawrence River with the spectacular panorama of waterfalls.

In addition, we visitors should also realize that Québec not only is a charming place with fortified stone walls, narrow streets, old churches, and a French-speaking populace. It is a modern city, with a growing technology industry and one of the most prestigious universities in Canada and the world: the University of Laval. **Hani Antoun**, a professor at Laval University and chair of the Local Organizing Committee of the XIV International Congress on Molecular Plant-Microbe Interactions, together with the MPMI Board of Directors, is preparing a scientific program that should be of the most interest to the MPMI scientific community gathering July 19–23, 2009.

The composition of the Local Organizing Committee is **Nicole Benhamou**, Department of Phytologie (plant science), Laval University; **Louise Brisson**, Department of Biochemistry and Microbiology, Laval University; **Danielle Prévost**, Agriculture and Agri-Food Canada; **Carole Beaulieu**, director of the Centre Seve, Sherbrooke University; **Valérie Fournier**, entomologist, Department of Phytologie, Laval University; **Tyler Avis**, Department of Phytologie, Laval University; **Richard Bélanger**, Department of Phytologie, Laval University; **Martin Trepanier**, Department of Phytologie, Laval University; **Louis Bernier**, Forestry, Laval University, presently on sabbatical in France; and, as previously mentioned, Antoun, Department of Soil and Agriculture and Agri-Food Engineering, Laval University. The already-organized eight plenary sessions will highlight the latest research in plant-pathogenic interactions, symbiotic interactions, common host mechanisms, signaling and molecular dialogues, plant dynamic responses to microbes, plant-microbe interactions and technology transfer, plant innate immune response, and RNA silencing. Confirmed speakers are the most prestigious scientists in the plant-microbe interaction field. In addition, most of the speakers for the concurrent sessions will be chosen from the authors of the submitted abstracts. Concurrent sessions—which are still under construction—will cover secondary metabolites, plant cell wall modifications, plant-virus interactions, and tree-microbe interactions, a theme of particular importance for Canadian forestry conservation, among others. From the cultural side, the committee has prepared an attractive program, including a boat tour of the St.-Lawrence River and other entertaining activities. Tell your colleagues about IS-MPMI and please remember to renew your membership to receive member benefits, including a reduction in the congress registration fee! Participate and enjoy the cutting-edge science in plant-microbe interactions by registering for the XIV International Congress on Molecular Plant-Microbe Interactions hosted by a renewed and charming Québec City. Think MPMI July 19–23, 2009!

## Citing Your MPMI Online Sources Is Easy

Do you ever wish that your research citations would format themselves? MPMI Online's citation formatting feature works with citation management software, including EndNote, BibTex, ProCite, Medlars, Reference Manager, RefWorks, and RefWorks China. Citation information can be downloaded automatically to your software or you can copy and paste the metadata as it is displayed. Here's how it works: From a paper's abstract, just click "Download to citation manager" from the links bar on the left side of the page. Then, select the format that you are using for citations and the metadata will be placed in your citation management program. Check out this great FREE feature!

## Nominations Due November 1 for the Noel T. Keen Award for Research in Molecular Plant Pathology

The American Phytopathological Society (APS) is now accepting nominations for the Noel T. Keen Award for Research in Molecular Plant Pathology. **Noel T. Keen** was a former board member of IS-MPMI and a prolific scholar who made many major contributions to the field of molecular plant-microbe interactions on very diverse systems. Recipients of the Noel T. Keen Award receive a certificate and a cash prize derived from a fund established through the APS Foundation. For nomination instructions, visit [www.apsnet.org/members/awards/closing.asp](http://www.apsnet.org/members/awards/closing.asp), nominees need to be APS members. Nomination packages should be submitted **by November 1, 2008**, as specified in the directions for consideration. Additional inquiries can be directed to **Linda Schmitt** at APS Headquarters, [lschmitt@scisoc.org](mailto:lschmitt@scisoc.org), +1.651.454.7250.

## Win Free Congress Registration!

Remember to share IS-MPMI membership with your colleagues! IS-MPMI members who recruit new members through December 31, 2008, will be entered into a drawing for free registration to the XIV International Congress. Members who bring in five or more new members will receive free membership renewal for 1 year.

For each new member you recruit, your name will be entered into the drawing; so the more recruits you bring in, the higher your chances are of winning! Visit the Member-Get-A-Member webpage on IS-MPMI *net* to learn more and to download special membership applications, or complete the online referral form. New members will receive a special discount of \$10 off 1 year of membership or 20% off 2 years of membership.

Contact the IS-MPMI membership department at +1.651.454.7250 or [ismpmiinfo@scisoc.org](mailto:ismpmiinfo@scisoc.org) with questions regarding this special campaign.

## Pierre de Wit Chosen as Royal Netherland Academy of Arts and Science Professor



Pierre de Wit

**Pierre de Wit**, Wageningen University, was among four new academy professors chosen this year by the Royal Netherland Academy of Arts and Science (KNAW). de Wit is joined by **H. R. (Harry) Büller**, **Ben Feringa**, and **Frank Grosveld** in this honor. As an academy professor, de Wit will be able to devote himself full-time to innovative research and the supervision of young researchers.

Academy professors are released by their universities from administrative obligations. The academy professorship is being awarded for a period of 5 years. For each academy professor, the KNAW is making EUR 1 million available for this purpose.

de Wit has been awarded an academy professorship for his major contributions to molecular plant pathology and plant-microbe interactions. He is recognized as a pioneer of this particular field and his early groundbreaking studies did much to energize the whole field of molecular study of disease in plants, which is now regarded as one of the three major areas of research in plant biology. He cloned the first avirulence gene in plants to the disease fungus *Cladosporium fulvum* and thus set the scene for others to follow. He has also studied the fungal effectors that are responsible for disease recognition in the attacked plant and identified both a cysteine protease and a chitin binding protein which are now considered to be effective receptors for fungal effectors. de Wit is known to be an excellent scientific diplomat and, by constructing numerous European networks, he has raised large sums of grant money for disease investigation. He attracts a large number of students, and several of his former students have obtained prestigious scientific positions.

The academy professorship programme has two aims. First, senior scientists between 54 and 59 years of age are released entirely from administrative and management tasks for a period of 5 years at the end of their careers. This enables them to devote all their time to doing innovative research and training young researchers. Second, new research leaders are appointed to replace the academy professors in the same or similar fields of science or scholarship. Nominations for academy professors are assessed by an international assessment committee, which comprises members of foreign academies or scientists and scholars of comparable stature.



## Meet IS-MPMI Members

IS-MPMI's diverse membership spans the globe and includes professionals who have been in their field for decades, as well as those who are just starting out. To help members learn more about their colleagues, the *IS-MPMI Reporter* includes profiles of randomly chosen members at different career stages.

### Post-Doctoral/Early Career



Jorunn Bos

#### Jorunn Bos

Sainsbury Laboratory  
Norwich, United Kingdom

Currently I am working as a post-doctoral researcher in the laboratory of **Sophien Kamoun** at the Sainsbury Laboratory in Norwich, United Kingdom. The overall research of the group focuses on the structure, function, and evolution of effectors from *Phytophthora*

*infestans*, the oomycete plant pathogen responsible for the Irish potato famine in the nineteenth century. *P. infestans* causes late blight on potato and tomato, a devastating disease that results in significant economic losses each year. To understand why this pathogen is highly destructive, we aim to identify *P. infestans* effector proteins that are secreted during infection and investigate their role in virulence. Significant progress has been made recently in understanding the biology of *P. infestans* effectors. One effector I focused on is AVR3a, which exhibits dual activities. *P. infestans* isolates that secrete one form of AVR3a are avirulent on host plants that carry the R3a gene. In addition to activation of the R3a resistance protein, we found that this effector suppresses cell death induced by another *P. infestans*-secreted protein, INF1 elicitor. Suppression of innate immunity, which often involves cell death, is a widespread function of plant pathogen effectors, especially the type III secretion system effectors of bacterial plant pathogens. AVR3a was the first among fungal or oomycete effectors to be shown to suppress cell death and this activity may reflect an important function for pathogen virulence. My main interest at the moment is to gain insight in the molecular basis of AVR3a effector activities, with a specific focus on cell death suppression. I work on this project in collaboration with the group of **Paul Birch** at the Scottish Crop and Research Institute and **Ari Sadanandom** at Glasgow University. The questions we are trying to address are: What is/are the plant target(s) of AVR3a? How does AVR3a modify its plant target(s) to suppress INF1 cell death?

I received my doctoral degree in biology (equivalent to master's degree) in 2002 from Utrecht University in the Netherlands. To fulfill the research requirements for my degree, I worked on two different research projects. The first project, supervised by **Guido van den Ackerveken** at Utrecht University, focused on the investigation of

*Hyaloperonospora arabidopsidis* (called at the time *Peronospora parasitica*)-induced gene expression in *Arabidopsis thaliana*. The second project was under the supervision of Kamoun, at the Ohio Agricultural Research and Development Centre (OARDC)-Ohio State University in Wooster, United States. I applied a strategy to combine data mining with intraspecific comparative genomics as well as functional assays to identify novel effectors from *P. infestans*. Hereby, I contributed to the identification and characterization of the small cysteine-rich protein SCR74, a member of a large polymorphic gene family. I enjoyed the research environment and atmosphere at OARDC and the Kamoun lab and was excited to be able start my Ph.D. degree there in 2003. My Ph.D. research was aimed at characterizing the first cloned avirulence gene from *P. infestans*, Avr3a. I used approaches involving (functional) genetics and genomics, biochemistry, and proteomics to understand more about the evolution, structure, and function of AVR3a. In 2007, I graduated and relocated with other members of Kamoun's group to the Sainsbury Laboratory in Norwich, United Kingdom, to continue my work on the AVR3a effector.

After working for years on oomycete-plant interactions, I decided it was time for a change and explore new territory. In late 2008, I will start a post-doctoral research position in the laboratory of **Saskia Hogenhout** at the John Innes Centre in Norwich, United Kingdom. There, I will investigate the role of aphid salivary gland proteins in plant infestation. Similar to many plant-pathogenic microbes, it was recently found that aphids produce proteins in their salivary glands that manipulate plant hosts. This finding opens up exciting questions about the molecular mechanisms underlying plant-aphid interactions. Because increasing amounts of sequence data became available for a variety of aphids, it is now possible to identify aphid proteins that are secreted in the salivary gland cells. In addition, a variety of tools are available to functionally analyze identified salivary gland proteins and determine their role in aphid-plant interactions.

I joined IS-MPMI in 2005, the year I also attended the congress in Merida, Mexico. I was fortunate to be provided with the opportunity to give a talk there, which was a great experience. Overall, I really enjoyed the science presented at this congress and the interaction with fellow scientists in my research field. Being part of IS-MPMI helps me to keep updated on the latest advancements in plant-microbe interactions.

## Distinguished



Alf Pühler

### Alf Pühler

Chair of Genetics and Center of Biotechnology  
Bielefeld University, Germany

Indeed, I appreciate very much the invitation to write a short article on my career and research profile for the *IS-MPMI Reporter*, which gives me the opportunity to consider my relationship with the International Society for Molecular and Plant-

Microbe Interactions. At the very beginning, I started my studies at the University Erlangen-Nürnberg in Germany, got a diploma degree in physics (1967), got a Ph.D. degree in microbiology (1971), and habilitated in genetics (1976). At the end of 1979, I moved to Bielefeld University, where I was appointed as a full professor of genetics. My interests at that time concentrated on the genetic background of biological nitrogen fixation. Actually, we were engaged with genetic engineering and succeeded in cloning the *Klebsiella nif* region in *Escherichia coli*. We also started DNA sequencing and published, in 1988, the nucleotide sequence of the entire nitrogen fixation gene cluster of *Klebsiella*. At that time, my group was already busy with the analysis of symbiotic nitrogen fixation using *Sinorhizobium meliloti* as a model organism. In particular, we experimented with transposon mutagenesis outside *E. coli*. One of my coworkers, **Reinhard Simon**, succeeded to establish Tn5-mutagenesis in *S. meliloti*, a technique that was published in 1983 in the first volume of *BioTechnology*, now called *Nature Biotechnology*. The paper entitled "A broad host range mobilization system for *in vivo* genetic engineering: Transposon mutagenesis in Gram negative bacteria" turned out to belong to a small group of highly recognized publications which up to now was cited more than 3,000 times. With such a transposon mutagenesis system in hand, it was easy to analyze the symbiotic interaction of *S. meliloti* with its host plant.

At that time, the Bielefeld group was also heavily engaged in launching the new research field "Molecular Plant-Microbe Interactions" by organizing the first International Symposium on "Molecular Genetics of the Bacteria-Plant Interaction," which was held in October 1982 at Bielefeld University. Originally, we expected around 100 participants and were very surprised when finally more than 200 people attended the symposium. The organizing committee was composed of the "who is who" of plant-microbe interaction research, e.g., **H. Hennecke, W. J. Broughton, J. Schell, E. M. Ausubel, J. E. Beringer, J. Dénarié, A. W. B. Johnston, A. Kondorosi, M. van Montagu, N. J. Panopoulos, B. G. Rolfe, R. A. Schilperoort, A. A. Szalay, and D. P. Verma**. The conference, lasting 3 days, was highly successful and initiated the series of the MPMI conferences.

Another point of interest was the launching of the new *MPMI* journal in 1988. I am proud that the Bielefeld group contributed to the first volume with an article entitled "*Rhizobium meliloti* genes for exopolysaccharide synthesis and nodule infection located on megaplasmid 2 are actively transcribed during symbiosis." The Bielefeld group continued to publish constantly in *MPMI*. Actually, we contributed more than 10 papers to *MPMI*. In the early years, we concentrated on the genetic analysis of the microsymbionts *S. meliloti* and *R. leguminosarum*. In recent times, an increasing number of articles dealt with the macrosymbionts, the host plants *Medicago truncatula* and *Vicia faba*. Some of the articles even switched from symbiotic nitrogen fixation to arbuscular mycorrhiza.

From the year 1999 on, genome sequencing emerged as one of the new directions of the chair of genetics of Bielefeld University. The outstanding project was the sequencing of the *S. meliloti* genome, which was carried out by an international consortium including laboratories from Europe, the U.S.A., and Canada. The final publication appeared in 2001 in *Science*, entitled "The composite genome of the legume symbiont *Sinorhizobium meliloti*." Since the *S. meliloti* genome consists of three replicons, each of these replicons could be published in *P.N.A.S.* separately. In the meantime, the Bielefeld group succeeded in sequencing several genomes of plant-associated bacteria, e.g., *Xanthomonas campestris* pv. *campestris*, *Xanthomonas campestris* pv. *vesicatoria*, *Azoarcus*, and *Clavibacter michiganensis* pv. *michiganensis*. For nearly all of these plant-associated bacteria, oligo-based microarrays were constructed and used for transcript profiling. At the moment, the Bielefeld group is running a GS-Flx-machine allowing *de novo* sequencing of microbial genomes in an ultrafast mode. All the work described was of course carried out by a larger group of people. I just would like to mention my coworkers **Ursula Priefer, Anke Becker, and Helge Küster**, who in the meantime have got professorships at German Universities in Aachen, Freiburg, and Hannover, respectively.

Concerning myself, I have to leave the faculty of biology of Bielefeld University after 28 years at the beginning of October this year. However, there is a favorite development. Bielefeld University runs a central research unit designated Center of Biotechnology composed of four institutes with activities in the field of bioinformatics, genome research, biophysics, and bioengineering. I have got now the opportunity to move into this center for another 3 years and to continue my work as a senior research professor. At the same time, I was elected executive director of this center. I therefore look forward very much to the coming years, hoping that I can continue to collaborate with students, post-graduates, and post-docs and that there is enough time left for research work in the field of plant-microbe interactions.

## People



Chris Lamb

**Chris Lamb**, director of the John Innes Centre, has been elected a fellow of the Royal Society, the UK's national academy of science. Lamb has been the director of the John Innes Centre since 1999 and has made major contributions to our understanding of the molecular basis of plant defense. His efforts have led to discoveries such as how cell wall composition influences microbial entry, which plant genes are rapidly

induced upon infection, and the role of reactive oxygen and nitrogen intermediates in plant defense. His genetic studies have also defined a novel component involved in systemic defense signaling. Prior to this, Lamb was director of the Plant Biology Laboratory at the Salk Institute for Biological Studies at La Jolla, California, U.S.A. Lamb becomes the ninth Royal Society fellow at the John Innes Centre and Sainsbury Laboratory, reflecting the exceptional quality of the scientific research being undertaken at the institute. Fellows are elected in recognition of their scientific achievements in fundamental research and in leading and directing scientific and technological progress in research establishments and industry.

**Kathryn M. Jones** joined the Department of Biological Science at Florida State University in August 2008 as an assistant professor. She studies how nitrogen-fixing rhizobial bacteria induce host plants to facilitate



Kathryn M. Jones

bacterial invasion and establish a functional symbiosis. Jones obtained her Ph.D. degree from the University of Chicago, working with **Robert Haselkorn** on nitrogen fixation in cyanobacteria, and then moved to MIT for her post-doctoral work with **Graham Walker** on exopolysaccharides of *Sinorhizobium meliloti*. She is currently studying the process of infection thread formation by

analyzing gene expression responses of the host legume *Medicago truncatula* to exopolysaccharides of *S. meliloti* and characterizing *M. truncatula* mutants defective in the early steps of infection thread formation.

The 2008 American Society for Microbiology (ASM) Roche Diagnostics Alice C. Evans Award is being presented to **Jo Handelsman**, Howard Hughes Medical Institute professor, professor of plant pathology and codirector of the Women in Science and Engineering Leadership Institute, University of Wisconsin, Madison. Handelsman studies the structure and function of microbial communities and the signals that govern them through the applications of metagenomics, genetics, and small molecule chemistry. She received her B.S. degree in agronomy from Cornell University, Ithaca, New York, and her Ph.D. degree in molecular biology from the University of Wisconsin, Madison.

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## Welcome New Members

The following members joined IS-MPMI between May 1 and April 31, 2008.  
Please join us in welcoming them to the society!

**Stephen M. Gross**  
Univ of California  
Davis, CA, U.S.A.

**David A. Jones**  
Australian Natl Univ  
Canberra, ACT, Australia

**Alexandra M. E. Jones**  
The Sainsbury Laboratory  
Norwich, United Kingdom

**Todd A. Naumann**  
USDA ARS NCAUR  
Peoria, IL, U.S.A.

**Katharina Pawlowski**  
Stockholm Univ  
Stockholm, Sweden

**Simona Elena Radutoiu**  
Univ of Aarhus  
Aarhus, Denmark

**Michael Ravensdale**  
CSIRO Plant Industry  
Canberra, ACT, Australia

**Larisa Shcherbakova**  
Russian Research Inst of Phytopathology  
Moscow, Russia

**Ji-Liang Tang**  
Guangxi Univ  
Guangxi, Peoples Rep of China

**Guiying Zhang**  
Guangxi Univ  
Hanning, Guangxi, Peoples Rep of China



## Employment

### Post-Doctoral Position in Functional Genomics of Soybean Defense Signaling Pathways

A post-doctoral position is available immediately to use functional genomics approaches to explore plant genes involved in resistance pathways to biotic and abiotic stressors of soybeans. Biotic stress agents include viral, fungal, and nematode soybean pathogens. The approach will utilize virus-induced gene silencing (VIGS) to explore signaling pathways that impact disease resistance, seed quality, and yield. The successful candidate will work within a collaborative team of university and USDA researchers at various locations. At Iowa State University, the project is directed by and integrates the laboratories of Steven Whitham, John Hill, and Thomas Baum. The position will have a duration of up to 4 years and will be renewable annually dependent upon satisfactory performance and continuation of funding. To be considered, applicants must have a Ph.D. degree with strong training and experience in molecular biology. The project will require a high level of motivation and technical skill. The successful candidate will have strong verbal and written communication skills and an ability to work effectively within a collaborative team environment. Send a cover letter describing your research interests and curriculum vita, including names of three referees, to Steve Whitham. **Contact:** Steve Whitham, Department of Plant Pathology, Iowa State University, 351 Bessey Hall, Ames, IA 50011-1020 U.S.A. **E-mail:** [swhitham@iastate.edu](mailto:swhitham@iastate.edu).

### Post-Doctoral Position in Molecular Plant-Nematode Interaction Research at Iowa State University

A post-doctoral position is available immediately to conduct research directed at the molecular and biochemical analysis of cyst nematode parasitism. This project will involve expression of nematode parasitism genes in plants, silencing of nematode and plant genes through RNAi, and identifying plant proteins interacting with nematode parasitism proteins, among other approaches. Highly motivated individuals with a strong background in molecular plant-microbe interactions or plant molecular biology are encouraged to apply. Expertise in plant molecular biology is required—nematology experience is not. The successful candidate is expected to be independent and have excellent written and verbal communication skills. Please send a cover letter describing your interest and expertise, a CV, and contact information for at least three reference persons to Thomas Baum. **Contact:** Thomas Baum. **E-mail:** [tbaum@iastate.edu](mailto:tbaum@iastate.edu). **Web:** [www.baumlabor.org](http://www.baumlabor.org).

### Erratum

In the 2008 #2 issue, a portion of the interview with Sheng Yang He is incorrect. On page 5, right column, lines 3–4, it was printed “(sequences of these effectors were available prior to 1996).” It should read “(sequences of *avrPto* and part of the *avrE* locus were available prior to 1996).”

## Does Your Institution Subscribe to MPMI Online?

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## A Historical Look at the Molecularization of Plant Pathology

The effect of molecular biology on late blight research is documented by **R. Steven Turner** in “Potato agriculture, late blight science, and the molecularization of plant pathology,” an article in *Historical Studies in the Natural Sciences*, Volume 38, No. 2. The article looks at how nucleic-acid-based methods changed plant pathology, most specifically late blight of potatoes. The new methods intensified the fragmentation among those scientists working on late blight, while integrating the study of the causal pathogen itself into broader areas of pathology. The article covers the discovery that *Phytophthora infestans* was undergoing genetic diversification, proving the importance of molecularization in biological sciences.

## XIV International Congress

July 19-23, 2009 • Québec City, Canada



Make plans now to attend the XIV International Congress on Molecular Plant-Microbe Interactions in beautiful Québec City!

Visit [www.ismpminet.org](http://www.ismpminet.org) for Congress updates.



XIV  
International Congress  
On Molecular  
Plant-Microbe Interactions

July 19-23, 2009, Québec City, Canada

## 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 2008, Vol. 21, Number 7

REVIEW—A Genome-Wide Meta-Analysis of Rice Blast Resistance Genes and Quantitative Trait Loci Provides New Insights into Partial and Complete Resistance.

REVIEW—ARCHIPELAGO: A Dedicated Resource for Exploiting Past, Present, and Future Genomic Data on Disease Resistance Regulation in Rice.

TECHNICAL ADVANCE—A Versatile Assay for the Identification of RNA Silencing Suppressors Based on Complementation of Viral Movement.

Differential Gene Expression Between the Biotrophic-Like and Saprotrophic Mycelia of the Witches' Broom Pathogen *Moniliophthora perniciosa*.

The  $R_{Pi-mcd1}$  Locus from *Solanum microdontum* Involved in Resistance to *Phytophthora infestans*, Causing a Delay in Infection, Maps on Potato Chromosome 4 in a Cluster of NBS-LRR Genes.

Differential Effectiveness of Microbially Induced Resistance Against Herbivorous Insects in *Arabidopsis*.

Gain of Virulence on *Rsv1*-Genotype Soybean by an Avirulent *Soybean mosaic virus* Requires Concurrent Mutations in Both P3 and HC-Pro.

Adaptation of *Soybean mosaic virus* Avirulent Chimeras Containing P3 Sequences from Virulent Strains to *Rsv1*-Genotype Soybeans Is Mediated by Mutations in HC-Pro.

The Outer Membrane Protein TolC from *Sinorhizobium meliloti* Affects Protein Secretion, Polysaccharide Biosynthesis, Antimicrobial Resistance, and Symbiosis.

Improvement of Drought Tolerance and Grain Yield in Common Bean by Overexpressing Trehalose-6-Phosphate Synthase in Rhizobia.

A Novel Plant Ferredoxin-Like Protein and the Regulator Hor Are Quorum-Sensing Targets in the Plant Pathogen *Erwinia carotovora*.

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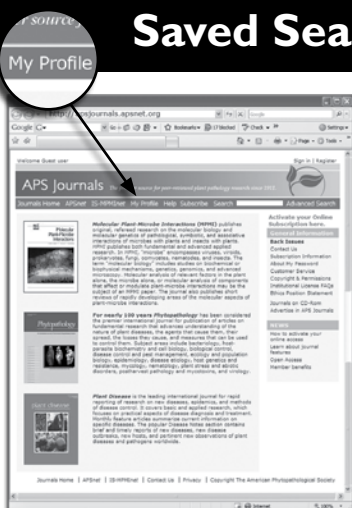
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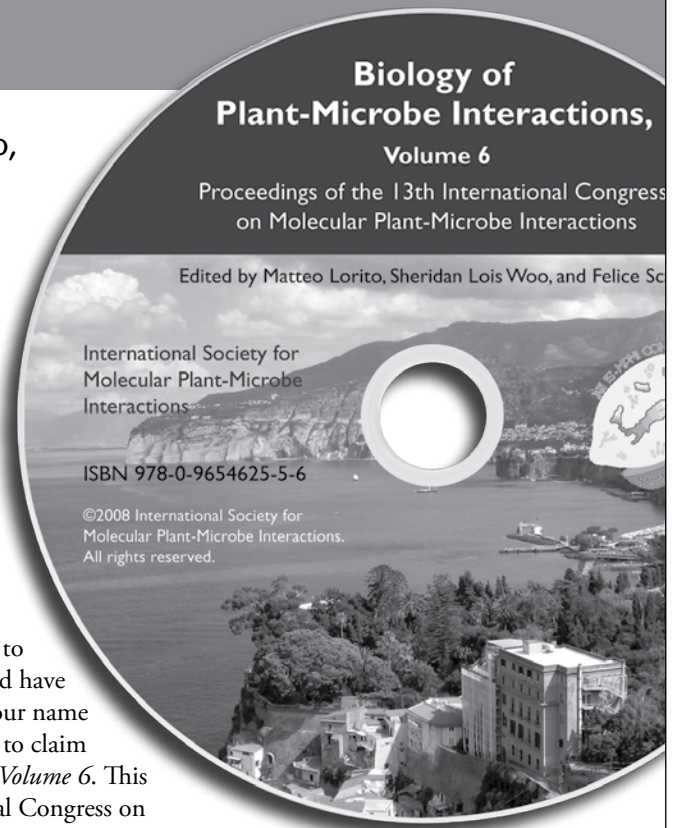
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Wellington, New Zealand  
[www.isbgmo.info](http://www.isbgmo.info)

November 30-December 5

**Biotechnology Havana 2008**  
Havana, Cuba  
<http://bh2008.cigb.edu.cu/home.htm>

December 2-4

**2008 National Fusarium Head Blight Forum**  
Indianapolis, IN, U.S.A.  
[www.scabusa.org/forum08.html](http://www.scabusa.org/forum08.html)

2009

March 17-22

**25th Fungal Genetics Conference**  
Pacific Grove, CA, U.S.A.  
[www.fgsc.net/25thFGC/FGC25.htm](http://www.fgsc.net/25thFGC/FGC25.htm)

May 12-16

**5th IOBC working group meeting on "Induced Resistance in Plants against Insects and Diseases"**  
Granada, Spain  
[www.fvccee.uji.es/](http://www.fvccee.uji.es/)

May 31-June 4

**14th International Sclerotinia Workshop**  
Wilmington, NC, U.S.A.  
[www.cals.ncsu.edu/sclerotinia\\_conference/index.html](http://www.cals.ncsu.edu/sclerotinia_conference/index.html)

June 28-July 2

**Ascochyta 2009: 2nd International Ascochyta Workshop**  
Pullman, WA, U.S.A.  
<http://capps.wsu.edu/conferences/ascochyta/>

July 5-10

**XXI International Conference on Virus and Other Graft Transmissible Diseases of Fruit Crops**  
Neustadt an der Weinstrasse, Germany  
[www.phytopmedizin.org/index.php?id=193/](http://www.phytopmedizin.org/index.php?id=193/)

July 8-10

**Plant ROS 2009**  
Helsinki, Finland  
<http://pog2009.org/>

July 19-23

**XIV International Congress on Molecular Plant-Microbe Interactions**  
Québec City, Québec, Canada  
[www.ismpminet.org/meetings](http://www.ismpminet.org/meetings)

October 25-30

**9th International Plant Molecular Biology Congress**  
St. Louis, MO, U.S.A.  
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