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Deadline for submitting items for the next issue is March 23, 2005.

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Send items to:

Editor-in-Chief: Thomas Baum
Department of Plant Pathology
351 Bessey Hall
Iowa State University
Ames, IA 50011
Phone: 515.294.2398
Fax: 515.294.9420
E-mail: tbaum@iastate.edu

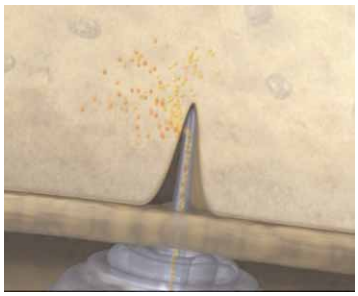
Submit Abstracts and Register for the 12th International Congress on Molecular Plant-Microbe Interactions

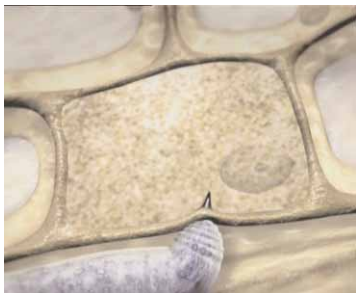
Plan now to attend the 12th International Congress on Molecular Plant-Microbe Interactions to be held July 17-22, 2005 in Cancun, Mexico at the Fiesta Americana Grand Coral Beach Cancun Hotel. Abstract submission as well as Congress and hotel registration is now fully open on the Congress website at: www.ibt.unam.mx/cancun2005/

Enhance your knowledge by attending any of the 18 sessions, seven plenary symposia, 28 plenary speakers, and 108 presentations. The cultural and social programs of the Congress will include a welcoming party at the pool area, an evening visit to Xcaret Mayan Ceremony, gala dinner dance, and pre- and post-Congress activities and tours, including exciting archeological visits to the Mayan ancient world, wild-life sighting in nature sanctuaries, jungle eco-tourism, cenote (underwater limestone cavern) and coral reef scuba-diving, and other aquatic activities.

Visit www.ibt.unam.mx/cancun2005/ for additional Congress information.
Vamos al Mèxico!

Computer-Animated Movie Showing Cyst Nematode Biology Wins Top Award





An international collaboration between Prof. Dr. J.-A. Verreet and Dr. H. Klink (editors-in-chief, Department of Plant Pathology, Christian-Albrechts University, Kiel, Germany), Dr. Rolf Stumm (Stumm Film Medien GmbH, Ludwigsburg, Germany), and Dr. Thomas Baum (scientific advisor, Department of Plant Pathology, Iowa State University) created an award-winning movie on sugarbeet cyst nematodes. The movie "The Beet Cyst Nematode *Heterodera schachtii*" was awarded the 'Magna Mater' top award at the 21st International Film Festival AGROFILM as the best and most valuable work. The film festival is annually organized by the Ministry of Land Management of the Slovak Republic and the United Nations Food and Agricultural Organization (www.agrofilm.sk/2003en/magna_en.htm). Using three-dimensional computer animations, the movie depicts the complete life cycle of the beet cyst nematode–from hatch, infection of sugarbeet roots, induction of feeding cell systems (syncytia) to the development of adult males and females, followed by fertilization and cyst formation. The movie is part of a multi-lingual DVD titled *Diseases and Pests of Sugarbeet* (Vol. 1) from APS PRESS (www.shopapspress.org/).

MPMI Announces Its New Web-Based Manuscript Submission and Review System

Molecular Plant-Microbe Interactions is pleased to announce its new Web-based service for authors, editors, and reviewers. ScholarOne's Manuscript Central is designed to provide user-friendly access to a variety of services via a single ID and password. Manuscript Central will make submission of new manuscripts quicker and easier for authors and allow them to track the progress of their manuscripts through the peer-review process, decrease the time needed for review and revision, and facilitate record keeping and statistical reporting for editors and headquarters staff.

MPMI's Manuscript Central site is configured to fit the specific workflow of the journal and is fully created, hosted, and supported by ScholarOne and The American Phytopathological Society. ScholarOne provides personal guidance every step of the way, from initial site design and user training to live support for authors, senior editors, reviewers, and administrative staff. Protected by user ID and password but accessible from any computer with an Internet connection and Web browser, the system facilitates real-time communication and access to manuscripts for editors, reviewers, and other editorial team members.

New MPMI authors can now use Manuscript Central to view and access all the information and tools they need, submit their manuscripts and then track their progress through the review and revision process. Simply log on to http://mc.manuscriptcentral.com/mpmi, create an account, and follow the easy instructions. Detailed instructions for preparing the manuscript for submission are available from the Manuscript Central site and on the MPMI site at www.apsnet.org/mpmi/submit.asp.

MPMI's authors, editors, and reviewers are the journal's most valuable assets, so ensuring a smooth transition is the top priority. We invite interested authors to visit the site and check out its ease of use and other helpful features. Any comments or questions can be directed to the journals coordinator, Ina Pfefer, at ipfefer@scisoc.org or the editorial director, Karen Cummings, at kcummings@scisoc.org.

News from Ohio State University

John A. Lindbo recently joined the Department of Plant Pathology at Ohio State University as assistant professor in plant virology. He is located at the Ohio Agricultural Research and Development Center (OARDC), Wooster, Ohio. Before joining the faculty at OSU, Dr. Lindbo was senior scientist at Large Scale Biology Corporation, Vacaville, CA, where he led research on virus-vector development for expression of foreign proteins in plants.

Dr. Lindbo received his Ph.D. in microbiology from Oregon State University, working with Dr. W. G. Dougherty. While studying plant virus resistance, Lindbo and Dougherty were the first to demonstrate sequence-specific RNA degradation in a biological system. At Ohio State, Dr. Lindbo will lead a research program focused on molecular plant virology, teach basic and advanced plant virology, and advise graduate students. His research will focus on virus-host interactions emphasizing RNA silencing and novel strategies for generating virus-resistant plants.

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 members at different career stages and chosen randomly.

Student

Christina Catalano
University of Delaware, Department of Plant and Soil Sciences and the Delaware Biotechnology Institute
Newark, Delaware

My interest in plant molecular biology began many years ago on our family farm in southern New Jersey. During this time, I gained insight into the successes and failures of crop production and was motivated to pursue a degree in this research field. In 1996, I attended the University of Delaware and later earned a B.S. in plant biology. During my undergraduate education, I participated in many research projects, including projects involving the study of bacterial s-triazine metabolism (advisor, Dr. Mark Radosevich), identification of plant disease-resistance signaling genes through suppression of ndr1-1 (advisor, Dr. Allan Shapiro), identification of early infection structures in the rhizobia-legume symbiosis (advisor, Dr. D. Janine Sherrier), and two internship projects involving fungicide translocation studies in crop plants (advisor, Dr. David Erbes, DuPont).

My undergraduate research experiences greatly influenced my decision to pursue a Ph.D. at the University of Delaware, where I joined the lab of Dr. D. Janine Sherrier in the Plant and Soil Sciences Department and the Delaware Biotechnology Institute in 2000. The focus of my graduate project is how membranes, specifically the symbiosome membrane, become specialized during the symbiotic interactions between rhizobia bacteria and legume plants. My project utilizes proteomics, biochemistry, microscopy, and molecular biology to elucidate the targeting mechanisms to the symbiosome membrane and the function of symbiosome membrane proteins in nodule development.

I became a member of IS-MPMI in January 2003. I greatly enjoy the newsletter, in particular the employment opportunities, accomplishments of fellow colleagues, and updates on the status of transgenic crops. Moreover, the MPMI journal offers exposure to cutting edge science in many areas of plant-microbe interactions, especially the rhizobia-legume symbiosis and allows my knowledge in this area to remain current.

I am currently completing my final year as a Ph.D. student. Aside from my research project, I have also developed a strong interest in public relations and plant biotechnology. I believe that it is very important to educate the public and policy makers accurately about genetically engineered crops. I hope to pursue a career that combines my expertise as a plant biologist with my interest in plant biotechnology.

Postdoctoral/Early Career

Kathryn Jones
Department of Biology, Massachusetts Institute of Technology
Cambridge, MA

I am currently a postdoctoral associate in Dr. Graham Walker's lab in the Biology Department at the Massachusetts Institute of Technology. The Walker lab studies mutants of the nitrogen-fixing legume symbiont *Sinorhizobium meliloti* that are defective in invasion or nodulation of the plant hosts alfalfa and *Medicago truncatula*.

I received my undergraduate degree in microbiology from the University of Missouri-Columbia. My undergraduate research in the lab of Dr. George P. Smith was on the packaging of filamentous phage DNA within the coat proteins during extrusion of the phage from the host bacterial cell.

I had become interested in how bacteria cope with environmental conditions by altering their metabolism, so I did my Ph.D. thesis project on the metabolic transitions required for the initiation and maintenance of nitrogen fixation in the filamentous cyanobacteria, *Nostoc* sp. strain PCC7120. This multicellular cyanobacterial species differentiates specialized cells called heterocysts, in which nitrogen fixation is performed, while the other cells of the filament perform oxygenic photosynthesis. I determined that the product of the *patB* gene is required in the heterocyst after the initial program of heterocyst differentiation is completed and that the activity of nitrogenase cannot be maintained in its absence. A mutant in the *patB* gene was initially identified as a defect in heterocyst pattern formation that aberrantly forms groups of multiple heterocysts. I found that the multiple-heterocyst phenotype was due to metabolic failure of the initial heterocyst, resulting in multiple, futile rounds of heterocyst formation. The inability of *patB* mutants to efficiently fix nitrogen ultimately results in cell bleaching and death (Jones et al. 2003, J. Bacteriol., 185:2306-2314). I also discovered and characterized an alternative cytochrome *caa3* oxidase operon that is specifically expressed in the heterocysts (Jones and Haselkorn 2002, J. Bacteriol. 184:2491-2499). This work was performed in the lab of Dr. Robert Haselkorn in the Department of Molecular Genetics and Cell Biology at the University of Chicago.

As a result of this work, I became interested in systems in which bacteria perform nitrogen fixation as intracellular symbionts of plants. Upon joining the Walker lab, I focused on how *Sinorhizobium meliloti*-secreted polysaccharides and components of the *S. meliloti* cell surface

Meet IS-MPMI Members *continued on page 4*

allow the bacteria to survive the stresses of an intracellular lifestyle. I found that while several *S. meliloti* mutants with altered lipopolysaccharide content have increased sensitivity to LPS-binding cationic peptide antibiotics, two intriguing mutants have increased resistance to these compounds. Antibiotics of this class resemble compounds produced by host organisms as part of innate immune responses. This work was published in Campbell et al. 2003, J. Bacteriol. 185:3853-3862.

My interests have expanded to include how host plant responses are modulated by bacterially-produced factors. Plant root hair cells cannot be efficiently invaded by *S. meliloti* mutants that are unable to produce the exopolysaccharide succinoglycan. I am currently investigating how the host plant *M. truncatula* perceives the succinoglycan polymer and how plant responses to this factor may permit bacterial invasion to proceed efficiently. In collaboration with Dr. Natalya Sharopova and Dr. Dasharath Lohar in Dr. Kate VandenBosch's lab at the University of Minnesota, I am comparing the transcriptome of *M. truncatula* challenged with wild-type *S. meliloti* with the transcriptome of *M. truncatula* challenged with a succinoglycan-deficient mutant of this bacterium. In analyzing this data, I am focusing on differentially expressed components of signaling pathways and plant defense responses.

I am also active in the local chapters of professional organizations. Currently, I am a member of Sigma Xi and the secretary of the Boston Chapter of Graduate Women in Science (GWIS). Our GWIS chapter has hosted speakers on science careers in academia, industry, and government, and this past June, we organized the GWIS National Conference in Boston. Both women and men are encouraged to attend our events. We also sponsor a yearly course on laboratory equipment repair at MIT during the January term. This spring, we will be organizing a mini-symposium on effective grant writing.

As a member of IS-MPMI, I have appreciated receiving the IS-MPMI-Reporter. It has helped keep me informed about scientific meetings, the career paths of other society members, and international science initiatives. Membership has also provided online access to MPMI, since our institution does not have a library subscription to this journal. I consider access to MPMI absolutely essential for my research!

Distinguished member

Suresh S. Patil
University of Hawaii
Honolulu, HI

I did my undergraduate work at Poona University, India. Subsequently, I received a master's degree (1959) and a Ph.D. (1962) in plant pathology with minors in plant physiology and biochemistry from Oregon State University. In graduate school, I developed a strong interest in biochemistry of plant-pathogen interactions, which was actively encouraged by Roy Young, a kind and supportive mentor. My work involved studies on the role of phenolic compounds in the resistance of potato plants to a wilt-causing fungus. This work led to an offer from Albert E. Dimond of the Connecticut Agricultural Experiment Station to continue wilt disease work. Supported by RO1grants from NIH (from 1963 to 1969), I worked with Al Dimond and Milton Zucker, a plant physiologist and biochemist. This work was reported in *Nature*, *JBC*, *Phytopathology*, and other journals. Cherished memories of my time at the Station include my occasional but highly stimulating conversations with James G. Horsfall, a prominent plant pathologist and director of the Experiment Station.

In 1969, I was offered a position as associate professor in the Plant Pathology Department at the University of Hawaii. I was fortunate to be able to bring along to Hawaii an NIH grant to work on the toxin (phaseolotoxin) produced *by Pseudomonas syrngae* pv. *phaseolicola* (the bean halo-blight pathogen), which we had shown to be an inhibitor of an important ornithine cycle enzyme from bean. This discovery, occurring towards the end my tenure in New Haven, proved to be seminal in shaping my career in Hawaii for the next 33 years. Supported by NIH, NSF, and USDA DOD grants and with the help of several very capable graduate students, post docs, and collaborators, we showed that phaseolotoxin was a potent and specific inhibitor of ornithine carbamoyl transferase (OCT), elucidated the kinetics of enzyme inhibition, and revised the chemical structure of the toxin. With the availability of molecular techniques in the late 1980s, my laboratory concentrated its attention on the molecular genetics of phaseolotoxin production and its regulation. In a series of papers, we reported on the isolation of a gene cluster involved in the production of phaseolotoxin, mapped the toxin loci, and determined their nucleotide sequence. An intriguing aspect of this system is the thermoregulation of toxin production (toxin is produced at 18°C , but not at 28°C). It was known that the pathogen produces two forms of the target enzyme: at the lower temperature, an OCT resistant to the toxin (Arg K) is produced that allows the pathogen to produce toxin and, at the higher temperature (nonpermissive), a susceptible OCT is produced. We showed that the pathogen produces a transcription factor (a regulatory protein) at high temperature but not at low temperature, which we proposed is involved in the thermoregulation of the *argK* gene and of the toxin genes. We have cloned and sequenced the gene that encodes this transcription factor. It has high homology to the curved DNA-binding protein found in *E.coli,* the first such example of a thermoregulatory protein.

Aside from my academic work, I have served the field of biotechnology as the director of the University's Biotechnology Program for 14 years and have been active in the development of biotechnology in the state of Hawaii. I am one of the founders of Hawaii Biotech, Inc. (HBI), a privately held biopharmaceutical company now in its 19th year of operation. HBI is engaged in the

research and development of human pharmaceuticals, including recombinant vaccines against dengue fever, West Nile virus, and anti-inflammatory small molecules for treatment of inflammatory conditions in humans.

One of the activities that has given me much satisfaction over the years is my involvement with the U.S.-Japan Cooperative Science Program in host-pathogen interactions. Funded by NSF and JSPS, this program has held small invitational meetings about every five years since 1964. I (along with Professors Ouchi, Mills and Vance) organized one such meting in Honolulu, HI in 1990, which resulted in publication of a book. This long running program has created invaluable mutual understanding, scientific cooperation and lasting friendships between the scientists from U.S. and Japan.

I have been a member of IS-MPMI from its inception and have tried to attend most of the biennial meetings organized by the Society. I find that, even though the members have diverse backgrounds, they share a common interest, and I find the opportunity to interact with them very stimulating and rewarding. I retired from the University of Hawaii at the end of 2001 and have moved to the Washington, D.C. area. These meetings have thus become even more important in remaining connected to the field. The journal published by IS-MPMI has grown in stature over the years, and I am delighted to have had the opportunity to publish our work in it. I think IS-MPMI has a bright future.

New Senior Editors Named for MPMI

S. P. Dinesh-Kumar, Peter Dodds, and Linda Walling recently accepted positions as senior editors for *Molecular Plant-Microbe Interactions*.

S. P. Dinesh-Kumar is an associate professor in the Department of Molecular, Cellular and Developmental Biology, Yale University, New Haven, CT. He received his Ph.D. from Iowa State University working with Allen Miller and investigating gene expression strategies of *Barley yellow dwarf virus*. He received a Life Science Research Foundation fellowship and from 1995 to 1998 studied *N* gene-mediated resistance to *Tobacco mosaic virus* with Barbara Baker at the Plant Gene Expression Center, University of California, Berkeley. He joined the faculty at Yale in June 1999. With others in his lab, he is currently studying innate immunity and gene silencing, using genetic, molecular, biochemical, genomic, and proteomic approaches. More details can be found on the lab home page at www.yale.edu/plantfunctionalgenomics.

Peter Dodds is a senior research scientist with the CSIRO Division of Plant Industry (CSIRO-PI) in Canberra, Australia. He received his Ph.D. in 1996 from the University of Melbourne, Australia, where he studied gametophytic self-incompatibility in the laboratory of Adrienne Clarke. His postdoctoral work included further study of pollen-pistil interactions with Sheila McCormick at the Plant Gene Expression Center in Albany, California, followed by work with Jeff Ellis at CSIRO-PI analyzing resistance gene evolution and specificity in the flax rust system. As a project leader at CSIRO-PI since 2001, he has focused on rust pathogen biology, and his current research involves the identification of virulence/avirulence factors from rust fungi and investigation of their role in disease as well as the molecular basis of recognition between host resistance and rust avirulence proteins and its implications for host-pathogen coevolution.

Linda Walling obtained her Ph.D. at the University of Rochester Medical School, Rochester, New York, in 1980, studying the interactions of bacteriophage T1 and *Escherichia coli*. Her first postdoctoral fellowship was in the laboratory of James Darnell at Rockefeller University, New York, where she investigated the role of transcriptional control in mouse liver gene expression. She transitioned into the field of plant molecular biology upon joining Robert Goldberg's laboratory at the University of California, Los Angeles, in 1981, where she studied the role of transcriptional and posttranscriptional processes in soybean seed protein gene expression. In 1984, she joined the University of California at Riverside (UCR) as an assistant professor. She is currently a professor at UCR, a member of UCR's Center for Plant Cell Biology, and associate dean for the biological sciences in the College of Natural and Agricultural Sciences. In addition to her work on the MPMI editorial board, she serves on the executive committee of the American Society of Plant Biology and on the editorial board of the *Journal of Chemical Ecology*. She and others in her laboratory study plant molecular and cellular responses to phloem-feeding whiteflies, tissue-damaging herbivores, and mechanical wounding. In addition, they are dissecting the role of aminopeptidases in plant growth, development, and defense to biotic and abiotic stress. Genetics, genomics, chemical genetics, and biochemical methods are used to dissect the roles of proteolysis in plant responses to its environment and the complex signal networks that link pathogen, wound, and herbivore responses.

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A Single Complementary-Sense Transcript of a Geminiviral DNA β Satellite Is Determinant of Pathogenicity. M. Saeed, S. A. A. Behjatnia, S. Mansoor, Y. Zafar, S. Hasnain, and M. A. Rezaian.

Fusarium oxysporum Evades I-*3*-Mediated Resistance Without Altering the Matching Avirulence Gene. M. Rep, M. Meijer, P. M. Houterman, H. C. van der Does, and B. J. C. Cornelissen.

Epitope Tagging of Legume Root Nodule Extensin Modifies Protein Structure and Crosslinking in Cell Walls of Transformed Tobacco Leaves, S. Gucciardo, E. A. Rathbun, M. Shanks, S. Jenkyns, L. Mak, M. C. Durrant, and N. J. Brewin.

Sugar Import and Phytopathogenicity of *Spiroplasma citri:* Glucose and Fructose Play Distinct Roles. A. André, M. Maucourt, A. Moing, D. Rolin, and J. Renaudin.

An *avrPto/avrPtoB* Mutant of *Pseudomonas syringae* pv. *tomato* DC3000 Does Not Elicit Pto-Mediated Resistance and Is Less Virulent on Tomato. N.-C. Lin and G. B. Martin.

Proteome Analysis of Programmed Cell Death and Defense Signaling Using the Rice Lesion Mimic Mutant *cdr2*. H. Tsunezuka, M. Fujiwara, T. Kawasaki, and K. Shimamoto.

Harpin of *Pseudomonas syringae* pv. *phaseolicola* Harbors a Protein Binding Site. C.-M. Li, M. Haapalainen, J. Lee, T. Nürnberger, M. Romantschuk, and S. Taira.

Role of Polyhydroxybutyrate and Glycogen as Carbon Storage Compounds in Pea and Bean Bacteroids. E. M. Lodwig, M. Leonard, S. Marroqui, T. R. Wheeler, K. Findlay, J. A. Downie, and P. S. Poole.

Identification of *cis*-Active Elements in *Ustilago maydis mig2* Promoters Conferring High-Level Activity During Pathogenic Growth in Maize. J. W. Farfsing, K. Auffarth, and C. W. Basse.

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Induction and Spatial Organization of Polyamine Biosynthesis During Nodule Development in *Lotus japonicus*. E. Flemetakis, R. C. Efrose, G. Desbrosses, M. Dimou, C. Delis, G. Aivalakis, M. K. Udvardi, and P. Katinakis.

Localization of Superoxide Dismutases and Hydrogen Peroxide in Legume Root Nodules. M. C. Rubio, E. K. James, M. R. Clemente, B. Bucciarelli, M. Fedorova, C. P. Vance, and M. Becana.

Apoplastic Extracts from a Transgenic Wheat Line Exhibiting Lesion-Mimic Phenotype Have Multiple Pathogenesis-Related Proteins That Are Antifungal. A. Anand, Z. Lei, L. W. Sumner, K. S. Mysore, Y. Arakane, W. W. Bockus, and S. Muthukrishnan.

Insertion of Transposon Tn*5*tac1 in the *Sinorhizobium meliloti* Malate Dehydrogenase *(mdh)* Gene Results in Conditional Polar Effects on Downstream TCA Cycle Genes. S. I. Dymov, D. J. J. Meek, B. Steven, and B. T. Driscol.

Pseudomonas Type III Effector AvrPto Suppresses the Programmed Cell Death Induced by Two Nonhost Pathogens in *Nicotiana benthamiana* and Tomato. L. Kang, X. Tang, and K. S. Mysore.

Gene Discovery and Gene Expression in the Rice Blast Fungus, *Magnaporthe grisea:* Analysis of Expressed Sequence Tags. D. J. Ebbole, Y. Jin, M. Thon, H. Pan, E. Bhattarai, T. Thomas, and R. Dean.

The Rice Bacterial Blight Resistance Gene *xa5* Encodes a Novel Form of Disease Resistance. A. S. Iyer and S. R. McCouch.

cAMP-PKA Signaling Regulates Multiple Steps of Fungal Infection Cooperatively with Cmk1 MAP Kinase in *Colletotrichum lagenarium*. J. Yamauchi, N. Takayanagi, K. Komeda, Y. Takano, and T. Okuno.

Identification and Characterization of Nip, Necrosis-Inducing Virulence Protein of *Erwinia carotovora* subsp. *carotovora*. L. Mattinen, M. Tshuikina, A. Mäe, and M. Pirhonen.

Relationship Between Avirulence Gene *(avrA)* Diversity in *Ralstonia solanacearum* and Bacterial Wilt Incidence. A. E. Robertson, W. P. Wechter, T. P. Denny, B. A. Fortnum, and D. A. Kluepfel.

Fungal Elicitation of Signal Transduction-Related Plant Genes Precedes Mycorrhiza Establishment and Requires the *dmi3* Gene in *Medicago truncatula*. S. Weidmann, L. Sanchez, J. Descombin, O. Chatagnier, S. Gianinazzi, and V. Gianinazzi-Pearson.

Induction of Phytohormones and Differential Gene Expression in Citrus Flowers Infected by the Fungus *Colletotrichum acutatum*. K. A. Lahey, R. Yuan, J. K. Burns, P. P. Ueng, L. W. Timmer, and K.-R. Chung.

Relationships Among Endo-Polygalacturonase, Oxalate, pH, and Plant Polygalacturonase-Inhibiting Protein (PGIP) in the Interaction Between Sclerotinia sclerotiorum and Soybean. F. Favaron, L. Sella, and R. D'Ovidio.

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Distribution of Phytoplasmas in Infected Plants as Revealed by Real-Time PCR and Bioimaging. N. M. Christensen, M. Nicolaisen, M. Hansen, and A. Schulz.

Role of Chemotaxis Toward Fusaric Acid in Colonization of Hyphae of *Fusarium oxysporum* f. sp. *radicis-lycopersici* by *Pseudomonas fluorescens* WCS365. S. de Weert, I. Kuiper, E. L. Lagendijk, G. E. M. Lamers, and B. J. J. Lugtenberg.

Diverse Members of the AvrBs3/PthA Family of Type III Effectors Are Major Virulence Determinants in Bacterial Blight Disease of Rice. B. Yang and F. F. White.

Defense Responses of *Fusarium oxysporum* to 2,4-Diacetylphloroglucinol, a Broad-Spectrum Antibiotic Produced by *Pseudomonas fluorescens*. A. Schouten, G. van den Berg, V. Edel-Hermann, C. Steinberg, N. Gautheron, C. Alabouvette, C. H. de Vos, P. Lemanceau, and J. M. Raaijmakers.

Identification and Expression Profiling of Tomato Genes Differentially Regulated During a Resistance Response to *Xanthomonas campestris* pv. *vesicatoria*. A. Gibly, A. Bonshtien, V. Balaji, P. Debbie, G. B. Martin, and G. Sessa.

cDNA Macroarray Analysis of Gene Expression in Ineffective Nodules Induced on the *Lotus japonicus sen1* Mutant. N. Suganuma, A. Yamamoto, A. Itou, T. Hakoyama, M. Banba, S. Hata, M. Kawaguchi, and H. Kouchi.

Cloning, Characterization, and Evolution of the NBS-LRR-Encoding Resistance Gene Analogue Family in Polyploid Cotton (*Gossypium hirsutum L.*). L. He, C. Du, L. Covaleda, Z. Xu, A. F. Robinson, J. Z. Yu, R. J. Kohel, and H.-B. Zhang.

Mutations in Wheat Exhibiting Growth-Stage-Specific Resistance to Biotrophic Fungal Pathogens. P. H. Smith, J. A. Howie, A. J. Worland, R. Stratford, and L. A. Boyd.

Transcriptional Regulation of Components of the Type III Secretion System and Effectors in *Pseudomonas syringae* pv. *phaseolicola*. R. Thwaites, P. D. Spanu, N. J. Panopoulos, C. Stevens, and J. W. Mansfield.

NopB, a Soybean Cultivar-Specificity Protein from *Sinorhizobium fredii* USDA257, Is a Type III Secreted Protein. J. C. Lorio, W. S. Kim, and H. B. Krishnan.

Involvement of *N*-acylhomoserine Lactones Throughout Plant Infection by *Erwinia carotovora* subsp. *atroseptica* (*Pectobacterium atrosepticum*). B. Smadja, X. Latour, D. Faure, S. Chevalier, Y. Dessaux, and N. Orange.

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Development of Ectopic Roots from Abortive Nodule Primordia. S. Ferraioli, R. Tatè, A. Rogato, M. Chiurazzi, and E. J. Patriarca.

Patterns of Gene Expression Upon Infection of Soybean Plants by *Phytophthora sojae*. P. Moy, D. Qutob, B. P. Chapman, I. Atkinson, and M. Gijzen.

Transcriptome Profiling in Root Nodules and Arbuscular Mycorrhiza Identifies a Collection of Novel Genes Induced During *Medicago truncatula* Root Endosymbioses. K. Manthey, F. Krajinski, N. Hohnjec, C. Firnhaber, A. Pühler, A. M. Perlick, and H. Küster.

Nitrogen Fixation in Wheat Provided by *Klebsiella pneumoniae* 342. A. L. Iniguez, Y. Dong, and E. W. Triplett.

Enhancer Trapping Identifies *TRI*, an *Arabidopsis* Gene Up-Regulated by Pathogen Infection. I. Fridborg, A. Williams, A. Yang, S. MacFarlane, K. Coutts, and S. Angell.

Impact of Temperature on In Planta Expression of Genes Involved in Synthesis of the *Pseudomonas syringae* Phytotoxin Coronatine. H. Weingart, S. Stubner, A. Schenk, and M. S. Ullrich.

Expression Patterns of Defense-Related Genes in Different Types of Arbuscular Mycorrhizal Development in Wild-Type and Mycorrhiza-Defective Mutant Tomato. L.-L. Gao, W. Knogge, G. Delp, F. A. Smith, and S. E. Smith.

Molecular Population Genetic Analysis Differentiates Two Virulence Mechanisms of the Fungal Avirulence Gene *NIP1*. S. Schürch, C. C. Linde, W. Knogge, L. F. Jackson, and B. A. McDonald.

Tagging Quantitative Trait Loci for Maturity-Corrected Late Blight Resistance in Tetraploid Potato with PCR-Based Candidate Gene Markers. C. A. Bormann, A. M. Rickert, R. A. Castillo Ruiz, J. Paal, J. Lübeck, J. Strahwald, K. Buhr, and C. Gebhardt.

Tobacco Genes Induced by the Bacterial Effector Protein AvrPto. V. K. Thara, A. R. Seilaniantz, Y. Deng, Y. Dong, Y. Yang, X. Tang, and J.-M. Zhou.

Candidate Defense Genes as Predictors of Quantitative Blast Resistance in Rice. B. Liu, S. Zhang, X. Zhu, Q. Yang, S. Wu, M. Mei, R. Mauleon, J. Leach, T. Mew, and H. Leung.

Flavonoids, NodD1, NodD2, and *Nod*-Box NB15 Modulate Expression of the y4wEFG Locus That Is Required for Indole-3-Acetic Acid Synthesis in *Rhizobium* sp. strain NGR234. M. Theunis, H. Kobayashi, W. J. Broughton, and E. Prinsen.

Overexpression of *Nt*ERF5, a New Member of the Tobacco Ethylene Response Transcription Factor Family Enhances Resistance to *Tobacco mosaic virus*. U. Fischer and W. Dröge-Laser.

Laboratory Technician Position
This position is located in the laboratory of Dr. Dennis Halterman in the Department of Plant Pathology on the University of Wisconsin campus in Madison, Wisconsin. The incumbent will provide technical assistance for a research program focused on host-pathogen interactions in potato and related species. Applicants must be U.S. citizens and have the ability to: develop or design projects based on specific objectives; devise and recommend alternative methods of standardized analysis; perform molecular biology analyses such as DNA, RNA, and protein extraction, hybridization, and PCR; operate and maintain specialized equipment; maintain seed stocks and plant pathogen collections and perform inoculations as needed; maintain inventory of chemicals, prepare solutions and reagents for use in the laboratory, greenhouse, or field; keep the work site in a neat and orderly manner; maintain and calibrate equipment; order new equipment and chemicals for the laboratory; collect and summarize data from laboratory, greenhouse, and field experiments; and keep detailed computer records, use bioinformatics software to analyze complex data sets and prepare data for inclusion in reports/manuscripts. Salary: GS-7 $34,184.00; GS-8 $37,858.00; GS-9 $41,815.00. Qualifications: The applicant must meet the following education requirements or specialized experience. Education: GS-7: Applicants must have one year of specialized experience equivalent to GS-06 or 1 year of graduate education that is directly related to the work of the position. GS-8: Applicants must have one year of specialized experience equivalent to GS-07 or one-and-a-half years of graduate education that is directly related to the work of the position. GS-9: Applicants must have one year of specialized experience equivalent to GS-08 or two years of graduate education or a master's degree directly related to the work of the position. Specialized experience: the applicant must have one year of specialized experience equivalent to the GS-06 level. This experience must have equipped the applicant with the following knowledge, skills, and abilities: 1. Knowledge of the principles and practices of biological science (e.g., plant pathology, plant physiology, entomology, biochemistry, microbiology, genetics, etc.). 2. Knowledge of plant growth techniques in growth chambers, greenhouse, and field. 3. Skill in standard techniques and procedures of molecular biology and genomics. 4. Skill in screening plants for resistance to diseases. 5. Skill in collecting, analyzing and summarizing experimental data, and generating detailed reports using personal computers and software packages. To apply: A full announcement can be found at www.afm.ars.usda.gov/divisions/hrd/vacancy/x4w-0385.htm. The full announcement will explain how to obtain the required application materials and the address to send the application to. Contact Dr. Dennis Halterman (dah@plantpath.wisc.edu) for more information or queries.

Phytopathology Position - The Hebrew University of Jerusalem, Faculty of Agricultural, Food, and Environmental Quality Sciences
The Department of Plant Pathology and Microbiology invites applications for a full-time tenure-track position in phytopathology. Starting date is October 1, 2005. Applicants should have a Ph.D. in a relevant discipline and have postdoctoral research experience in topics related to phytopathology. Starting rank will be commensurate with qualifications. Candidates are expected to conduct original and independent research on basic and applied aspects of phytopathology, specializing in phytopathogenic fungi. Responsibilities will include teaching (in Hebrew) of undergraduate and graduate courses in phytopathology and related topics and supervising graduate students. Candidates will be expected to attract external competitive funding. Strong leadership and communication capabilities are required and collaborative research with other researchers will be encouraged. Please send a cover letter stating research and teaching interests, detailed resume, list of publications, and the names of three people from academic institutions who are willing to write letters of recommendation (including complete address, telephone and fax numbers, and E-mail address) to: Prof. Yaacov Okon, Head, Department of Plant Pathology and Microbiology, Faculty of Agricultural, Food, and Environmental Quality Sciences, The Hebrew University of Jerusalem, P.O. Box 12, Rehovot 76100, Israel, Department secretary Mrs. Rina Byer; Fax: +972 8 9466794; E-mail: byerrina@agri.huji.ac.il. Applications will be reviewed promptly and are invited until the position is filled.

Welcome New Members

The following members joined IS-MPMI between August 1, 2004 and November 30, 2004.
Please join us in welcoming them to the Society!

Sara E. Blumer
Michigan State University
East Lansing, MI, U.S.A.

Cynthia M. B. Damasceno
Cornell University
Ithaca, NY, U.S.A.

Peter Dodds
CSIRO
Canberra, ACT, AUSTRALIA

Patrick Frettinger
Bainville, Madon, FRANCE

Julia A. Frugoli
Clemson University
Clemson, SC, U.S.A.

Ming Guo
University of Nebraska
Lincoln, NE, U.S.A.

Michael K. Jensen
Royal Vet & Agric University
Fredericksberg C, DENMARK

Jeffrey B. Jones
University of Florida
Gainesville, FL, U.S.A.

Nektarios Kavroulakis
Institute of Environmental Biotechnology
Kalamata, GREECE

Stephen M. Marek
Oklahoma State University
Stillwater, OK, U.S.A.

Gladys Mori
University Nacional De Rio Cuarto
Rio Cuarto, Cordoba, ARGENTINA

Richard J. O'Connell
Kyoto Prefectural University
Kyoto, JAPAN

Patrick Schweizer
Institute of Plant Genetics and Crop Plant Research
Gatersleben, GERMANY

Pamela Teubig
Michigan State University
East Lansing, MI, U.S.A.

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