APS Fellows

The Society grants this honor to a current APS member in recognition of distinguished contributions to plant pathology or to The American Phytopathological Society. DOI: 10.1094/PHYTO-95-0018

Michael A. Ellis

Michael A. Ellis received his Ph.D. degree in plant pathology from the University of Illinois in 1976 and joined the faculty of The Ohio State University in 1979. Dr. Ellis is recognized for his research and extension programs that emphasize the use of integrated disease management strategies as critical portions of an overall IPM and crop management program. Dr. Ellis and his colleague L. V. Madden, graduate students, and postdocs have made major advances in understanding the epidemiology of several important fruit crop diseases, with an emphasis on determining the effects of the environment on disease development and spread. In addition to basic research in epidemiology, Dr. Ellis is also extensively involved in problem-solving research for fruit growers. His research approach incorporates an understanding of disease epidemiology and pathogen biology to integrate resistance, cultural practices, biological control, and minimal and targeted fungicide usage for the efficient and cost-effective control of fruit crop diseases. He is an excellent example of how a plant pathologist with a research-extension appointment should function: that is, his research is problem solving and has resulted in practical information that is directly useful to the fruit industry. He is the author or co-author of over 100 refereed journal articles and over 500 papers in trade journals, extension fact sheets, and bulletins. In recognition of his excellence in research and extension, he was honored with the APS Ciba-Geigy Award in 1987 and the APS Excellence in Extension Award in 2000.

Bryce W. Falk

Bryce W. Falk was born in Culver City, California. He received his B.S. degree in biology from the California Polytechnic State University at San Luis Obispo in 1974 and his Ph.D. from the University of California at Berkeley in 1978. He pursued postdoctoral research at the University of California, Riverside, and in 1980 was appointed assistant professor at the University of Florida Everglades Research and Education Center, Belle Glade. He moved to the University of California at Davis as an assistant professor in 1985, advancing to associate professor in 1987 and professor in 1991. Dr. Falk has made significant contributions in several areas of plant pathology. The most noteworthy of these accomplishments have dealt with the biology, molecular genetic analysis, taxonomy, and virus–vector relationships of tenuiviruses and criniviruses. The discovery that subgenomic messenger RNA synthesis from the tenuivirus *Maize stripe virus* templates relies on host messenger RNA as the source of the 5′-end sequences ("cap snatching") created considerable interest in this important virus system. Dr. Falk's work includes extensive contributions to both practical and fundamental research. On the practical side, and with technically advanced methods, he initiated and improved virus detection to document virus distribution and plant resistance to viruses. Dr. Falk's contributions to the discovery and characterization of various viruses have resulted in clarification of virus taxonomic relationships. He was recently named a fellow of the American Association for the Advancement of Science. Dr. Falk has served on the boards of the journals *Phytopathology*, *Plant Disease*, *Molecular Plant Pathology*, and *Virology*.

Thomas C. Harrington

Thomas C. Harrington received his B.S. degree from Colorado State University, his M.S. degree from Washington State University, and his Ph.D. degree in plant pathology from the University of California, Berkeley. His first appointment was in the Department of Botany and Plant Pathology at the University of New Hampshire, where he served as chair of the department and later as co-chair of the new Department of Plant Biology. From 1991 until 1996, Dr. Harrington was chair of the Department of Plant Pathology at Iowa State University, where he is currently a professor of plant pathology and forestry.

Dr. Harrington is recognized as an international leader in forest pathology and has been involved in research projects on each of the seven continents. He has earned the reputation as one of the world's foremost authorities on the taxonomy and ecology of root rot fungi and fungi associated with bark beetles. He has produced major review articles on fungal–insect interactions, the ecology of pine diseases, and species concepts in fungi. He has integrated molecular approaches with classical taxonomy and genetic methods to clarify genetic diversity, mating strategies, and phylogenetic relationships among fungal taxa. These research contributions have advanced our understanding of the evolution and speciation of fungal plant pathogens and, in turn, enhanced our understanding of plant disease systems.

Dr. Harrington has an extensive record of service to APS. He has chaired the Forest Pathology and Mycology committees of APS, served two terms as associate editor and one term as a senior editor of *Plant Disease*, and co-organized mycology symposia at three APS meetings. He also has been active in a number of leadership roles in the Mycological Society of America and was elected a fellow of MSA in 2002.

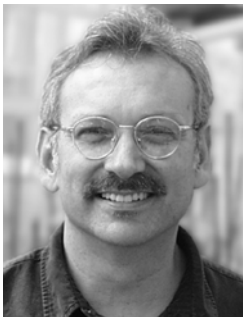
For his innovative and creative research contributions ranging from the molecular level to the ecosystem level, his scientific leadership in forest pathology, and his service to APS, Dr. Thomas Harrington is recognized as a highly deserving recipient of the APS Fellow Award.

Barry J. Jacobsen

Barry J. Jacobsen was born in Racine, Wisconsin in 1947. He received his B.S. and M.S. degrees in plant pathology from the University of Wisconsin, Madison, in 1969 and 1971 and his Ph.D. degree from the University of Minnesota in 1973. He joined the faculty at the University of Illinois as extension plant pathologist in 1973 and was appointed project leader in extension plant pathology in 1978. In 1987, he was selected

as head of the Department of Plant Pathology at Auburn University, which became a national leader in biological control research. He was named dean of the College of Agriculture at Montana State University and Director of the Montana Agricultural Experiment Station in 1992. After two years of severe budget cuts he joined the faculty of the Department of Plant Pathology at Montana State University, with extension, research, and teaching responsibilities. He accepted a one-year appointment as the first USDA IPM program coordinator and served in this position for 18 months. He then returned full time to Montana State University and also served as extended faculty for USDA/CSREES for two more years. He has maintained a strong interest in extension education and integrated disease management research on vegetables, field crops, grain storage, potato, and sugarbeets. Dr. Jacobsen has supervised eight Ph.D. candidates and 12 M.S. students. In addition, he has provided service to APS as councilor-at-large, as a member of the board of directors of the APS Foundation for 10 years, as a member or as the chair of 11 subject matter or general policy committees, and as APS representative to CAST.

Harold Corby Kistler



Harold Corby Kistler received his B.S. degree in biology from Kent State University and his Ph.D. degree in plant pathology from Cornell University. He conducted postdoctoral research at the University of Wisconsin, and he joined the faculty of the Department of Plant Pathology at the University of Florida in 1985. In 1999, he accepted a position as research geneticist with the U.S. Department of Agriculture-Agricultural Research Service in the Cereal Disease Laboratory in St. Paul and adjunct professor at the University of Minnesota.

Dr. Kistler is an internationally recognized authority on *Fusarium* species. He has made numerous outstanding contributions that have advanced our knowledge of the basic biology and molecular genetics of pathogenicity of *Fusarium* species. He has developed many of the tools and techniques that are now used routinely for molecular genetic studies of *Fusarium*.

Dr. Kistler's current research program is focused on the population genetics and genomics of *F. graminearum*, the Fusarium head blight pathogen. He has been at the forefront of efforts to develop publicly available genomic resources for *F. graminearum*, including coordinating efforts for manual annotation, functional analysis, and integration of the genetic and physical maps. The recent public release of the genome sequence of *F. graminearum* represents a major milestone in molecular biology of plant-pathogenic fungi.

Dr. Kistler has served APS as an associate editor of *Phytopathology* and *Molecular Plant-Microbe Interactions* and as a member and chair of the Genetics Committee, the Mycology Committee, and the Physiology, Biochemistry, and Molecular Biology Committee. He has been instrumental in developing an international forum of *Fusarium* researchers and currently serves as chair of the Committee on Fusarium of the International Society for Plant Pathology. He was the recipient of the Award of Excellence for Graduate Research at the University of Florida in 1998 and the Civil Servant of the Year Award, presented by the Federal Executive Board of Minnesota, in 2003.

For his innovative research contributions, his leadership in the molecular biology of plant-pathogenic fungi, and his service to APS, Dr. Corby Kistler is recognized as a worthy recipient of the APS Fellow Award.

Ing-Ming Lee

Dr. Ing-Ming Lee was born February 26, 1943 in Taiwan. He obtained his B.S. degree in plant pathology from National Taiwan University in 1965. In 1966, Dr. Lee joined the Taiwan Citrus Protection Research Center, where he investigated major fungal diseases of citrus. In 1971 he came to the United States and began graduate studies at the University of California, Riverside. He received his M.S. degree in 1973 and his Ph.D. degree in 1977. After his postdoctoral positions with the USDA-Agricultural Research Service (ARS), Rutgers University, and the University of Maryland, Dr. Lee joined the Molecular Plant Pathology Laboratory, USDA-ARS (Beltsville, Maryland), as research plant pathologist in 1987.

Dr. Lee began his innovative research career as graduate student at the University of California, Riverside, where he pioneered research on citrus stubborn disease. In 1973, after more than 20 years of unsuccessful searches by entomologists looking for the vector of citrus stubborn disease pathogen (*Spiroplasma citri*), his novel approach, involving direct cultivation of the pathogen from insects, led to his discovery of the first known natural vector (*Circulifer tenellus*). This discovery was recognized worldwide as a major breakthrough for citrus stubborn disease research and it opened the way for subsequent work that proved conclusively that a wall-less bacterium caused a plant disease.

Dr. Lee is recognized internationally for important contributions to understanding cell wall-less plant-pathogenic bacteria of Mollicutes (spiroplasmas and phytoplasmas) and the diseases they cause. In early work as a postdoctoral researcher, he led development of new media including the first serum-free and chemically defined media, for cultivation of *S. citri*, *S. kunkelii*, and other spiroplasmas. Based on DNA homology studies and serological relationships, Dr. Lee with his colleagues proposed the first taxonomic classification of spiroplasmas. The new taxonomic criteria were adopted internationally and new *Spiroplasma* species named accordingly.

Dr. Lee is best known for his pioneering studies on molecular detection, identification, and classification of phytoplasmas. In the past decade, he and his colleagues devised new methods and reliable molecular tools (cloned DNA probes and monoclonal antibodies) for phytoplasma detection. This made it possible to study the genetic interrelatedness among diverse phytoplasmas. Dr. Lee and colleagues in 1992 proposed several distinct phytoplasma groups (genomic clusters) and constructed the first genotype-based differentiation of phytoplasma strains. These new molecular-based tools greatly advanced phytoplasma diagnostics and largely replaced traditional approaches based on biological properties, such as symptomatology, host range, and vector relationships.

In 1993, Dr. Lee and colleagues constructed the first comprehensive phytoplasma classification system, based on restriction fragment length polymorphism (RFLP) analysis of 16S rDNA. This novel system provided for the first time a rapid and accurate means for differentiation and identification of a broad array of phytoplasmas. Dr. Lee led a team that further expanded the classification system in 1998 and again in 2000 to include 15 major phytoplasma groups and over 40 subgroups, providing the most comprehensive phytoplasma classification system available. This approach changed the direction of phytoplasma research. As a result, the phytoplasma research field has dramatically expanded in the last 10 years. It has been recognized by international peers as a major breakthrough for classification of phytoplasmas and has been adopted by scientists worldwide. The scheme is currently used by the National Center for Biotechnology Information (NCBI)/GenBank for classification of phytoplasmas.

Dr. Lee and colleagues also developed ultrasensitive nested-PCR assays, enabling detection of low titers of phytoplasmas associated with woody plants and detection of multiple phytoplasmas (mixed infections) in the same plant. As a result, Dr. Lee and his collaborators solved etiologies of many emerging phytoplasmal diseases. Using this framework, Dr. Lee and colleagues gained new insights into phytoplasma ecology and genomic diversity and devised a model of phytoplasma evolution driven by ecological constraints, a model supported by his recent study of an aster yellows disease epidemic in Texas.

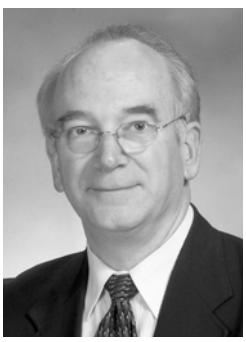
Dr. Lee's accomplishments also include the discovery, in 1997, that a phytoplasma causes desirable free-branching in commercial poinsettia cultivars. This was the first example of using molecular means to fulfill (a modified) Koch's postulates to prove pathogenicity of any phytoplasma, and the first definitive demonstration of a commercially beneficial phytoplasma.

In 1994, Dr. Lee led the first global phylogenetic analysis (graduate study of Ph.D. student Dawn E. Gundersen, advised by Dr. Lee); this accomplishment placed phytoplasmas definitively among members of class Mollicutes and revealed that phytoplasmas form a large discrete monophyletic clade. Significantly, all subclades corresponded to 16S rDNA RFLP groups previously delineated by Lee's team. Lee and his team proposed that each phylogenetic subclade represented at least one *Phytoplasma* species. This study formed the basis for delineating new genus and species level taxa, and led to establishment of formal phytoplasma taxonomy in which over 20 '*Candidatus* Phytoplasma species' have been proposed.

While researching phytoplasmas, Dr. Lee extended his research to include walled, bacterial pathogens. He and colleagues developed sensitive and specific PCR-based assays enabling detection of potato ring rot bacterium *Clavibacter michiganensis* subsp. *sepedonicus* and brown rot bacterium *Ralstonia solanacearum* biovar 2/race 3 in symptomless seed potatoes, an essential step to meet zero tolerance for import/export of seed potatoes. His assay for *R. solanacearum* biovar 2/race 3 (currently under U.S. quarantine) was adopted by APHIS to verify identity of a new strain that appeared to be responsible for an outbreak of geranium wilt disease in the United States.

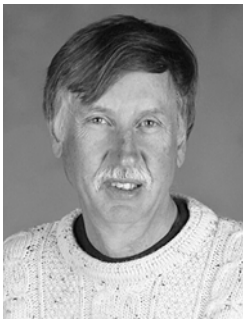
Dr. Lee has demonstrated a career-long dedication to research on plant-pathogenic Mollicutes. His achievements have established him as an authority and leader in the field of plant pathology and phytoplasma research. During the past decade, he has initiated successful collaborative studies on phytoplasmas nationally and internationally and has trained many U.S. and international scientists, including two Ph.D. students. Dr. Lee has been invited as a U.S. and international expert and consultant and has delivered numerous invitational seminars in national and international meetings. Dr. Lee has been a review panel member of USAID, has participated in APS as a member of APS Bacteriology Committee, chaired sessions at APS Annual Meetings, and served as an associate editor for *Plant Disease*.

Robert C. Seem



Robert C. Seem is a native of the Allentown area in eastern Pennsylvania. He acquired all of his higher education from The Pennsylvania State University, having received degrees in botany (B.S.) and plant pathology (M.S. and Ph.D.). In 1975, Dr. Seem joined the Department of Plant Pathology at Cornell University's New York State Agricultural Experiment Station as an assistant professor of plant pathology. He rose through the academic ranks and currently is professor of plant pathology. Dr. Seem specializes in the epidemiology, biology, and control of fruit and vegetable diseases with emphasis on the development of decision support systems, ranging from simple models of disease to sophisticated simulation models. Investigations often focus on the role of the abiotic environment on disease development and management including the application of new weather forecasting and information management techniques. He has carried out research in Australia, New Zealand, and Norway and has provided technical assistance in the People's Republic of China, Hungary, and Morocco. Along with his students and support staff, he has produced over 150 research publications. Since 1990, Dr. Seem has also served as the associate director of the experiment station, where he assists in the day-to-day management of this 119-year-old, SUNY-supported research and extension institution. The campus is located in Geneva, New York, with 52 faculty members, over 300 employees, 70 graduate students, 800 acres of research plots, and a budget exceeding $22 million.

Norman W. Schaad



Norman W. Schaad was born in Myrtle Point, Oregon. He received his B.S., M.S., and Ph.D. degrees in 1964, 1966, and 1969, all from the University of California at Davis. After postdoctoral work with C. I. Kado on the molecular biology and ecology of *Erwinia rubrifaciens*, he moved to the University of Georgia, Griffin, where he attained the rank of professor in 1982. Since then he has held appointments at the University of Idaho, as manager of biotechnology and plant pathology for Harris Moran Seed Company, and as research leader of the U.S. Department of Agriculture-Agricultural Research Service Foreign Disease–Weed Science Research Unit at Fort Detrick, Maryland, where he currently serves as a research phytobacteriologist.

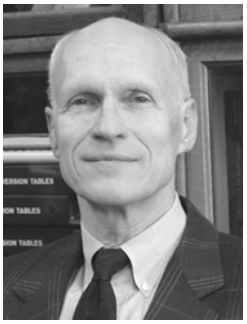
Dr. Schaad is known internationally for his research in the ecology, epidemiology, and control of plant-pathogenic bacteria, as exemplified by his early work leading to the practical control of black rot of cabbage. These studies revealed the potential for *Xanthomonas campestris* to survive over extended periods of time in asymptomatic cruciferous weeds and plant debris and to spread via wind-blown rain. Dr. Schaad is also highly respected for his many contributions to the identification and taxonomy of bacterial plant pathogens. Culture media he developed are used routinely in seed health testing worldwide, resulting in significant reductions in crop losses, and he pioneered the development and use of numerous serological and DNA-based diagnostic tools. In recent years he has become recognized as a leader in the area of crop biosecurity and the development of rapid PCR-based biosensors for detecting deliberately released pathogens.

One of Dr. Schaad's major contributions has been as editor of three editions of the *Laboratory Guide for Identification of Plant-Pathogenic Bacteria*. Over 7,500 copies of the book have been sold, and it has become a standard text for teaching and research in phytobacteriology. In total, he is the author or co-author of over 100 peer-reviewed papers, four U.S. patents, four books, and numerous book chapters. He has served APS as chair of the Bacteriology and Seed Pathology committees, as a member of the Office of International Programs Advisory Board and chair of the OIP Research Committee, and as an associate editor of *Phytopathology*.

John L. Sherwood

John L. Sherwood was born in Shreveport, Louisiana, in 1952. He received his B.S. degree in biology from the College of William and Mary in 1974 and his M.S. degree in plant pathology from the University of Maryland in 1977. He was awarded a Ph.D. degree in plant pathology from the University of Wisconsin in 1981. His Ph.D. research demonstrated that inhibition of the early events of uncoating of the challenge virus is the likely mechanism underlying cross-protection. This seminal finding provided a foundation for exploring the use of plant transformation with tobamovirus coat protein gene to protect against virus infection. In 1982, Dr. Sherwood joined the Department of Plant Pathology at Oklahoma State University (OSU) as an assistant professor, advancing to associate professor in 1987 and to professor in 1991. Dr. Sherwood moved to the University of Georgia in June 1997 as professor and head of the Department of Plant Pathology. While at OSU, Dr. Sherwood conducted research on the production of monoclonal antibodies that led to the first report of monoclonal antibodies to a number of important plant viruses, including the furovirus *Wheat soilborne mosaic virus* and the tospovirus *Tomato spotted wilt virus*. Dr. Sherwood was part of a multi-institutional team that determined that *Tomato spotted wilt virus* replicates in thrips, identified a potential receptor for the virus in the thrips midgut, and elucidated the route of the virus leading to thrips transmission. Dr. Sherwood has served APS extensively in various capacities, including associate editor and senior editor of *Plant Disease* and APS treasurer, and he currently chairs the Public Policy Board.

Turner B. Sutton



Turner Bond Sutton was born in Windsor, North Carolina. He earned his A.B. degree from the University of North Carolina in 1968 and a master's degree in 1971 and doctorate in 1973 at North Carolina State University. After postdoctoral training at Michigan State University, he returned to NC State in 1974 as a research associate and joined the faculty as an assistant professor in 1976. He was promoted to associate professor in 1981 and full professor in 1987.

Dr. Sutton is a world leader in the management of summer diseases of apples and the development of IPM programs for apples. His approach to solving apple diseases combines the knowledge and thoroughness of a classical plant pathologist with the skills of a modern epidemiologist who is extremely well versed in understanding the options available for integrated cultural and chemical control of a complex of diseases caused by a number of distinct pathogens. Dr. Sutton and his students and colleagues have made significant contributions to our knowledge and management of various summer diseases of apples, including bitter rot, Glomerella leaf spot, bot rot, black rot, Brooks fruit spot, black pox, sooty blotch, and flyspeck.

In addition to his research and extension activities, Dr. Sutton has taught his department's core course in epidemiology and disease control for 16 years and has chaired the advisory committees of 12 Ph.D. and 12 M.S. candidates.

Dr. Sutton has actively supported his profession and has served as a senior editor of *Plant Disease*, an associate editor of *Phytopathology*, a section editor of *Fungicide and Nematicide Tests*, and a member of various APS committees.

Noel T. Keen Award for Research Excellence in Molecular Plant Pathology

This award 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.

Brian Staskawicz

Brian J. Staskawicz was born in Boston, Massachusetts, in 1952. He received a B.A. degree from Bates College in Lewiston, Maine, in 1974, a Master of Forest Science degree from Yale University in 1976, and a Ph.D. degree in plant pathology from the University of California, Berkeley, in 1980. After three years at the International Plant Research Institute, in San Carlos, California, he was appointed to the faculty of U.C. Berkeley, where he is now the Maxine J. Elliot Professor and chair of the Department of Plant and Microbial Biology.

Dr. Staskawicz and Noel Keen were long-time friends and collaborated on several pioneering contributions to our understanding of plant resistance to pathogens. In 1984, they cloned the first *avr* gene from *Pseudomonas* and transferred it to virulent bacteria to elicit a race-specific incompatibility resistance response in soybean, providing the first molecular evidence in support of the "gene-for-gene" hypothesis for plant-pathogen resistance responses. Other seminal contributions from these early studies demonstrated that avirulence genes may condition important bacterial virulence traits and revealed a molecular mechanism for the evasion of plant host defenses when virulent mutants emerge from avirulent pathogen populations.

Dr. Staskawicz has also been in the forefront of research on plant resistance genes. He pioneered several genetic approaches that exploit natural variants in disease resistance in host populations for map-based cloning strategies and mutagenesis analyses. These combined approaches have facilitated the mapping of genes for altered disease resistance phenotypes and the identification and dissection of recognition and signal transduction pathways, culminating in the isolation and characterization of several components of plant cell death signaling pathways that are activated upon recognition of avirulence genes. Gene transfer experiments have shown that resistance genes transferred across genera retain their function and specificity. This finding should enable the identification of resistance pathways that are common to a wide range of crops and have a major impact on future plant breeding practices. Dr. Staskawicz also pioneered the use of *Arabidopsis* as a tool for fundamental studies of plant–pathogen

interactions, leading to new models to elucidate the mechanisms whereby avirulence and resistance genes and their products interact to evoke hypersensitive resistance.

Dr. Staskawicz has received the United States Department of Agriculture Honors Award and the Ruth Allen Award. He is a member of the National Academy of Sciences and a fellow of The American Phytopathological Society and the American Society for Microbiology. Many of these honors were also bestowed on Noel Keen in recognition of the research arising from their shared and individual efforts. Recognition of Dr. Brian Staskawicz as a recipient of the Noel T. Keen Award is based in part on this collaborative work and in part on his independent research, which together have been instrumental in leading us to a new era in plant pathology. His more recent breakthroughs promise to yield even greater insights into the molecular signaling that occurs during the response of plants to pathogens. Not only can we expect a clearer understanding of the molecular basis of gene-for-gene disease resistance, but in the near future this work should contribute to practical efforts to improve disease control by engineering broad-spectrum resistance into important crop plants.

Ruth Allen Award

This award recognizes individuals who have made an outstanding, innovative contribution to research that has changed, or has the potential to change the direction of research in any field of plant pathology.

Howard S. Judelson

Howard S. Judelson was born in the Bronx, New York. He received his B.S. degree in biochemistry from Cornell University in 1980 and his Ph.D. degree in molecular biology from the University of Wisconsin in 1985. Seeking experience in plant pathology, he then obtained a position as a postdoctoral fellow in the laboratory of Richard Michelmore at the University of California, Davis. After holding various positions at Davis until 1998, he relocated to the Department of Plant Pathology at the University of California at Riverside, where he is now an associate professor.

Dr. Judelson has made important contributions to the field of plant pathology by opening an important group of plant pathogens, the oomycetes, to molecular genetic analysis. Recognizing that oomycetes lacked taxonomic affinity with true fungi, Dr. Judelson developed new tools required for transformation by cloning the first oomycete genes, identifying promoters from those genes that could be used to drive the expression of marker genes, and devising methods for introducing DNA into oomycetes using *Phytophthora infestan*s as a model. These studies led to the first report of stable transformation in 1991 and to further improvements in the transformation approach that have subsequently enabled co-transformation, gene silencing, and the transformation of other *Phytophthora* species.

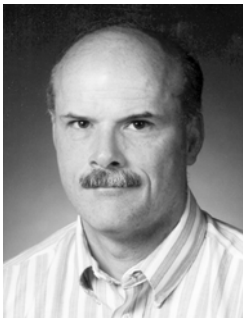
The continued advancement of genetic tools remains a major focus of research in the Judelson laboratory, along with the application of these tools to study the developmental biology, evolution, and pathology of oomycetes. While Dr. Judelson's work has focused mainly on *P. infestans*, he has helped extend transformation to other oomycetes and other species of *Phytophthora*, including *P. parasitica*, *P. sojae*, *P. palmivora*, and *P. phaseoli*, by providing hands-on training, vectors, and advice to others in the field.

The pace of research on *Phytophthora* has accelerated annually since Dr. Judelson's pioneering work, and many studies are now being published that address genes involved in the growth, pathogenicity, and host specificity of *Phytophthora* species. It is even fair to say that without the demonstration that oomycetes are amenable to molecular manipulation, recent efforts to sequence the genomes of *Phytophthora* species probably would not be under way. Dr. Judelson's efforts have stimulated studies across a broad range of oomycete–plant interactions that will impact plant pathology for years to come.

Lee M. Hutchins Award

This award is given to the author or authors of published research on basic or applied aspects of diseases of perennial fruit plants (tree fruits, tree nuts, small fruits and grapes, including tropical fruits, but excluding vegetables).

Mark L. Gleason



Mark L. Gleason was born in New York, New York, in 1950, and was raised on Long Island. He graduated from Carleton College with a B.A. degree in biology in 1972. After obtaining M.S. and Ph.D. degrees in environmental sciences from the University of Virginia, he was a visiting assistant professor at Centre College, in Danville, Kentucky, from 1980 to 1982. He earned a second Ph.D. degree in plant pathology from the University of Kentucky in 1985. Since 1986, Dr. Gleason has been on the faculty of the Department of Plant Pathology at Iowa State University. He conducts research and extension programs on disease management of all horticultural commodities (fruits, vegetables, trees, ornamentals, and turfgrasses). Gleason's research and extension program focuses on sustainable management of diseases of fruits, vegetables, and herbaceous perennials. He co-teaches four undergraduate and graduate courses: turfgrass integrated pest management, ecologically based pest management, integrated management of tropical crops, and sustainable horticulture. He was the feature editor of *Plant Disease* for 6 years (1994–2000) and is currently a senior editor of *Plant Disease*.

Excellence in Extension Award

This award recognizes excellence in extension plant pathology.

James W. Travis

Dr. James W. Travis is a professor of plant pathology at The Pennsylvania State University. He received a B.A. degree in biology from Gettysburg College, an M.S. degree in entomology from The Pennsylvania State University, and a Ph.D. degree in plant pathology from North Carolina State University in 1981.

He has responsibility for extension education in tree fruits and grapes. Dr. Travis has developed a creative program that has resulted in new technologies, improved pest management programs, and efficient delivery systems that benefit both the fruit industry and extension educators.

Dr. Travis has published 21 refereed journal articles, delivered the plenary address on expert systems at the APS Annual Meeting in 1988, was the co-author of a review of expert systems in the 1991 *Annual Review of Phytopathology*, and was instrumental in the development of four computer-based decision support programs for fruit growers.

Most recently, Dr. Travis has been a leader in the effort to eradicate *Plum pox virus* from Pennsylvania. Soon after the outbreak was discovered in October 1999, he led a team in developing a color fact sheet, a pocket field guide, and a video that brought to light the devastating impact the disease was having on Pennsylvania fruit growers. In recognition of the promptness and quality of the plum pox education program, Dr. Travis and his cooperators have received several prestigious awards.

He is an active participant in extension activities at Penn State, regionally and nationally, having served as chair of both divisional and national APS extension committees.

Excellence in Teaching

This award recognizes excellence in teaching plant pathology.

Karen-Beth G. Scholthof

Karen-Beth Goldberg Scholthof is an associate professor in the Department of Plant Pathology and Microbiology at Texas A&M University, where she teaches graduate-level courses and trains postdocs, graduate students, and undergraduates. Her extraordinary contributions as a teacher truly surface in "Pathogens, the Environment, and Society," an undergraduate course she developed for the bioenvironmental sciences program.

The overall objective of Karen-Beth's courses is for students to acquire critical thinking skills in areas that bridge disciplines. In her undergraduate course she achieves this goal by having students read a mix of contemporary popular scientific books and articles, poems, and novels, on topics that include diseases of plants, animals, and humans. Her students are expected to prepare topic folders and summaries on contemporary issues in public health, write critiques on assigned books and movies, and critique published case studies during in-class writing assignments. Her class often quickly adapts to newly arising topical events. This means that she herself has to keep up with current events, but this task is facilitated through her voracious appetite for reading.

Karen-Beth's teaching extends into other venues related to the history of agriculture, plant pathology, and virology. She also has a very productive and well-funded research program and is an active member of APS, serving on committees and as a senior editor and associate editor of APS Press and APS journals.

Karen-Beth is a scholar of exemplary breadth whose impact is often noted far beyond commonly observed academic boundaries.

International Service Award

This award recognizes outstanding contributions to plant pathology by an APS member for a country other than their own.

Henryk (Hanokh) Czosnek

Henryk (Hanokh) Czosnek was born in Lodz, Poland, in 1947. He immigrated to Israel in 1972. He received his B.S. degree in biology from the Faculté des Sciences de Paris in 1969 and his M.S. degree from the Institut de Biologie Moleculaire, Faculté des Sciences de Paris, in 1971. He was awarded a Ph.D. degree in biochemistry from the Hebrew University of Jerusalem in 1978. In 1985, Dr. Czosnek joined the Faculty of Agriculture of the Hebrew University of Jerusalem as a senior lecturer. He was promoted to associate professor in 1989 and professor in 1996. Dr. Czosnek served as the department head (1998–1999) and as the head of genetics studies of the Faculty of Agriculture (2000–2003). Dr. Czosnek's research program has made significant contributions in several areas of plant pathology. The most noteworthy of these dealt with the biology, molecular characterization, and virus–vector relationships of the important geminivirus *Tomato yellow leaf curl virus*. Dr. Czosnek's expertise in whitefly-transmitted geminiviruses has attracted widespread international interest and led to the establishment of meaningful research collaborations with scientists of developing countries in the Middle East, North Africa, Africa, the Caribbean region, and Central America. Dr. Czosnek's tireless efforts to foster scientific interactions among Israeli scientists and those of the Arab world are uplifting. Dr. Czosnek served as the principal investigator in significant bi-national grants with scientists from the United States, France, Germany, India, Japan, and China. Dr. Czosnek is an active member of APS, the Israel Society of Plant Molecular Biology, and the Israeli Phytopathological Society.

Syngenta Award

This award is given by Syngenta to an APS member for an outstanding contribution to teaching, research, or extension in plant pathology.

Krishna V. Subbarao

Krishna V. Subbarao received his Ph.D. degree in plant pathology from Louisiana State University in 1989. He held postdoctoral positions at LSU and the University of California at Berkeley, and in 1992 he joined the faculty of the University of California at Davis, where he is a full professor. Dr. Subbarao has developed a highly visible research program that is known for its innovation as well as practical application. He is recognized for his versatile ability to identify research needs and make thorough progress not only in our basic understanding of the system but also in transforming this knowledge into successful disease management tactics. His much-heralded contributions have come from his work on *Sclerotinia* species and *Verticillium dahliae*, both significant pathogens of a variety of hosts.

Dr. Subbarao is perhaps best known for his work on the innovative use of a broccoli rotation to suppress Verticillium wilt of cauliflower. Through incorporation of broccoli residue after harvest, populations of *V. dahliae* were reduced, wilt on cauliflower was suppressed, and significantly lower populations of microsclerotia were added to the soil. The combination of the ID–DI relationship and the root and shoot growth dynamics of cauliflower at different inoculum densities helped determine the length of rotations. Dr. Subbarao further studied root colonization by *V. dahliae* in cauliflower and broccoli. Despite ephemeral cortical infections, no vascular infection was observed in broccoli, which is regarded as the basis of its immunity. These studies have contributed to the successful management of Verticillium wilt in many crops. Dr. Subbarao is regarded as an important spokesperson in the area of soilborne diseases.