

# Vice President

Kira L. Bowen



*Professor, Department of Entomology and Plant Pathology, Auburn University, Auburn, AL*

**Area of Specialization:** Epidemiology, control of diseases of small grains and peanuts, aflatoxins in peanuts and corn

**Academic Record:** B.S., 1980, The Pennsylvania State University; M.S., 1983, University of Minnesota; Ph.D., 1987, University of Illinois; research affiliate (post-doc), 1987–1988, USDA ARS, North Carolina State University

## Brief Description of Professional

**Achievements:** I was hired by the Department of Plant Pathology at Auburn University (AU) in 1988 because of my training in plant disease epidemiology. Thus, I was able to take on the challenge of clarifying epidemiological aspects of *Aspergillus flavus* infection of peanuts. However, my teaching responsibilities included introductory plant pathology, and during those early years at Auburn, most students taking that class were horticulture majors. In order to better address the needs of those students, I sought information on and became involved with research on diseases of landscape and ornamental plants. Much of that information was gained through APS at meetings and through field trips. Thus, my expertise has become broad ranging and applied. I also teach graduate-level plant disease epidemiology.

In 1998, I was elected department chair and began building a more cohesive department, in part, by seeking input from everyone. In 2000, I was appointed research coordinator by the dean of the College of Agriculture and found myself in an administrator's role while assisting with grants approvals, Hatch projects, and annual reports for the college. In this position, I enjoyed learning about on-going research throughout the Alabama Agricultural Experiment Station and was involved in establishing an internal grant program. During this time, I stayed active with APS and served as editor-in-chief of *Plant Disease* as we transitioned to electronic submissions.

In 2007, I returned to research and teaching. Since then, I've worked on aflatoxins in peanuts and corn, addressing the cultural practices that contribute to decreasing aflatoxin problems. I've also become more

active with research on diseases of small grains. In addition, I've sought to involve undergraduate students in research by either hiring them or giving credit for their work. I've continued my involvement with APS through committee work, the APS Education Center, and most recently, as a member of the Annual Meeting Board.

**Service to APS:** Chair, Plant Disease Losses Committee (1989–1990) and CARE Committee (2011–2012); associate editor, *Phytopathology* (1991–1993); section editor, *Biological and Cultural Tests for Control of Plant Diseases* (1995–1997, 1998–2000); associate editor, *Plant Disease* (1998–2000); senior editor, *Plant Disease* (2001–2003); editor-in-chief, *Plant Disease* (2004–2006); organizer, I. E. Melhus Symposium (2013); AU representative, Academic Unit Leadership Forum (department heads); Annual Meeting Board (2012–present)

**Other Professional Service:** member, American Peanut Research and Education Society (technical chair, 2000 and 2007); USDA ARS review panels; USDA PMAP, USDA NRI, and Regional IPM grant panels, including PMAP panel (2012 and 2013); member, Mid-South Association of Wheat Scientists (chair, 2013 and 2014); member, Women in Science and Engineering Institute at Auburn (2008–2010 [chair, 2010]); member, AU's Faculty Salaries Committee (1993–1995); member, Auburn University College of Agriculture, Promotion and Tenure Committee (2013–2015 [chair, 2015]); member, several search committees, AU

**Awards and Honors:** Student Government Association, AU, Outstanding Faculty Award, Graduate School (1998); University of Minnesota, Department of Plant Pathology, Outstanding Alumnus (2012)

**Statement of Vision for APS:** APS has long been an important part of my professional life and has provided me with opportunities to stay up to date in my science, maintain friendships, and build collaborations. I frequently brag about our society to graduate students and others about the quality and quantity of information available through APS, the camaraderie of our membership, and the expertise of APS staff.

Our science, like many others, is comprised of a continuum of endeavors from field diagnoses to determining the role of a nucleic acid in pathogen interactions with plants. We need to appreciate this continuum to move the science forward while efficiently minimizing

plant diseases when they occur. Progress is made as we gain greater understanding of host-pathogen interactions, but we must make sure that future generations can recognize disease problems in the field. Given this range of efforts and expertise in plant pathology, it seems that few, if any, single institutions can maintain the proficiencies that wholly covers all aspects. Our institutions must collaborate with one another to help fill gaps in expertise, not only for getting grants and conducting research, but also for appropriately training students. I believe that APS can play an important role in building collaborative relationships, particularly to enhance student education. Indeed, in the past few years, APS has formed the Office of Education to provide leadership for and coordination of educational efforts throughout our society.

Many of us are aware of the challenges that we face as we look toward the future. One of these challenges is our continued ability to attract excellent students. I believe that this challenge is partially addressed through public awareness of our discipline. APS, through the Office of Public Relations and Outreach, contributes to our visibility; I believe that more can be done. Perhaps we need more apocalyptic films that mention "crop blight" (as in the 2014 film "Interstellar"), but how do we do this? Increased visibility for plant pathology could help with other challenges, such as funding issues. We can't understate our need for continued visibility and recognition.

The resources available through APS are truly astounding thanks to efforts by past and present society members. Much of APS web content is freely available, which is possible because of revenues from various products. Products, such as compendia and journals, are of high quality and value. We frequently need to consider improving these products and developing new products. We need to continue to evaluate ways to improve communication among members and with our international counterparts. APS does an excellent job with these products and facilitating our contact with one another, and I want to ensure that this continues.

Of course, our membership is a foremost concern. Our members help maintain and build the success of APS. In turn, the society as a whole must constantly be open to ideas from members and to addressing member needs. If elected, I will listen to membership, maintain quality activities with economic efficiency, and do anything else I can do to help APS continue as a premier resource for plant pathologists worldwide.

# Councilor-at-Large

## Gary Munkvold



*Professor, Department of Plant Pathology and Microbiology, Iowa State University, Ames, IA*

**Area of Specialization:** Seed pathology; epidemiology and management of seedling diseases and

root rots; mycotoxin-producing fungi in cereal crops

**Academic Record:** B.S. and M.S., 1986 and 1988, University of Illinois; Ph.D., 1992, University of California, Davis, CA

### Brief Description of Professional

**Achievements:** I have had a diverse career in academia and industry, holding two different positions at Iowa State University (ISU) (asst. and assoc. professor, field crops extension/research, 1993–2002; assoc. professor/professor and seed science endowed chair, 2006–present) and a research management position in a major seed company (research coordinator, pathology, entomology, & seed science, pioneer hi-bred int., 2003–2006). I have had a leading role in maize pathology extension and research, and recently completed editing of the 4th edition of the *Compendium of Corn Diseases*.

My research activities have encompassed a range of issues including integrated disease management, insect-pathogen interactions, detection of seedborne pathogens, pathogen population dynamics, and host defense responses. Research projects have spanned across numerous crops and types of pathogens. My most impactful research area has been the epidemiology of *Fusarium* ear rot and stalk rot in maize, including the crucial role of insects and the importance of transgenic insect resistance for mycotoxin management. A major outreach activity has been oversight of the U.S. National Seed Health System, a federally authorized accreditation program for phytosanitary certification activities, with a focus on seed health testing. I am deeply involved in graduate education at ISU, serving as chair of the ISU Graduate Council, and as director for graduate education for two graduate programs. I also have been a leader in on-line education at ISU.

**Service to APS:** Coeditor, *Compendium of Corn Diseases, 4th Edition* (2016); senior editor, *Plant Disease* (2001–2003); associate editor, *Plant Disease* (1997–1999); editor, *Corn and Sorghum Section, B&C Tests* (1998–2001); Awards and Honors Committee

(2014–2016); Nominations Committee (2010–2012); Seed Pathology Committee (2006–present [vice-chair, 2010–2011; chair, 2012–2013]); Mycotoxicology Committee (1997–2002 [chair, 2000–2001]); Extension Committee (1994–1997 [chair, 1996]); Industry Committee (2004–2006); North Central Division Awards Committee (1999); Office of Industry Relations Committee (2004–2006); sustaining associate representative, Pioneer Hi-Bred International, Inc. (2005–2006); Selection Committee, I. E. Melhus Symposium (2005); organizer and moderator, APS Annual Meeting Special Sessions (1996, 1999, 2003, 2010); North Central Division Annual Meeting Special Session and Workshop (2009); Planning Committee, North Central Division Annual Meetings (1998, 2009)

**Other Professional Service:** Codirector, U.S. National Seed Health System Administrative Unit (2006–present); member, International Society for Mycotoxicology; member, International Seed Testing Association (ISTA); ISTA Seed Health Committee (2010–present); program chair, American Seed Trade Association 68th Annual Corn and Sorghum Research Conference (2013); chair, USDA ARS OSQR Review Panel, NP 303, Panel 4 (2006); Seed Association of the Americas, Seed Treatment Working Group (2012–2014)

**Awards and Honors:** ISU Seed Science Endowed Chair (2006–2010); ISU College of Agriculture and Life Sciences, Distance Education Teaching Award (2012); American Society of Agronomy Excellence Certificate, Extension Materials (2000, 2007); APS Novartis Award (2000); Life Science Excellence Award, Monsanto Co. (2000); ISU extension, New Professional Award (1997)

**Statement of Vision for APS:** APS has had a powerful influence on my career. My first APS meeting was an eye-opening experience; discovering the diversity of people and projects that our discipline encompasses, as well as the brilliance and enthusiasm of my colleagues, was an incredibly motivating force that cemented my desire to learn and contribute to the science of plant pathology. The society has continued to provide me valuable benefits over the years, and I have tried to give back through volunteer opportunities. I still have much to learn about the intricacies of operating a professional organization of this scale, but I welcome the opportunity to help steer APS through this amazing 21st century.

Our society is only as strong as its membership, and we should strive to meet

the needs of our under-served members and potential members. I fully support partnerships with sister societies around the globe, as well as efforts to increase the value of APS toward industry members. The value of APS to all its members is multidimensional, but above all, it provides a framework and infrastructure for communication—not only for communication among its members, but also for communication between the scientific community and the agricultural community, the general public, and policy-makers. Many initiatives of the society revolve around communication and this focus needs to continue.

APS journals are one of the primary forms of communication and keeping them healthy is an important endeavor. The *Phytobiomes* journal is a bold new effort that will require careful nurturing. The proliferation of scientific journals is both a blessing and a curse. As a society, our challenge is to sustainably maintain the quality, relevance, and visibility of our journals, while simultaneously improving process efficiency. This is a complex, dynamic situation that must remain a high priority for APS Council.

External communication, particularly with policy-makers, is a key strategy for APS to benefit its members and society as a whole. Two areas that should be given high priority are: efforts to influence funding opportunities and science teaching in primary/secondary schools. APS could play a stronger role in both of these areas.

Finally, plant pathologists are in a unique position to communicate about the safety and benefits of genetic engineering and to bridge the divide between organic agriculture and modern biotechnology. We have in our midst scientists and practitioners who are among the most knowledgeable in the world regarding both biotechnology and sustainable farming practices. Surely this places our society in a uniquely powerful position to promote a future agriculture that incorporates both. How to achieve this? I can't state it better than Sir Gordon Conway (*The Doubly Green Revolution*) did: "The way forward lies in harnessing the power of modern technology, but harnessing it wisely in the interest of the poor and hungry and with respect for the environment in which we live. We need a shared vision, based, above all, on partnerships among scientists and between scientists and the rural poor." APS has many tools to promote and implement such a vision, and we need to use them to their full effect.