



# Education

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## A National Workshop on Education for the Future of Plant Pathology

**Background:** The practice of plant pathology will continue to be crucial to our nation's food production and safety. The U.S. network of agricultural experiment stations, cooperative extension units, USDA-ARS research centers, and diagnostic laboratories have been the backbone upon which knowledge of plant diseases has been discovered and management strategies developed and transferred to wide-scale practice. This network also has increasingly become a vital element in our nation's efforts to ensure agricultural biosecurity. And while the beneficial impact of state- and Federally-funded efforts has been profound, so too has been the effect of private industry where significant research, germplasm resources, and disease response capabilities are developed and moved into the nation's agricultural sector. The ability of governmental and private sector entities to carry out successfully their vital agricultural missions has been enabled by the ability of agricultural colleges and universities to turn out a steady stream of broadly-educated students who are trained to conduct high quality, applied research. However, the historic strength of this critical "feeder system" for plant pathology is at risk and already faltering. This was evidenced in the latest (January 2007) APS member survey, wherein some respondents stated concern about "*Lack of applied training of graduate students in ALL core areas of plant pathology*;" "*Lack of skilled and broadly trained plant problem diagnosticians*;" "[need to] *train applied plant pathologists so industry and extension have future candidates*;" and "*Declining student numbers and interest in plant pathology*." These are just a sampling of comments, but they indicate growing concern among APS members.

**The Problem:** The reasons for this growing concern stem largely from a steady decrease in national investment in agricultural education and research. This has impacted the capacity of agricultural degree-granting institutions through reduced numbers of faculty and concomitant reduction in the breadth of disciplinary expertise within departments. There also is an apparent trend toward a narrowed focus in faculty research (and the associated training opportunities for students) due to a heavy reliance on grant funds that tend to emphasize selected areas of plant pathology. However, this is a complex issue that may be confused by as much myth as fact. A clear, fact-based picture of the situation is needed—one that can lead to informed strategies for the future. For this reason, an ad hoc committee of APS has been established to address "The Future Education of Plant Pathologists." This committee currently is leading a survey of plant pathology graduate students, heads of plant pathology graduate programs, and prospective employers of plant pathologists to allow a factual examination of educational and training issues. The survey will be completed and presented to the APS leadership at the upcoming annual meeting, July 28-August 1, 2007 and will serve as a foundation for a national dialogue.

**The Proposal:** To move beyond these initial steps, APS is requesting partnership and funding to support:

- A ***National Workshop on Education for the Future of Plant Pathology*** to discuss fully the facts and issues and to develop strategies for the future.
- The workshop will bring together selected students, department heads/graduate coordinators, potential employers and Federal agency leaders for a thorough discussion of the issues and to undertake visionary strategic planning for the future.
- We recognize that the educational crisis we describe is not unique to plant pathology, but we propose a program focused on plant pathology that could serve as a national pilot program for competitive funding to support the development of novel (e.g., regional) approaches to curriculum delivery and the support of graduate students seeking a broad education.

**The Result:** The health of our nation's food, fiber and forest resources depends upon our ability to attract and train outstanding graduate students as the next generation of plant pathologists. The purpose of the proposed workshop is to identify the means to that end.

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