2009

National Workshop on the Future of Education in Plant Pathology and Related Disciplines

PROGRAM

March 19-20, 2009
Washington DC

Presented by

APS
The American Phytopathological Society

In cooperation with

National Science Foundation

USDA-CSREES

USDA-ARS

Presented by APS in cooperation with NSF, USDA-CSREES and USDA-ARS

Welcome

We are pleased you are participating in this important workshop that is bringing together representatives of several professional societies, government agencies, private-sector employers, early career professionals and students to discuss the future of education in plant science-related disciplines. During this interactive workshop we'll review credible data regarding the current and projected status of these disciplines in the U.S., identify strategies for strengthening vulnerabilities in education and research training opportunities, and develop action plans for working together to carry out the proposed strategies. We encourage your active involvement is these essential discussions. A report of the workshop will be prepared and disseminated to all participants to facilitate follow-through on action items. Special thanks to all of our presenters, our early career and graduate student education fellows, the sponsors and the committee members who helped make this program possible.

- ***James MacDonald, University of California, Coordinator of the 2009 National Workshop on the Future of Education in Plant Pathology and Related Disciplines***

Agenda

Wednesday, March 18, 2009

Arrival and Check-in at the Doubletree Hotel, Crystal City
5:00 PM Registration Opens / Van Buren Room
5:00 PM Welcome Reception / Van Buren Room / sponsored by
6:30 PM Reception Closes

Thursday, March 19, 2009

7:30 AM Registration Opens / Potomac View Room Foyer (14th Floor North Tower)
7:30 AM Continental Breakfast / Potomac View Room
8:00 AM **Welcome from The American Phytopathological Society /** Potomac View Room
James Moyer, APS President, North Carolina State University
8:05 AM **Review of Workshop Goals**
Jacque Fletcher, Chair APS Public Policy Board, Oklahoma State University
8:10 AM **Session I: Comparing Notes – The Future of Education in Plant Science-Related Disciplines**

- **Educational challenges facing plant pathology**
  Jim MacDonald, Professor and Exec. Assoc. Dean, University of California
- **Agronomy 101: Learning in the second century of ASA**
  Ken Moore, President, Agronomy Society of America and Professor, Iowa State University
- **Issues, visions, and commitments for education in soil science**
  Mary Collins, Past President, SSSA and Professor, University of Florida
- **Opportunities in education in entomology departments**
  Ernest (Del) Delfosse, Vice President-Elect, ESA and Professor, Michigan State University
- **Tomorrow's horticulturalists: Who will teach them and how will they learn?**
  Mary Peet, Chair, ASHS Board and Professor, Dept of Horticultural Science, NC State University
- **Budding plant biologists - growing from clueless to connected**
  Jane Ellis, Assoc. Professor, Presbyterian College, and Amer. Soc. of Plant Biologists

10:10 AM Break / Potomac View Room

10:20 AM **Session I: *Continued***

- **Maintaining viable plant pathology programs in multidisciplinary departments**
  Darin Eastburn, Professor, University of Illinois
- **Educating plant scientists at 1890 Land Grant universities and colleges: Challenges and successes**
  Oghenekome Onokpise, Associate Dean, Florida A&M University, College of Engineering Sciences, Technology and Agriculture (CESTA)
- **Strategies for sustaining critical research and educational capacities in Land Grant universities**
  Randy Woodson, Provost, Purdue University

11:30 AM **Breakout Session I: An Assessment of Educational Challenges in Plant Science-related Disciplines**

- **Desired Outcome**: A fact-based overview of educational challenges faced by plant science-related disciplines…what are the common issues of concern? Across disciplines, what sorts of curricular elements seem at risk? How do we preserve those that are essential? How can the broad training of students be sustained into the future? What can the different disciplines learn from each other? What are the appropriate roles of government, industry and professional societies in supporting education?
- **Refer to breakout session handout for participant assignments**
  Room 1428 Groups 1&2 / Room 1430 Groups 3&4 / Room 1432 Groups 5&6

12:00 PM Buffet Lunch and Continued Discussion / Served in Windows Over Washington

1:00 PM **Reports from Breakout Groups**

- **Assigned facilitator from each table provides recap of group discussion**

1:45 PM **Session II: Educational Needs for the Future**

- **The future educational needs of industry employers**
  Bill Dolezal, Pioneer Hi-Bred International
- **Critical role of ARS plant scientists in feeding and fueling the nation**
  Antoinette Betschart, Associate Director, USDA ARS
- **Essential skills for success in the Cooperative Extension Service**
  Paul Coreil, Vice Provost for Extension, LSU

2:45 PM Break / Potomac View Room

3:00 PM **Early Career Education Fellows**

- **Opening doors to opportunity and encouraging students to step through**
  Kimberly Webb, USDA-ARS, Ft. Collins, CO
- **Re-conceptualizing the "modern" plant pathologist: The need for an alternative paradigm in plant pathology education**
  Tim Durham, Assistant Professor, Nicholls State University, Thibodaux, LA
- **Peace Corps and plant pathology: Pathways to success!**
  Kristina Owens, USDA-APHIS, Annapolis, MD

Graduate Student Education Fellows

- **Plant pathology at the crossroads: Attracting the millennial generation**
  Olufemi Alabi, Ph.D. candidate, Washington State University
- **Increasing APS visibility to the nation's undergraduates: Why it matters, from a student's perspective**
  Lindsay Triplett, Ph.D. candidate, Michigan State University
- **Graduate education and training: What does it mean to be a graduate student?**
  Michelle Moyer, Ph.D. candidate, Cornell University

3:40 PM **Breakout Session II: An Assessment of Market Needs and How They Should Be Reflected in Educational Programs**

- **Desired Outcome**: Develop an understanding of what is needed to prepare graduate students for the positions of the future. What do employers in the private sector, the government and academic institutions (Land Grant and non-Land Grant) anticipate as proficiencies needed for the future? What is needed to prepare students for a highly globalized working environment? How well positioned are graduate programs to deliver M.S. and Ph.D. graduates with the skills needed for the future? Will workforce preparation require fundamental changes in educational content or methods? What changes are needed to prepare students for the diversity of positions available?
- **Refer to breakout session handout for participant assignments**
  Room 1428 Groups 1&2 / Room 1430 Groups 3&4 / Room 1432 Groups 5&6

4:30 PM **Reports from Breakout Groups**

- **Assigned facilitator from each table provides recap of group discussion**

5:00 PM Meeting Adjourns for the Day / Dinner on Own

Friday, March 20, 2009

7:30 AM Registration Opens

7:30 AM Continental Breakfast / Potomac View Room Foyer

8:00 AM **Session III: Thinking Strategically About the Future** / Potomac View Room

- **Adaptive Evolution: Society Collaborations Enhancing Science Education**
  Bill Dahl, Exec. Dir., Botanical Society of America
- **Our Future at Risk: The Need for Diversity in Plant Science Departments**
  Marla McIntosh, Professor, University of Maryland
- **A generalist degree in plant health: Present and future…The start-up of the DPH program at the University of Nebraska-Lincoln**
  Anne Vidaver, professor, University of Nebraska, Lincoln
- **Funding for Research Programs and Students with Interests in Field-oriented Research**
  Ann Lichens-Park, National Program Leader, USDA-CSREES
- **Graduate Education in the Plant Sciences supported by NSF**
  Bill Hahn, NSF Program Dir., Div. of Graduate Education

9:40 AM Break / Potomac View Room

9:55 AM **Breakout Session III: An Assessment of Strategic Options**

- **Desired Outcome**: What are the "best practices" for attracting undergraduate students into the plant sciences and ultimately into graduate studies? How might we work to have the plant sciences thought of in the same context as the STEM disciplines (Science, Technology, Engineering and Mathematics) so that they become natural parts of K-12 and undergraduate science education? How do we bridge the support gap for students interested in a broad education, as opposed to one defined by a research grant? Is it possible to build employment-sector experiences into graduate education? What are the proper roles of professional societies and employers in issues of education?
- **Refer to breakout session handout for participant assignments**
  Room 1428 Groups 1&2 / Room 1430 Groups 3&4 / Room 1432 Groups 5&6

10:45 AM **Reports from Breakout Groups**

- **Assigned facilitator from each table provides recap of group discussion**

11:30 AM **Session IV: Workshop Wrap-up**

Through full group discussion, try to achieve consensus on the next steps:

- What are the key issues that need to be addressed, and how best to address them?
- What should be the role of professional societies?
- What should be the role of government?
- What should be the role of the private sector?
- How can the results of this workshop best be used to stimulate a national coalition or strategy for sustaining strong educational programs in the plant sciences at Land Grant Colleges of Agriculture and other institutions?
- Where do we go from here? How do we collaborate across societies, employment sectors and universities to accomplish common goals?

12:30 PM Meeting Adjourns

Special Thanks to the APS Future of Education in Plant Pathology Committee

Special thanks to the committee members and their organizations for their collaboration and support on this important event.
Chair, James D. MacDonald, University of California; Members, Caitilyn Allen, University of Wisconsin; William R. Jacobi, Colorado State University; Segenet Kelemu, Intl Livestock Research Inst; James W. Moyer, North Carolina State University; Timothy D. Murray, Washington State University; Kevin Ong, Texas AgriLife Extension Service; Charles A. Pearson, Syngenta Crop Protection; John L. Sherwood, University of Georgia; and Anne K. Vidaver, University of Nebraska.

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