

National Science Advisory Board on  
Biosecurity (NSABB) Workshop on  
*'Dual Use Research of Concern'*  
Bethesda, MD  
February 27-28, 2008

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# The American Phytopathological Society

- APS is a diverse global community of scientists that strengthens the science and practice of plant pathology.
- 1908 - 2008
- 5,000 members worldwide
- Academic institutions, state and national government agencies, corporate industry, public and private sector.





- Dual use research is a topic of great concern to APS.
- Understanding the mechanisms of pathogenesis, virulence, host resistance, and epidemiology is crucial to disease management and our ability to respond and recover from a major plant disease event.
- The deployment of beneficial organisms to manage harmful organisms (biocontrol) potentially lends itself to dual use and needs further study.



- Plant pathogens have the potential to be used as biological weapons, although it is very difficult and would likely have limited direct impact.
- APS acknowledges that some public research intended to help control plant diseases might be useful to those wishing to cause harm.
- APS believes that the likelihood of this is remote relative to human and animal diseases.



# Level of Awareness of “Dual Use Research of Concern” by Plant Pathologists

- Most APS members are aware of this issue.
- The major concern expressed by APS members is “censorship” as opposed to “security”.
- Most APS members feel that scientific censorship is a bigger threat to biosecurity than dual use research.



# APS Awareness of Dual Use Research of Concern Issue

- APS participated in the ASM / NSF workshop on “Scientific Openness and National Security” (Jan 2003).
- APS participated in the NSABB proposal review on dual use research and serve on the NSABB.
- APS Public Policy Board published article on scientific openness (*Phytopathology News*, Mar 2003).
- APS organized symposium on “Information Security vs. Freedom of Information in Agriculture” (Aug 2004).



# APS Activity in Plant Biosecurity

- APS ad hoc committees on “Threatening and Emerging Diseases and Biosecurity”.
- APS serves in advisory capacity to USDA for the National Plant Disease Recovery System (HSPD 9).
- APS is instrumental in the USDA National Plant Diagnostic and Surveillance Network.
- APS has organized many symposia and published many papers related to plant biosecurity, several before 9/11.



- APS is keenly aware that new information and technologies have costs as well as benefits, including the potential misuse of information for unscrupulous purposes.
- APS, like other professional societies, believes that there is some research that may present enough risk of use by terrorists that it should not be published;
- However,



# APS Concerns

- APS opposes any policy that might impede legitimate research into the basic understanding of plant diseases or the application of information or technology for the prevention and control of plant diseases.
- APS opposes policies that would severely impede or unduly restrict the legitimate exchange of germplasm among scientists for purposes of conducting research to prevent and control plant diseases.



# APS Publication Policy

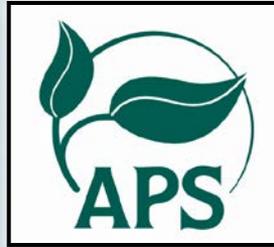
<http://www.apsnet.org/members/ppb/PDFs/BiosecurityAPSPubBoardPolicy.pdf>

- “APS members are obligated to discourage any use of plant pathology contrary to the welfare of humankind, including the use of plant pathogens as biological weapons”.
- Reviewers and/or editors must report any suspected misuse of information in submitted manuscripts which could result in a rejection to publish.
- Authors must self-select on manuscript submission form if, in their opinion, anything in the manuscript might constitute dual use research information.



# Outreach Avenues

- Web-based solicitation of comments; i.e., USDA Select Agent List proposed rule
- Agencies / societies joint workshops
- Publication of 'white papers'
- Symposia / workshops at society annual meetings
- Society 'blogs'
- Communication with the 'One Health - One Medicine' Initiative



On behalf of The American  
Phytopathological Society, I thank you  
for the opportunity to participate in this  
important workshop on dual use  
research.