

ASM and the Dual Use Dilemma: Outreach and Education

Ronald M. Atlas

Co-chair ASM Committee on Biodefense

Presented to the NSABB

On Behalf of the American Society for Microbiology

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What is the nature and size of the constituency that your organization represents; i.e., number of members, principal professional activities of members?

- The ASM is the largest single life science society with more than 42,000 members, and its principal goal is the study and advancement of scientific knowledge of microbiology for the benefit of human welfare.
- ASM members are involved in research, clinical, and public health efforts, focused on developing new preventions, therapies, and cures for infectious diseases.

What is the level of awareness among your membership with respect to the issue of dual use research; e.g., most members are keenly aware and the topic is on the agenda of annual meetings or few members have any cognizance of the issue. How have you assessed that awareness?

- While the ASM has not conducted any formal assessment of the aware our sense is that many are well aware of the dual use issue.
- Many of the NSABB members are ASM members
- ASM members have participated in many national international forums on dual use issues

ASM Code of Ethics

- ASM has a code of ethics that alerts its membership to dual use issues of concern

“ASM members are obligated to discourage any use of microbiology contrary to the welfare of humankind, including the use of microbes as biological weapons. Bioterrorism violates the fundamental principles upon which the Society was founded and is abhorrent to the ASM and its members. ASM members will call to the attention of the public or the appropriate authorities misuses of microbiology or of information derived from microbiology.”

ASM Publications

- ASM authors and editors are very aware of dual use issues
- ASM sponsored a meeting of editors and publishers that led to the development and implementation of procedures for screening manuscripts for dual use information of concern
- ASM reviewers and editors take potential dual use issues into account when assessing the suitability of manuscripts for publication.

ASM Meetings

- Several sessions have been held at the Annual Meeting and at the ASM Biodefense Meeting on dual use issues
- The ASM also has held policy briefings at its annual meetings of its Public and Scientific Affairs Board

PSAB Briefings on Biodefense and Biosecurity

2003

- Penrose (Parney) C. Albright, Assistant Director National Security and Homeland Defense, Executive Office of the President
- Sally Horn, Director, Nonproliferation Policy, Department of Defense
- Jerome M. Hauer, Assistant Secretary for Public Health Emergency Preparedness, Department of Health and Human Services

2004

- LTC George Korch, Jr. Department of Homeland Security
- Kenneth Bernard, M.D., Special Assistant to the President for Health and Biodefense, Homeland Security Council

2005

- Carol Linden, Deputy Director National Biodefense Analysis and Countermeasures Center, Department of Homeland Security
- Amy Patterson, Director, Biotechnology Activities Office, Office of Science Policy
- National Institutes of Health

2006

- Mary E. Groesch, Senior Advisor for Science Policy, Office of Biotechnology Activities, Office of Science Policy, National Institutes of Health

2007

- Amy Patterson, Director, Office of Biotechnology, National Institutes of Health (NSABB Dual Use Framework)

2007 ASM Biodefense Meeting

Symposium - The Dual-Use Dilemma

Moderators:

- **A. Casadevall** and **C. M. Fraser**

Presentations:

- What Is Dual-Use Science of Concern? **MICHAEL J. IMPERIALE**
- The International Perspective: Is the US Overreacting? **DAVID R. FRANZ**
- The Promise and Threat of Synthetic Genomics **CLAIRE M. FRASER**
- Communicating Dual-Use Research **PAUL KEIM**
- Restricting Access: The Select Agent Rule **STEPHEN A. MORSE**

2006 Annual Meeting

- n Confronting the Dual Use Dilemma: Codes of Conduct and Other Measures
- n Conveners:
 - Ronald Atlas and Ruth L. Berkelman

This session provided a forum to discuss activities aimed at confronting the dual use dilemma facing microbiologists in an age of terrorism.

2007 Annual Meeting

- Research in an Age of Terrorism: What are your Responsibilities?
- **Conveners:**
 - Ruth L. Berkelman and Kenneth I. Berns
- **Presentations:**
 - 1. Amy Patterson, The Dual Use Research Framework: An Update on the National Science Advisory Board on Biosecurity
 - 2. David Franz, Dual Use Research: International Issues
 - 3. Ralph Baric, Synthetic DNA to Select Agent Virus: An Assessment of Capabilities

Annual Meetings

- Annual meetings have limitations regarding raising awareness of dual use issues
- Symposia are one time events
- Most attendees are more interested in science sessions than policy symposia
- PSAB is limited to 3 sessions per meeting
 - Sessions are chosen based upon current importance
 - This year there will be a session on biosafety which is of particular relevance for biodefense research

To the extent your members are aware of the issue of dual use research, what is their perception of it; e.g., that it's of pressing concern and national importance or that it's of uncertain consequence? Similarly, how have you assessed these perceptions?

- The ASM has not assessed the perceptions of its members regarding dual use issues
- It is reasonable to assume, however, that since ASM members hold varying views of the importance of biodefense research that they will also have diverse views on the significance of dual use research and on what steps would be effective in deterring the misuse of science

What mechanisms of outreach would be particularly effective (and not especially effective) with your membership for soliciting their views on federal policies under development? For education and awareness-building purposes? e.g., Web-based modules, presentations at annual meetings, government-sponsored roundtables, society-initiated professional development activities.

- Formal publication of a framework for oversight of dual use research of concern in the Federal Register would elicit formal comment by the ASM

Effectiveness of Outreach Efforts

- The ASM offers symposia on important policy issues at its annual meeting—however, these are attended by only a small proportion of the attendees
- The ASM sends electronic alerts to its members on important policy matters
- The ASM posts on its web site policy matters
- The ASM publishes a monthly journal that includes discussions of policy matters

Effectiveness of Outreach Efforts

- The ASM Annual Meeting allows government bodies to present information at booths in the exhibits area – many members visit these exhibits and take home relevant information

Concluding Remark

- The ASM recognizes that it is up to the scientific community to help prevent scientific knowledge and materials from being misused.
- The ASM has taken, and will continue to take, steps to ensure that its members are aware of dual use of concern issues and that its members understand the importance of complying with laws, regulations, and frameworks aimed at deterring bioterrorism.