

National Science Advisory Board for Biosecurity: Purpose, Structure, and Operations



NSABB Inaugural Meeting
June 30 – July 1, 2005

Life Sciences Research: National Biosecurity Initiatives

- **U.S. government has enhanced biosecurity in life sciences research through several initiatives:**
 - **USA PATRIOT Act of 2001**
 - **Public Health Security and Bioterrorism Preparedness and Response Act of 2002**
 - **Agricultural Bioterrorism Protection Act of 2002**
 - **Promoting and conducting research on the development of countermeasures for biologic threats**

Report of the National Research Council of the National Academies

- **“Biotechnology Research in an Age of Terrorism” (October 2003)**
- **Description of “Experiments of Concern”**
- **Recommendations included:**
 - **Creation of a national advisory board**
 - **Education of science community**
 - **System to review plans for certain research**
 - **Self-governance in review for publication**
 - **Increase in communication between life scientists, security, and law enforcement**

NSABB Purpose and Function

- **To advise HHS Secretary, NIH Director, and heads of all Federal entities that conduct/support life sciences research.**
- **To recommend strategies for the effective oversight of federally conducted or supported dual use research**
 - **Dual use research is research with legitimate scientific purpose that may be misused to pose threat to public health or national security**
 - **The NSABB will consider both the needs of the research community and concerns about national security**

NSABB Charge

- **Develop criteria for identifying dual use research and research results**
- **Develop guidelines for oversight of dual use research, including guidelines for risk/benefit analyses**
- **Advise on national policies governing local review and approval for dual use research, including guidelines for case-by-case review and approval by Institutional Biosafety Committees (IBCs)**

NSABB Charge (*cont'd*)

- **Advise on criteria and processes for referral of classes of research or specific experiments by IBCs to the NSABB**
 - **Review/provide guidance on specific experiments that exemplify significant or complex permutation, or represent a new category of dual use research**
 - **Respond to research institutions' requests for interpretation and application of guidelines to specific proposals that have been denied by an IBC**

NSABB Charge (*cont'd*)

- **Provide recommendations regarding the development of a code of conduct for scientists and laboratory workers for adoption by professional societies and institutions engaged in life sciences research**
- **Provide recommendations on the development of mandatory programs for education and training in biosecurity for all scientists and laboratory workers at federally-funded institutions**
- **Advise on national policies for publication, communication and dissemination of dual use research methodologies and results**

NSABB Charge (*cont'd*)

- **Provide recommendations regarding strategies for coordinated international oversight of dual use biological research**
- **Advise on national policies for conduct of dual use research including strategies to address national security concerns while still fostering continued rapid progress in life sciences research**
- **Address other issues as directed by the Secretary of HHS**

NSABB Structure / Operations

- **Up to 25 voting members appointed by Secretary, HHS, after consultation with other Federal Agencies**
- **Meets quarterly and as needed**
- **Meetings open to public, unless otherwise determined by the Secretary, HHS**
- **Managed and administered by the NIH**

NSABB Expertise

- **Molecular biology/genomics**
- **Microbiology**
- **Clinical infectious disease/diagnostics**
- **Lab biosafety/security**
- **Public health, epidemiology**
- **Health physics**
- **Pharmaceutical production**
- **Veterinary medicine**
- **Plant health**
- **Food production**
- **Bioethics**
- **National security**
- **Intelligence**
- **Biodefense**
- **Institutional Biosafety Committees**
- **Export controls**
- **Law, law enforcement**
- **Scientific publishing**
- **Perspectives from academia, industry, public, recombinant DNA Advisory Committee**

NSABB *ex officio*

- Exec. Office of the President
- Department of Health and Human Services
- Department of Energy
- Department of Homeland Security
- Department of Veterans Affairs
- Department of Defense
- Environmental Protection Agency
- United States Department of Agriculture
- Department of Interior
- National Science Foundation
- Department of Justice
- Department of State
- Department of Commerce
- National Aeronautics and Space Administration
- Intelligence community



Modus Operandi

- **Engage the biosafety, security, life sciences research, and public communities in NSABB activities such as the development of the guidelines, code of conduct, and training programs**
- **Recognize and develop strategies to address the significant challenges that will face:**
 - **Researchers**
 - **IBCs**
 - **Institution leadership and research administrators**
 - **Publishers**

Role of the NIH Office of Biotechnology Activities

- **NIH manages the NSABB on behalf of DHHS**
 - **Plan and execute meetings**
 - **Develop background materials and support/oversee development of NSABB work products**
- **Maintains website as resource for public**
- **Identifies and analyzes dual use research issues**
- **Facilitates coordination of the development of federal policies regarding dual use research**
- **Participates in the implementation and interpretation of federal guidelines for dual use research**
- **Develops training and education programs for IBCs involved in dual use research**

NSABB Website

<http://www.biossecurityboard.gov>

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