

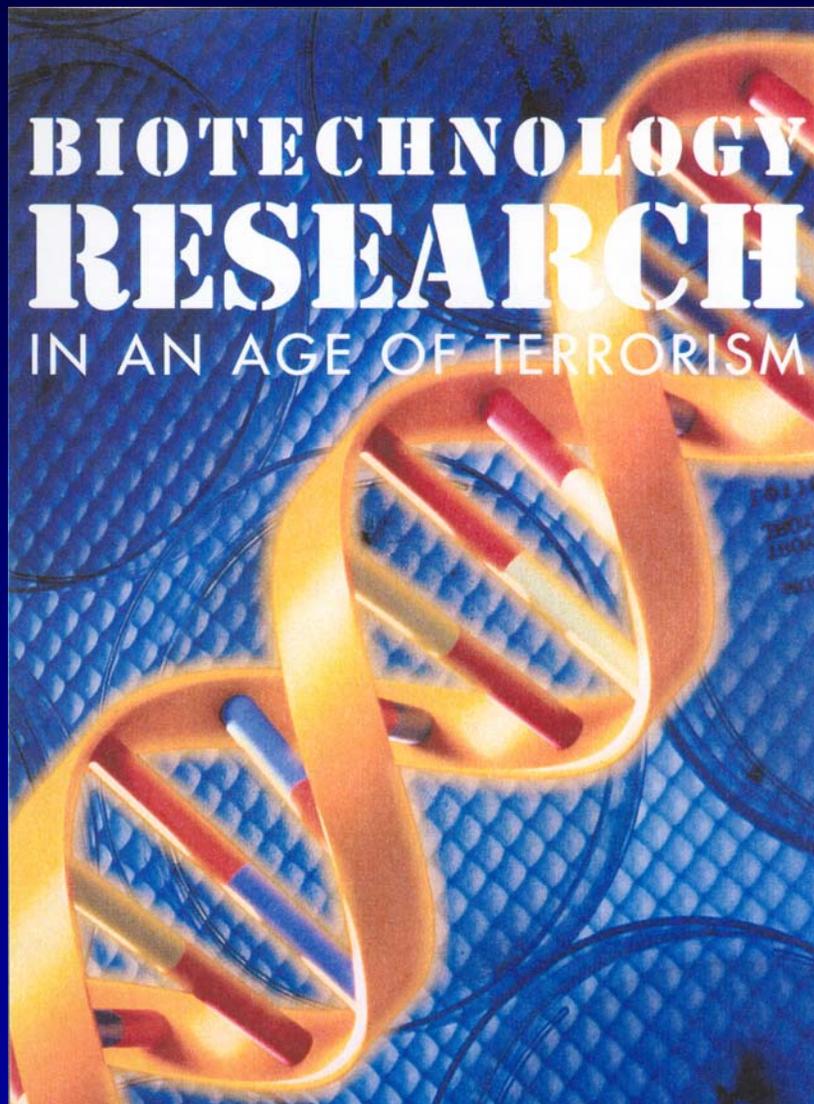
Biosecurity Challenges in the Post-9/11 World: The Role of the NSABB

Michael Imperiale

AAAS Annual Meeting

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Good science can be put to bad uses

National Science Advisory Board for Biosecurity (NSABB)

- **Advisory to the Secretary of Health and Human Services, Director of National Institutes of Health, and heads of all US federal departments and agencies that conduct or support life science research**
- **Will recommend specific strategies for efficient and effective oversight of US federally conducted or supported dual use biological research**

NSABB operations

- **25 voting members from outside the government**
- **ex officio members representing governmental units**
- **meetings open to public unless otherwise determined by the Secretary of HHS**

Guiding principles

- **scientists must adopt a “culture of responsibility”**
- **the scientific enterprise is successful due to, and is dependent on, open communication**
- **the potential for dual use does not automatically mean the experiment should not be performed or the results published**
- **it is better for the community to oversee itself than to have the legislative branch do it for us**
- **oversight must be consistent**
- **NSABB is not going to stop someone who intends to do harm from doing so**

NSABB Working Groups

- **constituted at the first NSABB meeting, June 30 – July 1, 2005**
 - **Dual use criteria**
 - **Communications**
 - **Code of conduct**
 - **International**
 - **Synthetic genomes**

Recent Publication of 1918 Pandemic Influenza Virus Manuscripts



What happens next?

- **continue working group discussion**
- **obtain input from stakeholders**
 - **scientists**
 - **national security interests**
 - **other government units**
 - **universities**
 - **international entities**
- **develop recommendations**
- **discuss how to implement recommendations**

How will this affect the individual scientist?

- **scientists need to be aware of the issues**
 - think about possible outcomes of experiments
 - be prepared to respond to unforeseen results
- **some experiments will require biosecurity review prior to commencement**
- **some results may require review prior to publication**

Evolution

- **rDNA guidelines have been revised as we gained experience**
- **experience and the progress of research should allow similar modifications**
 - **what constitutes “dual use”?**

Dual Use and the IBC

- **IBC recommended as first level of review by NRC report**
- **IBC is already set up to perform risk assessment related to biological hazards**
- **maintains local control and oversight**
- **deliberations involve, and are open to, the public**

Dual Use and the IBC - Issues

- **expertise may need to be expanded**
 - math, engineering, physics, chemistry, others?
- **increased workload for a voluntary committee**
- **need for “standardization”**
 - clear guidelines
 - NSABB