NATIONAL SCIENCE ADVISORY BOARD FOR BIOSECURITY

Balancing Biosecurity & Scientific Progress: The Need for a Culture of Responsibility

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Background

- Concern has been mounting about the threat of biological warfare and bioterrorism.
- The U.S. government has been:
 - strengthening and expanding efforts to develop countermeasures, and
 - developing public health emergency preparedness programs.

Legislation

- The PATRIOT Act of 2001 strengthened criminal statutes.
- Public Health Security and Bioterrorism Preparedness and Response Act of 2002 and the Agricultural Bioterrorism Act of 2002 improved the nation's capacity to respond to bioterrorism and other public health emergencies.

A Need for Biosecurity

- U.S. government became cognizant of the "dual use dilemma".
- Certain life sciences research results and technologies raise biosecurity concerns beyond physical containment issues.
- The National Academies also considered ways to minimize the destructive applications of biotechnology research and issued a report entitled, "Biotechnology Research in an Age of Terrorism" (a.k.a. Fink Report).

A Model for Addressing Biosecurity Issues

- In the 1970s, the advent of genetic engineering raised concerns about potential unintended effects on human health and the environment.
- Scientific community convened to address this matter at the outset, resulting in the U.S. Government establishing the NIH Recombinant DNA Advisory Committee (RAC) to advise on these matters.

The NIH Recombinant DNA Advisory Committee (RAC)

- Serves as a public forum for in-depth review and discussion of all aspects of recombinant DNA technology,
- Developed internationally accepted guidelines for the oversight of recombinant DNA research, and
- Supplanted the need for Congress to formally legislate the oversight of these activities.
- Both the RAC and NSABB are directed to provide advise, guidance, and leadership about how to carry out important and highly beneficial research that may also present a risk.

Culture of Responsibility

With the establishment of NSABB, scientists must collaborate to develop a culture of responsibility that will improve security of research at the level of individual scientist or laboratory worker.

A Call to the Research Community

- Active participation of the research community in the deliberations of NSABB.
- Success depends on the actions of individuals.