

Codes of Conduct as Tools for Fostering Responsibility in Dual Use Research:

The Work of the National Science Advisory Board for Biosecurity, USA
SECOND WORLD CONFERENCE ON RESEARCH INTEGRITY @ SINGAPORE

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National Science Advisory Board for Biosecurity (NSABB)

- Established 2004
- Federal advisory commission
- Central mission: policy advice and consultation to the US government on dual use research

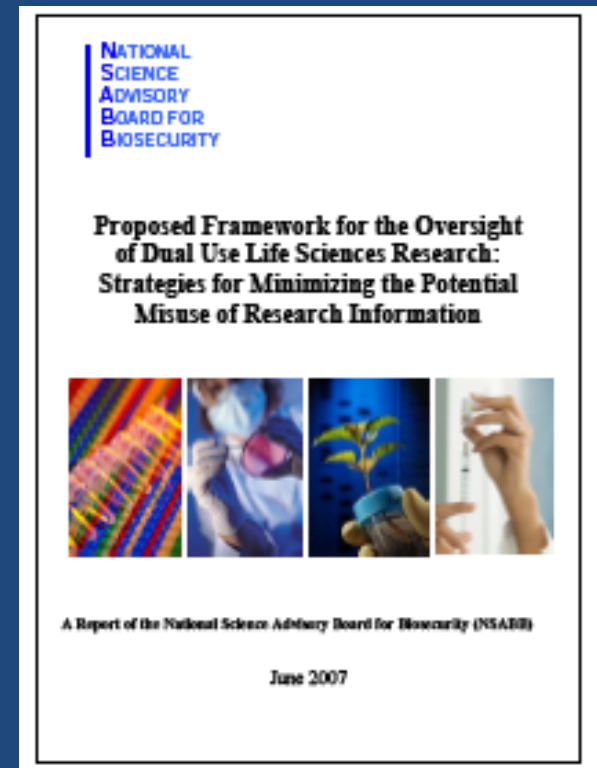
1. Biosecurity & Select Agents (2006)

2. Proposed Framework (2007)

3. Strategic Plan for Outreach & Education (2008)

4. Personnel Reliability and Select Agent Access (2009)

5. Synthetic Biology (2010)



- **Guiding Principles**
- **Key Features**
 - Federal Guidelines
 - Awareness
 - Ongoing, Mandatory Education
 - Evaluation & Review of Research for Dual Use Potential
 - Risk Assessment and Risk Management
 - Periodic Evaluation
 - Compliance
- **Roles and Responsibilities**
- **Major Steps in Local Oversight**
- **Criteria and Considerations for Identifying DURC**
- **Evaluation of Life Sciences Research for Dual Use Potential**
- **Review of Potential DURC: Risk Assessment and Risk Management**
- **Responsible Communications**
- **Considerations in Developing a Code of Conduct for DUR**



The pivotal role of the individual researcher



Guiding principle:

The foundation of oversight of dual use research includes investigator awareness, peer review, and local institutional responsibility. Such oversight allows input directly from the investigators, facilitates timely review, offers appropriate opportunities for public input, and demonstrates to the public that scientists are taking responsibility for their research.

Key role and responsibility:

Researchers are the most critical element in the oversight of dual use life sciences research. ... [They] thus have a professional responsibility to be aware of dual use research issues and concerns, to be aware of the implications of their work and the various ways in which information from their work could be misused, and to take steps to minimize misuse of their work.

From Considerations: Core Responsibilities of Life Scientists

Individuals involved in any stage of life sciences research have an ethical obligation to avoid or minimize the risks and harm that could result from malevolent use of research results. Toward that end, scientists should:

- Assess their own research efforts **for dual use potential and report as appropriate**
- Seek to stay informed **of literature, guidance, and requirements related to dual use research**
- Train others **to identify dual use research of concern, manage it appropriately, and communicate it responsibly**
- Serve as role models **of responsible behavior, especially when involved in research that meets the criteria for dual use research of concern**
- Be alert **to potential misuse of research**

NSABB Initiatives

- **Surveys to identify barriers to—and proven strategies for—the adoption of codes of conduct among professional societies and associations and at the institutional/local level**
- **Compiling/disseminating the results**

The Challenges

- **Developing and sustaining awareness of the dual use dilemma among researchers**
- **Inculcating and maintaining a sense of responsibility for one's research and the research of others**
- **Individuals and groups – behaving responsibly**



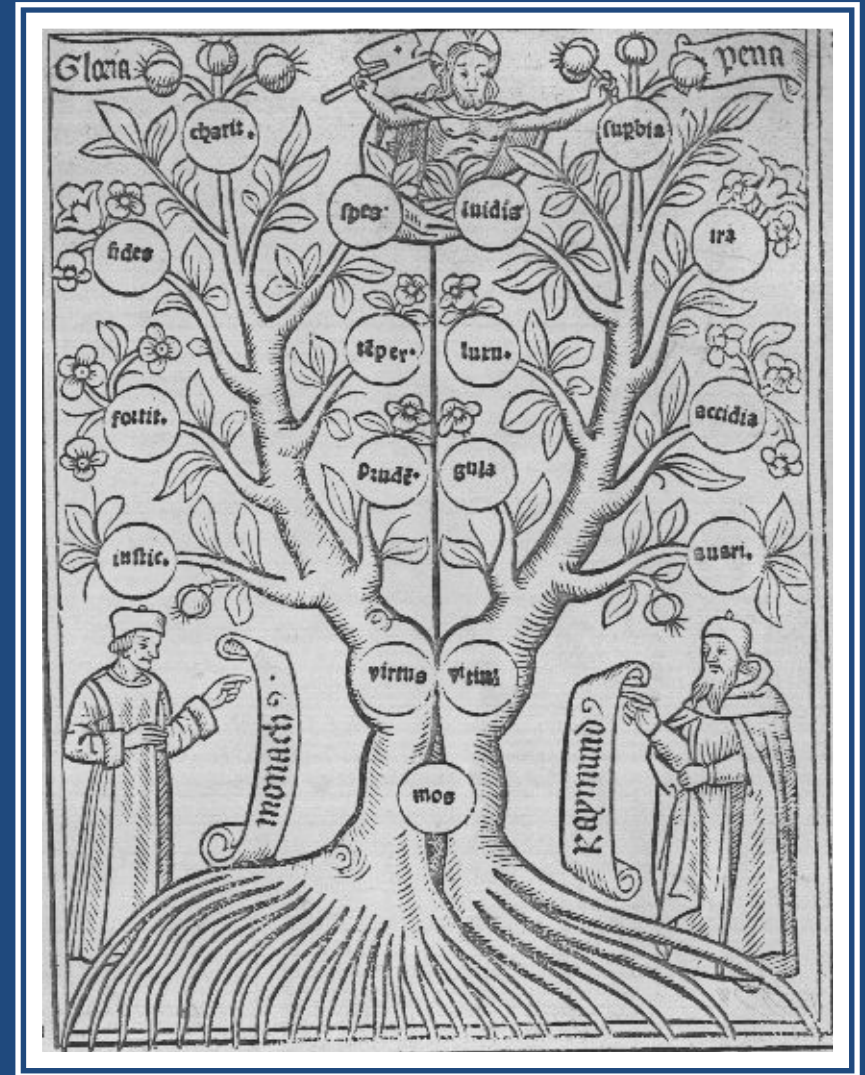
Dual use dilemma & potential

The Limits of Codes of Conduct in Meeting the Challenges

- Depending upon type, aims, context, etc., any given code of conduct may—probably will—have limits (vagueness, generality, etc.)
- **In and of itself, any given code will be insufficient**
- In **cultivating** the moral agency of individuals and groups, there are **no** magic bullets ... a given tool is only as effective as the maker *and* the wielder of that tool

Moral Agency

- **Complex and multidimensional**
- **Individuals (and groups) fail – as well as succeed – in being “good” or “responsible” for multiple reasons**
- **Even individuals and institutions of unshakeable integrity can fail to do the right thing**



Moral agency and the value of codes of conduct

➤ Moral agency as an individual *human capacity*

- Thrives through a sustained, inward drive to do the right thing
- Depends upon thoughtful, morally formative mentoring
- **Requires knowledge and awareness**
- Is strengthened by the mutual respect and accountability that ideally defines the relationship between an individual and his/her peers and the profession at large

A code of conduct:

a tool—among others—for fostering and enhancing the moral agency of individuals and groups

