NATIONAL SCIENCE ADVISORY BOARD FOR BIOSECURITY

Working Group on Communication of Dual Use Research Results, Methods, and Technologies

Communication Working Group Charge

- Identify concerns and examine options and strategies for addressing issues related to the communication of dual use research information
- Develop draft recommendations for the NSABB that will facilitate the consistent application of well-considered principles to decisions about communication of information with biosecurity implications

Broad Target Audience

- Including:
  - Researchers
  - Students
  - Laboratory Directors
  - Institutional Review Bodies
  - Institutional Officials
  - Manuscript Reviewers
  - Research Administrators
  - Journal Editors
  - Research Sponsors

Working Group Roster

Voting Members:

- P. Keim (Chair)
- A. Casadevall
- L. Enquist
- D. Franz
- J. Gordon
- D. Kasper
- S. Lemon
- M. Nance
- M. Osterholm
- T. Shenk
- A. Sorensen

Federal Agency Representatives:

- Brenda Cuccherini (VA)
- Dennis Dixon (NIH)
- Terri Lomax (NASA)
- Boris Lushniak (FDA)
- Stuart Nightingale (HHS)
- Scott Steele (DoJ)
- M. Schmolesky/ N. Comella (State)
- Ronald Walters (Intelligence)

Working Group Deliverables

- **Develop for consideration by the NSABB:**
  - **Overarching principles for responsible communication**
  - **Framework for assessing risks and benefits of communicating dual use research**
  - **Principles and options for how and when to communicate information**
  - **Options for local review of work products containing information with national security implications**
  - **Workshop on communication of dual use information**

Working Group Activities

- Examine extant systems and proposed models for the review and communication of work products that may have national security implications
  - Federal policies and regulations
  - Policies of professional societies, scientific journals
  - Practices from other disciplines that deal with the control of sensitive information

Working Group Activities

- Identify/develop case studies that highlight the issues and can serve as test cases for proposed approaches

- Identify outreach needs, both during the development of NSABB recommendations, and during the dissemination/ implementation of any new policies pertaining to the communication of dual use research

Overarching Principles

- **Communicate research to the fullest extent possible**
  - **Permits advancement of life sciences research to benefit public health and the environment**
  - **Restriction of scientific communication a rare exception rather than the rule**

Overarching Principles

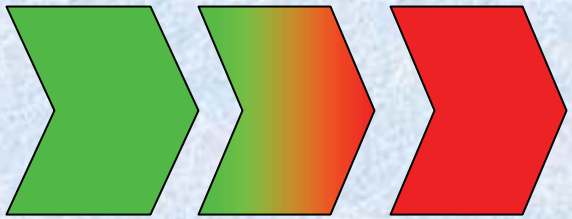
The Need for Balance

Sharing of information and technologies underpins scientific progress

Mitigating the potential for deliberate misuse of information

Overarching Principles

- **The decision to communicate information is not necessarily binary**



YES **NO**

Overarching Principles

- **Communication of dual use research occurs at multiple points throughout the research process**
  - **It is important to apply principles and practices of responsible communication throughout the research endeavor, at points well upstream of the publication stage**

Overarching Principles

Examples of Communication During the Research Process

Project Concept and Design	Funding application and award process	Institutional Approval	Ongoing Research	Development of Manuscript or Research Product	Publication of Manuscript or Research Product
Presentation of preliminary data Discussions with collaborators Draft application review by peers, institution administration etc	Review by IC staff and study section Research award notices/ description on CRISP etc	Review by Institutional Committee Members Project descriptions on institution webpage or in PI CV	Training of lab staff, students, visiting scientists Presentations at departmental seminars Presentations or posters at National or International Conferences Evaluation by other faculty if thesis project	Peer Review of Manuscript/ Research product	Public Dissemination of Research Findings or Products

Overarching Principles

- Many modes of communication

Overarching Principles

- Need to consider not only what is communicated, but also the way in which it is communicated
  - Recognize communication of dual use information may raise biosecurity concerns, not only within the scientific community, but also general public
  - Consider potential for public concern, misunderstanding, and sensationalism
  - Consider need for inclusion of contextual/explanatory information to minimize concerns and misunderstanding

Key Considerations

- Life sciences research is dynamic and often unpredictable

- The scientific enterprise is global in nature
  - Consider international implications during development of a framework for the communication of dual use research

Recommendation

- **Responsible communication of dual use research is an important value to incorporate into a code of conduct and ethics training**

Tools for Communication of Dual Use Research

- **Framework for Assessing the Risks and Benefits of Communicating Dual Use Research Products**
  - **Need to make initial determination of whether there is risk to public health or national security**
  - **If so, weigh against potential benefits, considering for example:**
    - **Novel scientific information or technology**
    - **Potential benefits to public health or national security of broadly disseminating the information or technology**
    - **Time frame (e.g., immediate, near future, years from now) in which the information would be useable**

Tools for Communication of Dual Use Research

- **Options for Communicating Dual Use Research**
  - **Spectrum of options, not necessarily mutually exclusive**

Tools for Communication of Dual Use Research

- Approaches to the Responsible Communication of Dual Use Research Results and Technologies
  - A communication plan is a critical part of decision to communicate
    - Not only what is said, but how it is said
    - Public understanding and trust

Next Steps

- Further development of:
  - Principles for responsible communication
  - Algorithm for assessing risk and benefits of communication
  - Communication options
  - Points to consider in the development of a communication plan
- Continued planning of workshop on communication of dual use research

Questions

- Comments on work plan?
- Additional tasks?