Controlling Dangerous Pathogens Project: Recent Activities

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Controlling Dangerous Pathogens Project



- Previous presentation focused on basic issue of dual-use research; developments in US, including ideas developed in Controlling Dangerous Pathogens Project
- Will present two other aspects of Pathogens Project:
 - Development of data management system to support review process for dual-use research
 - Outreach activities, including results of other regional workshops





- Recognized early in project that dual-use review would require scientists to submit information about proposed research
- Willingness to do so would depend on:
 - How much of a burden the review process entailed: unlikely to participate if difficult or time consuming
 - Whether information that was submitted could be protected: risk of unauthorized disclosure of research ideas and plans
- Legitimate concerns → led to development of prototype data management system

Data Management System, cont'd



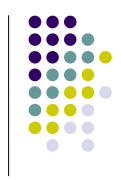
- Based on open source software, with no licensing or user fees
- Contains questions that scientists would answer and submit on-line to appropriate review body
- Presented in cascading design: answer to one question determines whether need to answer certain others
- Goal to focus on questions most relevant to scientist's proposed work, thus minimizing burden and time involved





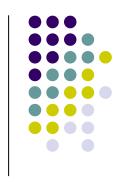
- Uses multiple levels of encryption to ensure security of information being submitted:
- User interactions done using same standard as financial industry for transmitting data electronically
- Information stored in system also encrypted to ensure breach does not lead to loss of information
- Held simulation exercise with submission of fictional projects for dual use review
- Now preparing pilot test of system with actual projects: participants welcomed!
- Also interested in sharing data management system with interested researchers for their use





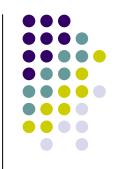
- Variety of efforts to engage other experts on dual use issue:
 - Meetings w. government officials: e.g. US NIH, Canada MOH, Thailand MFA
 - Presentations scientific & professional meetings e.g. ASM, Chinese Academy Sciences, British Royal Society
 - Regional Workshops
 - Engagement of international organizations, e.g. WHO

Outreach cont'd



- Regional Workshops: with scientists, academic researchers, govt science & health ministry officials, international security experts, industry reps:
 - Hungary Central/Eastern Europe
 - Brazil Latin America/Caribbean
 - Singapore Pacific rim
 - Thailand Southeast Asia & South Asia
 - South Africa sub-Saharan Africa





- Common elements in discussion:
 - Lack of consensus on risk from dual use research
 - Need for balance in policies: avoid discouraging scientists but also reassurance of public
 - Importance of multi-pronged approach: no single answer; need policies ranging from codes of conduct to oversight
 - Need to build on existing mechanisms where possible: biosafety review processes, rDNA, etc
- Differences between workshops:
 - Hungary: focus on relevance of regulatory approaches, both national & international
 - Brazil & South Africa: emphasis on capacity building for biosafety, biosecurity and disease surveillance & response
 - Singapore & Bangkok: focus on lessons of SARS epidemic in terms of international cooperation & openness in research

Outreach cont'd



- Concrete results from workshops:
 - Establishment of Biosecurity section in Hungarian Society for Law
 - Follow-on workshops by participants from Indonesia, Philippines
 - Policy statement from South Africa workshop participants
 - Networking: continuing contact between participants of specific workshops

Outreach cont'd

- Engage relevant international organizations via workshops and other venues: OECD, UNESCO, ICRC, OECD, ICGEB, ICSU, WHO
- Example of WHO: 2 meetings on dual use issue
 - October 20065 Scientific Working Group meeting Geneva
 - Report identified 5 priority issue areas, including capacity building at country level & development of research oversight guidelines
 - December 2007 research policy meeting Bangkok
 - One draft recommendation called for WHO technical support on lab biosafety & biosecurity and to develop guidelines for risk assessment & management of dual use research
 - Another called on member states to develop and implement regulations, legis, guidelines & procedures for addressing lab biosafety, biosecurity & dual use research





Further information available at:

http://cissm.umd.edu/projects/pathogens.php/#papers

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