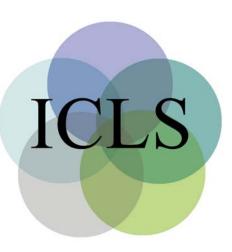
Enhancing Biological Security with International Cooperation

National Science Advisory Board for Biosecurity Bethesda, MD 30 March 2006

Terence Taylor Director International Council for the Life Sciences

Getting the Balance Right

- Extraordinary advances in life sciences and biotechnology bring enormous benefits to medicine, public health, and agriculture
- But the risk to public safety and security from the misuse of this science and technology needs to be minimized by the engagement of the life sciences community



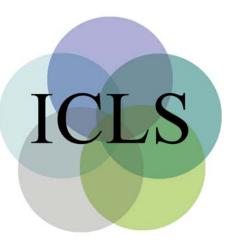
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Understanding the Risks

Biological Risk spectrum

- Naturally Occurring
- Accidents/Misadventure
- Lack of Awareness
- Deliberate Misuse
- The challenge is not just weapons or classifying some agents as dangerous pathogens

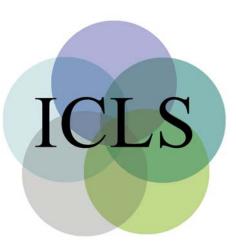


Other Challenges

- Lack of shared global language, risk assessment methodologies and standards in biosafety and biosecurity
- Challenge to traditional multilateral institutions, individual scientific organizations and national IC governments

International Council for the Life Sciences

- Created in December 2005 to help enhance biological safety and security through international standards and the sharing of best practices
- Product of over three years of engagement of the global life sciences community



Terence Taylor ICLS

ICLS Mission

The mission of the Council is to help ensure global public health, safety and security by safeguarding the opportunities offered by advances in the life sciences and their application through the promotion of best practices, standards, and codes of conduct.

30 March 2006

Global Awareness

Dual Use vs. Misuse

- Language choice is important
- Port of Entry for Dialogue Matters
 - Ministry of Health, scientific professional societies, individual companies...
 - Level of mistrust for organizations dealing with issue from a biological weapons perspective
- Sensitivities if exclusively viewed as security challenge
 30 March 2006

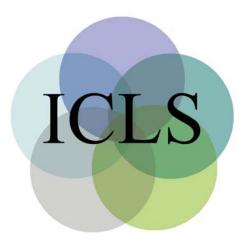
Specific Concerns and Priorities

Competing Issues Commercial Interests

- Desire to measure up to global standards perceived to be in the strategic interest of private business and governments
- Basic health care infectious dise**ucls**
- Agriculture and food production

National Responses

- United Kingdom
- European Union
- Singapore
- India
- Russia
- Saudi Arabia



Russia

- G-8 Presidency
- Infectious disease on the agenda for the July 2006 summit
- Meeting of experts from G-8 countries in Moscow in April 2006 to discuss biosafety and biosecurity
 - Cooperative effort between the ICL\$,CL\$ governments, and research institutes

Saudi Arabia

"I came to the meeting from a country that is starting in this business ... we do not have regulations in this area and we are in a grave need to start establishing rules and regulations...I hope we can stay in contact." Representative, Molecular Virology and Infectious Diseases Research SectionCLS

Saudi Arabian Food and Drug Authority

Global Approaches

- Biological and Toxin Weapons Convention
- World Health Organization
- G-8 and Global Partnership
- Inter-Academy Panel
- Global networks of life scientist<mark>FCLS</mark>

World Federation for Culture Collections (WFCC) & Biosecurity

- Highlighted the ICLS effort in its August 2005 newsletter
- Acknowledges biosecurity as critical issue and specifically requested opinions on the topic from its members

WFCC Position

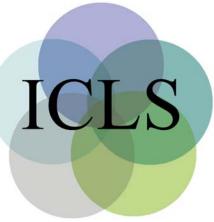
"It is important that a voice of reason be heard above the clamor that appears in the public media. Too often public policy is formulated in response to incomplete or inaccurate information. This is especially the case with biological agents and their potential use as weapons. This is affecting both the science as well as national scientific priorities. It is CLS essential that the WFCC present a reasoned perspective jin this issue."

Role of the ICLS

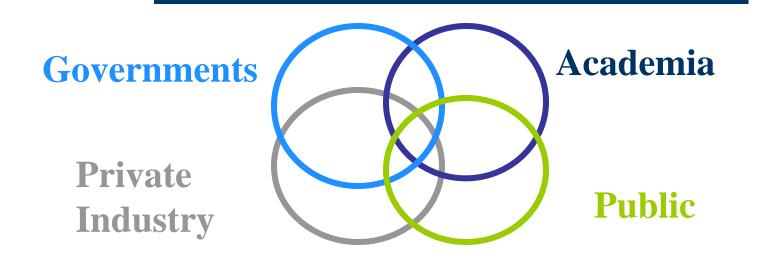
- Help develop the necessary partnerships with policymakers, the public, academia and industry
- Provides a forum and a focal point for the sustained engagement of the life sciences community

ICLS - Creating Partnerships

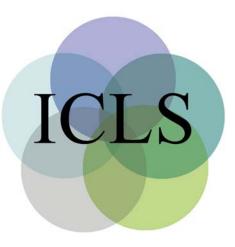
- Common global standards for Biosafety Levels 1, 2, 3 and 4
- Safety and security training curricula for personnel from academia, private industry and government
- Global multi-disciplinary biological risk assessment



Stakeholder Cooperation



Successful **risk management** requires **cooperation** among all the **stakeholders**



30 March 2006

Terence Taylor ICLS

Senior Advisory Panel Members

- Abdallah Daar University of Toronto
- Robert Erwin
 Large Scale Biology Corporation
- Paul Fischer
 GenVec
- William Haseltine
 Haseltine Associates
- Jerome Gervais The Vaccine Fund (France)
- Erling Myhre Lund University Hospital (Sweden)
- Mark Smolinski
 Global Health and Security Initiative,
 Nuclear Threat Initiative

- Mikhail Paltsev Moscow Medical Academy and TEMPO
- Charles Penn

Syntaxin (UK)

- George Poste Arizona Biodesign Institute, Arizona State University
- Una Ryan

AVANT Immunotherapeutics

- Gurinder Shahi
 Global BioBusiness Initiative at USC (Singapore)
- Rainer Wessel GANYMED Pharmaceuticals (Germany)

ICLS Charter & Membership Obligations

- National and International Laws and Regulations
- Personnel
- Information
- Safe and Secure Operation of Facilities
- Governance of Research

ICLS

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