Dual Use Research Workshop

- 6-8 December 2006

A concept not in the void

Term used in international politics to define items that can be used for peaceful or military (agressive) ways

A child of Cold War innitially associated with nuclear power

Employed for definition and control of items within disarmment and non-proliferation regimes including export/import

Dual Use

- Preserve and protect
- RISKS
- Military application
- Improve quality of life

Wide scope of items: nuclear, chemical, and biological

- Harm and destroy
- BENEFITS
- Industrial/commercial applications
- Create threats

Applies to materials, agents, technology, quipment, research

The dilemma of human action

- Can intention be controlled? Use ?
- Intention and risk-benefit
- Result and deliberate use

- Effectiveness of control measures

Dual use research & tools

- Genetics
- Genomics
- Proteomics
- Nanotechs
- Biorregulators
- Synthetic biology
- Bioprospecting
- Bioinformatics
- High Troughput Screening
- RNAi/siRNA
- Micro-encapsulation
- Fusion proteins

Challenges in research

- When to assess
- How to find right ballance
- Who should decide
- What to do about

Haves and Have nots

Knowledge and information tha can bring benefits will be the priviledge of few. DC are not the frontier of scientific achievements,we depend on new knowledge and technology to solve problems affecting poor populations We have yo put more weight on the benefit side of the ballance

Assymetrical positions

Will we test and adopt solutions for health or other conditions without understanding them? How will industry work in this way ? Can controls be used to justify other kind of Measures? Will development level or political inclinations be taken into account to determine who may have access to knowledge? How to avoid that?

Lesser evil

Controllig scientific activities represents abridging basic rights and fundamental freedoms. Therefore it can not be done for ever or without sanctioning by society. Securityby by itself does not justify secrecy unless submitted by permanent review by Congress, the Courts and free press, in a way that society may influence decisions.

Defence is best deterrence

We know what is to be hopeless. It does not have to lead to desperate decisions. We have to remain rational about our acts. We already do not share the risks proportionally. Same with benefits. We have different perception of threats, and have different needs for information sharing. How can we narrow the gap in defence?

What about scientists

Scientists will feel more the constraints of any imposed control. Freedom is a relative concept, so is responsibility. Many work in poor settings or within plutocratic societies. How can they Respond beyond their own i nterests to the needs of people? How should they work with other actors on reasonable solutions?

Can they realize that they are not alone, they are not the only actors involved or capable of decision? Can they face the Challenges not only individually but collectively? Can they accept that scientific excelence not necessarily means capacity for good judgement in benefit of others?