

## IAP Statement on Biosecurity 07 November 2005

In recent decades scientific research has created new and unexpected knowledge and technologies that offer unprecedented opportunities to improve human and animal health and environmental conditions. But some science and technology can be used for destructive purposes as well as for constructive purposes. Scientists have a special responsibility when it comes to problems of "dual use" and the misuse of science and technology.

The 1972 Biological and Toxin Weapons Convention reinforced the international norm prohibiting biological weapons, stating in its provisions that "each state party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain: microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic or other peaceful purposes." Nevertheless, the threat from biological weapons is again a live issue. This statement presents principles to guide individual scientists and local scientific communities that may wish to define a code of conduct for their own use.

These principles represent fundamental issues that should be taken into account when formulating codes of conduct. They are not intended to be a comprehensive list of considerations.

 Awareness. Scientists have an obligation to do no harm. They should always take into consideration the reasonably foreseeable consequences of their own activities. They should therefore:

- •always bear in mind the potential consequences possibly harmful of their research and recognize that individual good conscience does not justify ignoring the possible misuse of their scientific endeavour;
- •refuse to undertake research that has only harmful consequences for humankind.
- Safety and Security. Scientists working with agents such as pathogenic organisms or dangerous toxins have a responsibility to use good, safe and secure laboratory procedures, whether codified by law or common practice.
- 3. Education and Information. Scientists should be aware of, disseminate information about and teach national and international laws and regulations, as well as policies and principles aimed at preventing the misuse of biological research.
- 4. Accountability. Scientists who become aware of activities that violate the Biological and Toxin Weapons Convention or international customary law should raise their concerns with appropriate people, authorities and agencies.
- 5. Oversight. Scientists with responsibility for

oversight of research or for evaluation of projects or publications should promote adherence to these principles by those under their control, supervision or evaluation and act as role models in this regard.

These principles have been endorsed by the following national academies of science, working through the InterAcademy Panel:

Albanian Academy of Sciences

National Academy of Exact, Physical and Natural

Sciences, Argentina

The National Academy of Sciences of Armenia

Australian Academy of Science Austrian Academy of Sciences Bangladesh Academy of Sciences

National Academy of Sciences of Belarus

The Royal Academies for Science and the Arts of

Belgium

Academy of Sciences and Arts of Bosnia and

Herzegovina

Brazilian Academy of Sciences Bulgarian Academy of Sciences Cameroon Academy of Sciences The Royal Society of Canada Chinese Academy of Sciences Academia Sinica, China Taiwan

Colombian Academy of Exact, Physical and Natural

Sciences

Croatian Academy of Arts and Sciences

**Cuban Academy of Sciences** 

Academy of Sciences of the Czech Republic Royal Danish Academy of Sciences and Letters Academy of Scientific Research and Technology,

Egypt

Estonian Academy of Sciences

The Delegation of the Finnish Academies of Science

and Letters

Académie des Sciences, France

Union of German Academies of Sciences and

**Humanities** 

Academy of Athens, Greece Hungarian Academy of Sciences Indian National Science Academy Indonesian Academy of Sciences

Royal Irish Academy

Israel Academy of Sciences and Humanities

Accademia Nazionale dei Lincei, Italy

Science Council of Japan African Academy of Sciences

Kenya National Academy of Sciences

The National Academy of Sciences, The Republic of

Korea

National Academy of Sciences of the Kyrgyz

Republic

Latvian Academy of Sciences
Lithuanian Academy of Sciences

Macedonian Academy of Sciences and Arts Akademi

Sains Malaysia

Academia Mexicana de Ciencias Academy of the Kingdom of Morocco

The Royal Netherlands Academy of Arts and

Sciences

Academy Council of the Royal Society of New

Zealand

Nigerian Academy of Sciences Pakistan Academy of Sciences

Palestine Academy for Science and Technology

Academia Nacional de Ciencias del Peru National Academy of Science and Technology,

**Philippines** 

Polska Akademia Nauk, Poland Russian Academy of Sciences

Académie des Sciences et Techniques du Sénégal

Serbian Academy of Sciences and Arts Singapore National Academy of Sciences

Slovak Academy of Sciences

Slovenian Academy of Sciences and Arts Academy of Science of South Africa

Royal Academy of Exact, Physical and Natural

Sciences of Spain

Royal Swedish Academy of Sciences Council of the Swiss Scientific Academies

Turkish Academy of Sciences

The Uganda National Academy of Sciences

The Royal Society, UK

**US National Academy of Sciences** 

Academia de Ciencias Físicas, Matemáticas y

Naturales de Venezuela

Zimbabwe Academy of Sciences

TWAS, the Academy of Sciences for the Developing

World

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