

**STATEMENT OF ELISA D. HARRIS**  
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Meeting of Experts for the Biological and Toxin Weapons Convention

August 18-22, 2008

Mr. Chairman, Excellencies, Distinguished Representatives, Ladies and Gentlemen:

Thank you for providing me with an opportunity to address this Meeting of Experts for the Biological and Toxin Weapons Convention, on behalf of the Center for International and Security Studies at Maryland. My remarks today are directly relevant to key elements of the topics under consideration: “national, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins;” and, “oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuses in the context of advances in bioscience and bio-technology research with the potential of use for purposes prohibited by the Convention.” They are a product of a multi-year biosecurity project that I co-direct at the Center for International and Security Studies at Maryland with support from three private U.S. foundations: the Alfred P. Sloan Foundation, the John D. and Catherine T. MacArthur Foundation, and the Ford Foundation.

Over the course of our project, we have held nearly a dozen major workshops in the U.S. to explore both the potential risks posed by advances in the biosciences and the adequacy of existing biosafety and biosecurity measures for reducing those risks. To broaden our understanding of how others view these issues, we also have held five regional workshops outside of the U.S.: in Hungary for Eastern and Western European experts, in Brazil for experts from Latin America and the Caribbean, in Singapore for experts from the Pacific region, in Thailand for experts from Southeast and South Asia and, most recently, in South Africa for experts from sub-Saharan Africa.

It is clear from our meetings as well as others, including the various Intersessional Meetings held by BWC States Parties, that awareness is growing within both the scientific and policy communities that legitimate science *can* create new dangers -- if a cutting-edge experiment has unanticipated results or if findings from work done for benign purposes are misused by someone else. It is also clear that current biosafety and biosecurity measures, which vary greatly within and across countries, do not address this problem, as they are focused largely on preventing exposure to dangerous pathogens or controlling access to them.

Education, awareness raising and codes of conduct can help sensitize individual scientists to the issue of dual-use research. But as experience has shown, such measures alone are not enough. In January 2003, thirty U.S. and international journal editors and scientists agreed in a signed statement to support the development of new processes for considering the security implications of proposed manuscripts and to modify or refrain from publishing papers whose potential harm outweighed their benefits. Unfortunately, the group never developed uniform procedures for reviewing manuscripts or specified the types of information that constituted a potential threat.

In order to manage the risks from advances in the biosciences and biotechnology successfully, prudent *and* effective oversight measures must be put in place. Such measures must protect both the right of scientific investigation *and* the norm against destructive applications of biology. They

must provide reassurance both to scientists that they will not be subject to excessive regulation *and* to society that the power of biology is being used appropriately.

Mr. Chairman, various options for oversight of dual-use work are now being discussed, ranging from minimal self-governance to maximal regulation. Regardless of the precise nature of the oversight system that is ultimately established, **if we are to avoid having to make a false choice between science and security, certain features must be included.**

**First, the activities subject to oversight should be clearly defined, based on specific, objective criteria.** Vague or highly subjective criteria would impede the ability of scientists to determine whether their work falls under the oversight requirements. Such criteria would also lead to inconsistent and inequitable treatment across institutions, thus denying life scientists a level playing field.

**Second, the dual-use review should be carried out by independent experts under a tiered system, in which the level of oversight is determined by the level of risk.** This dual-use review process should build wherever possible on existing review procedures, such as those that already exist in many countries for work with recombinant DNA, animals, or human subjects.

**Third, the risk assessment process should consider not only the potential for intentional misuse or misapplication of results by others but also the possibility of accidental or unintended consequences arising from the actions of scientists themselves.**

**Fourth, the oversight arrangements should apply, without exception, to all relevant research activities, whether government, private sector, or academic.** Comprehensiveness of scope is essential for the legitimacy and effectiveness of any oversight process.

**Fifth, the oversight arrangements should be embodied in mandatory regulations not voluntary guidelines.** Regulations provide a much stronger basis than guidelines for encouraging and ensuring compliance.

**Finally, any oversight arrangements for dual-use biotechnology would need to be harmonized across countries, regions and internationally.** Work with potentially destructive consequences is taking place in laboratories throughout the world. Harmonization is required both to reduce biological risks effectively and to ensure equal treatment across nations.

Mr. Chairman, this Meeting of Experts is to discuss and promote common understanding and effective action to improve biosafety and biosecurity and to prevent the misuse of advances in biotechnology for purposes prohibited by the Convention. A dual-use oversight arrangement with the features I have described would help achieve these goals. I respectfully recommend that the Meeting of Experts include among its oversight recommendations the six key points detailed here.

Thank you, Mr. Chairman and Distinguished Representatives.