## Global Awareness-Raising and Education for Biosafety and Biosecurity: A Status Report

At the December 2008 Meeting of States Parties to the Biological and Toxin Weapons Convention the final report stated in regard to education that:

"State Parties recognized the importance of ensuring that those working in the biological sciences are aware of their obligations under the Convention and relevant national legislation and guidelines, have a clear understanding of the content, purpose and foreseeable social, environmental, health and security consequences of their activities, and are encouraged to take an active role in addressing the threats posed by the potential misuse of biological agents and toxins as weapons, including for bioterrorism..."

Unfortunately, despite similar sentiments having been expressed in Final Declarations of the Five Yearly Review Conferences of the Convention since 1986, statements by States Parties and academic research has shown that most practicing life scientists have very limited awareness of such issues.

Surveys carried out in Europe, and Asia have shown that one probable reason for this lack of awareness is that such material is not often covered in the University education of life scientists. Therefore States Parties to the Biological and Toxin Weapons Convention also noted in their 2008 final report that:

"...formal requirements for seminars, modules or courses, including possible mandatory components, in relevant scientific and engineering training programmes and continuing professional education could assist in raising awareness and in implementing the Convention."

This raises the interesting question of how life scientists are to include such material into their University courses if they have so little knowledge of such issues of biosafety and biosecurity.

Therefore, after briefly reviewing what has been discovered about the level of awareness of life scientists around the world, the paper outlines the strategy we have followed in surveying educational provision in biosafety, biosecurity and bioethics in Universities, contacting lecturers to ascertain the reasons for our findings and the facilitation the setting up national and regional networks. The paper then goes on to describe how we built a freely-available internet-based education module resource to assist lecturers who wished to incorporate material on biosecurity (broadly understood) into their courses and our current work on a train-the-trainer programme. Finally, the paper sets this work in the context of what we know of other educational initiatives and the possibility of the development of best practice that can be considered at the Seventh Review Conference of the Biological and Toxin Weapons Convention in 2013.