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The role of export controls in regulating biotechnology

Biotechnology has the ability to improve health with pharmaceuticals, improve agricultural crops, improve the environment with new biofuels by reducing greenhouse gas emissions and improve crop insect resistance. Biotechnology is dual use technology because it can be used for legitimate manufacturing of pharmaceuticals and used for production of bioweapons. Civilian uses would include manufacturing of medicines and industrial chemicals. The same equipment and technology could also be used to manufacture chemical or biological weapons. Therefore, biotechnology poses a challenge because of its dual nature. To prevent misuse of biotechnology, many countries use export control or strategic trade to promote non-proliferation and as a deterrent to illicit use by terrorists. This is a means of controlling technology, manufacturing or processing equipment, chemicals and biological agents that may be used to manufacture chemical weapons or bioweapons. Export control is one of many tools to promote non-proliferation among countries and to prevent misuse of controlled technology, equipment, chemicals or biological agents. Many countries are members of multilateral regimes such as the Wassenaar Arrangement, Missile Technology Control Regime, Nuclear Suppliers Group and the Australia Group. In the case of biotechnology, the Australia Group maintains a list of controlled technology, software and commodities related to biotechnology and chemical processing. The US government regulates the transfer of controlled commodities and technology, identical to the Australia Group List. This talk will explain the particulars of the control list and how each country deters the illicit transfer of important equipment and technology to make weapons of mass destruction (WMD).

Biography

Betty Lee has completed her PhD at Dartmouth Medical School, USA; MS in Clinical Chemistry at the University of Windsor, Canada and MS in Biochemistry at LSU Medical Center, USA. She has completed her Postdoctoral training at the National Institutes of Health, USA. She currently works as a Licensing Officer with the US government. She educates industries and academia about the export administration regulations (EAR) and participates in outreach. In addition, she has participated in the policy review of the executive order entitled, "Optimizing the security of biological select agents and toxins in the United States", signed by American President, Obama on July 2nd, 2010.

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