

# **Biological Threat Prevention - Approaches** for Increased International Co-operation

Dr. Wendy E. M. Crocker

International Science & Technology Center, Krasnoproletarskaya 32-34, PO Box 20, 127473 Moscow, Russia. crocker@istc.ru; www.istc.ru

### **About ISTC**

The International Science and Technology Center (ISTC) is an intergovernmental organization connecting scientists from Russia, Georgia and other countries of the Commonwealth of Independent States (CIS) with their peers and research organizations in Canada, EU, Japan, Republic of Korea, Norway and the United States.

ISTC facilitates international science projects and assists the global scientific and business community to source and engage with Russian and CIS institutes that develop or possess an excellence of scientific know-how.

# Science and Technology in Prevention of Biological Threats

This Targeted Initiative focuses on selected pathogens of concern and infectious diseases to foster development of:

- Improved Detection
- •Improved Containment
- •Emergency Response Measures

International projects and workshops in biothreat prevention:

- •Foster improved coordination
- ·Strengthening the scientific base
- ·Enable enhanced international engagement

# Workshops

# Conferences



Example: Prof. Firuza Nasyrova and Prof. Astghik Pepoyan (Tajikistan and Armenia delegates of steering committee of the Targetted Initiative Science and Technology in the Prevention of Biological Threats) with Robert Griffin Animal and Public Health Inspection Service (APHIS)/USDA attending the Conference Global Biosecurity 2010 Held: February 28<sup>th</sup> -March 3<sup>rd</sup> 2010, Brisbane, Australia

Example: Workshop Biological Threat Prevention – The Global Food Supply Chain Held: September 8-10, 2010, Ottawa, Canada Organised by ISTC and CFIA (Canadian Food Inspection Agency. Supported by Global Partner ship Program Canada

### Results:

Improved trust;
Improved Communication;
Improved Knowledge
Transfer;
Improved International
Interaction

## **Training**



Example: Training run by TEMPO (Non Commercial Partnership "Center of Modern Medical Technology" Technology, Education, Marketing, Production and Optimization) supported by Global Partnership Program, Canada

# Call for Proposals

Supported by:

Global Partnership Program, Canada; Japanese Ministry of Foreign Affairs; U.S. State Dept. U.S. Dept. of Energy;

Recipients: Armenia, Georgia, Kazakhstan, Kyrgyzstan and Tajikistan

Steering committees from both supporters and recipients selected the following Key Foci:

- a) Examination of field deployable equipment and tools, from the perspective of ease of use, ruggedness, shelf-life, availability of reagents, requirements for peripheral support/equipment (cost-benefit analysis)
- b) Application of nanotechnology and novel techniques for the rapid, specific and sensitive detection of biothreat agents
- c) Development of novel technologies to identify, at the Family or Genus level, the pathogenic agents that cannot be identified by ordinary or common methods.
- d) Detection and monitoring pathogenic agents from environmental samples taken from soil and water.

### Collaboration

Example: Concept development of international Collaborative project entitled "The Great Silk Road – as a Target for Biological Threats of the Global Food Supply Chain" involving animal, plant and medical agencies looking at risk assessment and mitigation in the food supply with collaboration from scientists based in Tajikistan, Kyrgyzstan and Armenia working with Canadian Food Inspection Agency, Global Partnership Program Canada and U.S. Dept. of Energy





















