

APR12-2012-000231

Abstract for an Invited Paper  
for the APR12 Meeting of  
the American Physical Society

**Joseph A. Burton Forum Award Lecture: Managing Nuclear and Biological Risks: Building Resilience through International Cooperation**

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International technical cooperation has long been an important nonproliferation strategy, especially since the 1990s when cooperative threat reduction (CTR) to prevent theft or illicit transfer of nuclear weapons, material and expertise in the former Soviet Union became a keystone of U.S. policy. The CTR approach expanded to include engagement with scientists and engineers with expertise relevant to biological and chemical weapons, and continued in the 2000s with efforts in Iraq and Libya, and cooperation with a wide range of countries on export control and nuclear and biological security. In general, the goal of such efforts has been to prevent proliferation or WMD terrorism. In most cases, the United States (or the West) defines the threat, and then funds partner countries to implement solutions. This presentation will argue that the future requires a new approach. Nuclear capabilities are more widely available than ever before, repercussions of the A.Q. Khan network continue to unfurl, and countries such as the DPRK engage in illicit cooperation. In addition, there has been a global boom in biotechnology with many nations, particularly across South and East Asia, investing in the biotech industry as a source of fuels, food, and materials for their rapidly expanding populations. Compared to the 1990s, today's threat is more diffuse, and the line between legitimate and illegitimate technical capability is no longer so clear. In addition, the West has many fewer resources to invest due to the global economic downturn. In this environment, full commitment of all countries that benefit from nuclear and biological advances will be required to assure the safety and security of all. Technical cooperation can continue to play an important role, but with some significant changes: First, challenges should be defined from a local perspective to ensure full commitment and participation. Second, the goal of cooperation should shift from preventing specific threats to building general capabilities to respond to a broad range of challenges as they arise. Finally, the funding model for technical cooperation should move from contractual arrangements to mutual investment and partnership, with regional approaches encouraged to add credibility, increase available resources, and help to ensure broad support.