

The Future of Biodetection Systems Workshop

Workshop Overview

As the emergence of natural disease, the threat of bio-terror and the use of industrial facilities for non-peaceful purposes increases, our ability to monitor these threats is critical. Maintaining public health and national security requires the implementation of the best scientific and technological solutions possible. Key to this objective will be developing strategic investments in biodetection technology development.

The principle objective for this workshop is to develop a vision of the future of biodetection for the national security community by understanding the status of current science and technology in this area and developing an analysis of the gaps that need to be filled through strategic and targeted investments.

Through a workshop style program that brings together industry, academia, national labs, and federal agency personnel in an interactive process, participants will develop a roadmap for research and development investment in biodetection. These R&D initiatives will address areas of sampling technologies, DNA-based detection technologies, protein-based detection technologies, transducers, spectroscopy-based technologies, and systems integration.

The workshop's invited speakers will initiate the discussion by reviewing the science and technology in each one of the specified areas; providing an understanding of the challenges and gaps; and initiating a vision as to where the technology will be in 5-10 years with appropriate levels of R&D investments. Workshop participants will breakout into small groups each afternoon to further develop these areas and will report back to the main session on their outcomes.

Through this arrangement, as well as the poster session on Tuesday evening and the numerous opportunities for discussion added to the schedule, this workshop will allow participants to thoroughly explore opportunities for growth in the biodetection arena.