FY25 Training Schedule

Foundations March 3- 14 July 7- 18

Advanced Techniques March 17 - 28 July 21 - August 1

<u>Managers</u> November 12 - 14 January 7- 9 April 8 - 10 June 24 - 26



USAMRIIDs MISSION: To provide leading edge medical capabilities to deter and defend against current and emerging biological threat agents.



Fort Detrick is located in Frederick, MD, approximately 48 miles northwest of Washington, D.C. and 54 miles west of Baltimore, MD. There are three major airports that service the metropolitan area and provide access to Fort Detrick:

Dulles International Baltimore- Washington International Reagan International

FIBWA

Field Identification of Biological Warfare Agents



1425 Porter Street Fort Detrick, MD 21702

Phone: (301) 619-8656 / 4173

usamriid.health.mil/index.cfm/ training/fibwa

NOTE: Any reference to specific instruments, manufacturers, or processes, does not imply endorsement by USAMRIID, or the US Army







In the late 1990's, development and deployment of advanced biological warfare (BW) agent diagnostic and detection assays required the development of a program to train laboratory personnel to perform the complex, specialized tasks required for the new assays. In 2012 the mission expanded from just BW detection to a broader full range of threats, including a terrorist attack involving a biological agent, the spread of infectious diseases, and food-borne illnesses, now collectively known as bio-surveillance (BSV).

USAMRIID's Field Identification of Biological Warfare Agents (FIBWA) programs provide foundational and advanced training to support both the traditional BW and broader scope BSV missions that are of interest to the Department of Defense, Federal and State Agencies and US foreign partners. FIBWA trains attendees to set-up, maintain, and operate deployable laboratories under field conditions for both BW and BSV missions. The courses offer training in the most advanced technologies as well as the concepts of operations that are needed for effective diagnostic/detection missions. Training provided includes operational biosafety and in-depth background knowledge for mission success in austere or challenging environments. The FIBWA courses focus on an integrated application of multiple technologies as well as in depth laboratory knowledge for timely, high-confidence solutions.

Equipment and technology are largely integrated with the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD). Concepts of Operations and reagents are continually evaluated and transitioned to the field and into the training programs to ensure all FIBWA courses remain relevant and on the "Cutting Edge" of science.

The FIBWA program consists of five different resident core courses offered throughout the year:

- Manager's Course
- NGBCST

- Special Interest Training
- Foundations
- Advanced Techniques

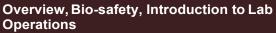
The **FIBWA Manager's Course** is a three-day course designed to introduce leaders to the management of BW agent identification laboratories. Covering common operation concerns, theater neighbors, troubleshooting and integrating results from different testing modalities as well as a hands-on laboratory for familiarity.

The **FIBWA NGB CST Course** is provided exclusively for the National Guard Bureau Civil Support Teams (CST). The course is tailored to the mission specific needs of each individual CST. The course consists of two weeks of CST specific instruction culminating in an independent STX.

FIBWA Special Interest Training courses are adapted to a customer's specific requirements. Courses can range from days to weeks depending on the breadth of information needed and any requirements for certification. Training on newly fielded systems and technologies, laboratory operations and process validations or competency assessments are the usual focus.

FIBWA Foundations is a two week course aimed at providing attendees with an introduction or review of the lab science and skills needed to master more advanced techniques commonly used for BW agent detection and identification. This course is aimed at individuals who need refresher training or have not had in-depth training in microbiological processes.

FIBWA Advanced Techniques is a two week aimed at providing attendees with advanced laboratory knowledge and skills required to independently perform highly complex testing for BW detection and identification. An STX provides an opportunity for attendees to independently exercise their training with real-world scenarios to challenge and reinforce their understanding, critical decision making and laboratory skills.



- Brief history of BioWarfare
- Lab concepts
- Current techniques
- Lab operations in a field environment
- Fundamentals of bio-safety
- Lab skills overview

Nucleic Acid Extraction polymerase reaction (PCR):

- Theory and practice of detecting agents
- DNA & RNA extraction protocols
- Operation and maintenance of various PCR instruments
- Data interpretation, troubleshooting and result confidence

Electrochemiluminescence (ECL):

- Theory and practice of detecting agents (bacteria, virus, and toxins) utilizing immunoassay technology
- Review of protocols for major threat agents
- Preparation of a variety of sample matrices
- Operation of various immunochemistry analyzers
- Interpretation of results

Field Operations Discussions:

- Operational and regulatory issues
- The decision-making process
- Long-range support
- Laboratory design and sample flow
- Tabletop exercises

Situational Training Exercises:

- Set up and operate a lab under field conditions
- Problem solving
- Demonstrate an understanding of the Concept of Operations
- Formative and summative evaluations

