## **Detection Systems:**

**DNA** detection using real-time PCR

384-Well plate format for high throughput

**Triplicate Testing to** increase confidence

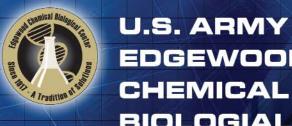


ABI 7900



**BV M8 (Electrochemiluminescence** Assay)

The M8 utilizes BV's patented ECL immunoassay which allows for processing of 96 samples in 20 minutes, much quicker than traditional ELISA's.



**EDGEWOOD** CHEMICAL BIOLOGIAL CENTER

For more information contact:

**Technical Contact:** 

Ray Mastnjak **AMSRD-ECB-CB APG Edgewood Area** Maryland, 21010-5424 410-436-4735

**Business Contact:** 

**Steve Norman AMSRD-ECB-CB-CM APG Edgewood Area** Maryland, 21010-5424 410-436-8428



HIGH THROUGHPUT MOBILE BIOMONITORING INITIATIVE



## **Equipment:**

BIOMEK FX Robotic Lab Automation ABI 7900HT PCR (DNA Analysis)

BV M8 (Electrochemiluminescence Assay)
Incubator

**Autoclave** 

Class II Biosafety Cabinet (6 foot)

Chemical Glove Box (4 foot, interlocked doors)

**CBR filtration System** 

30 KW Diesel Generator

Sample Pass Through Port

Sample Refrigerator / Freezer



300 Samples Per Day

7 Target Bio Warfare Agents

Additional target development

Upgradeable to BSL-3 / BSL-4 for Emergency Situations

THROUGH THREE ARRESTS

Surge Capacity



**Robotic Sample Prep** 

Analysis via 2 technologies (Polymerase Chain Reaction (PCR), Electrochemiluminescence (ECL) )

Classical Microbiology

Operated by 2 People / Shift (Technicians/ Scientists



**Microscope** 



**Biosafety Cabinet** 

## Mobile capability:

Deployable via F-450 Truck or via Military Air Independent Electrical Power Shore Electrical Power Connection Enhanced Climate Control



**STORM Trailer** 



**Biomek FX** 

Biomek FX performs DNA extraction on environmental sample, and uses purified DNA to prepare PCR assay. Prepared assays are then transported from the Biomek FX to their respective analyzers.



Pass Through and Glove Box