

**UNCLASSIFIED**

**Exhibit R-2A, RDT&E Project Justification:** PB 2012 Chemical and Biological Defense Program

**DATE:** February 2011

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	<b>R-1 ITEM NOMENCLATURE</b> PE 0602384BP: CHEMICAL/BIOLOGICAL DEFENSE (APPLIED RESEARCH)	<b>PROJECT</b> C12: CONGRESSIONAL INTEREST ITEMS (APPLIED RESEARCH)
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**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2010	FY 2011
<b>FY 2010 Accomplishments:</b> Developed humanized monoclonal antibodies for passive immunization of military or civilian individuals capable of neutralizing botulinum toxins BoNT/A, BoNT/B, and BoNT/E.		
<b>Congressional Add:</b> Countermeasures to Chemical and Biological Controls-Rapid Response	2.788	-
<b>FY 2010 Accomplishments:</b> Developed new, low cost, detection technologies with a high level of differentiation that can be deployed independently or integrated into existing and future CBRN reconnaissance systems.		
<b>Congressional Add:</b> MEMS Sensors for Real-time Sensing of Weaponized Pathogens	1.992	-
<b>FY 2010 Accomplishments:</b> Developed wearable, diamond-based MEMS biosensors for first responders or Warfighters that detect weaponized pathogens in real-time.		
<b>Congressional Add:</b> Mobile Rapid Response Prototype	2.390	-
<b>FY 2010 Accomplishments:</b> Developed prototype capability to incorporate commercial "best in class" components, processes, tools, techniques, and training to ensure that responders will be able to provide appropriate treatment, diagnose disease with forward-deployable assays, and ultimately minimize the toll on human life.		
<b>Congressional Adds Subtotals</b>	27.186	-

**C. Other Program Funding Summary (\$ in Millions)**

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• C11: CONGRESSIONAL INTEREST ITEMS (BASIC RESEARCH)	7.968	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	7.968
• C13: CONGRESSIONAL INTEREST ITEMS (ATD)	30.172	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	30.172
<b>D. Acquisition Strategy</b>											
N/A											
<b>E. Performance Metrics</b>											
N/A											