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Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Chemical and Biological Defense Program **Date:** March 2024

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605502BP / <i>Small Business Innovative Research - Chemical Biological Def</i>
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	0.000	26.487	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.487
SB6: <i>Small Business Innovative Research (Mgmt Support)</i>	-	26.487	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.487

A. Mission Description and Budget Item Justification

The overall objective of the Chemical Biological Defense (CBD) Small Business Innovative Research (SBIR) program is to improve the transition or transfer of innovative CBD technologies between Department of Defense (DoD) components and the private sector for mutual benefit. The CBD SBIR program includes those technology efforts that maximize a strong defensive posture in a biological or chemical environment using passive and active means as deterrents. These technologies include chemical and biological detection; information assessment, which includes identification, modeling, and intelligence; contamination avoidance; and protection of both individual soldiers and equipment.

B. Program Change Summary (\$ in Millions)

	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>
Previous President's Budget	2.000	0.000	0.000	-	0.000
Current President's Budget	26.487	0.000	0.000	-	0.000
Total Adjustments	24.487	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	24.487	-			
• Other Adjustments	-	-	0.000	-	0.000

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: SB6: *Small Business Innovative Research (Mgmt Support)*

Congressional Add: *Infectious Disease Diagnostics*

	FY 2023	FY 2024
	2.000	-
Congressional Add Subtotals for Project: SB6	2.000	-
Congressional Add Totals for all Projects	2.000	-

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Change Summary Explanation

Funding: FY 2023 (+\$24.487 Million): Funding transferred and applied to Small Business Innovative Research program.

Schedule: N/A

Technical: N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Chemical and Biological Defense Program										Date: March 2024		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605502BP / <i>Small Business Innovative Research - Chemical Biological Def</i>				Project (Number/Name) SB6 / <i>Small Business Innovative Research (Mgmt Support)</i>			
COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
SB6: <i>Small Business Innovative Research (Mgmt Support)</i>	-	26.487	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.487
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Small Business Innovative Research (SBIR) Program is a Congressionally mandated program established to increase the participation of small business in federal research and development (R&D). Currently, each participating Government agency must reserve 3.2% of its extramural R&D for SBIR awards to competing small businesses. The goal of the SBIR Program is to invest in the innovative capabilities of the small business community to help meet Government R&D objectives while allowing small companies to develop technologies and products which they can then commercialize through sales back to the Government or in the private sector.

The Small Business Technology Transfer (STTR) Program like SBIR, is a Government-wide program, mandated by the Small Business Research and Development Enhancement Act of 1992, Public Law (PL) 102-564. STTR was established as a companion program to the SBIR Program and is executed in essentially the same manner; however, there are several distinct differences. The STTR Program provides a mechanism for participation by university, Federally-Funded Research and Development Centers (FFRDCs), and other non-profit research institutions. Specifically, the STTR Program is designed to provide an incentive for small companies and research at academic institutions and non-profit research and development institutions to work together to move emerging technical ideas from the laboratory to the marketplace to foster high-tech economic development and to advance U.S. economic competitiveness. Each STTR proposal must be submitted by a team which includes a small business (as the prime contractor for contracting purposes) and at least one research institution, which have entered into a Cooperative Research and Development Agreement for the purposes of the STTR effort. Furthermore, the project must be divided up such that the small business performs at least 40% of the work and the research institution(s) performs at least 30% of the work. The remainder of the work may be performed by either party or a third party. The budget is separate from the SBIR budget and is significantly smaller (0.45% of the extramural R&D budget vs. 3.2% for the SBIR Program).

The overall objective of the CBD SBIR/STTR program is to improve the transition or transfer of innovative CBD technologies between DoD components and the private sector for mutual benefit. The CBD program includes those technology efforts that maximize a strong defensive posture in a biological or chemical environment using passive and active means as deterrents. These technologies include chemical and biological detection; information assessment, which includes identification, modeling, and intelligence; contamination avoidance; and protection of both individual soldiers and equipment. The executive agent for the SBIR/STTR portion of the CBDP is the Army Research Office-Washington.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2023	FY 2024	FY 2025
Title: 1) ZSBIR	24.487	0.000	0.000
Description: Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR)			
FY 2024 Plans:			

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Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605502BP / <i>Small Business Innovative Research - Chemical Biological Def</i>	Project (Number/Name) SB6 / <i>Small Business Innovative Research (Mgmt Support)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<ul style="list-style-type: none"> - CB Decontamination / CB Detection – Chemical Countermeasures (estimated funding, \$4.0 Million): Blister Chemical Warfare Agent Disclosure Spray System - CB Decontamination / CB Detection – Biological Countermeasures (estimated funding \$2.6M): Decontamination of Open Wounds - CB Detection – Biological Countermeasures (estimated funding, \$2.6 Million): Development of an early-warning biosensor based on the detection of helical structures in biomolecules - CB Detection – Point Detection (estimated funding \$2.6 Million) - CB Protection (estimated funding, \$4.0 Million): Polynomial-Curved Bespoke Prescription Lens for Respiratory Protection - Medical Therapeutics / CB Protection – Biological Countermeasures (estimated funding, \$2.6 Million): Real Time Physiological Status Monitor for MicroClimate Control - CB Protection (estimated funding, \$2.6 Million): Breathable, Non-Fluorinated Chemical Barrier Materials <p>FY 2025 Plans:</p> <ul style="list-style-type: none"> - Medical Pretreatments – (estimated funding, \$2.6 Million) - Medical Diagnostics – (estimated funding, \$2.6 Million) - Medical Therapeutics – Biological Countermeasures (estimated funding, \$4.0 Million) - Medical Therapeutics – Chemical Countermeasures (estimated funding, \$2.6 Million) - Detection – Point Detection (estimated funding, \$4.0 Million) 			
Accomplishments/Planned Programs Subtotals	24.487	0.000	0.000

	FY 2023	FY 2024
Congressional Add: Infectious Disease Diagnostics	2.000	-
FY 2023 Accomplishments: Conducted research in the Technology Area of Infectious Disease and Diagnostics.		
Congressional Adds Subtotals	2.000	-

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
N/A