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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Defense Health Agency **Date:** April 2022

Appropriation/Budget Activity 0130: <i>Defense Health Program I BA 2: RDT&E</i>	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	74.639	8.913	25.090	39.568	0.000	39.568	40.121	41.210	41.436	41.633	Continuing	Continuing
100A: <i>Congressional Special Interests</i>	0.000	0.000	15.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
371: <i>GDF - Basic Operational Medical Research Science</i>	51.415	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
371A: <i>GDF - BOMRS (Combat Casualty Care)</i>	23.224	1.304	1.328	1.356	0.000	1.356	1.381	1.410	1.437	1.466	Continuing	Continuing
371B: <i>GDF - BOMRS (Military Operational Medicine)</i>	0.000	5.498	5.609	5.720	0.000	5.720	5.836	5.953	6.072	6.193	Continuing	Continuing
371E: <i>GDF - BOMRS (Military Infectious Disease)</i>	0.000	2.111	2.154	2.197	0.000	2.197	2.241	2.285	2.331	2.378	Continuing	Continuing
371F: <i>GDF - BOMRS (Defense Research Sciences)</i>	0.000	0.000	0.000	30.295	0.000	30.295	30.663	31.562	31.596	31.596	Continuing	Continuing

Note

n/a

A. Mission Description and Budget Item Justification

Guidance for Development of the Force (GDF) -Basic Medical Research Sciences: This program element (PE) provides support for basic medical research directed toward greater knowledge and understanding of the fundamental principles of science and medicine that are relevant to the improvement of Force Health. Research in this PE is designed to address areas of interest to the Secretary of Defense regarding Service Member Health, capabilities identified through the Joint Capabilities Integration and Development System, and sustainment of DoD and multi-agency priority investments in science, technology, research, and development. GDF basic research (PE 0601117) program development and execution is peer-reviewed and coordinated with all of the Military Services, appropriate Defense agencies or activities and other federal agencies, to include the Department of Veterans Affairs, and the Department of Health and Human Services. Funds in this PE are for basic research that promises to provide important new approaches to complex military medical problems. As the research efforts mature, the most promising efforts will transition to applied research (PE 0602115) or technology development (PE 0603115) funding.

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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	8.913	9.091	39.568	0.000	39.568
Current President's Budget	8.913	25.090	39.568	0.000	39.568
Total Adjustments	0.000	15.999	0.000	0.000	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	15.999			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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

Project: 100A: *Congressional Special Interests*

Congressional Add: *GDF - Restore Core Research Funding Reduction*

Congressional Add Subtotals for Project: 100A

Project: 371F: *GDF - BOMRS (Defense Research Sciences)*

Congressional Add: *Add input*

Congressional Add Subtotals for Project: 371F

Congressional Add Totals for all Projects

	FY 2021	FY 2022
	-	15.999
	-	15.999
	0.000	0.000
	0.000	0.000
	0.000	15.999

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 100A / <i>Congressional Special Interests</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
100A: <i>Congressional Special Interests</i>	0.000	0.000	15.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is program increase due to GDF restoral in the FY22 enacted budget.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - Restore Core Research Funding Reduction	0.000	-	-	-	-
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

Congressional Add: GDF - Restore Core Research Funding Reduction

FY 2022 Plans: This is a program increase due to GDF restoral in the FY22 enacted budget.

	FY 2021	FY 2022
Congressional Adds Subtotals	-	15.999

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

N/A

Remarks

D. Acquisition Strategy

N/A

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371 / <i>GDF - Basic Operational Medical Research Science</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
<i>371: GDF - Basic Operational Medical Research Science</i>	51.415	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration and Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research, and development as stated in the National Defense Strategy, the National Research Action Plan for Improving Access to Mental Health Services for Veterans, Service Members, and Military Families, and the National Strategy for Combating Antibiotic Resistance. This project supports basic research in the following areas:

- Military Infectious Diseases basic research supports development of protection and treatment products for military relevant emerging infectious diseases.
- Military Operational Medicine basic research efforts seek to develop medical countermeasures against operational stressors, prevent musculoskeletal, neurosensory, and psychological injuries during training and operations, and to maximize health, performance and readiness of Service Members.
- Combat Casualty Care efforts are focused on optimizing survival and recovery of injured Service Members across the spectrum of care from point of injury through en route and facility care.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<i>Title:</i> Project 371 GDF – Basic Operational Medical Research Sciences	0.000	-	-	-	-
<i>Description:</i> Provide support for basic medical research directed toward attaining greater knowledge and understanding of fundamental principles of science and medicine relevant to the improvement of medical care in operationally relevant environments.					
Accomplishments/Planned Programs Subtotals	0.000	-	-	-	-

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

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: April 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>				Project (Number/Name) 371A / <i>GDF - BOMRS (Combat Casualty Care)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371A: <i>GDF - BOMRS (Combat Casualty Care)</i>	23.224	1.304	1.328	1.356	0.000	1.356	1.381	1.410	1.437	1.466	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on the enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research and development. This project supports combat casualty care basic research with the goal of optimizing Warfighter survival and recovery from combat-related injury in current and future operational scenarios by driving medical innovation through development of knowledge and materiel solutions for the acute and early management of combat-related trauma, including point of injury, en route, and facility-based care.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Combat Casualty Care	1.304	1.328	1.356	0.000	1.356
Description: Combat Casualty Care basic research activities are focused on pre-hospital tactical combat casualty care (TCCC) toward improved Warfighter survival of casualties with potentially survivable wounds.					
FY 2022 Plans: Conduct combat casualty care-relevant basic research focused on pre-hospital tactical combat casualty care (TCCC), such as defining biological and pathophysiological mechanisms of the acute effects of trauma including that of life threatening external, junctional (arm pit and groin), and internal (abdomen and chest) bleeding; abnormal blood clotting due to excessive blood loss; and compromised breathing due trauma to the thorax or airways.					
FY 2023 Base Plans: Will continue to conduct combat casualty care-relevant basic research focused on TCCC, such as defining biological and pathophysiological mechanisms of the acute effects of trauma including that of life threatening external, junctional (arm pit and groin), and internal (abdomen and chest) bleeding; abnormal blood clotting due to excessive blood loss; and compromised breathing due trauma to the thorax or airways.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371A / <i>GDF - BOMRS (Combat Casualty Care)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Funding change reflects planned lifecycle of this effort. Increase due to inflation.					
Accomplishments/Planned Programs Subtotals	1.304	1.328	1.356	0.000	1.356

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

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency										Date: April 2022		
Appropriation/Budget Activity 0130 / 2					R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>				Project (Number/Name) 371B / <i>GDF - BOMRS (Military Operational Medicine)</i>			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371B: <i>GDF - BOMRS (Military Operational Medicine)</i>	0.000	5.498	5.609	5.720	0.000	5.720	5.836	5.953	6.072	6.193	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on the enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research and development. This project supports military operational medicine basic research with the goal of maximizing the health, readiness, and performance of Service Members and their families by the development of effective biomedical countermeasures against operational stressors, and prevention and treatment physical and psychological injuries during training and operations.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Operational Medicine	5.498	5.609	5.720	0.000	5.720
Description: Military Operational Medicine basic research efforts are focused on increasing fundamental knowledge and understanding to support the development of medical countermeasures in the areas of: musculoskeletal injury prevention and treatment; blunt, blast, accelerative and neurosensory injury; psychological health and resilience; performance in extreme environments; and optimized cognition and fatigue mitigation.					
FY 2022 Plans: Conduct basic research in military operational medicine-relevant areas to include injury prevention and recovery related to blunt, blast, and accelerative injuries, optimized cognition and fatigue management, physiological health and resilience related to musculoskeletal injuries, and performance in extreme environments.					
FY 2023 Base Plans: Continue to conduct basic research with focus on injury prevention and recovery related to blunt, blast, and accelerative injuries; injury prevention and recovery related to musculoskeletal injury; performance nutrition and weight balance; operational systems toxicology for environmental health hazards; and, fatigue, cognitive health and performance.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement:					

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Increase is due to inflation.					
Accomplishments/Planned Programs Subtotals	5.498	5.609	5.720	0.000	5.720

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

N/A

Remarks

n/a

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Defense Health Agency **Date:** April 2022

Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371E / <i>GDF - BOMRS (Military Infectious Disease)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371E: <i>GDF - BOMRS (Military Infectious Disease)</i>	0.000	2.111	2.154	2.197	0.000	2.197	2.241	2.285	2.331	2.378	Continuing	Continuing

A. Mission Description and Budget Item Justification

Basic research described here focuses on the enhancement of knowledge to support capabilities identified through the Joint Capabilities Integration Development System process and sustainment of DoD and multi-agency priority investments in science, technology, research and development. This project supports military infectious diseases basic research toward the goal of preventing and treating infectious disease threats to eliminate their impacts on operational readiness.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Military Infectious Diseases	2.111	2.154	2.197	0.000	2.197
Description: Military infectious diseases basic research activities support efforts in military relevant emerging infectious diseases threats.					
FY 2022 Plans: Conduct basic research in emerging infectious diseases to respond to new and emerging infectious diseases threats and accelerate promising, innovative countermeasures.					
FY 2023 Base Plans: Will continue to conduct basic research in emerging infectious diseases to respond to new and emerging infectious diseases threats and accelerate promising, innovative countermeasures.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Increase due to inflation.					
Accomplishments/Planned Programs Subtotals	2.111	2.154	2.197	0.000	2.197

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

N/A

Remarks

n/a

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D. Acquisition Strategy
N/A

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Appropriation/Budget Activity 0130 / 2	R-1 Program Element (Number/Name) PE 0601117DHA / <i>Basic Operational Medical Research Sciences</i>	Project (Number/Name) 371F / <i>GDF - BOMRS (Defense Research Sciences)</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
371F: <i>GDF - BOMRS (Defense Research Sciences)</i>	0.000	0.000	0.000	30.295	0.000	30.295	30.663	31.562	31.596	31.596	Continuing	Continuing

A. Mission Description and Budget Item Justification

Funding and mission realignment of US Army Medical Research and Development Command transfer to the Defense Health Agency in order to meet Congressional intent as outlined in NDAA 2019 (Section 711) and NDAA 2020 (Section 737) in support of Defense Research Sciences.

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

	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: GDF - BOMRS (Defense Research Sciences)	0.000	0.000	30.295	0.000	30.295
Description: Programmatic transfer in accordance with the 711/737 US Army Medical Research and Development Command transfer to Defense Health Agency in support of Defense Research Sciences from Army PE 0601102A.					
FY 2022 Plans: N/A					
FY 2023 Base Plans: Efforts will focus on Basic Research in support of medical problems related to infectious diseases, operational medicine and combat care.					
FY 2023 OCO Plans: N/A					
FY 2022 to FY 2023 Increase/Decrease Statement: Funding increase for this Project was due to transfer/realignment from Army.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	30.295	0.000	30.295
	FY 2021	FY 2022			
Congressional Add: Add input	0.000	0.000			
FY 2021 Accomplishments: Add input					
FY 2022 Plans: Add input					
Congressional Adds Subtotals	0.000	0.000			

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

N/A

Remarks

D. Acquisition Strategy

N/A