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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Defense Health Program	<b>DATE:</b> March 2013
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APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
0130: <i>Defense Health Program</i> BA 2: <i>RDT&amp;E</i>					PE 0601117HP: <i>Basic Operational Medical Research Sciences</i>							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	1.000	3.038	6.074	-	6.074	11.121	11.131	11.132	11.332	Continuing	Continuing
100A: <i>CSI - Congressional Special Interests</i>	-	1.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
371A: <i>GDF-Basic Operational Medical Research Sciences</i>	-	0.000	3.038	6.074	-	6.074	11.121	11.131	11.132	11.332	Continuing	Continuing

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**A. Mission Description and Budget Item Justification**

Guidance for Development of the Force-Basic Operational 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 Protection. Research in this PE is designed to address the following: areas of interest to the Secretary of Defense regarding Wounded Warriors, capabilities identified through the Joint Capabilities Integration and Development System (JCIDS), and the strategy and initiatives described in the Quadrennial Defense Review (QDR). Program development 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, the Department of Health and Human Services, and the Department of Homeland Security. This coordination occurs through the planning and execution activities of the Joint Program Committees, established for the Defense Health Program Research, Development, Test and Evaluation (RDT&E) funding. Research supported by this PE includes polytrauma and blast injury, diagnosis and treatment of brain injury, and psychological health and well-being for military personnel and families. 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 0602115HP) or technology development (0603115HP) funding.

The FY12 DHP Congressional Special Interests (CSI) funded peer-reviewed directed basic research for Hemorrhage (bleeding) Control. Because of the CSI annual structure, out-year funding is not programmed.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Defense Health Program	<b>DATE:</b> March 2013
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0130: <i>Defense Health Program</i> BA 2: <i>RDT&amp;E</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0601117HP: <i>Basic Operational Medical Research Sciences</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO</b>	<b>FY 2014 Total</b>
Previous President's Budget	0.975	3.038	6.074	-	6.074
Current President's Budget	1.000	3.038	6.074	-	6.074
Total Adjustments	0.025	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	0.025	-			

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

**Project:** 100A: *CSI - Congressional Special Interests*

Congressional Add: 436A - *Peer-Reviewed Hemorrhage Control Research*

Congressional Add Subtotals for Project: 100A

Congressional Add Totals for all Projects

<b>FY 2012</b>	<b>FY 2013</b>
1.000	-
1.000	0.000
1.000	0.000

**Change Summary Explanation**

FY 2012: Restore FY 2013 President's Budget decrease to Congressional Special Interest from DHP RDT&E PE 0605502-Small Business Innovation Research (SBIR) Program (-\$0.025 million) to DHP RDT&E, PE 0601117- Basic Operational Medical Research Sciences (+\$0.025 million).

FY 2013: No Change

FY 2014: No Change

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Health Program										DATE: March 2013		
APPROPRIATION/BUDGET ACTIVITY 0130: Defense Health Program BA 2: RDT&E					R-1 ITEM NOMENCLATURE PE 0601117HP: Basic Operational Medical Research Sciences				PROJECT 100A: CSI - Congressional Special Interests			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
100A: CSI - Congressional Special Interests	-	1.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012 <sup>##</sup> The FY 2014 OCO Request will be submitted at a later date												
<b>A. Mission Description and Budget Item Justification</b> The FY12 DHP Congressional Special Interests (CSI) funded peer-reviewed directed research for Hemorrhage Control. Because of the CSI annual structure, out-year funding is not programmed.												
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>								<b>FY 2012</b>	<b>FY 2013</b>			
<b>Congressional Add:</b> 436A - Peer-Reviewed Hemorrhage Control Research  <b>FY 2012 Accomplishments:</b> The CSI for Peer-Reviewed Hemorrhage Control Research seeks solutions to the problem of impaired clotting caused by severe trauma. Approximately 38% of severe combat trauma patients suffer unexplained heavy and prolonged bleeding after injury which makes hemorrhage (bleeding) control extremely difficult. These funds supplement the basic research efforts currently underway to better understand the related fundamental mechanisms. Solutions are also being sought to develop diagnostics or treatments for this life-threatening condition.								1.000	-			
<b>Congressional Adds Subtotals</b>								1.000	0.000			
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A												
<b>Remarks</b>  												
<b>D. Acquisition Strategy</b> N/A												
<b>E. Performance Metrics</b> N/A												

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APPROPRIATION/BUDGET ACTIVITY 0130: Defense Health Program BA 2: RDT&E					R-1 ITEM NOMENCLATURE PE 0601117HP: Basic Operational Medical Research Sciences				PROJECT 371A: GDF-Basic Operational Medical Research Sciences			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
371A: GDF-Basic Operational Medical Research Sciences	-	0.000	3.038	6.074	-	6.074	11.121	11.131	11.132	11.332	Continuing	Continuing
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
Guidance for Development of the Force-Basic Operational Medical Research Sciences: Basic research described here will be focused on enhancement of knowledge to support capabilities identified through the JCIDS process and the strategy and initiatives addressed in the QDR. Within this Program Element, research will be conducted in the general categories of polytrauma and blast injury, diagnosis and treatment of brain injury, and psychological health and wellbeing for military personnel and families. Polytrauma and blast injury efforts will focus on fundamental mechanisms to support forward surgical and intensive critical care, treatment for extremity trauma, enroute care, devices for hemorrhage (bleeding) control, military medical photonics (interdisciplinary branch of medicine that involves the study and application of light with respect to health and disease), blast injury models and performance standards for protections systems, and diagnostics and metrics for hearing loss and protection. Traumatic brain injury (TBI) efforts will focus on fundamental mechanisms to support far-forward deployable technologies for diagnosis of mild TBI, identification and characterization of mechanisms of TBI, and improved therapeutics for TBI. Psychological health efforts will focus on characterization and identification of family and community health and resilience, diagnosis of deployment-related psychological health problems, and causes of post traumatic stress disorder.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014	
Title: Project 371 GDF – Basic Operational Medical Research Sciences									0.000	3.038	6.074	
Description: 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.												
FY 2012 Accomplishments: No funding programmed.												
FY 2013 Plans: Combat casualty care research is conducting studies to understand the fundamental mechanisms in support of diagnosis and treatment of excessive hemorrhage (bleeding) resulting from severe trauma.												
FY 2014 Plans: Military operational medicine research will conduct studies to understand fundamental effects of exposure to blast, which will inform development of performance standards for protection systems. Research efforts will also: identify strategies for												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Defense Health Program		<b>DATE:</b> March 2013	
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
diagnostics and metrics for hearing loss and protection; identify new candidate diagnostics for deployment-related psychological health problems, including health risk behaviors (accidents, tobacco use, etc.), alcohol misuse and substance abuse; formulate new concepts in support of diagnosis and treatment of post-traumatic stress disorder; and, assess how single and multiple deployments affect military family and community health, well-being and resilience.			
<b>Accomplishments/Planned Programs Subtotals</b>		0.000	3.038
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b> Not required for basic science.			
<b>E. Performance Metrics</b> Principal investigators will participate in In-Progress Reviews, high-level DHP-sponsored Review & Analysis meetings, submit quarterly and annual status reports, and are subjected to Program Sponsor Representative progress reviews to ensure that milestones are being met and deliverables will be transitioned on schedule. The benchmark performance metric for transition of research conducted with Basic Medical Research Sciences funding will be the attainment of a maturity level that is typical of Technology Readiness Level 2 or the equivalent for knowledge products.			