

Defense Health Program
 Fiscal Year (FY) 2010 Budget Estimates
 Exhibit R-2, DHP RDT&E Budget Item Justification

Appropriation/Budget Activity
 Defense Health Program/BA: 2

DATE: May 2009
 R1 Item Nomenclature: 5
 Medical Advanced Technology (AFRRI)
 0603002HP

COST: (Dollars in Millions)

	2008 Actual	2009 Estimate	2010 Estimate
Total PE 0603002	0.797	0.815	0.737
Biodosimetry (USUHS)	0.476	0.488	0.442
Radiation Countermeasures (USUHS)	0.321	0.327	0.295

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: For the Uniformed Services University of the Health Sciences (USUHS), Armed Forces Radiobiology Research Institute (AFRRI), the first two programs support applied research for advanced development of biomedical strategies to prevent, treat and assess health consequences from exposure to ionizing radiation. It capitalizes on findings under PE 0602787HP, Medical Technology, and from industry and academia to advance novel medical countermeasures into and through pre-clinical studies toward newly licensed products. Program objectives focus on mitigating the health consequences from exposures to ionizing radiation that represent the highest probable threat to US forces under current tactical, humanitarian and counter terrorism mission environments. Findings from basic and developmental research are integrated into highly focused advanced technology development studies to produce the following: (1) protective and therapeutic strategies; (2) novel biological markers and delivery platforms for rapid, field-based individual dose assessment; and (3) experimental data needed to build accurate models for predicting casualties from complex injuries involving radiation and other battlefield insults. The Armed Forces Radiobiology Research Institute (AFRRI), because of its multidisciplinary staff and exceptional laboratory and radiation facilities, is uniquely positioned to execute the program as prescribed by its mission.

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B. PROGRAM CHANGE SUMMARY:

	<u>2008</u>	<u>2009</u>	<u>2010</u>
FY10 Budget Estimate RDT&E	0.797	0.836	0.737
SBIR	0.000	-0.021	0.000
FY10 Budget Submission RDT&E	0.797	0.815	0.737

PROGRAM CHANGE SUMMARY EXPLANATION:

FY08:
 - No Change

FY09:
 - SBIR Transfer from DHP RDT&E Program Element 0603002-Advanced Technology (AFRRI) to DHP RDT&E Program Element 0605502-Small Business Innovation Research (SBIR) (\$0.021 million) for proper execution

FY10:
 - No Change

C. OTHER PROGRAM FUNDING SUMMARY: None.

D. ACQUISITION STRATEGY: Not Required.

E. PERFORMANCE METRICS:

Accomplishments: 1) obtained "investigational new drug" status for a therapeutic agent to mitigate radiation injury and 2) released PC-based software tool for biodosimetric assessment (BAT).

By FY 2010 transition a total of 4 new drugs for FDA approval for treatment of radiation injury.