

Defense Health Program
 Fiscal Year (FY) 2011 Budget Estimates
 Exhibit R-2, DHP RDT&E Budget Item Justification

Appropriation/Budget Activity
 Defense Health Program/BA: 2

DATE: February 2010
 R1 Item Nomenclature: 5
 Medical Advanced Technology (AFRRI)
 0603002HP

COST: (Dollars in Millions)

	2009 Actual	2010 Estimate	2011 Estimate	2012 Estimate	2013 Estimate	2014 Estimate	2015 Estimate
Total PE 0603002	0.736	0.719	0.752	0.767	0.783	0.799	0.815
Biodosimetry (USUHS)	0.441	0.431	0.451	0.460	0.470	0.480	0.489
Radiation Countermeasures (USUHS)	0.295	0.288	0.301	0.307	0.313	0.319	0.326

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: For the Uniformed Services University of the Health Sciences (USUHS), Armed Forces Radiobiology Research Institute (AFRRI), the programs support applied research for advanced development of biomedical strategies to prevent, treat and assess health consequences from exposure to ionizing radiation. They capitalize 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 in 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; (3) experimental data needed to build accurate models for predicting casualties from complex injuries involving radiation and other battlefield insults; and (4) methodologies for neutralization of bio-threat agents using ionizing radiation. 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>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
FY11 Budget Estimate RDT&E	0.736	0.737	0.752	0.767
SBIR	0.000	-0.018	0.000	0.000
FY11 Budget Submission RDT&E	0.736	0.719	0.752	0.767

PROGRAM CHANGE SUMMARY EXPLANATION:

FY09:
No Change.

FY10:
SBIR Transfer from DHP RDT&E Program Element 0603002-Advanced Technology (AFRRI) to DHP RDT&E Program Element 0605502-Small Business Innovation Research (SBIR) (-\$0.018 million).

FY11:
No Change.

FY12:
No Change.

C. OTHER PROGRAM FUNDING SUMMARY: None.

D. ACQUISITION STRATEGY: Not Required.

E. PERFORMANCE METRICS:

By FY 2010 transition up to 4 new drugs for FDA approval for treatment of radiation injury.

By FY 2011 provide new/advanced forward-fieldable biodosimetric tools.

By FY 2012 provide validated automated cytogenetic biodosimetric assays.