

UNCLASSIFIED

PE NUMBER: 0601103F
 PE TITLE: University Research Initiatives

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2004
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BUDGET ACTIVITY 01 Basic Research	PE NUMBER AND TITLE 0601103F University Research Initiatives
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Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	0.000	106.313	115.865	110.092	110.273	110.924	113.020	0.000	0.000
5094 University Research Initiatives	0.000	106.313	115.865	110.092	110.273	110.924	113.020	0.000	0.000

Note: In FY 2004, the Office of the Secretary of Defense devolved a portion of the Department of Defense University Research Initiative program to this program in the Air Force.

(U) A. Mission Description and Budget Item Justification

This program supports defense-related basic research in a wide range of scientific and engineering disciplines pertinent to maintaining U.S. military technology superiority; enhances and promotes the education of U.S. scientists and engineers in disciplines critical to maintaining, advancing, and enabling future U.S. defense technologies; and assists universities in establishing superior instrumentation capabilities needed to improve the quality of defense-related research and education. A fundamental component of this program is the recognition that future technologies and technology exploitations require highly coordinated and concerted multi- and interdisciplinary efforts.

(U) B. Program Change Summary (\$ in Millions)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous President's Budget	0.000	105.224	116.169
(U) Current PBR/President's Budget	0.000	106.313	115.865
(U) Total Adjustments	0.000	1.089	
(U) Congressional Program Reductions			
Congressional Rescissions		-0.911	
Congressional Increases		2.000	
Reprogrammings			
SBIR/STTR Transfer			
(U) <u>Significant Program Changes:</u>			
Not Applicable.			

Exhibit R-2a, RDT&E Project Justification

DATE
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BUDGET ACTIVITY 01 Basic Research				PE NUMBER AND TITLE 0601103F University Research Initiatives			PROJECT NUMBER AND TITLE 5094 University Research Initiatives		
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
5094 University Research Initiatives	0.000	106.313	115.865	110.092	110.273	110.924	113.020	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

Note: In FY 2004, the Office of the Secretary of Defense devolved a portion of the Department of Defense University Research Initiative program to this program in the Air Force.

(U) A. Mission Description and Budget Item Justification

This program supports defense-related basic research in a wide range of scientific and engineering disciplines pertinent to maintaining U.S. military technology superiority; enhances and promotes the education of U.S. scientists and engineers in disciplines critical to maintaining, advancing, and enabling future U.S. defense technologies; and assists universities in establishing superior instrumentation capabilities needed to improve the quality of defense-related research and education. A fundamental component of this program is the recognition that future technologies and technology exploitations require highly coordinated and concerted multi- and interdisciplinary efforts.

(U) B. Accomplishments/Planned Program (\$ in Millions)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) MAJOR THRUST: Promote fundamental, inter- and multi-disciplinary science and engineering research projects.	0.000	52.548	62.198
(U) In FY 2003: Not Applicable.			
(U) In FY 2004: Issue competitive research awards to universities focused on enabling Air Force-related technologies usually not achievable through single investigator awards. Topics will be selected in scientific research areas related to transformational and high priority technologies, such as nanotechnology, biomimetic sensor networks, intelligence information fusion, smart materials and structures, efficient energy and power conversion, high energy materials for propulsion and control, enhancing human performance, and improving research related to student training in instrumentation development. Continue funding of multi-disciplinary programs begun in prior years.			
(U) In FY 2005: Fund competitive research awards at U.S. universities to focus on underpinning Air Force-related technologies usually not achievable through typical single investigator awards. Topics will be selected in scientific research areas related to transformational capabilities and high priority technologies, such as nanotechnology, informatics, biotechnologies (e.g., biomimetic sensory networks, intelligent information fusion, smart materials, etc.), energy and power conversion, high energy propellants and materials, and enhanced human performance. Continue funding of multi-disciplinary programs begun in prior years.			
(U) MAJOR THRUST: Support post-graduate, graduate, and undergraduate education in science and engineering disciplines at U.S. universities.	0.000	34.520	39.670
(U) In FY 2003: Not Applicable			
(U) In FY 2004: Award approximately 170 highly competitive graduate fellowships as part of the FY 2004 National Defense Science and Engineering Graduate Fellowship Program. These fellowships are awarded under a joint			

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<p>tri-Service and Office of the Director of Defense Research and Engineering competition. Support competitive awards for graduate and undergraduate research experiences including those established under the Awards to Stimulate and Support Undergraduate Research Education program. Promote and advance recognition of superior academic research under Federal programs such as the Presidential Early Career Award for Scientists and Engineers. Continue funding for awards made under prior year Department of Defense programs.</p>			
<p>(U) In FY 2005: Award approximately 180 highly competitive graduate fellowships as part of the FY 2005 National Defense Science and Engineering Graduate Fellowship Program. Fellowships are awarded under a joint tri-Service and Office of the Director of Defense Research and Engineering competition. Support competitive awards for graduate and undergraduate research experiences including those established under the Awards to Stimulate and Support Undergraduate Research Education program. Stimulate and recognize superior academic research under Federal programs such as the Presidential Early Career Award for Scientists and Engineers. Continue funding for awards made under prior year Department of Defense programs.</p>			
<p>(U) MAJOR THRUST: Enhance the scientific and engineering research and education infrastructure and instrumentation at U.S. universities.</p>	0.000	17.261	13.997
<p>(U) In FY 2003: Not Applicable.</p>			
<p>(U) In FY 2004: Conduct the competition for U.S. universities to establish unique capability, high technology instrumentation and infrastructure under the Defense University Research Instrumentation Program.</p>			
<p>(U) In FY 2005: Conduct the competition for U.S. universities to acquire state-of-the-art, high technology instrumentation and infrastructure to enhance research and educational capabilities under the Defense University Research Instrumentation Program.</p>			
<p>(U)</p>			
<p>(U) CONGRESSIONAL ADD: Network and Information Space Security Center.</p>	0.000	0.992	0.000
<p>(U) In FY 2003: Not Applicable.</p>			
<p>(U) In FY 2004: Conduct fundamental multidisciplinary scientific research associated with network and information efforts.</p>			
<p>(U) In FY 2005: Not Applicable.</p>			
<p>(U)</p>			
<p>(U) CONGRESSIONAL ADD: Kelly Material Science and Engineering Laboratory.</p>	0.000	0.992	0.000
<p>(U) In FY 2003: Not Applicable.</p>			
<p>(U) In FY 2004: Conduct fundamental multidisciplinary scientific research at Kelly Material Science and Engineering Laboratory.</p>			
<p>(U) In FY 2005: Not Applicable.</p>			
<p>(U) Total Cost</p>	0.000	106.313	115.865
Project 5094	R-1 Shopping List - Item No. 2-3 of 2-4		Exhibit R-2a (PE 0601103F)

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BUDGET ACTIVITY

01 Basic Research

PE NUMBER AND TITLE

0601103F University Research
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(U) C. Other Program Funding Summary (\$ in Millions)(U) D. Acquisition Strategy

Not Applicable.