

Worcester Polytechnic Institute
Report of Proposals Submitted
January 2006

Department	PI	Co-Pi	Project Title	Sponsor	Awarded	Cost Sharing
Biology and Biotechnology	Theodore Crusberg	JoAnn Whitefleet-Smith	Collaboration and Communication for Biotechnology and Biomufacturing College-Level Faculty	National Science Foundation	\$481,595.00	\$0.00
Chemical Engineering	Jennifer Wilcox		Fundamental Adsorption Studies for the Remediation of Combustion and Nuclear-Generated Waste	Office of Naval Research	\$299,848.00	\$36,457.00
Chemistry and Biochemistry	Jose Arguello		Structure-Function of Heavy Metal Transport CPx-ATPases	National Science Foundation	\$6,750.00	\$0.00
Chemistry and Biochemistry	Jose Arguello		Determinants of Membrane Protein Stability	American Heart Association	\$181,500.00	\$66,768.00
Civil and Environmental Engineering	Jeanine Plummer		Development of Acoustic Cavitation Technology for Drinking Water Treatment in Small Rural Utilities	Harris Acoustic Products Corporation	\$42,262.00	\$0.00
Computer Science	Craig Wills		CSR-PDOS: Virtual Machines Meet Application Clusters: A Highly Responsive Global Utility Computing Platform for Internet Applications	Case Western Reserve University	\$257,998.00	\$0.00
Computer Science	Emmanuel Agu		CSR-EHS: Real-Time Ray Tracing on Mobile GPUs	National Science Foundation	\$534,234.00	\$0.00
Computer Science	Emmanuel Agu	Robert Lindeman, Michael Gennert, Matthew Ward	Acquisition of GPU-based Visual Computing Cluster	National Science Foundation	\$402,600.00	\$0.00
Computer Science	Kathi Fisler		Redesigning Introductory Computing: The Design Discipline	Adelphi University	\$19,819.00	\$0.00
Electrical and Computer Eng'g.	Peder Pedersen	William Michalson	Real-Time Troop Physiological Status Monitoring System Using a Common Wireless Network	U.S. Army Medical Research and Materiel Command	\$95,000.00	\$0.00
Electrical and Computer Eng'g.	Peder Pedersen	James Duckworth	Development and Testing of Wireless Wearable Ultrasound Scanner	Army Research Office	\$252,689.00	\$0.00
Electrical and Computer Eng'g.	Richard Vaz	Natalie Mello, David DiBiasio	Pathways to Professional Competence in Global Engineering	Purdue University	\$248,530.00	\$0.00
Electrical and Computer Eng'g.	Sergey Makarov	Reinhold Ludwig	Feasibility Study for an Advanced Extremely High Frequency Multiband Terminal	Raytheon	\$26,581.00	\$0.00
Electrical and Computer Eng'g.	Ted Clancy	Donald Brown	Analysis of Multiple Motor Units Using Surface Arrays	National Institute for Health Care Management Research & Educational Fndn.	\$3,307,392.00	\$0.00
Electrical and Computer Eng'g.	Wenjing Lou		Comprehensive Security Framework for Tactical Wireless Sensor Networks	Office of Naval Research	\$299,995.00	\$0.00

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Fire Protection Eng'g.	Jonathan Barnett		New GUI for Computer Fire Codes	Crile Carvey Consulting, Inc.	\$17,950.00	\$0.00
Interdisciplinary & Global Studies	Robert Hersh		Community Involvement at Brownfield Sites	Pacific Studies Center	\$41,030.00	\$16,488.00
Interdisciplinary & Global Studies	Robert Hersh		Regulating Abandoned Hardrock Mines: State Responses to a Federal Imbasse	Resources for the Future, Inc.	\$48,000.00	\$19,289.00
Management	Sharon Johnson		COLLABORATIVE RESEARCH: Integrating Hands-On Discovery of Lean Principles into Operations, Industrial, and Manufacturing Curricula	National Science Foundation	\$244,212.00	\$0.00
Mechanical Engineering	Christopher Brown		Development of Intelligent Sampling, Large-area, Fine-scale Metrology Device	National Science Foundation	\$992,931.00	\$0.00
Mechanical Engineering	Cosme Furlong-Vazquez		Metrology for Ogive Infrared Dome	Ceranova Corporation	\$20,750.00	\$0.00
Mechanical Engineering	Jianyu Liang	Boquan Li, Rick Sisson, Venkat Thalladi, John MacDonald	Acquisition of X-ray Diffraction System for Materials Research and Education	National Science Foundation	\$326,403.00	\$0.00
Mechanical Engineering	Nikos Gatsonis		Lifetime Modeling of High Current Hollow Cathode Emitters	Busek, Co.	\$57,635.00	\$0.00
Physical Education & Athletics	Regina Roberto	Sherry Gibson	A Coordinated Response of College Campuses in Central Massachusetts to Address Violence Against Women	Department of Justice	\$449,933.00	\$0.00
Physics	Carolann Koleci		E & M Visualizations for Introductory Physics	Massachusetts Institute of Technology	\$34,746.00	\$0.00
Physics	John Norbury		Kaon and Pion Transport for Space Radiation and Continued Development of HZETRN	National Aeronautics & Space Administration	\$24,000.00	\$17,784.00
Physics	John Norbury		Electromagnetic Nucleus - Nucleus Collision Cross Sections	National Aeronautics & Space Administration	\$24,000.00	\$17,784.00
Totals for January 2006 (27 proposals)					\$8,738,383.00	\$174,570.00