

Worcester Polytechnic Institute
Report of Awards Received
May 2007

| Department | Principal Investigator | Co-PI | Project Title | WPI Sponsor | Prime Sponsor (if Sub) | Award Action Type | Program Type | Amount Awarded | Cost Sharing |
|-------------------------------------|-------------------------------|---------------|--|--|--|--------------------------|---------------------|-----------------------|---------------------|
| Biology and Biotechnology | Duffy, J. | | Analysis of LIG Molecules: A Novel Class of Signal Transduction Modulators | NSF | | Supp. | Research | 6,250 | 0 |
| | Duffy, J. | | Analysis of LIG Molecules: a Novel Class of Signal Transduction Modulators | NSF | | Con't. | Research | 119,704 | 0 |
| Subtotal | | | | | | | | 125,954 | 0 |
| Chemical Engineering | Camesano, T. | | CAREER: Molecular-Scale Interactions Between Microbes and Surfaces in the Environment | NSF | | Con't. | Research | 83,903 | 5,517 |
| | Dixon, A. | | GOALI: Catalyst Deactivation and Heat Transfer Modeling for Fixed Bed Reactors Using Computational Fluid Dynamics | Johnson Matthey Catalysts | NSF | New | Research | 75,000 | 0 |
| | Ma, Y. | Kazantzis, N. | Composite Pd and Pd Alloy Porous Stainless Steel Membranes for Hydrogen Separation and Process Intensification | DOE | | New | Research | 442,785 | 78,103 |
| Subtotal | | | | | | | | 601,688 | 83,620 |
| Civil and Environmental Engineering | Mallick, R. | | Investigation of Use of Heat Flow through Asphalt Pavements | Novotech, Inc. | Massachusetts Technology Collaborative | New | Research | 14,066 | 0 |
| Subtotal | | | | | | | | 14,066 | 0 |
| Computer Science | Heffernan, N. | | Scaling Up A Web-Based Formative Assessment System: Testing the Replicability of Deploying ASSISTment Beyond Its "Home Town" | Massachusetts Technology Transfer Center | The Commonwealth of Massachusetts | New | Research | 40,000 | 10,873 |
| | Heffernan, N. | | CAREER: Learning about Learning | NSF | | Con't. | Research | 118,449 | 62,820 |
| | Rundensteiner, E. | Mani, M. | REU Supplement: Automaton Meets Algebra: Towards an XML-Centric Stream Query System | NSF | | Supp. | Research | 12,000 | 0 |

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| | Ward, M. | Rundensteiner, E. | REU Supplement: Quality-Aware Visual Exploration Tools | NSF | | Supp. | Research | 12,000 | 0 |
| Subtotal | | | | | | | | 182,449 | 73,693 |
| Electrical and Computer Eng'g. | Clancy, T. | | Powered Leg Prosthesis for the Restoration of Amputee Balance, Locomotory Metabolism and Speed | MIT | Army | New | Research | 72,591 | 0 |
| Subtotal | | | | | | | | 72,591 | 0 |
| Mathematical Sciences | Fehribach, J. | | Vector Spaces and Kirchoff Graphs | NSF | | New | Research | 87,600 | 0 |
| | Lui, R. | | Mathematics of Molecular and Cellular Biology | University of Minnesota | NSF | New | Other | 49,000 | 0 |
| Subtotal | | | | | | | | 136,600 | 0 |
| Mechanical Engineering | Apelian, D. | Makhlouf, M. | Commercially Viable, Low Cost, and Energy Efficient Processing of Semi-Solid Aluminum Alloys | Advanced Technology Institute | DOE | Con't. | Research | 20,000 | 17,500 |
| | Hoffman, A. | Ault, H. | National Dissemination of the National Engineering Projects in Community Service Program | Purdue University | NSF | Con't. | Educational Support | 19,273 | 21,517 |
| | Liang, J. | | Phase I: Nano-Engineered Anode Materials for Rapid Recharge High Energy Density Lithium Ion Batteries | Yardney Technical Products, Inc. | Navy | New | Research | 32,134 | 0 |
| Subtotal | | | | | | | | 71,407 | 39,017 |
| Total (16 awards) | | | | | | | | 1,204,755 | 196,330 |