

Proposals submitted during the period Jul-01-2009 to Jul-31-2009

Program Type	Associated Department - Proposal Primary	PI Full Name	Project Title	Sponsor Name	Requested Total Sponsor Costs
Research	Aerospace and Mechanical Engr	Corke, Thomas C.	Advancing Reliability for Large Offshore Wind Turbines and Component Technologies in the 7-10 Mw Class	Ohio State University	\$883,002
		Corke, Thomas C.	NSF Engineering Research Center for: Enhanced Wind Energy Design	National Science Foundation, U.S.	\$17,481,513
		Go, David Batten	Analysis and Characterization of Microscale Pre-Breakdown Ionization	Air Force Office of Scientific Research, AFOSR-AFRL-DOD-US	\$360,000
		Go, David Batten	CAREER: Characterization of Microscale Ion/Gas Transport	National Science Foundation, U.S.	\$400,002
		Ovaert, Timothy C.	Mechano-Rheological properties of the murine thrombus determined via nanoindentation and finite element modeling	American Heart Association (National)	\$52,000
		Renaud, John Eldon	MULTISCALE OPTIMIZATION OF STRUCTURES AND MATERIALS FOR ENERGY ABSORPTION AND DISSIPATION UNDER EXTREME LOADS	Department of the Army	\$75,001
		Renaud, John Eldon	Reducing and Characterizing Uncertainty in Multiscale Microstructural Failure Characterization Based on a Material Design Framework	Purdue University-West Lafayette	\$326,705
		Schmiedeler, James Patrick	CAREER: Modeling Time Invariances in Human Motor Coordination for Robot-Assisted Rehabilitation	National Science Foundation, U.S.	\$208,571
		Sucosky, Philippe Ph.D.	CAREER: Fluid-Based Characterization of Bicuspid Aortic Valve Calcification	National Science Foundation, U.S.	\$411,355
		Wagner, Diane Renee	Load History Effects in IVD Mechanics and Mechanobiology	University of Maryland	\$25,473
	Alliance for Catholic Education (ACE)	Staud, John Joseph	Conference on financing Catholic Schools	PRIVATE FOUNDATION	\$50,000

Research	Art, Art History, and Design	Sherman, John Francis	Gill Digital Archive at Notre Dame	National Endowment for the Humanities	\$178,103
	Biological Sciences	Archie, Elizabeth A.	CAREER: Genes and germs from dung: Understanding how social organization shapes patterns of disease transmission	National Science Foundation, U.S.	\$810,258
		Belovsky, Gary E.	Collaborative Proposal: Experimentally unraveling the roles of different herbivores in ecosystem functioning - insects, rodents and ungulates	National Science Foundation, U.S.	\$829,882
		Duman, John Girard	COLLABORATIVE RESEARCH: Novel Thermal Hysteresis Glycolipid Antifreeze in Insects: Structure and Physiological Activity	National Science Foundation, U.S.	\$721,672
		Haldar, Kasturi Ph.D.	Erythrocyte Raft Signaling in Malarial Infection	National Institutes of Health, (NIH-DHHS), US	\$38,751
		Hellmann, Jessica J.	LIT: The role of climate and resource availability in setting the southern and northern boundary of an insect species' range	National Science Foundation, U.S.	\$688,000
		Hellmann, Jessica J.	The National Collaboratory for Adaptation to Climate Change: creating and studying a virtual community	National Science Foundation, U.S.	\$6,974,158
		Hyde, David R.	Genetic Hierarchy Underlying Photoreceptor Regeneration	National Institutes of Health, (NIH-DHHS), US	\$374,574
		McDowell, Mary Ann	Control of Vector-borne Diseases: Development of Human-safe Insecticides for US Military Protection and Improving Global Health	Department of the Army	\$1,080,603
		McLachlan, Jason Stifler	Collaborative Research: Multi-scale Modeling: Integrating Centennial Scale Models of Forest Change with Centennial Scale Data	National Science Foundation, U.S.	\$203,319
		Streit, Thomas Gerard CSC	LOI: Haiti NTD Program Izumi Foundation Proposal	PRIVATE FOUNDATION	\$398,665
		Xu, Peng	Expression and function of three new genes-spire, dumpy and mastermind-in early heart development	American Heart Association Indiana Affiliate	\$95,224

Center For Transgene Research	Smith, Denise Lynn	The Role of Protein C in an LDL-driven Atherosclerosis Mouse Model	American Heart Association Indiana Affiliate	\$90,772
Center for Research Computing	Brenner, Paul Raymond	Facility Integrated Information and Communication Technology	Department of Energy, US	\$2,818,082
Chemical and Biomolecular Engr	Bilgicer, Zihni Basar	ENHANCEMENT OF THE SELECTIVITY OF TRASTUZUMAB VIA CYCLIC COMPLEX FORMATION	American Heart Association (National)	\$308,000
	Bilgicer, Zihni Basar		National Institutes of Health, (NIAID-NIH-DHHS), US	\$412,500
	Bohn, Paul William	Hetero-Bivalent Ligand Design for Preventing Food Allergy Responses Molecular Aspects of Transport in Thin Films of Controlled Architecture	Department of Energy, US	\$528,838
	Brennecke, Joan Frances	NSF Engineering Research Center for Separations for Efficient Energy Systems (CSEES)	National Science Foundation, U.S.	\$17,911,109
	Maginn, Edward Joseph	Breakthrough Technology for Post-Combustion CO2 Capture	Department of Energy, US	\$1,244,683
	Maginn, Edward Joseph	Thermally-stable Ionic Liquid Carriers for Nanoparticle-based Advanced Heat Transfer in Concentrating Solar Energy Applications	Savannah River National Laboratory, Department of Energy (SRNL-DOE), US	\$245,667
	McGinn, Paul J.	Development of Informatics and High Throughput Metrology Tools for Advanced Battery Technology	Purdue University-West Lafayette	\$481,309
Chemistry and Biochemistry	Ashfeld, Brandon Lee	CAREER: Transition Metal-Catalyzed Generation of Highly Reactive Organometallic Reagents	National Science Foundation, U.S.	\$716,253
	Chang, Mayland	Indiana Clinical and Translational Science Institute	Indiana University-Purdue University	\$280,246
	Clark, Patricia L.	Influence of Translation on Protein Folding	National Institutes of Health, (NIH-DHHS), US	\$270,233
	Clark, Patricia L.	Secretion and Folding of Bacterial Virulence Proteins	National Institutes of Health, (NIH-DHHS), US	\$2,402,505
	Corcelli, Steven A	Computationally Efficient Simulations of Aqueous Metal Oxide Interfaces	National Science Foundation, U.S.	\$592,834

	Estiu, Guillermina Lucia	Computational Study of Complex and Diverse Biological Systems	TeraGrid	\$0
	Goodson, Holly V.	Computational and Experimental Studies of Microtubule Dynamics and Regulation by Binding proteins	National Science Foundation, U.S.	\$640,056
	Goodson, Holly V.	The Characterization of a Novel Membrane-Microtubule Linker Protein, CLIPR76	American Heart Association (National)	\$52,000
	Hartland, Gregory Victor	Ultrafast transient absorption studies of single II-VI nanowires	Argonne National Laboratory	\$0
	Helquist, Paul	Computational Prediction of Enantioselectivity in Metal-Catalyzed Reactions	National Science Foundation, U.S.	\$652,981
	Kuno, Masaru K.	Single nanowire optical metrology supporting future uses in solar photovoltaics	National Institute of Standards and Technology (NIST), US	\$593,457
	Smith, Bradley Dennis	Optical Sensors for Bacterial Detection	CORPORATE FUNDING	\$36,000
	Wiest, Olaf Guenter	Q2MM Transition State Force Fields for Computational Enzymology	National Science Foundation, U.S.	\$533,440
	Xu, Zhi	Mechanisms of Plasminogen Activator Inhibitor-1 (PAI-1) in the Pathologies of Cardiac Fibrosis	American Heart Association Indiana Affiliate	\$98,476
Civil Engr and Geological Sciences	Khandelwal, Kapil	STEEL BUILDINGS UNDER EXTREME LOADS: MULTI-SCALE MEHTODS FOR ROBUSTNESS MEASURE AND DESIGNING FOR ROBUSTNES	National Institute of Standards & Technology (NIST), Dept. of Commerce, U.S.	\$681,968
	Kijewski-Correa, Tracy Lynn	Performance of Tall Buildings in Extreme Wind Events	National Institute of Standards & Technology (NIST), Dept. of Commerce, U.S.	\$585,223
	Kurama, Yahya C.	Reinforced Concrete Building Frame Structures Subjected to Elevated Temperatures from Fire	National Institute of Standards & Technology (NIST), Dept. of Commerce, U.S.	\$671,966
	Na, Chongzheng	PRE PROPOSAL: Stimulated Production of Extracellular Polymeric Substances (EPS) for Wastewater Treatment	PRIVATE FOUNDATION	\$0

	Nerenberg, Robert	CAREER: Structure and Function of Membrane-Supported Biofilms for Wastewater Treatment	National Science Foundation, U.S.	\$400,003
	Shrout, Joshua Ph.D.	CAREER: Studying How Environment Dictates Bacterial Motility	National Science Foundation, U.S.	\$947,121
	Westerink, Joannes J. Ph.D.	Katrina Canal Breaches	Department of Justice, U.S.	\$19,999
Computer Science and Engineering	Blanton, Marina	CAREER: Realizing Mutual Benefits of Privacy-Preserving Tools and Biometrics	National Science Foundation, U.S.	\$552,099
	Bowyer, Kevin W.	Measurement of accuracy and coverage trade-off in duplicate detection using multi-modal biometrics in very large databases	CORPORATE FUNDING	\$459,762
	Chaudhary, Amitabh	CAREER: Algorithms for Online Problems	National Science Foundation, U.S.	\$420,830
	Flynn, Patrick Joseph	Synthetic Identification Models	CORPORATE FUNDING	\$300,000
	Izaguirre, Jesus Antonio	(Supplement) Simulation of self-emerging properties of coupled biochemical and cellular networks in social behavior of Myxobacteria	National Science Foundation, U.S.	\$36,000
	Poellabauer, Christian	WReal-Time Performance Guarantees for Wireless LANs and Multi-Hop Ad-Hoc Networks	Air Force Office of Scientific Research, AFOSR-AFRL-DOD-US	\$353,728
Deans Office-Coll. of Engineering	Wistey, Mark	Direct Bandgap Dilute Carbide Ge1-xCx Laser Materials	Air Force Office of Scientific Research, AFOSR-AFRL-DOD-US	\$362,739
Deans Office-College of Science	Crawford, Gregory Philip Ph.D.	Electro Magnetic Biomedical Research Accelerator CEnter (EMBRACE at ND)	National Institutes of Health, (NIH-DHHS), US	\$7,862,663
Electrical Engineering	Fay, Patrick John	InGaP HBT Ltoff for L-Band T/R Modules	CORPORATE FUNDING	\$50,000
	Fay, Patrick John	Lightweight, Flexible, High Efficiency Solar Cell Sheets	CORPORATE FUNDING	\$90,000
	Gupta, Vijay	Control of Sensing Resources for Dynamic Information Fusion: A Stochastic Approach	Air Force Office of Scientific Research, AFOSR-AFRL-DOD-US	\$360,000

	Huang, Yih-Fang	ARRA: Censoring Sensors in Clustered Distributed Sensor Networks	National Institute of Standards & Technology (NIST), Dept. of Commerce, U.S.	\$707,848
	Laneman, J. Nicholas	Software-Defined Radio Technologies for Justice and public Safety Communications.	National Institute of Justice (OJP), Dept. of Justice, U.S.	\$150,000
	Lent, Craig Stanley	Designing and Building Mixed-valence Molecular Assemblies for Quantum-dot Cellular Automata	National Science Foundation, U.S.	\$871,002
	Mintairov, Alexander	Nano-Optics of Wigner Molecules Utilizing Single Electron Transistors	National Institute of Standards & Technology (NIST), Dept. of Commerce, U.S.	\$1,571,601
	Porod, Wolfgang	Radiation-Hard Nanomagnetic Logic with Electronic Input and Output	Office of Naval Research (ONR)	\$482,671
	Pratt, Thomas Gregory	Biometric Metrology Investigation for Remotely Characterizing Cardiopulmonary Activity with Wireless Sensing Modalities	National Institute of Standards & Technology (NIST), Dept. of Commerce, U.S.	\$1,491,790
	Pratt, Thomas Gregory	PRE PROPOSAL: Standoff Biometric Sensing of Cardiopulmonary Cycles Using Polarimetric Receivers for Multi-Target Discrimination	Intelligence Advanced Research Projects Activity, The (IARPA)	\$0
	Pratt, Thomas Gregory	Polarimetric Processing Techniques for Signal Detection and Recovery in Mainbeam Co-Channel Interference	Defense Advanced Research Projects Agency, U.S. (DARPA-DOD)	\$500,000
	Seabaugh, Alan C.	ARRA NIST: Green-Electronics Metrology	National Institute of Standards & Technology (NIST), Dept. of Commerce, U.S.	\$1,579,957
	Seabaugh, Alan C.	Metrology for Energy-Efficient Transistors	National Institute of Standards and Technology (NIST), US	\$383,335
History	Noll, Mark	Bradley Fellowship Program	PRIVATE FOUNDATION	\$25,000
Institute for Latino Studies	Cardenas, Gilberto	The Midwest Latino Arts and Culture Digital Archive (MidLADA)	National Endowment for the Humanities	\$350,004

Mathematics	Budur, Nero	CAREER: Problems on Singularities in Algebraic Geometry	National Science Foundation, U.S.	\$458,373
	Grove, Karsten	Geometry and Topology in the Presence of Lower Curvature Bounds	National Science Foundation, U.S.	\$287,826
	Xu, Zhiliang	Career: Computational Study of Prosthetic Heart Valves Leading to Thrombogenesis Using a Multiscale Model	National Science Foundation, U.S.	\$596,015
	Zhang, Yongtao Ph.D.	CAREER: Topics in High Accuracy Numerical Methods and Computational Analysis of Biological Systems	National Science Foundation, U.S.	\$458,778
Philosophy	Ramsey, Grant Aaron	HPS Scholars Award: Fitness and the Foundations of Evolutionary Theory	National Science Foundation, U.S.	\$116,182
Physics	Blackstead, Howard A.	Development and Evaluation of a 3rd-generation Cubic Superconductor for Power Applications	National Institute of Standards and Technology (NIST), US	\$1,498,362
	Lannon, Kevin	CAREER: Understanding Particle Masses through Studying Higgs Produced in Association with Top Quarks at CMS	National Science Foundation, U.S.	\$827,264
	Ruggiero, Steven T.	Lateral Tunneling and Superconductivity in Graphene	National Institute of Standards and Technology (NIST), US	\$425,085
Provost Office	Burish, Thomas Gerard	Advancing Translational Research at the Center for Children and Families	National Center for Research Resources, (NCCR-NIH-DHHS), US	\$9,504,520
Psychology	Bergeman, Cindy S.	Notre Dame Study of Resiliency in Later Life	National Institutes of Health, (NIH-DHHS), US	\$571,377
	Borkowski, John G.	Child Neglect Cell Phone Enhanced Parent Training	National Institutes of Health, (NIMH-NIH-DHHS), US	\$3,124,325
	McNeil, Nicole M	CAREER: Predictors and consequences of developing an understanding of mathematical equivalence in the early grades	National Science Foundation, U.S.	\$1,123,881
	Narvaez, Darcia Fe	Collaborative Research: Longitudinal Measurement of Ethical Development in Engineering Students and Professionals	California Polytechnic State University	\$226,832

		Radvansky, Gabriel Allen	Aging and Spatial Updating in Virtual Environments	National Institutes of Health, (NIH-DHHS), US	\$204,713
		Radvansky, Gabriel Allen	Cognitive Disruption in Interactive Events	National Science Foundation, U.S.	\$489,179
	Robinson Learning Center	Kostielney, Andrew Thomas	YJP - Reading for Life	CORPORATE FUNDING	\$33,000
		Kyes, Ellen G	Take Ten Comic Book Project, Third Edition	PRIVATE FOUNDATION	\$5,000
Other Programs	Robinson Learning Center	Kyes, Ellen G	Take Ten Program	Indiana Criminal Justice Institute	\$70,200
Research	Sociology	Fast, Larissa A.	Collaborative Learning Approach to NGO Security Management Phase I	Save the Children	\$62,933
	Sociology	Sikkink, David H.	Christian Education Outcomes: A Quantitative Investigation of the Life Trajectories of Christian School Students	Cardus Institute	\$316,280
Research	Theology	Cavadini, John C.	Vision Youth Ministry Partnership: 2009-10	CORPORATE FUNDING	\$32,500
	University	Hug, Gordon L.	New Biologically Relevant Sulfur Radical Cation Chemistry	University of Arizona	\$66,739
Service Programs	University Security	Johnson, Phillip	Operation Pull Over	Indiana Criminal Justice Institute	\$4,000
Research	University of Notre Dame du Lac	Matous, Karel	Experimental and Computational Program for Slow and Fast Cookoff for Insensitive Munitions Testing	CORPORATE FUNDING	\$195,012
		Matous, Karel	Heterogeneous Solid Propellant Characterization using Micro-computer Tomography	CORPORATE FUNDING	\$70,999
	Walther Cancer Institute	Gunasekaran, Christopher	Regulation of Protein Kinase C epsilon by metals – An attractive drug target in cardiovascular diseases	American Heart Association Indiana Affiliate	\$95,224
102	102	102	102	102	\$106,708,180