

Louisiana Tech University



BREEZE BULLETIN

Office of University Research (<http://research.latech.edu>)

Storms make the oak grow deeper roots.

*George Herbert
(1593-1632, British metaphysical poet)*

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2011-12 TECH FRINGE RATES REVISED 1-5-12

- Faculty/Unclassified: 41.86%
- Civil Service: 43.76%
- Temp/Post-doc: 24.54%
- DROP: 18.16%

IN-HOUSE WORKSHOPS

- **BoR Support Funds Overview** - July 3 @ 2-3pm WT1535.
- **Grants.gov** - August 21 @ 2-3pm WT1535.
- **LaTech Proposal Process** - Sept. 25 @2-3pm WT1535.

Register via e-mail to Beth Free bfree@latech.edu to reserve your spot.

For a full list and description of in-house workshops, go to http://research.latech.edu/resources/training_workshops/latech_workshops.

PRESS RELEASE 12-098 NSF REPORT DETAILS FEDERAL SCIENCE AND ENGINEERING SUPPORT TO COLLEGES, UNIVERSITIES AND NONPROFIT INSTITUTIONS

Institutions of higher education perform about one-half of the nation's basic research

May 23, 2012

Institutions of higher education, the major source of the nation's scientists and engineers, perform about one-half of the nation's basic research. Therefore, the level, distribution and characteristics of federal academic support are of much interest to officials at federal, state and local levels in non-governmental sectors.

This information is provided in a report released this week by the National Science Foundation (NSF). The "[Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions: Fiscal Year 2008](#)" provides the full set of detailed tables associated with the report "[Federal Obligations for Science and Engineering to Universities and Colleges Show Little Growth](#)," published earlier this year.

The National Science Foundation Act of 1950, as amended, requires that the Foundation "initiate and maintain a program for the determination of the total amount of money for scientific and engineering research, including money allocated for the construction of the facilities wherein such research is conducted, received by each educational institution and appropriate nonprofit organization in the United States, by grant, contract, or other arrangement from agencies of the federal government, and to report annually thereon to the President and the Congress."

To fulfill this requirement, the NSF uses the data collection system originally designed by the Committee on Academic Science and Engineering of the Federal Council for Science and Technology. NSF annually collects statistical data from the 19 federal agencies that account for virtually all support for science and engineering (S&E) research and development at educational institutions. Data are also collected on these agencies' obligations to nonprofit institutions.

Since its inception, this survey system has been the sole source of data on federal funding to individual institutions for S&E activities and therefore attracts a wide audience. These data provide information that enables users to examine patterns of support for individual institutions over time and to compare such patterns with those of other institutions.

Please visit the [NSF's National Center for Science and Engineering Statistics](#) for more reports and other products.

-NSF-



NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	\$ Awarded
Rastko Selmic	<i>Intelligent Distributed and Ubiquitous Health Management System</i>	NASA/American GNC	30,000
Jay Wang	<i>The Thermal Effects on the Structural Behavior of the Energy Foundation</i>	NSF/BoR/Pfund	10,000
Yuri Lvov	<i>Methane Storage in Clay Nanotube Composite for ANG (Adsorbed Natural Gas)</i>	NSF/BoR/Pfund	10,000
N.Wassiuddin	<i>Nanoclay-Based Modifications of Asphalt Binders</i>	NSF/BoR/Pfund	10,000
Long Que	<i>Efficiency Improvement Studies of Carbon Nanotube Films-Based Energy Harvesting Technology</i>	NASA/LaSPACE	34,660
Long Que	<i>Fabrication of Transparent Nanostructured Optical Devices for Ultrasensitive</i>	NSF/BoR/Pfund	10,000
Stan Napper	<i>Research, Training & Technology Development in Security & Sensory</i>	Cyber Innovation Center	701,244
March 2012			\$368,267
B.Ramachandran	<i>Subcontract from Tabbetha Dobbins (NSF Career award) to support PhD</i>	NSF/Rowan Univ.	5,000
Frank Igou	<i>Louisiana State Police Commission Promotional Testing Phase 1</i>	LSUS/Institute for Human Services & Public Policy	5,000
Glenn Beer	<i>NASA SOI: Summer STEM Snacks</i>	NASA	49,633
B.Ramachandran	<i>Interim Funding for Catalyst Development</i>	Madden Contracting	52,049
L.Keith-Vincent	<i>Louisiana Tech/LA GEAR UP Explorers Camps</i>	USDE/LaSIP/LaGEARUP	100,060
Glenn Beer	<i>Reaching Beyond Our Limits Through STEM Camp (Balloon Camp)</i>	USDE/LaSIP/LaGEARUP	104,063
Glenn Beer	<i>LA GEAR UP Soaring to New Heights Camps</i>	USDE/LaSIP/LaGEARUP	104,734
Glenn Beer	<i>LA GEAR UP Lights, Camera, ACTION Camps</i>	USDE/LaSIP/LaGEARUP	108,913
Glenn Beer	<i>LA CAMPS 2012</i>	USDE/LaSIP/LaGEARUP	282,752
Tammy Schilling	<i>LaTech/LA GEAR UP Sports Medicine Camp</i>	USDE/LaSIP/LaGEARUP	103,574
Henry Cardenas	<i>Electrokinetic Abrasion Resistance Enhancement in Concrete</i>	AJ Weller Corp	5346
Mary Murimi	<i>Youth4Health Outreach Project</i>	HRSA	150,000
Niel Crews	<i>CAREER: Thermal Gradient Microflow Calorimetry Using Anisotropic Temperature</i>	NSF CAREER	400,000
April 2012			1,471,123
Erez Allouche	<i>Optimization of Geopolymer Formulation in View of Workability & Strength Development</i>	Hansen Pipe/Heidelberg Cement	23,000
Mike Swanbom	<i>Cyber Discovery 1.0</i>	DHS/Cyber Innovation Center	116,300
Ron Cathey	<i>Choose to BARC</i>	Alcoholic Beverage Medical Research Foundation	10,000
Mark Gibson	<i>McIntire-Stennis Cooperative Research Program - 2012</i>	USDA	237,927
Bogdan Strimbu	<i>Identification of Optimal Products Allocation for Strategic Planning Using LIDAR data</i>	BoR	239,500
Erez Allouche	<i>Experimental Evaluation of Soil-Pipe Friction Coefficients for Coated Steel Pipe (Polyurethane, Cement Mortar and Pre-Fabricated Plastic Tape Coating Systems)</i>	Northwest Pipe Corp.	50,020
Erez Allouche	<i>Pickle Jar Test for 'Reactamine Et' - a 100% Solids Aromatic Polyurea Coating Product</i>	Quadex	10,065
Chester Wilson	<i>Mda Nanotube Dfv</i>	DOD	132,000
May 2012			818,812
2011-12 YTD Total:			9,190,311.62

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$ Requested
12-212	Wilson, Chester		Interim Funding for Catalyst Development	Jupiter Fuels	52,058
12-213	Phoha, Vir		Investigating Cognitive Rhythms as a New Modality for Continuous Authentication	DARPA	162,672
12-214	Carwile, Guy		HABS Drawings - I. Ed Wile House	LA Office of Culture, Rec & Tourism	8,675
12-215	Selmic, Rastko		Intelligent Distributed and Ubiquitous Health Management System	American GNC	30,000
12-216	Murray, Teresa		In vivo Time Course Study of Adult Neurogenesis & Adult Neural Stem Cell Transformation to Tumor Cells in the Mouse Subventricular Zone...	NIH	275,000
12-217	Ramachandran, Ramu		Interim Funding for Catalyst Development	Madden Contracting	52,058
12-218	Wilson, Chester	Derosa/ Greenwood/ Simisevic/Genov/ Mainardi	Center of Excellence NNSA Stewardship Alliance	NNSA	14,249,518
12-219	Wang, Jay		Effect of Compaction Bands in Saturated Porous Rocks on Reservoir Production and Injection	American Chemistry Society/ Petroleum Research Fund	100,000
12-220	Ramachandran, Ramu		Subcontract from Tabbetha Dobbins (NSF Career award) to support PhD student at LaTech	Rowan University	5,000
12-221	Wilson, Chester		Engineering & Development of Anisotropic Conductive Polymer Nanomaterials for Visible, Infrared and Bi-Spectral Obscurant Applications	Army/DOD	33,333
12-222	Que, Long	Genov, Dentcho	An Integrated Hybrid Energy Scavenging System	DOE	
12-223	Montes, Carlos	Allouche, Erez	Enhancing the Early Compressive Strength & Corrosion Resistance of Dynastone	Quadex, Inc.	10,065
12-224	McKim, Robert		Ohio DOT - Assessment of ODOT's Conduit Service Life Prediction Methodology	Ohio DOT	70,652
12-225	Cathey, Ron	Medley, Chris	Choose to BARC	Alcoholic Beverage Medical Research Foundation	10,000
12-226	Allouche, Erez		Evaluating the Geopolymerization Potential and Commercial Applications of Dollet Hill Power Plant Fly Ash - Phase 5	Cleco Power	25,000
12-227	Lusby, Aaron	Kennedy, Gary	Agricultural Sciences Enhancement Program	USDA	82,602
12-228	DeCoster, Mark		A Novel System for High-Throughput Screening of Normal and Cancer Cells Using 3D Spheroids	NIH	45,517
12-229	Merchant, David	Choate, Jaicee	Green Clinic Consortium 2	LWC IWTP	264,231
12-230	Madden, Diane	Vincent, Lindsey	Project LESS (Learning Environmental Science at SciTEC)	Louisiana Department of Wildlife & Fisheries	2,044
12-231	Lvov, Yuri		Antimicrobial Polymer Composite Doped With Clay Nanotube	La EPSCoR/SURE	4,000

PROPOSALS SUBMITTED (CONT'D FROM PAGE 3 . . .)

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
12-232	Weiss, Leland		CAREER: Ambient Thermal Energy Harvesting for Power Production	NSF-REU	6,000
12-233	Wasiuddin, N.		Evaluation of Dynamic Shear Rheometer Tests for Emulsions	LTRC	5,000
12-235	Allouche, Erez	Patil/Mainardi	Testing of Geopolymer Binder in Rocket Plume Environments at NASA Stennis Space Center	NASA	91,947
12-236	Igou, Frank	Apter-Desselles, Marita	Louisiana State Police Commission Promotional Testing Phase II	Institute for Human Services & Public Policy	15,000
12-237	Edwards, Thea		Caterpillar Dependence on Plant Derived Estrogens for Normal Reproduction	La EPSCoR/SURE	4,500
12-238	Atkison, Travis	Turner/Gould/Wilson	Cyber-CaB: Louisiana Tech University's Federal Cyber Capacity Building Program	NSF	895,602
12-239	Gibson, Mark		McIntire-Stennis Cooperative Research Program - 2012	USDA	237,927
12-240	Wilson, Chester		LaSPACE Fellowship for Nick Groden	NASA	25,000
12-241	Mainardi, Daniela		CREST Bioenergy Center	NSF	300,000
12-242	Wilson, Chester		LaSPACE Fellowship for Jesse Lehmann	NASA	25,000
12-243	Beer, Glenn		ACT Quality Core: Accelerated Academic Achievement Initiative	LaSIP/LA GEAR UP	674,871
12-244	Que, Long		Ultrasensitive Disease Biomarker Detection & Monitoring	CDMRP	
12-245	Dowling, Bobby		Garland Gregory Hideaway Park Lake Trail	FHWA Recreational Trails Program	121,400
12-246	Selmic, Rastko		LaSPACE Fellowship (Saba Ramazani)	LSU/NASA	26,000
12-247	Selmic, Rastko		LaSPACE Fellowship (Andrew Gardner)	LSU/NASA	26,000
12-248	Guice, Les	Derosa, Pedro	Multiscale Modeling of Composites & Interfaces	Clarkson Aerospace	150,000
12-249	Wilson, Chester		GRSA for Jesse Lehmann	LaSPACE/NASA	5,000
12-250	Evans, Katie	Watson, Melanie	Open-Source Problems in Engineering Studies (OPES): Making the WeB Work	NSF	249,980
12-251	O'Neal, Patrick		Quantifying Space-Related Edema Using Multi-Wavelength Photoplethysmography	LaSPACE/NASA	6,000
12-252	Elund, Sven	Cardenas, Henry	Corrosion Reduction of Launch Pad Concrete with Electrokinetic Polymer Treatment	LaSPACE/NASA	12,000
12-253	Chiu, Alan		LaSPACE FELLOWSHIP: Knight - BCI with DCEFs	LaSPACE/NASA	21,000
12-254	Crews, Niel		LaSPACE Fellowship - Collin Tranter	LaSPACE/NASA	26,000

(Cont'd on page 5)

PROPOSALS SUBMITTED (CONT'D FROM PAGE 4 . . .)

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
12-255	Cassady, Dawn	Holmes/Nielson/ Manning	Center for Innovative Learning & Technology (CITAL)	BoR	3,500
12-256	Napper, Stan		Cyber Discovery 2.0 and Curriculum Development	Cyber Innovation Center/DHS	313,177
12-257	Swanbom, Mike		Cyber Discovery 1.0	Cyber Innovation Center/DHS	116,300
12-258	Norris, Dave		Rural Jobs Accelerator Challenge	EDA	249,918
12-259	Jaganathan, Arun	Allouche/ Simicevic	Advanced Ultra Wideband Radar for Accurate & Rapid Condition Assessment of Wooden Utility Poles Used in Electrical Transmission Lines & Other Critical Cylindrical Structures	LaEPSCoR/OPT IN	37,500
12-260	Que, Long	Genov, Dentcho	Hybrid Nanomaterials and Nanostructures for a Solar Thermal Energy Scavenging System	AFRL	
12-261	Cox, Mickey		Consequences of Net Metering on Electric Utilities	SWEPCO	8,280
12-262	Kennedy, Angela	Moore, Pamela	2012-13 Carl Perkins Basic Grant	LCTCS through NE LA Technical	34,431

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

- Erez Allouche, CULVERT REHABILITATION TO MAXIMIZE SERVICE LIFE WHILE MINIMIZING DIRECT COSTS AND TRAFFIC DISRUPTION, U.S. Dept. of Transportation through National Academies of Science \$549,643;
- Mike Tyree, THE INFLUENCE OF ESTABLISHING NATATIVE SHORT-ROTATION WOODY CROPS ON CARBON CYCLING PLANTED ON RETIRED AGRICULTURAL LANDS OF THE LOWER MISSISSIPPI ALLUVIAL VALLEY, USDA \$29,000;
- Sumeet Dua, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH through LSU \$2,518;
- Alan Chiu, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH through LSU \$14,835;
- June Feng, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH through LSU \$5,674.97;
- Prerna Sethi, LOUISIANA TECH UNIVERSITY - IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH through LSU \$16,021.84;
- Lee Sawyer, RESEARCH IN HIGH ENERGY PHYSICS AT LOUISIANA TECH UNIVERSITY, U.S. Dept. of Energy \$238,000;
- Vir Phoha, DISTRIBUTED AUTONOMY FOR INTELLIGENT MAKING, ADAPTIVE LEARNING, AND ROBUST COLLABORATION, ONR through Penn State University \$15,005;
- Yuri Lvov, LAYER BY LAYER NANOCARRIERS FOR HIGHLY EFFICIENT SOLUBILIZATION OF INSOLUABLE DRUG, NIH through Northeastern University \$108,193;
- Steven Jones, REU SITE: UNDERGRADUATE RESEARCH IN MICRO/NANOENGINEERING, National Science Foundation \$96,617.

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BOB SUPPORT FUND 2012-13 ELIGIBLE DISCIPLINES

ENHANCEMENT - TRADITIONAL & UNDERGRADUATE:GROUP II - ELIGIBLE FYs 2012-13, 2015-16

Agricultural Sciences
Arts
Earth/Environmental Sciences
Engineering A (Chemical, Civil, Electrical, etc.)
Health and Medical Sciences

RESEARCH & DEVELOPMENT - RCS:GROUP I - ELIGIBLE EVERY YEAR

Biological Sciences I (Cell/Molecular Biology, Biochemistry, Microbiology, Immunology/Virology, Retro-virology)
Biological Sciences II (Ecology, Nutrition, Natural Biology, Toxicology, Pharmacology, Neurosciences, Anatomy, Genetics [Physiology-Phenotype])
Computer and Information Sciences**
Earth/Environmental Sciences

GROUP III - ELIGIBLE IN FYs 2012-13, 2013-14

Chemistry
Health and Medical Sciences
Engineering B (Industrial, Materials, Mechanical, etc.)

RESEARCH & DEVELOPMENT - ITRS:*INDUSTRIAL TARGETS ADVISORY COMMITTEE**TARGET AREAS FOR ITRS*

Medical and Biomedical
Micromanufacturing
Data and Telecommunications
Environmental Technologies
Food Technologies
Materials
Existing Principal Industries, such as petrochemicals and agribusiness
Louisiana Culture and History

AWARDS TO LOUISIANA ARTISTS & SCHOLARS (ATLAS): All projects in Arts, Humanities, and Social Sciences are eligible.

GRADUATE FELLOWS:GROUP I - ELIGIBLE EVERY YEAR

Biological Sciences
Chemistry
Computer and Information Sciences
Earth/Environmental Sciences
Engineering A and B
Health/Medical Sciences**
Physics/Astronomy

GROUP II - ELIGIBLE IN FYs 2012-13, 2014-15, 2016-17

Agriculture
Business
Education, including Literacy
Mathematics

For information on these and additional BoR Support Fund opportunities, go to <http://web.laregents.org/downloads/rfps-policies-forms/#applications>.