

Louisiana Tech University



# BREEZE BULLETIN

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

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## 2012-13 TECH FRINGE RATES

Faculty/Unclassified/Post Doc: 42.82%  
 Civil Service: 47.52%  
 Temporary/Part-time: 9.40%  
 DROP: 18.42

Download a pdf: [http://research.latech.edu/files/documents/2012-13\\_latech\\_fringe\\_rates.pdf](http://research.latech.edu/files/documents/2012-13_latech_fringe_rates.pdf).

## LATECH IN-HOUSE WORKSHOPS

- **Grants.gov** - Feb. 6 @2-3pm WT1535.
- **Funding Sources** - March 12 @2-3pm WT1535

Register via e-mail to [bfree@latech.edu](mailto:bfree@latech.edu) to reserve your spot (required).

For a full list and description of in-house workshops, go to [http://research.latech.edu/resources/training\\_workshops/latech\\_workshops](http://research.latech.edu/resources/training_workshops/latech_workshops).

## CONFLICT OF INTEREST TRAINING

LaTech faculty who are planning to submit research proposals to federal agencies are required to take the Conflict of Interest training through CITI. There is no cost for this mandatory online course and it is open to all LaTech faculty. Please contact Susan Black in University Research for more information: 318-257-5075 or [sblack@latech.edu](mailto:sblack@latech.edu).

## FEDERAL RESEARCH AND DEVELOPMENT FUNDING: FY 2013

John Sargent, Jr., Coordinator  
 Specialist in Science and Technology Policy  
 Congressional Research Service  
 October 2012  
 Summary

Congress has received President Obama's budget request for FY2013, which includes \$140.820 billion for research and development (R&D), a \$1.951 billion (1.4%) increase from the FY2012 estimated funding level of \$138.869 billion. The request represents the President's R&D priorities; Congress may opt to agree with part or all of the request, or may express different priorities through the appropriations process. In particular, Congress will play a central role in determining the extent to which the federal R&D investment can grow in the context of increased pressure on discretionary spending and how available funding will be prioritized and allocated. Low or negative growth in the overall R&D investment may require movement of resources across disciplines, programs, or agencies to address priorities.

Funding for R&D is highly concentrated in a few departments. Under President Obama's FY2013 budget request, seven federal agencies would receive 95.8% of total federal R&D funding, with the Department of Defense (50.6%) and the Department of Health and Human Services (22.3%, primarily for the National Institutes of Health) accounting for nearly three-fourths of all R&D funding.

Among the largest changes proposed in the President's request, the R&D budget of the Department of Defense would fall by \$1.535 billion (-2.1%), while R&D funding for the Department of Commerce's National Institute of Standards and Technology (NIST) would increase by \$1.329 billion. The NIST growth is fueled by increases in funding for its core research laboratories and by the establishment of two new initiatives: \$1 billion for the National Network for Manufacturing Innovation, which seeks to promote the development of manufacturing technologies with broad applications, and \$300 million for a Wireless Innovation (WIN) Fund to help develop cutting-edge technologies for public safety users.

President Obama has requested increases in the R&D budgets of NIST, the National Science Foundation, and the Department of Energy's Office of Science that were targeted for doubling over 7 years, from their FY2006 levels, by the America COMPETES Act, and over 10 years by the America COMPETES Reauthorization Act of 2010. The funding requested for FY2013 is consistent with a doubling timeframe of 17 years, much longer than authorized by either act.

## NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	\$ Awarded
Erez Allouche	<i>Field Demonstration &amp; Retrospective Evaluation of Rehabilitation Technologies for Wastewater Collection and Water Distribution Systems</i>	EPA/Battelle	59,008
Davy Norris	<i>Rural Jobs Accelerator Challenge</i>	EDA	500,000
Vir Phoha	<i>Investigating Cognitive Rhythms as a New Modality for Continuous Au-</i>	USAF	166,622
Lindsey Keith-Vincent	<i>Professional Development Contract for Services Through the MSP Partnership</i>	US Dept. of Education & OPSS	1,134.88
Guy Carwile	<i>HABS Drawings - I. Ed Wile House</i>	National Park Services & La. Dept. of Tourism	6,820
Teresa Murray	<i>Invivo Time Course Study of Adult Neurogenesis &amp; Adult Neural Stem</i>	NIH	208,705
Mark Gibson	<i>Louisiana Forest Products Development Center at Louisiana Tech University</i>	LSU Ag. Center	28,066
Teresa Murray	<i>AEMB 2012 Broader Impacts Educational Session</i>	NSF	19,000
Jeremy Mhire	<i>NICERC Research Grant</i>	DHS/CIC	91,865
Lindsey Keith-Vincent	<i>Lincoln Parish MSP</i>	Lincoln Parish School Board	11,911
John McDonald	<i>Gas to Liquids Catalyst Development</i>	American Strategic Innovation	368,266
Sven Eklund	<i>Corrosion Reduction of Launch Pad Concrete with Electrokinetic Polymer</i>	NASA/LaSPACE	12,000
Chester Wilson	<i>GRSA for Jesse Lehmann</i>	NASA/LaSPACE	5,000
Les Guice	<i>Multiscale Modeling of Composites &amp; Interfaces</i>	US Air Force/Clarkson Aerospace	150,000
<b>Sept 2012 Total</b>			<b>\$1,628,398</b>
Erez Allouche	<i>Development &amp; Demonstration of a Cast-In-Place-Fibers Technology</i>	CenturyLink	50,020
Erez Allouche	<i>Burst Pressure Tests of Composite CIPP Liners</i>	Insituform, LLC	9,500
Susan Hughes	<i>Menu Modification for Lincoln Parish</i>	Lincoln Parish School Board	2,499
Niel Crews	<i>LaSPACE Fellowship - Collin Tranter</i>	BoR/LaSPACE	26,000
N.Wasiudden	<i>Civil Engineering Senior Project: Tarbutton Road Interchange and I-20 Frontage Roads</i>	LTRC	5,000
Marita Desselle	<i>Project Evaluation for Louisiana Models for Change</i>	Baton Rouge Area Foundation	35,000
<b>Oct 2012</b>			<b>\$128,019</b>
Kim Barlow	<i>UL System Extreme Clean Make-over Grant (KLB)</i>	UL System	3,300
Rastko Selmic	<i>LaSPACE Fellowship (Saba Ramazani)</i>	BoR/LaSPACE	26,000
Erez Allouche	<i>Evaluation of a UT Robotic System Using Steel Pipe Specimens Subjected to Controlled Corrosion</i>	RITECH	9,500
Erez Allouche	<i>Materials Testing for Southern Trenchless</i>	Southern Trenchless	5,997
Erez Allouche	<i>Applications of Thermoplastic Pipes in HDD and MT Installations</i>	City of New York	15,000
<b>Nov 2012</b>			<b>\$60,047</b>
Stan Napper	<i>Growth &amp; Characterization of Graphene Films for Advanced Electronics &amp;</i>	AFRL/Clarkson	50,000
Stan Napper	<i>Development of IR Nanosensors Based on CNT-Cus Nanohybrids</i>	AFRL/Clarkson	20,000
Stan Napper	<i>Surface Plasmon Polariton Diode: Toward Thz Optoelectronics</i>	AFRL/Clarkson	50,000
Pam Moore	<i>2012-13 Carl Perkins Basic Grant</i>	US Dept. of Education	31,549
Patrick O'Neal	<i>Quantifying Space-Related Edema Using Multi-Wavelength Photoplethysmography</i>	NASA/LaSPACE	6,000
<b>Dec 2012</b>			<b>\$157,752</b>

(Cont'd on page 9)

## PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$ Requested
13-029	Roberts, Tom L.	Burns, A.J.	The Role of Psychological Capital in Information Security	Personnel Security Research Center	14,600
13-030	Apter-Desselles, Marita	Sheets, Tilman	Project Evaluation for Louisiana Models for Change	La. Models for Change, Baton Rouge Area Foundation	35,000
13-031	Dua, Sumet		Enhanced Associative Mining of MASINT Data for Human Signature Discovery and Exploitation	AFRL/Clarkson	75,000
13-032	Dua, Sumet		Heterogeneous and Distributed Data Mining for Mission Focused Decision Support	AFRL/Clarkson	75,000
13-033	Tyree, Michael		The Role of Soil Moisture & Cracking on Total Soil CO2 efflux and it's Respiratory Components in Sharkey Shrink-swell Clay Soil Planted with Eastern Cottonwood	BoR/Pfund	9,734
13-034	McDonald, John		Gas to Liquids Catalyst Development	American Strategic Innovations	368,266
13-035	Choi, Jeong Hoon		Louisiana Multi-tiered Early Childhood Education Summer Institute (LEEP)	USDOEdu	62,500
13-036	Casas, Irene		Awareness & Control Practices of Dengue Fever in the City of Cali, Colombia	BoR/RCS	120,000
13-037	Atkison, Travis		Ensemble Modeling with Randomized Projection	DoEnergy	
13-038	Wilson, Chester		Steam Reforming Catalyst & Advanced Fischer-Tropsch Reactor Development for American Synthetic Fuel	BoR/ITRS	140,000
13-039	Gourd, Jean		General Purpose Solution Optimization via Distributed Artificial Life of Agents	BoR/RCS	180,000
13-040	Sawyer, Lee	Greenwood/Wobisch	High Energy Physics Research at the Energy Frontier at Louisiana Tech	U.S.Dept. of Energy	1,137,047
13-041	Wilson, Chester		Highly Specific Neutron Detectors and Nuclear Containment Systems for Louisiana's Energy & Defense Industries	BoR/ITRS	147,000
13-042	Shaw, John		Are We Alone? Astronomy and the Existence of Life in the Universe	NEH	24,999
13-043	Bishop, Thomas		Innovations in Interactive Chromatin Modeling	NSF	129,559
13-044	Shepard, Scott		Nanoparticle Routing for Telecommunication Interfaces & Enhanced Photovoltaics	BoR/RCS	180,000
13-045	Allouche, Erez	Montes/McKim	Effect of Geospray TM and Geospray AM-STM on the Mitigation of Biological Generation of Sulfide in Concrete Sewer Pipes	Geotree Technologies	18,300
13-046	Gibson, Mark	Grozdzits, George	Louisiana Forest Products Development Center at Louisiana Tech University	LSUAC	28,066
13-047	Radadia, Adarsh		Point of Care Microelectronic Diagnostics for Early Phase Rickettsial Infections	LBRN/INBRE	310,000
13-048	Radadia, Adarsh		Graphene Chemiresistors for Point-of-Care Diagnostics	BoR/RCS	180,000
13-049	Orr, Marisa		Using Structural Equation Modeling to Explore How Gender, Race and Socioeconomic Status Affect Major Choice, Academic Performance, and Persistence in Engineering	BoR/RCS	200,000

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
13-050	Jaganathan, Arun	Simicevic/Hall	Development of Multi-Sensor Based Obstacle Detection System to Prevent Undergrown Utility Strikes in Horizontal Directional Drilling	BoR/ITRS	0
13-051	Dai, Weizhong		Computational Model and Experimental Verification for the Development of Drug Eluting Stent Coatings for Arterial Pharmacokinetics	BoR/Pfund	10,000
13-053	Sherer, Eric		Automated Abstraction of Serial Colonoscopy Results from EMR text	BoR/RCS	195,000
13-054	Hindmarsh, Patrick		Using Combination Antifungal Drug Treatment to Identify Stress Response in Candida Albicans	BoR/RCS	180,000
13-057	Tewari, Sanjay		Treating Hydraulic Fracturing Wastewater with Carbon Aerogel & Capacitive Deionization Technology	BoR/RCS	105,000
13-058	O'Neal, Patrick	Evans, Katie	Pre-Clinical Development of a Multi-Wavelength Pulse Photometer for Non-Invasive Real-Time Pharmacokinetics	BoR/ITRS	172,005
13-059	Keith-Vincent, Lindsey		Lincoln Parish MSP	Lincoln Parish School Board	144,299
13-060	Edwards, Thea		Chemical Ecology of Phyto-Hormones	BoR/RCS	186,000
13-062	Derosa, Pedro		Understanding the Interface Between Nanoinserts and the Matrix in Nanocomposites	NSF	273,100
13-063	Dowling, Bobby		Hideaway Park Piers	Louisiana Dept. of Wildlife & Fisheries	14,532
13-064	Dillaway, Dylan		Above-ground Carbohydrate Pools Control Recovery from Crown Scorch in Longleaf Pine (Pinus Palustris P. Mill)	BoR/Pfund	166,735
13-065	Radadia, Adarsh		Evaluation of Antibody Stability on Nanodiamonds Under Physiological Conditions	BoR/Pfund	130,000
13-066	Zivanovich, Sandra	Que, Long	Precision Probe System for Research on Surface Plasmons and Nanohybrids	DOD	455,650
13-067	Tims, Heath	Turner, Galen	CITEST: Louisiana Tech's Cyber ITEST Program	NSF	65,000
13-068	Gourd, Jean		FAST-VM: Managing Advanced Persistent Threats via Temporal Complex High Order State Change	DOD	10,000
13-069	Moore, Brandon	Gourd, Jean	Histological Characterization of the Adult American Alligator Phallus	BoR/Pfund	10,000
13-070	Ker, Jun-Ing		A Learning Factory for Continuous Quality Improvement: A Pilot Study	BoR/Pfund	149,776
13-071	Gunasekaran, Alfred	Weiss/Que	Acquisition of Surface Profilometer, White-light Interferometer & Multiferoic Measurement Tester for Minature Energy & Electronic Security Systems for US-Military Applications	DOD/DURIP	1,200,000
13-072	Wasiudden, Nazimuddin		Civil Engineering Senior Project: Tarbuton Road Interchange and I-20 Frontage Roads	LTRC	45,000
13-073	Mainardi, Daniela	Allouche, Erez	Multi-scale Studies of Geopolymer Binders for High Temperature Applications	NSF	304,509

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
13-074	Jaganathan, Arun	Guice/Allouche/Simicevic	Sensors for Fatigue Failure Prediction in Critical Infrastructure	NSF	10,000
13-075	Hindmarsh, Patrick		Using Combination Antifungal Drug Treatment to Identify Stress Response in Candida Albicans	BoR/Pfund	10,000
13-076	Wang, Shengnian		Regulation DNA Conformation and Dynamics With Hybrid Field Microfluidics	BoR/Pfund	10,000
13-077	Zivanovich, Sandra		Research on Graphene Electrode for Plasmonic Solar Cell Application	BoR/Pfund	10,000
13-078	O'Neal, Chad		DURIP: Acquisition of a Raman Spectrometer for Graphene-Based Sensors, Bioscience and Polymer Characterization	DoD	200,625
13-079	Maness, Terri		Immunological Memory in a Long-lived Wild Vertebrate	BoR/Pfund	10,000
13-080	Hollins, Bryant		Investigating the Formation of Protein-centered Radicals in Brain Cells Using Immuno-spin Trapping	BoR/Pfund	10,000
13-081	Hughes, Susan	McDonald, Olevia	Menu Modification for Lincoln Parish	Lincoln Parish Foundation through LPSB	2,499
13-082	Keith-Vincent, Lindsey	Madden, Diane	The IDEA Place: Activity Station Support	LaSPACE/NASA	16,761
13-083	Smith, Genaro		The Land Baron's Sun: Poetry Collection and the Beautiful Ones Are Not Yet Born: Collection of Short Stories	BoR/ATLAS	18,536
13-084	Allouche, Erez	Alam, Shaurav	Burst Pressure Tests of Composite CIPP Liners	Insituform LLC	9,500
13-085	Saber, Aziz	Allouche, Erez	Sustainable Engineering Laboratory	BoR/ENH	82,500
13-086	Lvov, Yuri	Mills, David	Bone Cement/Tubule Clay Composites With Sustained Antibiotic Release	NIH	408,744
13-087	Jackson, Paul	Reichley, Jacob	A Safe Lighting System & Mechanical Ventilation for the Louisiana Tech University Greenhouses	BoR/ENH	48,900
13-088	Kanno, Jinko		Genus & Outerthickness of Graph	NSA	39,815
13-089	Barlow, Kim		UL System Extreme Clean Make-over Grant (KLB)	KLB, Inc.	3,300
13-090	Atkison, Travis	Gourd, Jean	SFS@LaTech: Louisiana Tech University's Scholarship for Service Program	NSF	3,724,382
13-091	Casas, Irene		Assessing Space Time Uncertainties on Dengue Fever Outbreaks: A Parallel Approach	NIH	60,898
13-092	Radadia, Adarsh	Hegab/Palmer	Raman Microscopy Augmented Micro/Nanotechnology Education at Louisiana Tech University	BoR/ENH	80,540
13-093	Allouche, Erez	Alam/Bartlett	Performance of Flexural/Bending Test on Composite Liner Specimens According to ASTM D790	Trinity River Authority of Texas	10,800
13-094	Gentry, Laura	Buttrey/Hillard	Development of a Nutrition and Physiology Teaching Laboratory Providing Kinesthetic Learning Opportunities for Undergraduates in Agricultural Sciences	BoR/ENH	75,150
13-095	Allouche, Erez	McKim/Alam	Applications of Thermoplastic Pipes in HDD and MT Installations	URS	15,000

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
13-096	Orr, Marisa		A Comparative Study of Engineering Matriculation Practices	NSF	8,127
13-097	Dai, Weizhong		Numerical Method for Investigating the Superfluid Effects of Exciton-Polariton Condensates	NSF	195,306
13-098	Murray, Teresa	Weiss/Tims	Engine Research for Efficiency & Sustainability Lab Enhancement	BoR/ENH	86,330
13-099	Allouche, Erez	McKim/Alam	Fabrication of End-Seals & Burst Pressure Tests of Composite CIPP	Insituform LLC	12,500
13-100	Sherer, Eric		Benzodiazepine Driven TSPO Modulation & Prostrate Cancer Progression	NIH	186,798
13-101	Kennedy, Gary	Green/Hennen/Russell	Utilizing Forages to Develop Innovative Beef Markets	BoR/ENH	49,786
13-102	Murphey, Mark	Reger, Gorden	Meat Processing Enhancement	BoR/ENH	68,172
13-103	Phillips, Kerri	Madix/Sherman	Enhancement of the Speech-Language Pathology Program at Louisiana Tech University	BoR/ENH	115,054
13-104	Berg, Jerry	Miller, Patrick	School of Art Application Development Lab	BoR/ENH	76,633
13-105	Iasemidis, Leon	Vlachos, Ioannis	Analysis of Brain Dynamics in Ictogenesis	NIH	299,761
13-106	Wasiudden, Nazimuddin	Pike, Jeff	Acquisition of Superpave Asphalt Binder Testing Equipment for Highway Engineering Laboratory	BoR/ENH	42,565
13-107	Maggio, Todd	Crittenden/Slaughter	Advanced Technology for Art and Product Design	BoR/ENH	127,674
13-108	Sorensen, Randall	Alexander/Robken	Creation of a Digital Multi-Media Studio	BoR/ENH	117,759
13-109	Sciro, Cherrie	Crook, Paul	Enhancing Stage Management at Louisiana Tech University	BoR/ENH	119,142
13-110	Shoemaker, Sheryl	Iasemidis/Vlachos	ACEL: Acoustical & Clinical Electrophysiology Laboratory	BoR/ENH	84,070
13-111	Liu, Pei	Hughes/Erickson	Using Classroom Enhancement to Improve Student Learning Outcomes in the Nutrition & Dietetics Program	BoR/ENH	19,666
13-112	Jaganathan, Arun	Pike/Hall	Enhancement of Undergraduate Materials Testing Laboratory	BoR/ENH	33,007
13-113	Wang, Jay		Enhancement of the Geotechnical Engineering Laboratory	BoR/ENH	68,553
13-114	Allouche, Erez	Saber/Alam	Enhancement of LTU Structural Testing Laboratory	BoR/ENH	126,275
13-115	Bishop, Thomas		Molecular Dynamic Studies of Mononucleosomes	NIH	399,576
13-116	Que, Long		Investigation of Surface Plasmon Enhanced Nanomaterials for Thermal and Solar Energy	NSF	230,596
13-117	Lvov, Yuri	Tully, Joshua	Insulation and Energy Storage Utilizing Phase Change Materials in Heating/Cooling Cycle	NASA/LURA	6,000

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
13-118	Choi, Ben		Developing Multivalued Logic Microprocessors	NSF	278,621
13-119	Zivanovich, Sandra	Genov, Dentcho	Metal-dielectric Fractal Composites for Photovoltaic Enhancement	NSF	306,165
13-120	Genov, Dentcho		Collaborative Research: Continuous Index Photon Traps	NSF	180,000
13-121	Casas, Irene		Knowledge, Attitude & Practices Towards Dengue Fever in Rapidly Emerging Cities: A Geographical Approach	Bill & Melinda Gates Foundation	16,455
13-122	Hou, Songming		Solving Two & Three Dimensional Interface Problems Using Non-Body-Fitted Grid	NSF	169,883
13-123	Choi, Ben		Developing Fuzzy Microprocessors	NSF	333,181
13-124	Shepard, Scott	Que, Long	Conventionally Incident, Mode-Coupled and Nonlinear Light-Trapping	NSF	274,963
13-125	Wells, Steven	Johnston/Simicevic	Precision Measurements Using the Weak Interaction	NSF	560,889
13-126	Carpenter, Jenna		Toolkits for Leaders and Advocates to ADVANCE Women in Engineering	NSF	59,171
13-127	Allouche, Erez	Montes, Carlos	Materials Testing for Southern Trenchless	Southern Trenchless	5,997
13-128	Allouche, Erez	Montes, Carlos	Pickle Jar Test of Geotree's Geopolymer Grout	Geotree Technologies	8,500
13-129	Wasiuddin, Nazimuddin		Evaluation of Dynamic Shear Rheometer Tests for Emulsions	LTRC	49,880
13-130	Allouche, Erez	Patil, Kunal	Evaluation of a UT Robotic System Using Steel Pipe Specimens Subjected to Controlled Corrosion	RITECH	9,750
13-131	Tims, Heath	Turner/Gourd	CITEST: Louisiana Tech's Cyber ITEST Program	NSF	1,200,000
13-132	Phoha, Vir	Karim/O'Neal	TTP-Medium-Collaborative-System and Software for Collusion Restraint	NSF	931,458
13-133	Palmer, James	Ramachandran, Bala	Superior Grad Fellows Supporting Five Centers of Excellence in Engineering 2014-2017	BoR/Grad Fellows	400,000
13-134	Ramachandran, Ramu	Dai, Weizhong	Computational Analysis & Modeling Doctoral Graduate Fellows 2014-2018	BoR/Grad Fellows	200,000
13-135	McConathy, Terry	Ramachandran, Bala	Increasing Diversity in Doctoral Populations at Louisiana Tech University 2013-17	BoR/Grad Fellows	380,000
13-136	Evans, Katy	Schroder, Bernd	CURM Application	Brigham Young University Center Mathematics	6,250
13-137	Jaganathan, Arun	Simicevic/Hall	Development of a Robust Drill Head Integrated Cross Bore Warning System for Horizontal Directional Drilling (HDD)	Ditch Witch - Charles Machines Works, Inc.	85,024
13-138	Patterson, William		Impacts of Beef Cattle Forage Production Systems on Water Quality and Nutrient Runoff in the Bayou Teche Watershed	LSU/USDA	0
13-139	Shepard, Scott	Zivanovic, Sandra	Fabrication and Analysis of a New Class of Nano-Enhanced Light-Traps for Polymer Photovoltaics	NSF	315,805

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
13-140	Atkison, Travis		Ensemble Modeling with Randomized Projection	DoEnergy	770,544
13-141	Evans, Katy	DeCoster, Mark	REU Supplemental Request for Award #1032176: Mathematical Modeling of Biological and Biomedical Engineering Processes	NSF	5,240
13-142	Radadia, Adarsh		Characterizing the Bio-Graphene Interface Using Biomolecular Field Effect Transistors	Louisiana Space Consortium /BoR	34,000
13-143	Tyree, Michael		Seed Bank Dynamics, Ecophysiology & Establishment of Chinese Tallow (Triadica Sebifera L. Small) in Managed Bottom-Land Hardwood Forests	USDA	
13-144	Que, Long		Space Power And Energy Storage	NASA/STTR	48,000
13-145	Wilson, Chester		Synthetic Biofuel Blends of Louisiana Producers for Military Applications	BoR/OPT-IN	70,000
13-146	O'Neal, Chad		MEMS Based Solutions for an Integrated Energy Harvesting System	NASA/STTR	74,833
13-147	Crews, Niel		LaSPACE GSRA: Collin Tranter	NASA/LaSPACE	5,000
13-148	Leangsuksun, Box		Data Parallel Manager	NSF	306,381
13-149	Radadia, Adarsh		A Highly Multiplexed, Reproducible, Scalable Ultrananocrystalline Diamond Microarray Biosensor for Real-Time Pathogen Detection	NSF/Advanced Diamond Technologies	39,976
13-150	Phoha, Vir		A Foundational Investigation into the Potential of Users' Touch Behavior as an Implicit Authentication Modality	NSF	499,359
13-151	O'Neal, Patrick		Optical Interrogation of Nanoshell Pharmacokinetics	NSF/SBIR	49,500
13-152	Saber, Aziz	Flurry, Laura	Highway for Life Demonstration Project LA511 (70th Street)	LTRC	92,049
13-153	Allouche, Erez		Experimental Evaluation of Infinite Pipe - Mechanical Performance and Design Considerations	PipeMedic	49,979
13-154	Rutledge, Julie	Chestnut/McCollum	Bulldog Book Club: Increasing Lincoln Parish Preschoolers' Access to Books in the Home	Lincoln Health Foundation	67,000
13-155	Allouche, Erez	Montes/Eklund	Flexible Geopolymer Coating for High Pressure Steel Pipes & Other Critical Infrastructure Components	LaEPSCoR OPT-IN	70,000
13-156	Liu, Don		A Particle-Resolving Computational Model for Particulate Flows and its Applications in Sediment Entrainment and Coastal Erosion	NSF	159,841
13-157	Choi, Ben		Human and Humanoid Robot Interactions	NSF	301,712
13-158	Allouche, Erez	Lvov/Mainardi	High Performance Geopolymeric Binders for Space Applications - Multi-Scale Analysis and Simulation	Nasa/LaEPSCoR	1,400,000
13-159	Crews, Niel	Wilson/Derosa	Real-Time Characterization of DNA Binding Energy as a Biological Radiation Dosimeter	Nasa/LaEPSCoR	0
13-160	Liu, Don		An Efficient Model of Disperse Flows at Low to Moderate Reynolds Numbers and its Applications	NSF	161,041
13-161	Crittenden, Kelly	Evans/Hall	Louisiana Tech's Redshirt Quarter for Beginning Majors	NSF	999,539



## **FEDERAL RESEARCH AND DEVELOPMENT FUNDING... (CONT'D FROM PAGE 1)**

The President's budget request continues support for three multi-agency R&D initiatives in FY2013, proposing \$1.766 billion for the National Nanotechnology Initiative, an increase of \$70 million (4.1%) over FY2012; \$3.807 billion for the Networking and Information Technology Research and Development program, an increase of \$69 million (1.8%); and \$2.633 billion for the U.S. Global Change Research Program, an increase of \$136 million (5.6%).

In recent years, Congress has used a variety of mechanisms to complete the annual appropriations process after the start of the fiscal year. This may affect agencies' execution of their R&D

budgets, including delaying or canceling some planned R&D and equipment acquisition.

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## **ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS**

Vir Phoha, DISTRIBUTED AUTONOMY FOR INTELLIGENT MAKING, ADAPTIVE LEARNING, AND ROBUST COLLABORATION, ONR/Penn State University \$18,902;

Yuri Lvov, TUBULE NANOCONTAINERS FOR CORROSION INHIBITORS, NSF \$76,471;

Don Liu, COLLABORATIVE RESEARCH: AN EFFICIENT COMPUTATIONAL APPROACH FOR WAVE AND SURGE ATTENUATION IN WETLANDS AND APPLICATIONS IN FLOOD RISK REDUCTION, NSF \$50,409;

B. Ramachandran, LOUISIANA EPSCOR RESEARCH INFRASTRUCTURE IMPROVEMENT: COMPUTATIONAL MATERIALS LOUISIANA TECH SUB-CONTRACT, NSF/BoR \$626,410;

W. Campbell, CYBERFLORA LOUISIANA, NSF/ULM \$15,223;

E. Allouche, DEMONSTRATION OF INNOVATIVE TECHNOLOGIES FOR REHABILITATION OF WASTEWATER CONFEYANCE SYSTEMS, EPA THROUGH WATER ENVIRONMENT RESEARCH FOUNDATION \$12,400;

R. Sterling, ENCOURAGING INNOVATION IN LOCATING AND CHARACTERIZING UNDERGROUND UTILITIES, US DEPT OF TRANSPORTATION THRU NATIONAL ACADEMIES OF SCIENCE \$8,268;

K. Evans, MATHEMATICAL MODELING OF BIOLOGICAL AND BIOMEDICAL ENGINEERING PROCESSES, NSF \$5,240;

L. Keith-Vincent, C3: CHEMISTRY CONCEPTS AND CONNECTIONS, US Dept. of Education/LASIP \$123,281;

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## **NEW GRANTS AWARDED (CONT'D FROM PG 2)**

PI/Co-PI	Title	Funding Agency	\$ Awarded
Erez Allouche	<i>Flexible Geopolymer Coating for High Pressure Steel Pipes &amp; Other Criti-</i>	BoR	50,000
Erez Allouche	<i>Experimental Examination of Partial Compaction Reaming &amp; Assessment</i>	Charles Machine	38,796
Erez Allouche	<i>Neutron Scattering Studies to Examine the Effect of Activator to Binder</i>	NSF/BoR	8,000
Erez Allouche	<i>The Assess-and-Fix Approach Using NDE to Help Select Pipe Renewal Methods</i>	EPA/Water Research Fund/HDR Engineering	15,000
Erez Allouche	<i>Effect of Geospray TM and Geospray AMSTM on the Mitigation of Biological Generation of Sulfide in Concrete Sewer Pipes</i>	GeoTree Technologies	18,300
Stan Napper	<i>A Cryptologic Method for Preventing Unauthorized Outbound Network ...</i>	DOD/Clarkson	75,000
Daniela Mainardi	<i>CREST Bioenergy Center</i>	NSF	116,656
<b>January 2013</b>			<b>\$321,752</b>
<b>2012-13 YTD Total:</b>			<b>\$3,422,429.</b>