

Louisiana Tech University



BREEZE BULLETIN

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

Chance favors only the prepared mind.

*Louis Pasteur
(1822-1895, French scientist who developed pasteurization)*

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2011-12 TECH FRINGE RATES REVISED 10-12-11

- Faculty/Unclassified: 41.90%
- Civil Service: 43.80%
- Temp/Post-doc: 24.58%
- DROP: 20%

IN-HOUSE WORKSHOPS

- **Grants.gov**—January 10 @ 2-3pm Rm. 1535 Wylly Tower
- **Grant Management**— February 14 @ 2-3pm Rm. 1535 Wylly Tower
- **Life in the Fastlane System**—March 13 @ 2-3pm CITDL Prescott Library

In-house workshops will be scheduled every second Tuesday of each month unless otherwise stated. For a full list and description of in-house workshops, go to http://research.latech.edu/resources/training_workshops/latech_workshops.

**HAPPY HOLIDAYS !
December 21-January 3
Geaux Dawgs!!**



"MOSAIC REPORT" OUTLINES STRATEGIES AND PRIORITIES FOR FUTURE SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES

New report says future social science research will be interdisciplinary, data-intensive and collaborative

December 1, 2011

View a [webcast](#) with Dr. Myron Gutmann, assistant director for Social, Behavioral and Economic Sciences at NSF.

The National Science Foundation's (NSF) Directorate for Social, Behavioral and Economic (SBE) Sciences, on Thursday, announced the findings of a year-long study that may chart the course of federally-funded social science research for the near future and beyond.

Called *Rebuilding the Mosaic: Fostering Research in the Social, Behavioral, and Economic Sciences at the National Science Foundation in the Next Decade*, the report results from a visioning process launched by the directorate in August 2010. It concludes NSF's existing programs serve the social science communities well and new topics, especially multidisciplinary ones, may invite a more flexible structure for future funding.

"'Rebuilding the Mosaic' is a commendable outcome of a herculean and very time-ly effort," said NSF Director Subra Suresh. "The information and thinking within the community--and reflected in the report--promise significant impact on science, NSF, and the nation's wellbeing."

More than 240 authors and teams of authors from the wider SBE community responded to an open invitation from NSF to contribute white papers that set forth the big questions that are likely to drive next generation research in social, behavioral and economic sciences; drive the kinds of skills and training future scholars will need to undertake this research; and drive the infrastructure of data, services and support required to enable future social research.

Within the rich diversity topics described in the 252 white papers received, the report finds SBE scientists share of a vision of research that is interdisciplinary, data-intensive and collaborative. It also finds the social science community looks to NSF's SBE directorate to provide the leadership and direction in building the capacity and infrastructure that will make future research possible.

The report includes definitive work on how behavioral, social and economic sciences can contribute significantly to understanding critical issues ranging from brain and behavior; creativity and innovation; crisis and disaster prevention/management; education and learning; social network dynamics; and to many other topics of critical importance to increasingly interconnected world communities.

"We have the opportunity to transform SBE over the next decade by creating a new generation of researchers and by providing them with the research programs, data and working environments in which to answer critical questions," said Myron P. Gutmann, NSF assistant director for SBE.

NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	\$ Awarded
Galen Turner	<i>NSF Graduate Research Fellowship - LR</i>	NSF	3,850
James Nelson	<i>Smart Scholarship (ASEE) Joshua Hitchins</i>	DOD/ASEE	5787
Jeremy Mhire	<i>Cyber-Liberal Arts</i>	DOD/Cyber Innovation Center	60000
Jane Petrus	<i>Louisiana Tech University Engage Mini-Grant Proposal</i>	NSF/WEPAN	10,000
August 2011			901,274
Glenn Beer	<i>Madison Parish Math Project</i>	US DoEdu/,MPSB	5000
Mark Gibson	<i>Louisiana Forest Products Development Center at Louisiana Tech University</i>	LSU Ag. Cente	37,422
Patrick O'Neal	<i>Real-time Optical Pharmacokinetics for Telemedicine</i>	NASA/LaSPACE	12,000
Don Liu	<i>Collaborative Research: An Efficient Computational Approach for Wave & Surge Attenuation in Wetlands and Applications in Flood Risk Reduction</i>	NSF	159,245
Carynn Wiggins	<i>Spotlight on Being a Writer</i>	BESE	2,505
Bala Ramachandran	<i>Computational and Experimental Investigations of the Reversible Reactions of Lithium With Nanostructured RuO2 for New Potential Lithium Ion</i>	NSF/Xavier	17,000
Sandra Zivanovic	<i>LaSPACE GSRA: Melancon</i>	NASA/LaSPACE	5,000
Jay Wang	<i>Application of Soil Bioengineering (Ecosystem-based) Approaches for Riparian Restoration in Coastal Area of Louisiana</i>	O CPR	25,000
September 2011			779,767
Erez Allouche	<i>Geopolymer Binders for High Temperature & Corrosion Resistant Refrac-</i>	NCL Resource	10,000
Pam Moore	<i>Nursing Capitation 11-12</i>	BoR	9,750
Long Que	<i>A Novel Hybrid Power Generator for Harvesting Multiple Ambient Energy</i>	DOD	24,910
Dave Norris, Jr.	<i>Louisiana Tech Proof of Concept Center</i>	US Dept. of Commerce	1,000,000
David Mills	<i>LURA - Weisman</i>	NASA/LaSPACE	5,000
David Mills	<i>GSRA: Herb Vandenberg</i>	NASA/LaSPACE	5,000
October 2011			1,054,660
Jay Wang	<i>Capstone Senior Design Project: Segment E of I-49 North (JCT. LA 170 to</i>	LTRC	5,000
David Gullatt	<i>WALL 11/12-13 Turnaround Schools Travel II</i>	BoR	3,877
Randall Null	<i>AMCOM Express Technical Domain</i>	DOD/Radiance	47,500
Erez Allouche	<i>Mechanical Testing of an Innovative Lining Product</i>	NIST/LMK Enterprises	47,550
Yuri Lvov	<i>NSF REU Supplement for Tubule Nanocontainers for Corrosion Inhibitors</i>	NSF	6,000
November 2011			109,927
2011-12 YTD Total:			5,477,368

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

- S. Dua, MODES OF ADAPTATION, RESISTANCE, AND SURVIVAL FOR LIFE INHABITING A FREEZE DRIED RADIATION BATHED ENVIRONMENT (MARS LIFE), NASA through LSU \$18,534;
- L. Guice, CENTURYLINK TELECOM PROGRAM & PROFESSORSHIP, Louisiana Dept. of Economic Development \$300,000;
- C. Wilson, LASPACE GRADUATE FELLOW-JOHN W. SWEENEY-LA TECH, NASA through LSU/LaSPACE \$19,792;
- N. Crews, LASPACE FELLOW-MATTHEW HARTMANN LA TECH, NASA through LSU/LaSPACE \$20,834;

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$ Requested
12-025	Turner, Galen		NSF Graduate Research Fellowship - LR	NSF	40,500
12-026	Phoha, Vir		RBSG: Rapid Behavioral Signature Generation	DARPA	150,000
12-027	Nelson, James		Smart Scholarship (ASEE) Joshua Hitchins	ASEE	5,787
12-028	Allouche, Erez	Saurav, Alam	Pickle Jar Test Forepoxy Coating for Man-hole Rehabilitation	Quadex Utility Infrastructure Restoration	8,500
12-029	Wilson, Chester		Mda Nanotube Dfv	Radiance	275,000
12-030	Mhire, Jeremy		Cyber-Liberal Arts	Cyber Innovation Center	60,000
12-031	Allouche, Erez	Patil, Kunal	Optimization of Geopolymer Formulation in View of Workability & Strength Development	Heidelberg Cement	23,000
12-032	Crews, Niel		Polymerase Chain Reaction-Based High-Sensitivity Genetic Analysis On Nanosatellites (PCR-Sat)	NASA	1,197,347
12-033	Wilson, Chester		Micro and Nano Structured Radiation Detectors for the Nuclear Energy and Defense Industries	BoR/ITRS	144,000
12-034	Que, Long		Efficiency Improvement Studies of Carbon Nanotube Films-Based Energy Harvesting Technology	LaSPACE	34,660
12-035	Allouche, Erez	Simicevic, Jadranka	Encouraging Innovation in Locating & Characterizing Underground Utilities - Part 2	Transportation Research Board NAS-NRC	9,500
12-036	Strimbu, Bogdan		Sensitivity of Forest Planning Objective Function to Structure and Representation of Forest Estate	BoR/RCS	151,155
12-037	Gunasekaran, Alfred	O'Neal, Chad	Acquisition of Film Thickness Monitor & Stress Measurement System for Miniature Energy & Electronic Security Systems for US Military Applications	DOD/DURIP	172,160
12-038	Que, Long		A Novel Hybrid Power Generator for Harvesting Multiple Ambient Energy Sources	NAVY/SBIR	24,910
12-039	Radadia, Adarsh		Covalently Bio-functionalized Graphene Nanoribbon Chemiresistors for Portable Biomedical Diagnostics	BoR/RCS	180,000
12-040	Strimbu, Bogdan	Gibson, Mark	Identification of Optimal Products Allocation for Strategic Planning Using LIDAR data	BoR/ITRS	249,114
12-041	Wilson, Chester		FIB Capability for AT-RER	DOD/DURIP	669,892
12-042	Zivanovic, Sandra	Genov, Dentcho	Novel Plasmonic Solar Cell Micromanufacturing Technology	BoR/ITRS	180,000
12-043	Shepard, Scott		Nanoparticle Routing for Telecommunication and Renewable Energy Applications	BoR/RCS	180,000
12-045	Wasiudden, Nazimuddin		Investigation of Dewetting & Spreading Mechanisms at the Asphalt-Aggregate Interface for Moisture Damage	BoR/RCS	82,006

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
12-046	Chiu, Alan	Walczyk, Jeffrey	Cognitive Response to Visual Feed back Paradigms in Brain Computer Interfce for Motor Imagery Decoding	NSF/CBET/BME	188,170
12-047	Que, Long	Lvov, Yuri	Single-Cell Controlled Drug-Effects Analysis Using Real-Time Label-Free Electrical Measurements	NSF	335,100
12-048	Que, Long		Ultrasensitive & Inexpensive Transparent Nanoplasmic Platform for Multiplexed Detection of Cancer Biomarkers	NSF	298,869
12-049	Atkison, Travis		Developing Effective Rogue Application Prediction Techniques Through Combining of Multiple Machine Learning & Data Mining Techniques	BoR/RCS	180,000
12-050	Kertson, Julie Rutlege	McCollum, Heather	"I'll Be Your Best Friend if..." Exploring Relational Manipulation	BoR/RCS	100,000
12-051	Murray, Teresa		Invivo Time Course Study of Adult Neurogenesis & Adult Neural Stem Cell Transformation to Tumor Cells in the Mouse Subventricular Zone...	BoR/RCS	180,000
12-052	Cardenas, Henry	Gibson/ Grozdits	Environmentally Sustainable High Performance Wood Products	BoR/ITRS	187,000
12-053	Wilson, Chester		Nanocatalyzed Syngas and Liquid Fuels from Natural Gas & Carbon Dioxide	BoR/ITRS	144,000
12-054	Guilbeau, Eric	DeCoster, Mark	Novel Thermoelectric L-Glutamate Biosensor	NSF	455,824
12-055	Merchant, David		Enduring Questions Course Grant: Are We Alone	NEH	24,685
12-056	Gibson, Mark	Grozdzits, George	Louisiana Forest Products Development Center at Louisiana Tech University	LSUAC	37,422
12-057	Murray, Erica		Multi-Sensing, Highly Sensitive Exhaust Gas Sensor: Fabrication, Characterization & Gas Response	Ford Motor Company	120,000
12-058	Merchant, David		Digital Start-up	NEH	24,906
12-059	Allouche, Erez	Patil/ Gunasekaren	Characterization & Chemical Analysis of fly Ash Stockpiles, Literature Review & Economic Potential Analysis	Cherokee Fund	51,850
12-060	O'Neal, Chad		Acquisition of A Multipurpose Die Bonder for Packaging of Antitamper Related Devices	DOD/DURIP	249,267
12-061	Lvov, Yuri	Hollister, Anne	Bone Cement Doped With Antibiotic Loaded Clay Nanotubes for Antimicrobial Protection	NIH	366,401
12-062	Lvov, Yuri		Multiscale Smart Coatings With Sustained Anticorrosive Action	G8 Research Council	
12-063	Allouche, Erez	Patil, Kunal	Geopolymer Binders for High Temperature & Corrosion Resistant Refractory Castables	M.L. Smith, Jr. LLC	10,000
12-064	Wang, Jay		Capstone Senior Design Project: Segment E of I-49 North (JCT. LA 170 to US 71)	LTRC	5,000
12-065	Zivanovic, Sandra	Genov/ C.O'Neal	Research & Education on Plasmonically-Enhanced Polymer-Based Photovoltaic Devices	NSF	310,905

(Cont'd on page 5)

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
12-067	Allouche, Erez	Bishop/Eklund	Evaluating the Durability of Geopolymer Binders & Establishing Deterioration Mechanisms at the Macro, Micro and Atomic Levels	NEH	286,942
12-068	Buboltz, Walt	Thibodeaux/McDaniel	Sleep and Physical Activity Implications for Obesity in Children & Adolescents	NSF	116,746
12-069	Mills, David	Mainardi, Daniela	Louisiana Tech's RET Site: Creating Curricula and Careers Through Collaboration, Inquiry & Innovation	Aetna Foundation	498,413
12-070	Weiss, Leland		CAREER: Ambient Thermal Energy Harvesting for Power Production	NSF	6,000
12-071	Moore, Pamela		Nursing Capitation 11-12	NSF	9,750
12-072	Stoff, Laurie		More than Binding Men's Wounds: Wartime Nursing in Russia During the Great War	UL System	50,000
12-073	Kanno, Jinko		Characterizations of Outerthickness on Several Classes of Graphs	BoR/ATLAS	39,801
12-074	Que, Long		Nanostructured Microtiter-Plate Format Device with a Built-In Label-Free Biosensing Platform for Cancer Biomarker Detection With Ultrasensitivity	NSA	227,327
12-075	Shultz, Jeff		Alternative Splicing of Cell Signaling Polypeptides Leads to Multiple Sclerosis	CDMRP	301,374
12-076	Crews, Niel		Thermal Micro-Reactor for Reduced Gravity Biology	NIH	49,613
12-077	Selmic, Rastko		Virtual Health-Monitoring Sensors for Sensing & Actuation Devices	LaSPACE/BoR/DART2	47,140
12-078	Que, Long		Cancer Biomarker Detection With Ultrasensitivity Using Microfluidic Integrated Nanostructured Optical Microdevices	BoR/EPSCoR/LaSPACE DART2	325,392
12-079	Dai, Weizhong		Development of a Higher Order Accurate Finite Difference Time Method Domain Method for Solving Nonlinear Schroedinger Equation	NIH	44,136
12-080	Hegab, Hisham		PHENOMENal Micro/Nanotechnology Education at Louisiana Tech University	LaSPACE/BoR/DART2	76,500
12-081	Casas, Irene	Palmer, Wesley	GIS Laboratory Enhancement Grant: Positioning & Mobile Technologies	BoR/ENH	46,502
12-082	O'Neal, Mike		Integrating Robotics into the Computer Science Curriculum	BoR/ENH	143,482
12-083	Mainardi, Daniela	Derosa/Ramachandran	Computer Upgrade for College-wide nanotechnology Teaching Laboratory	BoR/ENH	64,813
12-084	Murray, Erica	Weiss/Tims	Engine Research for Efficiency and Sustainability Lab Enhancement	BoR/ENH	86,330
12-085	Harpel, Tammy		Enhancing the Preparation of Future Family Life Educators with Technological Equipment and Media Based Projects	BoR/ENH	18,900
12-086	Roberts, Tom	Fuller/Courtney	Smart Mobile Device Forensics Laboratory	BoR/ENH	118,208

(Cont'd on page 6)

PROPOSALS SUBMITTED (CONT'D FROM PAGE 5 . . .)

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
12-087	Thompson, Elaine	Anderson/ Roach	La @ 200: An Interdisciplinary Exploration of Two Hundred Years of Louisiana History and Life	BoR/ENH	16,650
12-088	Chiu, Alan	Shoemaker, Sheryl	Multi-Model System Electrophysiology Laboratory	BoR/ENH	73,993
12-089	Shultz, Jeff		Alternative Splicing of Cells Signalling Polypeptides Leads to Multiple Sclerosis	Gates Foundation	100,000
12-090	Shoemaker, Sheryl	Chiu, Alan	Multidisciplinary Auditory Research Laboratory	BoR/ENH	75,400
12-091	Bishop, Thomas	Bishop, Thomas	Molecular Dynamics Study of the Nucleosome and Chromatin	NIH	1,250,000
12-092	Tims, Heath	Crittenden/ Swanbom	Advanced Manufacturing and Prototyping With Computer Controlled Machining	BoR/ENH	45,300
12-093	Ker, Jung-Ing	Easley, John	Development of Project-Based Lean-Six Sigma Courses to Enhance INEN Education	BoR/ENH	93,330
12-094	Kim, Yeonsoo	Erickson, Dawn	Resources for Enhancing Student's Knowledge & Skills in Nutrition Assessment & Education	BoR/ENH	32,088
12-095	O'Neal, Patrick	Eklund/Hegab	Nanotechnology Lab Enhancement for Nanoparticle Manufacture Education	BoR/ENH	74,462
12-096	Townsend, Bryan	Adams, Mary Alice	Enhancement of Speech Communications Program at Louisiana Tech University	BoR/ENH	46,000
12-097	Singh, Kevin		Touch Screen Monitors and Webcams for Enhanced Studio Critiques	BoR/ENH	37,600
12-098	Hancock, Liane		Materials Resource Lab Lecture Series	BoR/ENH	21,500
12-099	Paun, Andrei	Strimbu/ Dickson/Ross	Identification of Climate Sensitive Landscape Management Strategies in Forested Areas With Predominantly Small Timberland Owners	AFRI	750,000
12-100	Roach, Susan	Merchant, David	Going Green: Enhancing the English Technical Writing Lab	BoR/ENH	53,744
12-101	Lvov, Yuri		Methane Storage in Clay Nanotube Composite for ANG (Adsorbed Natural Gas)	BoR/PFUND	10,000
12-102	Johnston, Kathleen	Simicevic/ Wells	Parity Violation Electron Scattering Measurements at Jefferson Lab	NSF	631,709
12-103	DeCoster, Mark		Growth, Differentiation, and Interaction of Brain Stem Cells and Normal Brain Cells Using a Novel 3-dimensional Spheroid Method	BD Biosciences	12,200
12-104	Wang, Shengnian		Hybrid Field Regulation of Macromolecule Configurations and Dynamics in Glows	NSF	300,079
12-105	Wang, Jay		The Thermal Effects on the Structural Behavior of the Energy Foundation Piles Driving in Louisiana Soft Clayey Soils	BoR/PFUND	10,000
12-106	Hegab, Hisham		Microscale Compressor for Gas Based Microfluidic Devices	BoR/PFUND	10,000

(Cont'd on page 7)

PROPOSALS SUBMITTED (CONT'D FROM PAGE 6 . . .)

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
12-107	Gullat, David		WALL 11/12-13 Turnaround Schools Travel II	BoR	3,877
12-108	Dai, Weizhong		Computational Model and Experimental Verification for the Development of Drug Eluting Stent Coatings for Arterial Pharmacokinetics	BoR/PFUND	10,000
12-109	Que, Long		Fabricaton of Transparent Nanostructured Optical Devices for Ultrasensitive Cancer Biomarker Detection	BoR/PFUND	10,000
12-110	DeCoster, Mark		Three Dimensional Cell Spheroids fro Multi-Scale Systems	BoR/PFUND	10,000
12-111	Radadia, Adarsh		Miniaturized Point-of-care Diagnostics for Pathogen Sensing Blood	NIH	320,000
12-112	Leangsuksun, Box		Towards Better Failure Monitoring, Near-Real Time Modeling and Analysis Toll Sets for HPC Systems	Sandia National Lab	150,936
12-113	Moore, Brandon		Reproductive Assessment of Mercury-Bioaccumulating Aquatic Predators	BoR/PFUND	10,000
12-114	Wasiudden, Nazi-muddin		Nanoclay-Based Modifications of Asphalt Binders	BoR/PFUND	10,000
12-115	Bukowski, Marie	Donehoo/ Gould	Superior Graduate Fellows Supporting Area of Excellence in the School of Art	BoR/GRAD FELLOWS	150,000
12-116	Shultz, Jeff		Alternative Splicing of Cell Signaling Polypeptides Leads to Multiple Sclerosis	LBRN/INBRE	375,000
12-117	McConathy, Terry	Ramachandran/Young	Increasing Diversity in Doctoral Populations at Louisiana Tech University	BoR/SREB/GF	335,000
12-119	Allouche, Erez	Alam, Shaurav	Mechanical Testing of an Innovative Lining Product	LMK Enterprises	47,550
12-120	Crews, Niel		Closed-Loop Thermal Control for a High-Altitude Microreactor	LaSPACE/ ACES	9,500
12-121	Palmer, James	Ramachandran, Ramu	Superior Graduate Fellows Supporting Three Centers of Excellence in Engineering 2013-2017	BoR/GRAD FELLOWS	30,000
12-122	Jones, Steven	Guilbeau, Eric	Biomedical Engeeneering Doctoral Graduate Fellows 2013-17	BoR/GRAD FELLOWS	200,000
12-123	Crews, Niel		Free-Floating Payload for Microgravity Assessment of a Genetic Analysis for the Iss National Lab	NASA	75,454
12-124	Gourd, Jean		Sensitive Information Accountability Among Physically Segregated Data Networks	DARPA	59,906
12-125	Lvov, Yuri		Clay Nanotube Coating for Sustained Anti-corrosion Protection	NSF	50,000
12-126	Giorno, Rebecca		Roles of the Spore Coat & Exosporium in Modulating a Response to Germinants	LBRN/INBRE	0
12-127	Mills, David	Mainardi, Daniella	I3: Integrating Environmental Science Education & Research Service Through	NSF	0
12-128	Murimi, Mary	Jackon, Edward	Youth4Health Outreach Project	HRSA	450,000
12-129	Strimbu, Bogdan	Ross, William	Sensitivity of Mayhaw Productivity to Genetics & Environmental Factors: A Multi-Scale Approach	USDA-Nifa	0

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS (CONT. FROM PG. 2)

- Jeong Hoon Choi, TECHNICAL ASSISTANCE CENTER ON POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORTS, U.S. Dept. of Education \$14,347.
- R. Sterling, ENCOURAGING INNOVATION IN LOCATING AND CHARACTERIZING UNDERGROUND UTILITIES, U.S. Dept. of Transportation through National Academies of Science \$9,500;
- S. Dua, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH through LSU \$4,690;
- J. Feng, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH through LSU \$11,250;
- L. Guice, THE LONI INSTITUTE: ADVANCING BIOLOGY, MATERIALS & COMPUTATIONAL SCIENCES FOR RESEARCH EDUCATION AND ECONOMIC DEVELOPMENT, Board of Regents through LSU \$273,879;
- J.Palmer, SUPERIOR GRADUATE FELLOWS SUPPORTING THREE CENTERS OF EXCELLENCE IN ENGINEERING, Board of Regents \$25,000;
- S.Jones, GRADUATE FELLOWS IN BIOMEDICAL ENGINEERING, Board of Regents \$25,000;
- E.Allouche, ADVANCED DEVELOPMENT & DEMONSTRATION OF NON-INTRUSIVE DUCT LINING TECHNOLOGY FOR SEALING/REHABILITATION OF DUCTS IN RESIDENTIAL BUILDINGS, NY State Energy Resource Development Authority through Steven Winters Assoc., Inc. \$100,000;
- E. Allouche, GEOPOLYMER BINDERS FOR HIGH TEMPERATURE AND CORROSION RESISTANT REFRACTORY CASTABLE, NCL Resource Management through M.L. Smith Jr. LLC \$2,500;
- K. Wyatt, BUSINESS TO BARN (B2B) ENERGY INITIATIVE, USDA Rural Development \$30,000;
- M.Wobisch, SEARCH FOR NEW PHYSICS SIGNALS IN JET PRODUCTION AT HADRON COLLIDERS FROM 2 TEV TO 14 TEV, Dept. of Energy \$8,000;
- V.Phoha, DEPCOR OBFUSCATION AND DEOBFUSCATION OF INTENT OF COMPUTER PROGRAMS, DOD through ULL \$67,578;
- P.O'Neal, LOUISIANA TECH RAPD SENIOR DESIGN PROGRAM, NSF \$24,998;
- L. Guice, LOUISIANA EPSCOR RESEARCH INFRASTRUCTURE IMPROVEMENT: COMPUTATIONAL MATERIALS EPSCOR CHAIR SUBCONTRACT, Board of Regents \$14,935;
- B. Ramachandran, GRADUATE FELLOWS IN BIOMEDICAL ENGINEERING, Board of Regents \$50,000;
- B. Ramachandran, SUPERIOR GRADUATE FELLOWS IN ENGINEERING, Board of Regents \$25,000;
- K. Wyatt, ENTERPRISES INTEGRATING EVERYDAY INGENUITY, USDA Rural Development \$66,652;
- C. Wilson, PHASE II CAPACITIVE FABRIC, DOD through Radiance Technologies \$200,000;
- D. Dillaway, SEASONAL EFFECTS OF PRESCRIBED BURNING ON LONGLEAF PINE VIGOR AND MECHANISMS FOR TOLERATING REPEATED CROWN SCORCH, USDA Forest Service \$14,589.20;
- K. Johnston, PRECISION ELECTROWEAK MEASUREMENTS AT JEFFERSON LAB, NSF \$210,762;
- N. Zotov, LIGO DATA ANALYSIS: VETO AND FOLLOW-UP ANALYSES, AND DETECTOR CHARACTERIZATION, NSF \$29,131;
- J. Carpenter, PARTNERSHIPS FOR ADAPTATION, IMPLEMENTATION, AND DISSEMINATION (PAID): CREATING A CULTURE OF SUCCESS FOR WOMEN IN ENGINEERING AND SCIENCE, NSF \$186,782;
- G. Turner, STEM-PLUS: LOUISIANA TECH UNIVERSITY'S NOYCE SCHOLARSHIP PROGRAM, NSF \$127,664;
- C.Wick, COMPUTATIONAL DESIGN OF COS-PHILIC HYDROCARBON POLYMERS TO PROMOTE MORE EFFICIENT OIL RECOVERY, ACS Petroleum Research Fund \$26,500;
- D. Liu, COLLABORATIVE RESEARCH: AN EFFICIENT COMPUTATIONAL APPROACH FOR WAVE AND SURGE ATTENUATION IN WETLANDS AND APPLICATIONS IN FLOOD RISK REDUCTION, NSF \$45,833;
- B. Ramachandran, SUPERIOR GRADUATE FELLOWS IN ENGINEERING, Board of Regents \$24,000;
- E. Allouche, FINITE ELEMENT MODELING OF A DETERIORATED REINFORCED CONCRETE INTERCEPTOR PRIOR TO AND FOLLOWING STRUCTURAL LINING, HVJ Associates, Inc. \$6,000.

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" MOSIAC REPORT... " (CONT. FROM PG. 1)

"'Rebuilding the Mosaic' is a remarkable report, said AnnaLee Saxenian, a professor and dean of University of California, Berkeley's School of Information. "It summarizes crowd sourced input from the diverse communities served by the NSF's SBE directorate [and] it recognizes that the directorate needs to reinvent itself and the research enterprise for new technological and global realities."

"This is a genuinely refreshing reorientation and refocusing that bodes well for social science research in the 21st Century," said Saxenian, who chairs NSF's Board of Advisors for SBE.

Beginning in 2012, the SBE directorate will move forward on three parallel tracks: refining priorities for the content of SBE science; exploring ways to develop the capacity to conduct this work through fellowships, mentoring, and training programs; and advancing the infrastructure of services, facilities and data that forms the platform from which the science can be undertaken. The "[Rebuilding the Mosaic](#)" report is available online at NSF's website together with all 252 white papers, supporting materials and an archived copy of the town hall webcast today, in which Gutmann discusses the report and its implications.

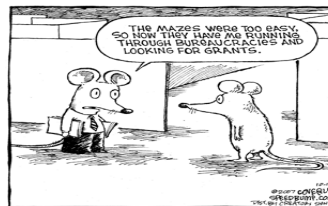
SERVICE LEARNING CONFERENCE

On April 19th, 2012, McNeese State University in Lake Charles will host the 2012 Academic Summit for the University of Louisiana System. **They have opened their call for papers (the deadline is March 1)**, and we would like to encourage anyone who is working with or has worked with service-learning to submit a proposal to the conference. Louisiana Tech has always been well-represented at the conference, and as the only university in northern Louisiana recognized as a member of Presidential Community Service Honor Roll, we hope you will consider this opportunity to further showcase our university's work.

The link for the conference is below, and if you have any questions please feel free to contact me at 3282.

<http://www.ulsystem.net/index.cfm?md=pagebuilder&tmp=home&nid=103&pnid=0&pid=286&fmid=0&catid=0&elid=0>

Dr. Rick Simmons
George K. Anding Endowed Professor of English
Director, The Center for Academic and Professional Development

**FEEDBACK & COMMENTS**

In an effort to better serve the Tech research community, the Office of University Research welcomes suggestions and comments on how we can improve our service to research faculty & students. We'd like to know faculty interests and needs with regard to workshop topics, forms, information dissemination, or anything else that would help our office assist you, the Tech researcher. While requested changes to Tech's Policies and Procedures with regard to research cannot be addressed through this venue, we'd like you to go to our website and download the Feedback and Comments form (http://research.latech.edu/files/documents/feedback_and_comments_form.docx), type in your thoughts, then print and send via campus mail (anonymously is ok) to Campus Box 47 or e-mail to bfree@latech.edu at your convenience.

Thank you! Have a safe & happy holiday!

Office of University Research

