

Louisiana Tech University



BREEZE BULLETIN

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

The will to win, the desire to succeed, the urge to reach your full potential... these are the keys that will unlock the door to personal excellence.

Eddie Robinson
(American College Football Coach)

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2011-12 TECH FRINGE RATES

- Faculty/Unclassified: 41.18%
- Civil Service: 43.08%
- Temp/Post-doc: 23.86%
- DROP: 17.48%

Download the pdf doc: http://research.latech.edu/files/documents/2011-12_latech_fringe_rates.pdf

IN-HOUSE WORKSHOP

Board of Regents Overview
August 23 @ 2pm
#1535 Wylly Tower

To register, e-mail Beth Free (bfree@latech.edu) or call 257-5075.

LOUISIANA BOARD OF REGENTS SUPPORT FUND PROGRAMS FY2011-12

The BoRSF, funded through the interest earnings from a \$583 million Trust Fund dedicated in the Louisiana State Constitution to the Board of Regents, is designed to foster excellence in education, research and service, as well as promote economic development through collaborations between academic programs and industrial, business and professional entities. The Louisiana Constitution mandates that funds allocated to the BoRSF be used for “any or all of the following higher educational purposes to enhance economic development:

- carefully defined research efforts at public and private universities in Louisiana
- endowment of chairs for eminent scholars
- enhancement of the quality of academic, research, or agricultural departments or units within a university
- recruitment of superior graduate students”

Accordingly, the BoRSF currently operates several subprograms available through four primary program areas: Research and Development (RCS/ITRS), Endowed Chairs, Enhancement, and Graduate Fellows. Awards in all categories are based on the following considerations:

- the potential for the award to enhance the overall quality of higher education in Louisiana
- the potential for the award to enhance the economic development of the State

The 2011-12 BORSF rfp’s can be found on LaTech’s University Research website which includes information on eligible disciplines, internal deadlines, forms, and instructions:

http://research.latech.edu/resources/funding_opportunities/louisiana_board_of_regents/.
Schedule of due dates and eligible disciplines: <http://web.laregents.org/documents/SCHEDULEOFDATES201112.pdf>.

Seats are available for the upcoming in-house BoR Overview Workshop scheduled for August 23 @ 2pm. See side bar on this page for details or e-mail Beth Free, Pre-Award Coordinator at bfree@latech.edu to reserve your spot.

* * *

TECH CLOSURE

Monday September 5
Labor Day

NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	\$ AwarAllded
Allouche/Vaidya	<i>Pickle Jar Test for 'Reactamine Et' - a 100% Solids Aromatic Polyurea</i>	Carboline	8,500
Stacy Gilbert	<i>Assistive Technology Grant</i>	US Dept. of Education/LTCTS	4,500
May 2011			300,167
Glenn Beer	<i>Ouachita Parish Math Science Project</i>	US Dept. of Education OPSB	3,849
Erez Allouche	<i>Demonstration of Innovative Technologies for Rehabilitation of Alyssa Watts: Experimental Examination of the Resistance of Geopolymer Concrete to Alkali-Silica Reaction (ASR)</i>	EPA/WERF	35,000
Erez Allouche		NSF	5,000
Kevin Mahoney	<i>Implicit Leadership Theories, Attribution Theory and the Deepwater Horizon Oil Spill: Who Dun Dat</i>	Southern Management Associations	10,000
Allouche/Alam	<i>Finite Element Modeling of a Deteriorated Reinforced Concrete Interceptor Prior to and Following Structural Lining</i>	HVJ Association	8,784
Glenn Beer	<i>Monroe City/Ouachita Parish MSP 2011</i>	US Dept. of Education	19,716
Glenn Beer	<i>LaGEAR UP Summer of Innovation</i>	NASA	50,067
Guy Carwile	<i>HABS Drawings - Municipal Memorial Auditorium</i>	La. Office of Tourism	5,625
Jaganathan/Simicevic/Steward	<i>Characterization of Dielectric Properties of Soil for GPR Applications</i>	UIT	2,440
David Merchant	<i>First National Bank Bienville Parish</i>	La. Workforce	63,742
Chester Wilson	<i>Mda Nanotube Dfv</i>	DOD	30,000
Glenn Beer	<i>Implementation of ACT Quality Core in LaGEAR UP Schools</i>	BoR/LaGEARUP	286,945
John Shaw	<i>Enhancement of the Upper Level Physics Laboratories at LaTech</i>	BoR/Enhancement	62,943
Tom Roberts	<i>College of Business Virtual Laboratory</i>	BoR/Enhancement	29,930
Ramachandran, Ramu	<i>Shared Memory Computational Infrastructure for Computational Chemistry & Materials Science Education</i>	BoR/Enhancement	68,599
Glenn Beer	<i>Rigor and Relevance in the Classroom: The Path to Educational Excellence</i>	BoR/Enhancement	97,127
June 2011			779,767
			FY 2010-11 YTD
			15,542,689
Andre Paun	<i>SHF: SMALL Computing with Cells-the Neuron Case</i>	NSF	200,000
David Gullatt	<i>Louisiana Center for the Blind/La. Tech</i>	Center for the Blind	400,000
Erez Allouche	<i>Development of a Highly Durable "Green" Inorganic Polymer Concrete With Commercial Potential for Sustainable Urban Infrastructure Projects in the Gulf Coast Region</i>	BoR	50,000
Tommy Grafton	<i>Project Northland - Union, Lincoln & Jackson Parishes</i>	US/LDHH	180,600
Tommy Grafton	<i>Project Northland - Claiborne Parish</i>	US/LDHH	34,650
June Feng	<i>Glutathionylation Profiling in a Transgenic Mouse Model of Alzheimer's Disease...</i>	BoR	140,100
Heather Haberman	<i>Innovative Diabetes Self-Management Intervention Through Technology</i>	BoR	80,000
Genov, Dentcho	<i>Artificial Optical Materials for Molding the Flow of Light</i>	BoR	131,433
Dua, Perna	<i>Novel Methods for Microarray Gene Expression Data Mining for Translational Bioinformatics</i>	BoR	80,139
Cahoy, Dexter	<i>Statistical Methods for Fractional Linear Birth-Death Processes</i>	BoR	117,683
Ramachandran, Ramu	<i>Graduate Fellows in Computational Analysis & Modeling 2011-1015</i>	BoR	200,000
Palmer, Jim	<i>Graduate Fellows in Biomedical Engineering 2011-2015</i>	BoR	200,000
O'Neal, Chad	<i>Captive Carry Vibration Sensors for Hellfire Missile System</i>	DoD/Radiance	45,745
Cummins, Carrice	<i>Implementation of ACT Quality Core in LaGEAR UP Schools</i>	BoR/USDE	136,390

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$ Requested
11-291	Palmer, James	Wilson/Strimbu/ Kennedy	Integrated Biomass Research & Development Initiative at Louisiana Tech University	DOEnergy	5,931,373
11-292	Gilbert, Stacy		Assistive Technology Grant	LCTC System/Carl Perkins	4,500
11-293	Beer, Glenn		Ouachita Parish Math Science Project	Ouachita Parish School System	3,849
11-294	Allouche, Erez	Alam, Shaurav	Finite Element Modeling of a Deteriorated Reinforced Concrete Interceptor Prior to and Following Structural Lining	Hvj Associates, Inc.	8,784
11-295	Strimbu, Bogdan		Development of Longleaf Pine Growth & Yield Models	USDA Forest Service	0
11-296	Ramachandran, Bala	Wick, Collin	Computational & Experimental Investigations of the Reversible Reactions of Lithium With Nanostructured RuO2 ...	Xavier/Louisiana EPSCoR	17,000
11-297	Norris, Dave		EDA Jobs and innovation Accelerator Challenge	Dept. of Commerce EDA	0
11-298	Zivanovic, Sandra		LaSPACE GSRA: Melancon	LaSPACE/NASA	5,000
11-299	Bishop, Thomas		Molecular Dynamics Study of Nucleosome Positioning and Receptor Binding	NIH	135,900
11-300	Petrus, Jane	Camp/Ciccarelli	Louisiana Tech University Engage Mini-Grant Proposal	WEPAN/NSF	10,000
11-301	Liu, Don		Spectral Element Modeling of Transport of Oil-sediment Mixture in Coastal Region	BP Global	149,958
11-302	Madix, Steve		Brittany Brown Dissertation: Objective Hearing Screening Equipment for Union Parish School	American Hearing Research Foundation	8,046
11-303	Mills, David		Manuel and McNamara: Hallyosite Nanotube-PCL Scaffold Composites for Biomedical Applications	LaSPACE/LURA	12,000
11-304	Wilson, Chester	Crews, Niel	Rapid Remediation of Oil Spills Using Louisiana Developed Biodegradable Nanoporous Sensors for Bacterial Analysis	BP Global	300,000
11-305	Norris, Dave		Continuation of 32-2206-56182 (10-309)	Dept. of Commerce OED	112,850
11-306	O'Neal, Patrick		Real-time Optical Pharmacokinetics for Telemedicine	LaSPACE/LURA	12,000
11-307	Grafton, Tommy		Project Northland - Claiborne Parish	LDHH	45,766
11-308	Grafton, Tommy		Project Northland - Union, Lincoln & Jackson Parishes	LDHH	180,600
11-309	Mills, David		LURA - Weisman	LaSPACE/LURA	5,000

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
11-310	O'Neal, Patrick	Lvov, Yuri	Quality Control in Nano-medicine Towards an Integrated System for Early Cancer Detection and Therapeutics	LBRN/INBRE	50,000
11-311	Mills, David		GSRA: Herb Vandenberg	LaSPACE/GSRA	5,000
11-312	O'Neal, Chad		Captive Carry Vibration Sensors for Hellfire Missile System	DoD/Radiance	65,000
11-313	Shultz, Jeff		Alternative Splicing of Cell Signaling Polypeptides Leads to Multiple Sclerosis	LBRN/INBRE	49,662
11-314	Hindmarsh, Patrick		Using Combination Antifungal Drug Treatment to Identify Stress Response in Candida Albicans	LBRN/INBRE	50,000
11-315	Giorno, Rebecca		Role of the Spore Coat in Modulating a Response to Germinants	LBRN/INBRE	50,000
12-001	Allouche, Erez		Experimental Investigation of Pipe-soil Friction Phenomenon During HDD Installations	Underground Solutions	38,308
12-002	Wick, Collin		Atmospheric Trace Gases Interactions With Water Thin Films: Molecular Simulations and Experimental Work	NSF	60,147
12-004	Wick, Collin		CAREER: Computational Studies of Ion and Acid-Base Dissociation Reactions at Aqueous Interfaces	NSF/CAREER	502,684
12-005	Norris, Dave	Guice, Les	North Louisiana Jobs & Innovation Accelerator Initiative	EDA, ETA, SBA	1,810,448
12-006	Jaganathan, Arun	Allouche, Erez	E-Vortex: Energy Harvesting from Waste and Storm Water Conveyance Systems	Water Environment Research Foundation	52,000
12-007	Bishop, Thomas		Scalable Approaches for Large Ensemble Molecular Simulations (SCALE-MS)	NSF	565,892
12-008	Chiu, Alan		CAREER: Surface EEG-based Brain Computer Interface for Integrated Neuroprosthetic Applications	NSF	499,884
12-009	Lvov, Yuri		NSF REU Supplement for Tubule Nanocontainers for Corrosion Inhibitors NSF-CMMI-1029147	NSF	7,500
12-010	Choi, Jeong	Smith/Cummins/McCoy/Beer	Effects of Integrated Problem Solving Multi-tiered Model on Academic & Social Outcomes for At-risk, Underserved Rural Community Population Pre-K to Grade 5	US DOEdu	2,750,000
12-011	Wasiudden, Nazimuddin		CAREER: Investigation of Dewetting and Spreading Mechanisms at Asphalt-Aggregate Interface for Moisture Damage	NSF/CAREER	402,071
12-012	Liu, Don		CAREER: An Efficient Model for Disperse Flows at Low to Moderate Reynolds Numbers	NSF/CAREER	430,294
12-013	Crews, Niel		CAREER: Thermal Gradient Microflow Calorimetry Using Anisotropic Temperature Sensors	NSF/CAREER	400,000
12-014	Allouche, Erez	Simicevic, Jadranka	Establishment of a Trenchless Technology Electronic Reference Room	La CETF	60,000
12-015	Crews, Niel		Microfluidic Devices for Parabolic Testing	NASA	5,000

(Cont'd on page 5)

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
12-016	Guice, Les	Dua, Sumeet	Spatial-Spectral Change Detection	Clarkson Aero-space/DOD	25,000
12-017	Guice, Les	Derosa/ McKim	Computational Materials Science & Engr. Sub-CTC	Clarkson Aero-space/DOD	35,000
12-018	Guice, Les	Selmic, Rastko	Cooperative Apertures for Position-Adaptive MAV Sensors	Clarkson Aero-space/DOD	25,000
12-019	Wiggins, Carynn	Wiggins, Carynn	Spotlight on Being a Writer	LaTech/BESE	2,505
12-020	Que, Long		A Disposable Nanophotonic Platform for Real-Time Detection of cancer Biomarkers at Picomolar Concentration	LBRN/INBRE/NIH	50,000
12-021	Beer, Glenn		Lincoln Parish Math/Science Partnership	LPSB/USDOE	10,560
12-022	Beer, Glenn		Madison Parish Math Project	MPSB/USDOE	5,000
12-023	Walczyk, Jeff	Buboltz/ Phillips	Advancing Cognitive Load-Inducing Lie Detection for Use in Forensic Settings	NSF	182,429
12-024	Bell, Edward		Lincoln Parish O & M Services	LPSB	22,468

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS (CONT. ON PG. 6)

- M. Murimi, DIABETIC INTERVENTION AIMED AT TOTAL ENHANCEMENT OF COMMUNITY HEALTH, DHHS \$17,376;
- E. Deemer, RESEARCH PROPOSAL: THE MEDIATING ROLE OF STEREOTYPE THREAT AND ACHIEVEMENT GOALS IN THE REGULATION OF SCIENTIFIC MOTIVATION, NSF \$10,000;
- Y. Lvov, A CENTER FOR ADVANCED MATERIALS AND NANOTECHNOLOGY IN AMRI AT THE UNIVERSITY OF NEW ORLEANS, BoR thru UNO \$110,000;
- J. Nelson, LATECHSTEP: LOUISIANA TECH'S STEM TALENT EXPANSION PROGRAM, NSF \$168,018;
- V. Phoha, CENTER FOR EXCELLENCE IN INTEGRATED SMART SENSOR SURVEILLANCE SYSTEMS, BoR \$741,145;
- L. Weiss, NOVEL SOLAR ENERGY HARVESTING USING MEMS DEVICES, BoR \$44,756;
- P. Derosa, DEVELOPMENT OF A MULTI-SCALE TOOL TO STUDY ELECTRONIC, GEOMETRICAL, AND CONDUCTIVE PROPERTIES OF POLYMERS, BoR \$49,000;
- E. Allouche, SENSORY SYSTEM FOR CRITICAL INFRASTRUCTURE: DEFECT, RECOGNITION, VISUALIZATION, AND FAILURE PREDICTION, BoR \$50,000;
- P. O'Neal, OPTICAL INSTRUMENT FOR THE REAL TIME ESTIMATION OF IN VIVO NANOPARTICLE CONCENTRATION, BoR \$58,000;
- Y. Lvov, CLAY NANOTUBES FOR CONTROLLED RELEASE OF CORROSION INHIBITORS, BoR \$64,000;
- M. Paun, DNA IMAGE SEGMENTATION METHODS AND STATISTICAL MODELING, BoR \$37,810;
- S. Wang, DIVERGING FLOW CELL ELECTROPORATION TO FACILITATE IN VITRO BIOMOLECULE DELIVERY, BoR \$46,604;

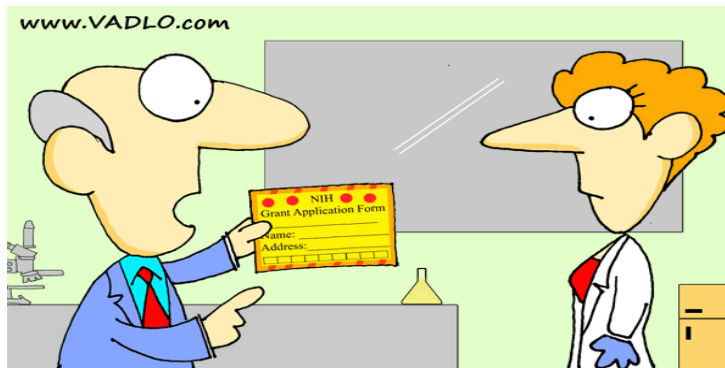
NEW GRANTS AWARDED (CONT'D FROM PAGE 2)

PI/Co-PI	Title	Funding Agency	\$
Guice, Les	<i>Advanced Certifications & Training for Technology (ACTT)</i>	HUD/IWC	1,000,000
Erez Allouche	<i>Fly Ash Processing Trial - Metro Vancouver's Waste-to-Energy Facility - Phase 2</i>	Precix Advanced Cutting Technologies	25,000
David Mills	<i>Effects of Various Nanocoatings on Electrospun Scaffolds for Accelerated Wound Healing</i>	BoR	5,000
Glenn Beer	<i>Best of RIPPLE IV</i>	BoR/USDE/NSF	94,005
Rebecca Giorno	<i>Roles of the Bacillus Anthracis Spore Coat and Exosporium in Modulating a Response to Germinants</i>	BoR	22,589
Niel Crews	<i>Microfluidic Devices for Parabolic Testing</i>	NASA	5,000
July 2011			3,148,335
Weizong Dai	<i>Mathematical Modeling & Simulation of the Drug Delivery System Using</i>	BoR	9,150
Jung Feng	<i>Measurement of the Cellular ATP, Oxygen Consumption, Glutathionylated Molecular Dynamics Study of Nucleosome Positioning and Receptor Binding</i>	BoR	16,650
Thomas Bishop	<i>Microfluidics-Mediated Delivery of Biomolecule Probes for ES and Cancer Cells</i>	NIH	122,997
Shengnian Wang	<i>Lincoln Parish Math/Science Partnership</i>	NIH	330,340
Glenn Beer		DoED	10,560
August 2011			779,767
FY 2011-12 YTD			3,638,032

ADDITIONAL GRANT FUNDING FOR EXISTING AWARD (CONT'D FROM PAGE 5)

- L. Sawyer, RESEARCH IN HIGH ENERGY PHYSICS AT LOUISIANA TECH UNIVERSITY, Dept. of Energy \$240,000;
- S. Dua, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH thru LSU \$103,902;
- S. Dua, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH thru LSU \$42,206;
- A. Chiu, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH thru LSU \$100,290;
- P. Sethi, LOUISIANA TECH UNIVERSITY - IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH thru LSU \$101,250;
- J. Feng, LOUISIANA TECH UNIVERSITY-IDEA NETWORKS OF BIOMEDICAL RESEARCH EXCELLENCE, NIH thru LSU \$101,250;

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“I like the new format,
but the Power Play option scares me.”