



BREEZE BULLETIN

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

One does not discover new lands without consenting to lose sight of the shore for a very long time.

Andre Gide
(1869-1951, French author)

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SAVE THE DATES!! LATECH IN-HOUSE WORKSHOPS

There are still seats available in the workshops below. Contact Beth Free via email: bfree@latech.edu to reserve your spot:

- **BoR RCS & ITRS – June 22 2-3pm, WT 1535 Conf. Rm.** Eligible disciplines/how to write a successful RCS and ITRS proposal.
- **BoR Enhancements – July 20 2-3pm WT 1535 Conf. Rm.** Eligible disciplines/how to write a successful ENH proposal.

For a more complete list of available workshops go to: http://research.latech.edu/resources/resource_links/louisiana_tech_workshops and contact Beth Free at 257-5075 or bfree@latech.edu.



Have a safe & happy July 4th!!
(Observed Monday, July 5)

NSF RAPID RESPONSE RESEARCH GRANTS AVAILABLE FOR GULF OF MEXICO OIL SPILL RESEARCH

NSF 10-060

Dear Colleague Letter: Rapid Response Research Grants Available for Gulf of Mexico Oil Spill Research

May 27, 2010

In light of the recent oil spill in the Gulf of Mexico, we would like to remind you that the National Science Foundation (NSF) has in place a mechanism to receive and review proposals having a severe urgency with regard to availability of, or access to data, facilities or specialized equipment, as well as quick-response research on natural or anthropogenic disasters and similar unanticipated events.

This Rapid Response Research (RAPID) mechanism has been regularly used to enable research on unanticipated events such as earthquakes, volcanic eruptions, or any other event where a timely presence is required to enable the research. A number of RAPID awards were made to support research on the earthquakes earlier this year in Haiti and Chile, and awards are being made related to the oil spill.

RAPID is a special grant mechanism developed specifically to respond to unusual circumstances where a timely response is essential to achieving research results. To help determine whether the proposed research is appropriate for NSF's RAPID funding, potential investigators must contact the NSF program officer(s) most germane to the proposal topic before submitting a RAPID proposal.

Complete guidance on submitting a RAPID proposal is located on NSF's web site at: http://www.nsf.gov/pubs/policydocs/pappguide/nsf10_1/gpg_2.jsp#IID1.

Sincerely,

Arden L. Bement, Jr.

Cora B. Marrett

Director

Acting Deputy Director

NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	\$ Awarded
Glenn Beer	<i>LaTech/LaGEAR UP Explorers Camps - Consolidated budget</i>	LaGEAR Up/US Dept. Edu.	168,843
Edward Bell	<i>Muskie Fellowship Through International Research and Exchanges</i>	IREX	7,360
March 2010 (cont'd)			1,143,515
Niel Crews	<i>Strengthening NASA's Involvement at LaTech</i>	LaSPACE/NASA	9,914
Yuri Lvov	<i>Layer-by-layer Nanocarrier for Highly Efficient Solubilization of Insoluble</i>	NIH	112,111
Erez Allouche	<i>Experimental Examination of the Effect of Cyclic Thermal and Pressure</i>	Underground Tech., Inc.	26,555
Simmons/Rea	<i>Service Learning Webinar</i>	ULS/CNCS	858.00
Long Que	<i>A Novel Power Chip for Opportunistic Energy Harvesting on Submarines</i>	Navy/DOD	21,710
Caroline Leung	<i>FSCPE 2010 Count Review Program</i>	Census Bureau	15,000
Allouche/Vaidya/ McKim	<i>Testing of Brick Specimens Exhumed from the New Croton Aqueduct,</i>	Warren Environ., Inc.	6,800
Patrick O'Neal	<i>Medical-Device-Industry Experience Towards an Investigational Device</i>	BoR/NSF	3,000
Collin Wick	<i>Simulations of CO2 Capture in Ionic Liquids</i>	Battelle/DOE	21,075.30
April 2010			217,023
Erez Allouche	<i>Utility Locating Technologies Development Utilizing Multi-Sensor Platform</i>	Underground Imaging Technologies, Inc.	128,502
Erez Allouche	<i>Fly Ash Processing Trial - Metro Vancouver's Waste-to Energy Facility</i>	Precix Advanced Cutting Technologies, Inc.	7,564
Derosa/Dobbins	<i>Summer 2010 JFAP Educational Outreach Program at IfM</i>	BoR/NSF	60,381
Allouche/Vaidya	<i>Enhancing the Mechanical Properties of Low Vixosity Grout</i>	Boyer, Inc.	6,700
May 2010			203,147
Erez Allouche	<i>NASTT Scholarship - Diaz-Loya</i>	NASTT	5,000
Jeong Hoon Choi	<i>OSEP Technical Assistance Center on Positive Behavioral Interventions</i>	US Dept. Education	13,696
Beer/Schilling/ Tobacyk	<i>A Comprehensive School Reform Initiative for Louisiana GEAR UP Schools - Year 2</i>	BoR/US Dept. Education	295,144
Beer/Deese/Madden	<i>The Best of Ripple III</i>	BoR/BESE/NCLB	49,266
Griffin/Pickett	<i>H1N1 Response</i>	OPH/ULS	25,153
Yuri Lvov	<i>Healing Polymer Composites Based on Clay Nanotubes/Alyson Goeders</i>	LaSPACE/NASA	6,000
Leland Weiss	<i>MEMS Thermal Energy Storage for NASA Power Efficiency and Thermal</i>	LaSPACE/NASA	13,183
June 2010			404,441.27
YTD 09-10 Total:			\$13,477,652

LOUISIANA TECH FEATURED IN BOR JUNE SPOTLIGHT ... (CONT'D ON PAGE 6)

The 21st century economy depends on universities within states as engines of innovation. Louisiana is embracing this challenge through strategic investments which will harness its resources to capitalize on technologies of the future. Inspired by the conceptualization of Dr. Les Guice, Vice-President of Research and Development at Louisiana Tech, a State Science and Technology Plan is being developed to help shape Louisiana's technological future. The Fostering Innovation through Research in Science and Technology in Louisiana plan has been refined through illuminating meetings with research leaders from campuses across the State. The statewide framework, broadly supported by colleges and universities, was approved by the Board of Regents at its January 2010 meeting.

The plan builds on Louisiana's long history of strategic investments to provide direction for the next twenty years. Its vision is that by 2025, Louisiana's universities will lead the State's dynamic innovation economy through the advancement of science and technology research and education. Louisiana's colleges and universities have been building capacity and capitalizing on opportunities for more than 20 years and are already positioned to be in the vanguard of innovation and technology development.

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$ Requested
10-257	Bell, Edward		Muskie Fellowship Through International Research and Exchanges Board	IREX	8,482
10-258	Palmer, Wesley	Tyree/Fillsesy	Lagniappe Ladies Trail	Lagniappe Ladies Trail	5,000
10-259	Jaganathan, Arun	Simicevic/ Grimm	Development of MM-wave Antenna Array for High Directive Applications	NineSigma	73,877
10-260	Sheets, Tilman	Igou/Beer	Louisiana Tech/LaGEARUP Research and Evaluation Project	BoR	99,532
10-261	Grafton, Tommy	Smith/Boyd	North Central Alliance Partners in Prevention	SAMSHA	125,000
10-262	McConathy, Terri		GSU SACS Report Site Development	GSU MOU	1,500
10-263	McConathy, Terri		CALL Campus Challenge Travel Grant	Bossier Parish Community Col-	250
10-264	Wick, Collin		Simulations of CO2 Capture in Ionic Liquids	Battelle Memorial Institute	21,075
10-265	Lvov, Yuri		Healing Polymer Composites Based on Clay Nanotubes/Alyson Goeders	LaSPACE	6,000
10-266	Grafton, Tommy		Project Northland - Jackson, Lincoln, Claiborne Parish	OAD	186,042
10-267	O'Neal, Patrick		Medical-Device-Industry Experience Towards an Investigational Device Exemption for the Pulse Photometer	BOR	3,000
10-268	Genov, Dentcho	Lvov, Yuri	PNA Substrates for Surface Enhanced Raman Scattering Sensing	STTR/DOD	50,000
10-269	Leangsuksun, Box		Dynamic Resource-Aware Decision Support Environment for Exascale Systems	ORNL	375,000
10-270	Weiss, Leland		MEMS Thermal Energy Storage for NASA Power Efficiency and Thermal Management	LaSPACE	28,298
10-271	Wick, Collin		The Importance of Polarizability and its Implementation for Understanding Aqueous Interfaces & Bulk Ion Solvation	BoR/TGEF	1,250
10-272	Atkison, Travis		Exposing the Netprint	DARPA/Cyber Genome Pro-	1,565,738
10-273	DeCoster, Mark		Modulation of Brain Tumor Apoptosis by Glutamate	Ajinomoto Amino Acid Re-	0
10-274	Carpenter, Jenna		REACH OUT! Increasing Capacity in Faculty Student Interaction and Instruction	WEPAN	16,204
10-275	O'Neal, Patrick		Clinical Feasibility of Real-time Optical Feedback During Nanoparticle Therapy	STTR	45,000
10-276	Harpel, Tammy		Educating Students About Realities and Skills of Parenthood	Energy Corporation	5,110

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
10-277	Napper, Stan		Bioenergy/Bionanotechnology Projects	DOEnergy	2,000,000
10-278	Gullatt, David		School Leadership Program	DOEducation	750,000
10-279	Wilson, Chester	Kaajakari, Ville	Nano-Micro Structured Radiological Detectors and Active Sources for Homeland Security Applications	NSF DNDO	2,000,000
10-280	Fuller, Christie		Building Indicators of Trust for Information Systems	DOD	81,599
10-281	Mills, David	Mainardi/McConathy	La Tech's Graduate STEM Fellows in K12 Education	NSF	3,000,000
10-282	Simmons, Richard	Rea, Kenneth	Service Learning Webinar	ULS	858
10-283	Guice, Les		LaTech Proposal for the Cybersecurity Research Program at the Cyberspace Research Laboratory	AFOSR	1,189,458
10-284	Keith-Vincent, Lindsey	Beer, Glenn	Project INVEST Year 2	Learn & Serve America	18,197
10-285	Derosa, Pedro	Dobbins, Tabbetha	Summer 2010 JFAP Educational Outreach Program at IfM	BoR	60,381
10-286	Que, Long		A Novel Power Chip for Opportunistic Energy Harvesting on Submarines (Phase I Basics)	DOD Navy	
10-287	Tyree, Michael	Dillaway, Dylan	Mechanisms Controlling Total Ecosystem Carbon Exchange in Cottonwood Short-rotation Woody Crop Systems on the Lower Mississippi Alluvial Valley	Agriculture & Food Research Initiative	0
10-288	Allouche, Erez	Vaidya/McKim	Testing of Brick Specimens Exhumed from the New Croton Aqueduct, New York City, NY	Warren Environmental Inc.	6,800
10-289	Allouche, Erez	Hall/Winiewicz	Trenchless Service Tee Renewal of Live Natural Gas Lines Using Emulated Microsurgery Technology	Nysearch-NGA	185,000
10-290	Crews, Niel		Lifetime & Sensitivity Enhancements for Space-Deployable Microfluidic Systems	LaSPACE/REA	33,040
10-291	Wang, Sheng-nian		Microfluidic Platform for Automatic Cell Surgery in Space	LaSPACE/REA	33,891
10-292	Selmic, Rastko		Optimal Deployment of Sensor Swarms	LaSPACE/REA	38,299
10-293	Sims, Tanya		Increasing Breast Cancer Awareness through Service Learning	Susan G. Komen for the Cure	528
10-294	Ramachandran, Ramu		Bridging to XD - Leveraging the La. Optical Network Initiative HPC Resources for Scientific Research and Education	NSF	3,000,000
10-295	DiCarlo, Mike	Buckley, Lynell	Langniappe Ladies Liberal Arts Book Collection	LaTech University Foundation	5,000
10-296	Wilson, Chester		Bergeron GSRA: Development of Mitro-Rockets for Remote Sensing	LaSPACE/NASA	5,000

(Cont'd on page 5)

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
10-297	Wilson, Chester		<u>Sweeney Fellowship</u>	LaSPACE/NASA	25,000
10-298	Bukowski, Marie	Lvov, Yuri	Micro, Nano Engineering Inspiration for Artistic Outreach	LaTech University Foundation	5,000
10-299	Wilson, Chester		URP: Bergeron/Advanced Photonic Materials for Exploration Systems	LaSPACE/NASA	10,000
10-300	Crews, Niel		Collin Tranter LaSPACE Fellowship	LaSPACE/NASA	25,000
10-301	Murimi, Mary	Kim, Yeonsoo	Menu Modification for Lincoln Parish Child Nutrition Program	USDA	30,000
10-302	Allouche, Erez	Vaidya, Saiprasad	Enhancing the Mechanical Properties of Low Viscosity Grout Using Polypropylene Micro-Fibers	Boyer, Inc.	6,710
10-303	Crews, Niel	Wilson, Chester	LaSpace Fellowship for Eric Borquist	LaSPACE/NASA	25,000
10-304	Crews, Niel	Kaajakari, Ville	LaSpace Fellowship for William Clower	LaSPACE/NASA	25,000
10-305	Leangsuksun, Box		Information Analysis and Visualization Enhancements for Resilience Project	DOE	37,579
10-306	Crews, Niel		LaSPACE Fellowship-Christopher Barber	LaSPACE/NASA	25,000
10-307	Wilson, Chester		Field-Portable, Nanowire-Enhanced Plasma Spectroscopic Sensor Platform	LaSPACE GSRA/NASA	5,000
10-308	Wilson, Chester		High-g. High-v Capable Rocket-Based MEMS Sensor Platform	LaSPACE/NASA	10,000
10-309	Norris, Dave		Louisiana Tech Enterprise Center	U.S. Dept. of Commerce	494,178
10-310	Cardenas, Henry		Electrokinetic Median Nerve Stimulator	NoNaz	64,494
10-311	Crews, Niel		LaSPACE Fellowship: Delvin Jackson	LaSPACE/NASA	25,000
10-312	Phoha, Vir	Balagani, K.	Remote Suspect ID	Assured Information Security	400,000
10-313	Allouche, Erez		NASTT Scholarship - Diaz-Loya	NASTT	5,000
10-314	Crews, Niel		LaSPACE: GSRA for Collin Tranter	LaSPACE/NASA	5,000
10-315	Hegab, Hisham	Weiss, Leland	NSF/DOE Thermoelectrics Partnership: Novel Nanostructured Thermoelectric Generators for Vehicle Applications	NSF	1,500,000
10-316	Bell, Edward		RSA Long Term Training	DOEducation	500,000
10-317	Griffin, Linda	Pickett, P.	H1N1 Response	ULS/OPH	25,153
10-318	Wasiuddin, Nazimuddin		Evaluation of the Validity of Multiple Stress Creep Recovery for Emulsions	LTRC	20,170
10-319	Crews, Niel		LaSPACE LURA: Haywood (Preventing the Degradation of PCR Reagents for Space Flight)	LaSPACE/NASA	6,000
10-320	O'Neal, Chad		Energy Scavenging for Ttl Sensors	DTRA/DOTD	33,000

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
10-321	Mills, David	Mainardi/ McConathy	Louisiana Tech's Research Scholars Program: Creating Competencies, Curricula, and Careers Through University/K-12 Research Partnerships	NSF	2,819,327
10-322	Allouche, Erez		Full-scale Testing of Waterline Ss and Waterline Fs From Inspar Robotic Technologies	Inspar Robotic Technologies	44,835
10-323	Allouche, Erez	Vaidya, saip-rasad	Determination of Short-and Long-term Behavior of Steel Fiber Reinforced Concrete Pipes and Manhole Components in Support of a North American Standard	ConCast Pipe	38,000
10-324	Guice, Les	Derosa, Pedro	Thermal & Electrical Properties of Nanocomposites	Clarkson Aerospace	50,000
10-325	Guice, Les	Dobbins, Tabbetha	Materials for Agile Airbase Technologies	Clarkson Aerospace	50,000
10-326	O'Neal, Patrick		Clinical Feasibility of Real-Time Optical Feedback During Nanoparticle Therapy	SBIR/NSF	49,878
10-327	Tyree, Michael	Dillaway/ Seiler	Mechanisms Controlling Total Ecosystem Carbon Exchange in Short-Rotation Perennial Crop Systems on the Lower Mississippi Alluvial Valley	AFRI	783,066
10-328	Dillaway, Dylan	Tyree, Mike	Seasonal Effects of Prescribed Burning on Longleaf Pine (<i>Pinus palustris</i> Mill.) Vigor and Mechanisms for Tolerating Repeated Crown Scorch	USDA Forest Service	31,723
10-329	Chiu, Alan	DeCoster, Mark	Modulation of Neuronal Activity in Patterned Cell Culture Using Adaptive Electrical Stimulation	NIH	274,667
10-330	Hindmarsh, Patrick		Environmental Effects on Bacillus Firmus Growth	Syngenta	5,000
10-331	Guice, Les	Dua, Sumeet	Network Intrusion Detection Using Associates Rule-Based Expert System & Hyperspectral Change Detection Using Pattern Mining	Clarkson Aerospace/ DOD	62,500
10-332	Guice, Les	Selmic, Rastko	Cooperative Apertures for Position-Adoptive MAV Sensors & Dynamically Perchable Mini-UAV Data/Sensor Hubs for Mobile Urban Operations	Clarkson Aerospace/ DOD	62,500
10-333	Moore, Pamela		Nursing Capitation 2010	BoR	81,250

... BOR SPOTLIGHT NEWS ARTICLE (CONT'D FROM PAGE 2)

To promote awareness and understanding of this important plan, the Board of Regents is currently in the process of producing an S&T video to feature the conceptualization of the plan, and demonstrate its potential impact through profiles of research faculty and resources which are the backbone of its success.

(Read the entire article at <http://web.laregents.org/latest-news/>)

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

- Y. Voziyanov, TAILOR-MADE VARIANTS OF SITE SPECIFIC RECOMBINASES AS TOOLS FOR GENOME ENGINEERING, NIH \$232,331;
- E. Allouche, INFRASTRUCTURE DEFECT RECOGNITION, VISUALIZATION AND FAILURE PREDICTION SYSTEM UTILIZING ULTRA WIDE BAND PULSED RADAR, U.S. Dept. of Commerce/ELXSI \$114,585;
- A. Saber, LOAD DISTRIBUTION AND FATIGUE COST ESTIMATES OF HEAVY TRUCK LOADS ON LOUISIANA STATE BRIDGES, LTRC \$143,518;
- V. Phoha, SECURE AND SURVIVABLE CYBER CENTRIC SENSOR NETWORKS: ALGORITHMS AND ARCHITECTURE RESEARCH, ONR thru LSU \$57,305;
- C. O'Neal, VOLUME PROTECTION ANTI-TAMPER PHASE II, DOD thru Radiance Technologies \$65,301;
- C. Wilson, VOLUME PROTECTION ANTI-TAMPER PHASE II, DOD thru Radiance Technologies \$127,002;
- S. Dua, CYBERTOOLS: COMPREHENSIVE COMPUTING, DATA, NETWORK, AND VISUALIZATION SERVICES FOR LONI, WITH APPLICATIONS IN COASTAL AND ENVIRONMENTAL FLUID DYNAMICS, NSF thru LSU \$107,806;
- L. Griffin, THE SOLUTION PART II: A MENTORING PROGRAM, CNCS thru ULS \$7,550;
- L. Guice, PFI: VENTURE ENHANCEMENT TEAMS (VETS) FOR COMMERCIALIZATION OF UNIVERSITY INTELLECTUAL PROPERTY, NSF \$200,000;
- M. O'Neal, PROVIDING MANAGERIAL EXPERTISE TO NETWORK FOUNDATION TECHNOLOGIES, NFT \$35,001;
- M. Murimi, DIABETIC INTERVENTION AIMED AT TOTAL ENHANCEMENT OF COMMUNITY HEALTH, DHHS \$125,000

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Helpful OUR Weblinks

Reference these websites for help in proposal preparation and budget info (copy & paste links):

- Proposal preparation - For instructions on how to prepare and route your proposal for departmental, college and university approval: http://research.latech.edu/resources/proposal_preparation.
- Proposal budget preparation, fringe rates & federal indirect cost rates - For instructions and current rates to use when preparing your budget: http://www.latech.edu/univresearch/resources/proposal_preparation/gathering_internal_budget_numbers/.
- Forms and downloads - For current outing form, F&A Waiver, grant management and administration forms: http://research.latech.edu/resources/forms_downloads.

To find \$\$ for your research, go to: http://research.latech.edu/resources/funding_opportunities (copy & paste link) or contact Beth Free, Pre-award Coordinator, 257-5075 or bfree@latech.edu.