



BREEZE BULLETIN

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

One must learn by doing the thing. For though you think you know it, you have no certainty until you try.

Sophocles
(BC 495-406, Greek Tragic Poet)

TABLE OF CONTENTS

New Grants Awarded	2-3
Agency Announcements	3
In-house Workshop info	3
Proposals Submitted:	4-6
Additional Grant Funding for Existing Awards	6

08-09 BORSF RFP'S AVAILABLE ON-LINE

Deadlines are in September, October and November for applicable announcements. For more info and to download 08-09 rfp's and forms, go to <http://www.lagregents.org/www2/index.htm>. PLEASE BE SURE TO USE 08-09 FORMS. Please call or e-mail Beth Free, Pre-award Coordinator at 257-5075 or bfree@latech.edu if you have questions or need assistance.

NEW FACULTY ORIENTATION: THE ROUTING BASICS

Tuesday 9/23 from 12-1:30pm and Wednesday 9/24 from 12:30-2pm.
Learn the process for routing proposals and setting up budgets. Both classes are the same so register for only one. Also, both will be held in the CITDL, Rm. 1014 in Prescott Library. Bring your lunch; drinks and dessert will be provided. Please contact Rick Simmons, Director for Educational Excellence at 257-2912 or CEE@latech.edu for registration and other info. (See page 3 for a link to more in-house workshops scheduled.)

IMPORTANT 08-09 INSTITUTIONAL REVIEW BOARD INFORMATION

Because of increased Homeland Security measures and other Federal and State mandates, all projects research, instructional, service projects involving the use of hazardous chemical, biological, and/or radiological agents must strictly adhere to the rules and regulations in the Louisiana Tech University Safety Plan, the Louisiana Tech University Laboratory Safety Manual, and the DHS Chemical List. These documents can be found at www.ltadm.latech.edu/envirosafety. Additional safety regulations may apply to certain projects. Projects must also be approved by the Director of the Office of Environmental Health and Safety and the Biosafety and Radionuclide Institutional Review Committee (BRIRC) prior to submitting a proposal for funding at the beginning of any phase of these or any non externally-funded project. The BRIRC "**APPLICATION FOR USE OF BIOHAZARDOUS AGENTS OR RADIONUCLIDES**" and instructions on how to complete the Application can be found at: http://research.latech.edu/about/compliance_review_boards/biosafety_and_radionuclide_institutional_review_committee/. (Copy and paste link into your browser to activate) These applications are to be routed to Cathy Sly, 257-4771/csly@latech.edu. A component of the approval process is verification that all participants (faculty, staff, students) have received the appropriate safety training. The training requirements are stated in the cited documents. Blood Borne Pathogen training, if appropriate to a project, can be scheduled through the Office of Environmental Health and Safety (257-2120). It is the responsibility of the Budget Unit Head of the investigator's department to develop, conduct and document any other required training. ***Failure to adhere to these safety policies and procedures, including having the necessary safety training, could place Louisiana Tech in jeopardy of having all federally funded research dollars rescinded and could lead to fines against the investigator as well as the University.***

* * * * *

New 08-09 LaTech Benefits Rates: (copy and paste link into your browser): http://research.latech.edu/files/documents/2008-2009_latech_benefits_rates.xls

NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	\$ Awarded
Harrell Walker	<i>SG-3 Shelf-Life Evaluation</i>	MEGABAC, LLC DBA ASTER BIO	6,881.
Despina Davis	<i>Fabrication & Testing of Magnetic Nanowire Based Sensors</i>	NSF/BoR (Pfund)	10,000
Sven Eklund	<i>Synthesis and Spectroscopic Characterization of Tanalum and Tunsten Fluorides for Use in Electrodeposition from Room Temperature Ionic ...</i>	NSF/BoR (Pfund)	10,000
Daniela Mainardi	<i>Kinetics of Methonal Production Catalyzed by Methanol Dehydrogenase Aftter the Photochemical Conversion of CO2 to Formate</i>	NSF/BoR (Pfund)	10,000
Yuri Lvov	<i>Clay Nanotubes for Controlled Release of Anticorrosion Agents</i>	NSF/BoR (Pfund)	10,000
Sandra Selmic	<i>Numerical and Experimental Study of Conjugated Polymer Photodetectors</i>	NSF/BoR (Pfund)	10,000
Sumeet Dua/Box Leangsuksun	<i>Cybertools: Comprehensive Computing, Data, Network and Visualization Services for LONI, with Applications in Coastal and Environmental Fluid Dynamics</i>	NSF/LSU	323,418
Charles Ciciarella	<i>A Course For Campus Emergency Preparedness Information</i>	La. Campus Compact	5,000
Chester Wilson/ Scott Forrest	<i>Flight Testing of Micro Scale Space Radiation Detectors</i>	NASA/LaSIP	19,993
Glenn Beer/Bill Deese	<i>The Best of RIPPLE</i>	NASA/LaSIP/BoR/ USDE	214,575
Rastko Selmic	<i>Fault Detection and Isolation in Leader-Follower Networks</i>	NASA/LaSPACE	38,2111
Erez Allouche	<i>Field Demonstration of M-34 Drive & Pull - An Innovative Close-fit Lining Solution for On-Grade</i>	Ipex , Inc.	15,177
Chester Wilson	<i>LaSpace GRSA/Pellegrin</i>	NASA/LaSPACE	4,000
May 2008 Total			\$677,255.49
Chester Wilson	<i>Commercialization of Metal Nanostructures for Biomass Fuel Conversion</i>	BoR/ITRS	146,727
Beer/Talton/ Deese/Madden	<i>Ouachita Parish/LaTech Math & Science Partnership</i>	DoEdu	57,726
Jay Wang	<i>Estimating Setup of Piles Driven into Louisiana Clayey Soils</i>	LTRC	124,986
Leonard/Hill/ Smith/Beer	<i>Louisiana Tech University EPAS Train the Trainer Project</i>	BoR/LaSIP	11,253
Songming Hou	<i>A Hybrid Method for Solving Inverse Medium and Obstacle Problems With Limited or Synthetic Aperture</i>	BoR/RCS	116,394
Sidney Sit	<i>Effects of Materials Surface Properties on Endothelial Cell Micromechanics</i>	BoR/RCS	142,827
John Shaw/ Natalia Zotov	<i>EFRI-COPN Preliminary Proposal: Engineering Spaces for Observation and Modeling of Brain Cell Network Activity</i>	BoR/ENH	50,956
Box Leangsuksun	<i>Reliability, Availability & Serviceability (RAS)</i>	DOEnergy	253,708
Despina Davis	<i>Nano Thermoelectric Coolers Electrodeposition</i>	BoR/NASA	30,000
Ken Rea Smith/Hill/Beer/ Leonard	<i>Rural Development Centers, LA</i>	USDE	147,637
Allouche/Sterling/ Baumert	<i>Comprehensive School Reform Project for LaGEARUP</i>	USDE/Gearup	375,599
Green/Kennedy	<i>Culvert Rehabilitation to Maximize Service Life While Minimizing Direct Costs and Traffic Disruption</i>	NAS	749,643
Ville Kaajakari	<i>The Effect of Aloe Vera on Absorption of Vitamin E in the Horse</i>	Stuart Products	3,411
Randall Hermes	<i>Quartz MEMS for High-Performance RF Devices</i>	BoR/RCS	142,285
Allouche/Sterling	<i>Campus Police Technology</i>	BoR	86,134
Schillinger/Gullatt	<i>Constructability Evaluation of Fusible and Restrained Joint PVC Pipes In- stalled Using HDD Method</i>	Certianteed Corp.	7,442
Grafton/Boyd	<i>Literacy Across the Curriculum Web Site Development</i>	BoR	20,000
DeCoster/Evans/ Chiu	<i>Project Northland</i>	OAD	193,555
Aaron Lusby	<i>H-DIML: High-Speed Digital Imaging & Modeling Laboratory</i>	BoR	64,656
	<i>Rural Dvelopment Certification Program</i>	USDA	86,990
June 2008 Total			\$2,608,221
			07-08 YTD 10,751,732

NEW GRANTS AWARDED (CONTINUED FROM PG. 2)

PI/Co-PI	Title	Funding Agency	\$ Awarded
Shipp/Washington	Comprehensive Center for Rehabilitation Technology	LRS	880,041
Tims/Crittendon/ Pratt/Swanbom	Enhancing Multidiscipline Product Development and Marketing Through Modern Fabrication Tools	BoR/RCS	50,000
Susan Roach	Louisiana Regional Folklife Program	LDOA	60,000
Frank Ji/Scott Gold	Acquisition of Differential Scanning Calorimeters for Undergraduate and Graduate Lab & Research	BoR/ENH	57,100
Chester Wilson	Commercialization of Metal Nanostructures for Biomass Fuel Conversion	Avoyelles	146,7270
July 2008 Total			\$1,089,141.00

RECENT AGENCY FUNDING ANNOUNCEMENTS AND DEADLINES

(Copy and past links into your browser to activate):

- **Louisiana Board of Regents Office of Sponsored Programs Fall 08-09 funding opportunities:** <http://www.laregents.org/www2/index.htm>.
- **Current NSF funding opportunities due dates:** http://www.nsf.gov/funding/pgm_list.jsp?org=NSF&ord=date.
- **U.S. Dept. of Education Funding Forecast for 08-09 (with deadlines):** <http://www.ed.gov/fund/grant/find/edlite-forecast.html>.
- **NIH announcements and grants information:** <http://grants.nih.gov/grants/oer.htm>.

IMPORTANT NOTICE FROM THE OFFICE OF NAVAL RESEARCH

ONR has been using Grants.Gov for receipt of Grant and Cooperative Agreement proposals over the past two years and considers the system to be sufficiently reliable and responsive that other forms of proposal submission are no longer necessary or desirable. In that context, **all ONR funding opportunities published as Broad Agency Announcements (BAAs) for FY 2009 and beyond will designate the Grants.Gov "Apply" function as the only acceptable means for submission of applications for Grants or Cooperative Agreements.**

PLANS FOR CYBER COMMAND CENTER MAY BE DELAYED

Read the full article at this link (copy and paste into your browser): <http://www.afcyber.af.mil/news/story.asp?id=123110806>.

* * * * *

AVAILABLE IN-HOUSE WORKSHOPS/OFFICE OF UNIVERSITY RESEARCH

There are grant-related workshops available and scheduled throughout the year. Go to http://research.latech.edu/resources/resource_links/louisiana_tech_workshops to view the list and schedule. To schedule a workshop in your college or for more information, contact Beth Free, Pre-Award Coordinator at 257-5075 or bfree@latech.edu.

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
08-257	Cahoy, Dexter	Crump, Keeny	Effects of Exposure Measurement Errors in EPA's Dose-Response Models	ORISE-EPA	21,895.00
08-258	Kaajakari, Ville	Wilson, Chester	Electrochemical Etching of Resonators	DARPA	132,151
08-259	Fang, Ji		Antibody-Based Diagnostic System for Early Detecton of Prostate Cancer	DOD	163,411
08-260	Sterling, Ray	Allouche, Erez	Web-Based Decision Support Tools for Selection of Condition Assessment and Rehabilitation Methods for Laterals	Water Environment Research Foundation	100,000.00
08-261	Palmer, James	Hegab, Hisham	Teaching Undergraduates Nanomanufacturing Engineering (TUNE)	NSF	200,000
08-262	Allouche, Erez		Field Demonstration of M-34 Drive & Pull - an Innovative Close-fit Lining Solution for On-Grade	IPEX, Inc.	15,177
08-263	Duncan, Christian	Crittenden/ Etheridge/ Tims/Turner	CyberTHREADS	NSF	149,844
08-264	Wasiuddin, Nazimuddin		Introduction to Rheology (Viscosity and Visco-Elasticity) of Materials (Asphalt) in Civil Engineering	NSF	130,996
08-265	Roach, Susan		Louisiana Regional Folklife Program	LDA	60,000
08-266	Atassi, Ahmad		Homs from the Sixteenth Century: A Socio-Political History of a Small Ootoman Town in Syria	Atassi Foundation	1,000
08-267	Kennedy, Angela	Moore, Pam	2008-09 Carl Perkins Vocational & Technical Education Grant	USDE/La. Tech. & Community Colleges	53,436
08-268	Allouche, Erez	Sterling, Ray	Constructability Evaluation of Fusible and Restrained Joint PVC Pipes Installed Using HDD Method	CertainTeed Corp.	7,442
08-269	Green, William	Kennedy, Gary	The Effect of Aloe Vera on Absorption of Vitamin E in the Horse	Stuart Products	3,411
08-270	Simicevic, Neven		Improving the Capabilities of Acoustic Sensors Using Numerical Finite Difference Time Domain Method - Building a Virtual Testing Laboratory	Underground Imaging Technologies	27,340
08-271	Leangsuksun, Box		Scalable Resilience in Large-Scale Systems	NSA	218,691
08-272	Buboltz, Walter	Soper, Barlow	Student Sleep and its Relationship to Food Intake, Weight, and Health Status	NIH	225,350
08-273	Sethi, Perna		Microarray Gene Expression Biclustering Using Associative Pattern Mining	LBRN	50,000
08-274	Voziyanov, Yuri		Generation of iPS Cells by Temporary Integration of Pluripotency-Inducing Genes	NIH	350,796
08-275	Chiu, Alan		The Study of Neuronal Synchrony Using Coupled Oscillator Model for Brain Function Restoration	LBRN	50,000
08-276	Corley, Mel		Planning Grant for Energy Engineering Curriculum	Halliburton Foundation	49,500

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
08-277	Robbins, Ken		As You Like It, Professional Artists Project	Shreveport Regional Arts Council	8,300
08-278	Feng, June		The Study of Protein Damage in Aging and Age-Related Diseases ...	LBRN	50,000
08-279	Hermes, Randall		Campus Police Technology	BoR	134,747
08-280	Norris, Dave		Enterprise Center Artrepreneurship Initiative	Shreveport Regional Arts Council	10,000
08-281	Schillinger, Don	Gullatt, David	Literacy Across the Curriculum Web Site Development	BoR	20,000
08-282	O'Neal, Patrick	Davis, Despina	NSF ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers	BoR/NSF	10,000
08-283	Kaajakari, Ville		LaSPACE Fellowship/Clower	BoR/NASA	4,000
08-284	Kaajakari, Ville		LaSPACE Fellowship/Marchmann	BoR/NASA	4,000
09-001	Guice, Leslie K.		LSU Tech MOU-Louis Rack	LSU	20,020
09-002	Wilson, Chester	Forrest, Scott	Balloon Flight Testing of Micro Scale Space Radiation Detectors	LaSPACE	9,950
09-003	Walczyk, Jeffrey	Schroeder, Brendt	Compensatory Processes in Reading as Revealed Through Eye Tracking Technology	NSF	175,840
09-004	Dobbins, Tab-betha	Dobbins, Tabbetha	CAREER: Enhancing Atomic Mobility and Desorption Kinetics in Light Metal Hydrides	NSF/CAREER	403,872
09-005	Que, Long		CAREER: Biomolecular Nanophotonic Fabry-Perot Interferometry (BioNanoFPI)	NSF/CAREER	400,000
09-006	Derosa, Pedro		CAREER: Development of a Multi-Scale Tool to Study Conductive Properties of Polymers _	NSF/CAREER	400,000
09-007	Allouche, Erez		Experimental Evaluation of Soil-Structure Related Design Parameters for Fusible PVC Pipe	Underground Solutions	25,010
09-008	Allouche, Erez		Enhancing the Tensile Modulus of Low Viscosity Grout Using Micro-Fibers	Ultraliner, Inc.	7,442
09-009	Paun, Andrei		CAREER: Membrane Systems and Discrete Simulations	NSF/CAREER	509,791
09-010	Hunt, Alice		Effects of Carbohydrate and Caffeine Consumption on Pilot Performance in a Flight Simulator	LaSPACE	23,261
09-011	Wobisch, Markus	Wobisch, Markus	CAREER: Measurements and Interpretations of Jet Cross Sections at Hadron Colliders	NSF/CAREER	541,280
09-012	Sit, Sidney		CAREER: Effects of Interfacial Material Properties on Cellular Micro-mechanics	NSF/CAREER	400,000

(Cont'd on page 6)

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
09-013	Wick, Collin		Computational Design of CO ₂ -philic Hydrocarbon Polymers to Promote More Efficient Oil Recovery	ACS Petroleum Research Fund	50,000
09-014	Campbell, William	Campbell, William	CyberFlora Louisiana	NSF	31,646
09-015	O'Neal, Chad		Fabrication of a Probe-Tip Changer on SO ₁ Wafers	NSF	5,547
09-016	Allouche, Erez	Sterling/Simicevic	Web-based Decision-Support Software for Selecting Utility Locating Methods	TRB/National Academy of Science	65,189

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

Les Guice, MEMORANDUM OF UNDERSTANDING FOR THE LOUIS BACKUP SERVER, LSU \$10,920;

Mills/Ramsey/Mainardi, CONTINUING GK-12, CREATING CONNECTIONS: ADVANCING KNOWLEDGE, LEARNING AND STEM CAREER OPPORTUNITIES FOR RURAL LOUISIANA, NSF \$20,000;

Chester Wilson, FOCUSED ION BEAM (FIB) RESISTANT SYSTEM, DOD through Radiant Technologies \$162,446;

Edward Bell, REHABILITATION LONG-TERM TRAINING-REHABILITATION OF INDIVIDUALS WHO ARE BLIND OR HAVE VISION IMPAIRMENTS, U.S. Dept. of Education \$99,995;

Natalia Zotov, RESEARCH IN SUPPORT OF LIGO BINARY INSPIRAL SEARCH AND DETECTOR CHARACTERIZATION, NSF \$15,000;

Phoha/Varahramyan, CENTER FOR EXCELLENCE IN INTEGRATED SMART SENSOR SURVEILLANCE SYSTEMS, BoR \$805,620;

Dauzat/Beer/Gullatt, LOUISIANA TECH/MONROE CITY PARTNERSHIP FOR SCHOOL REFORM, BoR \$199,758;

Marcus Wobish, SEARCH FOR NEW PHYSICS PHENOMENA IN JET PRODUCTION AT HADRON COLLIDERS, BoR \$47,249;

Liu/Lvov/Dai, AN EFFICIENT METHOD FOR SIMULATING DIFFUSION INSIDE NANO-TUBES FOR DRUG DELIVERY SYSTEM, BoR \$27,931;

Katy Evans, SENSITIVITY ANALYSIS FOR THE DESIGN OF MINMAX CONTROLLERS, BoR \$24,471;

Alan Chiu, APPLICATION OF HIPPOCAMPAL NEURON DYNAMICS IN ARTIFICIAL NEURAL NETWORKS FOR THE DEVELOPMENT OF BRAIN FUNCTION RESTORATION STRATEGY \$34,904;

Scott Gold, PLATINUM NANOTUBE BASED ELECTROCATALYST STRUCTURES FOR MICRO FUEL CELLS, BoR \$42,000;

James Palmer, LAYER BY LAYER NANO SELF-ASSEMBLY FOR ENZYME IMMOBILIZATION, BoR \$37,800;

Ji/Varahramyan, MICROCANTILEVER SENSORS FOR MEASUREMENT OF LOW LEVEL MOISTURE IN NATURAL GAS, BoR \$60,000;

L. Lee/Cardenas, RAPID REHABILITATION OF HURRICANE DAMAGED STRUCTURES, BoR \$45,000;

Sumeet Dua, IINBRE-DATA MINING MICROARRAY GENE EXPRESSION DATA FOR PHYSIOLOGICAL DISCOVERY, NIH through LSU \$234,561;

Mills/Ramsey/DeCoster, NERO: NANOSCIENCE EDUCATION AND RESEARCH OUTREACH, NSF \$133,860.

* * * * *

Correction to the April Breeze: Year to Date total of funded proposals should have read as \$7,375,835.94.