AUGUST 2006

Louisiana Tech University

BREEZE BULLETIN

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

Storms make the oak grow deeper roots.
George Herbert
(1593-1632, British metaphysical poet)

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NSF WORKSHOP KEYNOTE SPEAKER AND PANEL PARTICIPANTS

Key Note Speaker: *Dr. Frank P. Scioli*, Senior Science Advisor Division of Social and Economic Sciences NSF

Panel Participants:
Dr. Robert D. Laird, LSU
Dr. Geoff Parker, Tulane

Lunch Speaker:
Dr. Brygg Ullmer, LSU

IMPORTANT ANNOUNCEMENT RE: NSF AND GRANTS.GOV!!

For information on NSF programs to be submitted through grants.gov, go to the Fastlane advisories website: *www.nsf.gov/bfa/dias/policy/docs/grantsgovadvisory06.pdf.*

NEW LATECH FRINGE RATES

For the new 2006-2007 LaTech Fringe Benefits Rates, click on 'Grants Management Forms' at http://research.latech.edu/resources/forms_downloads.

UNLOCK YOUR GRANT WRITING POTENTIAL!!

REGISTER NOW FOR THE NSF SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES WORKSHOP TO BE HELD SEPTEMBER 13 IN THE LOUISIANA TECH STUDENT CENTER

Purpose: The role of behavioral and social sciences is gaining increased recognition by high profile institutes and agencies, as evidenced by recent presentations during the Consortium of Social Science Association's (COSSA) annual meeting held during Fall 2005 (http://www2.asanet.org/footnotes/jan06/index3.html). Important issues were addressed by the presenters which included representatives from the National Institutes of Health, the National Science Foundation's Social, Behavioral and Economic Sciences Directorate, and the U.S. President's science advisor, John Marburger, Director of the Office of Science and Technology Policy (OSTP). Critical issues such as the potential societal effects regarding federal policy for homeland security, nanotechnology, and the political influence of religion in America, are all part of an initiative to formulate a new social science of science policy. It was also noted that the primary obstacle to incorporating the social sciences into 'grand public plans' is because the findings are often inherently 'disquieting'. Recent findings such as those cited in the 9/11 Commission Report and last year's hurricane response failures on local, state and federal levels are more publicized examples of the need and urgency in researching qualitative and quantitative solutions through the behavioral and social sciences.

Recent advances in cyberinfrastructure are offering new tools and resources to advance research in many areas, including the social sciences and economics. With the recent deployment of the Louisiana Optical Network Initiative (LONI), Louisiana researchers are in a position to participate at the forefront of these revolutionary discoveries and advancements. New methods of research are required to enable researchers to capitalize upon these tools. Particular attention must be given to interdisciplinary and multi-institutional collaborations that can facilitate the advancement of novel technology-based approaches for understanding highly complex behavioral, social and economics problems. In particular, the complex social and environmental problems resulting from hurricanes Katrina & Rita offer the Louisiana research community new opportunities to explore new research paradigms.

The goal of hosting a Regional Grant-Writing Workshop at Louisiana Tech University in September 2006 is to broaden the participation of faculty at Louisiana Tech and surrounding universities in research in the NSF, particularly with the Social, Behavioral and Economic Sciences Directorate. Further, we plan to capitalize upon investments that the state is making to advance key initiatives in information technology and Post-Katrina/Rita research.

Workshop Objectives

- To emphasize the growing need for research in the behavioral, social and economic sciences in the local region and nationally;
- To assist participants in identifying key components and funding opportunities in creatively applying knowledge in the social and behavioral sciences to qualitative and quantitative research;
- To increase the competitiveness of Louisiana researchers for federal funding;
- To foster collaborations between area universities in the Mississippi, Louisiana, and East Texas regions;
- To stimulate interdisciplinary and multi-institutional research focused on rebuilding social infrastructures devastated by last year's hurricanes; and
- To encourage the use of LONI and related infrastructure in all areas of research.

The workshop will be held in Rm. 222 in the Student Center from 8 a.m.-3:30pm. To register, go to http://research.latech.edu/NSF06, or contact Beth Free in the Office of University Research via e-mail: bfree@latech.edu, or by phone at 257-5075. A buffet breakfast and lunch will be served.

NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	Amount Awarded
Kody Varahramyan	*Summer 2006 JFAP Educational Outreach Program at IfM*	NASA/LURA	10,000.00
Linda Ramsey	*LINCS*	BoR/Ed	6,879.00
Linda Ramsey	*RIPPLE*	NSF	8,379.00
Linda Ramsey/Hubbard	*The North Louisiana Regional Education Collaborative*	Shell	65,000.00
Ray Sterling	*Review of Test Data and Field Trials for Cempipe Process*	CEMPIPE	9,634.00
Rastko Selmic	*New Intelligent Feedback Control of Smart Actuators*	BoR/NASA	30,158.00
Chad O'Neal	*Tunable Multi-mode MEMS Vibrational Anti-Tamper Sensor*	Radiance Tech.	30,000.00
Chester Wilson	*Xray/Focused ION Beam Detector*	Radiance Tech.	30,000.00
Erez Allouche	*Differential Impedence Obstacle Detection (DIOD) Sensor Phase 3-3rd Party Review and State of the Art Compilation*	Gas Tech. Inst.	48,550.00
Henry Cardenas	*Reactive Electrophoretic Consolidaton of Fine Construction Aggregates*	Osmotech	62,254.00
William Ross/Johnson/ Meeker	*Improved Detection and Monitoring Systems for Native and Non-native Sircids*	USDA Forest	34,932
May 2006 Total			**$335,786.00**
Glenn Beer	*Ouachita Parish 3rd & 4th Grade Science Project*	Ouachita Parish	14,400.00
Glenn Beer	*Ouachita Parish 2nd Grade Science Project*	Ouachita Parish	10,800.00
Jo Ann Dauzat/Beer/ Gullatt	*Louisiana Tech/Monroe City Partnership for School Reform*	BoR/Ed	199,758.00
Linda Ramsey/Gullatt	*IMPACTS in Mathematics and IMPACTS in Science Subcontract*	DOE/Monroe City	116,119.00
Glenn Beer	*Louisiana Tech GEAR UP*	DOE/BoR	163,475.00
Glenn Beer	*Establishing the Louisiana Coalition for Academic and Mentoring Programs for Success (LaCAMPS) Year 2*	DOE/BoR	84,334.74
Chad O'Neal	*Reflow Study of Solder Bumps for Wafer-level Packaging of 200 mm+ Wafers*	Surfect	3,500.00
Hisham Hegab	*Development of a Design Tool for Enhanced Fluorescin Angiography in Opthalmology*	NIH/LSU	16,320.00
Wendy Miletello/	*Louisiana Tech GEAR UP Summer Learning Camps*	LaSIP	23,073.00
Pauline Leonard/Beer	*Project EPAS - Year 2*	DOE/LaSIP	193,000.00
Aziz Saber	*Elimination of Deck Joints Using a Corrision Resistant FRP Approach*	LSU/LTRC	58,367.00
Glenn Beer	*Experiment Gallery Activity Station Support*	DoED	12,893.00
Frank Ji	*Microcantilever Sensors for Measurement of Low Level Moisture in Natural Gas*	BoR	60,000.00
Kenneth Griswold/Baxter	*Medical Applications of Science in Health (M.A.S.H.) Summer Scholars Program*	BoR	19,643.00
Amy Vessel/Kimbell-Lopez/Cummins	*The Reading CSI (Competencies Subject Integration) Project*	DOE	500.00
Kathleen Johnston/Wells/ Simicevic/Forest	*Precision Electroweak Measurements at Jefferson Lab*	NSF	204,954.00
Wendy Milletello/Heimdal	*Louisiana Tech GEAR UP Summer Learning Camps*	DoE/LaSIP	63,915.00
Les Guice	*An NSF Social, Behavioral, and Economic Sciences Workshop*	NSF/BoR	4,000.00
Kody Varahramyan/Mills	*Planning for the Biomedical Nanosystems IGERT Program*	NSF/BoR	10,000.00
Chester Wilson	*Scott Pellegrins NSF Fellowship*	NSF	40,500.00
June 2006 Total			**$1,299,552.13**
		YTD	**$8,916,222.95**

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	$
06-262	Katie Evans	Turner/Camp	WeBWorK in an Integrated STEM Curriculum	NSF	149,991
06-263	Sethi, Prerna		Dev. Of Design Tool for Enhanced Fluorescin Angiography in Opthalmology	LSU/NIH	16,320
06-265	Kuila, Debasish		Micromixers for Liquid Phase Reactions: Investigation of Mixing and Precipitation Kinetics of Salt Forms of Organic Bases	Pfizer, Inc.	124,981
06-266	Beer, Glenn		Experiment Gallery Activity Station Support	Louisiana Space Grant Consortium	12,893
06-267	Dua, Sumeet		NIH-INBRE	NIH	381,951
06-268	Voziyanov, Yuri		Evolution of Novel Specificities and Catalytic Sites in Tyrosine Recombinases	NIH	1,148,708
06-270	Phoha, Vir	Selmic, Rastko	Alliance Universities Effort to Increase Underrepresented Students in Computing Discipline	NSF	418,638
06-271	Lvov, Yuri		Development of Targeted Nanoparticles for Sustained Release of Small Peptides for Cancer Treatment	Pennington/DOD	141,256
06-273	Wilson, Chester		Neutron Dosimeter	Space Micro Corp.	10,000
06-278	Siriwardane, Upali		Development of Low Cost Membranes (Ta,Nb, and Cellulose Acetate) for H2/CO2/CO Separation in WGS Reactors	DoE/HBCU	12,000
06-279	Hall, David		Evaluation of a Commercial Laser Profiling System for Post-Installation Measurement of Storm Sewer and Drainage Pipe	Plastics Pipe Inst.	24,054
06-280	Wang, Jay	Roberts, Freddy	Update of Correlations Between Cone Penetration and Boring Log Data	LTRC	70,479
06-281	Allouche, Erez	Sterling/ Simicevic	Development of a Risk Assessment Algorithym For Pccp	Jason Consultant/ Awwarf	54,998
06-282	Wilson, Chester		Development of a Micro-and Nanotechnology Based Platform for Radiation Detection	DoD	1,345,911
06-283	Phoha, Vir		Center for High Dimensional Biomedical Data with Large Bandwidth Networking, Visualization and Data Fusion to Facilitate Medical Diagnosis and Decision Making	BoR/EPSCoR/NSF	180,000
06-285	King, James	Milford/Ford	Smart Habits in Valued Directions	Paul Fidler Foundation	5,000
06-287	Beer, Glenn	Basinger/ Livingston	Explorers Camps for Students Displaced or Affected by Hurricanes Katrina and Rita	Louisiana Family Recovery Corps, Summer Youth Activities	497,487
06-288	Wang, Jay		Macro-and Micro-scale Modeling of Shear Localization in Porous Rocks	DOEnergy	197,010
06-289	Buboltz, Walter	Loveland, James	Sleep Quality and Duration: Its Relationship to Food Choices, Body Mass Index and Obesity	USDA	179,680

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PROPOSALS SUBMITTED(CONT'D FROM PAGE 3)

FILE #	PI	Co-PI 's	TITLE	AGENCY	$
06-290	Dauzat, Jo Ann		Literacy Across the Curriculum	BoR	5,000
06-291	Mills, David	Jones, Steve	GK-12 Graduate Teaching Fellows	NSF	1,798,889
06-292	Besio, Walt		Effects of Non-invasive Transcutaneous Electrical Stimulation via Concentric Ring Electrodes on Pilocarpine-Induced Seizures in Rats	NIH	194,428
06-293	Wang, Jay		CAREER: Shear Band Localization Modeling in Micro- and Macro-Scales for Soils	NSF	402,486
06-294	Kennedy, Angela	Moore, Pam	2006-07 Carl Perkins Vocational & Technical Education Grant	LTCCS	108,216
06-295	Ji, Frank		Novel Microcoil Based Biosensors for Protein and Bacteria Detection	NIH	275,000
06-296	Schroeder, Bernd		CSUMS: Interdisciplinary Computational Math Research Program	NSF	309,625
06-297	Cardenas, Henry		E-Seal Phase I SBIR Consultation and Development Support	SHOT, Inc.	38,575
06-298	Varahramyan, Kody		Collaborative Research for the Design & Development of Micro/Nano Scale Devices	BoR/ EPSCoR/ NSF	454,530
06-299	Dua, Sumeet	Leangsuksun, Box	CYBERTOOLS: Comprehensive Computing, Data, Network, and Visualization Services for LONI, with Applications in Coastal and Environmental Fluid Dynamics	BoR/ EPSCoR/ NSF	340,000
06-300	Dua, Sumeet	Hegab, Hisham	Petascale Computing of Transport Processes in Biological Systems Using the Grid	BoR/ EPSCoR/ NSF	295,000
06-301	Voziyanov, Yuri		Novel Target Specificities and Catalytic Sites in Tyrosine Recombinases	NSF	515,363
06-302	Norris, Dave		Independent Economist	La. Div. of Admin.	31,000
06-303	Beer, Glenn		Developing the e-Portal Curriculum	BoR	35,000
06-304	Selmic, Rastko		CAREER: Optimal Coverage Control in Distributed Wireless Sensor Networks	NSF Career	407,526

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

Sumeet Dua, INBRE - MODIFICATION OF CORNEAL TISSUE ENGINEERED SCAFFOLDS TO PROMOTE EPITHELIALIZATION, LSU/NIH $82,956;

Debasish Kuila, SYNTHESIS AND CHARACTERIZATION OF NANO-CATALYSTS FOR HYDROGEN PRODUCTION, BoR Year 2 funding $41,730;

Yuri Lvov, NANOTECHNOLOGY FOR PULP AND PAPER INDUSTRY: LAYER BY LAYER POLYELECTROLYTE COATING, BoR Year 2 funding $59,997;

Jay Wang, SHEAR BAND LOCALIZATION: MATHEMATICAL MODELING, NUMERICAL IMPLEMENTATION AND EXPERIMENTAL VALIDATION, BoR Year 2 funding $35,110;

Tabbetha Dobbins, ENGINEERING DOPANT LOCAL ATOMIC STRUCTURES IN COMPLEX METAL HYDRIDES, BoR Year 2 funding $30,370;

Sumeet Dua, INBRE, LSU/NIH $298,996;

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ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS (CONT'D FROM PAGE 4)

Chester Wilson , MICRO AND NANOTECHNOLOGIES FOR NEUTRON DETECTORS AND SOURCES, BoR $42,650;

Dave Norris, ECONOMIC AND COMMUNITY DEVELOPMENT OUTREACH INITIATIVE, US Dept. of Commerce $95,850;

Aziz Saber, MONITORING SYSTEM TO DETERMINE THE IMPACT OF SUGARCANE TRUCKLOADS ON NON-INTERSTATE BRIDGES, LTRC $3,000;

Sumeet Dua, NOVEL GENE EXPRESSION MINING ALGORITHMS TO ASSIST MEDICAL DISCOVERY, BoR $33,500;

Andre Paun, NOVEL GENE EXPRESSION MINING ALGORITHMS TO ASSIST MEDICAL DISCOVERY, BoR $33,700;

Bala Ramachandran, SUPERIOR GRADUATE FELLOWS IN MOLECULAR SCIENCE AND NANOTECHNOLOGY, BoR $19,438;

Lee Sawyer, RESEARCH IN HIGH ENERGY PHYSICS AT LOUISIANA TECH UNIVERSITY, Dept. of Energy $170,000;

Michael Shipp, COMPREHENSIVE CENTER FOR REHAB TECHNOLOGY, La. Rehab. Services $610,883;

Andre Paun, BIOCOMP: COLLABORATIVE RESEARCH: P SYSTEMS: THEORY & APPLICATIONS TO MODELING & SIMULATION OF CELLS, NSF $50,000;

Natalia Zotov, RESEARCH IN SUPPORT OF LIGO BINARY INSPIRAL SEARCH AND DETECTOR CHARACTERIZATION, NSF $20,000;

Larry Proctor, BETTER HEALTH FOR THE DELTA PHASE II, US Health Resources Services Administration thru Area Health Education Center $89,631;

Debasish Kuila, MICROMIXERS FOR LIQUID PHASE REACTIONS: INVESTIGATION OF MIXING AND PRECIPITATION KINETICS OF SALT FORMS OF ORGANIC BASES, Pfizer, Inc. $124,981;

Milan Vavrek, USE OF MYCORRHIZAL FUNGI TO RESTORE REFUGE LAND DEGRADED BY PRODUCED WATER, US Dept. of the Interior $38,095;

Miriam Murimi, DUBACH-RURAL HEALTH CARE SERVICES OUTREACH GRANT PROGRAM, DHHS Health Resources & Services Admin. $178,963.

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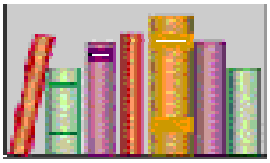

Summer quarter ends 8/17! Fall quarter begins: 9/7!!

For more info, go to: http://www.latech.edu/calendar-of-events/index.shtml

(Psssstttt . . .

See page 6 for other important announcements!!!)

NEW FACULTY ORIENTATION

New faculty orientation is Wednesday, September 6 from 4:45pm until 7pm in the Ropp Center. Refreshments will be served (fruit, chips, ham/turkey/beef sandwiches and cookies). Dr. Rea will begin by welcoming new faculty and Bob Vento will give an informative presentation on life at Tech. While at the orientation, register for other New Faculty sessions dealing with procedures for submitting a research proposal dated September 26 from noon to 1:30 and Wednesday, September 27 from 12:30-2:00 in the Third Floor Prescott Library conference room.

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Louisiana Board of Regents

Check the Board of Regents website for updates on Fall RFP's:

www.laregents.org/www2/index.htm

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ATTENTION ALL FASTLANE GRANTWRITERS!!!

National Science Foundation
WHERE DISCOVERIES BEGIN

NSF will require certain grant submissions to be submitted through Grants.gov. For more information, see the Fastlane Advisory dated May 1, 2006 at www.fastlane.nsf.gov/fastlane.jsp.