



BREEZE BULLETIN

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

The purpose of education is to replace an empty mind with an open one.

Malcolm S. Forbes

(1919-1990, American publisher, businessman)

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CENIT WORKSHOP APRIL 4

Dr. Box Leansuksun will host a workshop on High Performance Computing on April 4 from 1-3:30pm in the CENiT Innovation Lab. For more information, contact James Elliott via phone at 318-286-6927 or via e-mail: jje011@latech.edu.

GRANTS.GOV WORKSHOP APRIL 12

An interactive, hands-on workshop on submitting proposals to the National Institute of Health through Grants.gov will be held April 12 at 2:00 in the CITDL located on the 10th floor of the Prescott Library. Seating is limited so registration is required. Other workshops to be scheduled include submitting to the Louisiana Board of Regents, as well as to the National Science Foundation. Dates and times TBA. **Your input and suggestions are critical to the success of these workshops.** So, please contact Beth Free via e-mail (bfree@latech.edu) or phone (257-5075) for comments, suggestions or questions. Thank you!

LOUISIANA TECH: A LEADER IN STATE EDUCATION

Louisiana Tech was awarded just over \$2.3 million in LaSIP funding at the Council meeting March 16, 2007, securing 19 out of 37 total funded projects.

"Louisiana Tech has genuinely left its mark on the Board of Regents Research Division . . . with quality projects in mathematics, science, and English/language arts. That, in itself, is an accomplishment." Jo Ann Dautat, Dean of Education.

"This reflects much hard work on the part of each project staff member and demonstrates what Louisiana Tech is capable of achieving when there is extensive interdepartmental and inter-college collaboration. Our reputation as a flagship institution for Louisiana continues to build as we serve the education needs of this state." Glenn Beer, SciTEC.

Those collaborations include Engineering, Liberal Arts, Health and Exercise Science, Mathematics, and Human Ecology.

LA. TECH TO SEE \$12M UNDER PLAN

By Nick Todaro
The News-Star

Louisiana Tech University President Dan Reneau was glowing when he returned to Tech on Thursday after Gov. Kathleen Blanco's budget news conference in Baton Rouge.

The governor unveiled an aggressive plan to fund primary and secondary education, proposing allocating \$611 million to the state's needy education systems.

Part of the budget plan, roughly \$115 million, would be used to enhance operational funding for institutions of higher education, bringing Louisiana universities to a level of state funding comparable to its neighboring states.

I didn't think I'd live to see the day," Reneau said.

Tech specifically would see a budget increase of about \$12 million under the plan, which left Reneau walking on air.

"This will allow us to give raises, fill vacant faculty spots, hire specialized teachers to expand our knowledge base and have equipment and maintenance budgets again," Reneau said. "We were expanding slowly before, kinda holding on without much resources, but this is incredible. It's beyond our hopes and dreams."

Compounding that, the university is also feeling the benefits of being raised to Southern Regional Education Board Level II status, which richens the funding formula for the school by about \$6 million dollars, Reneau said.

Tech has been struggling somewhat — it was the only regional institution funded below the full formula at 81 percent.

"She'll be known as the 'Education Governor' in Louisiana if this goes through," Reneau said.

NEW GRANTS AWARDED

PI/Co-PI	Title	Funding Agency	\$ Awarded
Heath Tims	<i>Electrode Orientation Testing</i>	Interactive Neuro Center	1,225
Erez Allouche	<i>Utilization of Ultra-wideband Radiation as a Utility Detection System Ahead of an Excavation Bucket in Soil</i>	John Deere	8,000
Chester Wilson	<i>Elvense Measurement of Focused Ion Beams</i>	NASA/LURA	5,000
Chester Wilson	<i>LaSpace GSRA/Whitney</i>	NSF	4,000
Nov 2006 Total			\$18,225.00
Kevin Stevens	<i>2006 Regional Campus Compact Conference Travel</i>	LA Campus Compact	1,000.00
Dec 2006 Total			\$1,000.00
Jo Ann Dauzat	<i>Second Careers in Teaching (SCIT) Yr. 2</i>	BoR	49,651
Brian Barron	<i>MERLOT Editorial Board</i>	BoR	2,500
Chester Wilson	<i>Theresa Williams GSRA</i>	NASA/LURA	4,000
Ville Kaajakari	<i>Rodrigue/LASPACE Fellowship</i>	NASA	4,000
Erez Allouche	<i>A Web Based Software for Trenchless Technology</i>	ASTT	12,505
Henry Cardenas	<i>Electrokinetic Strategies for Moisture Control and Durability of Ceramic Structures</i>	Osmotech	351,515
Sidney Sit/Yuri Lvov	<i>Modification of Corneal Tissue Engineered Scaffolds to Promote Epithelialization</i>	NIH/LBRN	55,000
Vigwhari Jani	<i>Assisting Rejuvenation of Gert Town</i>	ULS Serves	14,978
Aleta Overby	<i>The CARE Project</i>	ULS Serves	9,301
Glenn Beer	<i>Louisiana Tech/SGA Mentoring Project</i>	ULS Serves	14,763
Elaine Thompson	<i>Hurricane Devastation Photographic Exhibit</i>	ULS Serves	14,693
Freddy Roberts/ E.Allouche	<i>Senior Design Projects With Transportation Features</i>	LTRC	7,500
Jan 2007 Total			\$540,406.00
David Mills/S.Jones	<i>GK-12 Graduate Teaching Fellows Providing Managerial Expertise to Network Foundation Technologies</i>	NSF	503,640
Mike O'Neal		NSF	21,267
Hisham Hegab	<i>NASA-ESMD Senior Project: Design of a Thermal Control System for Mars Rover</i>	NASA/LaSPACE	3,000
Ray Sterling	<i>Listening Sessions for BAMI-I EPA Cooperative Grant</i>	BAMI/I	20,000
Ray Sterling/ E.Allouche	<i>Encouraging Innovation in Locating and Characterizing Underground Utilities</i>	NAS	299,983
Larry Proctor	<i>Better Health for the Delta Phase I/Year 3 Reapplication</i>	SELAHEC	21,676
Susan Roach	<i>Quilt Index: Phase III</i>	NEH/MSU	4,000
Angela Kennedy	<i>Carl Perkins 06-07</i>	LCTCS	8,153
Feb 2007 Total			\$881,918.00
Jeffrey Walczyk	<i>Response Time, Answer Consistency, and Eye Movements: Cognitive and Physiological Cues to Deception</i>	NSF	170,142
Upali Siriwardane	<i>Development of Low Cost Membranes (Ta,Nb, and Cellulose Acetate) for H2/CO2/CO Separation in WGS Reactors</i>	Dept. of Energy/ GSU	48,006
Dick Greenwood/ S.Dua	<i>MRI: Development of a PetaShare</i>	NSF/LSU	96,144
Steven Jones	<i>Undergraduate Experiences in Micro/Nanoengineering</i>	NSF	259,075
Erez Allouche/ Wang/Baumert	<i>Numerical Modeling of Non-Ferrous Terrabrute Restraint Joint Under Static and Dynamic Loading Conditions</i>	IPEX, Inc.	9,638
Heath Tims/David Hall	<i>CFD of Flow Impact of Service Taps</i>	InsituformTechnologies	82,091
Linda Ramsey/ David Gulatt	<i>Impacts in Mathematics Subcontract</i>	La. Dept. of Edu.	65,521

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
07-144	Beer, Glenn		Establishing LaCAMPS-Year 3	BoR	253,935.64
07-145	Schillinger, Don	Crittendon/ Turner/Beer	Building Bridges to the Future Camp	BoR	101,910.58
07-147	Miletello, Wendy		LA GEAR UP Sports Medicine Camp	BoR	135,000.00
07-148	Stevens, Kevin		2006 Regional Campus Compact Conference Travel	LaCampus Com- pact	1,000.00
07-149	Siriwardane, Upali		Catalyst Development for Linear Force Actuator With Hydrogen Per- oxide as Fuel in Microchemical Sys- tem	DoDefense/Army	129,459
07-150	Wobisch, Markus		Experimental Measurements and Theoretical Interpretation of Jet Pro- duction at Hadron Callidors	DoEnergy/High Energy Physics	280,735
07-152	Kaajakari, Ville		Stress Tolerant MEMS Packaging	DoDefense/ DARPA	149,666
07-153	Fang, Ji		High Sensitivity Prostate Cancer Detection System	ULM	2,000
07-155	Norris, Dave		Louisiana Business Incubator Sup- port Grant	LEDP	64,950
07-156	Mainardi, Daniella		Synthesis & Characterization of Nanoscale Non-noble Metal Cata- lysts for Hydrogen Production	DoEnergy	62,000
07-159	Ji, Frank		A Wearable MEMS-Based Sensor for Detecting and Monitoring Per- sonal Exposure	NIH	380,700
07-160	Phoha, Vir		CCLI: Course Development in Secu- rity in Sensor Networks	NSF	171,272
07-162	Leonard, Pauline		Project EPAS Year 3	LaSIP/LA GEAR UP	205,089
07-163	Schillinger, Don	Tims/Camp/ Beer	Engineering Higher Student Achievement in Mathematics	LaSIP/BoR	286,595
07-165	Beer, Glenn	Miletello, Wendy	Healthy Teaching With Technology Project: Louisiana	NSF	1,199,772
07-166	Vessel, Amy	Kimball- Lopez/ Cummins/Hill/ Powell	The Reading CSI (Competencies/ Subject Integration) Project	LaSIP	362,349
07-168	Ramsey, Linda	Beer, Glenn	Ripple Plus	LaGEAR UP	168,495
07-169	Wilson, Chester		ITO Shield	Air Force/ Radiance	30,000
07-170	Ji, Frank	Deese, Wil- liam	Complementary Teams for Dev. Ion- Selective Multilayer Modified Mi- crocoil Sensors	NSF	298,643
07-171	Derosa, Pedro	Ramachandra n, Bala	Development of a Multi-scale Model for the Study of Conductive and Photoconductive Polymers	NSF	414,872

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
07-172	Saber, Aziz		Monitoring System for I-10 Twin Span Bridges Substructure over Lake Pontchartrain	LTRC	669,929
07-173	Leangsuksun, Box		CSR-PDOS: Collaborative Research: Reactive & Proactive Fault Tolerance in Large-Scale Clusters	NSF	359,901
07-174	Cardenas, Henry	Hall, David	Electrochemical Oil Spill Prevention	OSRDP	35,716
07-175	Murimi, Mary		Sabbatical Leave-Yale	USDA	98,317
07-177	Phoha, Vir	Turner, Galen	E-SAM: Engineering Situation-Aware Self-Morphological Sensor Networks for Urban Surveillance	NSF	483,820
07-178	Bell, Edward		Vocational Self-Efficacy for Individuals Who are Legally Blind	DOEdu	598,871
07-179	Beer, Glenn		Developing a Web-based EPAS Professional Development Course	American College Testing	19,684
07-180	Beer, Glenn	Tobacyk/ Livingston/ Chauvin	Explorer Clubs (Year 3)	BoR/LaSIP/LA GEAR UP	346,454
07-181	Dobbins, Tab-betha	Varahramyan/ Gunasekaran	MRI: Acquisition of State of the Art X-Ray Diffractometer for Research, Education and Training	NSF	349,070
07-182	Wilson, Chester		LaSpace Minority Research Undergrad Program - Debra Anding	LaSPACE	4,000
07-183	Varahramyan, Kody	Dobbins/ Derosa	Summer 2007 JFAP Educational Outreach Program at IfM	BoR	14,972
07-184	Dai, Weizhong	Nassar, Raja	Mathematical Models, Numerical Methods, and Experimental Verifications for Investigating Thermal Deformation in Micro-Scale Metal Media Induced by High-Energy Ultrashort-Pulsed Lasers	NSF	236,454
07-185	Cronk, Stan		Web Browsing Interface for Persons With a Severe Physical Disability	DOEdu	268,141
07-186	Dix, Lynn	Colvin/Gerald	Triple Play: Nutrition, Activity and Better Health for Youth	General Mills Foundation	10,000
07-188	Hunt, Alice	Gerald/Dix/ Erickson/Long	Effect of Environmental Factors on BMI of School Age Children in Lincoln Parish, Louisiana	Robert Wood Johnson Foundation	59,764
07-189	Besio, Walt		Investigation of Anticonvulsant and Neuroprotective Effects and Safety of Transcutaneous Electrical Stimulation via Concentric Ring Electrodes	NIH	367,299
07-190	Luo, Cheng	Lvov, Yuri	Development of a Nanopunching Lithography Method for Generating Sidewall Templates and Polymer Nanodevices	NSF	320,010
07-192	Wang, Jay		Time-dependent Initiation and Propagation of Shear Strain Local-	NSF	259,826
07-193	O'Neal, Patrick	Lvov, Yuri	Nano-Engineered Drug Delivery With Optical Monitoring of Vascular Delivery and Tumor Uptake	NIH	275,000

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
07-194	Grafton, Tommy	Boyd, Rhonda	Alliance Partners in Prevention	DHH	169,646
07-195	Lee, Luke	Cardenas, Henry	Durability of Structural Rehabilitation Methods	NSF	346,439
07-196	Duncan, Christian		Geometric Techniques for Interactive Ray Tracing	NSF	180,000
07-197	Eklund, Svend	O'Neal, Chad	Spectroscopic and Electrochemical Studies of the Electrodeposition of Refractory Metals in Room Temperature Ionic Liquids	NSF	351,857
07-198	Sethi, Prerna		Design and Development of Computational Techniques for Hyperspectral Image Mining	LBRN/NIH	26,490
07-199	Phoha, Vir	Varahramyan, Kody	Engineering Smart Cyber-centric Sensor Surveillance Systems for Large Geographic Domains	BoR/LSU	1,900,000
07-200	Miletello, Wendy		PBRC Professional Development Initiative	BoR/LaSIP/LA GEAR UP	100,001
07-202	Ji, Frank	Selmic/Varahramyan	Functional Multilayer Films Modified Microcoil Sensors for Explosive Detection	NSF	400,000
07-204	Cronk, Stan		Prototype Web-Browsing Interface for Persons with a Severe Physical Disability	NEC Foundation of America	33,276
07-205	Gold, Scott		Fuel Cell Catalytic Nanostructures by Template Wetting	NSF	276,100
07-206	Gold, Scott		Proton Conduction in Nanoporous Proton Exchange Membranes	NSF	276,100
07-207	Voziyanov, Yuri		Evolution of Novel Specificities and Catalytic Sites in Tyrosine Recombinases	NIH	1,746,545
07-208	Shipp, Michael	Washington, Daphne	Training in Assistive Technology	La. Rehabilitation Services	99,845
07-209	Shipp, Michael	Washington, Daphne	Comprehensive Center for Rehabilitation Technology	La. Rehabilitation Services	2,383,138
07-211	Eklund, Svend		B.Lessig/Electrode Disposition of Wear Resistant Films of Refractory Metals from Room Temperature Ionic Liquids	LaSPACE/LURA	5,000
07-212	Lvov, Yuri		Center for Experimental Cancer Therapeutics (CECAT)	BoR	1,263,191
07-213	Tims, Heath	Crittendon/Hall	Empirical Design of Miniature Gas Turbines	Quoin Intl', Inc.	30,000
07-214	Patterson, William	Gibson, Mark	Evaluation of Effectiveness of Forestry Best Management Practices for Water Quality Improvement in the Ouachita Basin: Phase 2	La. DEQ	377,739

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
07-215	Ford, Pamela		Dual Enrollment Pilot Project	BoR	12,700
07-216	Lvov, Yuri	DeCoster/ Varahramyan	Center for Advanced Materials and Nanotechnology in AMRI at the University of New Orleans	BoR	1,000,000
07-217	Dua, Sumeet		Resource Development for High Dimensional Biomedical Data with Large Bandwidth Networking, Visualization and Data Fusion to Facilitate Medical Diagnosis and Decision Making	BoR	602,495
07-218	DeCoster, Mark		Patterned Nanofilm Substrate Environments for Investigating Brain Cell Growth and Repair	LaSPACE	5,000
07-219	Besio, Walt		Histological Analysis of Emergency Seizure Control Effectiveness	LaSPACE	5,000
07-220	Grafton, Tommy	Smith, Addie	Drug Free Communities Support Program	SAMSHA	259,726
07-221	Varahramyan, Kody		Louisiana Integrated Nanomaterials Center (LINC) - From Research & Development to Commercial Technologies Promoting Economic Development	BoR	7,900,000
07-222	Guice, Les		The LONI Institute: Advancing Biology, Materials, and Computational Science for Research Education and Economic Development	BoR	2,246,372
07-224	Saber, Aziz		Rapid Bridge Construction Techniques and Technology	LTRC	200,006
07-225	O'Neal, Patrick		Development of a Novel SERS (Surface-Enhanced Raman Spectroscopy) Sensor for Online Monitoring of Analytes in Cell Culture Media)	LaSPACE	5,000
07-226	Gold, Scott	Wilson, Chester	Advanced Catalyst & Microreactor Structures to Enhance Fischer-Tropsch Selectivity	DOD/ Office of Naval Research	70,000
07-227	Lvov, Yuri		Tuning Cellulose Fiber Aggregation With Electrostatic Nanoassembly	Georgia Tech	50,000
07-228	Dowd, Duane		Lincoln Parish Coalition for Healthy Marriage	Entergy	7,014
07-229	Turner, Galen	Nelson/ LaBorde	STEM-Plus: Louisiana Tech University's Noyce Scholarship Program	NSF	749,980
07-230	Beer, Glenn	Livingston/ Tobacyk	Exploring Partnership Opportunities With Ford	Southern Quality Ford Dealers	485,560



HAPPY EASTER!!!



UNIVERSITY CLOSING: APRIL 6-9

LATECH TO SEE \$12M UNDER PLAN (CONT'D FROM PAGE 1)

University of Louisiana at Monroe President James Cofer said he is deeply pleased by the governor's plan, citing \$30 million for the faculty pay plan as hugely needed.

"We are especially grateful for the governor's recommendation of salary increases for both faculty and staff," Cofer said. "ULM faculty and staff spend countless hours inside and outside of the classroom working with and for our students. This continued recognition of their hard work is greatly appreciated."

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NEW GRANTS AWARDED (CONT'D FROM PAGE 2)

PI/Co-PI	Title	Funding Agency	\$ Awarded
Connie LaBorde	<i>E-Portfolios: Teaching with Emerging Technology</i>	BoR	9,500
Dave Norris	<i>Louisiana Business Incubator Support Grant</i>	LEDP	64,950
Larry Proctor	<i>Minority & Multicultural Health Month</i>	La. Dept of Health & Hospitals	48,950
Erez Allouche	<i>Utilization of Ultra-wideband Radiation as a Utility Detection System Ahead of an Excavation Bucket in Soil</i>	John Deere	575,000
Erez Allouche	<i>Interactive Software for the Selection of Technologies for the Rehabilitation of Buried Pipes and Conduits</i>	NASSCO	25,000
March 2007 Total			\$583,005.00
			YTD 8,425,786.96

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

Larry Proctor, BETTER HEALTH FOR THE DELTA PHASE I YEAR 3, U.S. Health Resources Service Administration through Area Health Education Center \$21,676;

Mike Shipp, COMPREHENSIVE CENTER FOR REHAB TECHNOLOGY, Louisiana Rehab Services \$94,062;

Glenn Beer, OUACHITA PARISH 2ND GRADE SCIENCE PROJECT, Ouachita Parish School System \$21,600;

Natalia Zotov, RESEARCH IN SUPPORT OF LIGO BINARY INSPIRAL SEARCH AND DETECTOR CHARACTERIZATION, NSF \$5,000.

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Go to http://research.latech.edu/resources/forms_downloads and scroll down to 'Human Use Compliance Forms'. Please also contact Barbara Talbot, Office of University Research at 257-5075 or via e-mail: btalbot@latech.edu.