JUNE 2007

Louisiana Tech University

BREEZE BULLETIN

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

Somebody is always doing what somebody else said couldn't be done.
Author Unknown

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SUMMER GRANTWRITING WORKSHOPS

Below is the beginning of a series of workshops to be presented by the Office of University Research, designed to assist faculty in successfully writing and managing grants. It is suggested that staff members also attend workshops noted with an asterisk (*) as these workshops focus on helpful information for ordering equipment, paying credit card statements, balancing the CICS account, etc.:

- **6/18 @ 2pm-3pm**: Fall Funding Opportunities With The Board of Regents. Location: *Rm. 1535, Wyly Tower.*
- **6/25 @ 2pm-3pm**: Submitting to Grants.gov. Location: *CITDL, 10th Floor, Prescott Library.*
- ***6/28 @ 2pm-3pm**: Grant Management . Location: *Rm. 1535, Wyly Tower.*

Additional workshops will be scheduled throughout the summer with e-mail notifications to faculty and staff. If you cannot attend during the dates and times listed, please contact Beth Free via e-mail (bfree@latech.edu) or phone 257-5075 to schedule a convenient date

Dobbins Receives Penn State Award

Tabbetha A. Dobbins ('02 EMS) assistant professor with a joint appointment in physics at Louisiana Tech University and Grambling State University was one of 10 alumni to receive the 2007 Penn State Alumni Association Alumni Achievement Award. This award recognizes alumni who are 35 years of age and younger for their extraordinary professional accomplishments.

After receiving her doctorate from Penn State in 2002, Dobbins was awarded the prestigious National Research Council Post-Doctoral Fellowship to do research at the National Institute of Standards and Technology.

Dobbins' dissertation focused on how high-temperature thermal spray conditions affected the quality of thermal barrier coatings—a critical component to the performance of commercial jet engines. She continues to do cutting-edge research in applying synchrotron x-ray analysis to modern engineering problems in carbon nanotubes, the hydrogen fuel economy, and polymer self-assembly. She already has an excellent record of publication in the top journals for materials research, which includes 13 scholarly publications.

Dobbins also excels in teaching and outreach. In her position, she has mentored students in both graduate and undergraduate research projects and promoted the students' professional research. She works diligently to engage Louisiana Tech and Grambling State universities in joint research with Penn State in the area of synchrotron X-ray studies. One focus of this collaboration is on introducing women and minority students to state-of-the-art instrumentation and to the excitement of materials research. Students from these two institutions travel to Penn State to conduct research expanding the capabilities and relationships of all three universities, while at the same time, attracting and recruiting students to Penn State's graduate science programs.

Dobbins is a member of the Louisiana Science Teacher's Association and serves on the Louisiana State University Center for Advanced Microstructures and Devices User Participation Committee. She lives in Ruston, La.

(Re-published with permission, Penn State Univ., 2007)

NEW GRANTS AWARDED

1I/Co-PI	Title	Funding Agency	$ Awarded
Glenn Beer	*Establishing LaCAMPS-Year 3*	DOE/LaSPACE	253,936
G. Beer/D.Basinger	*LaTech/LA GEAR UP Explorers Camps 2007*	DOE/LaSPACE	297,637
Ji Fang	*High Sensitivity Prostate Cancer Detection System*	ULM	2,000
Chester Wilson	*LaSpace Minority Research Undergrad Program*	NASA/LaSPACE	4,000
Chester Wilson	*Micro Scale Detectors for Space Based Cosmic Radiation Detection and Monitoring*	NASA/LaSPACE	29,970
April 2007 Total			**$587,543.00**
Chad O'Neal	*Suss Microtec SB6e Wafer Bonder for Microenergy and Advanced Device Packaging Applications*	DOD	160,825
L.Ramsey/G.Beer	*Ripple Plus*	LaSIP	182,226
Schillenger/Tims/ Camp/Beer	*Engineering Higher Student Achievement in Mathematics*	LaSIP	297,256
Pauline Leonard	*Project EPAS Year 3*	LaSIP	233,242
Pamela Ford	*Dual Enrollment Pilot Project*	BOR	12,700
Wendy Miletello	*LA GEAR UP Sports Medicine Camp*	USDE/BoR	133,167
L. Ramsey/G.Beer	*Development of Ripple Plus Professional Development Materals*	USDE/BoR	39,454
Les Guice	*LaTech LONI Environmental Upgrade*	BoR	55,000
Chad O'Neal	*Low Profile Multi-Mode Sensors for Anti-Tamper Applications*	Radiance/Air Force	162,500
Chester Wilson	*X/FIB Technology*	Radiance/Air Force	162,446
Wendy Miletello	*PBRC Professional Development Initiative*	USDE through BoR	109,094
Henry Cardenas	*Electrochemical Oil Spill Prevention*	OSDRP	37,456
Baumert/Allouche/ Simicevic	*Laboratory and Field Test of Push and Drive - An Innovative Pipe for the Trenchless Industry*	IPEX	18,946
May 2007 Total			**$1,604,312**
		YTD	**$10,617,642**

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

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

Mary Murimi, DUBACH-RURAL HEALTH CARE SERVICES OUTREACH GRANT PROGRAM (Year 3), DHHS, $191,285;

Larry Proctor, BETTER HEALTH FOR THE DELTA PHASE II (Year 3), US Health Resources Services Adm., $87,630.83;

Natalia Zotov, RESEARCH IN SUPPORT OF LIGO BINARY INSPIRAL SEARCH AND DETECTOR CHARACTERIZATION (Year 3), NSF $40,000;

Chokchai Leangsuksun, MOLAR: MODULAR LINUX AND ADAPTIVE RUNTIME SUPPORT FOR HEC OS/R RESEARCH (Year 3), DOE $98,057;

Tabbetha Dobbins, RESEARCH AND EDUCATION - INCREASING STUDENT PARTICIPATION IN RESEARCH AT INTERNATIONALLY RECOGNIZED USER FACILITIES (Year 3), NSF $91,361.

PROPOSALS SUBMITTED

FILE #	PI	Co-PI 's	TITLE	AGENCY	$
07-231	Varahramyan, Kody		Integrative Graduate Education and Research Traineeship Program in Nano-Bio-Info-Cogno-Sciences and Converging Technologies	NSF	3,000,000
07-232	Napper, Stan		Integrative Graduate Education and Research Traineeship Program in Nano-Bio-Info-Cogno-Sciences and Converging Technologies	NSF	19,905
07-233	Eklund, Sven	O'Neal, Chad	Electrodeposition of Tantalum and Other Refractory Metals in Room Temperature Ionic Liquids	DOD	355,057
07-234	Wilson, Chester		ARDEC/GA Nanofab	NSF	1,400,000
07-235	Evans, Katie	Camp, Brian	i-Work: WeBWorK to Enhance an Integrated Engineering Curriculim	NSF	149,980
07-236	Sit, Sidney	Mills, David	Integrated Manipulation of Substrate Properties for an Improved Construction of Stem Cell-based Artificial Biomaterials	Governor's Office of Community Programs	1,999,864
07-237	Dowling, Bobby		Hideaway Park Trail Phase II	NSA	121,400
07-238	Leangsuksun, Box		Scalable Proactive Fault Tolerance for Next-Generation HPC		153,217
07-239	Norris, Dave		Enterprise Center Economic Development Outreach	US Dept. of Commerce	413,313
07-240	Wilson, Chester		DNDO Academic Proposal	NSF	1,974,452
07-241	Fang, Ji		Development of Antibody-based Diagnostic System for Novel Early Detection of Prostrate Cancer	DOD/US Army Medical Research & Material Command	148,974
07-242	Wick, Collin		Computational Studies of Aqueous Interfaces	Dreyfus Foundation	50,000
07-243	Beer, Glenn	Vessell, Amy	Lincoln Parish Math/Science Project	Lincoln Parish School System	24,450
07-244	Schillinger, Don	Dauzat, Jo Ann	Literacy Across the Curriculum Web Site Development	BoR	10,000
07-245	Ramsey, Linda	Beer, Glenn	Development of Ripple Plus Professional Development Materals	LA GEAR UP/ LASIP	39,454
07-246	Baumert, Mike	Allouche, Erez	Laboratory and Field Test of Push and Drive - An Innovative Pipe for the Trenchless Industry	Ipex, Inc.	18,948
07-247	Guice, Les		LaTech LONI Environmental Upgrade	BoR	55,000
07-248	Sterling, Ray		Application of Grade Control and Guidance Training Module	Jacobs Associates	7,000

(Cont'd on page 4)

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

FILE #	PI	Co-PI 's	TITLE	AGENCY	$
07-249	Chiu, Alan		Brain Function Replacement Using Coupled Oscillators	NIH	1,252,035
07-250	Besio, Walt		A Non-Invasive Patterned Functional Electrical Stimulation (PFES) Prototype for Stroke Rehabilitation	NCIIA	16,500
07-251	Wang, Jay		Time-dependent Initiation and Propagation of Shear Strain Localization in Soft Rocks Subject to Chemical/Mechanical Degradation	DOE	201,749
07-252	Beer, Glenn	Basinger/ Schillinger	Family Recovery Corps/LA GEAR UP Explorers Camps	Louisiana Family Recovery Corps	224,995
07-253	Wolf, William		Profiling and Characterization of Serine Proteases in Pancreatic Cancer	NIH	136,702
07-254	Leangsuksun, Box		Reliability, Availability & Serviceability (RAS)	DOE	375,000
07-255	Leangsuksun, Box		Virtualized System Environments for Extreme-Scale High-End Computing	DOE	375,000
07-256	Allouche, Erez	Hall/Sterling	Experimental Evaluation of Cip Lining Systems for High Temperature Applications	NY Dept. of Design & Construction	174,460
07-257	Selmic, Rastko	Phoha, Vir	A Multi-University Alliance to Increase Participation of Under-Represented Students in Computing Disciplines	NSF	549,370
07-258	Roach, Susan		Louisiana Regional Folklife Program	Louisiana Div. of the Arts	60,000
07-259	Robbins, Kenneth		The Arthur W. Stone New Play Award	Shreveport Regional Arts Council Decentralized Arts	3,938
07-260	Kennedy, Angela		2006/07 Carl Perkins Vocational & Technical Education WIA Incentive Grant/Carry Over	La. Tech. & Comm College Sys	1,852
07-261	Kennedy, Angela		2007-08 Carl Perkins Vocational & Technical Education Grant	La. Tech. & Comm College Sys	108,000
07-262	Baumert, Mike		One-Day Workshop-Strain Gage Application & Ni Compact Rio 9014: Software and Hardware Familiarization	Clement Industries	3,993