



## 2007-2008 FACULTY RESEARCH GRANT PROGRAM RECIPIENTS

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### Small Grant Recipients and Project Titles

- Priscilla D. Allen- *Social Work* pallen2@lsu.edu  
“Culture Change in Louisiana’s Nursing Homes: Improving Care Quality and Quality of Life”
- Kimberly Arp- *Art* karp1@lsu.edu  
“Large Format Digital and Traditional Printmaking”
- Jacob Rama Berman- *English* jberman@lsu.edu  
“American Arabism; Imagining the Nation and Constructing Nativity”
- Steve C. S. Cai- *Civil and Environmental Engineering* cscai@lsu.edu  
“Assessment of Countermeasures for Storm Surge and Wave Effects on Coastal Bridges”
- Bradley E. Cantrell- *Landscape Architecture* cantrell@lsu.edu  
“Interactive Landscape”
- Russell L. Carson- *Kinesiology* rlcarson@lsu.edu  
Jennifer J. Baumgartner- *Human Ecology* jbaumgartner@agcenter.lsu.edu  
“Alleviating Childcare Provider Burnout Through Daily Rejuvenation Strategies: Pilot Work Necessary for Future External Funding”
- Areendam Chanda- *Economics* achanda@lsu.edu  
“Foreign Direct Investment and Absorptive Capacities: The Experience of Indian States”
- Xi Chen- *Political Science* xchen@lsu.edu  
“An Authoritarian State and a Contentious Society: the Case of China (Part II)”
- Brent Christner- *Biological Sciences* xner@lsu.edu  
“Biogenic Ice Nuclei In Precipitation”
- Alex S. Cohen- *Psychology* acohen@lsu.edu  
“Computerized Assessment of Negative Symptoms In Schizophrenia”

Zhi-Qiang Deng- *Civil and Environmental Engineering* z deng@lsu.edu  
“Mixing and Dispersion of Polluted Surface Buoyant Plumes in Lake Pontchartrain”

Ram V. Devireddy- *Mechanical Engineering* devireddy@me.lsu.edu  
“Cryobiology of Adult Stem Cells in the Presence of Nanoparticles”

Patrick J. DiMario- *Biological Sciences* pdimari@lsu.edu  
“Linking Nopp140 loss in Drosophila to the Human Treacher-Collins Syndrome”

John F. DiTusa- *Physics and Astronomy* ditusa@phys.lsu.edu  
“Nanowire Silicides: Properties and Devices”

Matthew L. Dunn- *Interior Design* mdunn1@lsu.edu  
“Office for Responsive Design Research”

Annette Engel- *Geology and Geophysics* aengel@lsu.edu  
Alexander Prange- *CAMD* prange@lsu.edu  
“Sulfur Speciation Using Xanes Spectroscopy to Interpret Natural Sulfur Biological Signatures”

David W. Foltz- *Biological Sciences* dfoltz@lsu.edu  
“Collecting Single-Copy Nuclear Sequence Data in Starfish to Support Future NSF Proposals in Systematics”

Jayne C. Garno- *Chemistry* jgarno@lsu.edu  
“High Throughput Fabrication and Testing of Metal-Molecule-Semiconductor Heterojunctions via Electroless Deposition of Metals on Silane Nanopatterns”

Beilei Ge- *Food Science* bge@lsu.edu  
“Interaction of Escherichia coli O157:H7 with Growing Spinach Plants”

Anne Grove- *Biological Sciences* agrove@lsu.edu  
“Uric Acid as a Bacterial Antioxidant”

Shengmin Guo- *Mechanical Engineering* sguo2@lsu.edu  
“The Development of Novel Ceramic Nanofiber Sensors for Aerospace Application”

Patrick Hesp- *Geography and Anthropology* pahesp@lsu.edu  
“Foredune Dynamics, Sediment Supply and Response to Sea level Change and Storms, Cape San Blas, Florida”

Robert Hynes- *Physics and Astronomy* rih@phys.lsu.edu  
“Optical Observations of the Faintest Accreting Black Holes in the Galaxy”

Shantenu Jha , *Computer Science and CCT* shantenu@lsu.edu  
Fareed Aboul-ela, *Biological Sciences* faboul@lsu.edu  
“Investigating the Conformational Flexibility of the S-box Riboswitch Using Molecular-Dynamics Simulations”

Seung Ihl Kam- *Petroleum Engineering* kam@lsu.edu  
“Experimental Study of Foam Flow in Pipes”

Kelli Scott Kelley- *Art* kskelley@lsu.edu  
“The Other”

Sean M. Lane- *Psychology* slane@lsu.edu  
Emily M. Elliott- *Psychology* eelliott@lsu.edu  
“Control Over Memory Accuracy”

Yong-Hwan Lee- *Biological Sciences* yhlee@lsu.edu  
“Functional Characterization of the Lead Molecules from Virtual Drug Screening of PFKFB3”

Matthew R. Lee- *Sociology* mlee@lsu.edu  
“Culture and Violence in Rural America”

Kirsten Prufer- *Biological Sciences* kprufer@lsu.edu  
“Determining the Molecular Basis for Differential Gene Regulation by LXR $\alpha$  and LXR $\beta$ ”

Frederick A. Rainey- *Biological Sciences* frainey@lsu.edu  
“How Resistant to Radiation and Desiccation are the Species of the Genus *Deinococcus*?”

Tracey E. Rizzuto- *Psychology* trizzut@lsu.edu  
“Healthcare Technology Training at the Intersection of Workforce Aging and Innovation”

Luigi Romolo- *Geography and Anthropology* lromolo@src.lsu.edu  
“The Synoptic Controls on Drought and Drought -Related Variables in the Southeastern United States”

Amitava Roy- *CAMD* reroy@lsu.edu  
“Phytoremediation for Heavy Metal Polluted Sites in the Southeast”

Susan Elizabeth Ryan- <i>Art</i>	faryan@lsu.edu
“Wearable Technology Art: Body, Media, and Interconnectivity”	
Bradley E. Schaefer- <i>Physics and Astronomy</i>	schaefer@lsu.edu
“The Nature of Dark Energy from the Gamma-Ray Burst Hubble Diagram”	
Radhey S. Sharma- <i>Civil and Environmental Engineering</i>	rsharma@lsu.edu
“Dynamic Behavior of Unsaturated Soils”	
Frank T.C. Tsai- <i>Civil and Environmental Engineering</i>	ftsai@lsu.edu
“Bayesian Model Integration and Uncertainty Analysis in Groundwater Inverse Modeling”	
Grover Waldrop- <i>Biological Sciences</i>	gwaldro@lsu.edu
“Design of Nano/Microscale Enzymatic Machines: Preliminary Work on Enzyme Synchronization”	
Harris Wong- <i>Mechanical Engineering</i>	hwong@lsu.edu
“Self-propulsion of Evaporating Liquid Droplets on Micro- and Nanoscale Asymmetric Substrate Structures”	
Gang Zhou- <i>Foreign Languages and Literatures</i>	gzhou@lsu.edu
“Language, Myth, Identity: The Chinese Vernacular Movement in a Comparative Perspective”	

## Large Grant Recipients and Project Titles

### Group 1:

Wen Jin Meng, <i>Mechanical Engineering</i>	wmeng@me.lsu.edu
Jost Goettert, <i>CAMD</i>	jost@lsu.edu
Robert P. Hammer, <i>Chemistry</i>	rphammer@lsu.edu
Kun Lian, <i>CAMD</i>	klian@lsu.edu
Edward B. Overton, <i>Environmental Studies</i>	ebovert@lsu.edu
“Replication-Based Fabrication of Glass- and Metal- Based Structures: Development of Enabling Technologies”	

Group 2:

Frederick Weil, *Sociology*

fweil@lsu.edu

John Pine, *Geography and Anthropology*

jpine@lsu.edu

Juan Barthelemy, *Social Work*

jbarthel@lsu.edu

Daphne Cain, *Social Work*

dscain@lsu.edu

Barrett Kennedy, *Architecture*

arkenn@lsu.edu

“Community Recovery in Greater New Orleans since Hurricane Katrina. *Social and Organizational Surveys, combined with Damage Assessments and GIS Mapping*”

Group 3:

Richard L. Kurtz, *Physics and Astronomy*

rlkurtz@lsu.edu

Julia Chan, *Chemistry*

jchan@lsu.edu

John Scott, *CAMD*

scott@lsu.edu

Phillip T. Sprunger, *Physics*

phils@lsu.edu

Michael Tolocka, *Chemistry*

mpt@lsu.edu

“Microfluidic Structures for Hydrogen Generation”