

**Funded Proposals:
2008 Pilot Funding for New Research (Pfund)**

(alphabetical by institution, PI last name)

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Institution/Department	Principal Investigator	Title
LSU Agricultural Center Entomology	Lane Foil	Characterization of Polymorphic Microsatellite Loci for Population Genetic Analyses in the Horn Fly, <i>Haematobia irritans</i>
LSU Agricultural Center Calhoun Research Station	Hui Pan	Characterization of CCA Metals in Liquefied Spent CCA-Treated Wood Sludge by Sequential Extraction
LSU Agricultural Center Renewable Natural Resources	Todd F. Shupe	Development of Highway Guardrail Blockouts from Decommissioned Chromated Copper Arsenate (CCA)-Treated Wood
LSU Agricultural Center Plant, Environmental & Soil Sciences	Brenda S. Tubana	Estimating sugarcane yield potential and responsiveness to nitrogen fertilization using mid-season crop canopy reflectance
LSU Agricultural Center Plant Pathology and Crop Physiology	Rodrigo A. Valverde	Molecular Characterization of dsRNA Viruses Infecting Rice and <i>Rhizoctonia solani</i>
Louisiana State University Civil and Environmental Engineering	Michele Barbato	Probabilistic Demand Analysis of Dynamically-Excited Uncertain Structural Systems
Louisiana State University Chemical Engineering	Michael G. Benton	Synthesizing novel yeast strains for biofuel production
Louisiana State University Civil and Environmental Engineering	Steve Cai	Exploring OTDR Methodology for Debonding Monitoring of FRP Strengthened Concrete Bridges
Louisiana State University Comparative Biomedical Sciences	W. James Catallo	Bio-Based Petrochemicals: Hydrothermal Production of Acetic Acid and CO ₂ from Pest Vegetation Biomass
Louisiana State University Electrical and Computer Engineering	Jin-Woo Choi	Bioelectronic Sensors Using Enzyme Electrodes
Louisiana State University Mechanical Engineering	Shengmin Guo	Novel Electro-Plasma Process for Plasma Spray Coating
Louisiana State University Chemical Engineering	Francisco R. Hung	Molecular modeling of adsorption of small biological molecules on ordered mesoporous carbons
Louisiana State University Construction Management & Industrial Engineering	Xiaoyue Jiang	Legendre Queues for Performance Guarantees

Louisiana State University Physics and Astronomy	Thomas Kutter	Characterization and Optimization of the Fine Grained Scintillator Detectors with Wavelength Shifting Fibers and Semi Conductor Photon Counter Readout
Louisiana State University Geography and Anthropology	Heather McKillop	Experimental Research on Tropical Tree-Ring Dating and Climate Change
Louisiana State University Chemistry	David A. Spivak	Protein Detection by Proximity Immobilization of Aptamers and Antibodies
Louisiana State University Electrical and Computer Engineering	Shuanggin Wei	Jamming and counter-measures in wireless networks
Louisiana State University Electical and Computer Engineering	Hsiao-Chun Wu	Novel signal processing techniques for cognitive communications
Louisiana State University Civil and Environmental Engineering	Guoping Zhang	Elastic Modulus and Hardness of Individual Clay Particles
Louisiana State University Electrical and Computer Engineering	Kemin Zhou	Robust Control Applied to Color Print Engine
LSU Health Sciences Center - New pediatrics	Bonnie Dickinson	Cholera Toxin Increases Dendritic Cell Expression of CXCR4 and CXCR7 and Drives SDF-1 Dependent Chemotaxis by Activating RKA, Epac1, or Both Molecules
LSU Health Sciences Center - New Genetics	Diptasri M. Mandal	Genetic Characterization of Prostate Cancer Risk Locus at 8q24 in African-American Males with Family History
LSU Health Sciences Center - New Physiology	Patricia E. Molina	Target Mechanisms for Improved Hemodynamic Outcome from Hemorrhage in the Alcohol-Intoxicated Host
LSU Health Sciences Center - Cellular Biology & Anatomy	Wie-Ming Duan	AAV9-Mediated Erythropoietin Gene Delivery in a Rat Model of Parkinson's Disease
Louisiana Tech University IFM/Chemical Engineering	Despina Davis	Fabrication and Testing of Micro Fluidic GMR Sensors
Louisiana Tech University Physics	Pedro Derosa	A realistic model for charge transport in conductive polymers
Louisiana Tech University Chemistry	Sven Eklund	Synthesis and spectroscopic characterization of tantalum and tungsten fluorides for use in electrodeposition from room temperature ionic liquids
Louisiana Tech University IFM/Engineering	Yuri Lvov	Caly Nanotubes for Controlled Release of Anticorrosion Agents

Louisiana Tech University Chemical Engineering	Daniela S. Mainardi	Kinetics of methanol production catalyzed by methanol dehydrogenase after the photochemical conversion of CO ₂ to formate
Louisiana Tech University Institute for Micromanufacturing	Long Que	Plasmonics substrates fabricated nonlithographically for fluorescence and Raman signal enhancement
Louisiana Tech University Institute for Micromanufacturing	Sandra Selmic	Numerical and Experimental Study of Conjugated Polymer Photodetectors
Louisiana Tech University Biomedical Engineering	Ping-Fai Sit	Protein tethering on corneal tissue engineering scaffolds to promote epithelialization
Louisiana Tech University IfM/Biosciences	Yuri Voziyanov	Correction of mutations using tailor-made recombinases
Nicholls State University Biological Sciences	Rajkumar Nathaniel	Molecular characterization of Methicillin resistant staphylococcal species from domesticated pets
Nicholls State University Biological Sciences	Enmin Zou	A Test for Hypoglycemic Actions of the Molting Hormone in the Fiddler Crab, <i>Uca pugilator</i>
Southeastern Louisiana University Chemistry and Physics	Ju Chou	Resolution of Higher Fullerene Isomers, for Photophysical Investigation, Through Alternating Column Recycling Chromatography
Southern University Electronic Business	Victor Mbarika	A theoretical model for electronic medical records adoption in resource-poor settings: the case of rural Louisiana
Southern University Physics	Guang-Lin Zhao	Exploration of Novel Thermoelectric Materials for Thermal Energy Harvesting and Conversions
Tulane University Ecology and Evolutionary Biology	Michael J. Blum	Evolutionary responses of freshwater fishes to anthropogenic modification of stream flow
Tulane University Chemical and Biomolecular Engineering	Daniel De Kee	Yield Stress of Complex Structured Fluids: Concentric Cylinder Geometry with Slotted Rotor
Tulane University Chemistry	James P. Donahue	A Proposed Homogeneous Cycle for Carbon Dioxide Reduction by Direct Oxygen Atom Excision with Low-Valent Tungsten Complexes
University of Louisiana at Lafayette Biology	Paul L. Klerks	A Shift in Research Direction by using Proteomics to Investigate Resistance Differences among Aquatic Organisms
University of Louisiana at Lafayette Center for Structural and Functional Materials	Devesh Misra	Magnetic Nanorods: The Determining Role of Shape Anisotropy and Surface Roughness on the Magnetic Behavior of Nickel Ferrites for Sensor and Device Applications

University of Louisiana at Lafayette
Center for Advanced Computer Studies

Danella Zhao

Intra-chip wireless nanonetworks for high-performance
embedded computing

University of New Orleans
Computer Science

Jing Deng

Multi-Path Key Establishment in Wireless Sensor Networks

University of New Orleans
Chemistry/AMRI

Pierre F. Poudeu

Expoloratory Synthesis and Characterization of New
Quaternary Transition Metial-Tin-Bismuth Chalcogenides

Xavier University
Sociology

Amy Hite

African American-Hispanic Labor Market Competition in
Post-Katrina New Orleans: A Segmented Labor Market in the
Making?
