

**FY 2011-12 NSF EPSCoR Pfund Proposals Received (listed alphabetically by Institution, PI Last Name)**

BOR #	Name	Institution	Department
001	Berkowitz , Dana <i>Youth in a syringe: gender politics and Botox cosmetic</i>	Louisiana State University	Sociology
002	Brown , Jeremy <i>Next-generation phylogenomics through posterior predictive data filtering</i>	Louisiana State University	Biological Sciences
003	Cai , Steve <i>Exploring the feasibility of geopolymer-based concrete recycling for civil infrastructure applications</i>	Louisiana State University	Civil & Environmental Engineering
004	Gleason , Evanna <i>Cytosolic chloride levels in nitric oxide producing amacrine cells of the avian retina</i>	Louisiana State University	Biological Sciences
005	Hart , Craig <i>Investigating the link between gene regulation and nuclear organization</i>	Louisiana State University	Biological Sciences
006	Hayes , Daniel <i>miRNA delivery system directed differentiation of adipose-derived stromal cells</i>	Louisiana State University	Biological and Agricultural Engineering
007	Kartika , Rendy <i>Chiral auxiliary mediated dynamic resolution of prochiral carbenium ion: an access to fully substituted carbon</i>	Louisiana State University	Chemistry
008	Kooima , Robert <i>The Louisiana sky</i>	Louisiana State University	Computer Science
009	Kutter , Thomas <i>Characterization and optimization of large electron multiplier for a dual phase argon time projection chamber</i>	Louisiana State University	Physics & Astronomy
010	Lee , Charles <i>Cell-specific stimulation of auditory cortical circuits</i>	Louisiana State University	Comparative Biomedical Sciences
011	Lu , Rui <i>The functional role of RSD-2 in RNAi directed antiviral immunity in Caenorhabditis elegans</i>	Louisiana State University	Biological Sciences
012	Martin , Michael <i>Radiation-resistant nano-electro-mechanical memory</i>	Louisiana State University	Mechanical Engineering

**FY 2011-12 NSF EPSCoR Pfund Proposals Received (listed alphabetically by Institution, PI Last Name)**

BOR #	Name	Institution	Department
013	Pettis , Gregg <i>The ecological role of Vibrio vulnificus exopolysaccharide phase variation in surface colonization of copepods</i>	Louisiana State University	Biological Sciences
014	Sarker , Bhaba <i>Procurement, manufacture and supply of components and materials for off-shore wind energy facilities</i>	Louisiana State University	Construction Mgt & Industrial Engineering
015	Srivastava , Ashok <i>Mixed-signal trusted hardware for defense, space, homeland and security applications</i>	Louisiana State University	Electrical and Computer Engineering
016	Urbatsch , Lowell <i>Increasing biodiversity out-reach by developing a web interface incorporating plant identification tools and other information into herbaria websites</i>	Louisiana State University	Biological Sciences
017	Veronis , Georgios <i>Slow-light enhanced nanoscale plasmonic devices</i>	Louisiana State University	Electrical & Computer Engineering
018	Wahab , Muhammad <i>Development and analysis of composite sensors for structural health monitoring of composite pressure vessels</i>	Louisiana State University	Mechanical Engineering
019	Wei , Shuangqing <i>Tradeoff between reliability and secrecy of ciphered systems: a systematic study</i>	Louisiana State University	Electrical and Computer Engineering
020	Pan , Hui <i>Study on the demethylation of lignin to improve its reactivity as a phenol substitute in phenol-formaldehyde resin synthesis</i>	LSU Agricultural Center	Dean Lee Research Center
021	Pitman , W. <i>Ecological approaches for use of native legumes in Louisiana pastures</i>	LSU Agricultural Center	Hill Farm Research Station
022	Subudhi , Prasanta <i>Genetic dissection of salt tolerance in rice</i>	LSU Agricultural Center	Plant, Environmental, & Soil Sciences
023	Wu , Qinglin <i>Biodegradable nano-fibrous materials modified by biopolymer nanoparticles through coaxial electrospinning</i>	LSU Agricultural Center	Renewable Natural Resources
024	Molina , Patricia <i>Impact of alcohol intoxication on recovery from traumatic brain injury</i>	LSU Health Sciences Center - New Orleans	Physiology

**FY 2011-12 NSF EPSCoR Pfund Proposals Received (listed alphabetically by Institution, PI Last Name)**

BOR #	Name	Institution	Department
025	Yu , Qingzhao <i>Model guided adaptive design and analysis in computer experiment</i>	LSU Health Sciences Center - New Orleans	School of Public Health
026	DeCoster , Mark <i>Three dimensional cell spheroids for multi-scale cell systems</i>	Louisiana Tech University	Biomedical Engineering
027	Hegabq , Hisham <i>Microcompressor for gas based microfluidic devices</i>	Louisiana Tech University	Mechanical Engineering
028	Lvov , Yuri <i>Methane storage in clay nanotube composite for ANG (adsorbed natural gas) applications</i>	Louisiana Tech University	Engineering
029	Moore , Brandon <i>Reproductive assessment of mercury-bioaccumulating aquatic predators</i>	Louisiana Tech University	Biological Science
030	Que , Long <i>Fabrication of transparent nanostructured microtiter for ultrasensitive protein biomarker detection</i>	Louisiana Tech University	Institute for Micromanufacturing
031	Wang , Jay <i>Energy piles driven in soft clayey soil ground with high ground water table</i>	Louisiana Tech University	Civil Engineering & Construction Engineering
032	Wasiuddin , Nazimuddin <i>Nanoclay-based modifications of asphalt binders</i>	Louisiana Tech University	Civil Engineering
033	Shanata , Jai <i>Measuring distribution coefficients of enzymes in octanol/water</i>	Loyola University	Chemistry
034	Stephenson , Clifton <i>Development of fluorescent xanthene-based mechanophores</i>	Loyola University	Chemistry
035	Bender , Paul <i>Environmental sensor network testbed at LERC</i>	McNeese State University	Mathematics, Computer Science & Statistics
036	Nathaniel , Rajkumar <i>Isolation and characterization of small peptides with antimicrobial properties from Gar</i>	Nicholls State University	Biological Sciences

**FY 2011-12 NSF EPSCoR Pfund Proposals Received (listed alphabetically by Institution, PI Last Name)**

BOR #	Name	Institution	Department
037	Sichula , Vincent <i>New organic dye-sensitizers for solar cells with different electron donating moieties</i>	Nicholls State University	Physical Sciences
038	Bossart , Janice <i>Does landscape connectivity of pitcher plant bogs predict invertebrate diversity of the pitcher inhabitants?</i>	Southeastern Louisiana University	Biological Sciences
039	Fotie , Jean <i>Transition metal-catalyzed homo-coupling of cyclic amines resulting in N,N-linked cyclic hydrazines</i>	Southeastern Louisiana University	Chemistry & Physics
040	Li , Zhengrong <i>Synthesis of free, unsupported monolayer graphene nanosheets</i>	Southeastern Louisiana University	Chemistry & Physics
041	Mitra , Rana <i>Investigation of friction stir welding of dissimilar materials comprising aluminum alloys and steels under various conditions including small offsets in the butt well configuration</i>	Southeastern Louisiana University	Computer Science & Industrial Technology
042	Bai , Shuju <i>Simulating interactions between 5-lipoxygenase and arachidonic acid using computational approaches</i>	Southern University	Computer Science
043	Gwee , Nigel <i>Application of heuristic and machine learning algorithms to solve NP-hard dance choreography problems</i>	Southern University	Computer Science
044	Jones , Chanika <i>Assessing STEM students' cognitive learning of EHR technologies: a multi-media case study approach</i>	Southern University	SU Internat'l Ctr for IT & Development
045	Jones , Conrad <i>The application of metal organic framework (MOF) materials in biodiesel production and reversible hydrogenation/dehydrogenation process</i>	Southern University	Chemistry
046	Lam , Pui-Man <i>Statistical physics of polymers and DNA under external force</i>	Southern University	Physics
047	Martiniz- , Eduardo <i>Hydrogel-based encapsulation of retinoic acid-loaded dendrimers for biological applications</i>	Southern University	Biological Sciences
048	Salam , Md Abdus <i>Enhancement of energy-efficient data aggregation algorithm for wireless sensor networks</i>	Southern University	Computer Science

**FY 2011-12 NSF EPSCoR Pfund Proposals Received (listed alphabetically by Institution, PI Last Name)**

BOR #	Name	Institution	Department
049	Shaban , Elhag <i>Development of gas electron multiplier based fluorescence detector for dilute elements</i>	Southern University	Electrical Engineering
050	Vincent- , Rachel <i>Molecular modeling of optical coatings</i>	Southern University	Computer Science
051	Belmasrou , Rachid <i>Using new distribution to fit cotton fiber length distribution</i>	Southern University - New Orleans	Natural Sciences - Mathematics
052	Marinov , Tchavdar <i>Inverse problems for coefficient identification in Lotka-Volterra and Goodwin systems of equations</i>	Southern University - New Orleans	Natural Sciences/Mathematics
053	Ashbaugh , Henry <i>Protein side-chain interactions with surfactant micelles</i>	Tulane University	Chemical & Biomolecular Engineering
054	Khismatullin , Damir <i>HIFU system for liver tumor ablation</i>	Tulane University	Biomedical Engineering
055	Kim , Dae Ho <i>Modulation of ferroelectricity by epitaxial strain in thin films of perovskite oxides</i>	Tulane University	Physics and Engineering Physics
056	Talbayev , Diyar <i>Development of an intense pulsed terahertz light source based on tilted-wavefront optical excitation for pump-probe and nonlinear terahertz spectroscopy</i>	Tulane University	Physics
057	Bellows , Charles <i>The effect of bariatric surgery on circulating mesenchymal stromal cells</i>	Tulane Health Sciences Center	Surgery
058	Bunnell , Bruce <i>Regeneration of damaged lungs for use in transplantation</i>	Tulane Health Sciences Center	Pharmacology
059	Do , Mai <i>Acculturation and mental-illness-related stigma among Vietnamese New Orleanians</i>	Tulane Health Sciences Center	Global Health Systems and Development
060	Wang , He <i>Autophagy of mesenchymal stem cells induced by titanium dioxide nanoparticles</i>	Tulane Health Sciences Center	Global Environmental Health Sciences

**FY 2011-12 NSF EPSCoR Pfund Proposals Received (listed alphabetically by Institution, PI Last Name)**

BOR #	Name	Institution	Department
061	Houston , Louis <i>Tomography software for scanning transmission ion micro tomography</i>	University of Louisiana at Lafayette	Physics
062	Khattak , Mohammad <i>Performance enhancement of carbon nanofibers (CNF) reinforced peizelectric polymers</i>	University of Louisiana at Lafayette	Civil Engineering
063	Liu , Yucheng <i>Development of cross-sectional warping functions for modeling thin-walled beam's buckling during dynamic analysis</i>	University of Louisiana at Lafayette	Mechanical Engineering
064	Wang , Yi-Hong <i>Mapping glucose conversion yield for increased biofuel production in sorghum</i>	University of Louisiana at Lafayette	Biology
065	Xu , Wu <i>Biochemical and computational studies of a hypothetical protein Slr110 of Synechocystis sp. PCC 6803</i>	University of Louisiana at Lafayette	Chemistry
066	Bhattacharjee , Joydeep <i>Primary production and carbon sequestration potential of high altitude wetlands in the Himalayas</i>	University of Louisiana at Monroe	Biology
067	El-Giar , Emad <i>Electropolymerized polyphenols coatings for corrosion protection of steel alloys</i>	University of Louisiana at Monroe	Chemistry
068	Liu , Yong-Yu <i>Pre-mRNA splicing determines the expression of wild-type or mutant p53 in cells</i>	University of Louisiana at Monroe	Basic Pharmaceutical Sciences
069	Minton , Russell <i>Inter-simple sequence repeats as population markers in freshwater snail</i>	University of Louisiana at Monroe	Biology
070	Akyuzlu , Kazim <i>Non-intrusive temperature, velocity, and species concentration measurements in chemically reacting turbulent flows</i>	University of New Orleans	Mechanical Engineering
071	Anthony , Nicola <i>Isolation and characterization of the major histocompatibility complex in the green anole Anolis carolinensis: development of a model system for studying host-parasite evolution in Caribbean anoles</i>	University of New Orleans	Biological Sciences
072	Caruntu , Gabriel <i>Soft solution processing of interface engineered ceramic magnetoelectric nanocomposites</i>	University of New Orleans	Chemistry

**FY 2011-12 NSF EPSCoR Pfund Proposals Received (listed alphabetically by Institution, PI Last Name)**

BOR #	Name	Institution	Department
073	Ghose-Hajra , Malay <i>Study of sedimentation characteristics of dredged sediment using column settling test apparatus</i>	University of New Orleans	Civil & Environmental Engineering
074	Li , X. Rong <i>Toward a general approach to performance evaluation</i>	University of New Orleans	Electrical Engineering
075	Liu , Zhengchang <i>Regulation of TORC2 signaling by FAM40A/B and PP2A in HeLa cells</i>	University of New Orleans	Biological Sciences
076	Malkinski , Leszek <i>Fabrication and properties of convoluted magnetic film architectures</i>	University of New Orleans	Physics/AMRI
077	Scaramella , Laura <i>Identifying links among level of environmental stress, the HPA axis, and responsive parenting among mothers of newborn infants</i>	University of New Orleans	Psychology
078	Shirtcliff , Elizabeth <i>Oxytocin provides insight into social support in couples during stress</i>	University of New Orleans	Psychology