

Louisiana Tech University



# BREEZE BULLETIN

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

## TABLE OF CONTENTS

New Grants Awarded ..... 2-3  
 Additional Grant Funding for  
     Existing Awards ..... 4  
 Proposals Submitted ..... 5-11  
 Funding Agency Announcements,  
     Requests for Proposals ..... 12  
**Save the Date!** Two Day Grant Writing  
     Workshop ..... 12  
 Dissertations ..... 13-14

## 2015-16 TECH FRINGE/F&A RATES

Faculty/Unclassified/Post Doc: 47.75%  
 Civil Service: 57.65%  
 Temporary/Part-time: 9.98%  
 DROP: 20.45%  
 Federal F&A (SW): 49.40%

Click the following link to download as a pdf file: [http://research.latech.edu/files/documents/2015-16\\_fringe\\_rates.pdf](http://research.latech.edu/files/documents/2015-16_fringe_rates.pdf).

## OUR IN-HOUSE WORKSHOPS

For a complete list of in-house workshops, go to [http://research.latech.edu/resources/training\\_workshops/latech\\_workshops](http://research.latech.edu/resources/training_workshops/latech_workshops).

- **NSF Fastlane** - 1/26/16, WT1535 2-3pm
- **Finding Research Funding** - 2/23/16, WT1535 2-3pm
- **NIH Grantwriting** - 3/22/16, WT1535 2-3pm

*The fishermen know that the sea is dangerous and the storm terrible, but they have never found these dangers sufficient reason for remaining ashore.*

*Vincent Van Gogh  
 (1853-1890, Dutch-born French painter)*

## NSF EAGER Award Allows Tech Faculty to Help Investigate Robust and Reliable Manufacturing of Cells for Future Healthcare

National Science Foundation  
 October 2, 2015

The National Science Foundation (NSF) has awarded \$3.7 million for high-risk, high-impact research on the manufacturing of cells and cell-based products for future healthcare.

In 13 exploratory projects, researchers will investigate fundamental engineering and biology to address key challenges in the manufacturing of cell-based therapeutics and diagnostics.

While certain cells and cellular products have shown promise as medical therapeutics, clinical use will not be possible until they can be reliably produced in sufficient number, potency, purity and stability.

The NSF-funded projects involve several approaches.

To help procure consistent starting material for biomanufacturing, some researchers will pursue new methods using microdevices and platforms for cell separation to collect and prepare the living cells.

To efficiently cultivate the needed cells and cellular products in large quantities, other researchers will investigate engineering methods and devices to direct cell growth and differentiation.

These methods include, for example, techniques to grow the bone marrow cells used in leukemia treatments, devices to grow new heart tissue for patients and bioreactors to provide cells' ideal growing environments.

Cell-based diagnostics present opportunities to study damage, disease and medications on living cells and tissues.

Research teams will devise complex, 3-D networks of cells, such as brain cells that serve as models for concussion research, and methods to selectively optimize the function of cultivated cell formations. Other researchers will combine the capabilities of cells and microdevices to create new tools to target cancer cells.

“Leveraging existing knowledge in engineering, biology and manufacturing, cellular biomanufacturing has the potential to impact not only human healthcare but also the chemical and energy industries,” said Pramod Khargonekar, NSF assistant director for engineering.



## NEW GRANTS AWARDED

PI	Title	Funding Agency	\$ Awarded
Paul Jackson	<i>Evaluation of Longleaf Pine Seedlots for the Prevalence of Hybridization</i>	USDA Forest Service	24,998
Jamie Newman	<i>Manipulation of Notch Signaling Pathway in Treatment of Estrogen Independent Breast Cancer</i>	LBRN/LSU	9,500
Mary Caldolera-Moore	<i>Novel Environmentally Responsive Nanoparticles for Dual Controlled Drug Release of Diallyl Trisulfide and Sodium Nitrite Orally</i>	LSU Health Sciences Center	21,400
Teresa Murray	<i>Investigating the Annexin A1-Formyl Peptide Receptor Pathway to Develop Innovative Anti-stroke Drugs</i>	LSU Health Sciences Center	5,350
Shaurav Alam	<i>Updates to the Renewal Technology Database Housed on the TTC Server</i>	Battelle Memorial Institute	2,500
Edward Bell	<i>Louisiana Center for the Blind</i>	Louisiana Center for the Blind	400,000
Sheryl Shoemaker	<i>Increasing Diversity in Doctoral Populations at Louisiana Tech University 2015-19</i>	BoR/SREB	95,000
Waizhong Dai	<i>Computational Analysis &amp; Modeling Doctoral Graduate Fellows 2015-19</i>	BoR/Grad Fellows	100,000
Jamie Newman	<i>Optimization of Cardiac Muscle Generation for Replacement of Damaged or Weakened Tissue</i>	LSUHS-S	25,000
M.Caldolera-Moore	<i>Evaluation of the Effects Size and Surface-area-to-volume Ratio has on Material Performance of Environmentally Responsive Micro- and Nanoscale Polymeric Biomaterials</i>	BoR	149,082
Davy Norris	<i>EDA University Conference and Best Practices Review</i>	EDA	75,000
Shaurav Alam	<i>Evaluation of Pipeline Grout via Impedance Spectroscopy</i>	Avanti	1,000
Arun Jaganathan	<i>Development of a Robust Drill Head Integrated Cross Bore Warning System for Horizontal Directional Drilling (HDD) - Phase 2</i>	Charles Machine Works, Inc.	53,777
Mike Shipp	<i>Comprehensive Center for Rehabilitation Technology (CCRT)</i>	USDEdu/LRS	491,266
Steven Wells	<i>Parity Violating Electron Scattering and Nucleon Structure Studies at Jefferson Lab</i>	NSF	219,865
<b>July 2015</b>			<b>Total: 1,673,737.64</b>
Jeremy Mhire	<i>Cyber Society Curriculum Development</i>	CIC	104,000
Jaicee Choate	<i>Vintage Realty Co., LLC</i>	Vintage Realty Company, LLC	46,822.60
N. Wasiuddin	<i>Additional Re-entry and Accelerated Loading Tests of Apical System</i>	CenturyLink	10,739
David Mills	<i>Anti-Microbial Medical Device Coatings that Reduce Infection and Promote Healing</i>	NIH/LSU INBRE	8,367
Jamie Newman	<i>The Role of Mediator in Maintaining and Differentiating Human Mesenchymal Stem Cell State</i>	NIH/LSU INBRE	111,900
Carolyn Talton	<i>Project Math IDEA</i>	BoR	160,337
Donna Hood	<i>Carl Perkins Basic Grant 2015-16</i>	USDoEdu/LCTCS	14,400
Tommy Grafton	<i>North Central Alliance Partners in Prevention</i>	DHHS/NW La HSD	50,000
Tommy Grafton	<i>Project Northland</i>	DHHS/NW La HSD	83,401
Shaurav Alam	<i>Testing of Glass Laminate and Sprayable Coating System Produced by Mirteq</i>	Mirteq, Inc.	20,130
Fatmir Menkulasi	<i>Development of a Sustainable UHPC Bridge Deck for Movable Bridges</i>	LTRC	174,940
Dewanna Blake	<i>Tobacco Free Lifestyle</i>	Lincoln Health Foundation	4,721
Rebecca Giorno	<i>Spore Outer Structures: Contribution to Germination Heterogeneity</i>	NIH/LSU INBRE	120,251
Sumeet Dua	<i>Louisiana Biomedical Research Network</i>	NIH/LSU INBRE	56,693
<b>August 2015</b>			<b>Total: 442,165.60</b>
Carlos Montes	<i>Analysis of Concrete Pipe Scale Sample</i>	Stantec Consulting Services	488.00
Mark DeCoster	<i>EAGER: Biomanufacturing: "Multi-scale High-aspect Ratio Structures (HARS) for Constructing Dynamic 2D and 3D Cellular Bioreactors"</i>	NSF	300,000

## NEW GRANTS AWARDED (CONT'D FROM PG 2)

PI	Title	Funding Agency	\$ Awarded
B. Ramachandran	<i>RII Track-1: Consortium for Innovation in Manufacturing and Materials</i>	BoR/NSF	4,281,382
Steven Jones	<i>Calibration System for Ultrasonic Probes</i>	Vascular Technology, Inc.	4,270
Carlos Montes	<i>Analysis, Characterization and Testing of Geokrete</i>	Quadex, Inc.	36,106
<b>September 2015</b>			<b>Total: 4,622,246</b>
Arden Moore	<i>Low Altitude Unmanned Aerial Vehicle (UAV) from Sustainable Materials</i>	NASA/LSU/ LaSPACE	1,525
Rastko Selmic	<i>LaSPACE Fellowship -Saba Ramazani</i>	NASA/LSU/ LaSPACE	26,000
Niel Crews	<i>LaSPACE Fellowship - Collin Tranter</i>	NASA/LSU/ LaSPACE	26,000
N.Wasiuddin	<i>Tack Coat and Void Filler Material Properties and Shallow Trench Design for Apical System- Phase I</i>	CenturyLink	95,718
Sumeet Dua	<i>LBRN Admin.</i>	NIH/LSU/INBRE	54,691
Prerna Dua	<i>A Predictive Modeling Framework for Studying Disparity in Colorectal Screening</i>	NIH/LSU/INBRE	75,815
Leon Iasemidis	<i>Characterization of In Vivo Biosignal Dynamics as Quantitative Biomarkers of SUDEP</i>	CURE/LSU HSC	62,500
Donna Hood	<i>Perkins Carryover FY16</i>	LA DoEdu/LCTCS/ LA Delta CC	6,290
Arden Moore	<i>Hierarchical Hexagonal Boron Nitride Nanomaterial Composites for Phase Change Thermal Energy Storage</i>	NASA/BoR	41,680
Bryan McCoy	<i>Pilot Teacher Preparation Inspection</i>	LA DoEdu	15,000
Sumeet Dua	<i>Information Fusion, Indexing and Search Algorithms for Active Cyber</i>	DoD/Clarkson	128,584
Braden Romer	<i>Kinesiology in North Louisiana Education (Project KINES)</i>	Lincoln Health Foundation	52,250
Shengnian Wang	<i>Preparing New Carbon/Si Composites for High Performance Energy Storage System</i>	NASA/LaSPACE/ LSU	8,000
Rastko Selmic	<i>GSRA Andrew Gardner</i>	NASA/LaSPACE/ LSU	8,000
Mary Caldorera-Moore	<i>Development of Drug Delivery Carrier Systems for Controlled Release of Vasodilator Drugs for Improved Cardiovascular Health of Astronauts</i>	NASA/LaSPACE/ LSU	6,000
Mary Caldorera-Moore	<i>High Surface Area Nanopatterned Hydrogels for Wound Healing and Tissue Scaffolding Applications</i>	NASA/LaSPACE/ LSU	6,000
Jamie Newman	<i>Microtopographical Effects on the Differentiation of Mouse Embryonic Stem Cells into Cardiomyocytes</i>	NASA/LaSPACE/ LSU	6,000
Lindsey Keith-Vincent	<i>Morehouse IDEAS</i>	Morehouse Parish School Board	20,830.25
Jeremy Mhire	<i>Cyber-Discovery 2.0 Scenario Development</i>	CIC	69,000
<b>October 2015</b>			<b>Total: 709,883.25</b>
Arden Moore	<i>Batch Fabricated Multifunctional Thermal Sensors for High Temperature Propulsion Testing Environments</i>	NASA	30,312
Steven Toaddy	<i>Scope of Work for Greater Ouachita Coalition providing AIDS Resources and Education (Go Care)</i>	Go Care	8,250
<b>November 2015</b>			<b>Total: 38,562</b>
Tom Iseley	<i>Fairfax County Hydrocarbon Project</i>	Greeley and Hansen, LLC	5,000
Wesley Palmer	<i>Mapping and Identification of Tree Seedlings Using Unmanned Aerial Vehicles (UAVs)</i>	Weyerhaeuser	19,980
Frank Igou	<i>Proposal to Develop a Selection Test for the New Orleans Civil Service Dept.</i>	City of New Orleans	18,300
<b>December 2015</b>			<b>Total: 43,280</b>
			<b>Total 2015-16 YTD: 7,529,874.49</b>

**TECH NSF EAGER AWARD ... (CONT'D FROM PG 1)****ABSTRACT (NSF EAGER AWARD)**

Mark A. DeCoster (Principal Investigator)  
 Yuri Lvov (Co-Principal Investigator)  
 Teresa Murray (Co-Principal Investigator)

Proposal Number: 1547693

One type of Biomanufacturing involves placing cells together in both two dimensions (2D) and three dimensions (3D). To better approximate what happens in the body in both healthy and diseased tissues, the growth of cells, as well as cell death must be understood. Much like pruning the limbs of a tree without killing it, the investigators of this project will use a controlled, natural process called apoptosis to prune groups of cells in both 2D and 3D environments to improve the function of the overall construct. These studies could enhance our understanding of how to control normal cell formations into tissues and how to control disease processes such as cancer. The containers for the cells to be studied in this project will include bioreactors generated using 3D printers.

The technological components of this project seek to address the challenges of generating and shaping assemblies of cells in both 2D and 3D environments. The project aims to understand the growth processes of both normal and cancer cells, with the goal of achieving better biomanufacturing strategies and insight into tumor growth. Beyond just growth, the investigators of this EAGER award will also apply apoptotic stimuli to cells using two types of high-aspect ratio structures (HARS), to prune away cells in a controlled manner. To facilitate imaging into thicker (>0.5 mm) 3D cell assemblies in this project, gradient index (GRIN) lenses combined with multi-photon microscopy will be used. The HARS materials used in this project include a hollow, non-degradable halloysite, and a novel, biodegradable biocomposite containing copper. Both HARS materials scale from the nano-dimension in diameter to the micro-dimension in length. The experiments carried out in this project will utilize bioreactors generated using 3D printers and functional outputs from the bioreactors will include detection of glutamate and pH dynamics using a fast-growing glioma cell line and slower growing (normal) astrocyte primary culture model to compare cellular outputs with growth before and after the pruning process of apoptosis. To better approximate dynamic processes in the brain, microglia will also be added to model recovery after apoptosis. A foundry of 3D printed bioreactors generated for the project will be established in the form of bioreactor images, .stl files, and animations, and will be tested for integration with commercially available millifluidic devices to detect, for example, chemical changes occurring in the bioreactors over time. Results from this project are anticipated to impact future biomanufacturing strategies and educational materials considering the increasing availability of 3D-printing technology and design software.

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**ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS**

- M. Gibson, *McIntire-Stennis Cooperative Forestry Research Program* - 2015, USDA \$207,800;
- L. Guice, *CenturyLink Telecom Program & Professorship*, Louisiana Dept. of Economic Development \$300,000;
- J. McDonald, *Catalyst Development for Fischer-Tropsch Synthesis*, American Strategic Innovations \$114,764;
- J. Newman, *Louisiana Tech Summer Series*, Lincoln Health Foundation \$3,029;
- J. Rutledge, *Bulldog Book Club Year 3*, Lincoln Health Foundation \$78,817.97
- J. Gourd, *High School A.P. Computer Science Curriculum*, DHS/CIC \$151,692;
- L. Keith-Vincent, *Project A-LINE, Ouachita Parish MSP*, Ouachita Parish School Board \$31,006;
- D. Hall, *Participating as a Member in a Consortium Led by Univ. of Oklahoma for Regional University Transportation Center (UTC) Program Grants*, Univ. of OK \$20,536;
- S. Tewari, *Participating as a Member in a Consortium Led by Univ. of Oklahoma for Regional University Transportation Center (UTC) Program Grants*, Univ. of OK \$64,414;
- J.Wang, *Participating as a Member in a Consortium Led by Univ. of Oklahoma for Regional University Transportation Center (UTC) Program Grants*, Univ. of OK \$27,271;
- N.Wasiuddin, *Participating as a Member in a Consortium Led by Univ. of Oklahoma for Regional University Transportation Center (UTC) Program Grants*, Univ. of OK \$72,994;
- E. Murray, *Microstructural and Electrical Characterization of Novel Porous ZrO<sub>2</sub>-based NO<sub>x</sub> Sensors*, NSF \$100,000;
- S. Alam, *Rehabilitation for Wastewater Collection and Water Distribution Systems - Task 4*, Battelle Memorial Inst. \$11,999;
- S. Dua, *Computational Study of Surface Interaction Between Peptides and Graphitic Surfaces*, Clarkson Aerospace \$23,015.50;
- R. Selmic, *Computational Study of Surface Interaction Between Peptides and Graphitic Surfaces*, Clarkson Aerospace \$25,000;
- J. Gourd, *Computational Study of Surface Interaction Between Peptides and Graphitic Surfaces*, Clarkson Aerospace \$25,000;
- Y.Lvov, *Building an Internationally Competitive Neutron Scattering Research Program in Louisiana*, DOE/BoR, \$67,500;
- M. DeCoster, *2D and 3D Systems for Evaluating Potential Glutamate Involvement in TBI*, US Army Research Lab \$39,999.65.
- E. Bell, *Rehabilitation Long-Term Training*, US Dept. of Education \$150,000.

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## PROPOSALS SUBMITTED

* FILE #	PI	Co-PI 's	TITLE	AGENCY	\$ Requested
16-047	Montes, Carlos		Analysis of Concrete Pipe Scale Sample	Stantec Consulting Services	488
16-048	Genov, Dentcho		All-optical Switching Using Extraordinary High Thermo-optic Nonlinearity of Surface Electronic Waves at Doped Semiconductor Interfaces	BoR/Pfund	20,000
16-049	Alam, Shaurav		Rehabilitation for Wastewater Collection and Water Distribution Systems – Task 4	Battelle	11,999
16-050	Weiss, Leland		Electrode-based Hydrogen Sulfide Detection for a Lab on Chip Device	BoR/Pfund	20,000
16-051	Romer, Braden	Keith-Vincent,L.	Kinesiology in North Louisiana Education (Project KINES)	Lincoln Health Foundation	52,750
16-052P	Sherer, Eric		Automated Abstraction of Serial Colonoscopy Results from EMR Text	BoR/RCS	180,000
16-053	Derosa, Pedro		Identity Development Evaluation of African American Science Students (IDEAAS): A Longitudinal Investigation	NSF	191,796
16-054	Murray, T.	Arumugam/Siddiqui	All-diamond Microelectrode Arrays for Chronic In Vivo Neurochemical Detection	NIH	114,940
16-055	Newman, Jamie		The Role of Notch in Regulating Mesenchymal Stem Cell State	BoR/Pfund	20,000
16-056	Voziyanov, Yuri		Correction of the Albino Mutation in the Mouse Tyrosinase Gene	BoR/Pfund	20,000
16-057	Orr, Marisa		Explaining the Choice, Persistence, and Attrition of Black Students in Electrical, Computer, and Mechanical Engineering	NSF	496,414
16-058	Dua, Sumeet		LBRN Admin.	LBRN/NIH	54,691
16-059	Hollins, Bryant		Investigating the Time Course of Protein Carbonylation in Neurodegeneration	BoR/RCS	180,000
16-060	Vincent, Lindsey	Talton, Carolyn	Morehouse IDEAS	Morehouse Parish School Board	20,000
16-061	Arumugam, Prabhu		A Diamond-enabled Electrochemical Advanced Oxidation Technology to Improve the Biodegradability of Oil-Contaminated Waste Water	BoR/ITRS	195,000
16-062	Vlachos, Ioannis		Granger Causality Networks and Graph Theory in Neurophysiological Time Series	BoR/RCS	180,000
16-063	Bardaweel, Hamzeh		Self-powered Dental Implant Osseointegration Electrical Stimulator	BoR/RCS	0
16-064	Gibson, Mark		Mcintire-Stennis Cooperative Forestry Research Program - 2016	USDA	254,232
16-065	Zivanovic, Sandra	Giorno/Weiss	Optical Detection of Bacillus Anthracis Bacterial Spores	BoR/Pfund	20,000
16-066	Selmic, Rastko	Palmer, Wesley	UAV Formation Control and Data Analysis for Forestry Applications	BoR/ITRS	195,689

(\*Missing File #'s denote withdrawn proposals)

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

* FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
16-067	Moore, Arden		Probing Joule Heating and Multicarrier Effects in 2D Material Heterostructure FETs via Surface Enhanced Micro-Raman Spectroscopy	BoR/RCS	120,484
16-068	Wang, Shengnian		Manufacturing Foamed Mesoporous Composite Nanofibers	NSF	299,985
16-069	Hill, Jennifer		The Effects of Pesticides on Invertebrate Predator-prey Interactions in Marine and Freshwater Communities	BoR/RCS	189,851
16-070	Wang, Shengnian		Additive Manufacturing Stitched Composite Nanofibers as electrodes for Lithium Batteries	BoR/Pfund	20,000
16-071	Zivanovic, Sandra	Derosa/DeCoster	Exploration of Copper-cystine-based Nanowires for Electronic or Environmental Applications	BoR/ITRS	200,000
16-072	Tewari, Sanjay		Removal of Haloacetic Acids From Treated Groundwater Using Biofiltration	BoR/RCS	150,000
16-073	Mills, David		Bioengineered Two-Layered Periosteum for Tissue Regeneration	BoR/Pfund	19,120
16-074	Mills, David		3D Printing of Customized Implants for Repair of Orofacial Deformities and Defects	BoR/POC	32,640
16-075	Menkulasi, Fatmir		Behavior of Composite Steel Moment Frames Under Lateral Loads	BoR/RCS	180,000
16-076	Montes, Carlos		Analysis, characterization and testing of Geokrete	Quadex, Inc.	36,106
16-077	Menkulasi, Fatmir		Lateral Load Response of Composite Steel Moment Frames: Influence of Concrete Slab	American Institute of Steel Construction	200,000
16-078	Sawyer, Lee	Greenwood/Wobisch	Testing the Standard Model at the Energy Frontier	DoEnergy	1,350,784
16-079	Clay, Natalie		Predicting Herbivory Across a Salinity Gradient	BoR/Pfund	20,000
16-080	Bishop, Thomas		ABI: Innovation in Chromatin Structural Bioinformatics	NSF	568,462
16-081	Evans, Katie	Orr/Deselles/Hall	Sophomore Fast-Forward: A Summer Bridge Program to Support Retention in Engineering	NSF	999,234
16-082	Shipp, Michael		Pre-Employment Transition Services for Students with Assistive Technology	LRS	182,541
16-083	Alam, Shaurav	Murray, Erica	Long-term Performance Evaluation of AV-100 Grout Material Subjected H2SO4 Solution Environment using Hardness Test and Electrochemical Impedance Spectroscopy	Avanti	39,474
16-084	Mills, David		Nanoenhanced Bone Cement for Bone Regeneration and Repair	Osteo Science Foundation	97,350
16-085	Wang, Shengnian		Novel Core-Shell Mesoporous Carbon Nanofiber/Zeolites Catalyst for Direct Synthesis of Gasoline Rang Hydrocarbons	ACS Petroleum Research	110,000
16-085A	Anguah, Katherine	Liu/Fontenot	Store Tour Training Grant Program	Produce for Better Health Foundation	4,952

(\*Missing File #'s denote withdrawn proposals)

(Cont'd on page 7)

## PROPOSALS SUBMITTED (CONT'D FROM PAGE 6 . . .)

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
16-086	Arumugam, Prabhu	Murray, Teresa	Diamond-Platinum Nanodes for Multi-Analyte Brain Sensing	NIH	342,264
16-087	Sawyer, Lee	Greenwood/ Wobisch	Bridge Funding: High Energy Physics Research at the Energy Frontier at Louisiana Tech	DOE	282,192
16-088	Wassiuddin, N.		Tack Coat and Void Filler Material Properties and Shallow Trench Design for APICAL System- PHASE I	CenturyLink	95,838
16-089	Wang, Jay	Patterson, William	Coastal SEES Collaborative Research: Sustainability Study of Newly Established Wetland in Louisiana Shoreline	NSF	618,266
16-090	Mills, David		VEGF Encapsulation Through a Novel Microfluidic Technique for Bone Tissue Regeneration and Repair	Osteo Science Foundation	33,600
16-091	Liu, Don		Innovative Geo-Reef Structures for Coastal Protection, Wave Attenuation, and Marine Product Proliferation	NSF	862,552
16-092	Moore, Arden		Low Density Functional Nanomaterials via Chemical Vapor Deposition on Sacrificial Multiscale Metallic Architectures	AFOSR	360,000
16-093	Turner, Galen	Kanno, Jinko	Chromatically-critical Graphs and Embeddings	NSF	209,904
16-094	Mike O'Neal		DARPA - Extreme DDos Defense (XD3) DARPA-BAA-15-56	DARPA	922,310
16-095	Wasserman, Andrew		Contemporary Manhattan Cartographies: Making Places of Public Art in a New City	BoR/ATLAS	48,500
16-096	Hollins, Bryant		Investigating Brain Protein Oxidation Accumulation as a Mechanism for Cognitive Impairment in Sleep Restriction	AFOSR	360,000
16-097	Hood, Donna		Perkins Carryover FY16	Perkins Basic Grant	6,290
16-098	Atassi, Ahmad		The Making and History of the Earliest islamic Biographical Dictionary: Ibn Sa'd's Kitab al-Tabaqat al-Kabir	BoR/ATLAS	32,728
16-099	Weiss, Leland	Arumugam, Prabhu	COLLABORATIVE RESEARCH: Nano-materials and Electrodes for Hydrogen Sulfide Biological Detection	NSF	394,054
16-100	Arumugam, Prabhu		Multimodal Biosensing of Brain Chemicals and Field Potentials using Diamond Nanodes	NSF	299,806
16-101	Mills, David		3D Printing of Stem-Cell Tissue Matrices	LSUHSC	7,000
16-102	Lvov, Yuri	Derosa, Pedro	Nanoconfined Catalyst Synthesis in Tubule Clay	ACS Petroleum Research	110,000
16-103	Eklund, Sven	Cardenas/Montes	High Performance Geopolymeric Binders for Space Applications	BoR/EPSCoR	750,000
16-104	Tewari, Sanjay		Corrosion Map for Metal Pipes in Coastal Louisiana	LTRC	49,968
16-105	Nestorova, Gergana	Crews/DeCoster	Lab-on-a-chip thermoelectric biosensor for direct and label-free detection of miRNA	NSF	300,000

(\*Missing File #'s denote withdrawn proposals)

(Cont'd on page 8)

## PROPOSALS SUBMITTED (CONT'D FROM PAGE 7 . . .)

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
16-106	Weiss, Leland	Newman/Moore	Detecting, Understanding, and Managing Gasotransmitters in Low Gravity Environments	BoR/EPSCoR	0
16-107	Newman, Jamie		The Role of Med31 in Regulating Mesenchymal Stem Cell State	Sigma XI	550
16-108	Moore, Arden		Core to Center (C2C): A Multiscale Parametric Engineering Analysis Framework for Assessing Cost and Performance of Direct Immersion Cooling Strategies	Google	32,355
16-109	Newman, Jamie		Microtopographical Effects on Differentiation of Mouse Embryonic Stem Cells into Cardiomyocytes	Sigma XI	673
16-110	Moore, Mary C.		Thermal polymerization of genipin Crosslinked Chitosan Hydrogels for Diabetic foot Ulcer Treatment	Sigma XI	922
16-111	Gentry, Laura	Keith/Hillard	Development of a Nutrition and Physiology Teaching Laboratory Providing Kinesthetic Learning Opportunities for Undergraduates in Agricultural Sciences	BoR/ENH	68,850
16-112	Liu, Don		Spectral Element Simulation of Electromagnetic Particulate Flow in Three Dimensions	NSF	287,510
16-113	Liu, Pei	Hughes, Susan	Upgrading Food Sciences Research and Teaching Laboratory to Improve Student Foodservice Management Experiences in Nutrition and Dietetics	BoR/ENH	32,176
16-114	Iasemidis, Leonidas	Vlachos, Ioannis	Dynamics of Brain Connectivity in Ictogenesis	NSF	385,391
16-115	Lvov, Yuri	Derosa, Pedro	Halloysite Microtubes as Templates for Separate Inside/outside Catalytic Nanoparticles	BoR/Pfund	20,000
16-116	Toaddie, Steven		Scope of Work for Greater Ouachita Coalition Providing AIDS Resources and Education (Go Care)	GoCare	8,250
16-117	Radadia, Adarsh		Experimental Investigation of Biomolecular Stability on 2D Materials	NSF	238,143
16-118	Wang, Shengnian		Hierarchical Nanofiber Hybrid Catalyst for GTL Process	NSF	299,985
16-119	Sherer, Eric	Madadi, Mahboubeh	Quantification of Colonic Neoplasia Growth and Impact on Colorectal Cancer Testing	NIH	346,865
16-120	Clay, Natalie	Hill, Jennifer	Stereomicroscopes for Environmental Science Courses	BoR/ENH	75,029
16-121	Glenn, Jordan	Romer/Anguah	Acquisition of Gold-standard Equipment to Enhance the Kinesiology and Nutrition Curricula at Louisiana Tech University	BoR/ENH	112,498
16-122	Berg, Jerry		Advancement in the Arts	BoR/ENH	91,092
16-123	Heiden, Kathleen		A Glimpse of Cultural Art Through Historic Fashion: The Development of a Virtual Museum	BoR/ENH	65,811
16-124	Guinn, Mark		Howard Auditorium Smart Classroom Enhancement	BoR/ENH	190,153
16-125	Wasserman, Andrew	Forrester, Adam	DIGR Lab	BoR/ENH	246,179

(\*Missing File #'s denote withdrawn proposals)

(Cont'd on page 9)



## PROPOSALS SUBMITTED (CONT'D FROM PAGE 8 . . .)

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
16-126	Sherer, Eric	Cahoy, Dexter	Receipt of Colorectal Cancer Surveillance Care and Survival	NIH	124,522
16-127	Crook, Paul		Arthur W. Stone Theatre Stage Manager Console	BoR/ENH	104,774
16-128	Wang, Jay		Enhancement of Geotechnical Engineering Laboratory for Teaching and Research	BoR/ENH	41,500
16-129	Genov, Dentcho		Collaborative Research: A Roadmap Toward Terahertz Optoelectronics Using Active Control of Charge Density Waves at Degenerate Semiconductor Interfaces	NSF	143,900
16-130	O'Neal, Patrick	Sherer/Evans	Non-invasive Real-time Optical Control of Drug Exposure	NIH	382,353
16-131	Tewari, Sanjay	Pumphrey, Norm	Enhancement of Undergraduate Surveying Laboratory	BoR/ENH	79,228
16-132	Romer, Braden	Syzmanski/Hollins/Schilling	Lumbopelvic Rhythm During Anterior Load Lifting	BoR/ENH	181,985
16-133	Crews, Niel	Gunasekaran/Chapman	Enhancement: Acquisition of 3D Laser Scanning Confocal Microscope for Nanotechnology Education and Training	BoR/ENH	116,557
16-134	Petzet, John		Department of Music Choir Library Enhancement	BoR/ENH	53,673
16-135	Haskins, Tara	Blake/McVay/Owens	Aligning Nursing Education With Current Practice: Clinical Skills Lab Enhancement Project	BoR/ENH	101,455
16-136	Theodos, Kim	Dua/Martin	Unique Patient Identification: A Simulation of Multiple Biometric Modalities	BoR/ENH	37,608
16-137	Hamrick, Frank	Forrester, Adam	Louisiana Tech University School of Design Photography Enhancements and Upgrades	BoR/ENH	82,200
16-138	Moore, Mary C.	Arumugam, Prabhu	Undergraduate Materials Core Lab Enhancement	BoR/ENH	100,000
16-139	Bryan, Matthew	Bryan, Melinda	Enhancement of the Pediatric Audiology Program at Louisiana Tech University	BoR/ENH	90,034
16-140	Wang, Shengnian	Radadia, Adi	Enhancing Chemical Engineering and Energy Education with Pyrolyzer and GCMS Systems	BoR/ENH	76,000
16-141	Menkulasi, Fatmir	Alam, Shaurav	Enhancement of Structural Health Monitoring Capabilities at Louisiana Tech University Using a Wireless Structural Testing System	BoR/ENH	18,600
16-142	Bishop, Thomas		AREA: Nucleosome Positioning and Mispositioning in the MMTV Promoter	NIH	391,622
16-143	Alam, Shaurav	Pumphrey, Norm	Enhancement of the CET Program by Establishment of Construction Equipment Simulation Laboratory	BoR/ENH	117,991
16-144	Tripplett, Kyle	Deal, Brad	Digital Fabrication Enhancement via Robotic Milling Cell	BoR/ENH	194,925
16-145	Wang, Shengnian	Wang, Shengnian	Hybrid Field Microfluidics for Vaccine Nanoparticle Synthesis and Cell Therapy	NSF	299,998
16-146	Hou, Songming		Improved Imaging Algorithms for Extended Targets	NSF	187,309
16-147	Clay, Natalie		Biological and Ecological Consequences of Sub-lethal Ion Concentrations on Microbial and Macroinvertebrate Detritivores	USGS Arkansas Water Resource Center	0

(\*Missing File #'s denote withdrawn proposals)

(Cont'd on page 10)

## PROPOSALS SUBMITTED (CONT'D FROM PAGE 9 . . .)

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
16-148	Radadia, Adarsh		An Accuri Flow Cytometer for Strengthening Biomedical Research at Louisiana Tech University	LBRN	25,000
16-149	Radadia, Adarsh	Moore, Arden	SusChem: Optimizing the Directed Self-Assembly of Nanodiamonds	NSF	343,413
16-150	Hollins, Bryant	Wang/Mills	Enhancing the Biomedical Research and Educational Infrastructure of Louisiana Tech Through the Acquisition of a TECAN Microplate reader	INBRE	0
16-151	Palmer, James	Ramachandran, Bala	Superior Graduate Fellows Supporting Five Centers of Excellence in Engineering 2017-2012	BoR/GF	400,000
16-152	Evans, Katie	Weiss/MC-Moore/Gates	Bulldog Grand Challenge Research, Education and Training (Be-GREAT) Program	NSF	879,623
16-153	Moore, Arden	Crews, Niel	STARSS: Small: Leveraging Hardware-unique Electrothermal Signatures to Achieve System Security Assurance	NSF	315,204
16-154	Hegab, Hisham	Hall/Orr/Deselles	IUSE/PFE: RED: The NEST (Nurturing Environment for STEM Talent)	NSF	0
16-155	Syler, Rhonda	McCumber/Chowriappa	Leveraging Smart Devices for Micro Credit Social Network and Transactional Behavior Data Collection and Analysis	Gates Foundation	100,000
16-156	Manning, Libby	Kimball-Lopez/Cummins/King/Tobacyk	Assessment Literacy: Data-Based Instruction	BoR/LaSIP	211,039
16-157	Lvov, Yuri	Vincent, Lindsey K.	Making Things Small Count	LaSIP	128,106
16-158	Voziyanov, Yuri	Voziyanov, Yuri	Correction of Mutations Using Flp-TAL and Cre-TAL Recombinases	NIH	354,322
16-159	Clay, Natalie		Towards an Improved Understanding of Environmental, Biological and Climatological Controls on Woody Decomposition and Carbon Mineralization	DoEnergy	125,370
16-160	Palmer, Wesley	Palmer, Wesley	Mapping and Identification of Tree Seedlings Using Unmanned Aerial Vehicles (UAVs)	Weyerhaeuser	19,980
16-161	Shoemaker, Sheryl	Ramachandran/Thomas	Increasing Diversity in Doctoral Populations at Louisiana Tech University 2016-20	BoR/SREB	380,000
16-162	Liu, Don		Simulation of Bubble Flow Dynamics and Phase Change Heat Transfer with Experimental Validation	NSF	324,690
16-163	Dua, Sumeet	Dai, Weizhong	Recruitment of Superior Doctoral Graduate Fellows in Computational Analysis and Modeling	BoR/GF	200,000
16-164	Newman, Jamie		Multiwell Plate Reader for Biological Sciences	LBRN	44,508
16-165	Ramachandran, Bala	Campbell, Bill	Superior Graduate Fellows in Molecular Sciences and Nanotechnology 2016-2021	BoR/GF	200,000
16-166	Jones, Steven		Graduate Fellows in Biomedical Engineering 2016-2021	BoR/GF	200,000
16-167	Dua, Sumeet		Satellite-Assisted Monitoring, Modeling, and Mapping of Norovirus Outbreak Risks	BoR/NASA/EPSCoR	200,000

(\*Missing File #'s denote withdrawn proposals)

(Cont'd on page 10)

## PROPOSALS SUBMITTED (CONT'D FROM PAGE 90 - -.)

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
16-168	Dua, Sumeet		Investigating Volatiles and Advancing Sedimentology of Soil at Gale Crater, Mars, by Applying New Photoanalytical Methods.	BoR/NASA/EPSCoR	197,784
16-169	Maness, Teresa		NSF EAGER	NSF	31,157
16-170	Weiss, Leland	Newman/C-Moore/Arumugam	Detecting, Understanding, and Managing Gasotransmitters in Low Gravity Environments	BoR/NASA/EPSCoR	1,340,318
16-171	Newman, Jamie	C-Moore/Schilling/Blake	New Frontiers in Biomedical Research Seminar Series	Lincoln Health Foundation	4,809
16-172	Eklund, Sven	Montes/Cardenas	High Performance Geopolymeric Binders for Space Applications	BoR/NASA/EPSCoR	1,133,063
16-173	Hill, Jennifer		Coastal Science Assistantship Program	Louisiana Sea Grant	75,000
16-174	Liu, Don		Modeling Soil Particles Entrainment Flow in Deltaic Rivers and Coastal Louisiana to Prevent Soil Erosion	NSF	256,869
16-175	Menkulasi, Fatmir	Alam, Shaurav	Rehabilitation of Deteriorated Timber Piles using Fiber Reinforced Polymer (FRP) Composites	Southern Plains Transportation Center	35,000
16-176	Poh, Scott		Targeting Activated Macrophages in Inflammation With Thermosensitive Biopolymers	LBRN Start Up	25,000
16-177	Radadia, Adarsh	Wang/DeCoster/Newman	An Accuri Flow Cytometer to Strengthen Biomedical Research at Louisiana Tech	LBRN Equipment	25,000
16-178	Iseley, Tom		Fairfax County Hydrocarbon Project	Fairfax County	5,000
16-179	Wang, Jay		Development of a Mechanistic-based Design Method for Geosynthetic-Reinforced Pavement on Expansive Soils	Southern Plains Transportation Center	34,192
16-180	Jaganathan, Arun		Investigation of Multichannel Analysis of Surface Wave Technique for NDT of Buried Transportation Infrastructure	Southern Plains Transportation Center	14,974
16-181	Selmic, Rastko		Kalman Filter For Tracking Hand Gestures	LaSPACE/REA	43,784
16-182	Bell, Edward		Teachers of Blind Students Scholarship Support	USEdu	1,250,000
16-183	Wilson, Chester		Inexpensive bulk manufactured graphene for 3D manufactured space components	LaSPACE/REA	32,351
16-184	Liu, Don		Big-Data Modeling of Deltaic and Coastal Sediment Flows on GPUs and Xeon Phi Coprocessors	NSF	253,869
16-185	Adams, Joshua		Identification of Genetic Sources in American Sycamore for Resistance to Xylella fastidiosa	DoEnergy	0
16-186	Orr, Marisa		IUSE/PFE:RED: The NEST (Nurturing Environment for STEM Talent)	NSF	1,996,040
16-187	O'Neal, Mike		Insider Threat / Active Authentication: User Identification	DOD	2,000,000
16-188	Wasiuddin, Nazimuddin		Development of a Revised RTFO Protocol for Foam-Based Warm Mix Asphalt	Southern Plains Transportation Center	40,000
16-189	Wasiuddin, Nazimuddin		Development of a Revised RTFO Protocol for Foam-Based Warm Mix Asphalt	LTRC	25,000

(\*Missing File #'s denote withdrawn proposals)

**FUNDING AGENCY ANNOUNCEMENTS**

NSF released the *Proposal and Award Policies and Procedures Guide* (PAPPG, NSF 16-1) in October 2015. To support the policy updates in the PAPPG, **beginning on January 25, 2016**, NSF will no longer provide a 5-day grace period between the submission of a proposal to NSF and receipt of the Authorized Organizational Representative (AOR) signature. In addition, Proposal File Updates, Revised Budgets, Notifications and Requests, Proposal Withdrawals, PI Transfers, and Supplemental Funding Requests must be signed and submitted by an AOR. If you do not have the AOR permission, you will not be able to submit proposals and other documents to NSF.

Please work with your organization to ensure immediately that SPO staff required to submit proposals and other documents have been assigned the AOR permission and they are able to continue supporting proposal and document submission after January 22, 2016. Additionally, please review all of your submitted proposals that do not have an AOR signature at the time of submission and make sure they are signed prior to January 22, 2016. Proposals that have already been submitted to NSF without AOR signature will not be able to be signed after January 22, 2016.

If you have any questions, please contact the NSF Help Desk at 1-800-673-6188, or [fastlane@nsf.gov](mailto:fastlane@nsf.gov).

Thank you,

National Science Foundation  
Division of Information Systems



"Anyone who sends me junk e-mail is automatically added to the 'naughty' list!"

**GRANT WRITERS, SAVE THE DATES!!!**

*Want to learn how to write grants that get funded? Be sure to add March 7 & 8 to your 2016 planner to attend a 2 day grant writing workshop featuring an invited speaker! Agenda and location will be publicized early 2016 so check your e-mail regularly. See you there!*

**Requests for Proposals**

- LaSPACE Minority Research Scholars (MRS) - Proposals due January 28 - <http://laspace.lsu.edu/programs/mrs/mrs.php> ;
- Current NSF rfps- <http://www.nsf.gov/funding/>;
- Grants.gov (available funding for federal programs other than NSF): <http://www.grants.gov/>.

For more information on additional funding opportunities, go to: [http://research.latech.edu/resources/funding\\_opportunities](http://research.latech.edu/resources/funding_opportunities) or contact Beth Free, Pre-Award Coordinator at 318-257-5075 or [bfree@latech.edu](mailto:bfree@latech.edu).

## DISSERTATION HIGHLIGHTS (CONT'D ON PG 14)

## SPRING 2015

## DOCTOR OF AUDIOLOGY

## College of Liberal Arts

**Rebecca Ashley Howard, Springfield, IL**

BA (2010) Southern Illinois University, Edwardsville

Dissertation: "Ear Specific ANL Measurements in Individuals with Unilateral and Asymmetrical Sensorineural Hearing Loss"

Major Advisor: Dr. Melinda F. Bryan

**Jessica Dawn Ivey, West Monroe**

BS (2003) Louisiana State University, Baton Rouge

MS (2008) Louisiana Tech University, Ruston

Dissertation: "Grant Proposal: Effects of Sound Field Amplification on Standardized Test Scores"

Major Advisor: Dr. Melinda F. Bryan

**Brandee Elizabeth Rosa Richardson, Lafayette**

BA (2011) Louisiana State University, Baton Rouge

Dissertation: "The Effects of Auditory Processing Abilities on Acceptable Noise Levels"

Major Advisor: Dr. Melinda F. Bryan

## DOCTOR OF BUSINESS ADMINISTRATION

## College of Business

**Cedric Tresor Mbanga Luma, Yaounde, Cameroon**

BS (2005) University of Douala, Cameroon

MS (2006) University of Douala, Cameroon

MS (2009) New Mexico Highlands University, Las Vegas

Dissertation: "Anchoring Bias, Idiosyncratic Volatility and the Cross-Section of Stock Returns"

Major Advisor: Dr. Jungshik Hur (To be hooded by Dr. Jared Egginton)

## DOCTOR OF PHILOSOPHY

## College of Education

**DeAnn Howey Arnold, Bossier City**

BS (2001) Louisiana State University-Shreveport

MA (2002) Louisiana Tech University

Dissertation: "Job Analysis: Measuring Accuracy and Capturing Multiple Perspectives"

Major Professor: Dr. Frank Igou

**Lauren Elizabeth Tressler, Orlando, FL**

BA (2005) University of South Florida

MS (2008) University of Louisiana-Lafayette

MA (2012) Louisiana Tech University

Dissertation: "Increasing Career Exploratory Behavior Through Message Framing"

Major Professor: Dr. Donna Thomas (To be hooded by Dr. Walt Buboltz)

## DOCTOR OF PHILOSOPHY

## College of Engineering and Science

**Nevine Mohamed Gunaim, Jeddah, Saudi Arabia**

BS (2003) King Abdul Aziz University, Jeddah, Saudi Arabia

MS (2011) Louisiana Tech University, Ruston

Dissertation: "Sensitivity of Mixed Models to Computational Algorithms of Time Series Data"

Major Advisor: Dr. Bogdan Strimbu

**Yafei Zhao, Zhengzhou City, China**

BS (2007) Zhengzhou University, Zhengzhou, China

MS (2010) Zhengzhou University, Zhengzhou, China

Dissertation: "Functional Clay Nanotubes and Composites"

Major Advisor: Dr. Yuri Lvov

## SUMMER 2015

## DOCTOR OF BUSINESS ADMINISTRATION

## College of Business

**William Brian Dowis, Easley, SC**

BS (2006) Coastal Carolina University

MPAc (2007) Clemson University

Dissertation: "An Empirical Examination of Gender, Political Affiliation, and Family Composition Issues Affecting Reasonable Compensation in Closely Held Corporations"

Major Advisor: Dr. Ted Englebrecht

**Julia Crider Graham, Huntsville, AL**

BA (2001) Auburn University

MBA (2003) Louisiana State University in Shreveport

MS (2006) University of Alabama in Huntsville

Dissertation: "An Empirical Investigation of Technology Usage, Virtual Status, Organizational Justice, need for Affiliation, Organizational Identification and their Influence on Work Success"

Major Advisor: Dr. T. Selwyn Ellis

**Kenneth Awa Tah, Ruston**

BS (2003) University of Buea

MS (2005) Umea University

MS (2007) Umea University

MS (2008) New Mexico Highlands University

Dissertation: "Arbitrage Risk, Investor Sentiment and Maximum Daily Returns"

Major Advisor: Dr. Jungshik Hur (to be hooded by Dr. Jared Egginton)

## DOCTOR OF EDUCATION

## College of Education

**Misty Fortuna Davis, Shreveport**

BS (1998) Louisiana State University

MEd (2008) Louisiana State University in Shreveport

Dissertation: "Administrators' Perceptions of STEM Education and Their Influence on Classroom Practices in Louisiana Schools"

Major Professor: Dr. Dawn Basinger

## DOCTOR OF PHILOSOPHY

## College of Education

**Christopher Michael Castille, New Iberia**

BS (2008) Louisiana State University

MA (2012) Louisiana Tech University

Dissertation: "Bright or Dark, or Virtues and Vices? A Reexamination of the Big Five and Job Performance"

Major Professor: Dr. Tilman Sheets

**Stephanie Lucinda Murphy, LaPlace**

BS (2009) University of New Orleans

MA (2012) Louisiana Tech University

Dissertation: "Individual Adaptability as a Predictor of Job Performance"

Major Professor: Dr. Mitzi Desselles

**Christopher Baker Patton, Batesville, MS**

BA (2011) University of Mississippi

MA (2012) Louisiana Tech University

Dissertation: "Crystallized Intelligence and Openness to Experience: Drawing on Intellectual Investment Theories to Predict Job Performance Longitudinally"

Major Professor: Dr. Steven Toaddy

## DISSERTATION HIGHLIGHTS (CONT'D FROM PG 13)

**Meggie Price Rowland, Ruston**

BA (2010) Louisiana Tech University

MACG (2012) Louisiana Tech University

Dissertation: "Making the Connection Between Disordered Personalities and Interpersonal Distress: A Relational Study"

Major Professor: Dr. Tony Young (To be hooded by Dr. Donna Thomas)

**Victoria Joy Smoak, Dixie**

BS (2010) Louisiana State University-Shreveport

MA (2012) Louisiana Tech University

Dissertation: "The Bright Side of the Dark Side: The Influence of the Cultural Context in the Relationships Between Leader Dark Side Personality Traits and Leader Performance"

Major Professor: Dr. Tilman Sheets

**Jennifer LeBlanc Thibodeaux, St. Martinville**

BS (2003) Louisiana State University

MACG (2012) Louisiana Tech University

Dissertation: "Objectively Measuring the Effects of Sleep on Reading Comprehension and Sustained Selective Attention"

Major Professor: Dr. Walter Buboltz

**Abbey Gail White, Boonville, IN**

BS (2008) Indiana University - Bloomington

MACG (2012) Louisiana Tech University

Dissertation: "The Relationship Between Sleep and Nutrition in Message Framing Among College Students"

Major Professor: Dr. Walter Buboltz

**DOCTOR OF PHILOSOPHY****College of Engineering and Science****Koutilya Reddy Buchapudi, Chinnathokatta, India**

BT (2006) Jawaharlal Nehru Technological University, Hyderabad, India

MSNT (2008) Louisiana Tech University

Dissertation: "A Non-Invasive Fluorescence-Based Oxygen Sensor and Platform for Studying Cell Response to Metabolic Agents in Real Time"

Major Advisor: Dr. Sven Eklund

**Shuyan Huang, Qingdao, China**

BS (2006) Qingdao University, Qingdao, China

MS (2009) Qingdao University, Qingdao, China

MS (2013) Louisiana Tech University

Dissertation: "Gold Nanoparticle Enhancements in Electroporation Mediated DNA and RNA Therapeutics"

Major Advisor: Dr. Shengnian Wang

**James Connor Nicholson, Monroe**

BSEE (2011) Louisiana Tech University

MSE (2015) Louisiana Tech University

Dissertation: "Nanoenhanced Additive Manufacturing: Additive Introduction onto Halloysite Nanotubes and into 3D Printing Filament for Tailored Material Characteristics"

Major Advisor: Dr. Chester Wilson

**Gaurav Parekh, Jabalpur, India**

BP (2008) Devi Ahilya University, Indore, India

MT (2010) Vit University, Vellore, India

Dissertation: "Nanoformulation for Anticancer Drug Delivery: Enhanced Pharmacokinetics and Circulation"

Major Advisor: Dr. Bryant Hollins

**Stanislav Ponomarev, Voronezh, Russia**

BS (2012) Northwestern State University

Dissertation: "Intrusion Detection System of Industrial Control Networks Using Network Telemetry"

Major Advisor: Dr. Travis Atkison

**Nibert Elijah Saltibus, Saint Lucia**

BS (2009) Grambling State University

MSE (2014) Louisiana Tech University

Dissertation: "Role of Dewetting Mechanism on Moisture Damage in Asphalt Pavements"

Major Advisor Dr. Nazimuddin Wasiuddin

**Wenli Zhang, Dalian, China**

BS (2008) Dalian University of Technology, Dalian, China

Dissertation: "Diamond Mems Biosensors: Development and Applications"

Major Advisor: Dr. Adarsh Radadia

**FALL 2015****DOCTOR OF BUSINESS ADMINISTRATION****College of Business****Jacob Alan Young, Fayetteville, AR**

BS (2008) Henderson State University

MBA (2009) Henderson State University

Dissertation: "The Design and Evaluation of an Anonymous Two-Way, Ethics Management Reporting System"

Major Advisors: Dr. James Courtney (Chair) and Dr. Rebecca Bennett (Co-Chair)

**DOCTOR OF EDUCATION****College of Education****Lisa Daneen Wheeler, Shreveport**

AA (1979) Western Oklahoma State College

BMus (1982) University of Texas at Arlington

MEd (2008) Northwestern State University

Dissertation: "Integrated Instruction: Perceptions of Community College Faculty"

Major Professor: Dr. Dawn Basinger

**DOCTOR OF PHILOSOPHY****College of Education****Jeanette Michelle Edmonds, Hammond**

BA (2004) Southeastern Louisiana University

MA (2006) Southeastern Louisiana University

MA (2012) Louisiana Tech University

Dissertation: "DSM-5 Section III Model of Personality Disorders: Developing a Measure of Criterion A"

Major Professor: Dr. Tony Young

**DOCTOR OF PHILOSOPHY****College of Engineering and Science****Abena Carliesa Primo, Georgetown, Guyana**

BS (2006) University of Guyana, Georgetown, Guyana

MS (2012) Louisiana Tech University

Dissertation: "Smartphone Context-aware Authentication Using Gait, Touch and Keystroke Data"

Major Advisor: Dr. Vir Phoha