

Louisiana Tech University



BREEZE BULLETIN

Office of Sponsored Projects (<http://research.latech.edu/about/welcome>)

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2017-18 TECH FRINGE/F&A RATES

- Faculty/Unclassified/Post Doc: 49%
- Temporary/Part-time: 10.03%
- DROP: 21%
- Federal F&A (S/W): 49.40%

Go to the following link to download as a pdf file: [http://research.latech.edu/files/documents/2017-18 La Tech Fringe Rates.pdf](http://research.latech.edu/files/documents/2017-18%20La%20Tech%20Fringe%20Rates.pdf).

OSP IN-HOUSE WORKSHOPS

For a complete list of in-house workshops, go to http://research.latech.edu/resources/training_workshops/latech_workshops.

All workshops below will be in **WT1527**:

- 10/31/17 from 3pm to 4pm (Purchasing Card for Grants)
- 11/1/17 from 10am to 11am (Grants Management)
- 11/3/17 from 2pm to 3pm (Amplifund)
- 11/9/17 from 9am to 10am (Amplifund)



Learning is finding out what you already know. Doing is demonstrating that you know it. Teaching is reminding others that they know it just as well as you. We are all learners, doers, teachers.

*Richard Bach
(1936-, American author)*

WHERE IT GOES - INSTITUTIONS FUNDED BY NSF

WHERE IT COMES FROM

FY 2016 Appropriations by Account (\$7,463 million)

- 80% - Research and Related Activities (R&RA), \$5,990 million
- 12% - Education and Human Resources (EHR), \$879 million
- 5% - Agency Operations and Award Management (AOAM), \$357 million
- 3% - Major Research Equipment and Facilities Construction (MREFC), \$218 million
- <1% - Office of Inspector General (OIG), \$15 million
- <1% - National Science Board (NSB), \$4 million

Note: Totals may not add due to rounding. AOAM includes \$27 million in transfers for NSF headquarters relocation expenses from R&RA (\$24 million), EHR (\$1 million), and MREFC (\$2 million). MREFC includes \$20 million transferred from R&RA to fund NEON construction. These transfers were authorized by P.L. 114-113, Consolidated Appropriations Act, 2016.

WHERE IT GOES - INSTITUTIONS FUNDED BY NSF

FY 2016 Obligations for Research and Education Programs (\$7,124 million)

- 76% - Colleges, Universities and Academic Consortia, \$5,420 million
- 15% - Private Industry (includes small businesses), \$1,068 million
- 3% - Federally Funded Research and Development Centers, \$223 million
- 6% - Other (includes federal, state and local governments; nonprofit organizations; and international organizations), \$412 million

Note: Totals may not add due to rounding. NSF Research and Education Programs include Research & Related Activities, Education & Human Resources, and Major Research Equipment & Facilities Construction appropriations.

NEW GRANTS AWARDED

PI	Title	Funding Agency	\$ Awarded
Prabhu Arumugam	<i>Development of a Novel Multiplexed Electrochemical Probe for Brain Aging</i>	BoR/LaSPACE	30,968
Hamzeh Bardaweel	<i>Design, Characterization and Hydrodynamic Optimization of 3D Printed Embedded micro-channels networks</i>	BoR/LaSPACE	34,974
Lynam/Cardenas	<i>Biomass Ash as Replacement for Portland Cement in Concrete: Porosity, Strength, Corrosion, and Microscopic Phase Analysis</i>	BoR/LaSPACE	34,439
Kasra Momeni	<i>A High-Fidelity Phase-Field Model for Fatigue Failure of Metal Matrix Composites in Aerospace Structures</i>	BoR/LaSPACE	31,185
Steven Jones	<i>Graduate Fellows in Biomedical Engineering 2016-2021</i>	BoR	100,000
Palmer/ Ramachandran	<i>Superior Graduate Fellows Supporting Five Centers of Excellence in Engineering 2017-2021</i>	BoR	100,000
Ramachandran/ Campell	<i>Superior Graduate Fellows in Molecular Sciences and Nanotechnology 2016-2021</i>	BoR	200,000
Ramachandran/ Thomas	<i>Increasing Diversity in Doctoral Populations at Louisiana Tech University 2017-21</i>	BoR	95,000
Natalie Clay	<i>Quantifying the Effects of a Fungus-mediated Termite and Bark Beetle Interaction on Wood Decomposition</i>	NSF/MS State	52,192
Jamie Newman	<i>Influence of Biomaterials in Directing Stem Cell Fate</i>	BoR/LaSPACE	30,500
David Mills	<i>Instrumentation in Support of a New 3D Printing Lab</i>	NIH/LSU	8,550
N. Wassiuddin	<i>DOTD Support for UTC Project: Development of a Standard Test Method for Characterization of Asphalt Modifiers and Aging-Related Degradation Using an Extensional Rheometer</i>	LTRC/LA DOTD	20,000
Clark/Vincent/ Chestnut/Tims	<i>Making Makerspaces Work for Early Childhood Education</i>	US Dept. of Edu/ BoR	269,879
Weiss/Vincent/ Holmes/Evans	<i>Afterschool STEM Academy Support</i>	US Dept. of Edu/ BoR	145,492
Kimball-Lopez/ Manning/ Cummins/ King	<i>Grades 3-5 Curriculum Connections: Content-Pedagogy-Assessment-Teach</i>	US Dept. of Edu/ BoR	176,704
Teresa Murray	<i>Conference grant for MINDS Workshop</i>	NSF	16,200
Susan Thompson	<i>Northeast Delta Project</i>	DHHS	93,402
Green/Keith/Hennen	<i>Supplementation of Supreme Gold Plus to Beef Cattle Diets during Post-Weaning Period</i>	Supreme Energy Resources, Inc.	18,936
Pedro Derosa	<i>Identity Development Evaluation of African American Science Students (IDEAAS): A Longitudinal Investigation</i>	NSF/Purdue	50,014
July 2017		Total:	1,508,435
Hamzeh Bardaweel	<i>Managing Satellite Micro-jitters Using Energy Harvester Dynamic Vibration Isolation Platform</i>	NASA/LSU	6,000
Mary Calderera-Moore	<i>Drug Loaded Hydrogels for Chronic Wound Healing and Tissue Scaffolding Applications</i>	NASA/LSU	6,000
Joan Lynam	<i>Sustainable, Sulfurfree Lignin to Replace Plasticizers in Cement</i>	NASA/LSU	6,000
N. Waziuddin/S. Eklund	<i>Field Implementation of Handheld FTIR Spectrometer for Polymer Content Determination and for Quality Control of RAP Mixtures</i>	LTRC	200,000
Lvov/Pickett/Crews	<i>Microchannels Functionalized with Clay Nanotubes for Spacecraft Bacteria Monitoring Device</i>	NASA/LSU	6,000
Mary Calderera-Moore	<i>Development of Micropatterned Hydrogel Tissue Scaffolds for the Regeneration of Astronauts' Cardiovascular Systems</i>	NASA/LSU	6,000
A.Moore/J.Lynam	<i>Viability of Lignin-based Solid Biofuels as an Environmentally Friendly Propellant in Small Scale Rockets</i>	NASA/LSU	6,000
Niel Crews	<i>Microfluidic Valve and Pump System Using Joule Heating and Thermal Expansion</i>	NASA/LSU	6,000
Gergana Nestorova	<i>Identification of Novel miRNAs That Modulate Rradiation-induced mtDNA</i>	NASA/LSU	6,000
Jamie Newman	<i>Optimization and Characterization of the Osteogenic Differentiation of Human Mesenchymal Stem Cells on Tailorable Hydrogel Scaffolds</i>	NASA/LSU	6,000
August 2017		Total:	254,000

PROPOSALS SUBMITTED

* FILE #	PI	Co-PI 's	TITLE	AGENCY	\$ Requested
18-001	Caldolera-Moore, Mary		CAREER: Dynamic Tunable 3D Platforms for Controlling Human Mesenchymal Stem Cell Fate	NSF CAREER	574,955
18-002	Alam, Shaurav	Matthews, John	Pickle Jar Testing of SE1000 Epoxy Material	QUADEX, LLC	13,339
18-003	Moore, Arden		LaACES: Direction-correlated UVA-C Irradiance Measurements at Varying Altitudes	LaSPACE/ LaACES	10,000
18-004	Murray, Teresa		In Vivo Imaging and Analysis of Neuroblast Migration and Integration Before and After Brain Injury in the Same Mice	NIH/HINDS	310,741
18-005	Carver, Anthony		Support for Nuclear Deterrence and Escalation Workforce Development-NUC300	CIC	13,320
18-006	Murray, Teresa		Investigating the Annexin AI -Formyl Peptide Receptor Pathway to Develop Innovative Anti-stroke Drugs	LSUHSC - Shreveport/NIH	5,465
18-007	Matthews, John		Leveraging Big-Data and Deep Learning for Economical Condition Assessment of Wastewater Pipelines	WE&RF	25,000
18-008	Vlachos Ioannis		CAREER: Granger Causality Graphs in Physiological Time Series Analysis	NSF CAREER	408,715
18-009	Beminiwattha, Rakitha		High Precision Nuclear Physics Experiments to Study the Standard Model of Particle Physics	NSF CAREER	539,859
18-010	Thompson, Susan		Northeast Delta Project	DHHS	93,400
18-011	Alam, Shaurav	Eklund, Sven	Development of Transformative Technologies for Removal of Toxic Minerals in Source Waters	WE&RF	75,862
18-012	Tewari, Sanjay	Eklund, Sven	Hybrid Electrocoagulation/Capacitive-Deionization Treatment for Emerging Contaminants in Source Waters	WE&RF	87,175
18-013	Dua, Sumeet		Cyber Protection through Situational Awareness in Distributed Networks	Clarkson Aerospace/DOD	150,000
18-014	Lvov, Yuri		Tubule Nanoclay for Stabilized Dye – Pigment Formulations	CRDF/NSF	50,000
18-015	Moore, Arden	Wiess, Leland	Nanoscale Free-Standing Coaxial Vacuum Channel Field Effect Transistor	ONR	0
18-016	Matthews, John	Jaganathan, Arun	Innovative Technologies to Effectively Manage Deteriorating Infrastructure	WE&RF	149,308
18-017	Momeni, Kasra		Multiphysics Model and Application Development for Controlled 2D Materials Growth	NSF	1,500
18-018	Mhire, Jeremy	Worsencroft, John	Cyber Society Curriculum Development - Phase IV	CIC	105,000
18-019	Adams, Joshua	Vandershaaf, Curtis	Treenutri Product Testing Amendment II	TreeNutri	6,633
18-020	Lvov, Yuri		Nanoclay Based Anti-Aging Drug Formulations	BMRF	50,000

(*Missing File #'s denote with-drawn proposals)

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

* FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
18-021	Tewari, Sanjay	Matthews/ Eklund	Development of Rice Husk and Agricultural-Waste-based Advanced Geopolymeric Coating for Corrosion Protection of Metal Pipes in Coastal Regions	IUSSTF	163,872
18-022	Hegab, Hisham	Dua/Gourd/ Gates/Evans	SFS@LaTech: Cyber Engineers for Our Future	NSF	2,791,834
18-023	McConnell, Eric		Louisiana Forest Products Development Center at LA Tech University	LSU Ag. Sciences	25,000
18-024	Carwile, Guy		HABS Drawings: Caroline C. Dormon Log Cabin	Cane River National Heritage Area	6,139
18-025	Momeni, Kasra		Collaborative Research: Fundamental Understanding of Chemically-Induced Two-Dimensional Phase Changes of Few-Layer Graphene to Diamond	NSF	163,119
18-026	Clay, Natalie		Continuation: Biological and Ecological Consequences of Sub-lethal Ion Concentrations	USGS Arkansas Water Resources	0
18-027	Chen, Jinyuan		CRII: CIF: On the Optimality of Secure Communication Without Using Cooperative Jamming	NSF	172,166
18-028	Sawyer, Lee		Research at the Energy Frontier at Louisiana Tech	Dept. of Energy	0
18-029	Keith, Ashley		Exploring the Benefits of Regano® Supplementation in Sheep Diets	Ralco Nutrition, Inc.	5,000
18-030	DeCoster, Mark		Bottom Up and Top Down Control of Self-assembled Nanomaterials in Biological Systems	Office of Naval Research	0
18-031	Inman, Debbie		Business Incubator Support Program 2017-2018	LA Economic Development & LA Business Incubation Association	8,048
18-032	Nestorova, Gergana		ExoSense: A Lab-on-a-chip Cell Co-culture Platform for Solid-phase Purification of Exosomes	BoR/RCS	0
18-033	Tewari, Sanjay	Evans/ Patterson	Creating Pathways to Hands-on Project-based Geoscience Education	NSF	0
18-034	Bardaweel, Hamzeh		Nonlinear Damping Using Air flow Through Sharp Edged Orifices: A Novel Approach Towards Broadband Magnetic Levitation Based Vibration Energy Harvesting	BoR/RCS	0
18-035	Holderieath, Jason		Agent-based Open-source Computational Modeling of Conflicts Between Agriculture and the Environment.	rOpenSci	60,574
18-036	Nestorova, Gergana		Identification of Novel MicroRNAs that Regulate OGG1 Mediated DNA Repair	LBRN	50,000
18-037	Gleason, Melanie	Basinger/ Keith-Vincent/ Shrubb/ Vessell	WeTeach High Cost Needs Application for Residency Support	LDOEdu	20,000
18-038	Wang, Jay		Implementation of the Developed Analytical Model to Evaluate the Distresses of Pavement on Expansive Soils	SPTC	31,877
18-039	Hood, Donna		Perkins Basic Carryover FY18 Nursing	DOE Perkins through LA Delta Community College	2,327

(*Missing File #'s denote withdrawn proposals)

PROPOSALS SUBMITTED (CONT'D FROM PAGE 4 . . .)

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
18-040	Lvov, Yuri		Nanoconfined Catalyst Production With Mesoporous Tubule Clay	BoR/ITRS	0
18-041	Momeni, Kasra		A Multiscale Framework for Defect Engineering: Application to Low-Dimensional Materials	NSF	381,474
18-042	Tewari, Sanjay	Palmer, Wesley	Combined Effect of Sea-level Rise and Coastal Land Subsidence – Identification of Critical Transportation Infrastructure At-risk in Coastal SPTC Region	Southern Plains Transportation Center	25,400
18-043	Dua, Sumeet	see routing form for co-Pis	Advanced Cyber Curriculum Design & Development	CSRA, LLC	371,000
18-044	Hollins, Bryant		Protein-centered Radicals: A Link Between Two Hypotheses of Alzheimer's Disease	BRF	49,586
18-045	Murray, Teresa		Amelioration of Oxidative Stress and Modulation of Inflammatory Signaling by GHK-Cu peptide	BRF	40,171
18-046	Gourd/O'Neal, M.	Turner/Chen	A Modernized Framework for Air Force Supply Chain Management Incorporating Mobile Devices	DOD/Air Force Rapid Innovation	1,469,048
18-047	Singh, Kevin	Cardenas, Henry	Cross-Laminated Timber Using Southern Yellow Pine	Weyerhaeuser	6,000
18-048	Sun, Chuanbing Shawn		Implementation of Ultra-high Performance Concrete in Precast Through-girders for Shallow Bridge Structures	BoR/RCS	135,000
18-049	Drozdenko, Benjamin		Mitigating Natural Disasters with a Connected Smart Cities Framework	BoR/RCS	163,242
18-050	Adhikari, Kaushallya		Semi-Coprime Sparse Arrays	BoR/ITRS	145,970
18-051	Rutledge, Julie		Family and Early Educator Dynamic Impact on Children's Nutrition and Growth	BoR/RCS	160,000
18-052	Beminiwattha, Rakitha		Simulation, Data Acquisition, and Data Analysis Software Framework for Precision Nuclear and Particle Physics Experiments	BoR/RCS	150,000
18-053	Sun, Chuanbing Shawn		Manufacturing Precast Concrete Houses for Superior Sustainability and Disaster Resistance	BoR/ITRS	195,000
18-054	Madadi, Mahboubeh		Collaborative Research: An Innovative Approach for Designing a Cancer Screening Program Considering Overdiagnosis of Disease	NSF	130,834
18-055	Peters, Andrew		Diblock Blending for Cost Efficient Advanced Materials Design	BoR/RCS	162,000
18-056	Momeni, Kasra		An Advanced High-fidelity Computational Framework to Design Additive Manufactured Parts: From Microstructures to Final Components	BoR/RCS	143,656
18-057	Matthews, Elizabeth		Development of a Novel State-of-the-Art Flood Risk Analysis Methodology for Small-Scale Building Systems	BoR/RCS	195,000
18-058	Wang, Shengnian		Synthesis of New Hierarchically Porous Zeolites by Solid Crystallization	BoR/RCS/One Year	20,000
18-059	Madadi, Mahboubeh		Analyzing the Impact of Breast Density Notification Law on Patients' Outcomes Using Stochastic Dynamic Programming and	BoR/RCS	130,804

(*Missing File #'s denote with-drawn proposals)

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

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
18-060	Min, Manki		New Cryptographic Hash Function for Hierarchical Authentication	BoR/RCS	180,000
18-061	Wang, Shengnian		Production of Novel Mesoporous Zeolites for Lignin Depolymerization	BoR/POCP	40,000
18-062	Chen, Jinyuan		Information-Theoretic Secrecy for Wireless Networks: From Degrees-of-Freedom to Constant-Gap Capacity Approximations	BoR/RCS	154,907
18-063	Carver, Anthony		Air Force Global Strike Command September 2017 Innovation Summit Support	CIC	25,653
18-064	Alam, Shaurav	Wang,J/ Patterson	Development of Insitu Soil-root Binding Strength Evaluation Equipment With IoT Onboard and the Associated Testing Protocol	BoR/POCP	39,018
18-065	Alam, Shaurav	Eklund/ Matthews	Artificial Aggregates (AA) synthesized from Nanoparticles and Industrial Byproducts	BoR/RCS	150,000
18-066	Fatila, Elisabeth		Europium Complexes Containing Molecular Switches: a Pathway to Multimodality	BoR/RCS	146,578
18-067	Liang, Chen		Patient Safety Educational Initiative in Northeast Louisiana	Living Well Foundation	30,000
18-068	Matthews, John		Root Cause Identification for Elevated Chemical Emissions during Pipeline Rehabilitation using Cured-in-Place Pipe	BoR/RCS	130,000
18-069	Earl, Julia		Biodiversity Spillover: Effects and Mechanisms of Biological Diversity Across Ecosystems	BoR/RCS	141,176
18-070	Good, Levi		Micro-Interfaces for Neuronal Control	BoR/ITRS	147,183
18-071	Holley, Gordon		Louisiana Tech McIntire-Stennis FY18	USDA/NIFA	249,515
18-072	Tewari, Sanjay	Cardenas/ Wang,J	In-situ Electrokinetic Remediation of Water-rich Soils Contaminated With Hazardous Pollutants	BoR/RCS	145,000
18-073	Hollins, Bryant		Fundamental Principles for the Development of Autonomous Microfluidic Devices	BoR/RCS	150,000
18-074	Newman, Jamie		MED12 Directs Adipogenesis of Human Adipose-Derived Stem Cells	BoR/RCS	150,000
18-075	Cole, Marsha		Chemical Elucidation of the Chemical Inhibitors Causing Poor Sucrose Crystallization in Hard-to-Boil Masseccutes	BoR/RCS	140,000
18-076	Wobisch, Markus	Sawyer, Lee	Research at the Energy Frontier at Louisiana Tech	DOEnergy	441,615
18-077	Wick, Collin		Collaborative Research: Multiscale Strength Improvement of Metal/Ceramic Interfacial Region	NSF	145,249
18-078	Liang, Chen		Advancing Automated Knowledge Extraction From Adverse Medical Device Events	BoR/RCS One Year	19,700
18-079	Poh, Scott		The Use of Folate Targeted Degradable Thermosensitive Biopolymers to Treat Inflammatory Diseases	BoR/RCS	150,000
18-080	Matthews, John	Alam, Shaurav	Evaluation of an Innovative Spray-in-Place Pipe (SPP) Technology	SIPP Tech	458,974

(*Missing File #'s denote withdrawn proposals)

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

*FILE #	PI	Co-PI 's	TITLE	AGENCY	\$
18-081	Wang, Shengnian		Coupling Electrospinning and Foaming Processes to Manufacture Mesoporous Composite Nanofiber Mats	NSF	299,998
18-082	Moore, Arden	Weiss, Leland	Temporal Variation in Cardiovascular Cell Health Under Prolonged Exposure to High-LET Radiation	NASA	299,542
18-083	Wang, Jay		2017-18 Capstone Senior Design Projects of Civil Engineering at Louisiana Tech University	LADOTD	5,000
18-084	Poh, Scott		The Use of Novel Electrochemical Sensors to Detect Oxidative Stress Generated by Macrophage	BRF	49,911
18-085	Poh, Scott		Evaluation of the Folate Linked Thermosensitive Biopolymer PET Radiopharmaceuticals to Target Macrophages in Inflammation Model	LBRN	60,000
18-086	Ioannis, Vlachos		Closed Loop Modulation of Arousal and Epileptogenic Networks in Generalized Epilepsy	NIH	525,326
18-087	DeCoster, Mark		Testing for the Potential Inflammatory Response to Novel Neuro-therapeutics: Understanding Processing of Nano-biocomposites at the Cellular Level	CABRI (Caymen Chemical)	3,960
18-088	Poh, Scott		Receptor Mediated Dendrimer to Target Sites of Inflammation	LBRN	100,000
18-089	DeCoster, Mark		Targeting Alpha-synuclein With a Novel Copper-containing Biocomposite	Michael J. Fox Foundation	0
18-090	Hollins, Bryant		A Microfluidic platform for Enhancing Methylglyoxal Detection in Type 1 Diabetic Brain Tissue	LSU/PAC	17,540
18-091	Voziyanov, Yuri		Hybrid Site-specific Flp-TAL Recombinases as Genome Engineering Tools	NIH	1,603,125
18-092	Newman, Jamie		Role of MED31 in Maintaining Structural integrity of the Mediator Complex in Adipose-Derived Stem Cells	Sigma Xi	800
18-093	Nestorova, Gergana		Identification of Novel miRNAs that Regulate OGG1-mediated DNA Repair	LBRN	50,000
18-094	Doyle, John		Moduli Spaces and Galois Theory in Arithmetic Dynamics	NSF	125,303
18-095	Swambom, Mike	Corbett/Long	COMPLETE (Controlling, Operating, and Measuring: Pathways Leading to Engineering Technology Employment)	NSF	289,076
18-096	Crittenden, Kelly	Hall, David	Experimental Evaluation of Ultrasonic and LED Chip Detection Methods	Halsey	4,013
18-097	Maasberg, Michele		Insider Threat Detection via Knowledge Activation Monitoring	NSF	130,011
18-098	Lynam, Joan		Separation of Secondary Agricultural Residues for Conversion to Bioproducts	NSF	306,686
18-099	Jones, Ethel		Imperfect - No, I'm Perfect	American Assoc. of Family and Consumer Sciences	500
18-100	Caldolera-Moore, Mary	Newman, Jamie	GOALI: Tailorable Biomimetic Material for Muscle Regeneration using Human Adipose Stem Cells	NSF	244,522

(*Missing File #'s denote withdrawn proposals)



2017 SUMMER DISSERTATIONS

COLLEGE OF BUSINESS

**Doctor of Business Administration****Brian Phillip Waterwall, Slidell**

BS (2007) Southeastern Louisiana University, Hammond LA
 MBA (2008) Southeastern Louisiana University, Hammond LA
 Dissertation: "Understanding the Effects of Regulatory Focus on Proactive Behavior"
 Major Advisor: Dr. Bryan Fuller

COLLEGE OF EDUCATION

Doctor of Philosophy**Victoria Anne Felix, Staten Island, NY**

BS (2012) Wagner College, New York City, NY
 Dissertation: "The Influence of Auditory Distraction and Sleep on Cognitive Performance"
 Major Advisor: Dr. Walt Buboltz

Danielle Nichole Newman, Meroux

BA (2008) University of New Orleans, New Orleans
 MS (2011) Northwestern State University, Natchitoches
 Dissertation: "Impacting Student Slumber: An Analysis of Self-report and Physiological Data Following a Psychoeducational Intervention"
 Major Advisor: Dr. Walt Buboltz

John Brandon Waits, Niceville, FL

BA (2005) Auburn University, Auburn, AL
 MS (2009) Reformed Theological Seminary, Jackson, MS
 Dissertation: "A Randomized Controlled Study Examining the Effectiveness of a Gratitude Intervention and an Optimism Intervention on Well-being: Moderating Effects of Personality Disposition and Social Support"
 Major Advisor: Dr. Guler Boyraz (Hooded by Dr. Donna Thomas)

COLLEGE OF ENGINEERING AND SCIENCE

Doctor of Philosophy**An-Yi Chang, Taiwan**

BS (2008) Feng Chia University, Taiwan
 MS (2014) Louisiana Tech University, Ruston
 Dissertation: "Understanding the Surface Fouling Mechanism of Ultrananocrystalline Diamond Microelectrodes using Microfluidics for Neurochemical Detection"
 Major Advisor: Dr. Prabhu Umashanker Arumugam

Andrew Bryan Gardner, Ruston

BS (2012) Louisiana Tech University, Ruston
 MS (2015) Louisiana Tech University, Ruston
 Dissertation: "Motion-Capture-Based Hand Gesture Recognition for Computing and Control"
 Major Advisor: Dr. Rastko Selmic (Hooded by Dr. Jinko Kanno)

William Reid Grimes, Jr., Shreveport

BS (2011) Louisiana State University Shreveport, Shreveport
 MS (2012) Louisiana Tech University, Ruston
 Dissertation: "Surface Modification of Halloysite Nanotubes Via Layer-By-Layer Assembly And Covalent Modifications"
 Major Advisor: Dr. David K. Mills

Matthew Joshua Hartmann, Taylor

BS (2008) Louisiana Tech University, Ruston
 MS (2016) Louisiana Tech University, Ruston
 MS (2017) Louisiana Tech University, Ruston
 Dissertation: "Stretching the Limits of Dynamic Range, Shielding Effectiveness, and Multifrequency Response"
 Major Advisor: Dr. Chester Wilson (Hooded by Dr. Lee Sawyer)

2017 SUMMER DISSERTATIONS (CONTINUED FROM PG 8)

Hend Abdullah Nuhait, Riyadh, Saudi Arabia

BS (2006) King Saud University, Saudi Arabia
 MS (2012) Louisiana Tech University, Ruston
 Dissertation: "Simulations and Data Analysis for the Qweak Experiment"
 Major Advisor: Dr. Steven Wells



Nabamita Pal, Kolkata, India

BS (2006) West Bengal University of Technology, India
 MS (2017) Louisiana Tech University, Ruston
 Dissertation: Electrochemical Behavior of Dense Electrodes for Impedancemetric NOx Sensors
 Major Advisor: Dr. Erica Murray

ADDITIONAL GRANT FUNDING FOR EXISTING AWARDS

- Teresa Murray - *Investigating the Annexin A1 -Formyl Peptide Receptor Pathway to Develop Innovative Anti-stroke Drugs*, LSU-HSC: \$5,465;
- Edward Bell - *Louisiana Center for the Blind/La. Tech, State of Louisiana/LA Center for the Blind*: \$400,000;
- Jean Gourd - *Computational Study of Surface Interaction Between Peptides and Graphitic Surfaces*: \$17,719;
- Bill Campbell - *LBRN Admin Core*, NIH/LSU \$39,680;
- David Mills - *Spore Outer Structures: Contribution to Germination Heterogeneity*, Dr. Mills Mentor Salary, NIH/LSU: \$8,099;
- Arden Moore - *LaACES: Measurement of UVA, UVB, and UVC Irradiance at High Altitudes - Amendment*, NASA/LSU \$5,000.

NEW GRANTS AWARDED (CONT'D FROM PG 2)

PI	Title	Funding Agency	\$ Award-
Basinger/Keith-Vincent	<i>Support for Expansion of Clinical Residencies and Program Design for Implementation of Talent Pipeline Model</i>	US Dept of Ed/ LDOE	100,000
Sherer/ Madadi	<i>Quantification of Colonic Neoplasia Growth and Impact on Colonoscopy Follow-up</i>	NIH	360,665
Alam/Mathews	<i>Pickle Jar Testing of SE1000 Epoxy Material</i>	QUADEX, LLC	13,339
Hamzeh Bardaweel	<i>Geometric Fidelity and Dimensional Characteristics of Microfluidic Networks Fabricated Using Additive Manufacturing</i>	NASA/LSU	8,000
Donna Hood	<i>Perkins Basic Grant FY18 Nursing</i>	USEdu/LDCC	18,063
Mary Caldorera-Moore	<i>Investigating Cell-Biomaterial Interactions to Create Cardiac Tissue Patch on Tailorable PEGDMA Hydrogel Scaffolds</i>	NASA/LSU	8,000
John Matthews	<i>High Consequence Isolation Valve Placement and Operation for Effective Risk Management of Pipe Failure</i>	Pure Technologies	117,674
Bryant Hollins	<i>Graduate Student Research Assistantship: Shauna Tranter</i>	NASA/LSU	8,000
Mhire/Worsencroft	<i>Cyber Society Curriculum Development - Phase IV</i>	DHS/CIC	105,000
Gordon Holley	<i>Louisiana Tech McIntire-Stennis</i>	USDA/NIFA	45,013
Shengnian Wang	<i>Produce Novel Composite Sulfur Cathode for Lithium-Sulfur Battery</i>	NASA/LSU	8,000
Sumeet Dua	<i>Advanced Cyber Curriculum Design & Development</i>	CSRA, LLC	371,000
Dave Norris	<i>UALR-LaTech Railroad Corridor/Disaster Resiliency Project</i>	US Dept. of Commerce	80,000
Iseley/Matthews	<i>Technology Review for Trelleborg Mth and its Related LCR Systems</i>	Trelleborg Pipe Seals	17,644
Teresa Murray	<i>Evaluation of the Ability of the Tripeptide GHK-Cu to Ameliorate Oxidative Stress Induced by Ionizing Radiation in Neural Cell Cultures</i>	NASA/LSU	8,000

September 2017

Total: 1,268,398

2017-18 YTD Total: 3,066,535

NSF FUNDING ... (CONT'D FROM PAGE 1)

HOW IT GETS THERE - NSF AWARD MECHANISMS

FY 2016 Obligations for Research and Education Programs (\$7,124 million)

- 74% - Grants, \$5,425 million
- 22% - Cooperative Agreements, \$1,541 million
- 5% - Contracts, \$337 million

Note: Totals may not add due to rounding. NSF Research and Education Programs include Research & Related Activities, Education & Human Resources, and Major Research Equipment & Facilities Construction appropriations.

HOW IT IS SPENT

Number of NSF Competitive Proposals, New Awards, and Funding Rates

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Competitive Proposals	48,623	49,014	48,074	49,635	49,306
New Awards	11,534	10,844	10,981	12,106	11,893
Funding Rate (%)	24%	22%	23%	24%	24%

NSF Support of Academic Basic Research in Selected Fields (as a percentage of total federal support)

- 83% - Computer Science
- 69% - Biology
- 68% - Social and Psychological Sciences
- 64% - Mathematics
- 63% - Environmental Sciences
- 46% - Engineering
- 45% - Physical Sciences
- 27% - All Science and Engineering Fields

Note: Biology includes Biological Sciences and Environmental Biology. Biology and Psychological Sciences exclude National Institutes of Health funding from the total amount of federal support.

OUR NAME HAS CHANGED & WE HAVE MOVED!!!

The Office of University Research is now the Office of Sponsored Projects and we have moved to the 4th Floor of Keeny Hall, Suite 418 (formerly Human Resources). Our main number has remained the same: 257-5075. Feel free to drop by anytime!