

COLLEGE OF SCIENCES & ENGINEERING

Proposals Submitted and Funded

July 1, 2018 - June 30, 2021

FISCAL YEAR 2018-19

Proposals Submitted

Principal Investigator	Department	Co-PI	Co-PI	Co-PI	Agency	Title	Amount
Bagayoko, Diola	Physics	Anthony Stewart			Tuskegee University	Consortium for Energy Systems Integration and Optimization (CESIO) at SUBR	\$829,452.00
Bagayoko, Diola	Physics				LSU	2019 Space and Planetary Science at the Timbuktu Academy (SPS-TA)	\$40,000.00
Banadaki, Yaser	Computer Science	Ebrahim Khosravi			LA BOR	Automated Intellectual Property Analysis System and Smart Patent Search Engine Empowered by Machine Learning Algorithm	\$66,114.00
Banadaki, Yaser	Computer Science				LA BOR	Smart Additive Manufacturing Empowered by a Closed-loop Machine Learning Algorithm	\$19,675.00
Banadaki, Yaser	Computer Science	Rayven Joubert			LA BOR	Data Collection of Flaws in the Printed Parts/Layers of Additive Manufacturing for Developing Data-Driven Intelligence	\$5,000.00
Banadaki, Yaser	Computer Science				University of Alabama	iDMS - Southeast - An Integrated, Data Intensive, Computational System for Managing Southeastern Droughts	\$198,168.00
Banadaki, Yaser	Computer Science	Ebrahim Khosravi	Shuju Bai	Diola Bagayoko	LSU	CUE Ethics: Collaborative Research: Louisiana Computing and Data Education (LA-CODE)	\$77,179.00
Batra, Sanjay	Environmental Toxicology				NIH	Epigenetic Regulation of Autophagy in Lung Epithelial Cells Exposed to E-cigarette Vapor Condensate	\$410,027.00
Batra, Sanjay	Environmental Toxicology	Prathyusha Bagam			LSU	To Deduce the Role of FOXO Transcription Factors in Regulating Cigarette Smoke-Induced Autophagy by Chip-Sequencing	\$7,500.00
Batra, Sanjay	Environmental Toxicology	Gagandeep Kaur			LSU	Class I HDACs Regulate H3K9 Acetylation in Smoke-Challenged A549 Cells	\$7,500.00
Batra, Sanjay	Environmental Toxicology	Dhirenda Singh			LSU	Role of Lipid Rafts in ROS Production and Lipid Metabolism in E-cigs Condensate Exposed Human Bronchial Epithelial Cells (PCS-300)	\$7,500.00
Batra, Sanjay	Environmental Toxicology				LSU	Regulation of Cigarette Smoke Extract Induced Macrophage Polarization by Benzyl-Isothiocyanate and Resveratrol	\$13,956.00
Batra, Sanjay	Environmental Toxicology				NIH	Role of Lipid Rafts in TLR4/NOD-1 Dependent Responses in e-Cigarette Vapor Condensate Exposed Lung Epithelial Cells	\$412,593.00

Belu, Radian	Mechanical	Hamid Majilesein	Ghanashyam Joshi	Zhengmao Ye	LA BOR	Enhancement of Electrical Engineering Curriculum with Energy Related Virtual and Hands-on Laboratory Instrumentation for On-site and Remote Education and Learning	\$199,736.00
Belu, Radian	Electrical	Cole Ellis			LA BOR	Feasibility of the Design and Implementation of Wireless Sensor Nodes for Industrial Process Monitoring and Control	\$5,000.00
Belu, Radian	Electrical	Lannaman Hill, Jr.			LA BOR	A Gateway to Visualization and Learning STEM through PV Cell Imaging and Modeling	\$5,000.00
Blevins, Edgar	Mechanical	Karen Crosby			NSF	Collaborative Research: AGEP-T: The Black Men Alliance for Attaining Faculty Positions: Academic Achievement for the Forgotten Minority in Higher Education	\$495,353.00
Crosby, Karen	Mechanical	Patrick Mensah	Amitava Jana	Alberta Lawson	NSF	Enhancing Additive Manufacturing Education with Virtual Reality and Cybersecurity	\$1,980,067.00
Dawan, Fareed	Mechanical	Jiecai Luo			LA BOR	Additive Manufacturing and Electrical Characterization of a Solar-Harvesting Wind Turbine	\$196,752.00
Dubytka, Lidiya	Biological Sciences				LSU	Role of Legionella Pneumophila T4SS (LvH) System in Host Cell Immune Response	\$410,093.00
Dubytka, Lidiya	Biological Sciences				NSF	Role of the T3SS Effector EseN of E. ictulari in Virulence and Host Immune Response	\$1,185,222.00
Dubytka, Lidiya	Biological Sciences				NIH	Role of Legionella Pneumophila LvH TIVSS in Virulence	\$415,060.00
Gray, Wesley	Environmental Toxicology / Chemistry				The State University of New York at Binghamton	Improving Student's Interest in Health Disparity Research through International Collaboration and Summer Research Training	\$321,338.00
Gray, Wesley	Environmental Toxicology / Chemistry				Tulane University	Southeast Xlerator Network	\$2,800.00
Ibekwe, Samuel	Mechanical	Guoqiang Li			University of Louisiana at Lafayette	Laboratory Material and Component Level Tests to Obtain General and Mechanical Properties of FRP Specimens form CARGO Tank Motor Vehicle Manufacturers	\$74,400.00
Ismail, Yasser	Electrical				LA BOR	Low-Cost and High-Speed Homeland Security Video Surveillance System over the Internet of Things (IoT)	\$109,570.00
Ismail, Yasser	Electrical	Fred Lacy	Phyllis Okwan		NSF	Targeted Infusion Project: A Computer Engineering Research Lab (CERL) at Southern University and A&M College	\$398,940.00
Ismail, Yasser	Electrical				LTRC	Automate Pedestrians Bicyclists, Vehicles High-Fidelity Counting Algorithm Development	\$30,000.00
Ismail, Yasser	Electrical	Fred Lacy			NSF	RII Track-2 FEC: VISIOT: High Fidelity Video Surveillance System over the Internet of Things (IoT)	\$3,623,001.00
Jones, Nastassia	SMED	Emily Jackson	Christopher Chappell	Christopher Guillory	NSF	Boosting Educational Technology Competence and Leadership among Educators (Be-Tech)	\$449,814.00
Kandara, Osman	Computer Science	Md Abdus Salam			NSF	CONNECT: A Project Designed to Form a Network of Learning Communities among Inner-City Computer Science Teachers in South Louisiana	\$272,668.00
Khosravi, Ebrahim	Computer Science	Shuju Bai			LSU	Louisiana Alliance for Smart Chemical Manufacturing	\$597,324.00

Khosravi, Ebrahim	Computer Science	Shuju Bai	Barbara Carpenter	Ashagre Yigletu	U.S. Defense Intelligence Agency	Southern University System Intelligence Community Center for Academic Excellence (SUS-IC-CAE)	\$1,500,000.00
Khosravi, Ebrahim	Computer Science	Shuju Bai	Nigel Gwee, Ashagre Yigletu	Yaser Banadaki, Marilyn Antoine	U.S. DoEd	Computer Science-enabled College-readiness Strategy (CS2) Program to Close the Performance Gap and Accelerate Achievement and Attainment of High-need PreK-12 Students	\$3,947,639.60
Khosravi, Ebrahim	Computer Science	Shuju Bai	Yaser Banadaki	Bijoy Sahoo	NSF	CUE Ethics: Southern University System Center for Computing-enabled STEM Education (SU CCSE)	\$349,869.00
Kourouma, Mathieu	Computer Science	Lynette Jackson	Marilyn Antoine		LSU	RII Track-2 FEC: Big Data-Centric Framework to Improve Cybersecurity, Privacy and Infrastructure Resilience	\$520,000.00
Li, Guoqiang	Mechanical	Patrick Mensah	Samuel Ibekwe	Fareed Dawan	LSU	Informatics Enabled Materials Discovery and Additive Manufacturing	\$1,207,530.00
Martinez-Ceballos, Eduardo	Biological Sciences				NSF	Excellence in Research: Upstream and Downstream Analysis of Hoxa1 Gene Expression	\$658,879.00
Martinez-Ceballos, Eduardo	Biological Sciences	Devaiah Kambiranda	Sanjay Batra	Yaser Banadaki	NSF	HBCU-RISE: Enhancing Research and Educational Infrastructure in Evaluating Plant Secondary Metabolites as Anti-Inflammatory & Neuroprotective Agents	\$999,694.00
Mellieon-Williams, Francesca	SMED	Nastassia Jones	Conrad Jones	Christopher Guillory	NSF	Broadening Participation Research Project: Constructivism in STEM: Enhancing the STEM Learning Environment from High School to College	\$349,999.00
Mensah, Patrick	Mechanical	Guoqiang Li / Shuju Bai	Samuel Ibekwe / Stephen Akwaboa	Ebrahim Khosravi / Fareed Dawan	NASA	Center for 4D Printing of Multifunctional Polymer Composite Structures (C4DP)	\$3,000,000.00
Mensah, Patrick	Mechanical	Karen Crosby	Samuel Ibekwe	Chukwu Onu	NSF	SU International Research Experience for Students: Synthesis and Conversion of Zeolites for Environmental Applications (SCoZEA)	\$384,446.00
Mensah, Patrick	Mechanical				NSF	CREST Center for Next Generation Multifunctional Composites (NextGen Composites Phase II) - Supplement	\$99,996.00
Mensah, Patrick	Mechanical				LSU	Revival of Vivarium Facility in Environmental Toxicology at SUBR	\$199,995.00
Murthy, S.N.	Environmental Toxicology				American Heart Association	Inflammatory Responses of DPP-4 Inhibitors in Vascular Tissue of Zucker Diabetic Fatty and SD Rats Fed Atherogenic Diets	\$154,000.00
Murthy, S.N.	Environmental Toxicology	Shilpa Totha			LSU	Role of Methionine in Lipopolysaccharide Mediated Inflammation in HepG2 Cells	\$7,500.00
Okwan, Phyllis	Mathematics	Kimyata Dilworth	Yasser Ismail		NSF	Targeted Infusion Project: Enhancing Excellence in Mathematics and Science (E2MaS)	\$391,131.00
Salam, Md Abdus	Computer Science	Mathieu Kourouma			LA BOR	Intellectual Property Data Analysis and Decision Support using Advanced Text Analytics and Machine Learning	\$113,917.00
Shin, Alex Hak-Chul	Civil				LA BOR	Acquisition of Universal Testing Machine to Enhance Teaching and Research	\$196,283.00
Yang, Shizhong	Computer Science	Gregory Richard			LA BOR	Computational Multi-component Alloy Design Experiment Validation at LBNL	\$4,000.00
Yang, Shizhong	Computer Science	Latorious Spurlock			LA BOR	Texture of Multicomponent Alloys	\$5,000.00

Yang, Shizhong	Computer Science	Ebrahim Khosravi	Yaser Banadaki		U.S. DOE	Consortium of Extreme Environment Materials Design	\$3,000,000.00
Yang, Shizhong	Computer Science	Congyan Zhang	Uttam Bhandari		LA BOR	Computational MoNbTaW Design and Experiment Validation at ALS	\$4,000.00
Yi, Xiaoping	Biological Sciences				LSU	Life without O2: Deciphering Fe-S Cluster Biosynthesis on Early Earth	\$173,823.00
Yi, Xiaoping	Biological Sciences				LSU	The Molecular Pathways Induced by Antioxidant and Anticancer Drug in 3D Culture of Prostate Cancer Cells	\$24,935.00
Zhao, Guang-Lin	Physics	Feng Gao			LA BOR	High Pressure Study of High Entropy Alloys	\$4,000.00
Zhao, Guang-Lin	Physics				Department of the Army	Electric Field Polarization on Heteroatoms Doped Carbon Nanomaterials and their Electrocatalytic Properties	\$583,400.00
Zhao, Guang-Lin	Physics				Department of the Navy	Exploration of New Multifunctional Polymer Nano-Composites for Electromagnetic Wave Absorption and Low Density Structural Materials	\$583,400.00
Zhao, Guang-Lin	Physics	Feng Gao	Peter Adama Quaye		LA BOR	Axial Compress of Pure W and MoNbTaVW	\$4,000.00
TOTAL - 59							\$31,334,238.60

Proposals Funded

Principal Investigator	Department	Co-PI	Co-PI	Co-PI	Agency	Title	Amount
Akwaboa, Stephen	Mechanical				U.S. Air Force	Investigation of Hybrid Power-trains for Small Unmanned Aircraft Systems	\$178,200.00
Bagayoko, Diola	Physics	Kerry Davidson	Luria Young		LA BOR	Louisiana Alliance for Minority Participation Senior Alliance Statewide Office 2015-20 at SUBR	\$200,120.00
Bagayoko, Diola	Physics	Kerry Davidson	Luria Young		LA BOR	Louisiana Alliance for Minority Participation Senior Alliance Institutional Agreement 2015-20 with SUBR	\$100,000.00
Banadaki, Yaser	Mechanical	Rayven Joubert			LA BOR	Data Collection of Flaws in the Printed Parts/Layers of Additive Manufacturing for Developing Data-Driven Intelligence	\$5,000.00
Batra, Sanjay	Environmental Toxicology				Grambling State University	The Role and Regulation of Autophagy during Pentachlorophenol Exposure	\$28,700.00
Batra, Sanjay	Environmental Toxicology				LSU	LBRN Mentor Project Funds - Mentor to Dr. Lidiya Dubytska	\$3,002.00
Batra, Sanjay	Environmental Toxicology				LSU	LBRN Mentor Project Funds - Mentor to Dr. Waneene Dorsey	\$12,006.00
Batra, Sanjay	Environmental Toxicology				LSU	LBRN MCBRC and BB Core Activities Funds	\$2,800.00
Belu, Radian	Electrical				Northwestern State University	An E-learning Platform for Energy Engineering Implemented in a Service Oriented Architecture Paradigm	\$13,107.00
Belu, Radian	Electrical	Lannaman Hill, Jr.			LA BOR	A Gateway to Visualization and Learning STEM through PV Cell Imaging and Modeling	\$5,000.00
Belu, Radian	Electrical	Cole Ellis			LA BOR	Feasibility of the Design and Implementation of Wireless Sensor Nodes for Industrial Process Monitoring and Control	\$5,000.00
Carriere, Patrick					U.S. DoEd	Pathways for Advancing Student Success (PASS) in STEM	\$249,943.00

Carriere, Patrick		Francesca Williams			LA DOTD	2019 Southern University Summer Transportation Institute Program	\$49,861.24
Dubytka, Lidiya	Biological Sciences & Chemistry				LSU	Legionella Pneumophila T4SS (Ivh) System and its Role in Virulence	\$70,000.00
Finley, Rachel	Mathematics & Physics				Ohio State University	Cybertraining: CIU: Computational and Data Science Library Curriculum Exchange	\$54,986.00
Ismail, Yasser	Electrical				LA DoT	Evaluation of Counting Device for Pedestrians and Bicyclists	\$85,792.00
Li, Guoqiang	Mechanical	Shizhong Yang	Patrick Mensah	Samuel Ibekwe	LA BOR	Louisiana EPSCoR Research Infrastructure Improvement: Manufacturing and Materials SUBR Subcontract	\$346,787.00
Martinez-Ceballos, Eduardo	Biological Sciences				LSU	LBRN MCBRC and BB Core Activities Funds	\$2,800.00
Mensah, Patrick	Mechanical	Monroe Willis			LSU	Aligned Boron Nitride Nanotube (BNNT) Polymer Composite Films: Fabrication and Characterization	\$8,000.00
Mensah, Patrick	Mechanical	Wesley Gray			LSU	Southern University and A&M College IDeA Networks of Biomedical Research Excellence - LBRN Administrative Core	\$36,750.00
Murthy, S.N.	Environmental Toxicology				LSU	DPP-4 Inhibitors in Combating the Effects of Homocysteine and Cholesterol	\$29,400.00
Reese, Terrence	Physics				LSU	Space and Planetary Science at the Timbuktu Academy (SPS-TA)	\$40,000.00
Yang, Shizhong	Computer Science	Ebrahim Khosravi			U.S. Army	High Temperature and Pressure Multicomponent Alloy Design	\$599,940.00
Yang, Shizhong	Computer Science	Gregory Richard			LA BOR	Computational High Entropy Alloy Design Experiment Validation at LBNL	\$4,000.00
Yang, Shizhong	Computer Science	Latorious Spurlock			LA BOR	Texture of Multicomponent Alloys	\$5,000.00
Yang, Shizhong	Computer Science	Congyang Zhang	Uttam Bhandari		LA BOR	Computational MoNbTaW Design and Experiment Validation at ALS	\$4,000.00
Yi, Xiaoping	Biological Sciences				LSU	Apoptosis Pathway Induced by RES and Anticancer Drug in 3D Culture of Prostate Cancer Cells	\$137,616.00
Yi, Xiaoping	Biological Sciences				LSU	Apoptosis Pathway Induced by RES and Anticancer Drug in 3D Culture of Prostate Cancer Cells	\$136,619.00
Zhao, Guang-Lin	Physics	Feng Gao			LA BOR	High Pressure Study of High Entropy Alloys	\$4,000.00
Zhao, Guang-Lin	Physics	Feng Gao	Peter Adama Quaye		LA BOR	Axial Compress of Pure W and MoNbTaVW	\$4,000.00
TOTAL - 30							\$2,422,429.24

FISCAL YEAR 2019-20

Proposals Submitted

Principal Investigator	Department	Co-PI	Co-PI	Co-PI	Agency	Title	Amount
Akwaboa, Stephen	Mechanical	Samuel Ibekwe	Patrick Mensah / Guoqiang Li	Guang-Lin Zhao / Dwayne Jerro	LA BOR	Enhancement of Research and Education in Material Science through Acquisition of Discovery Laser Flash [DLF1600] Investigative Thermal Equipment	\$200,000.00

Bagayoko, Diola	Physics	Anthony Stewart	Feng Gao		Tuskegee University	Consortium for Energy Systems Integration (CESI) at SUBR	\$900,000.00
Banadaki, Yaser	Computer Science				Universities Space Research Association (USRA)	NSF QLCI - Harnessing Distributed Entanglement - Beyond Quantum Sensors	\$810,195.00
Banadaki, Yaser	Computer Science	Ebrahim Khosravi	Shuju Bai	Albertha Lawson	NSF	Targeted Infusion Project: Southern University - Computing and Data Education (SU-CoDE)	\$399,899.00
Banadaki, Yaser	Computer Science				The University of Alabama	R11 Track-2 FEC: IGM: A Platform for Harnessing Big Hydrological Datasets for Integrated Groundwater Management	\$198,169.00
Batra, Sanjay	Environmental Toxicology	Devaiah Kambiranda			NSF	UroL: Epigenetics 1: Epigenetic Regulation of Immune Genes and Their Role in E-cigs Induced Inflammation	\$499,132.00
Batra, Sanjay	Environmental Toxicology	Shilpa Thota			LSU	Complex Interplay between NF-Kb Signaling Pathway and Autophagy Mechanism in PCP-Challenged A549 and Hepg2 Cells	\$7,500.00
Batra, Sanjay	Environmental Toxicology	Abubakar Abdulkadir			LSU	Determination of Cannaboid Signaling in E-Cigs Vapor Challenged Cells Using Hybrid <i>in silico</i> and <i>in vitro</i> Approach	\$7,500.00
Batra, Sanjay	Environmental Toxicology				LSU	E-Cigarettes Vapor Condensate Induced Macrophage Polarization and Change in Their Functional Dynamics	\$6,449.00
Batra, Sanjay	Environmental Toxicology	Akubakar Abdulkadir			LA Environmental Education Commission	Diesel Particulate Extract-Mediated Inflammatory Responses: Hybrid <i>In-Silico/In-Vitro</i> Studies on Lung Epithelial Cells	\$2,500.00
Batra, Sanjay	Environmental Toxicology	Shilpa Thota			LA Environmental Education Commission	Complex Interplay between Hsp90 and Beclin-1 RegulatesTLR-4 Mediated Autophagy in PCP-challenged Cells an <i>In Vitro</i> Approach	\$2,500.00
Batra, Sanjay	Environmental Toxicology	Rizwana Begum			LA Environmental Education Commission	Novel Role of Immunoproteasomes in Regulating NO/ROI Production and Phagocytic ability of Lung Epithelial Cells during E-Cigarette Vapor Condensate Exposure	\$2,500.00
Batra, Sanjay	Environmental Toxicology				LA Environmental Education Commission	Regulation of Cannabinoid Receptor-mediated Signaling during E-Cigarette Vapor Extract Exposure	\$2,500.00
Batra, Sanjay	Environmental Toxicology	Devaiah Kambiranda			NSF	UroL: Impact of Plant Secondary Metabolites on Epigenetically-regulated Human Macrophage Polarization and Functional Dynamics during Cigarette Smoke Extract Challenge	\$850,250.00
Batra, Sanjay	Environmental Toxicology				NSF	RoL: Cannabinoid Receptor-mediated Signaling during Pentachlorophenol Exposure: Role of Lipid Rafts and Epigenetic Signatures	\$1,262,461.00
Belu, Radian	Electrical	Fred Lacy	Moustapha Diack		LA BOR	Design and Development of an Online Z-degree Certificate in Renewable Energy and Energy Management	\$10,000.00
Belu, Radian	Electrical				U.S. Department of Homeland Security	Using Microgrids to Improve the Grid Resilience and to Provide Emergency Service in the Aftermath of Extreme Events	\$46,789.00

Belu, Radian	Electrical	Fred Lacy	Md. Abdus Salam	Jiecai Luo	LA BOR	Heterogeneous Swarm Sensing (HSS): Integrating Intelligence from UAVs and WSNs	\$99,101.00
Belu, Radian	Electrical	Christopher Nash			LA BOR	Micro-fluidic Direct Methanol Fuel Cells Fabrication - Proof-of-Concept	\$5,000.00
Belu, Radian	Electrical	Dondy Dorlus			LA BOR	Models, New Materials and Feasibility Studies of Geothermal Heat Pump Applications in Humid Climate of Louisiana	\$5,000.00
Belu, Radian	Electrical	Fred Lacy	Moustapha Diack		LA BOR	An Online Z-degree Certificate in Renewable Energy and Energy Management	\$20,000.00
Doomes, Edward	Chemistry				LSU	EFRI E3P: Waste Plastics Depolymerization: Can Electromagnetic-Based Methods Enable a Lower-Temperature, More Selective Process	\$121,696.00
Dubytka, Lidiya	Biological Sciences				NSF	Excellence in Research: Role of the T3SS Effector EseN of E. Ictaluri in Virulence and Host Immune Response	\$727,015.00
Dubytka, Lidiya	Biological Sciences				NIH	Role of Legionella Pneumophila Lvh TIVSS in Virulence	\$415,060.00
Gray, Wesley	Environmental Toxicology	Rakeysha Pinkston			NIH	The Role of MMP12 and IL-17a Signaling following JUUL and E-Cig Aerosol Exposures and Allergen-Induced Inflammation	\$129,193.00
Gray, Wesley	Environmental Toxicology/Chemistry				NIH	SUBR Summer Research Program	\$540,000.00
Gray, Wesley	Environmental Toxicology/Chemistry	Rakeysha Pinkston			LSU	The Role of JUUL Aerosol Exposure During Asthma Development and Exacerbation	\$7,500.00
Gray, Wesley	Environmental Toxicology/Chemistry				NIH	U-RISE at SUBR	\$3,814,163.00
Ismail, Yasser	Electrical	Fred Lacy			NSF	Excellence in Research (EIR): ViSIoT: High Fidelity Video Surveillance System over the Internet of Things (IoT)	\$301,527.00
Ismail, Yasser	Electrical				LA BOR	Internet of video Surveillance Systems (IoVSS) for Smart Cities	\$153,947.00
Ismail, Yasser	Electrical	Fred Lacy	Norma Frank	Vijaya Gopu	NSF	IUSE: Improving Student Learning in Internet of Things Applications and Technologies Utilizing Modern Learning Resources	\$294,987.00
Ismail, Yasser	Electrical				LTRC	High-Fidelity Pedestrians Counting Algorithm Development	\$30,000.00
Jones, Conrad	Chemistry				LA BOR	Green Synthesis and Potential Application of Quantum Dots as Fuel Markers for Biofuels	\$111,452.00
Jones, Nastassia	SMED	Emily Jackson	Harold Mellieon	Christopher Guillory	NSF	Boosting Educational Technology Competence and Leadership Among Educators (Be-Tech)	\$449,365.00
Khosravi, Ebrahim	Computer Science	Shuju Bai	Yaser Banadaki		NSF	IUSE: HER: Southern University System for Computing-enabled STEM Education (SUSCCSE)	\$299,979.00
Khosravi, Ebrahim	Computer Science	Shuju Bai	Yaser Banadaki	Lynette Jackson	GenCyber	Southern University GenCyber Youth Camp	\$99,744.00
Khosravi, Ebrahim	Computer Science	Shuju Bai	Yaser Banadaki	Lynette Jackson	GenCyber	Southern University GenCyber Teacher Camp	\$99,996.00
Kourouma, Mathieu	Computer Science	Lynette Jackson			University of Louisiana at Lafayette	RII Track-2 FEC: Precise Regional Forecasting via Intelligent and Rapid Harnessing of National Scale Hydrometeorological Big Data	\$440,000.00
Lacy, Fred	Electrical	Jiecai Luo			Clarkson Aerospace Corporation	Sensor Network for Chemical Warfare Agent Detection	\$68,631.00

Lawson, Albertha	SMED				LSU	Disproportionate Environmental Exposome Problems in the South-DEEP South Center of Excellence	\$101,661.00
Li, Guoqiang	Mechanical	Patrick Mensah	Samuel Ibekwe	Fareed Dawan	LA BOR	Louisiana Materials Design Alliance (LAMDA)	\$1,138,420.00
Mackie, Deadra	Chemistry/Biology				LSU	The Impact of Engineered Rhizospheric Microbial Communities on Medicinal Plants: Hibiscus sabdariffa and Cannabis	\$19,000.00
Mensah, Patrick	Mechanical	Karen Crosby	Samuel Ibekwe	Chukwu Onu	NSF	Synthesis and Conversion of Zeolites for Environmental Applications (SCoZEA)	\$399,519.00
Mensah, Patrick	Mechanical	Diola Bagayoko	Christopher Guillory		LA BOR	Louis Stokes STEM Pathways and Research Alliances: Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP) for 2020-2025	\$1,659,643.00
Mensah, Patrick	Mechanical	Samuel Ibekwe	Stephen Akwaboa		United Launch Alliance, LLC	Modeling and Analysis of Cryogenic Thermal Transitions using Computational Fluid Dynamics (CFD) and Thermomechanical Analysis	\$50,000.00
Mensah, Patrick	Mechanical				NSF	Collaborative Research: The Role of Local Structure on Thermal Transport Properties in 3D Printed Open-Cell Foams	\$225,000.00
Mensah, Patrick	Mechanical	Samuel Ibekwe	Guoqiang Li		University of Delaware	Composite Manufacturing Technologies for Aerospace Performance at Automotive Production Rates	\$400,000.00
Mensah, Patrick	Mechanical	Stephen Akwaboa			NSF	Towards a Heat Flux Sensor for Venus Surface Operation Collaboration	\$99,995.00
Mensah, Patrick	Mechanical	Samuel Ibekwe	Guoqiang Li		NASA	Investigating Autonomous Healing of Cracks in Lightweight, Aerospace-Grade Materials Systems	\$53,100.00
Mensah, Patrick	Mechanical	Fareed Dawan	Francesca Williams	Nicolette Gordon / Deshoin York	NASA	STEM ³ in South-East Louisiana	\$44,050.31
Reese, Terrance	Physics/Mathematics	Diola Bagayoko			LSU	2019 Space and Planetary Science at the Timbuktu Academy (2019 SPS-TA)	\$40,000.00
Reese, Terrence	Mathematics & Physics	John Stacy	Feng Gao		LA BOR	Educational Enhancement through a Departmental Planetarium	\$142,700.00
Reese, Terrence	Mathematics & Physics	Diola Bagayoko			LSU	2020 Space and Planetary Science at the Timbuktu Academy (SPS-TA)	\$25,000.00
Rosby, Raphyel	Biological Sciences				LSU	Investigation of Global Ribosomal Stress Responses in Saccharomyces Cerevisiae	\$18,996.00
Salam, Md Abdus	Computer Science	Osman Kandara			NSF	FOUNDATION: A Project Designed to Develop and Pilot Computational Thinking Curriculum Modules for 3rd Grade Mathematics in Inner-City Elementary Schools in South Central Louisiana	\$292,922.00
Uppu, Rao	Environmental Toxicology				LSU	Disproportionate Environmental Exposome Problems in the South-DEEP South Center of Excellence (Individual Development Core)	\$93,233.00
Yang, Shizhong	Computer Science	Ebrahim Khosravi	Feng Gao		U.S DOE	The Enhancement of Extreme Environment Materials Design Capacity	\$803,044.00
Yang, Shizhong	Computer Science	Ebrahim Khosravi	Feng Gao		Carolina Central University	The NSAM-ML Consortium: Nuclear Security, Advanced Manufacturing Enhanced by Machine Learning	\$600,000.00
Yang, Shizhong	Computer Science	Ebrahim Khosravi	Yaser Banadaki		U.S. DOE	Consortium of Extreme Environment Materials Design	\$3,000,000.00
Yang, Shizhong	Computer Science	Ebrahim Khosravi			LSU	Additive Manufacturing of High Strength Tungsten Refractory Alloys	\$192,000.00

Yi, Xiaoping	Biological Sciences	Eduardo Martinez-Ceballos			LSU	Molecular Mechanism of Prostate Cancer Progression	\$1,050,000.00
Yi, Xiaoping	Biological Sciences	Ira Baggett			LSU	Molecular Mechanism of Fenbendazole Action in DU145 Prostate Cancer Cells	\$7,500.00
Young, Luria	SMED	Albertha Lawson	Michael Stubblefield		NSF	Collaborative Research: LIGO-SEC Partnership - Strengthening Communities of Learners	\$2,500,000.00
Zhao, Guang-Lin	Physics				Department of the Army	Exploration of New Multifunctional Polymer Nano-Composites for Electromagnetic Wave Absorption and Low Density Structure Materials	\$588,300.00
Zhao, Guang-Lin	Physics	Wesley Gray	Feng Gao	Maryam Jahan	NSF	HBCU-RISE: Infrastructure Enhancement for Functionalized Nano Materials Research and Applications	\$1,000,000.00
TOTAL - 65							\$27,985,783.31

Proposals Funded

Principal Investigator	Department	Co-PI	Co-PI	Co-PI	Agency	Title	Amount
Akwaboa, Stephen	Mechanical				U.S. Air Force	Investigation of Hybrid Power-trains for Small Unmanned Aircraft Systems	\$131,800.00
Batra, Sanjay	Environmental Toxicology				Grambling State University	The Role and Regulation of Autophagy during Pentachlorophenol Exposure	\$28,700.00
Batra, Sanjay	Environmental Toxicology	Prathyusha Bagam			LSU	To Deduce the Role of FOXO Transcription Factors in Regulating Cigarette Smoke-Induced Autophagy by Chip-Sequencing	\$7,500.00
Batra, Sanjay	Environmental Toxicology				LSU	LBRN MCBC Core	\$10,165.00
Batra, Sanjay	Environmental Toxicology				LSU	The Role and Regulation of Autophagy during Pentachlorophenol Exposure - LBRN Mentor Budget	\$15,631.00
Belu, Radian	Electrical	Christopher Nash			LA BOR	Micro-fluidic Direct Methanol Fuel Cells Fabrication - Proof-of-Concept	\$5,000.00
Belu, Radian	Electrical	Dondy Dorlus			LA BOR	Models, New Materials and Feasibility Studies of Geothermal Heat Pump Applications in Humid Climate of Louisiana	\$5,000.00
Belu, Radian	Electrical				U.S. Department of Homeland Security	Using Microgrids to Improve the Grid Resilience and to Provide Emergency Service in the Aftermath of Extreme Events	\$46,789.00
Carriere, Patrick		Francesca Williams	Alberta Lawson	Fareed Dawan	U.S. DoEd	Pathways for Advancing Student Success (PASS) in STEM	\$249,943.00
Crosby, Karen	Mechanical	Amitava Jana	Alberta Lawson		NSF	Enhancing Addictive Manufacturing and Cybersecurity and Virtual Reality	\$851,877.00
Gray, Wesley	Environmental Toxicology/Chemistry				Tulane University	Southeast Xlerator Network	\$2,800.00
Gray, Wesley	Environmental Toxicology/Chemistry				Tulane University	Southeast Xlerator Network 2019-20	\$5,600.00
Ismail, Yasser	Electrical	Fred Lacy	Phyllis Okwan		NSF	Targeted Infusion Project: Establishment of a Computer Engineering Research Lab (CERL) at Southern University and A&M College	\$396,190.00

Jones, Nastassia	SMED	Emily Jackson	Harold Mellieon	Christopher Guillory	NSF	Building Environmental and Educational Technology Competence and Leadership among Educators: An Exploration in Virtual Reality Professional Development	\$384,558.00
Li, Guoqiang	Mechanical	Shizhong Yang	Patrick Mensah	Samuel Ibekwe	LA BOR	Louisiana EPSCoR Research Infrastructure Improvement: Manufacturing and Materials SUBR Subcontract	\$344,511.00
Martinez-Ceballos, Eduardo	Biological Sciences				NSF	Excellence in Research: Upstream and Downstream Analysis of Hoxa1 Gene Expression	\$497,579.00
Martinez-Ceballos, Eduardo	Environmental Toxicology				LSU	LBRN BBC Core	\$10,164.00
Mensah, Patrick	Mechanical	Guoqiang Li	Guang-Lin Zhao	Samuel Ibekwe / Rachel Finley	NSF	CREST Center for Next Generation Multifunctional Composites (NextGen Composites Phase II)	\$99,996.00
Mensah, Patrick	Mechanical	Kerry Davidson	Luria Young		LA BOR	Louisiana Alliance for Minority Participation Senior Alliance Institutional Agreement 2015-20 with SUBR	\$110,000.00
Mensah, Patrick	Mechanical	Kerry Davidson	Luria Young		LA BOR	Louisiana Alliance for Minority Participation Senior Alliance Statewide Office 2015-20 at SUBR	\$190,000.00
Mensah, Patrick	Mechanical				LSU	LBRN Administrative Funds	\$38,773.00
Mensah, Patrick	Mechanical	Samuel Ibekwe	Guoqiang Li		NASA	Investigating Autonomous Healing of Cracks in Lightweight, Aerospace-Grad Materials Systems	\$53,100.00
Reese, Terrence	Physics				LSU	2019 Space and Planetary Science at the Timbuktu Academy (2019 SPS-TA)	\$40,000.00
TOTAL - 23							\$3,525,676.00

FISCAL YEAR 2020-21

Proposals Submitted

Principal Investigator	Department	Co-PI	Co-PI	Co-PI	Agency	Title	Amount
Akwaboa, Stephen	Mechanical	Patrick Mensah	Samuel Ibekwe	Edgar Blevins	U.S. DoD	Enhancement of Research and Education in Material Science through the Acquisition of Discovery Laser Flash (DLF1600) Investigative Thermal Equipment	\$251,027.00
Banadaki, Yaser	Computer Science	Jalen Brook			LA BOR	Develop an Intelligent Software to Analyze and Improve Flaws in the Printed Parts/Layers of Additive Manufacturing	\$5,000.00
Banadaki, Yaser	Computer Science	Lynette Jackson			LA BOR	Machine Learning-based Control System to Monitor and Improve the Additive Manufacturing Process	\$10,000.00
Banadaki, Yaser	Computer Science	Shuju Bai	Shizhong Yang		NSF	Excellence in Research: Enhancing Research and Education in Cyber-enabled Smart Materials, Manufacturing and Systems (CSMMS) at Southern University	\$451,521.00

Banadaki, Yaser	Computer Science				LSU	Machine Learning Assisted Design of Vitrimers for 4D Printing Lightweight Composite Structures	\$186,731.00
Banadaki, Yaser	Computer Science				LSU	NRT-QISE: Quantum Joint University Network (QuaJUN)	\$345,535.00
Banadaki, Yaser	Computer Science	Nigel Gwee	Lynette Jackson	Sudhir Trivedi	National Security Agency	Southern University GenCyber Youth Camp	\$148,719.00
Banadaki, Yaser	Computer Science	Patrick Mensah	Derrick Warren		LA BOR	Southern University System - Cybersecurity Talent Initiative Program (SUS-CyberTIP)	\$205,519.00
Batra, Sanjay	Environmental Toxicology	Yaser Banadaki			NSF	Enhancing Educational Infrastructure and Interdisciplinary Research by Bridging Environmental and Computational Sciences at SUBR	\$605,153.00
Batra, Sanjay	Environmental Toxicology	Rizwana Begum			Graduate Women in Science	Lipid Raft Mediated Regulation of Proteasome/Immunoproteasome and Oxidant/Antioxidant System in Vaping Induced Inflammation	\$8,500.00
Batra, Sanjay	Environmental Toxicology	Nandini Bidarimath			Graduate Women in Science	Molecular Chaperones Mediated Regulation of Initiator/Executioner Caspases: Effect of Diesel Particulate Extract In-vitro Study	\$8,500.00
Batra, Sanjay	Environmental Toxicology	Shilpa Thota			Graduate Women in Science	Novel Role of Epigenetic Mechanisms in Pentachlorophenol-induced Autophagy	\$8,000.00
Batra, Sanjay	Environmental Toxicology				LSU	Southern University and A&M College LBRN MCBRC Core Liason	\$5,600.00
Batra, Sanjay	Environmental Toxicology	S.N. Murthy	Shizhong Yang		NSF	Enhancement of Interdisciplinary Research and Educational Infrastructure in Two HBCUs in Louisiana	\$2,120,711.00
Batra, Sanjay	Environmental Toxicology				NSF	URoL:EN: Role and Regulation of Danger Associated Molecular Patterns in Vaping Induced Toxicity/Inflammation	\$890,795.00
Batra, Sanjay	Environmental Toxicology				LSU	Complex Interplay between Hsp90 and Beclin -1 RegulatesTLR-4 Mediated Autophagy during Pentachlorophenol Exposure-an In-vitro Approach	\$18,986.00
Belu, Radian	Electrical	Kaylynn Armstrong			LA BOR	Feasibility Studies of the Object Tracking through the Use of Color HUE Image Processing	\$5,000.00
Belu, Radian	Electrical	Chidinma Y. Dabels			LA BOR	Multi-scale Approaches to Analyze, Design and Model High Efficiency Photovoltaics	\$5,000.00
Belu, Radian	Electrical	Janae Minor			LA BOR	A Multi-scale Energy Systems Engineering Approach for Renewable Energy Generation and Energy Storage Optimization	\$5,000.00

Belu, Radian	Electrical	Trinity Reed			LA BOR	A Multi-scale Energy Systems Engineering for Micro-combined Heat and Power Systems	\$5,000.00
Belu, Radian	Electrical	Dailynn Thomas			LA BOR	Counterfeit Detection and Process Monitoring with Multispectral Imaging Techniques	\$5,000.00
Belu, Radian	Electrical	Fred Lacy	Zhengmao Ye	Jiecai Luo	LA BOR	A Unified Laboratory for Education, Training and Research of Renewable Energy and Smart Micro-Grids (RESmG)	\$217,463.00
Dawan, Fareed	Mechanical	Francesca Williams	Nicolette Gordon	DeShoin York	Southeastern Louisiana University	STEM ³ in South-East Louisiana	\$16,289.95
Dawan, Fareed	Mechanical	Patrick Mensah	Dwyane Jerro		Clarkson Aerospace Corporation	Formation of Complex 3D Metal Architecture Using 3D Printed Polymers as Electroplating Scaffolds	\$249,993.00
Diack, Moustapha	SMED				Carnegie Mellon University	Addressing Racial Disparities in Healthcare through Development and Continuous Improvement of Data-enabled Open Educational Resources	\$364,727.00
Diack, Moustapha	SMED	Md Abdus Salam			NSF	Targeted Infusion Project: Implementing an Evidence-based Model of Online Course Design and Delivery to Enhance Academic Success in STEM Disciplines	\$399,677.00
Dilworth, Kimyata	Mathematics & Physics	Munachimnso Orimma			LA BOR	Determine the Random Paths and Distortion using Cramer's Rule, Volume and Linear Transformation.	\$5,000.00
Dubytska, Lidiya	Biological Sciences				NSF	Excellence in Research: Role of the T3SS Effector EseN of E. Ictaluri in Virulence and Host Immune Response	\$727,015.00
Gao, Feng	Physics	Evonne Yang			LA BOR	Machine Learning Strength Prediction of Multicomponent Alloys	\$5,000.00
Gao, Feng	Physics	Congyang Zhang	Rumman Rafi	Uttam Bhandari	LA BOR	High Pressure Experimental and Computational Study of High Entropy Alloys	\$10,000.00
Gray, Wesley	Environmental Toxicology				NIH	Academic Research Enhancement Award for Undergraduate at SUBR (AREA @ SUBR)	\$412,800.00
Gray, Wesley	Chemistry and Environmental Toxicology	Fred Lacy	Kinesha Harris		NIH	U-RISE at Southern University (U-RISE@SUBR)	\$3,776,660.00
Gwee, Nigel	Computer Science	Shuju Bai	Yaser Banadaki	Lynette Jackson	National Security Agency	Southern University GenCyber Teacher Camp	\$92,905.00
Ismail, Yasser	Electrical	Dailynn Thomas			LA BOR	Automated Drug and Alcohol Detection of Louisiana Drivers	\$5,000.00
Ismail, Yasser	Electrical	LaBrea Brumfield			LA BOR	6-DOF Robotic Arm using Haptic Feedback	\$5,000.00

Ismail, Yasser	Electrical				LA BOR	Efficient Internet of Video Surveillance Systems [IoVSS] for Smart Cities	\$158,375.00
Ismail, Yasser	Electrical				NSF	Collaborative Research: Transforming the Construction and Management of a Smart Infrastructure through a Georeferenced Deep Learning Approach	\$75,080.00
Ismail, Yasser	Electrical				Louisiana Transportation Research Center (LTRC)	High-Fidelity Fatigue, Drowsiness, and Drunk Drivers Detection (FD4) System	\$30,000.00
Ismail, Yasser	Electrical	Fred Lacy	Md Abdus Salam		Apple, Inc.	VLSI/FPGA Laboratory for Enhancing Computer Engineering at Southern University and A&M College	\$1,092,905.00
Jackson, Lynette	Computer Science	Yaser Banadaki	Nigel Gwee	Sudhir Trivedi	National Security Agency	Southern Univeristy GenCyber Teacher Camp	\$97,142.00
Jahan, Maryam	Chemistry				LA BOR	Cost Effective and Environmental Friendly Bifunctional Oxygen Reduction and Oxygen Evolution Catalyst	\$20,000.00
Jones, Nastassia	SMED	Emily Jackson-Osagie	Phyllis Okwan		Bill & Melinda Gates Foundation	Strenthening Algebra I in Louisiana Schools using STACK	\$99,599.00
Khondoker, Mohammad Abu	Mechanical				NSF	Research Initiation Award: Development of Additive Manufacturing System for Smart Multi-Scale Porous Polymer Nanocomposite	\$286,341.00
Khondoker, Mohammad Abu	Mechanical	Fareed Dawan			LA BOR	Digital Light Processing of Ultraviolet Curable Resin Reinforced with Magnetically Oriented Fibers	\$38,650.00
Kourouma, Mathieu	Computer Science	Shuju Bai	Ratana Warren		LA BOR	Stimulating Teaching, Learning and Instructional Alignment in Computer Science Department at SUBR	\$199,864.00
Lacy, Fred	Electrical	Wesley Gray	Yadong Qi	Jiecai Luo Yasser Ismail	Central Intelligence Agency	Using Sensor Networks and Machine Learning to Characterize Agricultural Responses to Stimuli	\$350,000.00
Martinez-Ceballos, Eduardo	Biological Sciences				LSU	Southern University and A&M College LBRN BBCC Core Bucks	\$5,600.00
Mensah, Patrick	Mechanical	Yaser Banadaki	Yasser Ismail		Microsoft Impact 2020	Enhancing Computer Engineering and Big Data Education (CEBDE) at Southern University and A&M College	\$200,000.00
Mensah, Patrick	Mechanical				LA BOR	Southern University Board of Regents/SREB Doctoral Fellowship	\$135,000.00

Mensah, Patrick	Mechanical	Mohammad Khondoker			NSF	RII Track-2 FEC: Rapid Qualification for Additively Manufactured Safety-Critical Components	\$4,000,000.00
Mensah, Patrick	Mechanical	Guoqiang Li	Guang-Lin Zhao	Karen Crosby	NSF	Southern University Partnership for Research and Education in Materials Excellence (SUPREME)	\$3,992,932.00
Mensah, Patrick	Mechanical				LSU	Southern University and A&M College LBRN Administrative Funds	\$26,600.00
Mensah, Patrick	Mechanical	Francesca Williams	Fareed Dawan	Tiffany Franklin	NASA	STEM^3 in South-East Louisiana	\$1,184,907.00
Mensah, Patrick	Mechanical	Fareed Dawan	Samuel Ibekwe	Mohammad Khondoker	NASA	Additive Manufacturing of Fire Retardant and Repairable Composite Based on Lunar Regolith and Vitrimers Epoxy under Lunar Conditions	\$51,783.00
Munoz-Barona, Humberto	Mathematics & Physics	Phyllis Okwan	Harold Mellieon		The University of Texas at Arlington	Developing AI-driven Innovations to Enhance Agricultural Production and Food Safety under Conservation of National Resources	\$799,999.00
Okwan, Phyllis	Mathematics & Physics	Amber Hickman			LA BOR	Analysis of High School Students' Louisiana Educational Assessment Program (LEAP) Scores in Mathematics	\$5,000.00
Okwan, Phyllis	Mathematics & Physics	Maxwell Jackson			LA BOR	Perceptions of STEM Education in HBCUs	\$5,000.00
Okwan, Phyllis	Mathematics & Physics	Hunter Shepard			LA BOR	Facilitators and Barriers of STEM Education at HBCUs	\$5,000.00
Reese, Terrence	Mathematics & Physics	Diola Bagayoko			LSU	2021 Space and Planetary Science at the Timbuktu Academy (2021 SPS-TA)	\$50,000.00
Reese, Terrence	Mathematics & Physics	Diola Bagayoko	Cheryl Taylor		LA DHH	Stemming the Pool of Future Minority Clinicians at the Timbuktu Academy	\$500,000.00
Salam, Md Abdus	Computer Science				Morgan State University	Advancing Awareness and Engagement in Blockchain and Financial Technology through Blockchain FinTech Club	\$10,000.00
Salam, Md Abdus	Computer Science				NASA	Development of Data Visualization Software to Remotely Monitor on Multiple Platforms	\$36,717.00
Uppu, Rao	Environmental Toxicology				NSF	Collaborative Research: FMRG: Eco: Green Eco-friendly Nanofluidic Electronics System Integrations for Life Sciences, Environmental Sciences, Healthcare, and Biosecurity (GENESIS)	\$400,000.00
Wang, Weihua	Chemistry				LA BOR	Dendrimer-mediated Synthesis of Multimetallic Alloy Nanoparticles	\$10,000.00
Warren, Brian	Mechanical				NSF	ERI: Experimental and Modeling Characterization of Microwave induced Chemical Synthesis in Casted Metal Alloys	\$197,218.00

Yang, Shizhong	Computer Science	Jesus Castro			LA BOR	Semiconductor Alloy Prediction through Machine Learning	\$5,000.00
Yang, Shizhong	Computer Science	Feng Gao			U.S. DoD	Enhancement of Extreme Environment Materials Design Research and Education	\$508,782.00
Yang, Shizhong	Computer Science	Feng Gao	Yaser Banadaki	Weihua Wang	NSF	Excellence in Research: Machine Learning Based Extreme Environment Materials Design	\$399,997.00
Yang, Shizhong	Computer Science	Congyang Zhang			LA BOR	Design of Complex Concentrated Alloys with Balanced Mechanical Properties	\$40,000.00
Yang, Shizhong	Computer Science	Jelani Smith			LA BOR	Radiation Resistance Alloy Design through Data Analysis	\$5,000.00
Yang, Shizhong	Computer Science	Edward Doomes	Anthony Stewart		U.S. DoD	CoE: Data Driven Discovery of Materials	\$7,500,000.00
Yang, Shizhong	Computer Science				NSF	EAGER: SUPER: Machine Learning and Experiment Validation of High Temperature Superconductors	\$300,000.00
Young, Luria	SMED	Tonya Rose	Michael Stubblefield		NSF	Confidence Matters: Increasing Female Participation through Leadership Development	\$1,270,592.00
TOTAL - 73							\$35,675,909.95

FISCAL YEAR 2020-21

Proposals Funded

Principal Investigator	Department	Co-PI	Co-PI	Co-PI	Agency	Title	Amount
Banadaki, Yaser	Computer Science	Ebrahim Khosravi	Shuju Bai	Albertha Lawson	NSF	Targeted Infusion Project: Southern University - Computing and Data Education (SU-CoDE)	\$399,899.00
Banadaki, Yaser	Computer Science	Jalen Brook			LA BOR	Develop an Intelligent Software to Analyze and Improve Flaws in the Printed Parts/Layers of Additive Manufacturing	\$5,000.00
Banadaki, Yaser	Computer Science				The University of Alabama	RII Track-2 FEC: IGM--A Framework for Harnessing Big Hydrological Datasets for Integrated Groundwater Management	\$49,332.00
Banadaki, Yaser	Computer Science	Shuju Bai	Lynette Jackson		National Security Agency	Southern University GenCyber Youth Camp	\$99,744.00
Batra, Sanjay	Environmental Toxicology	Abubakar Abdulkadir			LA DoEd	Diesel Particulate Extract-Mediated Inflammatory Responses: Hybrid <i>In-Silico/In-Vitro</i> Studies on Lung Epithelial Cells	\$2,500.00
Batra, Sanjay	Environmental Toxicology				Grambling State University	The Role and Regulation of Autophagy during Pentachlorophenol Exposure	\$21,000.00
Batra, Sanjay	Environmental Toxicology				LSU	LBRN: The Role and Regulation of Autophagy during Pentachlorophenol Exposure	\$14,447.00
Batra, Sanjay	Environmental Toxicology				LSU	Southern University and A&M College MCBRC CORE Liaison Funds	\$5,600.00

Belu, Radian	Electrical	Fred Lacy	Moustapha Diack		Northwestern State University	An Online Z-degree Certificate in Renewable Energy and Energy Management	\$16,000.00
Belu, Radian	Electrical	Trinity Reed			LA BOR	A Multi-scale Energy Systems Engineering for Micro-combined Heat and Power Systems	\$5,000.00
Belu, Radian	Electrical	Janae Minor			LA BOR	A Multi-scale Energy Systems Engineering Approach for Renewable Energy Generation and Energy Storage Optimization	\$5,000.00
Belu, Radian	Electrical	Chidinma Y. Dabels			LA BOR	Multi-scale Approaches to Analyze, Design and Model High Efficiency Photovoltaics	\$5,000.00
Belu, Radian	Electrical	Kaylynn Armstrong			LA BOR	Feasibility Studies of the Object Tracking through the Useof Color HUE Image Processing	\$5,000.00
Carriere, Patrick		Francesca M. Williams	Alberta Lawson	Fareed Dawan	U.S. DoEd	Pathways for Advancing Student Success (PASS) in STEM	\$249,943.00
Carriere, Patrick		Francesca M. Williams			LA DOTD	National Summer Transportation Institute	\$49,921.49
Dilworth, Kimyata	Mathematics & Physics	Munachimnso Orimma			LA BOR	Determine the Random Paths and Distortion using Cramer's Rule, Volume and Linear Transformation	\$5,000.00
Gao, Feng	Physics	Evonne Yang			LA BOR	Machine Learning Strength Prediction of Multicomponent Alloys	\$5,000.00
Gao, Feng	Physics	Congyan Zhang	Rumman Rafi	Uttam Bhandari	LA BOR	High Pressure Experimental and Computational Study of High Entropy Alloys	\$10,000.00
Gray, Wesley	Environmental Toxicology				The University of Kentucky Research Foundation	STTR: Southeast Xlerator Network	\$3,811.00
Ismail, Yasser	Electrical	Dailynn Thomas			LA BOR	Automated Drug and Alcohol Detection of Louisiana Drivers	\$5,000.00
Ismail, Yasser	Electrical	LaBrea Brumfield			LA BOR	6-DOF Robotic Arm using Haptic Feedback	\$5,000.00
Khondoker, Mohammad	Mechanical	Fareed Dawan			LA BOR	Digital Light Processing of Ultraviolet Curable Resin Reinforced with Magnetically Oriented Fibers	\$38,650.00
Kourouma, Mathieu	Computer Science	Lynette Jackson			University of Louisiana at Lafayette	RII Track-2 FEC: Precise Regional Forecasting via Intelligent and Rapid Harnessing of National Scale Hydrometeorological Big Data	\$220,000.00
Kourouma, Mathieu	Computer Science	Ratana Warren			LA BOR	Stimulating, Teaching, Learning and Instructional Alignment in Computer Science Department at SUBR	\$199,864.00
Li, Guoqiang	Mechanical	Patrick Mensah	Samuel Ibekwe	Fareed Dawan	LA BOR	Louisiana Materials Design Alliance (LAMDA)	\$227,684.00
Martinez-Ceballos, Eduardo	Biological Sciences				LSU	Southern University and A&M College LBRN Core Liaison Funds	\$5,600.00

Mensah, Patrick	Mechanical	Damien Ejigiri			LA BOR	SUBR/Board of Regents Fellowship Program	\$45,000.00
Mensah, Patrick	Mechanical	Guoqiang Li	Guang-Lin Zhao	Samuel Ibekwe Rachel Finley	NSF	CREST Center for Next Generation Multifunctional Composites (NextGen Composites Phase II)	\$2,000,000.00
Mensah, Patrick	Mechanical	Samuel Ibekwe	Stephen Akwaboa		United Launch Alliance	Modeling and Analysis of Cryogenic Thermal Transitions using Computational Fluid Dynamics (CFD) and Thermomechanical Analysis	\$50,000.00
Mensah, Patrick	Mechanical	Fareed Dawan	Francesca M. Williams	Nicolette Gordon DeShoin York	NASA	STEM ³ in South-East Louisiana	\$44,050.31
Mensah, Patrick	Mechanical	Yaser Banadaki	Yasser Ismail		Microsoft Corporation	Enhancing Computer Engineering and Big Data Education (CEBDE) at Southern University and A&M College	\$200,000.00
Mensah, Patrick	Mechanical	Samuel Ibekwe	Guoqiang Li		University of Delaware	Composite Manufacturing Technologies for Aerospace Performance at Automotive Production Rates	\$100,000.00
Mensah, Patrick	Mechanical	Diola Bagayoko	Christopher Guillory		LA BOR	Louis Stokes Science, Technology, Engineering and Mathematics (STEM) Pathways & Research Alliances at Southern University and A&M College	\$61,033.00
Mensah, Patrick	Mechanical	Diola Bagayoko	Christopher Guillory		LA BOR	Louis Stokes Science, Technology, Engineering and Mathematics (STEM) Pathways and Research Alliances at Southern University - Baton Rouge	\$208,146.00
Mensah, Patrick	Mechanical	Guoqiang Li	Guang-Lin Zhao	Samuel Ibekwe Rachel Finley	NSF	CREST Center for Next Generation Multifunctional Composites (NextGen Composites Phase II)	\$99,995.00
Mensah, Patrick	Mechanical				LSU	Southern University and A&M College LBRN Administrative Funds	\$26,600.00
Okwan, Phyllis	Mathematics & Physics	Maxwell Jackson			LA BOR	Perceptions of STEM Education in Historically Black Colleges and Universities (HBCUs)	\$5,000.00
Okwan, Phyllis	Mathematics & Physics	Hunter Shepard			LA BOR	Facilitators and Barriers of STEM Education at Historically Black Colleges and Universities (HBCUs)	\$5,000.00
Okwan, Phyllis	Mathematics & Physics	Amber Hickman			LA BOR	Analysis of High School Students' Louisiana Educational Assessment Program (LEAP) Scores in Mathematics	\$5,000.00
Reese, Terrence	Physics				LSU	2019 Space and Planetary Science at the Timbuktu Academy (2019 SPS-TA)	\$37,000.00
Reese, Terrence	Physics	Diola Bagayoko			LSU	2020 Space and Planetary Science at the Timbuktu Academy (2020 SPS-TA)	\$25,000.00

Salam, Md Abdus	Computer Science				The FinTech Center at Morgan State University	Advancing Awareness and Engagement in Blockchain and Financial Technology through Blockchain FinTech Club	\$10,000.00
Wang, Weihua	Chemistry				LA BOR	Dendrimer-Mediated Synthesis of Multimetallic Alloy Nanoparticles	\$10,000.00
Yang, Shizhong	Computer Science	Jesus Castro			LA BOR	Semiconductor Alloy Prediction through Machine Learning	\$5,000.00
Yang, Shizhong	Computer Science	Lynette Jackson			LA BOR	Machine Learning-based Control System to Monitor and Improve the Additive Manufacturing Process	\$10,000.00
Yang, Shizhong	Computer Science	Ebrahim Khosravi	Feng Gao		North Carolina Central University	Consortium for Nuclear Security Advanced Manufacturing Enhanced by Machine Learning (NSAM-ML)	\$170,000.00
Yang, Shizhong	Computer Science	Congyan Zhang			LA BOR	Design of Complex Concentrated Alloys with Balanced Mechanical Properties	\$40,000.00
Yang, Shizhong	Computer Science	Jelani Smith			LA BOR	Radiation Resistance Alloy Design through Data Analysis	\$5,000.00
Yi, Xiaoping	Biological Sciences & Chemistry				LSU	LBRN: Apoptosis Pathway Induced by RES and Anitcancer Drug in 3D Culture of Prostate Cancer Cells	\$84,000.00
Young, Luria		Albertha Lawson	Michael Stubblefield		NSF	Collaborative Research: LIGO-SEC Partership - Strengthening Communities of Learners	\$625,000.00
TOTAL - 50							\$5,529,819.80

FY 2018-19

Department	Submitted	Amount	Funded	Amount
Biological Sciences	7	\$3,867,706.00	4	\$347,035.00
Chemistry	0	\$0.00	0	\$0.00
Civil	1	\$196,283.00	0	\$0.00
Computer Science	16	\$10,680,553.60	4	\$612,940.00
Electrical	6	\$4,171,511.00	4	\$108,899.00
Environmental Toxicology	10	\$1,344,714.00	5	\$75,908.00
Mathematics	1	\$391,131.00	1	\$54,986.00
Mechanical	10	\$7,838,275.00	5	\$574,737.00
Physics	6	\$2,044,252.00	5	\$348,120.00
SMED	2	\$799,813.00	0	\$0.00
Other (Dean)	0	\$0.00	2	\$299,804.24
TOTAL	59	\$31,334,238.60	30	\$2,422,429.24

FY 2019-20

Department	Submitted	Amount	Funded	Amount
Biological Sciences	5	\$2,218,571.00	1	\$497,579.00
Chemistry	3	\$252,148.00		
Civil				
Computer Science	12	\$7,235,948.00		
Electrical	11	\$1,034,982.00	4	\$452,979.00
Environmental Toxicology	15	\$7,227,381.00	7	\$80,560.00
Mathematics	3	\$207,700.00	1	\$40,000.00
Mechanical	10	\$4,269,727.31	8	\$1,820,057.00
Physics	3	\$2,488,300.00		
SMED	3	\$3,051,026.00	1	\$384,558.00
Other (Dean)			1	\$249,943.00
TOTAL	65	\$27,985,783.31	23	\$3,525,676.00

FY 2020-21

Department	Submitted	Amount	Funded	Amount
Biological Sciences	2	\$732,615.00	2	\$89,600.00
Chemistry	3	\$3,806,660.00	1	\$10,000.00
Civil				
Computer Science	19	\$10,548,432.00	12	\$1,213,839.00
Electrical	13	\$1,958,823.00	7	\$46,000.00
Environmental Toxicology	10	\$4,479,045.00	5	\$47,358.00
Mathematics	7	\$1,369,999.00	4	\$20,000.00
Mechanical	13	\$10,630,740.95	12	\$3,101,158.31
Physics	2	\$15,000.00	4	\$77,000.00
SMED	4	\$2,134,595.00	1	\$625,000.00
Other (Dean)			2	\$299,864.49
TOTAL	73	\$35,675,909.95	50	\$5,529,819.80

