

University of South Carolina — September 2023 New Grant Awards Report

PI's College	PI's Department	PI Name	Award Title	Sponsoring Agency	Award Total
<i>Arnold School of Public Health</i>					
	<i>Applied Research & Evaluation (CARE)</i>				
		<i>Gillam, Pamela</i>	<i>DDSN TBI Needs Assessment</i>	SC Department of Disabilities and Special Needs (SC DDSN)ACL/HHS	99,938
		<i>Macauda, Mark</i>	<i>Spartanburg 7 Consortium Implementation of YRBS, School Health Profiles, and Sexual Health Curricula - Year 6</i>	Spartanburg School District 7/Mary Black Foundation/CDC	21,600
	<i>Communication Sci & Disorders</i>				
		<i>Fridriksson, Julius</i>	<i>Community Project Funding/Congressionally Directed Spending - Construction (Alzheimer's Disease and Related Dementias in South Carolina)</i>	Health Resources & Services Administration (HRSA)/HHS	7,750,000
		<i>Neils-Strunjas, Jean</i>	<i>SC CREATE 2024</i>	SC Department of Education (SCDE)	309,996
	<i>Environmental Health Sciences</i>				
		<i>Baalousha, Mohammed</i>	<i>Rapid: Concentration and Form of Metal and Metal-Baring Nanomaterial Contamination in Maui Fire Ash and Soil</i>	National Science Foundation (NSF)	200,000
		<i>Kenne, Gabriel</i>	<i>Multimedia Campaign to Promote Climate Smart Agriculture and Soil Health Education in SC.</i>	Natural Resources Conservation Service(NRCS)/USDA	192,623
		<i>Porter, Dwayne</i>	<i>Operational Support of the National Estuarine Research Reserve System Centralized Data Management Office and Enhancements to the System-Wide Monitoring Program</i>	National Oceanic and Atmospheric Administration (NOAA)/DOC	3,076,550
			<i>Future Earth Coasts - Tour des Côtes</i>	Future Earth Coasts (FEC)/International Project Office (IPO)/East China Normal University	8,620
	<i>Epidemiology & Biostatistics</i>				
		<i>Nolan, Melissa</i>	<i>CDC Southeastern Center of Excellence in Vector-Borne Diseases: The Gateway Program (Subcontract to University of Florida)</i>	University of Florida/CDC	329,625
	<i>Exercise Science</i>				
		<i>Hirsch, Katie</i>	<i>Utility and feasibility of urinary hormone analysis for characterization of the female hormonal environment: A pilot and feasibility trial</i>	NSCA Foundation	24,000
		<i>Moore, Robert</i>	<i>IPA Agreement with Dorn VA Medical Center - Adam Harrison</i>	WJB Dorn VA Medical Center/VA	74,405
	<i>Health Prom., Educ. & Behavior</i>				
		<i>Ghattas, Hala</i>	<i>(PI: Tremaine T. Sails-Dunbar) Health Policy Research Scholars Cohort Seven - 2023</i>	Robert Wood Johnson Foundation	124,000
		<i>Li, Xiaoming</i>	<i>R13 Big Data Health Science Conference Application</i>	National Institutes of Health (NIH)	100,000
		<i>Yang, Xueying</i>	<i>Patterns and predictors of racial/ethnic disparities in HIV care continuum in the South</i>	National Institute of Nursing Research (NINR)/NIH	398,744
	<i>Health Services Policy & Mgmt</i>				
		<i>Giannouchos, Theodoros</i>	<i>Persistent Frequent Emergency Department Users in South Carolina: Who Are They and How Do They Use Other Cross-Sector Services?</i>	Health Sciences Center at Prisma Health	19,994
		<i>Hair, Nicole</i>	<i>Childhood Measles Exposure and Later-Life Cognitive Function.</i>	University of Michigan (CAPRA)/NIA/NIH	55,709
		<i>Kenison, Kelli</i>	<i>Prisma HPHC Grant Evaluation</i>	Prisma-Health Upstate/Duke Endowment	9,967
<i>College of Arts and Sciences</i>					
	<i>Chemistry & Biochemistry</i>				
		<i>Li, Jie</i>	<i>Expanding Natural Products Chemical Diversity by Big-data Analysis and Novel Biosynthesis</i>	National Institute of General Medical Sciences (NIGMS)/NIH	1,579,485

		Sutton, Christopher	Unraveling the Role of Cation Solvation in Aqueous Zn-Ion Batteries: A Combined Theoretical and Experimental Approach	AFOSR/USAF/DOD	600,000
		Tang, Chuanbing	CCI Phase I: NSF Center for Polymers from Waste	National Science Foundation (NSF)	1,800,000
	English				
		Dubinsky, Stanley	(PI: Lexington Whalen) Wordification: Reimagining How Spelling is Taught	College of Charleston/SC Space Grant Consortium/NASA	6,000
	Geography				
		Kang, Yuhao	Characterizing and Promoting Cartography and GIS Graduate Programs through Research Theme Discovery and Online Seminars	The Cartography and Geographic Information Society (CaGIS)	8,000
			Measuring Socioeconomic Impacts of A New Paradigm for Algae Monitoring and Control with Robotics	Watabot Inc.	3,000
	History				
		Donaldson, Bobby	Booker T. Washington High School Auditorium Building Restoration Project	National Park Service (NPS)/DOI	5,000,000
			Cooperative Agreement between the Department of the Interior/National Park Service and the Center for Civil Rights History and Research: Strategic Planning and Implementation for the CRC	National Park Service (NPS)/DOI	3,362,100
		Matthews, Marty	THE PAPERS OF WILLIAM SHORT A DIGITAL SELECTIVE DOCUMENTARY EDITION APPLICATION for October 1, 2023 – September 30, 2024	The National Historical Publications and Records Commission (NHPRC)	110,000
	Mathematics				
		Wang, Qi	R1I Track-1: ADAPT in SC: AI-enabled Devices for the Advancement of Personalized and Transformative healthcare in South Carolina	Clemson University/NSF	3,416,272
	Physics & Astronomy				
		Jin, Rongying	Directed Assembly of Metastable States for Harnessing Quantum Effects	Department of Energy (DOE)	600,000
	Psychology				
		Coffman, Donna	Deconstructing food parenting approaches to obesity prevention for the highly food motivated child	Temple University/NIH	24,802
		Goodrum, Nada	SCRA Research Scholars Program 2023 - ImPACT: Improving health for Parents And Children Together	Society for Community Research and Action (SCRA)	6,000
		Hudac, Caitlin	Reciprocity of Social Connection and Well-Being: Convergence of Temporal and Neural Underpinnings of Adolescent Social Connection Quality, Quantity, and Need	Arizona State/NICHHD/NIH	1,559,591
		Kivita Zarrett, Nicole	(PI: Olivia Staples) Health Policy Research Scholars	Robert Wood Johnson Foundation	124,000
		Weist, Mark	Improving Social, Emotional, Behavioral, and Academic Functioning of Elementary School Students through the Interconnected Systems Framework	East Carolina University/IES/USDE	1,756,552
		Will, Elizabeth	Early Developmental Determinants and Pathways in Down syndrome - R00 phase	National Institute of Child Health and Development (NICHD)/NIH	744,713
	School of Earth, Ocean & Env.				
		Bourbonnais, Annie	Collaborative research: Deciphering the mechanisms of marine nitrous oxide cycling using stable isotopes, molecular markers and in situ rates	National Science Foundation (NSF)	467,675
		Ryker, Katherine	Postdoctoral Fellowship: STEM Ed IPRF: Increasing geoscience enrollment and engagement by transforming perceptions of geoscience among students and the general public	National Science Foundation (NSF)	332,472
		Ziolkowski, Lori	Intergovernmental Personal Act (IPA) Assignment for Dr. Lori Ziolkowski (UofSC) to the National Science Foundation (NSF)	National Science Foundation (NSF)	169,666

<i>College of Education</i>					
	<i>Educational & Developmental Science</i>				
		<i>Plotner, Tony</i>	<i>Project FUSION: Preparing Special Education Leaders with a Focus on Research to Practice in Transition 2023-2024</i>	Office of Special Education and Rehabilitative Services (OSERS)/USDE	1,244,392
		<i>Tang, Hengtao</i>	<i>Preparing empathetic engineers via an empathy-oriented smart manufacturing curriculum</i>	National Science Foundation (NSF)	399,930
	<i>Leadership, Learning Design, & Inquiry</i>				
		<i>Tran, Henry</i>	<i>Does the Diversity Perspective of R1 Institutions matter for the workplace inclusion of their Black and Hispanic Engineering Faculty?</i>	National Science Foundation (NSF)	399,997
		<i>Yao, Christina</i>	<i>Collaborative Research: Advancing Collaborations for Equity in Marine and Climate Sciences (ACE-MCS)</i>	National Science Foundation (NSF)	375,552
<i>College of Engineering & Comp.</i>					
	<i>Chemical Engineering</i>				
		<i>Peng, Zhenmeng</i>	<i>EFRI E3P: Nonthermal Plasma-Assisted Hydrogenolysis of waste Plastics to Value-Added Chemicals and Fuels NSF - 2132178</i>	University of Akron/NSF	457,196
			<i>CAS: Dual-site Relay Catalysis in Oxygen Reduction Reaction on Reducible Metal Oxide Heterojunction Structure</i>	National Science Foundation (NSF)	350,817
		<i>Ritter, James</i>	<i>Development of a Continuous Cost Effective Kr Xe Capture Process for Nuclear Fuels Reprocessing</i>	Tetramer Technologies, LLC/DOE	60,000
		<i>Uline, Mark</i>	<i>UofSC Biomedical Engineering Center for Acute Stress and Credibility Assessment</i>	AFOSR/USAF/DOD	1,368,819
	<i>Civil & Environmental Eng.</i>				
		<i>Chaudhry, M.</i>	<i>CIROH: ML-based Flexible Flood Inundation Mapping and Intercomparison Framework</i>	University of Alabama/NWS/NOAA/DOC	265,876
		<i>Goharian, Erfan</i>	<i>CIROH: Forecast-Informed Reservoir Operation for Flooding Risk Reduction and Post-Flooding Season Water Conservation</i>	University of Alabama/NWS/NOAA/DOC	196,078
			<i>CIROH: Novel Geospatial Architecture of Channel and Floodplain Morphological Attributes within the OWP Hydrofabrics</i>	University of Alabama/NOAA	185,000
			<i>ML-based Flexible Flood Inundation Mapping and Intercomparison Framework</i>	University of Alabama/NWS/NOAA/DOC	265,876
	<i>Electrical Engineering</i>				
		<i>Ahmad, Iftikhar</i>	<i>PFI-TT: High-Power Electronic Chip Devices Using Novel Materials and Innovative Strategies</i>	National Science Foundation (NSF)	549,940
		<i>Mandal, Krishna</i>	<i>Self-biased wide bandgap semiconductor detectors for real-time monitoring of environmental UV light index</i>	College of Charleston	25,000
		<i>Matolak, David</i>	<i>Mosaic ATM: A Toolkit for UAM Communications Management</i>	Mosaic ATM/NASA	200,000
		<i>Nasiri, Adel</i>	<i>Phase II: Development of Ultra Compact AC/DC Converters for Low Power Applications</i>	DEFENSEWERX - ICWERX	225,000
		<i>Wang, Xiaofeng</i>	<i>Collaborative Research: SLES: Guaranteed Tubes for Safe Learning across Autonomy Architectures</i>	National Science Foundation (NSF)	500,000
	<i>Mechanical Engineering</i>				
		<i>Banerjee, Sourav</i>	<i>Development of a novel sensor for rapid onsite detection of microcystin in rural livestock ponds: A seed grant to support sensor development</i>	Clemson University/USDA	153,227
		<i>Downey, Austin</i>	<i>(PI: David Wamai) Discretized FPGA-based NMR System for Spacecraft Deployment</i>	College of Charleston/SC Space Grant Consortium/NASA	7,500
		<i>Gross, Andrew</i>	<i>DAPRA: Extraction of many material properties from analysis of a few data rich experiments</i>	DARPA/Defense Sciences Office/DOI	500,000

		Harik, Ramy	(PI: Victor Gadaw): Augmented Reality Framework for Automated Fiber Placement Rework	College of Charleston/SC Space Grant Consortium/NASA	16,000
			A Holistic Approach for Closed Loop Quality in Manufacturing Systems	Siemens Corporation	100,000
		Hu, Ming	MRI: Track 2 Acquisition of a High-Performance Computing Cluster for Boosting Artificial Intelligence Enabled Science, Engineering, and Education in South Carolina	National Science Foundation (NSF)	1,100,000
		Sockalingam, Subramani	ECP: Fundamental Studies of High Strain-rate Damage Propagation Mechanisms in Heterogeneous Anisotropic Meso-architected Composites	US Army Research Office (ARO)/DOD	358,991
			Tensile Split Hopkinson Pressure Bar for Design and Characterization of Next Generation Heterogeneous Meso-Architected Composite Armor Materials	US Army Research Office (ARO)/DOD	275,316
		Wang, Yi	Configurable Parametric Aeroelastodynamic Reduced Order Models for Aerostructural Sensing and Control	CFD Research Corporation/NASA	300,003
		Yu, Lingyu	(PI: Andrew Campbell, PhD student) High fidelity nondestructive characterization and evaluation for composite structures using non-contact remote ultrasonic laser systems	College of Charleston/SC Space Grant Consortium/NASA	16,000
College of Pharmacy					
	Pharm - Clin Pharm & Outcomes Sciences				
		Sutton, Scott	The advancement of rural pharmacy education infrastructure in South Carolina through clinical practice training and research: The UofSC College of Pharmacy & Tandem Health rural health pharmacy training model	SC Center for Rural and Primary Healthcare/SCDHHS	988,509
	Pharmacy - Dean's Office				
		Cutler, Stephen	Community Project Funding/Congressionally Directed Spending - Construction (Shared Biomedical Research Instrumentation Core)	Health Resources & Services Administration (HRSA)/HHS	4,500,000
General Fund					
	Div of Business & Finance				
		Claypoole, Jack	SC Technology Hub BCG Project	SC Department of Commerce	150,000
School of Medicine					
	Basic Science Research				
		Wenceslau, Camilla	Reprogramming endothelial cells to prevent and treat Alzheimer disease	Alzheimer's Association	199,930
	Internal Medicine				
		Al-hasan, Majdi	Housing Opportunities for Persons With AIDS (HOPWA) Housing First Program for Persons with Disabilities	City of Columbia/HUD City of Columbia	478,637 260,000
	Neurology				
		Sen, Souvik	Community Project Funding/Congressionally Directed Spending - Construction (Stroke and stroke related diseases in South Carolina)	Health Resources & Services Administration (HRSA)/HHS	2,505,000
School of Medicine (Grv)					
	Medicine Greenville				
		Grier, Jennifer	Countermeasures for Fatigue and Assessment of Functional Capacity in Residents	Prisma Health Upstate	20,000
University Libraries					
	Univ Libraries - Dean's Office				
		Pappas, Lydia	Preserving the Charleston Communication Centre Video Tapes: Digitizing and making accessible the Lowcountry folkarts of the 1970s	Council on Library and Information Resources	29,988
University of SC Aiken					
	AK Biology & Geology				

		<i>Shervette, Virginia</i>	<i>Enhancing U.S. Caribbean Deepwater Snapper Fisheries: Collaborative Research to Address Critical Information Gaps for Queen and Silk Snappers</i>	US Department of Commerce (DOC)	299,600
	<i>AK Psychology</i>				
		<i>Swain, Laura</i>	<i>(PI: Harshi Rajmal Lodha Jain)The Relationship Between Impulsivity and the Attribute Framing Effect on Decision Making and P3 in Social Contexts</i>	Psi Chi	1,485
	<i>AK Ruth Patrick Sci Ed</i>				
		<i>Senn, Gary</i>	<i>2024 GenCyber Teacher Program</i>	Maryland Procurement Office/ONR/NSA	149,265
<i>University of SC Beaufort</i>					
	<i>BFT Public Hlth & Human Services</i>				
		<i>Dudas, Kimberly</i>	<i>USCB: Increasing Pre-Licensure Educational Capacity in the Lowcountry</i>	Health Resources & Services Administration (HRSA)/HHS	1,000,000
<i>University of SC Lancaster</i>					
	<i>Lancaster</i>				
		<i>Criswell, Stephen</i>	<i>NAS Center Artist-In-Residence: Chief William Harris, Catawba Nation Potter</i>	South Carolina Arts Commission	6,000
<i>University of SC Salkehatchie</i>					
	<i>SA PALMETTO COLLEGE</i>				
		<i>Burns, Francis</i>	<i>USDA Forensic Lab 2</i>	Western Carolina Higher Education Commission (WCHEC)/USDA	49,900
<i>University of SC Upstate</i>					
	<i>UPS College of Education</i>				
		<i>Whitlock, Reta (Ugena)</i>	<i>SC Grow Your Own (SC GYO) State Innovation Grant</i>	SC Department of Education	100,000
	<i>UPS Dept of Education</i>				
		<i>Herzberg, Tina</i>	<i>Orientation and Mobility Contract</i>	SC Department of Education	219,386