

University of South Carolina — August 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>Epidemiology & Biostatistics</i> | | | | |
| | | <i>Boghossian, Nansi</i> | <i>Reducing racial disparities in postpartum adverse outcomes by implementing a cloud-connected remote blood pressure monitoring program</i> | USC Educational Foundation/The Duke Endowment | 610,000 |
| | <i>Exercise Science</i> | | | | |
| | | <i>Beets, Michael</i> | <i>Etiology of Accelerated Weight Gain during Summer vs. School in Adolescents: What's UP (Undermining Prevention) with Summer 2</i> | National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)/NIH | 2,621,060 |
| | <i>Health Services Policy & Mgmt</i> | | | | |
| | | <i>Hair, Nicole</i> | <i>Childhood Measles Exposure and Later-Life Cognition: The Mediating Role of Education</i> | University of Maryland/NIA/NIH | 24,996 |
| <i>College of Arts and Sciences</i> | | | | | |
| | <i>BARUCH COASTAL LABORATORY</i> | | | | |
| | | <i>Strosnider, William</i> | <i>From blue-gray to blue-green: Facilitating the transition to non-plastic, natural material use within the coastal zone economy</i> | SC Sea Grant Consortium/NOAA | 2,321,986 |
| | <i>Chemistry & Biochemistry</i> | | | | |
| | | <i>Garashchuk, Sophya</i> | <i>Quantum dynamics with nuclear quantum effects: a hierarchical methodology for large molecular systems</i> | National Science Foundation (NSF) | 530,000 |
| | | <i>Ge, Ting</i> | <i>Controlling Equilibrium Swelling of Polyampholyte Gels Using Charge Sequence - A Study Combining Molecular Simulation and Scaling Theory</i> | American Chemical Society Petroleum Research Fund | 110,000 |
| | <i>Criminology & Criminal Justice</i> | | | | |
| | | <i>Alpert, Geoffrey</i> | <i>Evaluating Artificial Intelligence Interventions in Police Body-Cameras</i> | Laura and John Arnold Foundation | 94,621 |
| | <i>Geography</i> | | | | |
| | | <i>Cutter, Susan</i> | <i>RII Track-2 FEC: Where We Live (WWL): Local and Place Based Adaptation to Climate Change in Underserved Rural Communities</i> | National Science Foundation (NSF) | 1,780,000 |
| | | <i>Wang, Cuizhen (Susan)</i> | <i>3D Visualization of hydrogeologic raster surfaces in South Carolina Hydrogeologic Framework</i> | US Geological Survey (USGS)/DOI | 34,982 |
| | <i>Mathematics</i> | | | | |
| | | <i>Dahmen, Wolfgang</i> | <i>FRG: Collaborative Research: Variationally Stable Neural Networks for Simulation, Learning, and Experimental Design of Complex Physical Systems</i> | National Science Foundation (NSF) | 599,999 |
| | | <i>Tsai, Wei-Lun</i> | <i>AMS-Simons Travel Grant</i> | American Mathematical Society (AMS)/Simons Foundation | 7,200 |
| | <i>Psychology</i> | | | | |
| | | <i>Rorden, Christopher</i> | <i>Extending ezBIDS, NiiVue and dcm2niix for user-friendly cloud-based integration and visualization</i> | National Institute of Mental Health (NIMH)/NIH | 2,039,629 |

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|--------------------------------|--|---------------------|---|---|---------|
| | | Smith, Courtnie | John H. Magill School Mental Health Certificate Program | SC Department of Mental Health (SCDMH) | 35,577 |
| | School of Earth, Ocean & Env. | | | | |
| | | Frost, Daniel (Dan) | Collaborative Research: High-resolution imaging of the Elgin-Lugoff earthquake swarm sequence and subsurface structures in South Carolina using a dense seismic nodal array | National Science Foundation (NSF) | 168,420 |
| | | Meyer-Gutbrod, Erin | Organismal Response to Climate Change (ORCC) | National Science Foundation (NSF) | 323,550 |
| | Sociology | | | | |
| | | Broussard, Rebekah | Fall course Buyouts - 2023 and 2024 | University of Texas at Austin (UTAUS) - Population Wellbeing Initiative | 23,774 |
| College of Education | | | | | |
| | Leadership, Learning Design, & Inquiry | | | | |
| | | Johnson, Jamil | A Resource Collection Advancing Educational Equity and Student Success | National Association of Student Personnel Administrators (NASPA) | 26,250 |
| College of Engineering & Comp. | | | | | |
| | Chemical Engineering | | | | |
| | | Ritter, James | Fabrication of a 4-Bed Rotary Valve PSA Pilot Plant | ColdStream Energy, LLC | 210,000 |
| | Computer Science & Engineering | | | | |
| | | Sheth, Amit | EAGER: Knowledge-guided neurosymbolic AI with guardrails for safe virtual health assistants | National Science Foundation (NSF) | 200,000 |
| | | | Summer AI Camp 2023 | Richland County School District II | 10,200 |
| | Electrical Engineering | | | | |
| | | Chandrashekhar, MVS | Vertical Laser Lifted Off Ultrawide Bandgap AlxGa1-xN Power Electronic Devices Transferred from Bulk AIN for Resilient Adaptable Power Electronics | Air Force Office of Scientific Research (AFOSR)/USAF/DOD | 599,923 |
| | Mechanical Engineering | | | | |
| | | Barazanchy, Darun | Collins Aerospace: blind induction welding optimization | Collins Aerospace | 199,360 |
| College of Information & Comm. | | | | | |
| | School of Information Sciences | | | | |
| | | Freeburg, Darin | Identity-Based Routines in the Public Library: Structuring the Workplace to Better Support Staff with Diverse Identities | Institute of Museum and Library Services (IMLS) | 321,973 |
| | | Kawooya, Dick | Equitable Access for the Blind, Visually Impaired, and Print-Disabled (BVIPI) Students in Online Learning: A Study of BVIPI Services Among Southeastern Conference (SEC) Institutions | Institute of Museum and Library Services (IMLS) | 249,394 |
| College of Nursing | | | | | |
| | Nursing | | | | |

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|---------------------------------------|---|----------------------------|---|---|-----------|
| | | <i>Dail, Robin</i> | <i>(PI - Karen Warren) Exploring the impact of neonatal transport on the health of Black preterm infants and psychosocial challenges faced by parents in relation to social determinants of socioeconomic and racial inequities</i> | National Institute of Nursing Research (NINR)/NIH | 34,104 |
| | | <i>Donevant, Sara</i> | <i>Using Infrared Thermography and Artificial Intelligence to Detect Tissue Damage Below the Skin</i> | South Carolina Research Authority (SCRA) | 15,000 |
| | | <i>Ribar, Alicia</i> | <i>Expanding an APRN Practice Training Partnership in South Carolina</i> | Health Resources & Services Administration (HRSA)/HHS | 2,599,616 |
| | | <i>Vick, Lori</i> | <i>Phase I study of panobinostat in adults with sickle cell disease: Novel approach to recruitment and retention</i> | Augusta University/NIH | 105,289 |
| College of Pharmacy | | | | | |
| | <i>Drug Discovery & Biomed Sci.</i> | | | | |
| | | <i>Kiaris, Hippokratis</i> | <i>Peromyscus Genetic Stock Center Support</i> | National Science Foundation (NSF) | 500,000 |
| College of Social Work | | | | | |
| | <i>Social Work - Dean's Office</i> | | | | |
| | | <i>Kim, Jaeseung</i> | <i>Underemployment, Poor-Quality Work Scheduling: Their Health and Well Being Outcomes and Disparities</i> | Penn State University/Urban Institute | 30,989 |
| Darla Moore School of Business | | | | | |
| | <i>Moore Sch - Div. of Research</i> | | | | |
| | | <i>Von Nessen, Joseph</i> | <i>South Carolina Sea Grant Consortium: Economic Impact Analysis</i> | SC Sea Grant Consortium/NOAA | 30,000 |
| | <i>Small Business Dev. Ctr.</i> | | | | |
| | | <i>Abraham, Michele</i> | <i>South Carolina Department of Commerce Award Fiscal Year 2023-2024</i> | SC Department of Commerce (SCDOC) | 1,000,000 |
| Economic Engagement | | | | | |
| | <i>Ofc of Economic Engagement</i> | | | | |
| | | <i>Hardaway, Chad</i> | <i>Michelin iOS Visual Inspection Project</i> | Michelin | 5,000 |
| Law Enforcement & Safety | | | | | |
| | <i>UNIVERSITY POLICE DEPARTMENT</i> | | | | |
| | | <i>Birnie, Stephen</i> | <i>Firehouse Sub Public Safety Foundation Grant 2023</i> | Firehouse Sub Public Safety Foundations | 23,587 |
| Research, Vice President for | | | | | |
| | <i>Office Research - General</i> | | | | |
| | | <i>Barlow, Shayne</i> | <i>Modernization of Housing for the Peromyscus Genetic Stock Center</i> | Office of the Director, National Institutes of Health (NIH) | 346,230 |
| School of Medicine | | | | | |
| | <i>Cell Biology & Anatomy</i> | | | | |
| | | <i>Tan, Wenbin</i> | <i>Generation and Validation of Disease Models for Port-Wine Birthmarks</i> | National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)/NIH | 360,580 |

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| | <i>MDC Ctr Disability Resources</i> | | | | |
| | | <i>Rotholz, David</i> | <i>Team for Early Childhood Solutions Data System Management and Compliance Indicator Analysis</i> | SC Department of Health and Human Services | 445,000 |
| | | | <i>Training Programs and Technical Assistance for Staff</i> | SC Department of Disabilities and Special Needs | 605,097 |
| | | | <i>Provision and Training and Certification for Self-Directed Attendant Care for ID/DD and HASCI Waiver Participants</i> | SC Department of Disabilities and Special Needs | 200,000 |
| | <i>Neuropsychiatry</i> | | | | |
| | | <i>Thornhill, Joshua</i> | <i>PDMHSEC Support of the USCSOM Associate Dean for Medical Student Education – Florence</i> | Pee Dee Medical & Health Sciences Education Consortium/SC DHHS | 205,530 |
| | <i>Path, Microbio. & Immunology</i> | | | | |
| | | <i>Wilson, Kiesha</i> | <i>Role of macrophages in CBD mediated attenuation of SEB-induced ARDS (R00)</i> | National Institute of General Medical Sciences (NIGMS)/NIH | 764,874 |
| <i>University of SC Beaufort</i> | | | | | |
| | <i>BFT Natural Sciences</i> | | | | |
| | | <i>Pettay, Daniel</i> | <i>Town of Bluffton Water Quality MOU</i> | Town of Bluffton | 925,000 |
| | <i>BFT Public Hlth & Human Services</i> | | | | |
| | | <i>Dudas, Kimberly</i> | <i>Vision for the Future: A Collaboration between USCB and the Town of Hilton Head Island</i> | Town of Hilton Head Island | 238,985 |
| <i>University of SC Upstate</i> | | | | | |
| | <i>UPS Achieve</i> | | | | |
| | | <i>Oswald-Hensley, Anna</i> | <i>USC Upstate ACHIEVE 2023-24</i> | Upstate Workforce Board/DOL | 523,293 |
| | <i>UPS Human Perform and Hlth</i> | | | | |
| | | <i>Pae, Holly</i> | <i>Project CREATE 2023-24</i> | SC Department of Education (SCDE) | 23,339 |
| | <i>UPS Natural Sciences & Eng</i> | | | | |
| | | <i>Tanner, Scott</i> | <i>Mikayla Spangler: Histochemical Society</i> | The Histochemical Society | 2,000 |