Office of Research
IT and Data Management Office

School of Medicine

Internal Medicine

Al-Hasan, Majdi

Title: Antimicrobial Stewardship Collaborative of South Carolina (ASC-SC): TeleECHO
Sponsor: Prisma Health - Midlands/SCCRPH/SCDHHS
Total Projected: $179,596
Project Years: 1

College of Engineering & Comp.

Mechanical Engineering

Banerjee, Sourav

Title: HiCam: P1.NDE.TDA.01: Non-Destructive Evaluation
Sponsor: National Aeronautics & Space Administration (NASA)
Total Projected: $172,847
Project Years: 1

College of Social Work

Child and Family Studies, Center for

Baughman, Amber

Title: CASA Fostering Futures Initiative Literature Review Proposal
Sponsor: National Court Appointed Special Advocates (CASA) & Guardian ad Litem (GAL)/DOJ
Total Projected: $6,037
Project Years: 1
Darla Moore School of Business

Moore Sch - Div. of Research

Becerril Arreola, Rafael

Title: Exploring disparate impact in online retailing
Sponsor: Washington Center for Equitable Growth
Total Projected: $85,000
Project Years: 3

University Libraries

Univ Libraries - Dean's Office

Boyd, Kate

Title: On The Books in South Carolina
Sponsor: UNC Chapel Hill/Mellon Foundation
Total Projected: $54,869
Project Years: 1

College of Arts and Sciences

Psychology

Brown, Michelle

Title: Beneficial or Fostering Future struggles (B.F.F.s)? Characterizing the Role of Friends in the Developmental Trajectory of Maltreated Adolescent
Sponsor: National Institute of Child Health & Human Development (NICHD)/NIH
Total Projected: $713,152
Project Years: 3
Arnold School of Public Health

Environmental Health Sciences

Cai, Guoshuai

Title: Copy Number Variation and Lung Cancer: Disease Risk and Mechanisms
Sponsor: University of Florida/NHGRI/NIH
Total Projected: $44,223
Project Years: 1

University of SC Lancaster

Lancaster

Catledge, Courtney

Title: CNA to BSN Pathway to Enhance the Healthcare Workforce in Rural South Carolina
Sponsor: SC Center for Rural and Primary Healthcare, UofSC School of Medicine Educational Trust/SCDHHS
Total Projected: $189,934
Project Years: 2

College of Engineering & Comp.

Civil & Environmental Eng.

Chaudhry, M.

Title: Modeling dam and levee breach and the impact of hydraulic structures on channel routing and flood inundation
Sponsor: University of Alabama/NOAA
Total Projected: $729,571
Project Years: 3
College of Arts and Sciences

Chemistry & Biochemistry

Chen, Donna

Title: Design of New Catalysts for the Generation of Clean H2 from Liquid Organic Hydrogen Carriers: Dehydrogenation of Methylcyclohexane on Bimetallic Catalysts

Sponsor: Department of Energy (DOE)

Total Projected: $3,181,725

Project Years: 3

Enrollment Management

TRIO Programs

Counts, Althea

Title: The University of South Carolina Ronald E. McNair Post-baccalaureate Program

Sponsor: U.S. Department of Education (USDE)

Total Projected: $1,391,120

Project Years: 5

University of SC Lancaster

Lancaster

Criswell, Stephen

Title: Native American Studies Center 10th Anniversary Celebration: Traditional Artist Demonstrations

Sponsor: SC Arts Commission

Total Projected: $6,000

Project Years: 1
College of Arts and Sciences

Geography

Cutter, Susan

Title: Society of Woman Geographers Fellowship Agreement for Sarah L. Jackson

Sponsor: Society of Woman Geographers

Total Projected: $12,000

Project Years: 1

College of Arts and Sciences

Geography

Cutter, Susan

Title: Identification of Disadvantaged and Low-Capacity Communities Subject to Wildfire Risks

Sponsor: National Aeronautics and Space Administration (NASA)

Total Projected: $120,000

Project Years: 2

College of Social Work

Social Work - Dean's Office

Doering-white, John

Title: Mapping Systems of Care

Sponsor: Lutheran Immigration and Refugee Service (LIRS)

Total Projected: $105,172

Project Years: 2
College of Engineering & Comp.

Computer Science & Engineering

Farkas, Csilla

Title: Department of Defense Cyber Scholarship Program Recruitment Scholarships Proposal University of South Carolina, Columbia

Sponsor: Department of Defense (DOD)

Total Projected: $117,594
Project Years: 1

Arnold School of Public Health

Communication Sci & Disorders

Friedman, Laura

Title: Neuropsychological Profiles and Risk for Dementia-Related Disease in Mothers of Children with Autism Spectrum Disorder

Sponsor: National Institute on Aging (NIA)/NIH

Total Projected: $214,578
Project Years: 3
College of Engineering & Comp.

**Mechanical Engineering**

Harik, Ramy

**Title:** HiCAM: P1.DFM.TDA.01: Design for Manufacturing  
**Sponsor:** National Aeronautics & Space Administration (NASA)  
**Total Projected:** $113,746  
**Project Years:** 1

College of Engineering & Comp.

**Mechanical Engineering**

Harik, Ramy

**Title:** PI: Theodros Tarekegne: Developing Industrial Internet-of-Things (IIoT) Connectivity Hardware to Enable Factory to Factory (F2F) Networking for Future Manufacturing Applications  
**Sponsor:** College of Charleston/SC Space Grant Consortium/NASA  
**Total Projected:** $16,000  
**Project Years:** 1

Arnold School of Public Health

**Health Services Policy & Mgmt**

Hung, Peiyin

**Title:** Mitigating effects of telehealth uptake on disparities in maternal care access, quality, outcomes, and expenditures during the COVID-19 pandemic  
**Sponsor:** National Institute of Child Health & Human Development (NICHD)/NIH  
**Total Projected:** $3,051,433  
**Project Years:** 5
College of Engineering & Comp.

Chemical Engineering

Jalilvand, Golareh

Title: Fraunhofer: Soteria Cellulose-Based Separator Technology for Rechargeable Lithium Metal Batteries
Sponsor: Soteria Battery Innovation Group
Total Projected: $60,000
Project Years: 1

College of Engineering & Comp.

Chemical Engineering

Jalilvand, Golareh

Title: Fraunhofer: DoC - Cellulose-Based Separator Technology for Rechargeable Lithium Metal Batteries
Sponsor: SC Fraunhofer USA Alliance (SCFUSA) Program - SC Department of Commerce
Total Projected: $60,000
Project Years: 1

University of SC Aiken

AK Sociology

Johnson, Melencia

Title: University of South Carolina Aiken Providing Subject Matter Expertise in Designing a Mock Community to US Department of Energy via Savannah River National Laboratory
Sponsor: Battelle Savannah River Alliance, LLC/SRNL/DOE
Total Projected: $40,733
Project Years: 1
Arnold School of Public Health

Environmental Health Sciences

Kloot, Robin

Title: Using Livestock Integration and Adaptive Multi-paddock Grazing to Enhance Soil Carbon Uptake and Improve Soil Health

Sponsor: Natural Resources Conservation Service (NRCS)/USDA

Total Projected: $199,927

Project Years: 3

School of Medicine

Path, Microbio. & Immunology

Kubinak, Jason

Title: Humoral immunodeficiency disrupt bile acid-induced immune tolerance in the small intestine

Sponsor: National Institute of Allergy & Infectious Diseases (NIAID)/NIH

Total Projected: $246,504

Project Years: 1

College of Arts and Sciences

History

Lekan, Thomas

Title: National Humanities Center “Conservation by Slaughter”: Wildlife Utilization and the African Origins of Sustainable Development

Sponsor: National Humanities Center

Total Projected: $40,000

Project Years: 1
Office of Research
IT and Data Management Office

College of Social Work

Social Work - Dean’s Office

Levkoff, Sue

Title: ADAR Summit Meeting
Sponsor: National Institute on Aging (NIA)/NIH
Total Projected: $99,086
Project Years: 2

College of Engineering & Comp.

Mechanical Engineering

Li, Chen

Title: ISS: Transient Behavior of Flow Condensation and Its Impacts on Condensation Rate
Sponsor: National Science Foundation (NSF)
Total Projected: $400,000
Project Years: 3

Arnold School of Public Health

Health Services Policy & Mgmt

Liang, Chen

Title: Informatics Approach to Identification and Deep Phenotyping of PASC Cases
Sponsor: National Institute of Allergy and Infectious Diseases (NIAID)/NIH
Total Projected: $398,311
Project Years: 2
Arnold School of Public Health

Epidemiology & Biostatistics

Liu, Jihong

Title: Healthy Start Initiative: Eliminating Disparities in Perinatal Health
Sponsor: Prisma Health - Midlands/HRSA
Total Projected: $99,068
Project Years: 1

Arnold School of Public Health

PASOS

Martin, Maria

Title: PASOs Connections for Childhood Development and First Steps
Sponsor: SC First Steps/SCDSS
Total Projected: $147,588
Project Years: 1

Arnold School of Public Health

PASOS

Martin, Maria

Title: Building Health Equity by Improving Vaccine Access in Latino Communities - CDC Foundation Grant
Sponsor: CDC Foundation/CDC/HHS
Total Projected: $100,000
Project Years: 1
College of Pharmacy

**Pharm - Clin Pharm & Outcomes Sciences**

**Maxwell, Whitney**

Title: Pharmacy Advancement in Rural Experiential Development for a Rural health Education And Career enhancenent Track (“PAIRED for REACH”)

Sponsor: SC Center for Rural and Primary Healthcare, UofSC School of Medicine Educational Trust/SCDHHS

Total Projected: $200,000

Project Years: 2

College of Pharmacy

**Drug Discovery & Biomed Sci.**

**McInnes, Campbell**

Title: Determining and targeting mechanisms controlling cancer cell division

Sponsor: University of California, Santa Cruz/NCI/NIH

Total Projected: $309,175

Project Years: 5

College of Engineering & Comp.

**Chemical Engineering**

**Mustain, William**

Title: ONR - Development, Assessment and Simulation of Enabling Fuels for Naval Decarbonization

Sponsor: Office of Naval Research (ONR)/DOD

Total Projected: $3,000,000

Project Years: 3
University of SC Upstate

UPS Human Perform and Hlth

Pae, Holly

Title: Project CREATE 2022-23
Sponsor: SC Department of Education (SCDE)
Total Projected: $28,106
Project Years: 1

College of Pharmacy

Drug Discovery & Biomed Sci.

Porcu, Alessandra

Title: Effects of light exposure on amygdala plasticity during adolescence: implications for anxiety and well-being
Sponsor: National Center for Complementary & Integrative Health (NCCIH)/NIH
Total Projected: $746,632
Project Years: 3

College of Social Work

Child and Family Studies, Center for

Reese, Lenora

Title: Contract Between South Carolina Department of Health and Human Services and University of South Carolina College of Social Work, Center for Child and Family Studies for the Purchase and Provision of Eligibility, Enrollment and Member Services Training
Sponsor: South Carolina Department of Health and Human Services
Total Projected: $1,547,086
Project Years: 2
School of Medicine

MDC Ctr Disability Resources

Rotholz, David

Title: Team for Early Childhood Solutions Data System Management and Compliance Indicator Analysis
Sponsor: SC Department of Health and Human Services/HHS
Total Projected: $445,000
Project Years: 1

School of Medicine

MDC Ctr Disability Resources

Rotholz, David

Title: 2023 SC Assistive Technology Expo
Sponsor: SC Developmental Disabilities Council (SCDDC)/HHS
Total Projected: $5,000
Project Years: 1

College of Education

Educational Studies

Samudre, Mark

Title: Behavioral Alliance of South Carolina
Sponsor: Clemson University/SCDE
Total Projected: $489,737
Project Years: 5
Arnold School of Public Health

Environmental Health Sciences

Scott, Geoffrey

Title: Subaward to CoC - Investigating Trophic Exposure to Marine Microplastics and Plasticizers in a Sentinel Species and the Implications for Food Safety

Sponsor: College of Charleston/NIH
Total Projected: $30,000
Project Years: 3

College of Arts and Sciences

Biological Sciences

Senner, Nathan

Title: Multi-Source Detection and Monitoring of Ephemeral Shorebird Habitats in an Agricultural Prairie System

Sponsor: Science Mission Directorate (SMD)/NASA
Total Projected: $92,564
Project Years: 2

College of Engineering & Comp.

Chemical Engineering

Shimpalee, Sirivatch

Title: Service Proposal: Spinner Simulation Model to Predict the Coating Layers on Stage 2 Nozzles

Sponsor: Advanced Ceramic Coatings, LLC
Total Projected: $57,668
Project Years: 1
College of Arts and Sciences

Psychology

Shinkareva, Svetlana

Title: An fMRI Investigation of Mental Imagery and Visual Correlates of Triggers in Misophonia

Sponsor: The REAM Foundation dba Misophonia Research Fund

Total Projected: $400,000

Project Years: 2

College of Arts and Sciences

Archaeology & Anthropology

Smith, Steven

Title: Archaeological Recovery At Camden Battlefield

Sponsor: South Carolina Battleground Trust, Inc.

Total Projected: $87,646

Project Years: 1

College of Arts and Sciences

Chemistry & Biochemistry

Stefik, Morgan

Title: Understanding the Role of Defects to Accelerate Wadsley-Roth Niobates for Long-Duration Energy Storage

Sponsor: US Department of Energy (DOE)

Total Projected: $850,000

Project Years: 1
College of Arts and Sciences

Psychology

Weist, Mark

Title: Equity-Enhancements to Reduce Disproportionate Unmet Mental Health Need of African American Children

Sponsor: University of Florida/PCORI

Total Projected: $43,348

Project Years: 1

College of Arts and Sciences

Biological Sciences

Welshhans, Kristy

Title: Coordinated control of local translation mediates brain development

Sponsor: Whitehall Foundation, Inc.

Total Projected: $100,000

Project Years: 1

College of Engineering & Comp.

IIT - Engineering

Wu, Dezhi

Title: Testing the feasibility and acceptability of social media and digital therapeutics to decrease vaping behaviors

Sponsor: Washington University/NIDA/NIH

Total Projected: $164,870

Project Years: 3
Office of Research
IT and Data Management Office

College of Pharmacy

**Drug Discovery & Biomed Sci.**

Xu, Peisheng

**Title:** Subcontract with MUSC: Computational model of targeted drug delivery

**Sponsor:** Medical University of South Carolina (MUSC)/NIH

**Total Projected:** $251,785

**Project Years:** 5

College of Engineering & Comp.

**Mechanical Engineering**

Yuan, Lang


**Sponsor:** College of Charleston/SC Space Grant Consortium/NASA EPSCoR

**Total Projected:** $7,500

**Project Years:** 1

College of Engineering & Comp.

**Civil & Environmental Eng.**

Ziehl, Paul

**Title:** HiCam: P1.TPC.TDA.01: Thermoplastic Composites

**Sponsor:** National Aeronautics and Space Administration (NASA)

**Total Projected:** $465,187

**Project Years:** 1