

**Office of VP for Research
IT and Data Management Office**

Academic Support Services

OFFICE OF SUSTAINABILITY

Mcnevin, Jessie

Title: Conservation and Stewardship Series

Sponsor: City of Columbia/Bloomberg Philanthropies

Total Projected: \$5,000

Project Years: 1

Arnold School of Public Health

Center for Community Health Alignment

Smithwick, Julie

Title: CCHA Community Health Worker Institute FY24 DOL Employment & Training Proposal

Sponsor: US Department of Labor

Total Projected: \$112,000

Project Years: 2

Epidemiology & Biostatistics

Liu, Jihong

Title: Community Health Worker Coaching to Reduce Cardiovascular Disease Risk among Women After a Hypertensive Disorder of Pregnancy

Sponsor: USC Educational Foundation/The Duke Endowment

Total Projected: \$653,000

Project Years: 3

Office of VP for Research IT and Data Management Office

Exercise Science

Emerson, Dawn

Title: *(PI - Lucy McCann) Thermoregulatory differences among premenopausal female runners using and not using hormonal contraception*

Sponsor: NATA Research & Education Foundation

Total Projected: \$1,000

Project Years: 1

Hirsch, Katie

Title: *Pistachio Snacking and Metabolic Flexibility*

Sponsor: American Pistachio Growers

Total Projected: \$99,990

Project Years: 1

College of Education

Child Development Res. Center

McDonald, Melissa

Title: *SC Child Care Resource & Referral PDG Grant Year 1*

Sponsor: SC Department of Social Services (DSS)

Total Projected: \$66,500

Project Years: 1

Educational & Developmental Science

Plotner, Tony

Title: *Project Invest: Maximizing Career Opportunities through Industry Recognized Credentials for College Students with Intellectual Disabilities: YEAR 2*

Sponsor: SC Developmental Disabilities Council/HHS

Total Projected: \$53,566

Project Years: 1

**Office of VP for Research
IT and Data Management Office**

Teacher Education

Sanchez, Lenny

Title: *(PI - Anthonia Awhinawhi) Bridging the Gap: Understanding and Supporting the Reading Development of Bilingual Neurodivergent Adolescents*

Sponsor: International Literacy Association

Total Projected: \$5,000

Project Years: 1

College of Pharmacy

Drug Discovery & Biomed Sci.

Sikirzhytski, Vitali

Title: *Zeiss LSM 980 with Airyscan2 for Biological Studies at the University of South Carolina*

Sponsor: Office of the Director, National Institutes of Health (NIH)

Total Projected: \$749,362

Project Years: 1

Darla Moore School of Business

Moore Sch - Div. of Research

Ozturk, Orgul

Title: *Juvenile Incarceration, Long-Run Outcomes, and Family Spillovers*

Sponsor: University of California - Riverside/Arnold Ventures, LLC.

Total Projected: \$120,210

Project Years: 3

**Office of VP for Research
IT and Data Management Office**

Joseph F. Rice School of Law

Law - Dean's Office

Samuels, Joel

Title: International Law Enforcement Academies (ILEA) effectiveness and impact assessment study, subaward from NORC

Sponsor: National Opinion Research Center (NORC)/DOS

Total Projected: \$65,789

Project Years: 1

Koger Center

Koger Center

Magradey, Karen

Title: Koger Center for the Arts 2025-2026 Season

Sponsor: SC Research Foundation (SCRF)/Richland County Government

Total Projected: \$6,000

Project Years: 1

Title: Open Arts Festival: Jazz

Sponsor: SC Research Foundation (SCRF)/Richland County Government

Total Projected: \$8,000

Project Years: 1

McCausland College of Arts and Sciences

Anthropology

Goldberg, Katherine

Title: Acquisition of portable X-Ray Fluorescence Analyzer for USC's Center for Elemental Mass Spectrometry

Sponsor: SC EPSCoR

Total Projected: \$48,309

Project Years: 1

Office of VP for Research IT and Data Management Office

Chemistry & Biochemistry

Peryshkov, Dmitry

Title: *Ambiphilic Phosphines Based on Redox-Active Carborane Clusters*

Sponsor: National Science Foundation (NSF)

Total Projected: \$508,998

Project Years: 3

Truex, Nicholas (Nick)

Title: *CAREER: Synthetic Protein Switches for Expanding the Folding Code*

Sponsor: National Science Foundation (NSF)

Total Projected: \$500,000

Project Years: 5

Geography

Goel, Varun

Title: *BMGF Climate Modeling*

Sponsor: Ifakara Health Institute/Bill and Melinda Gates Foundation

Total Projected: \$118,000

Project Years: 4

History

Kuenzli, Elisabeth

Title: *Sustaining Community Connections Grant*

Sponsor: American Council of Learned Societies (ACLS)

Total Projected: \$2,000

Project Years: 1

**Office of VP for Research
IT and Data Management Office**

Melvin-Koushki, Matthew

Title: MOSAIC: Mapping Occult Sciences Across Islamicate Cultures

Sponsor: European Research Council Executive Agency (ERCEA)

Total Projected: \$2,007,040

Project Years: 6

Mathematics

Ballard, Matthew

Title: Collaborative Research: FRGMS: Multigraded Commutative Algebra, Toric Varieties, and Homological Mirror Symmetry

Sponsor: National Science Foundation (NSF)

Total Projected: \$137,739

Project Years: 3

Dahmen, Wolfgang

Title: Accuracy Controlled Optimization in Physics Informed Deep Learning

Sponsor: National Science Foundation (NSF)

Total Projected: \$249,949

Project Years: 3

Philosophy

Kisner, Matthew

Title: Strengthening Democracy and Trust with South Carolina Environmental Justice Communities

Sponsor: Henry Luce Foundation

Total Projected: \$200,000

Project Years: 2

**Office of VP for Research
IT and Data Management Office**

Physics & Astronomy

Jin, Rongying

Title: Carl Zeiss - Single Crystal Fiber project

Sponsor: Carl Zeiss X-Ray Microscopy, Inc.

Total Projected: \$24,566

Project Years: 1

Nadel-Turonski, Pawel

Title: Experimental studies of the 3D structure of nucleons and nuclei

Sponsor: National Science Foundation (NSF)

Total Projected: \$375,000

Project Years: 3

Psychology

McDaniel, Heather

Title: Comparing Cognitive-Behavioral Therapy versus Mindfulness-Based Therapy for Autistic Adults

Sponsor: University of Virginia/PCORI

Total Projected: \$52,784

Project Years: 2

Roberts, Jane

Title: Onset, Development and Consequences of Autonomic and Sensory Dysfunction in Autism Spectrum Disorder

Sponsor: National Institute of Mental Health (NIMH)/NIH

Total Projected: \$3,584,077

Project Years: 5

**Office of VP for Research
IT and Data Management Office**

School of Earth, Ocean & Env.

Hardy, Dean

Title: Coastal Habitat Restoration on Sapelo Island for Flood Risk Reduction

Sponsor: University of Georgia Research Foundation (UGRF)/National Fish and Wildlife Foundation/NOAA/DOC

Total Projected: \$19,953

Project Years: 2

Molinaroli College of Engineering & Computing

Chemical Engineering

Meekins, Benjamin

Title: JTEKT/Celadyne/SC-Fraunhofer Alliance: Bipolar Plate Manufacturing for Water Electrolyzers - Commerce Portion

Sponsor: SC Department of Commerce - Fraunhofer Program

Total Projected: \$123,750

Project Years: 1

Regalbuto, John

Title: IUCR Phase III at University of South Carolina: The Center for Rational Catalyst Synthesis (CeRCaS) - Lead Site

Sponsor: National Science Foundation (NSF)

Total Projected: \$250,000

Project Years: 5

Ritter, James

Title: Fabrication of a 4-Bed PSA Pilot Plant with Bi-Directional Valves

Sponsor: ColdStream Energy, LLC

Total Projected: \$265,000

Project Years: 1

Office of VP for Research IT and Data Management Office

Shimpalee, Sirivatch

Title: Establishment of a Vertically Integrated Domestic Manufacturing Process for Production of Nonwoven Carbon Papers Substrates Needed for Gas Diffusion Layers

Sponsor: AvCarb Material Solutions/DOE

Total Projected: \$458,000

Project Years: 3

Title: Development of a Single Electrochemical Sensor for Simultaneously Detecting Multiple Groups of Contaminants in Groundwater at the Savannah River Site

Sponsor: University of Nevada, Las Vegas (UNLV)/BSRA, LLC./DOE

Total Projected: \$87,500

Project Years: 1

Computer Science & Engineering

Sheth, Amit

Title: RII Track 2 FEC: Enabling Factory to Factory (F2F) Networking for Future

Sponsor: Clemson University/NSF

Total Projected: \$516,272

Project Years: 1

Electrical Engineering

Altin, Necmi

Title: Cyber Physical Systems Security Laboratory Development

Sponsor: Benedict College/SNRL

Total Projected: \$200,000

Project Years: 1

Office of VP for Research IT and Data Management Office

Sahin, Alphan

Title: CAREER: Over-the-Air Computation - Turning Wireless Networks into Computing Networks

Sponsor: National Science Foundation (NSF)

Total Projected: \$499,949

Project Years: 5

Mechanical Engineering

Downey, Austin

Title: Event Camera paired with Time-series AI to Enable In-Space Melt Pool Monitoring for Metal-based Additive Manufacturing

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

Total Projected: \$20,000

Project Years: 1

Sockalingam, Subramani

Title: A novel approach combining high-speed DIC and EFEM for characterizing high strain rate delamination response of composite materials

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

Total Projected: \$20,000

Project Years: 1

Office of the Provost

USC Military Plan

Terry, Candace

Title: Veteran and Military Center of Excellence - HUD

Sponsor: U.S. Department of Housing and Urban Development (HUD)

Total Projected: \$10,000,000

Project Years: 8

**Office of VP for Research
IT and Data Management Office**

School of Medicine

Family & Preventive Medicine

Humphrey, Mark

Title: Short-term Infrastructure-building Opportunity to Reduce the Community Burden of Hypertension Among Populations Impacted

Sponsor: Prisma Health-Midlands/American College of Preventive Medicine/CDC

Total Projected: \$4,852

Project Years: 1

MDC Ctr Disability Resources

Rotholz, David

Title: IMPACT SC Self-Advocacy Initiatives

Sponsor: SC Development Disabilities Council/HHS

Total Projected: \$41,447

Project Years: 1

Neurology

Sen, Souvik

Title: Telehealth-Enhanced Assessment and Management after stroke - Blood Pressure (TEAMS-BP)

Sponsor: Wake Forest/PCORI

Total Projected: \$446,093

Project Years: 5

Pediatrics

Knight, Lisa

Title: Data Coordinating and Operations Center for the ECHO IDeA States Pediatric Clinical Trials Network D4PD Protocol Chair

Sponsor: University of Arkansas for Medical Sciences(UAMS)/NIH

Total Projected: \$36,303

Project Years: 1

**Office of VP for Research
IT and Data Management Office**

Pharm., Physiology & Neuroscience

Pujhari, Sujit

Title: Sex-Specific Epigenetic Reprogramming of Microglia in Zika Virus Infection

Sponsor: Augusta University/NIH

Total Projected: \$10,000

Project Years: 1

University of SC Aiken

AK Biology & Geology

Hancock, Charles Nathan

Title: Collaborative Research: TR-Tech-PGR / PlantSynBio: Intragenic genome engineering for the next generation of improved plants

Sponsor: National Science Foundation (NSF)

Total Projected: \$451,139

Project Years: 3

AK Library

Ennis, Lisa

Title: Digital Humanities: Bridging the Humanities and STEM Through Research and Innovation

Sponsor: SC EPSCoR

Total Projected: \$32,530

Project Years: 1

AK Mathematical Sciences

Paul, Titan

Title: Acquisition of Differential Scanning Calorimetry (DSC) for Thermal Analysis of Advanced Materials at USC Aiken

Sponsor: SC EPSCoR

Total Projected: \$49,990

Project Years: 1

**Office of VP for Research
IT and Data Management Office**

University of SC Sumter

SMT PALMETTO COLLEGE

Rosdail, Lisa

Title: Student Support Services Program

Sponsor: US Department of Education (USDE)

Total Projected: \$1,742,575

Project Years: 5