

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

Arnold School of Public Health

Center for Community Health Alignment

Smithwick, Julie

Title: Community Health Workers Changing Outcomes in South Carolina

Sponsor: SC Center for Rural and Primary Healthcare/SCDHHS

Total Projected: \$551,040

Project Years: 1

Environmental Health Sciences

Norman, Robert

Title: South Carolina SARS-CoV-2 Wastewater Surveillance

Sponsor: SC Department of Health & Environmental Control (DHEC)/CDC

Total Projected: \$81,600

Project Years: 1

Epidemiology & Biostatistics

Alberg, Anthony

Title: Estimation of the Population Burden of Secondhand Smoke Caused Mortality in South Carolina Adults

Sponsor: SC Department of Health and Environmental Control (DHEC)

Total Projected: \$60,000

Project Years: 1

Office of VP for Research IT and Data Management Office

Health Prom., Educ. & Behavior

Draper, Carrie

Title: Project 5. Local Food Policy Councils

Sponsor: SC Department of Social Services (SCDSS)/USDA

Total Projected: \$153,178

Project Years: 1

Title: Project 6. Strengthening and Expanding Transportation

Sponsor: SC Department of Social Services (SCDSS)/USDA

Total Projected: \$191,510

Project Years: 1

Thrasher, James

Title: Predicting and Understanding the Use of Nicotine Products In a Rapidly Evolving Nicotine Marketplace: The International Nicotine Product, Regulatory Policy, and Market (INPRAM) Study.

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

Total Projected: \$140,173

Project Years: 5

Health Services Policy & Mgmt

Crouch, Elizabeth

Title: Improving STD Prevention and Care Through Partnerships

Sponsor: CDC Foundation/CDC/HHS

Total Projected: \$308,744

Project Years: 1

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

College of Arts and Sciences

Anthropology

DeWitte, Sharon

Title: *Paleoepidemiological and aDNA study of a Neolithic Settlement in Northern China – In Search of the Earliest Plague Epidemic*

Sponsor: Texas A&M University Health Science Center/NSF

Total Projected: \$28,071

Project Years: 4

Archaeology & Anthropology

Spirek, James

Title: *A New Andalucía: Surveying for the Flagship of Lucas Vázquez de Ayllón in South Carolina*

Sponsor: SC Department of Archives and History

Total Projected: \$250,000

Project Years: 2

Geography

Kupfer, John

Title: *Managing fire in longleaf pine ecosystems: Current constraints and the longer-term challenges of landscape transformation and anthropogenic climate change*

Sponsor: NC State University/SECASC/USGS/DOI

Total Projected: \$60,437

Project Years: 1

Office of VP for Research IT and Data Management Office

Psychology

Decker, Scott

Title: *Integrating instructional and diagnostic testing in multi-tiered models to identify children with dyslexia using a neuropsychological approach*

Sponsor: The Woodcock Institute

Total Projected: \$15,000

Project Years: 1

Title: *Predicting at-risk reading outcomes in multi-tiered models using diagnostic cognitive and neuro-cognitive tests*

Sponsor: The Woodcock Institute

Total Projected: \$15,000

Project Years: 2

Will, Elizabeth

Title: *A Longitudinal Outcome Study of the Symptom Progression and Diagnostic Stability of Autism in Children with Down syndrome*

Sponsor: Jerome Lejeune Foundation

Total Projected: \$49,592

Project Years: 2

College of Engineering & Comp.

Chemical Engineering

Lauterbach, Jochen

Title: *Compact Catalytic Membrane Reactor for One-Step High-Efficiency Ammonia Synthesis at Moderate Temperatures and Pressures*

Sponsor: E2H2NANO, LLC/DOE

Total Projected: \$449,855

Project Years: 3

Office of VP for Research IT and Data Management Office

Meekins, Benjamin

Title: Nuvera 5 Samples -- December 2021
Sponsor: Nuvera Fuel Cells, LLC
Total Projected: \$4,250
Project Years: 1

Ritter, James

Title: Evaluation of Adsorbents for Hydrocarbon Adsorption
Sponsor: Coldstream Energy, LLC
Total Projected: \$150,000
Project Years: 1

Sadati, Monirosadat

Title: CAREER: Crystallization of Chiral Liquid Crystals Under Curved Confinement
Sponsor: National Science Foundation (NSF)
Total Projected: \$524,988
Project Years: 5

Shimpalee, Sirivatch

Title: Thermocatalytic Ethylene Production Using Targeted RF Induction Heating TO 0000585742
Sponsor: Battelle Savannah River Alliance, LLC (BSRA)/SRNL/DOE
Total Projected: \$385,000
Project Years: 3

Civil & Environmental Eng.

Ziehl, Paul

Title: Optimized Stringer Design
Sponsor: The Boeing Company
Total Projected: \$124,388
Project Years: 1

Office of VP for Research IT and Data Management Office

Computer Science & Engineering

Bakos, Jason

Title: A Unified Machine Learning Framework for Corrosion Surveillance

Sponsor: Savannah River National Lab/DOE

Total Projected: \$246,815

Project Years: 1

Valafar, Homayoun

Title: The Smartwatch Pilot Project

Sponsor: Pennington Biomedical Research Center/Louisiana State University

Total Projected: \$10,000

Project Years: 1

Zeng, Qiang

Title: CAREER: Towards Secure and Usable IoT Authentication Under Constraints

Sponsor: National Science Foundation (NSF)

Total Projected: \$545,666

Project Years: 5

Mechanical Engineering

Huang, Xinyu

Title: Ply friction measurement technique development

Sponsor: The Boeing Company

Total Projected: \$97,259

Project Years: 1

Knight, Travis

Title: Advanced Nuclear Technologies Research, Development and Planning Project

Sponsor: E4 Carolinas Inc./EDA/DOC

Total Projected: \$24,000

Project Years: 3

Office of VP for Research IT and Data Management Office

College of Nursing

Nursing

Everhart, Kayla

Title: *Evaluation of a blood warming device for packed red blood cell transfusions to decrease hypothermia in very preterm infants*

Sponsor: The Gerber Foundation

Total Projected: \$327,097

Project Years: 3

Jenerette, Coretta

Title: *SC Nursing Initiative to Address COVID-19 Health Disparities & Inequities*

Sponsor: SC Department of Health and Environmental Control(DHEC)/CDC/HHS

Total Projected: \$1,000,000

Project Years: 2

Vick, Lori

Title: *National Black Nurses Association (NBNA) Mini Nurse Academy*

Sponsor: National Black Nurses Association, Inc.

Total Projected: \$10,382

Project Years: 1

College of Pharmacy

Drug Discovery & Biomed Sci.

Sahin, Ozgur

Title: *Overcoming chemoresistance in triple negative breast cancer*

Sponsor: National Cancer Institute (NCI)/NIH

Total Projected: \$1,113,030

Project Years: 5

Office of VP for Research IT and Data Management Office

Pharm - Clin Pharm & Outcomes Sciences

Hastings, Tessa

Title: *Increasing Access to Pediatric Vaccinations through Rural SC Community Pharmacies*

Sponsor: SC Research Foundation (SCRF)/The Fullerton Foundation

Total Projected: \$147,877

Project Years: 3

Hosp., Retail, & Sport Mgmt

Hotel, Restaurant & Tour Mgmt

Harrill, Richard

Title: *Columbia Metropolitan Convention Center Expansion: Standards, Practices, and Projections*

Sponsor: Columbian Metropolitan Convention Center

Total Projected: \$15,000

Project Years: 1

School of Law

Children's Law Center

Morris, Carolyn

Title: *De-incarcerating South Carolina's Status Offenders*

Sponsor: SC Department of Public Safety/DOJ

Total Projected: \$193,939

Project Years: 1

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

School of Medicine

Basic Science Research

McCarthy, Cameron

Title: Autophagy regulates β -hydroxybutyrate synthesis to prevent hypertension-associated premature vascular aging

Sponsor: National Heart, Lung, and Blood Institute (NHLBI)/NIH

Total Projected: \$746,999

Project Years: 3

Webb, Robert (Clinton)

Title: Leucine-Rich Repeat-Containing 8 Proteins (LRRC8s) in Volume Regulated Anion Channels (VRACs) Facilitate Extracellular Superoxide Entry Into Vascular Smooth Muscle Cells

Sponsor: Sexual Medicine Society of North America (SMSNA)

Total Projected: \$5,000

Project Years: 1

Family & Preventive Medicine

Bennett, Kevin

Title: Activation and Expansion of the Libraries and Health Innovations Program

Sponsor: SC Department of Health & Environmental Control (SCDHEC)/CDC

Total Projected: \$500,000

Project Years: 2

Internal Medicine

Yates-Wilson, Beverly

Title: Fresh Food Access

Sponsor: Prisma Health Midlands

Total Projected: \$34,000

Project Years: 1

Office of VP for Research IT and Data Management Office

Neuropsychiatry

Narasimhan, Meera

Title: "Access Improvement/rural Outreach Initiatives in Partnership with SC Office of Rural Health Contract #1599 SC DHHS Services for Purchase and Provision of Rural Outreach Program"

Sponsor: SC Department of Health and Human Services/HHS

Total Projected: \$3,783,000

Project Years: 3

Pediatrics

Cramer, Stuart

Title: COG Study: ANBL1531 Jubilant Draximage, Inc.

Sponsor: The Children's Hospital of Philadelphia, Contracting on behalf of the Children's Oncology Group (COG)/Jubilant Draximage, Inc.

Total Projected: \$2,000

Project Years: 1

School of Medicine (Grvl)

Medicine Greenville

Trilk, Jennifer

Title: Creating Pathways to Advance Lifestyle Medicine Training into Undergraduate Medical Education.

Sponsor: American College of Lifestyle Medicine

Total Projected: \$274,927

Project Years: 2