University of South Carolina — December 2021 New Grant Awards Report **Award** PI's College PI Name **Sponsoring Agency** PI's Department **Award Title** Total Arnold School of Public Health Center for Community Health Alignment C Center for Rural and Primary Community Health Workers Changing Outcomes in South Carolina Healthcare/SCDHHS 551,040 Smithwick, Julie Environmental Health Sciences SC Department of Health & Environmental Control (DHEC)/CDC Norman, Robert South Carolina SARS-CoV-2 Wastewater Surveillance 81.600 Epidemiology & Biostatistics SC Department of Health and Environmental Control (DHEC) 60.000 Alberg, Anthony Estimation of the Population Burden of Secondhand Smoke Caused Mortality in South Carolina Adults Health Prom., Educ. & Behavior SC Department of Social Services Draper, Carrie Project 5. Local Food Policy Councils (SCDSS)/USDA 153,178 SC Department of Social Services SCDSS)/USDA Project 6. Strengthening and Expanding Transportation 191,510 Predicting and Understanding the Use of Nicotine Products In a Rapidly Evolving Nicotine Marketplace: Medical University of South Carolina Thrasher, James The International Nicotine Product, Regulatory Policy, and Market (INPRAM) Study. (MUSC)/NIH 140,173 Health Services Policy & Mgmt Improving STD Prevention and Care Through Partnerships CDC Foundation/CDC/HHS 308,744 Crouch, Elizabeth College of Arts and Sciences Anthropology Paleoepidemiological and aDNA study of a Neolithic Settlement in Northern China – In Search of the Texas A&M University Health Earliest Plaque Epidemic Science Center/NSF 28,071 DeWitte, Sharon Archaeology & Anthropology SC Department of Archives and Spirek, James A New Andalucía: Surveying for the Flagship of Lucas Vázquez de Ayllón in South Carolina 250,000 Geography Managing fire in longleaf pine ecosystems: Current constraints and the longer-term challenges of NC State University/SECASC/USGS/DOI Kupfer, John landscape transformation and anthropogenic climate change 60,437 Psychology Integrating instructional and diagnostic testing in multi-tiered models to identify children with dyslexia Decker, Scott using a neuropsychological approach The Woodcock Institute 15,000 Predicting at-risk reading outcomes in multi-tiered models using diagnostic cognitive and neuro-cognitive tests The Woodcock Institute 15,000 A Longitudinal Outcome Study of the Symptom Progression and Diagnostic Stability of Autism in Will, Elizabeth Children with Down syndrome Jerome Lejeune Foundation 49,592 College of Engineering & Comp

University of South Carolina — December 2021 New Grant Awards Report **Award Sponsoring Agency** PI's College PI's Department PI Name **Award Title** Total Chemical Engineering Compact Catalytic Membrane Reactor for One-Step High-Efficiency Ammonia Synthesis at Moderate Temperatures and Pressures E2H2NANO, LLC/DOE 449,855 Lauterbach, Jochen Nuvera 5 Samples -- December 2021 Nuvera Fuel Cells, LLC 4,250 Meekins, Benjamin Evaluation of Adsorbents for Hydrocarbon Adsorption Coldstream Energy, LLC 150,000 Ritter, James CAREER: Crystallization of Chiral Liquid Crystals Under Curved Confinement National Science Foundation (NSF) 524.988 Sadati, Monirosadat Battelle Savannah River Alliance. Shimpalee, Sirivatch Thermocatalytic Ethylene Production Using Targeted RF Induction Heating TO 0000585742 LLC (BSRA)/SRNL/DOE 385.000 Civil & Environmental Eng. Ziehl, Paul Optimized Stringer Design The Boeing Company 124,388 Computer Science & Engineering Savannah River National Lab/DOE A Unified Machine Learning Framework for Corrosion Surveillance 246,815 Bakos, Jason Pennington Biomedical Research Center/Louisiana State University Valafar, Homayoun The Smartwatch Pilot Project 10,000 Zeng, Qiang CAREER: Towards Secure and Usable IoT Authentication Under Constraints National Science Foundation (NSF) 545,666 Mechanical Engineering The Boeing Company 97,259 Huang, Xinyu Ply friction measurement technique development E4 Carolinas Inc./EDA/DOC Knight, Travis Advanced Nuclear Technologies Research, Development and Planning Project 24,000 College of Nursing Nursing Evaluation of a blood warming device for packed red blood cell transfusions to decrease hypothermia in 327.097 The Gerber Foundation Everhart, Kayla very preterm infants SC Department of Health and Environmental Jenerette, Coretta SC Nursing Initiative to Address COVID-19 Health Disparities & Inequities Control(DHEC)/CDC/HHS \$ 1.000.000 National Black Nurses Association. Vick, Lori National Black Nurses Association (NBNA) Mini Nurse Academy 10.382 College of Pharmacy Drug Discovery & Biomed Sci. \$ 1,113,030 Sahin, Ozgur Overcoming chemoresistance in triple negative breast cancer National Cancer Institute (NCI)/NIH

University of South Carolina — December 2021 New Grant Awards Report **Award** PI's College **Sponsoring Agency** PI Name **Award Title** PI's Department Total Pharm - Clin Pharm & Outcomes Sciences SC Research Foundation Hastings, Tessa Increasing Access to Pediatric Vaccinations through Rural SC Community Pharmacies (SCRF)/The Fullerton Foundation 147,877 Hosp., Retail, & Sport Mgmt Hotel, Restaurant & Tour Mgmt Columbian Metropolitan Convention Harrill. Richard Columbia Metropolitan Convention Center Expansion: Standards, Practices, and Projections Center 15,000 School of Law Children's Law Center Morris, Carolyn De-incarcerating South Carolina's Status Offenders SC Department of Public Safety/DOJ 193.939 School of Medicine Basic Science Research Autophagy regulates β-hydroxybutyrate synthesis to prevent hypertension-associated premature National Heart, Lung, and Blood Institute (NHLBI)/NIH 746,999 McCarthy, Cameron vascular aging Leucine-Rich Repeat-Containing 8 Proteins (LRRC8s) in Volume Regulated Anion Channels Sexual Medicine Society of North Webb, Robert (Clinton) (VRACs)Facilitate Extracellular Superoxide Entry Into Vascular Smooth Muscle Cells America (SMSNA) 5,000 Family & Preventive Medicine SC Department of Health & Environmental Control Bennett, Kevin Activation and Expansion of the Libraries and Health Innovations Program (SCDHEC)/CDC 500,000 Internal Medicine Fresh Food Access Prisma Health Midlands 34.000 Yates-Wilson, Beverly Neuropsychiatry "Access Improvement/rural Outreach Initiatives in Partnership with SC Office of Rural Health Contract SC Department of Health and Human #1599 SC DHHS Services for Purchase and Provision of Rural Outreach Program" Services/HHS \$ 3,783,000 Narasimhan, Meera **Pediatrics** The Children's Hospital of Philadelphia, Contracting on behalf of the Children's Oncology Group COG Study: ANBL1531 Jubilant Draximage, Inc. (COG)/Jubilant Draximage, Inc. Cramer, Stuart 2,000 School of Medicine (GrvI) Medicine Greenville American College of Lifestyle Trilk, Jennifer Creating Pathways to Advance Lifestyle Medicine Training into Undergraduate Medical Education. 274,927