September, 2019 New Awards

#### **Arnold School of Public Health**

#### Communication Sci & Disorders

Fitton, Lisa

Reach Every Reader Assessment 10,939

Sponsor: Chan Zuckerberg Initiative/Florida State University

PS PROJECT: 10009599

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 3

Werfel, Krystal

(PI - Gabriella Reynolds) Effects of Personal FM System on Children with Minimal 1,500

Hearing Loss and Dyslexia

Sponsor: LSVT Global, Inc.

PS PROJECT: 10009502

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

#### **Environmental Health Sciences**

Kloot, Robin

Field Schools and Bus Tours to support 'Advanced Soil Health Training for South Carolina 8,529

Agriculture Professionals' Proposal for SARE PDP

Sponsor: Clemson University/UGARF/USDA

PS PROJECT: 10009503

AWARD\_PROJECT\_AMT. IF AVAILABLE: 16,053

PROJECT YEARS: 2

Continue Educating on the Value of Soil Health Principles, the Economic and 199,716

Environmental Benefits for Every Farm, and of the Far-Reaching Benefits of Soil Health

for Society

Sponsor: Natural Resources Conservation Services/USDA

PS PROJECT: 10009568

AWARD\_PROJECT\_AMT. IF AVAILABLE:

September, 2019 New Awards

Porter, Dwayne

Support of the National Estuarine Research Reserve System Centralized Data Management Office and Enhancements to the System-Wide Monitoring Program 983,700

Sponsor: National Oceanic & Atmospheric Administration (NOAA)/DOC

PS PROJECT: 10009557

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

### **Epidemiology & Biostatistics**

Burch, James

Role of Circadian Factors in Inflammation and Colorectal Adenoma Risk

585,884

Sponsor: National Cancer Institute (NCI)/NIH

PS PROJECT: 10009556

AWARD\_PROJECT\_AMT. IF AVAILABLE: 2,931,745

September, 2019 New Awards

Haalda Busun, Edua & Bahasian	
Health Prom., Educ. & Behavior	
Draper, Carrie Project 1: Statewide SNAP-Ed Priority Indicators Evaluation	59,764
Sponsor: SC Department of Social Services/USDA	00,707
•	
PS PROJECT: 10009600  AWARD_PROJECT_AMT. IF AVAILABLE:	
PROJECT YEARS: 1	
Project 2: Health Clinic Nutrition Support Implementation	41,233
Sponsor: SC Department of Social Services/USDA	
PS PROJECT: 10009602	
AWARD_PROJECT_AMT. IF AVAILABLE:	
PROJECT YEARS: 1	
Project 3: Library Nutrition Support Implementation	30,289
Sponsor: SC Department of Social Services/USDA	
PS PROJECT: 10009603	
AWARD_PROJECT_AMT. IF AVAILABLE:	
PROJECT YEARS: 1	
Project 4: FoodShare SC Maintenance and Sustainability Support	26,505
Sponsor: SC Department of Social Services/USDA	
PS PROJECT: 10009604	
AWARD_PROJECT_AMT. IF AVAILABLE:	
PROJECT YEARS: 1	
Project 5: Food Policy Council Development, Maintenance, and Sustainability	35,628
Sponsor: SC Department of Social Services/USDA	
PS PROJECT: 10009605	
AWARD_PROJECT_AMT. IF AVAILABLE:	
PROJECT YEARS: 1	

September, 2019 New Awards

Li, Xiaoming

Scale It Up: Effectiveness-Implementation Research to Enhance HIV-Related Self-Management among Adolescents and Young Adults - Analytic Core for U19 Application 22,577

**Sponsor:** Florida State University/NIH

PS PROJECT: 10009544

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 5

Macauda, Mark

Project 1: Statewide SNAP-Ed Priority Indicators Evaluation

11,137

Sponsor: SCDSS/USDA

PS PROJECT: 10009601

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

Health Services Policy & Mgmt

Olatosi, Bankole

(Oluwatosin Momodu) Graduate Student: RESEARCH AGREEMENT Between South Carolina Department of Health and Environmental Control And The University of South Carolina

13,750

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

PS PROJECT: 10009565

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

**College of Arts and Sciences** 

Archaeology & Anthropology

Smith, Steven

Updating the National Landmark and National Register Nominations for the Camden Battlefield

64,862

Sponsor: National Park Service (NPS)/DOI

PS PROJECT: 10009579

AWARD\_PROJECT\_AMT. IF AVAILABLE:

September, 2019 New Awards

Spirek, James

Shoals and Shipwrecks: Archaeological Explorations off Port Royal Sound, South Carolina

643.602

94,915

74,041

56,479

Sponsor: National Oceanic & Atmospheric Administration (NOAA)/DOC

PS PROJECT: 10009595

AWARD\_PROJECT\_AMT. IF AVAILABLE: 214,534

PROJECT YEARS: 2

Young, Stacey

Proposal National Register Evaluations for Five Late Discoveries and Curated Collections

Maintenance for the Fort Jackson Cultural Resources Program

Sponsor: CESU: U.S. Army Corps of Engineers/Fort Worth District/DOD

PS PROJECT: 10009610

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 5

**Biological Sciences** 

Twiss, Jeffery

Dynamic Signaling of NRG3-ErbB4 in the Hippocampus Mediates Nicotine Withdrawal

Phenotypes (NIH/NIDA 1R01-DA044311)

Sponsor: University of Kentucky/NIDA/NIH

PS PROJECT: 10009554

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 2

Chemistry & Biochemistry

Garashchuk, Sophya

Data-science enabled investigation of the mechanisms for multiscale ion transport in

functional electrolytes and for the radical generation in crystalline assemblies

Sponsor: US Department of Energy (DOE)

PS PROJECT: 10009546

AWARD\_PROJECT\_AMT. IF AVAILABLE: 749,999

September, 2019 New Awards

Makris, Thomas

Divergence of Carboxylate-Bridged Diiron Enzymes for Natural Product Biosynthesis

285.121

Sponsor: National Institute of General Medical Sciences (NIGMS)/NIH

PS PROJECT: 10009597

AWARD PROJECT AMT. IF AVAILABLE: 1,144,623

PROJECT YEARS: 4

Shimizu, Linda

Data-science enabled investigation of the mechanisms for multiscale ion transport in functional electrolytes and for the radical generation in crystalline assemblies

19,999

Sponsor: US Department of Energy (DOE)

PS PROJECT: 10009547

AWARD\_PROJECT\_AMT. IF AVAILABLE: 749,999

PROJECT YEARS: 3

Tang, Chuanbing

Data-science enabled investigation of the mechanisms for multiscale ion transport in functional electrolytes and for the radical generation in crystalline assemblies

100,000

Sponsor: US Department of Energy (DOE)

PS PROJECT: 10009548

AWARD PROJECT AMT. IF AVAILABLE: 749,999

PROJECT YEARS: 3

Vannucci. Aaron

A New Approach to Catalyst Immobilization Research: Designing Molecular Catalysts for

Heterogeneous Catalysis

25,000

Sponsor: American Chemical Society (ACS), Green Chemistry Institute

PS PROJECT: 10009567

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

Mathematics

Ju, Lili

Efficient and Scalable Time-Stepping Algorithms and Reduced-Order Modeling for Ocean

216,828

System Simulation

Sponsor: US Department of Energy (DOE)

PS PROJECT: 10009543

AWARD\_PROJECT\_AMT. IF AVAILABLE: 375,000

PROJECT YEARS: 3

Page 6

September, 2019 New Awards

Wang, Qi

Data-science enabled investigation of the mechanisms for multiscale ion transport in functional electrolytes and for the radical generation in crystalline assemblies

239,685

Sponsor: US Department of Energy (DOE)

PS PROJECT: 10009550

AWARD\_PROJECT\_AMT. IF AVAILABLE: 749,999

PROJECT YEARS: 3

**Physics & Astronomy** 

Crawford, Thomas

Precision Metrology of Magnetic Recording and Magnetic Nanoparticle Self-Assembly for 44,208
Optical Metasurface Fabrication

Sponsor: Thorlabs, Inc.

PS PROJECT: 10009498

AWARD PROJECT AMT. IF AVAILABLE:

PROJECT YEARS: 1

**Religious Studies** 

Nguyen, Huong

Advancing Alzheimer's Family Caregiving Interventions and Research Capacity in 119,586
Vietnam (sub to UC Davis)

Sponsor: U.C. Davis/NIA/NIH

PS PROJECT: 10009551

AWARD PROJECT AMT. IF AVAILABLE: 584,214

PROJECT YEARS: 5

**College of Education** 

Instruction & Teacher Educ.

Jenkins-Henry, Toby

Septima Clark Youth Exhibition Program 10,000

Sponsor: City of Columbia

PS PROJECT: 10009609

AWARD\_PROJECT\_AMT. IF AVAILABLE:

September, 2019 New Awards

#### **SC School Improvement Council**

Hudson, Tom

SC Education Policy Fellowship Program

10,000

Sponsor: SC-EPFP Advisory Board/SC Association of School Administrators (SCASA)

PS PROJECT: 10009552

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

### College of Engineering & Comp.

#### **Chemical Engineering**

Shimpalee, Sirivatch

Development of a 3-D CFD-based Modeling Platform Capable of Predicting Dynamic

38,000

Behaviors: Shunt Loss and Mass Transport

Sponsor: Korea Institute of Machinery & Materials (KIMM)

PS PROJECT: 10009573

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 4

#### Civil & Environmental Eng.

Caicedo, Juan

SCH: INT: Inferring at Home Gait Parameters of Older Adults using Floor Vibrations

594,816

133,333

Sponsor: National Institute on Aging (NIA)/NIH

PS PROJECT: 10009563

AWARD PROJECT AMT. IF AVAILABLE: 1,179,484

PROJECT YEARS: 4

Goharian, Erfan

Utilizing Drought Forecasts to Develop Decision Calendars for Reoperation of California's

Hydroelectric Reservoir Systems and Managed Aquifer Recharge

Sponsor: National Oceanic & Atmospheric Administration (NOAA)/DOC

PS PROJECT: 10009594

AWARD\_PROJECT\_AMT. IF AVAILABLE:

September, 2019 New Awards

Qian, Yu

Intelligent Crossing Assessment and Traffic Sharing System (i-CATSS)

373.256

Sponsor: Federal Railroad Administration/DOT

PS PROJECT: 10009518

AWARD\_PROJECT\_AMT. IF AVAILABLE: 160,000

PROJECT YEARS: 1

Computer Science & Engineering

Bakos, Jason

SHF:Small:A Unified Approach for Scheduling Computer Vision Dataflow Graphs

249.416

Sponsor: National Science Foundation (NSF)

PS PROJECT: 10009553

AWARD PROJECT AMT. IF AVAILABLE:

PROJECT YEARS: 3

Hu, Jianjun

Data-science enabled investigation of the mechanisms for multiscale ion transport in functional electrolytes and for the radical generation in crystalline assemblies

25,585

204,177

Sponsor: US Department of Energy (DOE)

PS PROJECT: 10009549

AWARD\_PROJECT\_AMT. IF AVAILABLE: 749,999

PROJECT YEARS: 3

Collaborative Research: Integrating Physics and Generative Machine Learning Models for

Inverse Materials Design

Sponsor: National Science Foundation (NSF)

PS PROJECT: 10009560

AWARD PROJECT AMT. IF AVAILABLE: 408,736

PROJECT YEARS: 2

Rekleitis, Ioannis

RII Track-2 FEC: Computational Methods and Autonomous Robotics Systems for

100,000

Modeling and Predicting Harmful Cyanobacterial Blooms

Sponsor: Dartmouth College/NSF

PS PROJECT: 10009499

AWARD\_PROJECT\_AMT. IF AVAILABLE: 824,025

September, 2019 New Awards

Sheth, Amit

eDarkTrends: Monitoring Cryptomarkets to Identify Emerging Trends of Illicit Synthetic

129.404

Opioids Use

Sponsor: Wright State University/NIDA/NIH

PS PROJECT: 10009555

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

IIT - Engineering

Regan, Elizabeth

Planning Grant: Engineering Research Center for Health Care Transformation (ERC-HCT)

277,737

Sponsor: National Science Foundation (NSF)

PS PROJECT: 10009501

AWARD PROJECT AMT. IF AVAILABLE:

PROJECT YEARS: 1

Mechanical Engineering

Banerjee, Sourav

Damage Detection Using Two-Stage Compressive Sensing

37.000

Sponsor: Advent Innovation Limited Company/NASA

PS PROJECT: 10009574

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

Downey, Austin

Real-Time High-rate Decision Making for Functional Prognosis of Complex Mechanical

39.999

Systems

Sponsor: University of Dayton Research Institute/AFOSR/DOD

PS PROJECT: 10009506

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 2

RTML: Small: Collaborative: A programming model and platform architecture for real-time

519,570

machine learning for sub-second temporal systems

Sponsor: National Science Foundation (NSF)

PS PROJECT: 10009561

AWARD\_PROJECT\_AMT. IF AVAILABLE:

September, 2019 New Awards

Huang, Kevin

A New Class of Chemical Potential Driven Plug Flow Membrane Reactors for Combined

227,391

Gas Separation and Direct Natural Gas Conversion

PS PROJECT: 10009497

AWARD\_PROJECT\_AMT. IF AVAILABLE: 346,031

PROJECT YEARS: 3

**Sponsor:** National Science Foundation (NSF)

van Tooren, Michael

Problem Solving AFP Monthly Contract

53,200

Sponsor: Ingersoll Machine Tools, Inc.

PS PROJECT: 10009500

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

Boeing - Thermoplastic Induction Welding Computational Model Development

200,000

Sponsor: The Boeing Company

PS PROJECT: 10009575

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

Wang, Yi

Intelligent Crossing Assessment and Traffic Sharing System (i-CATSS)

66,686

Sponsor: Federal Railroad Administration/DOT

PS PROJECT: 10009519

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

Yu, Lingyu

Remote Laser Based Nondestructive Evaluation for Post Irradiation Examination of ATF

725,000

Cladding

Sponsor: Office of Nuclear Energy/DOE

PS PROJECT: 10009520

AWARD\_PROJECT\_AMT. IF AVAILABLE:

September, 2019 New Awards

### **College of Pharmacy**

#### Drug Discovery & Biomed Sci.

**Buckhaults, Phillip** 

TP53 Synthetic Lethal Screen in Organoid Avatars to Discover Novel Therapeutic Targets 293,000

for Colon Cancer

Sponsor: US Army Medical Research Acquisition Activity (USAMRAA)/DOD

PS PROJECT: 10009593

AWARD\_PROJECT\_AMT. IF AVAILABLE: 586,000

PROJECT YEARS: 2

#### **Darla Moore School of Business**

#### Small Business Dev. Ctr.

Abraham, Michele

SC Dept of Commerce – USC Charleston Award FY19-20 450,000

Sponsor: SC Department of Commerce

PS PROJECT: 10009525

AWARD\_PROJECT\_AMT. IF AVAILABLE: 450,000

PROJECT YEARS: 1

#### **Division of Student Affairs**

#### Student Health

Caldwell, Rebecca

SC VOCA 2019 - Expanding Advocacy at USC 29,871

Sponsor: SC Office of the Attorney General, Department of Crime Victim Assistance

Grants/DOJ

PS PROJECT: 10009576

AWARD\_PROJECT\_AMT. IF AVAILABLE:

September, 2019 New Awards

#### Substance Abuse and Prevention

Hourigan, Aimee

Gamecock Recovery 2019-2020 20,000

48.119

607,312

16,580

Sponsor: SC Dept of Alcohol & Other Drug Abuse Services (SC DAODAS)

PS PROJECT: 10009607

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

### **Law Enforcement & Safety**

#### **Environmental Health & Safety**

Syfert, Tom

USC Union Emergency Notification System

Sponsor: SC Emergency Management Division/FEMA

PS PROJECT: 10009577

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

### **School of Medicine**

#### Cell Biology & Anatomy

Morad, Martin

Functional Implications of RyR2 Mutations in Human Cardiomyocytes

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

PS PROJECT: 10009566

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 5

#### Internal Medicine

Napier, Rebecca

 $INTELLECT2-HF: INvesTigation \ to \ OptimizE \ Hemodynamic \ Management \ of \ HeartMate$   $II^{\intercal} \ Left \ VentricuLar \ Assist \ DEvice \ Patients \ using \ the \ CardioMEMS^{\intercal} \ Pulmonary \ ArTery$ 

Pressure Sensor in Advanced Heart Failure

Sponsor: St. Jude Medical Business Services Inc., an Abbott Company

PS PROJECT: 10009524

AWARD PROJECT AMT. IF AVAILABLE:

September, 2019 New Awards

Neurology

Graham, Cole

COMPLETE: International Acute Ischemic Stroke Registrywith the Penumbra System

7,150

Aspiration including the 3DRevascularization Device

Sponsor: Penumbra

PS PROJECT: 10009598

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 2

Sen, Souvik

Sleep for Stroke Management And Recovery Trial (Sleep SMART)

33,010

Sponsor: Palmetto Health/NINDS/NIH

PS PROJECT: 10009545

AWARD PROJECT AMT. IF AVAILABLE:

PROJECT YEARS: 5

**Orthopaedic Surgery** 

Jackson, J. Benjamin

Teriparatide: Stress FracTure Recovery fOr ReturNinG to Duty (Teriparatide: STRONG) 1,266,360

Sponsor: US Army Medical Research Acquisition Activity (USAMRAA)/DOD

PS PROJECT: 10009606

AWARD\_PROJECT\_AMT. IF AVAILABLE: 2,011,106

PROJECT YEARS: 4

Path, Microbio. & Immunology

Velazquez, Kandy

The Effects of Ojeok-San on Neuro-Immune Interactions on Cancer-Induced Visceral Pain

249,000

Sponsor: National Center for Complementary & Integrative Health (NCCIH)/NIH

PS PROJECT: 10009496

AWARD\_PROJECT\_AMT. IF AVAILABLE: 747,000

September, 2019 New Awards

7,500

#### **Pediatrics**

#### Brown, David

A Long-term, Randomized, Double-blind, Multicenter, Parallel-group, Phase III Study Evaluating the Efficacy and Safety of PT027 Compared to PT007 Administered as Needed in Response to Symptoms in Symptomatic Adults and Children 4 Years of Age or Older with Asthma (MANDALA) - (Protocol #AV003)

Sponsor: Bond Avillion 2 Development LLC

PS PROJECT: 10009564

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

### **University Advancement**

#### Ofc of Economic Engagement

Hardaway, Chad

University of South Carolina - FY 2019 FAST 500,000

Sponsor: US Small Business Administration (SBA)

PS PROJECT: 10009608

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

### **University of SC Beaufort**

#### **BFT Public Safety**

Garbade, Donald

Body-Worn Cameras 17,803

Sponsor: SC Department of Public Safety (SCDPS)

PS PROJECT: 10009578

AWARD\_PROJECT\_AMT. IF AVAILABLE: 17,802

September, 2019 New Awards

### **University of SC Sumter**

#### Sumter

Fenimore, Wanda

Elizabeth and Waties Waring: Paving the Rhetorical Road to Brown v. Board of Education 40,000

Sponsor: American Council of Learned Societies (ACLS)

PS PROJECT: 10009562

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

### **University of SC Upstate**

### Upstate

Pae, Holly

Project CREATE 2019-20 89,239

Sponsor: SC Department of Education/USDE

PS PROJECT: 10009572

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT YEARS: 1

Report Total: \$11,704,991