August, 2018 New Awards

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

#### **Environmental Health Sciences**

Xiao, Shuo

RII Track-4: Using the cryopreservation and microfluidic technologies to engineer bottlenose dolphin ovarian function in vitro for testing marine contaminants' female reproductive toxicity - 11510-FB91

214,400

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 2

**Exercise Science** 

Lane-Cordova, Abbi

Renin Angiotensin Adosterone System Components and Vascular Function in Women after an Adverse Pregnancy Outcome - 11530-KA69

77,000

Sponsor: American Heart Association

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE: 231,000 PROJECT\_YEARS: 3

Health Services Policy & Mgmt

Radcliff, Elizabeth

"Community Support for Young Parents (CSYP-II) Evaluation" - 11500-FL60

187,182

**Sponsor:** Children's Trust of South Carolina with funding from the Federal Office of Adolescent Health/DHHS

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 2

Public Health - Dean's Office

Murday, David

IPA Agreement: Production of online training recordings regarding staffing methodology for VA Office of Nursing Services - 11580-FJ02

21,300

Sponsor: WJB Dorn VA Medical Center

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

August, 2018 New Awards

Workman, Lauren Healthy People Healthy Carolinas Evaluation 2018 - 11580-KA20 21,536 Sponsor: South Carolina Hospital Research and Education Foundation Co-PI: AWARD\_PROJECT\_AMT. IF AVAILABLE: PROJECT\_YEARS: 1 College of Arts and Sciences Archaeology & Anthropology Smith, Steven Unit history of the 122nd Engineer Combat Battalion - 21300-FB13 11,500 Sponsor: Office of the Adjutant General Co-PI: AWARD\_PROJECT\_AMT. IF AVAILABLE: PROJECT\_YEARS: 1 **Biological Sciences** Czako, Mihaly DNA Barcoding of a Ginger Variety 'IC' - 13010-KL01 878 Sponsor: Robert Pollock, Ph. D. Co-PI: AWARD\_PROJECT\_AMT. IF AVAILABLE: PROJECT\_YEARS: 1 Chemistry & Biochemistry Angel, S. NEXT GENERATION RAMAN: DEVELOPING A MONOLITHIC SPATIAL HETERODYNE 63,055 SPECTROMETER FOR MULTI-SCALE CHEMICAL MAPPING IN MARINE ENVIRONMENTS - 13020-FD16 Sponsor: National Science Foundation (NSF) Co-PI: AWARD\_PROJECT\_AMT. IF AVAILABLE:

3

August, 2018 New Awards

Wang, Qian

MRI: Acquisition of a High Resolution, Quadrupole Mass Spectrometer to Enable Research and Education at the Interface of Chemistry and Biology - 13020-FQ08

450,000

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 5

Earth & Ocean Sciences

Benitez-Nelson, Claudia

Collaborative Research: Assessing the relative importance of small vs large particles as sources of nutrition to abyssal communities - 21610-FA21

264,691

8,400

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 3

Lang, Susan

The DEEP Project: DEtecting Extraterrestrial Piezophiles in Ocean World Analogs - 39,818

21610-FA20

Sponsor: Rensselaer Polytechnic Institute/NASA

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE: 88,807
PROJECT\_YEARS: 3

**Mathematics** 

Thorne, Frank

Collaborations in Arithmetic Statistics - 13060-KA15

Sponsor: Simons Foundation

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE: 42,000 PROJECT\_YEARS: 5

McKissick Museum

Przybysz, Jane

FOLKFabulous @theFair 2018 - 34000-KL05 21,421

Sponsor: SC State Fair

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

August, 2018 New Awards

Physics & Astronomy

Ilieva, Yordanka

NSF-BSF: The Study of Nuclear Physics with Intermediate Energy Probes - 13070-FB74

350,000

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE: 1,050,000

PROJECT\_YEARS: 3

**Psychology** 

January, Stacy-Ann

A Comparison of Two Reading Interventions and Initial Evaluation of a Caregiver-Delivered Reading Intervention with ELL Students - 13580-FB62 3,479

Sponsor: University of Texas-Austin/USDE

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS:

Kipp, Colby

Understanding the Effects of Positive Parenting, Neighborhood Supports and Perceived Stress on African American Adolescent Weight-Related Outcomes Using a Community Participatory Approach - 13580-KX00

1

800

Sponsor: Society for Community Research and Action (SCRA)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 1

College of Engineering & Comp.

**Chemical Engineering** 

Diao, Weijian

Project 15: Boron nitride (BN) supported metal and metal oxide catalysts for selective oxidation reactions - 15510-JB37

27,000

Sponsor: CeRCaS/Various Commercial

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

August, 2018 New Awards

Heyden, Andreas

Understanding and Designing Novel Anode Materials for Solid Oxide Fuel Cells - 15510-

80,000

FD13

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS:

Collaborative Research: Understanding and Manipulating the Solvent Microenvironment

4

for Selective, Catalytic Amination of Renewable Oxygenates - 15510-FD15

75,750

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE: 225,000

PROJECT\_YEARS: 3

Lauterbach, Jochen

Project 14:Mechanistic Understanding of Ethane Partial Oxidation over bi functional MoV-

32,000

based catalysts - 15510-JB38

Sponsor: CeRCaS/Various Commercial

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS:

Mustain, William

Additive Manufacturing for Lithium-Ion Batteries - 15510-FD12

30,000

Sponsor: Physical Sciences Incorporated(PSI)/DOD

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 1

GOALI: Collaborative Research: Electrochemical CO2 Separation and Capture through Design of Carbonate-Selective Catalysts and Ionomers - 15510-FD14

275,000

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

August, 2018 New Awards

Regalbuto, John

Project 17: Ultrasmall Bimetallic Catalysts for Selective Hydrogenation of Alkenes -

27,000

15510-JB36

Sponsor: CeRCaS/Various Commercial

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 1

Shimpalee, Sirivatch

Flow Loop and Getter Bed Simulation - 15510-FD16

117,200

Sponsor: Savannah River Nuclear Solutions, LLC

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 2

Civil & Environmental Eng.

Berge, Nicole

Fate of Nitrogen and Effectiveness of Evaporation in Managing Leachate - 15520-KA37

70,185

Sponsor: Environmental Research and Education Foundation (EREF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 2

**Electrical Engineering** 

Mandal, Krishna

Wide bandgap SiC based field effect transistor for radiation hard microelectronics -

19,997

15530-FB89

Sponsor: Radiation Monitoring Devices, Inc/Missile Defense Agency/DOD

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

29,979

PROJECT\_YEARS:

1

August, 2018 New Awards

Mechanical Engineering

Chen, Fanglin

Understanding and Designing Novel Anode Materials for Solid Oxide Fuel Cells - 15540-

80,000

FD84

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE: 640,000 PROJECT\_YEARS: 4

Cost-effective, Thin-film SOFCs for Reliable Power Generation - 15540-FD85

500,000

Sponsor: Office of Fossil Energy (DoE)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 2

Gurdal, Zafer

Solvay TX1100 Dry Preform Production and Inspection using AFP System - 15540-JL13

13,516

Sponsor: Solvay S.A.

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 1

Huang, Kevin

A Transformational Natural Gas Fueled Dynamic SOFC for Data Center In-Rack Power -

500,000

15540-FD86

Sponsor: US Department of Energy (DOE)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 2

**College of Social Work** 

Social Work - Dean's Office

Levkoff, Sue

Social Technology for Eldercare in China Initiative - 15900-KA38

10,000

**Sponsor:** Department of Global Health and Social Medicine, Harvard Medical School/Jiangsu Industrial Technology Research Institute, China

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS:

1

August, 2018 New Awards

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

Moore Sch - Div. of Research

Von Nessen, Joseph

EngenuitySC: 2018 Midlands Regional Competitiveness Report - 21200-KA48

10.000

Sponsor: EngenuitySC

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 1

#### School of Law

Law - Dean's Office

Samuels, Joel

Justice Sector Training, Research, and Coordination Plus (JusTRAC+) Program Project

4,748,969

1 - 61000-FJ02

Sponsor: US Department of State, Bureau of International Narcotics and Law

Enforcement (INL)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 5

#### **School of Medicine**

#### Cell Biology & Anatomy

Lessner, Susan

Investigating the Balance of Passive and Active Mechanics in Vascular Remodeling: An Integrated Experimental and Computational Approach - 18020-FB69

423,761

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 3

### Family & Preventive Medicine

Keisler, Brian

Model State-Supported AHEC Program - USC Subaward - 18130-FJ09

36,976

Sponsor: MUSC/AHEC/HRSA

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

August, 2018 New Awards

v		
Yates-Wilson, Beverly  FoodShare South Carolina; A Nutrition and Lifestyle Opportunity to Improve Health and Prevent Chronic Disease - 18190-KL14		275,000
C Education Foundation/The Duke	Endowment	
AWARD PROJECT AMT. IF AVAILA	ABLE:	
PROJECT_YEARS:	3	
munology		
oR NATIONAL CONFERENCE: Sc daries - 22000-FJ00	ience and Partnerships Across	737,585
ional Science Foundation (NSF)		
,		
AWARD_PROJECT_AMT. IF AVAILA	ABLE:	
PROJECT_YEARS:	1	
baward - 18140-FA28		16,427
metto Health/MUSC/NHLBI/NIH		
AWARD PROJECT AMT. IF AVAILA	ABLE:	
PROJECT_YEARS:	1	
Subaward 8.15.18 - 18140-FM72		3,257
metto HealthSubaward from MUS	CNIH/NHLBI	
	,	
AWARD PROJECT AMT. IF AVAILA	ABLE:	
PROJECT_YEARS:	1	
	Carolina; A Nutrition and Lifestyle Disease - 18190-KL14 C Education Foundation/The Duke  AWARD_PROJECT_AMT. IF AVAILA PROJECT_YEARS:  Immunology  OR NATIONAL CONFERENCE: Scaries - 22000-FJ00  ional Science Foundation (NSF)  AWARD_PROJECT_AMT. IF AVAILA PROJECT_YEARS:  Inducation Health/MUSC/NHLBI/NIH  AWARD_PROJECT_AMT. IF AVAILA PROJECT_YEARS:  Inducation Health/MUSC/NHLBI/NIH  AWARD_PROJECT_AMT. IF AVAILA PROJECT_YEARS:  Inducation Health-Subaward from MUSCAWARD_PROJECT_AMT. IF AVAILA PROJECT_YEARS:	Carolina; A Nutrition and Lifestyle Opportunity to Improve Health and Disease - 18190-KL14 C Education Foundation/The Duke Endowment  AWARD_PROJECT_AMT. IF AVAILABLE: PROJECT_YEARS: 3  Immunology OR NATIONAL CONFERENCE: Science and Partnerships Across daries - 22000-FJ00  ional Science Foundation (NSF)  AWARD_PROJECT_AMT. IF AVAILABLE: PROJECT_YEARS: 1  AWARD_PROJECT_AMT. IF AVAILABLE: AWARD_PROJECT_AMT. IF AVAILABLE:  AWARD_PROJECT_AMT. IF AVAILABLE:

August, 2018 New Awards

### School of Medicine (GrvI)

#### Medicine Greenville

Casanova, Manuel

To Determine the Mincolumnar Morphometry of Autistic, 15q Dup and Various Shank3 Mutant Mouse Models as Compared to Control Tissue - 16000-KA06 20,000

Sponsor: Autism Research Institute

Co-PI:

 ${\sf AWARD\_PROJECT\_AMT}. \ {\sf IF} \ {\sf AVAILABLE}:$ 

PROJECT\_YEARS:

### **University of SC Aiken**

#### Aiken

Shervette, Virginia

Novel Approaches to Age Validation in Data-Poor U.S. Caribbean Reef Fishes - 17110-

299,817

Sponsor: National Marine Fisheries Service (NMFS), National Oceanic and

Atmospheric Administration (NOAA), Department of Commerce

1

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 2

### **University of SC Upstate**

### Upstate

Pilgrim, Melissa

Maternal transfer of radiocesium in Nerodia floridana (Florida Green Watersnakes) - 17880-LA03

734

Sponsor: Greenville Zoo

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS: 1

Timonov, Alex

Stable and Convergent Computational Algorithms for Current Density Imaging - 17880-

59,997

FA18

Sponsor: National Science Foundation (NSF)

Co-PI:

AWARD\_PROJECT\_AMT. IF AVAILABLE:

PROJECT\_YEARS:

3

August, 2018 New Awards

Report Total: \$10,225,631