

***SPONSORED PROGRAMS and RESEARCH***  
***Award Activity - February 2004***

**Education, College of**

*Education Leadership & Policies*

**Stevenson, Kenneth**

\* *Evaluation of the "TECH" Program of the Educational Television Endowment of South Carolina - (15230-FA00)*

**\$29,881**

*Sponsor:* SCETV/NSF

*Educational Psychology*

**Drasgow, Erik**

\* *Establishing the 3 Rs - (15240-FA01)*

**\$42,456**

*Sponsor:* USCRF/University of Illinois/USDE

*Instruction & Teacher Education*

**Stephens, Diane**

\* *Reading First Course - (15250-GJ07)*

**\$5,600**

*Sponsor:* SC Department of Education

**Swick, Kevin**

\* *USC Learn and Serve America CHESP - (15250-FJ06)*

**\$15,000**

*Sponsor:* SC Department of Education/USDE

*Office of Program Evaluation*

**Yap, Ching**

\* *Standards-Based Arts Assessment in South Carolina Music and Visual Arts Assessment for Distinguished Arts Programs - (15290-GL06)*

**\$148,000**

*Sponsor:* SC Department of Education

\* *Study the Effects of Arts Education Reform (Year 05) - (15290-GL05)*

**\$36,000**

*Sponsor:* Winthrop University

**Engineering & Information Technology, College of**

*Chemical Engineering*

**Amiridis, Michael**

\* *Catalytic Performance of Metal Particles on Mesoporous Supports -*

**\$46,750**

*Sponsor:* USCRF/UT-Battelle LLC/DOE

## Chemical Engineering

### Popov, Branko

\* *Development of Novel Process for Plating Nanostructured Ternary Alloys and Composites for Replacement of Cadmium Coatings - (15510-FA48)* **\$59,759**

**Sponsor:** USCRF/Office of Naval Research/DOD

\* *Novel Non-Precious Metal Catalyst for PEMFC: Catalyst Selection Through Molecular Modeling and Durability Studies - (15510-FA44)* **\$125,000**

**Sponsor:** USCRF/US Department of Energy (DOE) - General

### Weidner, John

\* *Development of an Electrochemical Model for Simulating the Performance Behavior of a Prismatic Li/SOC12 Cell - (15510-FA49)* **\$41,035**

**Sponsor:** USCRF/Sandia National Laboratory/DOE

\* *REU Site: Materials Research in Chemical Engineering - (15510-FA50)* **\$85,000**

**Sponsor:** USCRF/National Science Foundation (NSF) - General

**Co-PI:** Van Zee, John

## Civil & Environmental Engineering

### Baus, Ronald

\* *Investigation of Graded Aggregate Base (GAB) Courses - (15520-FA08)* **\$30,498**

**Sponsor:** SC Department of Transportation/DOT

### Imran, Jasim

\* *Investigation of Bridger Abutment Scour - (15520-GA06)* **\$19,170**

**Sponsor:** SC State University/SC DOT

### Ray, Richard

\* *Cyclic Triaxial Testing - (15520-JA11)* **\$4,850**

**Sponsor:** USCRF/Florence & Hutcheson, Inc.

## Computer Science & Engineering

### Cameron, Kirk

\* *CAREER: High-Performance, Power-Aware, Distributed Computing - (15590-FA19)* **\$121,182**

**Sponsor:** USCRF/National Science Foundation (NSF) - General

### Fenner, Stephen

\* *Quantum Complexity, Algorithms, and Primitives - (15590-FA07)* **\$57,427**

**Sponsor:** USCRF/Army Research Office/DOD

### Huhns, Michael

\* *Virtual Soldier Project - (15590-FA20)* **\$56,569**

**Sponsor:** USCRF/UT-Battelle, LLC/DOE

*Computer Science & Engineering*

**Matthews, Manton**

- \* *Biomedical Industry Research Traineeship - (15510-FJ00)* **\$20,000**  
*Sponsor:* SC BRIN/EPSCoR

*Electrical Engineering*

**Khan, Asif**

- \* *AlInGaN MOSDHfet Based RF Circuits - (15530-FA28)* **\$607,099**  
*Sponsor:* USCRF/US Army & Missile Defense Command/DOD

**Sudarshan, Tangali**

- \* *Lapping and Polishing of Silicon Carbide Wafers - (15530-LA00)* **\$9,800**  
*Sponsor:* USCRF/Various Sources

*Engineering & Information Technology, College of*

**White, Ralph**

- \* *SCAMP Phase I - (15580-FA03)* **\$181,500**  
*Sponsor:* South Carolina State/NSF

*Mechanical Engineering*

**Baxter, Sarah**

- \* *Accuracy of Children's Dietary Recalls - (11590-FA03)* **\$193,783**  
*Sponsor:* National Heart, Lung and Blood Institute (NHLBI)/NIH

**Giurgiutiu, Victor**

- \* *Fundamental Studies in Embedded Ultrasonic NDE - (15540-FA39)* **\$54,000**  
*Sponsor:* USCRF/Air Force Office of Scientific Research/DOD

**Li, Xiaodong**

- \* *Synthesis, Structural and Mechanical Characterization of Boron-Based Nanowires - (15540-KA04)* **\$40,000**  
*Sponsor:* USCRF/American Chemical Society

**McNeill, Stephen**

- \* *Characterization and Model Assessment for Impact Damage Evolution in Functionally Graded Composites Using a Novel Nano-Second 3D Deformation Measurement System - (15540-FA25)* **\$71,569**  
*Sponsor:* USCRF/Department of Army/DOD

## Environment, School of the

### *Earth Sciences & Resources Institute*

**Rine, James**

- \* *Environmental Management Support for the MCAS, Beaufort SC -* **\$88,000**  
*Sponsor:* USCRF/CH2MHILL/DOD  
*Co-PI:* Barnes, Phil; Covington, Elzbieta

### *Environment, School of the*

**Barnes, Phil**

- \* *EMS Implementation at Naval Hospital Beaufort - (10060-FA06)* **\$58,635**  
*Sponsor:* USCRF/CH2MHILL/DOD

**Coull, Bruce**

- \* *Distinguished Lecturer in the Environment - (10060-KA00)* **\$126,000**  
*Sponsor:* USCRF/USC Education Foundation/SCANA & Rasmussen Foundation

## Liberal Arts, College of

### *Art*

**Dunn, Philip**

- \* *Professional Development in Technology and Authentic Assessment -* **\$79,244**  
*Sponsor:* Florence School District Three/USDE

### *Geography*

**Hodgson, Michael**

- \* *Spatial Data Needs and the Use of GIS and Remote Sensing in State-Level Hazard-Related Offices - (13540-FA17)* **\$2,006**  
*Sponsor:* John C. Stennis Space Center/NASA

**Jensen, John**

- \* *Program for a NASA Affiliated Research Center Program at the University of South Carolina - (13540-F165)* **\$50,000**  
*Sponsor:* National Aeronautics & Space Administration  
*Co-PI:* Cowen, David

**Power, Helen**

- \* *Climatic Influences on the Spatial and Temporal Variability of Aerosols over North America - (13540-FA24)* **\$52,934**  
*Sponsor:* USCRF/National Science Foundation (NSF) - General  
*Co-PI:* Sheridan, Scott

*Psychology*

**Allen, Gary**

- \* *Higher Education Mathematics Partner (HEMP) - (17110-FL24)* **\$8,000**  
*Sponsor:* SC Department of Education/USDE

**Follingstad, Diane**

- \* *GA: SC Department of Mental Health - (13580-GP14)* **\$7,212**  
*Sponsor:* SC Department of Mental Health

**Prinz, Ronald**

- \* *Risk Reduction via Promotion of Youth Development - (13580-FA15)* **\$934,268**  
*Sponsor:* USCRF/National Institute Mental Health/NIH

**Richards, John**

- \* *Development of Sustained Attention in Infants - (13580-FA04)* **\$256,095**  
*Sponsor:* National Institute of Child Health & Human Develop

- \* *The Development of Sustained Attention in Infants - (13580-KA02)* **\$48,316**  
*Sponsor:* University of Rochester/McDonnell Foundation

**Wandersman, Abraham**

- \* *Evaluation of BRIN/EPSCoR - (13580-GA02)* **\$8,534**  
*Sponsor:* SC Research Authority/CHE

*Public Service & Policy Research, Institute for*

**Steagall, Christine**

- \* *Supplemental Project Proposal US EPA Region 4 (PPG) Grant - (21100-FL12)* **\$27,721**  
*Sponsor:* SC Department of Health & Environmental Control/EPA

*Sociology*

**Billingsley, Andrew**

- \* *Pathways to Successful Reintegration of Ex-Inmates - (10010-FL08)* **\$100,000**  
*Sponsor:* USCRF/Public Private Ventures/Casey Fdn./DOL/DOJ

**Mass Communications & Information Studies, College of**

*Journalism & Mass Communications, School of*

**Jackson, Patricia**

- \* *Burroughs Early Head Start Classroom - (17880-FL36)* **\$57,908**  
*Sponsor:* Spartanburg County First Steps/HHS

*Library & Information Sciences, School of*

**Tu, Feili**

\* *Consumer Health Information Services in American Public Libraries: An Assessment of Current Status and Educational Needs - (15700-KA01)* **\$15,000**

*Sponsor:* USCRF/OCLC Online Computer Library Center

*Co-PI:* **Zimmerman, Nancy**

**Williams, Robert**

\* *GA: Michelin Americas R&D Corp. - (15700-JP00)* **\$3,062**

*Sponsor:* Michelin Americas R&D Corporation

**Medicine, School of**

*Cell & Developmental Biology & Anatomy*

**Goodwin, Richard**

\* *The Role of LEK1 in the Proliferation and Differentiation of Cardiac Myocytes - (18020-KA00)* **\$65,000**

*Sponsor:* American Heart Association

*Internal Medicine*

**Bryan, Charles**

\* *Center for Bioethics - (21100-L102)* **\$55,000**

*Sponsor:* Palmetto Health

\* *Midlands Care Consortium-Ryan White Base Funds - (18190-FL10)* **\$182,824**

*Sponsor:* SC Department of Health & Environmental Control/HHS

**Lin, Tu**

\* *Eli Lilly B7A-MC-MBCW LY333531 Treatment of Symptomatic Peripheral Neuropathy in Patients with Diabetes - (18190-JA10)* **\$8,914**

*Sponsor:* USCRF/Quintiles, Inc.

**Moloo, Jamal**

\* *Ontarget/Transcend - (18190-JA09)* **\$2,550**

*Sponsor:* USCRF/Hamilton Health Sciences/Boehringer Ingelheim

*Medicine, School of - (Dean)*

**Fowler, Stanley**

\* *South Carolina Consortium for Cardiovascular Disease and Stroke -* **\$17,500**

*Sponsor:* Palmetto Health Allilance

*Pediatrics/Developmental Disabilities, Center for*

**McRedmond, Kevin**

\* *An Open-Label, Single Arm, Multi-Center, Safety, Pharmacokinetic and Pharmacodynamic, Phase II Study of Anagrelide Hydrochloride in Pediatric and Adult Subjects with... - (18140-JA07)*

**\$5,022**

*Sponsor:* USCRF/Shire Pharmaceutical Development, Inc.

*Pharmacology, Physiology & Neuroscience*

**Fisher, Janet**

\* *Functional Effects of Mutations in the GABA<sub>A</sub> Receptor Linked to Inherited Epilepsy - (18080-KA07)*

**\$40,000**

*Sponsor:* Epilepsy Foundation

**Walsh, Kenneth**

\* *Hormonal and Mechanical Regulation of Cardiac Voltage-Gated K<sup>+</sup> Channels - (18080-KA01)*

**\$71,500**

*Sponsor:* American Heart Association

**Pharmacy, College of**

*Basic Pharmaceutical Sciences*

**Berger, Sondra**

\* *The Sphingosine Kinase 1/Sphingosine-1-phosphate Pathway as a New Target for Colon Cancer Chemoprevention - (11110-FA11)*

**\$6,892**

*Sponsor:* Medical University of SC/Geo-Centers/DOD

**Smith, Eric**

\* *Carcinogen Penetration Enhancement in Respiratory Tract Tissue -*

**\$46,793**

*Sponsor:* Medical University of SC/Geo-Centers/DOD

**Zhu, Bao**

\* *Selective Induction of Estrogen Conjugative Metabolism - (11110-FA06)*

**\$207,338**

*Sponsor:* USCRF/National Cancer Institute(NCI)/NIH

*Pharmacy - (General)*

**Wyatt, Michael**

\* *Effect of Dietary Components on DNA Repair - (11110-FA07)*

**\$70,521**

*Sponsor:* USCRF/National Cancer Institute(NCI)/NIH

*Pharmacy Practice*

**Phillips, Cynthia**

- \* *Educational Enhancement of University of South Carolina Doctor of Pharmacy Candidates - (11150-GJ03)* **\$10,300**  
**Sponsor:** SC Area Health Education Centers

**Public Health, Arnold School of**

*Environmental Health Sciences*

**Decho, Alan**

- \* *Microbial Observatories: Anhydrophilic, Halotolerant Microbial Mats of San Salvador Island, Bahamas - (11510-FA34)* **\$80,558**  
**Sponsor:** USCRF/University of North Carolina/NSF

**Feigley, Charles**

- \* *South Carolina Center for Public Health Preparedness - (11500-FJ06)* **\$10,000**  
**Sponsor:** USCRF/Association of Schools of Public Health/CDC  
**Co-PI: Richter, Donna**

*Epidemiology & Biostatistics*

**Mayer-Davis, Elizabeth**

- \* *Defining Diabetes in Youth: South Carolina Site - (11520-FA29)* **\$318,645**  
**Sponsor:** USCRF/University of Colorado/NIH

- \* *Diabetes Prevention Program Outcomes Study (DPPOS) - (11520-FA31)* **\$19,107**  
**Sponsor:** USCRF/The George Washington University/NIH

- \* *Revenue Account for 11520-FA16 and the Continuation Account 11520-FA26. (LOOK AHEAD) - (11520-LA02)* **\$6,562**  
**Sponsor:** USCRF/Wake Forest University/NIH

**Weinrich, Sally**

- \* *Collaborative Recruitment Centers for African American Hereditary Prostate Cancer - (11520-F101)* **\$92,883**  
**Sponsor:** Wayne State University/Howard University/NIH

**Xie, Da-wen**

- \* *Research Support - (18300-KA12)* **\$35,000**  
**Sponsor:** Palmetto Health Foundation/SC Cancer Center



*Exercise Science*

**Carson, James**

- \* *Aging Skeletal Muscle's Decreased REgenerative Capacity: Inflammation's Critical Role - (11530-FA17)* **\$25,000**  
*Sponsor:* Benedict College/NIH

**Pate, Russell**

- \* *Physical Activity in Preschool Children - Supplement - (11530-FA18)* **\$193,257**  
*Sponsor:* USCRF/National Institute of Child Health & Human Development (NICHD)/NIH  
*Co-PI:* **Williams, Harriett G.**
- \* *Promotion of Physical Activity in High School Girls - (11530-FA12)* **\$20,000**  
*Sponsor:* USCRF/National Heart, Lung & Blood Institute (NHLBI)/NIH

*Health Promotion, Education & Behavior*

**Richter, Donna**

- \* *African Americans and HIV: Knowing Partner Risk - (11540-FA24)* **\$50,000**  
*Sponsor:* USCRF/Association of Schools of Public Health/CDC
- \* *Community Disaster Response Services Training Initiative (Collaborative Team Model Budget) - (11540-FJ12)* **\$44,016**  
*Sponsor:* SC Department Mental Health/SC DHEC/HRSA  
*Co-PI:* **Reece, Linda**
- \* *Community Disaster Response Services Training Initiative (Training Budget) - (11540-FJ11)* **\$55,626**  
*Sponsor:* SC Department of Mental Health/SC DHEC/HRSA  
*Co-PI:* **Reece, Linda**
- \* *SC Public Health Consortium - (11540-FJ13)* **\$100,000**  
*Sponsor:* USCRF/Association of Schools of Public Health/CDC

**Teas, H. Jane**

- \* *Dietary Algae as a Modulator of Breast Cancer Matastases: An Exploratory Grant to Document Proof of Principle - (11540-FA23)* **\$41,259**  
*Sponsor:* Medical University of South Carolina/Geo-Centers/DOD

**Watkins, Kenneth**

- \* *GA: Companion Healthcare - (11540-JP25)* **\$4,784**  
*Sponsor:* Companion Health Care

*Health Services & Policy Research, Center for*

**Murday, David**

- \* *Planning and Facilitation Assistance to the DHEC Cancer Program -* **\$5,200**  
*Sponsor:* SC Department of Health & Environmental Control/CDC

*Health Services Policy & Management*

**Laditka, Sarah**

- \* *GA: Lexington Medical Center - (11550-LP46)* **\$3,950**  
*Sponsor:* Palmetto Health Richland
  
- \* *GA: Providence Hospital - Sisters of Charity - (11550-LP47)* **\$4,000**  
*Sponsor:* Providence Hospital
  
- \* *GA: SC Campaign to Prevent Teen Pregnancy - (11550-KP11)* **\$1,890**  
*Sponsor:* SC Campaign to Prevent Teen Pregnancy

*Prevention Research Center*

**Hooker, Steven**

- \* *Glenn Springs TRail Impact Assessment, Phase II - (11570-KA08)* **\$8,300**  
*Sponsor:* USCRF/Mary Black Foundation  
*Co-PI:* **Griffin, Sarah**

**Science and Mathematics, College of**

*Baruch Institute*

**White, David**

- \* *CICEET: Advanced Laser Fluorescence (ALF) Technology for Estuarine and Coastal Environmental Biomonitoring - (21600-FA60)* **\$10,000**  
*Sponsor:* USCRF/Hampton University/NOAA
  
- \* *Stormwater Monitoring - Supplement to USES - (21600-FA61)* **\$20,000**  
*Sponsor:* SC Department of Health & Environment Control/OCRM/NOAA

*Biological Sciences*

**Quattro, Joseph**

- \* *Assessing Hybridization Among Native and Introduced Black Bass Species in the Upper Savannah River Reservoirs, S.C. - (21600-GA04)* **\$40,000**  
*Sponsor:* SC Department of Natural Resources

**Raguso, Robert**

- \* *The Pre-Invention of Flowers by Splachnaceae Mosses: Odor-Driven Shifts in Spore Dispersal by Flies - (13010-FA62)* **\$5,000**  
*Sponsor:* BRIN/EPSCoR/NIH

**Vance, Vicki**

- \* *Regulation of Post-Transcriptional Gene Silencing - (13010-FA09)* **\$209,525**  
*Sponsor:* National Institute of General Medical Sciences/NI  
*Co-PI:* **Bowman, Lewis**

## *Biological Sciences*

### **Vogt, Richard**

\* *Expression of Olfactory SNMPs in Drosophila Melanogaster and Manduca Sexta* - (13010-FA37) **\$55,313**

**Sponsor:** USCRF/National Science Foundation (NSF) - General

## *Chemistry & Biochemistry*

### **Bryson, Thomas**

\* *A.P. Sloan Foundation Recruiting Support for Chemistry and Biochemistry* - (13020-KJ00) **\$2,000**

**Sponsor:** Alfred P. Sloan Foundation

### **Dawson, John**

\* *Editing: Journal of Inorganic Biochemistry* - (13020-J400) **\$5,668**

**Sponsor:** Elsevier Science, Inc.

### **Shimizu, Ken**

\* *New Strategies for Improved Imprinted Polymers* - (13020-FA05) **\$225,781**

**Sponsor:** National Institute of General Medical Science/NIH

## *Geological Sciences*

### **Kellogg, James**

\* *Editorship of Elsevier Science Ltd: Journal of South American Earth Sciences* - (13040-J400) **\$5,200**

**Sponsor:** Elsevier Science Ltd.

### **Williams, Douglas**

\* *The Arctic and Global Change: Informal Science Education Opportunities* - (12010-FA01) **\$72,513**

**Sponsor:** USCRF/National Science Foundation (NSF) - General

## *Marine Science*

### **Kjerfve, Bjorn**

\* *Oceanic Simulation Modeling along the Meso-American Barrier Reef in the Western Caribbean and for the Entire Caribbean Sea to Explore Reef Connectivity* - (13040-FA68) **\$15,000**

**Sponsor:** USCRF/The Nature Conservance/USAID

\* *Oceanic Simulation Modeling along the Meso-American Barrier Reef in the West Caribbean and for the Entire Caribbean Sea to Explore Reef Connectivity* - (13040-JA02) **\$35,000**

**Sponsor:** USCRF/Summit Foundation

## Mathematics

### DeVore, Ronald

\* *Analysis and Numerical Algorithms for Data Processing and Fast Solution of PDEs - (13060-FA07)* **\$19,751**

*Sponsor:* USCRF/Office of Naval Research/DOD

\* *Mathematical Analysis for Data and Image Processing - (13060-FA03)* **\$70,000**

*Sponsor:* USCRF/Army Research Office/DOD

### Miller, Matthew

\* *Gang Database Development and Field Test - (12200-FA05)* **\$27,720**

*Sponsor:* SC Department of Public Safety/DOJ

## Physics & Astronomy

### Blanpied, Gary

\* *Pilot Course for Physical Science Companion - (13070-GJ00)* **\$11,664**

*Sponsor:* SC Department of Education

### Djalali, Chaden

\* *Implementation of the Polarized HD Target at the Thomas Jefferson National Accelerator Facility - (13070-FA12)* **\$150,449**

*Sponsor:* USCRF/US Department of Energy (DOE) - General

## Senior and Regional Campuses

### USC Aiken

#### Hanlin, Hugh

\* *Response of Herpetofauna to Carolina Bay Restoration - (17110-FA15)* **\$36,108**

*Sponsor:* USCRF/Forest Service-Savannah River/USDA

### USC Salkehatchie

#### Rice, Anne

\* *Lowcountry Leadership - (17660-KL11)* **\$4,000**

*Sponsor:* The Community Foundation, Inc.

### USC Spartanburg

#### Davis, Thomas

\* *Removal of Rubber from Vent Holes in Tire Molds - (15510-JA34)* **\$15,000**

*Sponsor:* USCRF/Michelin Americas R & D Corp.

*USC Spartanburg*

**Ferrell, Jim**

- \* *UCG Nursing Program - (17880-KJ02)* **\$200,000**  
*Sponsor:* Carolina Piedmont Foundation

**Matthews, Lou**

- \* *Teacher Cadet Grant - (17880-G206)* **\$3,020**  
*Sponsor:* SC Center for Teacher Recruitment

**Stockwell, John**

- \* *South Carolina Quality Forum - (17880-JL00)* **\$13,810**  
*Sponsor:* Carolina Piedmont Foundation/Various Sponsors

- \* *Watershed Ecology Center Education Program - (17880-KL00)* **\$2,600**  
*Sponsor:* Carolina Piedmont Foundation

**Social Work, College of**

*Families in Society, Institute for*

**Harris, Muriel**

- \* *HIV Needs Assessment of Primary Population: A Secondary Analysis - (10010-FL09)* **\$21,020**  
*Sponsor:* SC Department of Health & Environmental Control/HH

**Hess, Peg**

- \* *Children's Rights Services - (15900-KL07)* **\$16,000**  
*Sponsor:* USCRF/Children's Rights

*Social Work, College of*

**Andrews, Arlene**

- \* *Technical Assistance: Mental Health Services to Children, Adolescents and Their Families - System of Care Development - (10010-GL06)* **\$26,796**  
*Sponsor:* SC Department of Mental Health

**Grand Total**

**\$7,259,892**