## 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)**
  - **Sponsor:** SCETV/NSF
  - **Amount:** $29,881

#### Educational Psychology

**Drasgow, Erik**
- **Establishing the 3 Rs - (15240-FA01)**
  - **Sponsor:** USCRF/University of Illinois/USDE
  - **Amount:** $42,456

#### Instruction & Teacher Education

**Stephens, Diane**
- **Reading First Course - (15250-GJ07)**
  - **Sponsor:** SC Department of Education
  - **Amount:** $5,600

**Swick, Kevin**
- **USC Learn and Serve America CHESP - (15250-FJ06)**
  - **Sponsor:** SC Department of Education/USDE
  - **Amount:** $15,000

#### Office of Program Evaluation

**Yap, Ching**
- **Standards-Based Arts Assessment in South Carolina Music and Visual Arts Assessment for Distinguished Arts Programs - (15290-GL06)**
  - **Sponsor:** SC Department of Education
  - **Amount:** $148,000

- **Study the Effects of Arts Education Reform (Year 05) - (15290-GL05)**
  - **Sponsor:** Winthrop University
  - **Amount:** $36,000

### Engineering & Information Technology, College of

#### Chemical Engineering

**Amiridis, Michael**
- **Catalytic Performance of Metal Particles on Mesoporous Supports -**
  - **Sponsor:** USCRF/UT-Battelle LLC/DOE
  - **Amount:** $46,750
Chemical Engineering

**Popov, Branko**

* Development of Novel Process for Plating Nanostructured Ternary Alloys and Composites for Replacement of Cadmium Coatings - (15510-FA48)  
  **Sponsor:** USCRF/Office of Naval Research/DOD  
  **Amount:** $59,759

* Novel Non-Precious Metal Catalyst for PEMFC: Catalyst Selection Through Molecular Modeling and Durability Studies - (15510-FA44)  
  **Sponsor:** USCRF/US Department of Energy (DOE) - General  
  **Amount:** $125,000

**Weidner, John**

* Development of an Electrochemical Model for Simulating the Performance Behavior of a Prismatic Li/SOC12 Cell - (15510-FA49)  
  **Sponsor:** USCRF/Sandia National Laboratory/DOE  
  **Amount:** $41,035

* REU Site: Materials Research in Chemical Engineering - (15510-FA50)  
  **Sponsor:** USCRF/National Science Foundation (NSF) - General  
  **Co-PI:** Van Zee, John  
  **Amount:** $85,000

Civil & Environmental Engineering

**Baus, Ronald**

* Investigation of Graded Aggregate Base (GAB) Courses - (15520-FA08)  
  **Sponsor:** SC Department of Transportation/DOT  
  **Amount:** $30,498

**Imran, Jasim**

* Investigation of Bridger Abutment Scour - (15520-GA06)  
  **Sponsor:** SC State University/SC DOT  
  **Amount:** $19,170

**Ray, Richard**

* Cyclic Triaxial Testing - (15520-JA11)  
  **Sponsor:** USCRF/Florence & Hutcheson, Inc.  
  **Amount:** $4,850

Computer Science & Engineering

**Cameron, Kirk**

* CAREER: High-Performance, Power-Aware, Distributed Computing - (15590-FA19)  
  **Sponsor:** USCRF/National Science Foundation (NSF) - General  
  **Amount:** $121,182

**Fenner, Stephen**

* Quantum Complexity, Algorithms, and Primitives - (15590-FA07)  
  **Sponsor:** USCRF/Army Research Office/DOD  
  **Amount:** $57,427

**Huhns, Michael**

* Virtual Soldier Project - (15590-FA20)  
  **Sponsor:** USCRF/UT-Battelle, LLC/DOE  
  **Amount:** $56,569
Computer Science & Engineering
Matthews, Manton
* Biomedical Industry Research Traineeship - (15510-FJ00)  
  Sponsor: SC BRIN/EPSCoR  
  $20,000

Electrical Engineering
Khan, Asif
* AlInGaN MOSDHFET Based RF Circuits - (15530-FA28)  
  Sponsor: USCRF/US Army & Missile Defense Command/DOD  
  $607,099

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

Engineering & Information Technology, College of
White, Ralph
* SCAMP Phase I - (15580-FA03)  
  Sponsor: South Carolina State/NSF  
  $181,500

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

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

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

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)  
  Sponsor: USCRF/Department of Army/DOD  
  $71,569
**Environment, School of the Earth Sciences & Resources Institute**

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

**Environment, School of the**

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

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

**Liberal Arts, College of**

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

- **Geography**
  - **Hodgson, Michael**
      Sponsor: John C. Stennis Space Center/NASA
    - Funding: $2,006

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

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

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)
   Sponsor: USCRF/OCLC Online Computer Library Center
   Co-PI: Zimmerman, Nancy

Williams, Robert
* GA: Michelin Americas R&D Corp. - (15700-JP00)
   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)
   Sponsor: American Heart Association

Internal Medicine
Bryan, Charles
* Center for Bioethics - (21100-L102)
   Sponsor: Palmetto Health
* Midlands Care Consortium-Ryan White Base Funds - (18190-FL10)
   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)
   Sponsor: USCRF/Quintiles, Inc.

Moloo, Jamal
* Ontarget/Transcend - (18190-JA09)
   Sponsor: USCRF/Hamilton Health Sciences/Boehringer Ingleheim

Medicine, School of - (Dean)
Fowler, Stanley
* South Carolina Consortium for Cardiovascular Disease and Stroke - (18190-JA10)
   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)
    **Sponsor:** USCRF/Shire Pharmaceutical Development, Inc.

Pharmacology, Physiology & Neuroscience
Fisher, Janet
 * Functional Effects of Mutations in the GABAa Receptor Linkedto Inherited Epilepsy - (18080-KA07)
    **Sponsor:** Epilepsy Foundation

Walsh, Kenneth
 * Hormonal and Mechanical Regulation of Cardiac Voltage-Gated K+Channels - (18080-KA01)
    **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)
    **Sponsor:** Medical University of SC/Geo-Centers/DOD

Smith, Eric
 * Carcinogen Penetration Enhancement in Respiratory Tract Tissue -
    **Sponsor:** Medical University of SC/Geo-Centers/DOD

Zhu, Bao
 * Selective Induction of Estrogen Conjugative Metabolism - (11110-FA06)
    **Sponsor:** USCRF/National Cancer Institute(NCI)/NIH

Pharmacy - (General)
Wyatt, Michael
 * Effect of Dietary Components on DNA Repair - (11110-FA07)
    **Sponsor:** USCRF/National Cancer Institute(NCI)/NIH
**Pharmacy Practice**

**Phillips, Cynthia**

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

**Public Health, Arnold School of**

**Environmental Health Sciences**

**Decho, Alan**

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

**Feigley, Charles**

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

**Epidemiology & Biostatistics**

**Mayer-Davis, Elizabeth**

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

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

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

**Weinrich, Sally**

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

**Xie, Da-wen**

* Research Support - (18300-KA12)  
  **Sponsor:** Palmetto Health Foundation/SC Cancer Center  
  **Amount:** $35,000
Exercise Science
Carson, James
* Aging Skeletal Muscle’s Decreased REgenerative Capacity: Inflammation’s Critical Role - (11530-FA17)  
  Sponsor: Benedict College/NIH  
  $25,000

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

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

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

Watkins, Kenneth
  Sponsor: Companion Health Care  
  $4,784

Health Services & Policy Research, Center for
Murday, David
* Planning and Facilitation Assistance to the DHEC Cancer Program - (11540-FA24)  
  Sponsor: SC Department of Health & Environmental Control/CDC  
  $5,200
Health Services Policy & Management

Laditka, Sarah

* GA: Lexington Medical Center - (11550-LP46)
  * Sponsor: Palmetto Health Richland
  * $3,950

* GA: Providence Hospital - Sisters of Charity - (11550-LP47)
  * Sponsor: Providence Hospital
  * $4,000

* GA: SC Campaign to Prevent Teen Pregnancy - (11550-KP11)
  * Sponsor: SC Campaign to Prevent Teen Pregnancy
  * $1,890

Prevention Research Center

Hooker, Steven

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

Science and Mathematics, College of

Baruch Institute

White, David

* CICEET: Advanced Laser Fluorescence (ALF) Technology for Estuarine and Coastal Environmental Biomonitoring - (21600-FA60)
  * Sponsor: USCRF/Hampton University/NOAA
  * $10,000

* Stormwater Monitoring - Suppplement to USES - (21600-FA61)
  * Sponsor: SC Department of Health & Environment Control/OCRM/NOAA
  * $20,000

Biological Sciences

Quattro, Joseph

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

Raguso, Robert

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

Vance, Vicki

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

Vogt, Richard
* Expression of Olfactory SNMPs in Drosophila Melanogaster and Manduca Sexta - (13010-FA37)
  Sponsor: USCRF/National Science Foundation (NSF) - General
  $55,313

Chemistry & Biochemistry

Bryson, Thomas
* A.P. Sloan Foundation Recruiting Support for Chemistry and Biochemistry - (13020-KJ00)
  Sponsor: Alfred P. Sloan Foundation
  $2,000

Dawson, John
* Editing: Journal of Inorganic Biochemistry - (13020-J400)
  Sponsor: Elsevier Science, Inc.
  $5,668

Shimizu, Ken
* New Strategies for Improved Imprinted Polymers - (13020-FA05)
  Sponsor: National Institute of General Medical Science/NIH
  $225,781

Geological Sciences

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

Williams, Douglas
* The Artic and Global Change: Informal Science Education Opportunities - (12010-FA01)
  Sponsor: USCRF/National Science Foundation (NSF) - General
  $72,513

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)
  Sponsor: USCRF/The Nature Conservance/USAID
  $15,000

* 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)
  Sponsor: USCRF/Summit Foundation
  $35,000
### Mathematics

**DeVore, Ronald**
- *Analysis and Numerical Algorithms for Data Processing and Fast Solution of PDEs - (13060-FA07)*
  - **Sponsor:** USCRF/Office of Naval Research/DOD
  - **Amount:** $19,751

- *Mathematical Analysis for Data and Image Processing - (13060-FA03)*
  - **Sponsor:** USCRF/Army Research Office/DOD
  - **Amount:** $70,000

**Miller, Matthew**
- *Gang Database Development and Field Test - (12200-FA05)*
  - **Sponsor:** SC Department of Public Safety/DOJ
  - **Amount:** $27,720

### Physics & Astronomy

**Blanpied, Gary**
- *Pilot Course for Physical Science Companion - (13070-GJ00)*
  - **Sponsor:** SC Department of Education
  - **Amount:** $11,664

**Djalali, Chaden**
- *Implementation of the Polarized HD Target at the Thomas Jefferson National Accelerator Facility - (13070-FA12)*
  - **Sponsor:** USCRF/US Department of Energy (DOE) - General
  - **Amount:** $150,449

### Senior and Regional Campuses

**USC Aiken**

**Hanlin, Hugh**
- *Response of Herpetofauna to Carolina Bay Restoration - (17110-FA15)*
  - **Sponsor:** USCRF/Forest Service-Savannah River/USDA
  - **Amount:** $36,108

**USC Salkehatchie**

**Rice, Anne**
- *Lowcountry Leadership - (17660-KL11)*
  - **Sponsor:** The Community Foundation, Inc.
  - **Amount:** $4,000

**USC Spartanburg**

**Davis, Thomas**
- *Removal of Rubber from Vent Holes in Tire Molds - (15510-JA34)*
  - **Sponsor:** USCRF/Michelin Americas R & D Corp.
  - **Amount:** $15,000
USC Spartanburg
Ferrell, Jim
* UCG Nursing Program - (17880-KJ02)
  Sponsor: Carolina Piedmont Foundation  $200,000

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

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

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

Social Work, College of

Families in Society, Institute for
Harris, Muriel
* HIV Needs Assessment of Primary Population: A Secondary Analysis - (10010-FL09)
  Sponsor: SC Department of Health & Environmental Control/HH  $21,020

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

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

Grand Total  $7,259,892