

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

**Business, Moore School of**

*Business Administration - Division of Research*

**Schunk, Donald**

\* *Economic Impact of the SC Education Lottery - (21200-JA09)*

**\$28,206**

*Sponsor:* USCRF/Chernof, Silver, Newman, Saylor, Gregory

*Small Business Development Center*

**Lenti, John**

\* *Defense Economic Transition Assistance - (21250-FL22)*

**\$133,944**

*Sponsor:* USCRF/Small Business Administration (SBA)

**Education, College of**

*Instruction & Teacher Education*

**Ebert, Christine**

\* *Proposal to Evaluate the Southeastern Regional Center for Ocean Science Education Excellence - (15290-FL02)*

**\$33,400**

*Sponsor:* SC Sea Grant Consortium/NOAA

**Singer, Jonathan**

\* *Middle School/Higher Education Partnerships in Science Education -*

**\$124,937**

*Sponsor:* SC Commission on Higher Education/SC Dept. of Education/USDE

**Stephens, Diane**

\* *SCRI Reading Initiatives - SDE - Spring and Summer 2004 - (15250-FL15)*

**\$25,056**

*Sponsor:* SC Department of Education

*Office of Program Evaluation*

**Yap, Ching**

\* *Arts Assessment Institute (AAI) - 2004 - (15290-GJ00)*

**\$120,000**

*Sponsor:* Arts in Basic Curriculum Project/SC Department of Education

## Engineering & Information Technology, College of

### Chemical Engineering

#### Gadala-Maria, Francis

- \* *Plan to Increase the Number of Minority Ph.D. Graduates from the Department of Chemical Engineering at USC - (15510-KJ00)* **\$12,000**  
*Sponsor:* Alfred P. Sloan Foundation

#### Van Zee, John

- \* *I/UCRC Fuel Cell Center - Operating Account - (15510-JA11)* **\$35,000**  
*Sponsor:* USCRF/Various
- \* *I/UCRC Project 23 - (15510-JA30)* **\$20,000**  
*Sponsor:* USCRF/Various  
*Co-PI:* Amiridis, Michael
- \* *I/UCRC Project 25 - (15510-JA31)* **\$15,000**  
*Sponsor:* USCRF/Various  
*Co-PI:* Amiridis, Michael

### Civil & Environmental Engineering

#### Gassman, Sarah

- \* *CAREER: Extending Non-Destructive Infrastructure Assessment Techniques to Micropile Foundation - (15520-F138)* **\$10,000**  
*Sponsor:* National Science Foundation (NSF) - General

#### Imran, Jasim

- \* *Numerical Modeling of Turbidity Current in Sinuous Submarine Channels - (15520-JA06)* **\$4,000**  
*Sponsor:* USCRF/Shell International Exploration & Production

### Electrical Engineering

#### Liu, Shengyi

- \* *Effect of Electric Power Disturbances on Equipment Reliability and Maintenance Costs - (15530-FA31)* **\$42,746**  
*Sponsor:* USCRF/Eagle Systems, Inc./NAVAIR/DOD

#### Sudarshan, Tangali

- \* *Lapping and Polishing of Silicon Carbide Wafers - (15530-LA00)* **\$3,881**  
*Sponsor:* USCRF/Various Sources

### Engineering & Information Technology, College of

#### White, Ralph

- \* *COEIT USC Palmetto Regional FIRST Robotics Competition - (15500-KL00)* **\$10,000**  
*Sponsor:* USCRF/The Verizon Foundation

*Engineering & Information Technology, College of*  
\* *SCAMP State Matching Funds for Summer Bridge Workshop - (15580-GA11)* **\$4,812**  
*Sponsor:* SC State University

\* *Utilizing Pre-Engineering Programs to Enhance Teacher Quality in South Carolina Schools (Bell South Grant) - (15500-KL01)* **\$23,000**  
*Sponsor:* Bell South/SC Department of Education  
*Co-PI:* Sternberg, Les

*Mechanical Engineering*

**Giurgiutiu, Victor**  
\* *Space Qualified Non-Destructive Evaluation and Structural Health Monitoring Technology - (15540-FA40)* **\$33,000**  
*Sponsor:* USCRF/NexGen Aeronautics,Inc.

**Sutton, Michael**  
\* *NASA EPSCoR - Year 5 - (15540-FA19)* **\$21,239**  
*Sponsor:* SC Research Authority/NASA

\* *Transfer of Technology for Automated Crack Growth Simulations to USAF - (15540-FA41)* **\$300,504**  
*Sponsor:* USCRF/S&K Technologies/US Air Force  
*Co-PI:* Deng, Xiaomin

**Environment, School of the**

*Earth Sciences & Resources Institute*

**Kloot, Robin**  
\* *Natural Resources and Conservation Decision - Support System -* **\$720,000**  
*Sponsor:* USDA Natural Resources Conservation Service/USDA  
*Co-PI:* Shafer, John

*Environment, School of the*

**Barnes, Phil**  
\* *EMS Program - (10060-KA01)* **\$8,000**  
*Sponsor:* USC Research

**Liberal Arts, College of**

*Archaeology & Anthropology, SC Institute of*

**Ziegenbein, Linda**  
\* *Native American Consultation - (21300-GL03)* **\$13,082**  
*Sponsor:* SC National Guard

*Comparative Literature*

**Miller, Paul**

- \* *Spiritual Practices - (12610-FA00)* **\$24,000**  
*Sponsor:* National Endowment For The Humanities (NEH) - General

*English Program for Internationals*

**Rowe, J. Alexandra**

- \* *Professional Development Seminar for Teachers from Kazakhstan and Russia and Celebrating Teaching Excellence Across Cultures - (25300-FJ03)* **\$229,309**  
*Sponsor:* USCRF/American Council for International Education  
*Co-PI:* Perkins, Margaret

*Geography*

**Cowen, David**

- \* *GA: SC National Guard Work Experience - (13540-FP02)* **\$6,600**  
*Sponsor:* SC National Guard

**Mock, Cary**

- \* *Baseline Methods for Reconstructing United States 19th Century Climatic Extremes from Historical Data - (13540-FA25)* **\$44,437**  
*Sponsor:* USCRF/National Science Foundation (NSF) - General

*Political Science*

**Tyer, Charlie**

- \* *GA: Richland County - (13570-HP05)* **\$4,550**  
*Sponsor:* Richland County
- \* *GA: Richland County - (13570-HP06)* **\$4,550**  
*Sponsor:* Richland County

*Psychology*

**Kelly, Sandra**

- \* *Alcohol Exposure, Social Behavior and Development - (13580-FA06)* **\$291,000**  
*Sponsor:* USCRF/National Institute on Alcohol Abuse and Alcoholism (NIAAA)/NIH
- \* *FIBR: Planning for Grant Proposal on Cortical Organization and Limits of Human Potential - (13580-FA31)* **\$15,000**  
*Sponsor:* USCRF/National Science Foundation (NSF) - General  
*Co-PI:* Morris, Robin

*Public Service & Policy Research, Institute for*

**Sheheen, Fred**

\* *The South Carolina Civil/Human Rights Anthology Project - (21100-KL05)*

**\$960**

*Sponsor:* SC Humanities Council

**Steagall, Christine**

\* *SC Environmental Symposium 2004 - (21100-GL13)*

**\$46,860**

*Sponsor:* SC Universities Research and Education Foundation (SCUREF)/HWMRF

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

*Library & Information Sciences, School of*

**Williams, Robert**

\* *Southeast Archives Education Collaborative with Louisiana State University - (15700-FA00)*

**\$4,945**

*Sponsor:* USCRF/Louisiana State Univ/IMLS

**Medicine, School of**

*Cell & Developmental Biology & Anatomy*

**Borg, Thomas**

\* *Integrin Shedding in the Heart: In Vivo and in Vitro - (18020-FA08)*

**\$361,250**

*Sponsor:* USCRF/National Heart, Lung and Blood Institute (NHLBI)/NIH

**Potts, Jay**

\* *Regulation of AV Canal Formation by the Jak-STAT Pathway - (18020-FA16)*

**\$310,644**

*Sponsor:* USCRF/National Heart, Lung, & Blood Institute/NIH

**Yost, Michael**

\* *Tissue Engineered Artificial Myocardium - (18200-FA00)*

**\$139,644**

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

*Cell Biology & Neurosciences*

**Millette, Clarke**

\* *L-Selectin and Testicular Cell Interactions - (18010-FA02)*

**\$227,588**

*Sponsor:* National Institute of Child Health & Human Development/NIH

*Family & Preventive Medicine*

**McDermott, Suzanne**

\* *STEPS to Your Health - (18130-GL06)*

**\$15,000**

*Sponsor:* SC Department of Disabilities & Special Needs

## *Internal Medicine*

### **Bryan, Charles**

- \* *Perinatal HIV Prevention Services - (18190-FL15)* **\$73,492**  
*Sponsor:* SC Department of Environmental Control/HHS

### **Lamb, Lawrence**

- \* *Tumor Aldehyde Dehydrogenase Activity as a Prognostic Indicator in Cancer Treatment - (18140-JA05)* **\$7,775**  
*Sponsor:* USCRF/STEMCO Biomedical, Inc.
- \* *Validation of Methods to Isolate Populations of Human HSPC by Cell Sorting Using Aldehyde Dehydrogenase - (18140-JA06)* **\$15,395**  
*Sponsor:* USCRF/STEMCO Biomedical, Inc.

### **Talwani, Rohit**

- \* *Midlands Care Consortium - CBC/MAI ADAP Awareness - (18190-FL19)* **\$32,991**  
*Sponsor:* SC Department of Health & Environmental Control/HHS
- \* *Midlands Care Consortium - CBC/MAI Discharge Planning - (18190-FL20)* **\$31,783**  
*Sponsor:* SC Department of Health & Environmental Control/HHS
- \* *Midlands Care Consortium - Ryan White Base Funds - (18190-FL16)* **\$1,881,169**  
*Sponsor:* SC Department of Health & Environmental Control/HHS
- \* *Midlands Care Consortium - Ryan White Emerging Communities Funds - (18190-FL17)* **\$219,139**  
*Sponsor:* SC Department of Health & Environmental Control/HHS
- \* *Midlands Care Consortium - SC ADAP Insurance Funding - (18190-FL18)* **\$50,000**  
*Sponsor:* SC Department of Health & Environmental Control/HHS
- \* *South Carolina HIV/AIDS Clinical Training Center - (18190-FJ00)* **\$16,000**  
*Sponsor:* USCRF/Emory University/HRSA/HHS

## *Neuropsychiatry*

### **Wright, Harry**

- \* *Molecular and Genetic Epidemiology of Autism - (18120-FA00)* **\$243,251**  
*Sponsor:* USCRF/Duke University/NIH

## *Ophthalmology*

### **Pakalnis, V. Al**

- \* *Protein Kinase C Beta Inhibitor - Diabetic Retinopathy Study 2 (PKC-DRS2) A Phase 3 Clinical Trial - (18150-JA00)* **\$2,342**  
*Sponsor:* USCRF/PAREXEL International LLC

*Pathology & Microbiology*

**Creek, Kim**

- \* *HPIV16-Induced TGF-Beta Resistance in Human Keratinocytes -* **\$258,100**  
*Sponsor:* USCRF/National Cancer Institute (NCI)/NIH

*Pediatrics/Developmental Disabilities, Center for*

**Clement-Atkinson, Gay**

- \* *ABC Special Needs Child Care Voucher Program Public Awareness Services -* **\$66,360**  
*(18140-GL16)*  
*Sponsor:* SC Department of Disabilities & Special Needs

**Neuberg, Ronnie**

- \* *National Children's Cancer Foundation Research Project - (18140-FA04)* **\$7,077**  
*Sponsor:* National Childhood Cancer Foundation/NIH

**Schwartz, I. David**

- \* *Kabi International Growth Study - (18140-JA02)* **\$210**  
*Sponsor:* USCRF/Pharmacia Corporation

*Radiology*

**Adcock, David**

- \* *Subcontract: Medical Surveillance for Former DOE Workers - (18180-F101)* **\$195,341**  
*Sponsor:* Medical University of South Carolina/DOE

*Surgery*

**Bynoe, Raymond**

- \* *Efficacy and Safety of Drotregogin Alfa (Activated) in Adult Patients with* **\$1,414**  
*Early Stage Sepsis - (18200-JA05)*  
*Sponsor:* USCRF/Eli Lilly & Co.

**Music, School of**

*Music, School of*

**Valerio, Wendy**

- \* *Music Technology Institute - (12550-FL00)* **\$39,955**  
*Sponsor:* Florence County School District Three/SC Department of Education

## Nursing, College of

### *Nursing - (General)*

#### **Andrews, Jeannette**

- \* *Sister to Sister: Helping Low-Income Women Quit Smoking - (11230-FA00)* **\$31,808**  
**Sponsor:** USCRF/National Institute of Nursing Research (NINR)/NIH

## Pharmacy, College of

### *Pharmacy - (General)*

#### **Michels, Jill**

- \* *Reportable Diseases Database Software - (11140-GL02)* **\$5,350**  
**Sponsor:** SC Department of Health & Environmental Control
  
- \* *SC DHEC Bioterrorism Project - (11140-FL03)* **\$158,244**  
**Sponsor:** SC Department of Health & Environmental Control/CDC

## Public Health, Arnold School of

### *Communication Sciences & Disorders*

#### **Healy, Eric**

- \* *Speech Perception by Normal and Impaired Listeners - (11560-FA00)* **\$72,750**  
**Sponsor:** USCRF/National Institute of Child Health & Human Development (NICHD)/NIH

### *Environmental Health Sciences*

#### **Feigley, Charles**

- \* *Support for Environmental Epidemiology Faculty - (11500-FJ07)* **\$53,000**  
**Sponsor:** SC Department of Health & Environmental Control/CDC  
**Co-PI: Richter, Donna**

#### **Porter, Dwayne**

- \* *NERRS Remote Sensing Applications Assessment Project (RESAAP) -* **\$158,140**  
**Sponsor:** USCRF/University of New Hampshire/NOAA  
**Co-PI: Jensen, John**

### *Epidemiology & Biostatistics*

#### **Hebert, James**

- \* *Geo Centers - (11520-FA40)* **\$1,885**  
**Sponsor:** MUSC/Geo-Centers, Inc/DOD

#### **McKeown, Robert**

- \* *Heart, Soul, Mind and Strength Program - (11520-KA03)* **\$50,700**  
**Sponsor:** USCRF/SCUMAC/Duke Endowment

*Epidemiology & Biostatistics*

**Wheeler, Frances**

- \* *Southeast Public Health Training Center - (11500-FJ01)* **\$15,000**  
*Sponsor:* University of North Carolina/HRSA

*Exercise Science*

**Pate, Russell**

- \* *Community Characteristics and PA Among Adolescent Girls - (11530-FA07)* **\$7,669**  
*Sponsor:* USCRF/RAND/NIH
- \* *Promotion of Physical Activity in High School Girls - (11530-FA12)* **\$585,275**  
*Sponsor:* USCRF/National Heart, Lung & Blood Institute (NHLBI)/NIH

**Wilcox, Sara**

- \* *Evaluation of the Active for Life Program - (11570-KA10)* **\$19,008**  
*Sponsor:* Robert Wood Johnson Foundation

*Health Promotion, Education & Behavior*

**Usdan, Stuart**

- \* *Evaluation of the Recovering Professional Program - (11540-FL05)* **\$4,485**  
*Sponsor:* SC Department of Alcohol & Other Drug Abuse Services/SAMHSA/HHS

**Watkins, Kenneth**

- \* *GA: Richland County School District One - (11540-HP11)* **\$1,340**  
*Sponsor:* Richland County School District One

*Health Services & Policy Research, Center for*

**Murday, David**

- \* *Evaluation of SC Access Plus Pilot Program - (11580-FA06)* **\$74,978**  
*Sponsor:* SC Department of Health & Human Services/HHS

**Science and Mathematics, College of**

*Biological Sciences*

**Felder, Michael**

- \* *Alcohol Metabolism Genes in Transgenic Mice - (13010-FA44)* **\$313,816**  
*Sponsor:* USCRF/National Institute on Alcohol Abuse and Alcoholism (NIAAA)/NIH

## Biological Sciences

### Feller, Robert

- \* *Control of Saltmarsh Cordgrass by Blue Crab Predation on Periwinkle Snails: An Immunological Gut Check - (21600-FA62)* **\$36,000**  
*Sponsor:* SC Sea Grant Consortium/NOAA

### Helmuth, Brian

- \* *Climate Change and Intertidal Biogeography: Coupling Remote Sensing Data to Thermal Physiology - (13010-FA66)* **\$262,662**  
*Sponsor:* USCRF/National Aeronautics & Space Administration (NASA) - General

### Hughes, Austin

- \* *Evolution of Immune Recognition and Evasion - (13010-FA52)* **\$158,088**  
*Sponsor:* USCRF/National Institute of General Medical Sciences (NIGMS)/NIH

### Morris, James

- \* *Coastal Wetland Indicators - (21600-FA41)* **\$240,725**  
*Sponsor:* USCRF/University of North Carolina/EPA

### Quattro, Joseph

- \* *A "Curated" DNA Database for Managed Marine Species - (21600-GA05)* **\$50,000**  
*Sponsor:* SC Sea Grant Consortium

### Waldman, Alan

- \* *Effects of Gravity on DNA Transactions in Mammalian Cells - (13010-FA46)* **\$252,129**  
*Sponsor:* USCRF/National Aeronautics & Space Administration (NASA) - General

## Chemistry & Biochemistry

### Dawson, John

- \* *Editing: Journal of Inorganic Biochemistry - (13020-J400)* **\$4,834**  
*Sponsor:* Elsevier

### Lebioda, Lukasz

- \* *Crystallization of APC4542 and Generation of Lysozyme Crystals With Variable Mosaicity - (13020-FA59)* **\$12,138**  
*Sponsor:* USCRF/University of Virginia/NIH

## Geological Sciences

### Benitez-Nelson, Claudia

- \* *Future Applications of the 234Th in Aquatic Ecosystems - (13040-FA73)* **\$78,520**  
*Sponsor:* USCRF/National Science Foundation (NSF) - General

## Geological Sciences

### Lakshmi, Venkataraman

\* *Climate Change and Intertidal Biogeography: Coupling Remote Sensing Data to Thermal Physiology* - (13040-FA69) **\$112,146**

**Sponsor:** USCRF/National Aeronautics & Space Administration (NASA) - General

### Owens, Thomas

\* *Receiver Reference Models: A Prototype for Automated Production of EarthScope/USArray Data Products* - (13040-FA70) **\$61,269**

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

**Co-PI:** Crotwell, Henry

### Talwani, Pradeep

\* *Cooperative Central and Southeast US Integrated Seismic Network-USC* - (13040-FA72) **\$68,000**

**Sponsor:** USCRF/US Geological Survey/DOI

### Torres, Raymond

\* *Coastal Wetland Indicators* - (13040-FA15) **\$49,897**

**Sponsor:** USCRF/University of North Carolina/EPA

### Wilson, Alicia

\* *Understanding Long-Term Solute Transport in Sedimentary Basins: Simulation Brine Migration in the Alberta Basin, Canada* - (13040-FA74) **\$49,891**

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

## Mathematics

### Temlyakov, Vladimir

\* *Greedy Approximation* - (13060-FA06) **\$35,501**

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

## Physics & Astronomy

### Johnson, Joseph

\* *Continued Enhancement and Deployment of IVIS* - (13070-FA40) **\$79,201**

**Sponsor:** SC Department of Public Safety/DOJ

\* *Support for Critical Infrastructure Protection Center (CIPC)* - (13070-FA41) **\$99,850**

**Sponsor:** USCRF/Space and Naval Warfare Systems Center

## Statistics

### Edwards, Donald

\* *Multiple Comparisons for Analysis of Mutant Spectra* - (13080-FA14) **\$9,997**

**Sponsor:** USCRF/SC BRIN/NCRR/NIH

## Senior and Regional Campuses

### USC Aiken

**Gregg, Paula**

- \* *Improving Middle School Math Teacher's Content Knowledge - (17110-FJ02)* **\$124,956**  
*Sponsor:* SC Commission on Higher Education/SC Dept. of Education/USDE

**Priest, Jeffrey**

- \* *USC Aiken/USC Salkehatchie/Aiken Tech Partnership to Prepare Paraprofessionals for Education Careers (PEC) - (17110-FL25)* **\$74,417**  
*Sponsor:* SC Commission on Higher Education/SC Dept. of Education/USDE

### USC Salkehatchie

**Refinetti, Roberto**

- \* *Homeostatic and Circadian Control of Energy Expenditure - (17660-FA01)* **\$182,984**  
*Sponsor:* USCRF/National Science Foundation (NSF) - General

**Williams, Patricia**

- \* *Character Education Professional Development Teacher's Academy -* **\$39,612**  
*Sponsor:* SC Department of Education

### USC Spartanburg

**Beck, Judy**

- \* *Integration of Geographic Information Systems (GIS) and Global Positioning System (GPS) Technologies into the Middle Grades - (17880-FJ07)* **\$66,659**  
*Sponsor:* SC Commission on Higher Education/SC Dept. of Education/USDE  
*Co-PI: Duarte, Valerie*

**Ferrell, Jim**

- \* *Upstate Nursing Consortium - (17880-KL03)* **\$200,000**  
*Sponsor:* Carolina Piedmont Foundation

**Gorske, Jim**

- \* *Postsecondary Education Consortium - SOTAC - (17880-FL29)* **\$7,000**  
*Sponsor:* Greenville Tech/USDE

**Matthews, Lou**

- \* *Project CREATE - (17880-FJ08)* **\$94,328**  
*Sponsor:* SC Commission on Higher Education/USDE

**Romine, Ronald**

- \* *American Humanitics - (17880-KL04)* **\$1,900**  
*Sponsor:* Carolina Piedmont Foundation, Inc.

*USC Spartanburg*  
\* *Center for Non-Profit Leadership - (17880-KL02)* **\$2,500**  
*Sponsor:* Carolina Piedmont Foundation

**Turner, Jack**  
\* *Microbiological Study - (17880-L101)* **\$1,050**  
*Sponsor:* Milliken Chemical

### **Social Work, College of**

*Families in Society, Institute for*  
**Brown, Elsbeth**  
\* *Renewal of the Catawba Indian Nation Head Start Contract - (10010-FL10)* **\$52,646**  
*Sponsor:* USCRF/Catawba Indian Nation/HHS

**Flerx, Vicki**  
\* *Bullying Prevention Program Dissemination - (10010-LL00)* **\$7,287**  
*Sponsor:* Clemson University

*Social Work, College of*  
**Ginsberg, Leon**  
\* *GA: Kershaw Family Medicine Associates, LLC - (15900-LP26)* **\$4,000**  
*Sponsor:* USCRF/Kershaw Family Medicine Associates

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

*Student Health*  
**Muellner, Juliette**  
\* *Sexual Health and Violence Prevention Technological Equipment Grant - (71000-FL05)* **\$9,000**  
*Sponsor:* SC Department of Public Safety/DOJ

**Grand Total** **\$10,692,573**