Business Administration - Division of Research

Schunk, Donald
* Economic Impact of the SC Education Lottery - (21200-JA09)  
  
  Sponsor: USCRF/Chernof, Silver, Newman, Saylor, Gregory  
  $28,206

Small Business Development Center

Lenti, John
* Defense Economic Transition Assistance - (21250-FL22)  
  
  Sponsor: USCRF/Small Business Administration (SBA)  
  $133,944

Education, College of

Instruction & Teacher Education

Ebert, Christine
* Proposal to Evaluate the Southeastern Regional Center for Ocean Science Education Excellence - (15290-FL02)  
  
  Sponsor: SC Sea Grant Consortium/NOAA  
  $33,400

Singer, Jonathan
* Middle School/Higher Education Partnerships in Science Education -  
  
  Sponsor: SC Commission on Higher Education/SC Dept. of Education/USDE  
  $124,937

Stephens, Diane
* SCRI Reading Initiatives - SDE - Spring and Summer 2004 - (15250-FL15)  
  
  Sponsor: SC Department of Education  
  $25,056

Office of Program Evaluation

Yap, Ching
* Arts Assessment Institute (AAI) - 2004 - (15290-GJ00)  
  
  Sponsor: Arts in Basic Curriculum Project/SC Department of Education  
  $120,000
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)  
  **Sponsor:** SC State University  
  **Amount:** $4,812

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

**Mechanical Engineering**

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

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

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

**Environment, School of the**

**Earth Sciences & Resources Institute**

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

**Environment, School of the**

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

**Liberal Arts, College of**

**Archaeology & Anthropology, SC Institute of**

* Native American Consultation - (21300-GL03)  
  **Sponsor:** SC National Guard  
  **Amount:** $13,082
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
Sheheen, Fred
* The South Carolina Civil/Human Rights Anthology Project - (21100-KL05)  
  **Sponsor:** SC Humanities Council  
  **Amount:** $960

Steagall, Christine
* SC Environmental Symposium 2004 - (21100-GL13)  
  **Sponsor:** SC Universities Research and Education Foundation (SCUREF)/HWMRF  
  **Amount:** $46,860

## Mass Communications & Information Studies, College of

**Library & Information Sciences, School of**

Williams, Robert
* Southeast Archives Education Collaborative with Louisiana State University - (15700-FA00)  
  **Sponsor:** USCRF/Louisiana State Univ/IMLS  
  **Amount:** $4,945

## Medicine, School of

**Cell & Developmental Biology & Anatomy**

Borg, Thomas
* Integrin Shedding in the Heart: In Vivo and in Vitro - (18020-FA08)  
  **Sponsor:** USCRF/National Heart, Lung and Blood Institute (NHLBI)/NIH  
  **Amount:** $361,250

Potts, Jay
* Regulation of AV Canal Formation by the Jak-STAT Pathway - (18020-FA16)  
  **Sponsor:** USCRF/National Heart, Lung, & Blood Institute/NIH  
  **Amount:** $310,644

Yost, Michael
* Tissue Engineered Artificial Myocardium - (18200-FA00)  
  **Sponsor:** National Heart, Lung & Blood Institute (NHLBI)/NIH  
  **Amount:** $139,644

**Cell Biology & Neurosciences**

Millette, Clarke
* L-Selectin and Testicular Cell Interactions - (18010-FA02)  
  **Sponsor:** National Institute of Child Health & Human Development/NIH  
  **Amount:** $227,588

**Family & Preventive Medicine**

McDermott, Suzanne
* STEPS to Your Health - (18130-GL06)  
  **Sponsor:** SC Department of Disabilities & Special Needs  
  **Amount:** $15,000
Internal Medicine

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

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

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

Neuropsychiatry

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

Ophthalmology

**Pakalnis, V. Al**
- *Protein Kinase C Beta Inhibitor - Diabetic Retinopathy Study 2 (PKC-DRS2)*  
  A Phase 3 Clinical Trial - (18150-JA00)  
  **Sponsor:** USCRF/PAREXEL International LLC  
  **Amount:** $2,342
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 - (18140-GL16) $66,360
    **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 Early Stage Sepsis - (18200-JA05) $1,414
    **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)  
  Sponsor: USCRF/National Institute of Nursing Research (NINR)/NIH  
  $31,808

Pharmacy, College of

Pharmacy - (General)

Michels, Jill
* Reportable Diseases Database Software - (11140-GL02)  
  Sponsor: SC Department of Health & Environmental Control  
  $5,350

  * SC DHEC Bioterrorism Project - (11140-FL03)  
    Sponsor: SC Department of Health & Environmental Control/CDC  
    $158,244

Public Health, Arnold School of

Communication Sciences & Disorders

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

Environmental Health Sciences

Feigley, Charles
* Support for Environmental Epidemiology Faculty - (11500-FJ07)  
  Sponsor: SC Department of Health & Environmental Control/CDC  
  $53,000

  Co-PI: Richter, Donna

Porter, Dwayne
* NERRS Remote Sensing Applications Assessment Project (RESAAP) -  
  Sponsor: USCRF/University of New Hampshire/NOAA  
  $158,140

  Co-PI: Jensen, John

Epidemiology & Biostatistics

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

McKeown, Robert
* Heart, Soul, Mind and Strength Program - (11520-KA03)  
  Sponsor: USCRF/SCUMAC/Duke Endowment  
  $50,700
**Epidemiology & Biostatistics**

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

**Exercise Science**

**Pate, Russell**
- *Community Characteristics and PA Among Adolescent Girls* - (11530-FA07)  
  **Sponsor:** USCRF/RAND/NIH  
  $7,669

- *Promotion of Physical Activity in High School Girls* - (11530-FA12)  
  **Sponsor:** USCRF/National Heart, Lung & Blood Institute (NHLBI)/NIH  
  $585,275

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

**Health Promotion, Education & Behavior**

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

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

**Health Services & Policy Research, Center for**

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

**Science and Mathematics, College of**

**Biological Sciences**

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

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

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

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

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

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

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

Chemistry & Biochemistry

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

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

Geological Sciences

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

Lakshmi, Venkataraman
* Climate Change and Intertidal Biogeography: Coupling Remote Sensing Data to Thermal Physiology - (13040-FA69)
  
  Sponsor: USCRF/National Aeronautics & Space Administration (NASA) - General

  
  
  $112,146

Owens, Thomas
* Receiver Reference Models: A Prototype for Automated Production of EarthScope/USArry Data Products - (13040-FA70)

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

  Co-PI: Crotwell, Henry

  
  
  $61,269

Talwani, Pradeep
* Cooperative Central and Southeast US Integrated Seismic Network-USC - (13040-FA72)

  Sponsor: USCRF/US Geological Survey/DOI

  
  
  $68,000

Torres, Raymond
* Coastal Wetland Indicators - (13040-FA15)

  Sponsor: USCRF/University of North Carolina/EPA

  
  
  $49,897

Wilson, Alicia
* Understanding Long-Term Solute Transport in Sedimentary Basins: Simulation Brine Migration in the Alberta Basin, Canada - (13040-FA74)

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

  
  
  $49,891

Mathematics

Temlyakov, Vladimir
* Greedy Approximation - (13060-FA06)

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

  
  
  $35,501

Physics & Astronomy

Johnson, Joseph
* Continued Enhancement and Deployment of IVIS - (13070-FA40)

  Sponsor: SC Department of Public Safety/DOJ

  
  
  $79,201

* Support for Critical Infrastructure Protection Center (CIPC) - (13070-FA41)

  Sponsor: USCRF/Space and Naval Warfare Systems Center

  
  
  $99,850

Statistics

Edwards, Donald
* Multiple Comparisons for Analysis of Mutant Spectra - (13080-FA14)

  Sponsor: USCRF/SC BRIN/NCRR/NIH

  
  
  $9,997
Senior and Regional Campuses

**USC Aiken**

Gregg, Paula

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

Priest, Jeffrey

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

**USC Salkehatchie**

Refinetti, Roberto

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

Williams, Patricia

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

**USC Spartanburg**

Beck, Judy

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

Ferrell, Jim

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

Gorske, Jim

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

Matthews, Lou

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

Romine, Ronald

* American Humantics - (17880-KL04)  
  
  **Sponsor:** Carolina Piedmont Foundation, Inc.  
  
  **$1,900**
USC Spartanburg
* Center for Non-Profit Leadership - (17880-KL02) $2,500
  
  Sponsor: Carolina Piedmont Foundation

Turner, Jack
* Microbiobial 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