Congratulations to OUR Discovery Day 2008 Award Winners

ARTS & MUSIC
1. Elizabeth Nyikos, Music – Columbia, SC
   Mentor: Dr. Scott Gwara, English Language and Literatures
   *Medieval French Polyphony at Columbia College*

2. Heather Davis, History, USC Aiken – Aiken, SC
   Mentor: Dr. Maggi Morehouse, History, USC Aiken
   *Music Production in Post-Katrina New Orleans*

BIOMEDICAL SCIENCES
1. Jeet Guram, Interdisciplinary Studies – Columbia, SC
   Mentor: Dr. Sarah Sweitzer, Pharmacology, Physiology and Neuroscience
   *Physiological Basis for Fetal Alcohol-Induced Hypersensitivity to Pain*

2. Timothy Davis, Chemical Engineering – Garden City, SC
   Mentor: Dr. Melissa Moss, Chemical Engineering
   *Inhibition of Amyloid-β Protein Aggregation in Alzheimer’s Disease*

COMMUNICATION, HUMANITIES & CULTURE
1. Jennifer Brackett, English – Easley, SC
   Mentor: Dr. Matthew Bruccoli, English Language and Literatures
   *In Case Something Should Happen: Changes to Hemingway’s Post-humously Published Garden of Eden*

2. William Davis, Biological Sciences, USC Upstate – Greenville, SC
   Mentor: Prof. Douglas Jackson, Spanish, USC Upstate
   *An Etymological Investigation of Medical Terminology: A Realistic Application for the Medical Interpreter*

HEALTH, WELL-BEING AND EDUCATION
1. Amanda Thomas, Nursing – York, SC
   Mentors: Dr. Stephanie Burgess, Nursing
   Prof. Kara Jones-Schubart, Nursing
   *Factors that Predict Teen Partner Abuse*

2. Sarah Mecca, Nursing – Columbia, SC
   Mentor: Dr. DeAnne Messias, Nursing
   *Testing the Quality of Life in School-Aged Children as Related to Asthma and Asthma Management in South Carolina Schools*
HISTORY & POLITICS
1. Michael Williams, History – Columbia, SC
   Mentor: Mr. Eric Barger, History
   The Shadow of Orangeburg: Voorhees Student Unrest 1969-71
2. Corinne D'Ippolito, Marine Science
   Mentor: Dr. Thomas Lekan, History – Boulder, CO
   American Wilderness Legacies and Feral Hog Management

NATURAL SCIENCE & ENGINEERING
1. Tyler Ray, Mathematics – Richmond, VA
   Mentor: Dr. Sarah Baxter, Mechanical Engineering
   Gold Nanorods: Exploration of the Growth Mechanism through
   Cellular Automata Modeling
2. Lauren Van Thiel, Marine Science – Roanoke, VA
   Mentor: Dr. Jerry Hilbish, Biological Sciences
   Sublethal Stress Response to Climate Variation in Marine
   Ecosystems

ARTS & HUMANITIES
1. Andrew Moeller, Music – Oak Ridge, TN
   Mentor: Dr. Constance Gee, Music Education, History and Theory
   Fundamental Differences in Violin and Viola Pedagogy
2. Stacy Wiley, Music – Columbia, SC
   Mentor: Dr. Gail Barnes, Music Education, History and Theory
   Online Community for String and Orchestra Teachers

BIOMEDICAL 1
1. Melisa Tanverdi, Biological Sciences – Irmo, SC
   Mentor: Dr. Rekha Patel, Biological Sciences
   The inhibitory effect of HoxA5 on NF-kB dependent transcription
2. Whitney Kellett, Chemistry – Columbia, SC
   Mentor: Dr. Georgi Petkov, Pharmacology, Physiology and Neuroscience
   SK and IK Ca2+-activated K+ channels as novel pharmacological targets to
   control urinary bladder smooth muscle excitability and contractility
3. Vaughn Braxton, Chemistry – Hemingway, SC
   Mentor: Dr. Susan Lessner, Cell and Developmental Biology and Anatomy
   Optimization of Pattern Formation Reagents for 3D-Digital Image
   Correlation Analysis of Mouse Arteries

BIOMEDICAL 2
1. Anne Hishon, Pharmacy – Charlotte, NC
   Kate Gerrald, Pharmacy – Asheville, NC
   Mentor: Dr. Brandon Bookstaver, School of Pharmacy
   Treatment Outcomes of Novel Antibiotic Lock Solutions: A Case Series
   Analysis
2. Tamara Looney, Anthropology – Aiken, SC
   Mentors: Dr. Thomas Leatherman, Anthropology
   Dr. Beth Mayer-Davis, Epidemiology and Biostatistics
   Carbohydrate Counting in Columbia Adolescents with Type 1 Diabetes

3. Whitney Jones, Pharmacy – York, SC
   Mentor: Dr. LeAnn Norris, Pharmacology, Physiology and Neuroscience
   Evaluation of the Modification of Diet in Renal Disease (MDRD) and
   Cockcroft-Gault (C-G) formulas in the Calvert equation for Carboplatin
   Dosing

BUSINESS, LAW AND POLITICS
1. Amanda Kay Seals, Interdisciplinary Studies – Clinton, TN
   Mentors: Prof. Melayne McInnes, Economics
   Prof. Christine Fountain, Sociology
   How much is tomorrow worth? The relationship between time preference
   and addiction

2. Joshua Rabon, Accounting – Georgetown, SC
   Mentor: Dr. Marcus Caylor, Accounting
   Corporate Governance and Return on Capital Expenditures

CHEMISTRY & MATERIAL SCIENCE
1. Byron Farnum, Chemistry – Camden, SC
   Mentor: Dr. John Ferry, Chemistry and Biochemistry
   Investigation of the photocatalytic properties of a family of calcium
   bismuth oxides

2. Jessica Michaud, Chemistry – Wilmington, NC
   Mentor: Dr. Stephen L. Morgan, Chemistry and Biochemistry
   Forensic Discrimination of Black Electrical Tape using Attenuated Total
   Reflectance and Pyrolysis-Gas Chromatography/Mass Spectrometry

3. Kathryn Seward, Chemistry – Chapin, SC
   Mentor: Dr. Hans Conrad zur Loye, Chemistry and Biochemistry
   Synthesis and characterization of amino-bis-phosphonic acids for use in
   crystallizing layered inorganic-organic materials

EARTH & MARINE SCIENCES 1
1. Justin Lewandowski, Marine Science – South Bound Brook, NJ
   Mentor: Dr. Joseph Quattro, Biological Sciences
   One or two species of cownose ray (Rhinoptera spp.) in the Western
   Atlantic and Gulf of Mexico?

2. Kevin Beers, Biological Sciences – Coatesville, PA
   Mentor: Dr. Richard Long, Biological Sciences
   Identification of the Production of Active Organic Compounds in
   Antagonistic Interactions among Marine Bacteria
EARTH & MARINE SCIENCES 2
1. Elizabeth Bell, Geology – Christiansburg, VA
   Mentor: Dr. David Barbeau, Geological Sciences
   *Geochemical Provenance Analysis of Calcareous Gravel, Ebro Basin, Spain*
2. Reid Mobley, Geology – Blythewood, SC
   Mentor: Prof. Gene Yogodzinski, Geological Sciences
   *Physical Conditions in the Upper Mantle Beneath Kharchinsky Volcano, Kamchatka*

ENGINEERING, PHYSICS AND MATH
1. Christopher, Poirel, Mathematics – Pawleys Island, SC
   Mentor: Dr. Joshua Cooper, Mathematics
   *Partition Regularity of the Pythagorean Triples*
2. TIE: Kevin Daniels, Electrical Engineering – Columbia, SC
   Mentor: Dr. Tangali Sudarshan, Electrical Engineering
   *Development of Selective, Low Damage Chemical Etching Technique for Silicon Carbide*
   TIE: Jonathan DeGange, Chemistry – Rock Hill, SC
   Mentor: Prof. Steffen Strauch, Physics and Astronomy
   *Study of Instrumental Asymmetries in the Focal-Plane Polarimeter at Jefferson Lab Hall A*

NEUROSCIENCE
1. Rabiah Ali, Biological Sciences – Newberry, SC
   Mentor: Dr. Sarah Sweitzer, Pharmacology, Psychology and Neuroscience
   *Using Herpes Simplex Virus-1 to Over-express the Mu-opioid Receptor in Afferent Neurons*
2. Lauren Codi Black, Experimental Psychology – Pickens, SC
   Mentor: Dr. Sandra Kelly, Psychology
   *Social anticipation and play behavior in an animal model of autism*
3. Jeet Guram, Interdisciplinary Studies – Columbia, SC
   Mentor: Dr. Sarah Sweitzer, Pharmacology, Psychology and Neuroscience
   *Growing Pains: Differential Endothelin-1 Induced C-Fos Expression in the Spinal Cord*

PSYCHOLOGY, GENERAL
1. Rachel Bingaman, Experimental Psychology – Columbia, SC
   Mentors: Dr. Benjamin Hankin, Psychology
   Ms. Emily Wetter, Psychology
   *Excessive Reassurance Seeking and Insecure Attachment as Risk Factors for Depressive Symptoms: A 2 year prospective study of youth*
2. **Daron Jolley**, Experimental Psychology – Gaffney, SC  
**Kristin Arnold**, Experimental Psychology – Lexington, SC  
Mentors: Ms. Kerrie Glass, Psychology  
Dr. Kate Flory, Psychology  
*Exploring Self-report and Friend Report Differences in Social Competence of Adolescents with ADHD*

3. **Eric Bowers**, Experimental Psychology – Walhalla, SC  
Mentor: Dr. Amit Almor, Psychology  
*Reference and Representation: The Neural Structures involved in Referential Processing*

**SOCIAL SCIENCE & EDUCATION**

1. **Kathy Niu**, Interdisciplinary Studies – Columbia, SC  
Mentor: Dr. Christopher Rorden, Communication Sciences and Disorders  
*Temporal Parietal Junction Activation during Temporal Order Judgments*

2. **Sarah Mecca**, Nursing – Columbia, SC  
Mentor: Dr. DeAnne Messias, Nursing  
*Testing the Quality of Life in School-Aged Children as Related to Asthma and Asthma Management in South Carolina Schools*

3. **Anna Walton**, Biological Sciences – West Columbia, SC  
Mentors: Dr. Heather Brandt and  
Dr. Deborah Parra-Medina, Health Promotion Education and Behavior  
*Readability of Cancer and Cancer-related Educational Materials Developed for the Hispanic Population in the United States*