Discovery Day 2009

Congratulations to our Award Winners!

Creative and Oral Presentations:

CREATIVE PRESENTATIONS
1. Mary Tilden, Freshman, Theatre – Columbia, SC
   Hannah Lathan, Freshman, Public Relations – Sumter, SC
   Lauren Koch, Freshman, Theatre – Anderson, SC
   Savannah Kruzner, Freshman, Theatre – Chapin, SC
   The Yellow Wallpaper: An Original Stage Adaptation

HUMANITIES
1. Christopher Ballard, Senior, Latin American Studies – Richmond, VA
   Mentor: Dr. E. Gabrielle Kuenzli, History
   Campesinos or Mestizos: The Formation of Indigenous Identity in Peru’s La Convencion Province

PUBLIC HEALTH & BIOMEDICAL SCIENCES
1. Maregeaux Wetendorf, Senior, Biological Sciences – Elgin, IL
   Mentor: Dr. Lydia Matesic, Biological Sciences
   Elucidating the in vivo Effects of Itch Using Apcmin/+ Mice

SCIENCE, ENGINEERING, & COMPUTING
1. Katherine Hyland, Senior, Chemistry – Highland, NY
   Mentor: Dr. P. Lee Ferguson, Chemistry and Biochemistry
   Characterization of the Biodegradation Products of Aircraft Anti-Icing Fluids and their Estrogenic Effects

SOCIAL SCIENCES 1
1. Jeremy May, Senior, Experimental Psychology – Sumter, SC
   Mentor: Dr. Amit Almor, Psychology
   Salience Matters: An fMRI Study of the Repeated Name Penalty

SOCIAL SCIENCES 2
1. Andrew Schwark, Senior, International Business – Hartland, WI
   Mentor: Dr. Gregory Niehaus, International Business
   An Analysis of the Azerbaijani Business Environment and Discussion of Opportunities for Private and Public Sector-Led Economic Development

Poster Session:

ARTS & MUSIC
1. Alex Wroten, Senior, Music – Greenville, SC
   Mentor: Dr. Reginald Bain, Music
   Music, Performance, and Interactive Parallel Computing Networks

BIOLOGY & ENVIRONMENTAL SCIENCES
1. Sarah Pulliam, Junior, Biological Sciences – Lexington, SC
   Mentor: Dr. Johannes Stratmann, Biological Sciences
   The Effects of CSN5 Silencing on Manduca sexta Herbivory in Tomato Plants

2. Ian Johnson, Senior, Geography – Summerville, SC
   Mentor: Dr. John Cupfer, Geography
   Environmental Controls of Steppe-Forest Transitions in Lava Beds National Monument
3. **Emily Kasl**, Senior, Marine Science – Western Springs, IL
   **Kathleen Marston**, Senior, Marine Science – Higganum, CT
   Mentor: Dr. Richard Long, Biological Sciences
   *Subcuticular Bacteria in the Brittle Star Amphipolis gracillima*

**BIOMEDICAL SCIENCES 1**

1. **Emily Ferguson**, Senior, Biological Sciences – Alpharetta, GA
   Mentor: Dr. David Reisman, Biological Sciences
   *Identification of Transcriptional Control Elements of a Novel Bi-directional Promoter Associated with the p53 Gene*

2. **Daniel Weinberg**, Sophomore, Biological Sciences – Columbia, SC
   Mentor: Dr. Chandrashekhar Patel, Cell and Developmental Biology and Anatomy
   *Regulation of Nuclear Factor-kappa B Phosphorylation in Lean Control and Zucker Diabetic Fatty Rat Cardiac Fibroblasts*

**BIOMEDICAL SCIENCES 2**

1. **Jewel Sheehan**, Junior, Exercise Science – Weddington, NC
   Mentor: Dr. James Carson, Exercise Science
   *The Effect of Wasting on Glucose Tolerance in the ApcMin/+ Mouse*

2. **Cedric Johnson**, Sophomore, Biological Sciences – Columbia, SC
   Mentor: Dr. Douglas Pittman, Biological Sciences
   *NonO: A Candidate for Repairing DNA Damage Produced by Cancer Chemotherapeutic Drugs*

**CHEMISTRY & PHYSICS**

1. **Samir Patel**, Senior, Chemistry – Irmo, SC
   Mentor: Dr. Ken Shimizu, Chemistry and Biochemistry
   *A Supramolecular Colorimetric System to Measure Diastereomeric Ratios*

2. **Vaughn Braxton**, Senior, Chemistry – Hemingway, SC
   Mentor: Dr. Qian Wang, Chemistry and Biochemistry
   *Structure and Morphology of Virus-Composite Fibers Fabricated via Electrospinning Method*

**COMPUTER SCIENCE & ENGINEERING**

1. **Elizabeth Timko**, Junior, Computer Science – Irmo, SC
   Mentor: Dr. Homayoun Valafar, Computer Science and Engineering
   *Structural Characterization of FXYD Protein Using REDCRAFT*

2. **Benjamin Fine**, Senior, Computer Science and Engineering – Charleston, SC
   Mentor: Dr. Jason O’Kane, Computer Science and Engineering
   *Inexpensive Mobile Robotic Platform for Computer Vision Applications*

**ENGINEERING & MATH**

1. **Lesley Joseph**, Sophomore, Civil Engineering – Rock Hill, SC
   **Rodrick Tucker**, Junior, Civil Engineering – Newberry, SC
   Mentor: Dr. Charles Pierce, Civil and Environmental Engineering
   *Ground Response to Projectiles Created During Extreme Weather Events*

2. **Kevin Daniels**, Senior, Electrical Engineering – Columbia, SC
   Mentors: Dr. Tangali Sudarshan and Dr. Peter Muzykov, Electrical Engineering
   *Investigation of Schottky Barrier Diode Performance on Morphological Defects in 4H-SiC 4° off cut Si Face Epilayers*
HEALTH SCIENCES (Tie for First Place)
1. **Katie Carpenter**, Senior, Exercise Science – St. Louis, MO
   Mentors: Dr. Heather Brandt, Health Promotion Education and Behavior and Dr. Swann Arp-Adams, Epidemiology and Biostatistics
   *Human Papillomavirus (HPV) and Its Relation to Oral Cancer: An Epidemiological Secondary Data Analysis*

1. **Jennifer McPhail**, Senior, Pharmacy – Rock Hill, SC
   Mentors: Dr. Celeste Rudisill and Dr. Brandon Bookstaver, Pharmacy
   *Evaluation of Vancomycin Prescribing Practices on a Nephrology Ward in a Community Teaching Hospital*

HUMANITIES
1. **Kharimah Dessow**, Senior, History – Columbia, SC
   Mentor: Dr. Bobby Donaldson, History and African-American Studies
   *The Mind and Mission of Dr. Andrew Billingsley*

2. **Jennifer Holcombe**, Senior, Russian – Greenville, SC
   Mentor: Dr. Alexander Ogden, Languages, Literatures, and Cultures
   *Faces from Prison: Sergei Paradjanov’s “My Friends” Series*

NEUROSCIENCE 1
1. **Casey O'Neill**, Senior, Experimental Psychology – Charleston, SC
   Mentor: Dr. Sandra Kelly, Psychology
   *The Rewarding Properties of Sugar in an Animal Model Fetal Alcohol Spectrum Disorders*

2. **Alexandra Basilikos**, Senior, Experimental Psychology – Greenville, SC
   Mentor: Dr. Steven Harrod, Psychology
   *Lobeline Decreases Methamphetamine-Induced Hyperactivity in Male and Female Periadolescent Rats*

NEUROSCIENCE 2
1. **Kathy Niu**, Senior, Interdisciplinary Studies – Columbia, SC
   Mentor: Dr. Chris Rorden, Communication Sciences and Disorders
   *Audiospatial Attention Evokes Similar Brain Activation Pattern to Visualspatial Attention*

2. **Shana Dykema**, Senior, French – Charleston, SC
   Mentor: Dr. Janet Fisher, Pharmacology, Physiology, and Neuroscience
   *Novel GABAA Receptor Mutations Exhibit Subunit-Selective Effects on GABA Sensitivity*

PSYCHOLOGY, GENERAL
1. **Rebecca Ridgeway**, Junior, Experimental Psychology – Blythewood, SC
   Mentor: Dr. Suzanne Swan, Psychology
   *Gender Differences in University of South Carolina Student Perceptions of Campus Sexual Assault*

2. **Ruthellen Thompson**, Sophomore, Experimental Psychology – Damascus, MD
   Mentor: Dr. Douglas Wedell, Psychology
   *Effect of Context on Policy Endorsement: How Impressionable Are We?*

3. **Afotey Quaye**, Junior, Experimental Psychology – Hartsville, SC
   Mentor: Dr. Amit Almor, Psychology
   *Attention and Conversing*

SOCIAL SCIENCES & BUSINESS
   **Duggan MacDonald**, Junior, Finance – Mendham, NJ
   Mentor: Dr. Edward Carr, Geography
   *Sustainability of the Emerging Middle Class in Johannesburg, South Africa and the Investment Opportunities Created*
2. Chewei Zhang, Senior, Political Science – Florence, SC
   Mentor: Dr. Donald Fowler, Political Science
   *The Impact of Youth Participation on the 2008 Elections and Beyond*

3. Megan Robers, Senior, International Business – Cincinnati, OH
   Mentor: Dr. David Crockett, Marketing
   *Historical Antecedents of a Contemporary Rivalry: The Evolution of Ideologies of Real Madrid and FC Barcelona*

SOCIAL SCIENCES & EDUCATION

1. Kaitlyn Pruitt, Senior, Russian – Columbia, SC
   Mentor: Dr. Kara Montgomery, Health Promotion Education and Behavior
   *An Analysis of Services for Orphaned Children in Yaroslavl, Russia*

2. Elaine Kao, Senior, Baccalaureus Artium et Scientiae – Greer, SC
   Mentor: Dr. Daniela Friedman, Health Promotion Education and Behavior
   *Perceptions of Health Care by the Deaf Community and by the Health Providers Who Serve Them*

3. Puja Dalal, Senior, Exercise Science – Columbia, SC
   Elaine Kao, Senior, Baccalaureus Artium et Scientiae – Greer, SC
   Mentor: Dr. David Simmons, Anthropology & Health Promotion, Education, and Behavior
   *The Use and Function of Botanicas in Santiago, Dominican Republic*