

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
Campeños 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 *Amphipholis 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. Chandrashekhhar 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 FXFD 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^o 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 Visuospatial 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

1. **Erin Turner**, Junior, International Business – Charlotte, NC

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