

# Congratulations to OUR Discovery Day 2005 Award Winners!!

## **MILLIKEN & COMPANY**

Best Poster Overall:

- Kelvin Moore (Chemical Engineering), *Development of Non-Precious Metal Cathode Catalysts for PEM Fuel Cells*; Mentor: Dr. Branko N. Popov, Department of Chemical Engineering

Top three posters:

- Rachel Hipp (Chemistry), *Hollow Tubular Metal-Organic Frameworks: Synthesis, Characterization, and Thermal Properties*; Mentor: Dr. Hans-Conrad zur Loye, Department of Chemistry and Biochemistry
- Ashley Metcalf (Chemical Engineering), *Synthesis of Copper-Palladium Bimetallic Catalysts using Electroless Deposition*; Mentor: Dr. Christopher T. Williams, Department of Chemical Engineering
- Thomas Styslinger (Chemistry), *Synthesis of a novel tris(pyrazole) compound for use in virus bioconjugation*, Mentor: Dr. Qian Wang, Department of Chemistry & Biochemistry

## **BIOMEDICAL ENGINEERING**

1. Stephanie Lareau (Chemical Engineering), *Strain Gauge Usage for Determination of the Effects of Platelet Derived Growth Factor on Fibroblast Populated Collagen Gel Contraction*; Mentor: Dr. Jonathan Bender, Department of Chemical Engineering
2. Mary Jo Manuse (Chemistry), *Synthesizing Conjugated Polymers for Pathogenic Sensing*; Mentor: Dr. John J. Lavigne, Department of Chemistry and Biochemistry
3. Nidhi Kumar (Biology), *Applications of Nanoparticles in Cancer Research*; Mentor: Dr. George Khushf, Department of Philosophy

## **EARTH SCIENCE**

1. Elyse Walker (Marine Science), *Growth Rates of the Toxic Dinoflagellate *Karenia brevis* in Response to Variations in Light and Grazing*; Mentor: Dr. Tammi Richardson, Department of Biological Sciences
2. Steven Traynum (Marine Science), *Mixing and sediment transport near a tidal node during high discharge conditions*; Mentor: Dr. Richard Styles, Department of Geological Sciences
3. Bonnie Coggins (Marine Science), *Radiocesium Distribution in North American River Otters on the Savannah River Site*; Mentor: Dr. Machele Wilson, Savannah River Ecology Laboratory

## **ENGINEERING AND MATERIAL SCIENCE**

1. Kelvin Moore (Chemical Engineering), *Development of Non-Precious Metal Cathode Catalysts for PEM Fuel Cells*; Mentor: Dr. Branko N. Popov, Department of Chemical Engineering
2. Rachel Hipp (Chemistry), *Hollow Tubular Metal-Organic Frameworks: Synthesis, Characterization, and Thermal Properties*; Mentor: Dr. Hans-Conrad zur Loye, Department of Chemistry and Biochemistry
3. Ashley Metcalf (Chemical Engineering), *Synthesis of Copper-Palladium Bimetallic Catalysts using Electroless Deposition*; Mentor: Dr. Christopher T. Williams, Department of Chemical Engineering

## ENVIRONMENTAL ISSUES

1. Mary Lohman (Exercise Science) and Kathryn Vignone (Baccalureas Artium et Scientiae), *The Georgetown Steel Mill in Georgetown, SC: The avoidance of "Beaufortization" and the effects of an industrial economy*; Mentor: Dr. Thomas Lekan, Department of History
2. Victoria Boozer (Advertising), Jessica Foster (Journalism), and Gabrielle Sinclair (Journalism), *Taking Action: An analysis of methods used to reduce the impact of tsunamis*; Mentor: Dr. Evan Paleologos, Department of Geological Sciences
3. Sara Saylor (English), Ryan Holt (Political Science), and Kenneth Bryan, (History), *Preservation or Utilization? The Question of Drilling in the Arctic National Wildlife Refuge*; Mentor: Dr. Evan Paleologos, Department of Geological Sciences

## LIFE SCIENCE

1. Jennifer Lake (Exercise Science), *The Immunological Effects of Oat  $\beta$ -Glucan Consumption and NSAID-Administration with Exercise*, Mentor: Dr. J. Mark Davis, Department of Exercise Science
2. Leah M. Brown (Psychology), *Prenatal Cocaine Exposure: Dose-Dependent Increase in Intentional Tremor*; Mentor: Dr. Charles F. Mactutus, Department of Psychology
3. Ian Kane (Biology), *Heart disease and diabetes: the role of  $\alpha$ 1-integrin and mitogen-activated protein kinases in transducing cardiac fibroblast response to hyperglycemia and mechanical stretch*; Mentor: Dr. Wayne Carver, USC School of Medicine

## NATURAL SCIENCE

1. Sarah Refi (Biology), *Identification of LeMKK4-interacting proteins from tomato*; Mentor: Dr. Johannes Stratmann, Department of Biological Sciences
2. Samantha N. Roberson (Chemistry), *Combinatorial Optimization of Extractions and Capillary Electrophoresis for Forensic Analysis of Dyes from Textile Fibers*; Mentor: Dr. Stephen L. Morgan, Department of Chemistry & Biochemistry
3. Jae Jun Kim (Physics), *Measurement of Neutrino Induced Quasi-Elastic (QE) Cross Section*; Mentor: Dr. Sanjib Mishra, Department of Physics and Astronomy

## PSYCHO-SOCIAL

1. Michael Chajewski (Psychology), *University Students' Projected Moral Disengagement Mechanisms on Peer Offenders*; Mentor: Dr. Thomas Cafferty, Department of Psychology
2. Ryan J. Newsom (Psychology), *Influence of skill acquisition on social behavior and other skills*; Mentor: Dr. Sandra J. Kelly, Department of Psychology
3. Bobby Frankenberger, Lesya Lasota, Jeni Mehta, Sara Peters, Ray Saut, and Raquel Vaca (all Psychology) *Phonological and Semantic Influences on Working Memory*; Mentor: Dr. Amit Almor, Department of Psychology

## SOCIAL AND POLITICAL COMMUNICATION

1. Kristie Etson (Marine Science) and Paula Johns (International Studies), *What is an Artist's Book?*; Mentors: Dr. Susan Hogue, Department of Art and Dr. Claudia Smith Brinson, South Carolina Honors College
2. Jeremiah Wolfe (Russian), *The True New Russians: Opinions on terrorism, democratic governance, and US-Russian relations among Russian university students*; Mentor: Dr. Gordon Smith, Department of Political Science
3. Caitlin Coker (English), *Transculturation and Gender in Japanese Contemporary Dance*; Mentor: Susan Anderson, Department of Theatre and Dance