

# ACCELebration

## SUMMER RESEARCH SYMPOSIUM

## SUMMER LEARNING

Students have experienced significant summer learning and research opportunities through the Allegheny College faculty and the Allegheny College Center for Experiential Learning (ACCEL). During the 2009 summer:

- 96 students participated in five credit-bearing travel seminars
- 20 students participated in ACCEL-sponsored internships in Washington, D.C.
- 32 pre-health students and 2 pre-legal students participated in shadowing experiences
- 35 students worked in non-profit organizations in Meadville
- 4 students worked in other parts of the world through the Bonner and Davies Leader programs
- 6 students worked for an intensive week of service with the college chapter of Habitat for Humanity
- 68 students participated in the annual week-long Collegiate Leadership Conference
- 70 students and organizations received funding for experiential learning experiences—internships, research, and shadowing

The outstanding students selected to present today were nominated by faculty and administrators involved in summer learning programs. Creating opportunities for students to give back to communities near and far is foundational to the College's philosophy. ACCELebration, Summer Learning, and the Summer Research Symposium all afford these students the chance to publicly share what they learned and a wonderful opportunity to give back to the Allegheny College community.



# ALLEGHENY COLLEGE

OCTOBER 24, 2009

# ORAL PRESENTATIONS

11 a.m.

Campus Center 301/302

## **Tinamaria Colaizzi**

**Beijing, Shanghai, Hong Kong, China's Global Cities**

*EL Study Tour*

## **Sylvia Kauffman**

**Unite for Sight Global Impact Fellow**

*Orissa, India*

## **Matthew Kaunert**

**Herpetological Internship**

*University of Florida*

## **Julia Rozewicz**

**Achieving Sustainable Development in Northern Europe**

*EL Study Tour*

# SUMMER RESEARCH POSTER PRESENTATIONS

10 a.m. – Noon

Campus Center Second Floor

## **Sandra Wayman, Alessandra Trunzo, Taylor Weiss**

**The Secret Underground Life of Switchgrass: Exploring Belowground Processes**

*Research Site: Allegheny College/Ernst Conservation Seeds*

*Mentor: Richard Bowden*

*Major/Minor of first author: Environmental Science/Music Performance (pipe organ)*

*Funding: Allegheny College Center for Economic and Environmental Development (CEED)*

## **Ryan Brindle, Amy Kimicata, Catie Vance, Lenny Constantini, Dave Domachowski**

**Daytime Sleep Does Not Influence Cardiovascular Reactivity to Stress**

*Research Site: Allegheny College*

*Mentor: Sarah Conklin*

*Major/Minor of first author: Neuroscience/Psychology*

## **Emily Thornton**

**Effects of Climate Variation on Nutrients Cycling by *Limnephilus externus* caddisfly larvae**

*Research Site: Rocky Mountain Biological Laboratory, Gothic, CO*

*Mentor: Scott Wissinger*

*Major/Minor of first author: Biology and Environmental Science/Studio Art*

*Funding: Harold M. State Fellowship*

## **Ali Trunzo**

**Forest Education for High School Students**

*Research Site: Allegheny College*

*Mentor: Richard Bowden*

*Major/Minor of first author: Environmental Studies/Biology*

*Funding: Rees Foundation, WRCP*

## **Leonard Constantini, Dave Domachowski, Ryan Brindle, Amy Kimicata, Catie Vance**

**Self-Reported Sleep Quality and Daytime Sleep Architecture in College Students is Related to Neuroticism**

*Research Site: Allegheny College*

*Mentor: Sarah Conklin*

*Major/Minor of first author: Biology, Psychology*

*Funding: FIPSE Endowed Fund, Shanbrom Fund*

## **Brendan O'Leary, Sam Elliot, Andrew Pfeifer**

**Meadville Greenhouse Gas Inventory**

*Research Site: Meadville Municipality*

*Mentor: Jennifer DeHart*

*Major/Minor of first author: Environmental Science*

*Funding: Greenhouse Gas Pilot Grant*

## **Catherine Vance, Leonard Constantini, Dave Domachowski, Ryan Brindle, Amy Kimicata**

**Exercise is related to daytime sleep architecture, but not self-reported sleep quality, in young adults**

*Research Site: Allegheny College*

*Mentor: Sarah Conklin*

*Major/Minor of first author: Mathematics/Psychology*

*Funding: FIPSE Endowed Fund, Shanbrom Fund*

## **Jessica Kenemuth, Allison Hensler**

**Investigating the Transduction Pathways of Odorants and Olfactory CO<sub>2</sub> in Mice**

*Research Site: Allegheny College*

*Mentor: E. Lee Coates*

*Major/Minor of first author: Jessica—Neuroscience/History;*

*Allison—Biology/Spanish*

*Funding: Shanbrom Fund*

## **Andrea Charbonnel**

**The Impact of Azo-Dyes on Complex Fluids**

*Research Site: Research Institute for Solid State Physics and Optics; Budapest, Hungary*

*Mentors: Istvan Janossy, David Statman*

*Major/Minor of first author: Physics/History*

*Funding: National Science Foundation*

## **Brandi Kautz, Mark Bordo**

**Electroconvection**

*Research Site: Research Institute for Solid State Physics and Optics; Budapest, Hungary*

*Mentor: David Statman*

*Major/Minor of first author: Environmental Studies and Physics/Studio Art*

*Funding: National Science Foundation*

### **Sarah Wilhelm**

#### **Internship with the Board of Health**

*Research Site:* Mahoning County Board of Health

*Mentor:* Mary Helen Smith

*Major/Minor of first author:* Environmental Science

### **LeAnne Kurela, April Johnston, Vaishali Satpute, Ludovic Tricoire, Chris McBain, David Poulsen, J. Josh Lawrence**

#### **Laminar, neurochemical, and electrophysiological evaluation of GAD65 GFP adeno-associated virus (AAV) specificity in mouse**

*Research Site:* The University of Montana- Missoula Center for Structural and Functional Neuroscience (CSFN)

*Mentor:* J. Josh Lawrence

*Major/Minor of first author:* Economics/Neuroscience

*Funding:* National Institute of Health

### **Noah R. Snyder**

#### **EPR Characterization of Manganese (II) Containing Superoxide Dimutase II Mimics**

*Research Site:* Allegheny College

*Mentor:* Doros Petasis

*Major/Minor of first author:* Biochemistry and Neuroscience/Chinese and Physics

*Funding:* Shanbrom Fund

### **Rachel Stamateris, Charles A. Ettensohn**

#### **The Role of Wnt Signaling Components in Polarized Degradation of $\beta$ -catenin in the Sea Urchin Embryo (*Strongylocentrotus purpuratus*)**

*Research Site:* Carnegie Mellon University

*Mentor:* Charles A. Ettensohn

*Major/Minor of first author:* Biochemistry/Economics

*Funding:* National Science Foundation

### **Gail Raspanti, Chris Wagner, Kaitlyn Huser, Melissa Millerschoen**

#### **Healthy Homes- Healthy Children**

*Research Site:* Crawford County

*Mentor:* Caryl Waggett

*Major/Minor of first author:* Environmental Science/Art History

*Funding:* Shanbrom

### **Daniel Paul, Ernest Smith, Jonathan Cumming**

#### **Zinc Induced Oxidative Stress Responses in Hybrid Poplars**

*Research Site:* West Virginia University

*Mentor:* Jonathan Cumming

*Major/Minor of first author:* Philosophy/Biology and Environmental Studies

*Funding:* DOE, National Science Foundation

### **Michelle Williams; Charles C. Hong, M.D., PhD; Jijun Hao, Ph.D.; Kaleh Karim; Joshua Ho**

#### **Inhibition of Hedgehog Signaling In Development and Cancer**

*Research Site:* Vanderbilt

*Mentor:* Charles C. Hong

*Major/Minor of first author:* undecided

*Funding:* National Institute of Health, Vanderbilt University

### **Stephen Shinsky**

#### **Auxin uptake effects on the kinetics of the auxin inducible GH3 promoter**

*Research Site:* Allegheny College

*Mentor:* Catharina Coenen

*Major/Minor of first author:* Biology/Political Science

*Funding:* Shanbrom Fund

### **John Milligan**

#### **Diels-Alder Reactivity of a Novel Phenylsulfonylfuran**

*Research Site:* Allegheny College

*Mentor:* S. Shaun Murphree

*Major/Minor of first author:* Chemistry/Communication Arts

*Funding:* Shanbrom Fund

### **Shane Downing**

#### **Past to present: Comparing microfossils from two locations on the California coast to understand ocean acidification**

*Research Site:* Bodega Marine Laboratory

*Mentor:* Tessa Hill

*Major/Minor of first author:* Biology/Religious Studies

*Funding:* National Science Foundation

### **Eric Winter, Z. Fowler, W. Peterjohn**

#### **Will adding more nitrogen sequester more carbon in young forests of central Appalachia?**

*Research Site:* Fernow Experimental Forest

*Mentors:* Zack Fowler, William Peterjohn

*Major/Minor of first author:* Environmental Science/Studio Arts

*Funding:* National Science Foundation

### **Hillary Bedell, Talha S. Siddiqui, Marc A. Walters**

#### **Cross-linking Carboxylic Acid Ligands to Synthesize Organic Nanoparticles**

*Research Site:* New York University

*Major/Minor of first author:* Biology/Environmental Health

*Funding:* National Science Foundation

### **Emma Cook, Liz Duhan, Chrissy Wusylo**

#### **Shadybrook Park Revitalization**

*Research Site:* Shadybrook Park, Meadville, PA

*Mentor:* Amara Geffen

*Major/Minor of first author:* Environmental Science/Studio Art

*Funding:* Arts and Environmental Initiative Funding

### **Radu Creanga**

#### **Points of Interest Along the Santa Fe Ant Trail**

*Mentor:* Bob Roos

*Major/Minor of first author:* Computer Science/Economics

*Funding:* Computer Science Department

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# STUDY ABROAD POSTER PRESENTATIONS

10:00 a.m. - Noon

Campus Center Second Floor

**Bryan Kramer**  
Angers, France

**Emily Benz**  
Angers, France

**Deborah Burnett**  
Angers, France

**Jennifer Yin**  
Capital Normal University, China

**Benjamin Eyer**  
CC-CS, Spain

**Ashley Miller**  
CC-CS, Spain

**Amanda Schworm**  
Duke Marine Lab, USA

**Matthew Neckelmann**  
Eberhard-Karls Universitat, Germany

**Zachary Honess**  
James Cook University, Australia

**Thomas Ludwig**  
James Cook University, Australia

**Emily Thornton**  
James Cook University, Australia

**Betsy Zirpoli**  
James Cook University, Australia

**Shad Hopson**  
Lancaster University, England

**Robin Sencenbach**  
Lancaster University, England

**Sarah Kropp**  
Lancaster University, England

**Jenna Levitski**  
Lancaster University, England

**Katrin Fabian**  
MSID, Kenya

**Rachel Poole**  
MSID, Kenya

**Ashley Teale**  
MSID, Kenya

**Caitlin O'Neill**  
MSID, India

**Michael Peroski**  
Oxford University, England

**Christopher Wagner**  
SFFS, Costa Rica

**Greg King**  
Tec de Monterrey, Campus Queretaro,  
Mexico

**Megan McNally**  
Washington Semester Program,  
Washington, D.C.

**Rebecca Cimko**  
Washington Semester Program,  
Washington, D.C.

**Edayatu Lamptey**  
Washington Semester Program,  
Washington, D.C.

## ALLEGHENY COLLEGE

A national liberal arts college where 2,100 students with unusual combinations of interests, skills and talents excel.