Allegheny College

2008 Summer Research Symposium
Using Genetic Algorithms to Improve Test Suite Prioritizations
Author(s): Alexander Conrad
Supervisor: Dr. Gregory M. Kapfhammer, Department of Computer Science
Funding: Harold M. State Research Fellowship

Integrating Health Across the Curriculum
Author(s): Sonja DeJong, Krys Castillo, Hillary Bedell, Nick Silva, Caryl Waggett
Supervisor: Dr. Caryl Waggett
Funding: Project Pericles grant, and R Cole; EPA grant; Demmler Foundation grant to Waggett, R Cole, V Silva and M Comber; Dean's Discretionary Fund; Office of Wellness; ACCEL; Office of Religious Life; Meadville Medical Center (in kind only)

Local Foods Network
Author(s): Lydia Gearhart
Supervisor: Dr. Jennifer DeHart
Funding: Gail Howe Fahrner Fund

Effects of learning, running & stress on maturation of new neurons in the adult brain
Author(s): Lucas R. Glover, Jason S. Snyder, Heather A. Cameron
Supervisor: Dr. Heather A. Cameron
Funding: Intramural Program of the National Institutes of Health, National Institute of Mental Health

Acute Supplementation of Long-Chain Omega-3 Fatty Acids on Parietal Asymmetry in Healthy Young Adults: A Double-Blind Placebo Controlled Study
Author(s): Siera Goodnight, Josh Sesek, Mia Symoniak, Sarah Conklin
Supervisor: Dr. Sarah Conklin
Funding: Wells Foundation, Shanbrom Fund, and McCune Foundation

The Role of Auxin in the Arbuscular Mycorrhiza Symbiosis
Author(s): Molly Hanlon and Catharina Coenen
Supervisor: Dr. Coenen
Funding: Howard M State Research Fellowship

The use of Carbon Nanotubes with Nematic Liquid Crystals
Author(s): Shad Hopson, Joshua Levinson
Supervisor: Dr. David Statman
Funding: ACCEL

The Progression of Gas through Granular Media
Author(s): Shad Hopson
Supervisor: Dr. David Statman
Funding: Well’s Foundation and ACCEL

Breathing and Nasal CO2 Chemoreceptors: Implications in Sudden Infant Death Syndrome
Author(s): Jessica Kenemuth and E. Lee Coates
Supervisor: Dr. E. Lee Coates
Funding: Shanbrom Fund

Learning eye-tracking methods by examining visual search patterns
Author(s): John Mahalchak and Megan Petroccia
Supervisor: Dr. Aimee Knupsky
Funding: John R. McCune Charitable Trust

Determination of Backbone Dynamics in Single and Dual Domain Protein GB1: Comparison in the Presence and Absence of Alignment Media
Author(s): Katlyn Meier, Joseph Walsh, and Rieko Ishima
Supervisor: Dr. Rieko Ishima of the Molecular Biophysics and Structural Biology Department at University of Pittsburgh School of Medicine
Funding: University of Pittsburgh
Race, Gender, and Persona in Buffalo Bill’s Wild West
Author(s): Amy Negley
Supervisor: Linda Clark, Buffalo Bill Historical Center in Cody, Wyoming
Funding: Dean’s Study Stipend

Spin Crossover Phenomena in Fe-Os Prussian Blue Analogs: A Variable Temperature EPR and Mössbauer Spectroscopy Study
Author(s): Tanya Nocera
Supervisor: Dr. Doros Petasis of the Physics Department
Funding: Shanbrom Fund

Design and Construction of a Low Frequency EPR Spectrometer
Author(s): Elliott Randall
Supervisor: Dr. Doros Petasis
Funding: Shanbrom Fund

Healthy Homes Healthy Children
Author(s): Gail Raspanti, Chris Wagner, Krys Castillo, and Mia Salimbene
Supervisor: Dr. Caryl Waggett
Funding: Shanbrom Fund, John McCune Foundation

Progress Toward the Development of Felix 01 as a Reporter Phage for the Rapid Detection of Salmonella
Author(s): Emily Ricotta
Supervisor: Dr. Brandi Baros, and Dr. Ann Kleinschmidt
Funding: Allegheny College Biology Department and Class of 1939 Research Fund

Women and the Civil War
Author(s): Aurora Schul
Supervisor: Dr. Paula Treckel and Dr. Ian Binnington of Allegheny College
Funding: Kenneth Robertson Fund (Department of History), Dean's Office

A Critical Look at Bandhavgarh National Park
Author(s): Mark Smeltz
Supervisor: Dr. Ishita Sinha Roy
Funding:

Effects of Mefloquine Hydrochloride on NMDA- and Kainate- Induced Drinking in Sprague Dawley Rats
Author(s): Sarah Snider and Rodney D. Clark
Supervisor: Dr. Rodney Clark
Funding: Neuroscience Program and Psychology Department

Do Caddisflies Reap a Double Benefit from Detritus Processing?
Author(s): Emily Thornton and Scott Wissinger
Supervisor: Dr. Scott Wissinger
Funding: Wells Foundation, NSF

Read Between the Signs
Author(s): Tom Kierzkowski, Zane Miller, Lacey Scott, Melissa Danielson, Heather Marendola
Supervisor: Professor Amara Geffen

Grease is the Word: Is Biodiesel Production Feasible in Meadville?
Author(s): Sandra Wayman, Alessandra Trunzo, Richard D. Bowden
Supervisor: Dr. Richard D. Bowden
Funding: Environmental Science Department

Leaf and Root Decomposition in a northern hardwood forest
Author(s): Liz Fager, Amy Werner, Richard D. Bowden
Supervisor: Dr. Richard D. Bowden
Funding: Class of 39 Fund, Shanbrom, Wells Foundation, University of Michigan
Forest Education for High School Students
Author(s): Alessandra Trunzo, Paula Carey, Elizabeth Straus, Terry Bensel and Richard D. Bowden
Supervisor: Drs. Richard D. Bowden & Terry Bensel
Funding: Rees Foundation, Shanbrom Fund, Wells Foundation

Productivity and nutrients in switchgrass, an alternative biofuel
Author(s): Katie Wills, Sandra Wayman, Lisa Alexander, Abby Conroy, Richard D. Bowden
Supervisor: Dr. Richard D. Bowden
Funding: Environmental Science, Ernst Conservation Seeds

Rostral Corpus Callosum Size is Associated with Motor Performance in Survivors of Childhood Leukemia
Author(s): Locascio, G., Ginty, A., Crocetti, D., Mostofsky, S.H., Ruble, K., Schwartz, C.L., & Mahone, E. M.
Supervisor: Dr. Mark Mahone, Kennedy Krieger Institute and Johns Hopkins University School of Medicine
Funding: Class of 1939 Fund and Visiting Alumni Fund

Acute omega-3 long chain polyunsaturated fatty acid supplementation is associated with decreased neuroticism, depression, and anxiety in healthy young adults.
Author(s): Mia Symoniak, Annie Ginty, Sierra Goodnight, Josh Sesek and Sarah Conklin.
Supervisor: Dr. Sarah Conklin, Allegheny College
Funding: Shanbrom fund.

Investigation of the hydrophobic depletion layer using Surface Plasmon Resonance
Author(s): Simon Kohnstamm, Satoko Asahi
Supervisor: Dr. Adele Poynor
Funding: Shanbrom Fund