Each on-campus summer science research student was awarded an 8-10 week stipend supported by one of several grants. Most grants also provided funds for the purchase of supplies and/or small pieces of equipment to support each student’s research project. The College generously provided free dorm housing and one course credit.

This poster session is a culmination of each student’s summer work. All of the students are pleased to have this opportunity to present their research and answer any questions you may have.
### Student Research Projects

#### Jim Ackerman ('10)
"Site Directed Mutagenesis and Functional Analysis of Estrogen Response Elements in ORF K8 Promoter Region of HHV-8 Genome"
Mentor: Dr. Frank J. Jenkins, University of Pittsburgh
Funded by: University of Pittsburgh Cancer Institute

#### Janette Adams ('09)
"The Effects of Photo-Exposed Dissolved Organic Matter on Bacterial Growth in Lake Itasca and Deming Lake"
Mentor: Dr. James Cotner, University of Minnesota
Funded by: NSF REU in Global Change Ecology

#### Mary Kate Adelizzi ('09) & Meghan Wilson ('10)
"Mycorrhizae and Soil Interactions: Getting to the 'Roots' of L. benzoin Herbivory"
Mentor: Dr. Richard Niesenbaum
Funded by: NSF-CRUI grant

#### Cari Baumgartner ('09)
"Sediment Grain Size in Stable and Historical Seagrass Beds of the Chesapeake"
Mentor: Dr. Cindy Palinkas
Funded by: NSF REU and Maryland Sea Grant

#### Samantha Brannick ('09)
"Synthesis of Linear Polynyes via Laser Ablation"
Mentor: Dr. Bruce Anderson
Funded by: Dean's Summer Research Grant

#### David Broxmeyer ('10)
"Assembly and Quality Assurance Tests of Gas Gaps for the PHENIX Muon Trigger Upgrade"
Mentor: Dr. Brett Fadem
Funded by: NSF and the PHENIX Collaboration

#### Kelly Butler ('11)
"Uptake of DDE and PCBs by Earthworms and Plants from Contaminated Soil"
Mentor: Dr. Jason Kelsey
Funded by: REBCS

#### Caley Caras ('09)
"The Effect of Soil Juglone Concentration on Herbivory of Lindera benzoin Growing near Black Walnut"
Mentor: Dr. Christine Ingersoll
Funded by: NSF-CRUI grant

#### Erin Cole ('10)
"Phenotypic Plasticity among Genotypes: Variations in Leaf Physiology by Light Environment"
Mentors: Drs. Richard Niesenbaum & Emily Mooney
Funded by: NSF-CRUI grant

#### Hayley Cush ('09)
"Hold Time Challenge Study Performed on IGIV-C In-process Initial Sterile Bulk Samples"
Mentor: Dr. Keri Colabroy
Funded by: Talecris Biotherapeutics

#### John DiMeglio ('10) and Anthony Bambara ('10)
"Synthesis and Characterization of Tetraaryl Silanes"
Mentor: Dr. Don Shive
Funded by: REBCS

#### Steve Epting ('09)
"Consequences of Lark Sparrow (Chondestes grammacus) Nest-site Selection in Shortgrass Prairie"
Mentors: Dr. William E. Jensen, Emporia State University and Dr. Raymond Matlack, West Texas A&M University
Funded by: NSF REU

#### Caitlin Harper ('11)
"Event Display for the RPC Test Stand at PHENIX"
Mentor: Dr. Brett Fadem
Funded by: NSF and the PHENIX Collaboration

#### Kelly Butler ('11)
"Uptake of DDE and PCBs by Earthworms and Plants from Contaminated Soil"
Mentor: Dr. Jason Kelsey
Funded by: REBCS

#### Mike Gillies ('10)
"Phosphine-Free Heck Reactions"
Mentor: Dr. Charles E. Russell
Funded by: REBCS

#### Michael Petrelli ('10)
"The Genetics of Phyto remediation of Soil Pollutants"
Mentor: Dr. Jason Kelsey
Funded by: Merck/AAAS

#### Maria Ruppert ('09)
"Heck Reactions of Alkenyl Halides"
Mentor: Dr. Charles E. Russell
Funded by: Johnson & Johnson

#### Zachary Kuschner ('09)
"GCN5 Distribution in Arabidopsis thaliana Flowers"
Mentors: Drs. Amy Hark and Elizabeth McCain
Funded by: Dean's Summer Research Grant

#### Chelsea Lobdell
"Free/Open Source Software Tools for a Library Website: A Comparative Analysis"
Mentors: Ms. Mary Moulton and Dr. Cliff Kussmaul
Funded by: Dean's Summer Research Grant

#### Andrew Markham ('09)
"Anaerobic Production of Methane in Plants"
Mentor: Dr. E. Neil G. Marsh, University of Michigan
Funded by: NSF

#### Jessica Nesmith ('09)
"Investigation of a Gain-of-Function APC-5 Mutation that Suppresses the Embryonic Lethality of an Anaphase Promoting Complex Mutant"
Mentor: Dr. Andy Golden, National Institute of Diabetes & Digestive & Kidney Diseases the Laboratory of Biochemistry and Genetics
Funded by: NIH Undergraduate Summer Internship

#### Evan Orosz ('10)
"Synthesis of Chiral Ligands for an Improved Asymmetric Heck Reaction"
Mentor: Dr. Charles E. Russell
Funded by: REBCS

#### Marisa Periera ('10), Elia Wright ('10) and Steven Finkelstein ('11)
"Genetic Diversity in Spicebush (Lindera benzoin) Populations from an Ecological and Biogeographical Perspective"
Mentor: Dr. Marten Edwards
Funded by: NSF-CRUI grant

#### Emily Petchler ('09)
"Eat and Run: Predator Preference for and Escape Responses by Potential Hosts of the Snail Crepidula adunca"
Mentor: Dr. Erika Iyengar
Funded by: Dr. John E. Trainer Scholarship for Summer Study in Biology and the Dean's Summer Research Grant

#### Evan Sheppard ('09)
"2b or not 2b? That is the Question: An Investigation of the Conserved Domains of ADA2b"
Mentor: Dr. Amy Hark
Funded by: Merck/AAAS

#### Michael Sikorsky ('10)
"Distribution of Brood XIV Periodical Cicadas in Pennsylvania"
Mentor: Dr. Marten Edwards
Funded by: James Vaughn Family