Student Research Projects

Hayley Reed (with Jeremy Kaplan)
Synthesis and Characterization of 4-pyrroldiyldipyridyl-based Tetradentate Ligands
Mentor: Dr. Joseph Keane
Funded by: Faculty-Student Collaborative Research Grant from the Muhlenberg College Provost’s Office

Hudson Roth
The Organic Synthesis of 1,4-benzodiazepine-2,5-diones, Potent Inhibitors of the Protein Kinase ROCK II
Mentor: Dr. Gary Glick and Lauren Dixon Mishra, University of Michigan
Funded by: University of Michigan NSF-REU program (NSF-CHE-1062654)

Lindsey Ruggiero
The effects of the protein synthesis inhibitor Cycloheximide on tactile discrimination memory in the Two Door Alley Maze
Mentor: Dr. Gretchen Gotthard
Funded by: Neuroscience Collaborative Research Grant

Benjamin Schweid (with Cora Wallace)
Transverse Energy
Mentor: Dr. Brett Fadem
Funded by: Brookhaven National Laboratories and NSF - 1209240

Kelson Shilling-Scrivo
Response of lateral protocerebrum to visual stimulation in Sarcophaga
Mentor: Dr. Patrick Williams
Funded by: Muhlenberg College Neuroscience Collaborative Research Program

MariAnne Skolnik (with Nicki Cronin)
Calibrating the Muon Piston Calorimeter (MPC)
Mentor: Dr. Brett Fadem
Funded by: NSF-RUI 1209240 and a Faculty-Student Collaborative Research Grant from the Muhlenberg College Provost’s Office

Kirsten Swayne
The Role of ARHGEF10 in Dendritic Spine Morphogenesis
Mentor: Dr. Huaye Zhang, UMDNJ-Robert Wood Johnson Medical School
Funded by: Department of Neuroscience and Cell Biology at Robert Wood Johnson Medical School

Besher Tolaymat (with Jimmy Custer)
Ligand Synthesis for use in Dearomatization of Aromatic Compounds using Metal Fragments.
Mentor: Dr. Joseph Keane
Funded by: Faculty-Student Collaborative Research Grant from the Muhlenberg College Provost’s Office

Andrew Tullo (with Michael Young)
Distinguishing the Highest Quality Events in Very Large Data Sets
Mentor: Dr. Brett Fadem
Funded by: NSF-RUI 1209240 and the Muhlenberg Provost’s Office

Cora Wallace (with Benjamin Schweid)
Transverse Energy
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Mike Walsh (with Laurainne Ojo-Ohikuare and Tim Gee)
Review & Design of Guided Inquiry Activities for Computer Science
Mentor: Dr. Clif Kussmaul
Funded by: NSF TUES #1044679: Process Oriented Guided Inquiry Learning (POGIL) in Computer Science (awarded to Dr. Kussmaul)

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Mark Yulis (with Kenn Andersen)
Investigating Mosquito and Drosophila Juvenile Hormone Biosynthetic Enzyme Gene Promoters Using the GAL4/UAS expression system.
Mentor: Dr. Marten Edwards
Funded by: Dr. James R. Vaughan Award

Christopher Zumberge
Progress in Simulations for the PHENIX Muon Piston Calorimeter Measurement of Transverse Energy
Mentor: Dr. Brett Fadem
Funded by: NSF-RUI 1209240

This poster session was sponsored very generously by the Muhlenberg College offices of Admissions, the Provost, and the DOCAL, by the departments of Biology, Chemistry, Mathematics, Physics and the Neuroscience program.
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Benjamin Doyle
Chemical Treatments Effects on *Bambus impatiens* Recruitment Rate To Novel Food Resources Via Olfactory Cues
Mentor: Dr. Jordanna Sprayberry
Funded by: Neuroscience Collaborative Research Grant

Jaclyn Durkin
The Effects of Distraction on Consolidation of Traumatic Memory in an Animal Model of PTSD
Mentor: Dr. Gretchen Gotthard
Funded by: Summer research grant from the office of the Dean of the College for Academic Life

Catherine Pearl Ezio
Using Yeast One-Hybrid Experiments to Identify Potential Regulators of *nhr-67* in *C. elegans* Uterine Development
Mentor: Dr. Bruce Wightman
Funded by: The Biology Department (unrestricted funds)

Matthew Fitzsimmons
Synthesis of a Non-Racemic Electron-rich Metal Complex
Mentor: Dr. Joseph Keane
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Baseball Cyclopedia: Facts, Stories, Peculiarities, Modeling and Predictions of Hitting for the Cycle in Major League Baseball
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Mentors: Kate Beishline and Dr. Jane Azizkhan-Clifford, Drexel University
Funded by: Department of Biochemistry and Molecular Biology, Drexel University College of Medicine

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Synthesis and Biological Characterization of Sphingosine Kinase II Selective Inhibitors
Mentor: Dr. Webster Santos
Funded by: The Fralin Undergraduate Summer Research Program

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Mentor: Dr. Bruce Wightman
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Mentor: Dr. Alexander Parikh, Vanderbilt University
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