

RC Research

Student/Faculty Research

December 2011

Editor: Dr. Julie Lyon

Student/Faculty Showcase of Research & Creativity a Big Success

Nearly 50 posters and 16 oral presentations were featured on the Friday of Family Weekend. Hundreds of family members and friends attended and were incredibly impressed by student/faculty scholarly activities. Presenters received a free t-shirt (“if it worked the first time, we wouldn’t call it re-search”) and a keychain sharpie (“Make your mark. Do research. roanoke.edu/research”). Feeling bummed that you didn’t get a t-shirt or sharpie? Present at the RC Conference on Student Research & Creativity this Spring (Friday, March 30 from 4-7pm) and you will receive them for free! (See next page for details.)

This Year’s New Faculty Scholars

One of the most prestigious internal research grants is called “Faculty Scholar.” After a competitive application process, the Faculty Development Committee named four Faculty Scholars. Each receives reassigned time and a small stipend for three years. Please congratulate the following faculty and encourage them in their scholarly endeavors!

- **Dr. Tim Johann** of the Chemistry Department: “Characterization of Proteases from a Malaria Pathogen”
- **Dr. Mary Henold** of the History Department: “A Period of Adjustment: Laywomen’s Responses to the Vatican II Transition”
- **Dr. Denise Adkins** of the Psychology Department: “Examining Higher-Order Cognition in Multiple Domains”
- **Dr. Pamela Galluch** of the Business Administration & Economics Department: “Triangulating Stress: The Role of Social Desirability in Technostress Research”



Current URAP Scholars and Faculty Mentors

Welcome New URAP Scholars

The Undergraduate Research Assistant Program (URAP) would like to welcome our newest batch of freshmen to the program:

- **Elsa Weiboldt** will be working with **Dr. Rachel Collins** on “Assessing the Role of Exotic Earthworms on Forest Understory Diversity”
- **Ann Shreckhise** will be working with **Dr. Matt Rearick** on “Understanding the Choices We Make: A Psychological, Physiological and Kinematic Examination of Human Motion”
- **Logan Brown** will be working with **Dr. Vern Miller** on “Reactions of Amine Iodoboranes with Carbon-Carbon and Carbon-Oxygen Double Bonds”
- **Ashley Nyitray** will be working with **Dr. Tim Johann** on “Investigations of the Enzyme 5,10-Methenyltetrahydrofolate Synthetase”
- **Michelle Pasier** will be working with **Dr. Cathy Sarisky** on “Purine Biosynthesis in Archaea”
- **Davalyn Pugh** will be working with **Dr. DB Poli** on “A Rock Garden: Understanding Botany through Natural History”
- **Nathan Sliwa** will be working with **Dr. Chad Morris** on “Community-Based Public Health Promotion: Diet and Non-Communicable Disease in Palau”

Roanoke College Student/Faculty Research



RC student presenters at MARCUS in October 2011

Need Money to Present at a Conference? Apply now.

Students are eligible for funding to present their research or creativity at professional conferences. To apply, students should submit a request (including budget numbers) via: <http://tiny.cc/travelfund> Funding is capped at \$500 per student per year. Students planning to travel before June 30th should apply by **February 1st** for priority consideration.

Present at RC Conference

RC Conference on Student Research & Creativity
4:00 – 7:00 p.m. – Colket Center
Friday, March 30, 2012

Abstracts due: Tuesday, March 20, 2012 at 11:59pm
Online submission: <http://tiny.cc/Conference2012>

Any Roanoke College student can present research or creative work at the conference. Projects from class, independent study, honors, etc. are welcome.

Recent Off-Campus Research Presentations

- **Rob Harbert** presented at the American Society of Plant Biologist's Meeting in Minneapolis, MN in August 2011. His research mentor was **Dr. Len Pysh** of the Biology Department.
- Twenty-two Roanoke College students presented at MARCUS (Mid-Atlantic Regional Conference of Undergraduate Scholarship) in October of 2011.
Roanoke College Student Oral Presentations:
- **Bryan Piatkowski:** Examining the Evolution of Polar Auxin Transport in Bryophyte Gametophytes
- **Sam Beasley:** A Psychological View of Love
- **Amanda Newman:** Intimacy and Texting Behaviors
- **Alyssa Bostrom:** Immigration and the Media
- **Sarah Ahlbrand:** The Biosynthesis of the Chemotherapeutic Agent ET-743 Focusing on the Heterologous Expression of Key Biosynthetic Genes
- **Julia Boudrye** and **Lauren Schwabe:** Smartphone Use in College Students: Implications and Impact
- **Margaret Anderson:** The Executive Office of the President: Analyzing the Influence on Policy-Making
- **Ariel Firebaugh:** Lymantria disp-erse! The Effect of Landscape Structure on Male Gypsy Moth Densities
Roanoke College Student Poster Presentations:
- **Will Bader:** Examining the Effect of Forest Fires and Increased Nutrient Levels on Algal Blooms in Marine Ecosystems.
- **Jonathan Perkins:** Ethers and Fluoroethers from Pentafluorophenyl-Substituted Cyclopentadienes
- **Caroline Hunter:** Gene Cloning in the Purine Biosynthetic Pathway in *Archaeoglobus fulgidus*
- **Jeremy Johnson:** Bisamine Boron Cations from 1,4-Dimethylpiperazine
- **Meagan Tolley:** A Study of Purine Biosynthesis in *Sulfolobus solfataricus*
- **Colin David Briggs:** Adsorption and Release of Organic Dyes in Mesoporous Silica Spheres
- **Sara Blankenship:** Creation of a Substrate Phage Display Library to Study Enzyme-Substrate Interactions of Plasmepsins IX and X in *P. falciparum*
- **Paul Vines:** A Computational Approach to Iron Metabolism in Breast Epithelial Cells
- **Casey Wojtera:** Investigations of the Active Site of 5, 10-methenyltetrahydrofolate synthetase (MTHFS) from *Mycoplasma pneumoniae*
- **Kayla R. Muncy:** Cloning Plasmepsins IX and X to Find Their Function in Malaria
- **Matthew Corbicz:** Examining Polar Auxin Transport in the Moss Gametophyte of *Dicranium scoparium*
- **Kacy Dillon & Steven Huffman:** Students' Perceptions of Professors
- **Chris Weisenbacher** presented at the Peace and Justice Studies Association Conference in Memphis, TN in October 2011 on "Legitimacy and Credibility in Nonviolent Movements." This Summer Scholars project was mentored by **Dr. Michael Heller** of the English Department.
- A team of Economics students presented at the Fed Challenge held at the Federal Reserve Bank of Richmond in November 2011. **Nomin Baasandavaa, Dustin DeMaria, Graham Quadland, Nathan Castellano,** and **Marko Krkeljas** were coached by **Professor Michelle Crook** of the Business Administration & Economics Department.