

# Undergraduate Research and Scholarship Symposium Award Winners 2017

## Bayer School of Natural and Environmental Sciences

Excellence in Research in the Basic Sciences: \$300

### **89 *Serine Phosphorylation is Involved in Lps-Dependent Activation Of The Spi-1 Transcription Factor***

Tiffany Ricketts

Other Authors: David Kosko, Sree Pulugulla

Junior | Biochemistry | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Philip Auron, Ph.D.

Excellence in Research in the Basic Sciences: \$300

### **114 *Detection of Lead in Drinking Water Using a Homemade and Inexpensive LED-Based Fluorometer*** Gage Tiber

Other Authors: Aria Parangi, Partha Basu, Spencer Graves

Senior | Physics | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Ted Corcovilos, Ph.D.

Honorable Mentions: \$100

### **13 *Evaluation of a mini-barcode primer set for use in monitoring ray-finned fish communities from environmental DNA samples.***

Ashton Callipare

Other Authors: Taylor Cutteridge, Brian Trevelline and Brady Porter

Sophomore | Biology | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Brady Porter, Ph.D.

Honorable Mentions: \$100

### **58 *Skin peptides from red-legged salamanders (Plethodon shermani) inhibit the chytrid fungus Batrachochytrium dendrobatidis.***

Andrew Magyan

Other Authors: Sarah Woodley

Senior | Biology | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Sarah Woodley, Ph.D.

Honorable Mentions: \$100

### **109 *Development of the Field Isolation and Amplification of DNA Assay (FIA-DNA) kit: A Revolutionary Method for Species Identification of Unknown Samples***

Nickolas Walker

Senior | Forensic Science & Law | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Jan Janecka, Ph.D.

Honorable Mentions: \$100

### **123 *Mechanical and thermal design for a part-per-million laser wavelength meter***

Jake Kline, Jahnavee Mittal, Isaac Davies, Tim Ireland, Gage Tiber

## Undergraduate Research and Scholarship Symposium Award Winners 2017

Sophomore | Physics | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Ted Corcovilos, Ph.D.

### Center for the Catholic Faith and Culture and Center for Spiritan Studies

Catholic Faith and Culture and Spiritan Studies Award for Undergraduate Research: \$250

**16 *Better Babies and "Race Suicide": Eugenics in Pittsburgh Women's Groups***

Nicole Cordier

Senior | History and Classics | McAnulty College and Graduate School of Liberal Arts

Faculty Advisor: Andrew Simpson, Ph.D.

### Center for African Studies

Award for Undergraduate Research: \$250

**2 *Unity is Strength: Effective Global Partnerships***

Clara Altemus, Nikki Yeckel, Quinn Tattersall

Other Authors: Anne Marie Hansen

Senior | Occupational Therapy | Rangos School of Health Sciences

Faculty Advisor: Jaime Munoz, Ph.D

### Center for Teaching Excellence

Award for Undergraduate Research: \$250

**42 *Imagination vs. Logical Thinking: The Difference in Imagination between a Higher-Level Learner and a Lower-Level Learner***

Morgan Hamby

Senior | Early Childhood Education | School of Education

Faculty Advisor: Sandra Quinones, Ph.D

### Counselor Education Program

Award for Undergraduate Research: \$250

**143 *The Effect of Alternate Seating on Improving Attention and in Seat Behavior of Preschoolers with Autism***

Kristen Morgus

Senior | Occupational Therapy | Rangos School of Health Sciences

Faculty Advisor: Jeryl Benson, EdD, OTR/L

### Department of History

The Clio Award for Undergraduate Research in History

First Place: \$200

**16 *Better Babies and "Race Suicide": Eugenics in Pittsburgh Women's Groups***

Nicole Cordier

Senior | History and Classics | McAnulty College and Graduate School of Liberal Arts

Faculty Advisor: Andrew Simpson, Ph.D.

Second Place: \$150

**72 *Women in the Late Nineteenth Century: Involvement in the 1893 Chicago World's Fair***

Maria Miller

Junior | History / Secondary Education | McAnulty College and Graduate School of Liberal Arts

Faculty Advisor: Jotham Parsons, Ph.D.

## Undergraduate Research and Scholarship Symposium Award Winners 2017

Third Place: \$100

**40 *Talk Less, Smile More: How Supplemental Education is the New Textbook Education***

Emily Grecco

Senior | Dual Degree Secondary Social Studies Education and History | School of Education

Faculty Advisor: Patricia Sheahan, Ph.D.

### Gumberg Library

Gumberg Library Award for Undergraduate Research: \$250

**20 *Tracking the Sexual Assault Kit Backlog***

Kallie Crawford

Senior | Forensic Science & Law | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Lyndsie Ferrara

### Honors College

Outstanding Poster: \$250

**96 *Measurement of the Proton Radius at The Paul Scherrer Institute (PSI)***

Adam Sneath

Sophomore | Physics | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Fatiha Benmokhtar, Ph.D.

### Mary Pappert School of Music

Mary Pappert School of Music Undergraduate Award: \$250

**67 *Music Therapy and the Rehabilitation of Child Soldiers***

Christie McKernan

Senior | Music Therapy | Mary Pappert School of Music

Faculty Advisor: Robin Chapdelaine, Ph.D.

### McAnulty College and Graduate School of Liberal Arts

Outstanding Research Merit: \$250

**87 *Spatial and Temporal Estimations for Familiar Objects and Events***

Jennifer Rauch

Senior | Psychology | McAnulty College and Graduate School of Liberal Arts

Faculty Advisor: Alexander Kranjec, Ph.D.

### Mylan School of Pharmacy

Award for Undergraduate Research: \$250

**52 *Antimicrobial Stewardship in Dental Practice: The Development and Impact of a Pharmacy-Led Intervention***

Natalie Kokta

Other author: Anthony J. Guarascio, PharmD, BCPS

Senior | Pharmacy | Mylan School of Pharmacy

Faculty Advisor: Autumn Stewart, PharmD, BCACP, CTTS

## Undergraduate Research and Scholarship Symposium Award Winners 2017

### ***76 Novel ERK5/MEK5 inhibitors in the treatment of triple negative breast cancer***

Victoria Nesbitt

Additional Authors: Akshita Bhatt, Thomas Wright, Jane Cavanaugh, Patrick Flaherty  
Senior | Pharmacy | Mylan School of Pharmacy

Faculty Advisor: Jane Cavanaugh, Ph.D.

### Office of the Provost

Outstanding Scholarship Award: \$250

### ***119 No Value: Money and Material Possession as Symbols for Decaying Values in Faulkner's The Sound and The Fury and As I Lay Dying***

Elisha Jones

Junior | English | McAnulty College and Graduate School of Liberal Arts

Faculty Advisor: Greg Barnhisel, Ph. D.

### Office of Research for Outstanding Poster: 125

### ***17 A Comparative Study of Two Analgesic Compounds, Fenobam Sulfate and Fenobam Free Base, Using a Model of Inflammatory Nociception***

Abigail Cox

Other Authors: Neil Lax, William Welsh, Youyi Peng , Benedict Kolber

Junior | Biology | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Benedict Kolber, Ph.D.

### Best Formal Presentation: \$125

### ***67 Music Therapy and the Rehabilitation of Child Soldiers***

Christie McKernan

Senior | Music Therapy | Mary Pappert School of Music

Faculty Advisor: Robin Chapdelaine, Ph.D.

### Office of Diversity and Inclusion

Outstanding Undergraduate Research: \$250

### ***110 Reproductive Health Awareness Among Female Adolescents of Inner City Pittsburgh***

Ella Walsh, Jamie Watt, Shaylene Carter, Ana Uribe

Senior | Nursing | School of Nursing

Faculty Advisor: Jessica Devido, PhD; Cathleen J. Appelt, PhD; and Andrew T. Simpson, PhD

### Phi Kappa Phi, National Honors Society

Outstanding Research: \$500

### ***7 Approaching Neuroscience Using an Engineering View***

Marissa Behun

Other Authors: Benedict J. Kolber

Junior | Biomedical Engineering | Biomedical Engineering

Faculty Advisor: Mary Jo Babinsack

## Undergraduate Research and Scholarship Symposium Award Winners 2017

Honorable Mention: \$250

### **20 *Tracking the Sexual Assault Kit Backlog***

Kallie Crawford

Other author: Lyndsie Ferrara

Senior | Forensic Science & Law | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Lyndsie Ferrara

Honorable Mention: \$250

### **116 *Body Posture and Perceptions of the Homeless***

Natalia Wohar

Sophomore | Psychology | McNulty College and Graduate School of Liberal Arts

Faculty Advisor: Alex Kranjec, Ph.D.

Honorable Mention: \$250

### **114 *Detection of Lead in Drinking Water Using a Homemade and Inexpensive LED-Based Fluorometer***

Gage Tiber

Other Authors: Aria Parangi, Partha Basu, Spencer Graves

Senior | Physics | Bayer School of Natural and Environmental Sciences

Faculty Advisor: Ted Corcovilos, Ph.D.

### **Rangos School of Health Sciences**

Rangos School of Health Sciences Award for Undergraduate Research: \$250

### **100 *The Effect of ADHD and Learning Disabilities on Neurocognitive Baseline Testing in High School Student-Athletes: A Critically Appraised Topic***

Morgan Starczewski, James Daniel

Junior | Athletic Training | Rangos School of Health Sciences

Faculty Advisor: Erica Beidler, PH.D

Rangos School of Health Sciences Award for Undergraduate Research: \$250

### **32 *Music and adherence in upper extremity home programs post-stroke***

Joanna Eskander, Lauren Matthews

Other Author: Sarah Wallace

Senior | Occupational Therapy | Rangos School of Health Sciences

Faculty Advisor: Elena Donoso Brown, PhD, OTR/L

### **School of Nursing**

School of Nursing Undergraduate Research Award: \$250

### **91 *Vocational Aspirations of Inner City School Girls***

Julie Rothberg, Octavia Anderson and Bria Brodie

Senior | Nursing | School of Nursing

Faculty Advisor: Cathleen J. Appelt, PhD; Andrew T. Simpson, PhD; and Jessica Devido, PhD

# Undergraduate Research and Scholarship Symposium Award Winners 2017

## University Academic Sustainability Committee

Excellence in Sustainability & the Environment: \$250

**148 *Is "Help", Helpful? Analyzing Foreign Aid in Context of Scale***

Catherine Hull

Senior | Information Systems Management & Accounting | A.J. Palumbo School of Business Administration

Faculty Advisor: Matt Ryan, Ph.D.

Excellence in Sustainability & the Environment: \$250

**118 *Vulnerable Populations, Mercer County, Pennsylvania***

Megan Winner

Senior | Sociology | McAnulty College and Graduate School of Liberal Arts

Faculty Advisor: Michael Irwin, Ph.D.