Bayer School of Natural and Environmental Sciences
Excellence in Research in the Basic Sciences: $300

**Recombinant Expression of Human Semenogelin Proteins and Creation of Novel Antibodies for the Detection of Human Semen**
David Brown
Bayer School of Natural and Environmental Sciences | Forensic Science and Law
Faculty Advisor: Michael Jensen-Seaman, Ph.D.
Abstract Number: 91

Excellence in Research in the Basic Sciences: $300

**Exploring spatial competition within biofilms through a pleiotropic regulator**
Jordan Denk
Bayer School of Natural and Environmental Sciences | Biology
Faculty Advisor: Wook Kim, Ph.D.
Additional Authors: Anton Evans (graduate student), Collin Kessler (graduate student), Wook Kim, Ph.D. (faculty)
Abstract Number: 60

Honorable Mentions: $100

**Electrochemically Fabricated Substrate Dependent Smart Electrocatalysts Ni-Fe-double and Ni-Co-Fe-triple hydroxides for Efficient Water Splitting to Oxygen and Hydrogen**
Meron Metaferia
Bayer School of Natural and Environmental Sciences | Biochemistry
Faculty Advisor: Shahed Khan, Ph.D.
Abstract Number: 53

Honorable Mentions: $100

**Exploring Plethodontid Salamander Skin Peptides for Antimicrobial Therapeutics**
Tiffany Ricketts
Bayer School of Natural and Environmental Sciences | Biochemistry
Faculty Advisor: Sarah Woodley, Ph.D.
Additional Authors: Patrice Clemenza, Kenzie Pereira (graduate student)
Abstract Number: 59

Honorable Mentions: $100

**LCMS Method Development for the Identification and Quantification of Illicit Drugs Introduced into Correctional Facilities**
Erica Maney
Bayer School of Natural and Environmental Sciences | Forensic Science and Law
Faculty Advisor: Stephanie Wetzel, Ph.D.
Additional Authors: Logan Miller (previous grad student); Sean Fischer (grad student)
Abstract Number: 78
Honorable Mentions: $100

**Multi-Anode Photo-Multipliers in Particle Detectors and Nuclear Medicine**
Connor Pecar
Bayer School of Natural and Environmental Sciences | Physics
Faculty Advisor: Fatiha Benmokhtar, Ph.D.
Additional Authors: Fatiha Benmokhtar, Ph.D. (Faculty member), Marco Mirazita, Ph.D. (External advisor)
Abstract Number: 84

**Biomedical Engineering**
Duquesne Award for Excellence in Biomedical Engineering: $100

**SOLFARM**
Madelyn Hoying, Garett Craig, Nina Dorfner, Karli Sutton, Jordan Hoydick, Paige Aley, Sawyer Weitzel, Audrey Steen, Peyton Joiner, Erin Kuhn, Alexander Evans, Sophia Perez
A.J. Palumbo School of Business Administration, School of Education, Rangos School of Health Sciences, Bayer School of Natural and Environmental Sciences, School of Nursing, Biomedical Engineering Physics
Majors: Biomedical Engineering, Chemistry, Nursing, Accounting, Education, Physician Assistant Studies
Faculty Advisor: Benjamin Goldschmidt, Ph.D.
Abstract Number: 95

**Center for the Catholic Faith and Culture**
Common Good Research Award: $250

**A Modern Reflection on Colonialism in Puerto Rico**
Shawn Robinson
McAnulty College and Graduate School of Liberal Arts | Political Science and History
Faculty Advisor: Emad Mirmotahari, Ph.D
Abstract Number: 5

**Center for Community-Engaged Teaching and Research**
CETR Award for Undergraduate Research: $150

**Developing Occupational Identity in Refugee Youth**
Anna Fish
Rangos School of Health Sciences | Occupational Therapy
Faculty Advisor: Jaime Muñoz, PhD, OTR/L/FAOTA
Abstract Number: 41
**Center for African Studies**
Award for Undergraduate Research in African Studies: $300

**Effects of Fluoride on the Human Body in Tanzania**
Abbey Whitewood
Bayer School of Natural and Environmental Sciences, School of Nursing | Nursing
Faculty Advisor: David Kahler, Ph.D.
Additional Authors: Jessica Devido, Ph.D, CRNP (faculty)
Abstract Number: 51

**Center for Healthcare Ethics**
Award for Undergraduate Research in Ethics: $250

**Being Pro-Life Beyond Political Divides**
Teresa Klaber, Mary Kate Modico
Rangos School of Health Sciences and School of Pharmacy | Speech Language Pathology and Pharmacy
Faculty Advisor: Radu Bordeianu, Ph.D.
Abstract Number: 21

**Center for Teaching Excellence**
Award for Undergraduate Research: $250

**Doodles From Pupils**
Brittney Lybarger
McAnulty College and Graduate School of Liberal Arts | Integrated Marketing Communication,
Minors in Business Management and Digital Media Arts
Faculty Advisor: Sarah DeIuliis, Ph.D.
Abstract Number: 46
**Center for Women’s and Gender Studies**  
Award for Undergraduate Research: $250  
**Exploring gender disparities in the scholarly activity of physician assistant educators**  
Ana Brandt  
Rangos School of Health Sciences | Physician Assistant Studies  
Faculty Advisor: Bridget Calhoun, Ph.D., PA-C  
Abstract Number: 58

**Classics Department**  
Best Poster/Presentation: $250  
**Negative Effects of the Sensualization of the RMS Titanic**  
Julia Cardinal  
McAnulty College and Graduate School of Liberal Arts | Classical Latin and History  
Faculty Advisor: Katherine Rask, Ph.D  
Abstract Number: 86

**Counselor Education Program**  
Award for Undergraduate Research: $250  
**Influence of Cognitive Behavioral Therapy on Anxiety in Individuals with Autism Spectrum Disorder**  
Tesla Knight  
Rangos School of Health Sciences | Occupational Therapy  
Faculty Advisor: Matthew Ussia, Ph.D.  
Abstract Number: 75

**Gumberg Library**  
Gumberg Library Award for Undergraduate Research: $500  
**How does the use of medical marijuana affect patients suffering from headaches?**  
Lilly Shupe, Sean Edmonds  
Rangos School of Health Sciences | Athletic Training  
Faculty Advisor: Sarah Manspeaker, Ph.D.  
Abstract Number 69

**Honors College**  
Outstanding Poster: $150  
**Creating a Waste-Negative 3D Printing Recycling System**  
Karli Sutton, Alexander Evans  
Biomedical Engineering  
Faculty Advisor: Benjamin Goldschmidt, Ph.D.  
Abstract Number: 34

**Mary Pappert School of Music**  
Mary Pappert School of Music Undergraduate Award: $250  
**Wagner, Opera, and Anti-Semitism**
Olivia Burik  
Mary Pappert School of Music | BM Cello Performance  
Faculty Advisor: Paul Miller, Ph.D.  
Abstract Number: 117

**McAnulty College and Graduate School of Liberal Arts:**
Outstanding Research Merit: $250  
**80 Mapping Mental Experience Inside and Outside the Brain**  
Julie Heintzel, Joseph Stockman  
McAnulty College and Graduate School of Liberal Arts | Psychology  
Faculty Advisor: Alexander Kranjec, Ph.D.

**Office of the Provost**
Outstanding Scholarship Award: $150  
**46 Doodles From Pupils**  
Brittney Lybarger  
McAnulty College and Graduate School of Liberal Arts | Integrated Marketing Communication, Minors in Business Management and Digital Media Arts  
Faculty Advisor: Sarah DeIuliis, Ph.D.

Best Poster: $150
**Using Loop-Mediated Isothermal Amplification (LAMP) to Identify At-Risk Species in the Field**  
Brooke Driscoll  
Bayer School of Natural and Environmental Sciences | Forensic Science and Law  
Faculty Advisor: Jan Janecka, Ph.D.  
Additional Authors: Nickolas P. Walker, M.S  
Abstract Number: 115

Best Oral Presentation: $150
**Quantifying Iron Overload using MRI, Active Contours, and Convolutional Neural Networks**  
Andrea Sajewski, Jonathan Kamis, Ralf Loeffler, Claudia Hillenbrand, Stacey Levine  
McAnulty College and Graduate School of Liberal Arts, Biomedical Engineering | Biomedical Engineering and Mathematics  
Faculty Advisor: Stacey Levine, Ph.D.  
Abstract Number: 90

**Office of Diversity and Inclusion**
Outstanding Undergraduate Research: $250  
**Empress Wu and Other Notable Women of Traditional China**  
Vicente Zamarripa-Zoucha  
McAnulty College and Graduate School of Liberal Arts | History
Faculty Advisor: Jing Li, Ph.D.
Abstract Number: 54

**Office of Disability Services**
Outstanding Undergraduate Research: $500
Use of a Person-Centered Planning Approach to Encourage Vocational Goal Setting Among Adults with Intellectual and Developmental Disabilities
Amy Castagnino, Abbey Gore, Katrina McNally
Rangos School of Health Sciences | Occupational Therapy
Faculty Advisor: Dr. Meghan Blaskowitz, DrPH, MOT
Abstract Number: 113

**Office of Research**
Video Competition Award: 3 awards, $150 each
**Stronger Than Hate**
Katrina McNally, Abigail Gore, Amy Castagnino
Major: Occupational Therapy | School: Rangos School of Health Sciences
Faculty Advisor: Amy Matilla, Ph.D, OTR/L
Video Link: [https://youtu.be/ZSsdOlz1HmY](https://youtu.be/ZSsdOlz1HmY)

**Leisure Exploration and Social Participation at St Anthony's**
Alexandria Raymond, Jenna Gallipoli, Katherine Gammer, Kyle Horan, Colleen Garrison
Major: Occupational Therapy | School: Rangos School of Health Sciences
Faculty Advisor: Amy Matilla, Ph.D, OTR/L
Video Link: [https://www.youtube.com/watch?v=fJgLy1txbI8](https://www.youtube.com/watch?v=fJgLy1txbI8)

**Shepherd's Heart: The House of Hope**
Jenna Roth, Sydney Giangiuli, Beth Kozuch
Major: Occupational Therapy | School: Rangos School of Health Sciences
Faculty Advisor: Amy Matilla, Ph.D, OTR/L
Video Link: [https://www.youtube.com/watch?v=DVjYz1L5Di4](https://www.youtube.com/watch?v=DVjYz1L5Di4)

**Rangos School of Health Sciences**
Rangos School of Health Sciences Award for Undergraduate Research: $250
A Qualitative Study of the Transition from an Educational Setting to Adulthood for Youth with Intellectual and Developmental Disabilities (IDD)
Rachel Tokarski
Rangos School of Health Sciences | Occupational Therapy
Faculty Advisor: Jeryl Benson, Ed.D
Additional Authors: Jeryl Benson, Ed.D, Ashlyn Geubtner, OTS (doctoral candidate)
Abstract Number: 6
Rangos School of Health Sciences Award for Undergraduate Research: $250

Comprehension of multimodal information by people with aphasia: Investigating varied rates of auditory information
Mary Rose Zoeckler, Erica Lapp, Anna Saylor
Rangos School of Health Sciences | Speech-Language Pathology
Faculty Advisor: Sarah Wallace, Ph.D.
Abstract Number: 30

School of Nursing

School of Nursing Undergraduate Research Award: $250

Assessing for Intimate Partner Violence - A Quality Improvement Pilot Project for Nurses
Leanna Tobin, Millicent Micho, Morgan Smith
School of Nursing | Nursing
Faculty Advisor: Melanie Turk, Ph.D., RN
Abstract Number: 17

School of Pharmacy

Award for Undergraduate Research: $250

Comparison of immediate release and extended release diltiazem post-intravenous conversion in the treatment of atrial fibrillation
Irene Jankowski, Caroline Dillon, Margaret English, Erin Hayden
School of Pharmacy and the Graduate School of Pharmaceutical Sciences | Pharmacy
Faculty Advisor: Branden Nemecek, Pharm.D., BCPS
Abstract Number: 28

University Academic Sustainability Committee

Excellence in Sustainability & the Environment: $250

Creating a Waste-Negative 3D Printing Recycling System
Karli Sutton, Alexander Evans
Biomedical Engineering
Faculty Advisor: Benjamin Goldschmidt, Ph.D
Abstract Number: 34

Honorable Mention: $100

Addressing Underserved Pittsburgh Communities' Social Health Needs With Connections4Health
Madeleine Perry
McAnulty College and Graduate School of Liberal Arts | Political Science
Faculty Advisor: Michael Irwin, Ph.D.
Abstract Number: 122

Honorable Mention: $100

Assuming Environmental Responsibility: Why Does it Fail?
Meredith Bennett
Bayer School of Natural and Environmental Sciences | Environmental Science
Faculty Advisor: Kristin Klucevsek, Ph.D.
Abstract Number: 18

Honorable Mention: $100

**Antibiotic Resistance in Metal and Triclosan Exposed Bacteria**
Taylor Keck, Joanna Burton
Bayer School of Natural and Environmental Sciences | Biology
Faculty Advisor: Nancy Trun, Ph.D.
Abstract Number: 13