

URSS AWARD WINNERS 2023

Click on the title of each project to view the virtual presentation.

Biomedical Engineering

[Duquesne Award for Excellence in Biomedical Engineering](#)

[VEGF Regulation by Activated Fibronectin: A Computational Study](#)

Nicole White | Biomedical Engineering | Rangos School of Health Sciences | Junior
Faculty Advisor: Kimberly Williams, Ph.D.

Abstract: 34

Center for African Studies

[Award for Undergraduate Research in African Studies](#)

[From Gyl Music to Dog Meat: A Gastromusicological Autoethnography of Traditional Dagara Culture](#)

Gordon Cortney | Music Performance | Mary Pappert School of Music | Junior
Faculty Advisor: Nicole Vilknor, Ph.D.

Abstract: 144

[Award for Undergraduate Research in Global Health](#)

[The Ethical Dilemma of Discovery of Misattributed Paternity in Living Kidney Donation](#)

Zehra Mehdi | Biology | School of Science and Engineering | Junior
Faculty Advisor: Joris Gielen, Ph.D.

Abstract: 102

Center for the Catholic Faith and Culture

[Common Good Research Award](#)

[In the Beginning, God Created Atoms](#)

Samiya Henry | Physics | School of Science and Engineering | Sophomore
Faculty Advisor: William Wright, Ph.D.

Abstract: 81

Center for Community-Engaged Teaching and Research

[CETR Award for Undergraduate Research](#)

[The Cor Unum Garden: Using Hydroponics and Community Engagement to Address Food Disparity in Pittsburgh](#)

Burton Carbino | Biomedical Engineering | Rangos School of Health Sciences | Senior
Faculty Advisor: Sarah Wright, Ph.D.

Abstract: 136

Center for Excellence in Diversity and Student Inclusion

[Undergraduate Research Award](#)

[The Beauty of African Clothing](#)

Brayden Parker | Multi-platform Journalism | McAnulty College and Graduate School of Liberal Arts |
Freshman

Faculty Advisor: Anna Scheid, Ph.D.

Abstract: 118

Center for Global Health Ethics

Award for Undergraduate Research in Ethics

The Ethical Dilemma of Discovery of Misattributed Paternity in Living Kidney Donation

Zehra Mehdi | Biology | School of Science and Engineering | Junior

Faculty Advisor: Joris Gielen, Ph.D.

Abstract: 102

Center for Migration, Displacement and Community Studies

Outstanding Research Award

Against All Odds: Psychosocial Intervention for Homeless Youth

Hannah Davis | Occupational Therapy | Rangos School of Health Sciences | Senior

Lauren Rose | Occupational Therapy | Rangos School of Health Sciences | Senior

Sara Foster | Occupational Therapy | Rangos School of Health Sciences | Senior

Faculty Advisor: Ann Stuart, OTD, OTR/L

Abstract: 149

Honorable Mention

Integrating Data to Recognize Community Need Across Pennsylvania

Valerie Koester | Data Science | McAnulty College and Graduate School of Liberal Arts | Senior

Faculty Advisor: Lauren Sugden, Ph.D.

Abstract: 66

Center for Teaching Excellence

Award for Undergraduate Research

How Is Focused Attention Related To Infants Learning To Sit?

Melanie Tommer | Physical Therapy | Rangos School of Health Sciences | Junior

Melanie Schultz | Physical Therapy | Rangos School of Health Sciences | Junior

Emma Costello | Nursing | School of Nursing | Junior

Aleena Purewal | Health Sciences | Rangos School of Health Sciences | Sophomore

Faculty Advisor: Regina Harbourne, Ph.D.

Abstract: 50

Center for Women's and Gender Studies

Award for Undergraduate Research

Women of the Irish Revolution

Ireland Parker | History | McAnulty College and Graduate School of Liberal Arts | Senior

Faculty Advisor: John Mitcham, Ph.D.

Abstract: 122

Chief Diversity Officer/Palumbo-Donahue School of Business

DEI Award for Undergraduate Research

Healthcare and Unstable Housing In Pittsburgh, PA: A Comprehensive Analysis on Disparities & Education

Emma Patton | Biology | School of Science and Engineering | Senior

Faculty Advisor: Cathleen Appelt, Ph.D.

Abstract: 141

Honorable Mention

Micro Is Not Meaningless: A Focus on Asian Women

Elisha Schoeneck | Physical Therapy: Health Sciences | Rangos School of Health Sciences | Junior
Faculty Advisors: Elisabeth Vasko, Ph.D.; Emad Mirmotahari, Ph.D.

Abstract: 116

Counselor Education Program

Award for Undergraduate Research, 2 Awards

Mental Health Perceptions Across Generations

Rio Scarcelli | Psychology and Music | McAnulty College and Graduate School of Liberal Arts | Senior
Nicole Sitarik | Psychology | McAnulty College and Graduate School of Liberal Arts | Sophomore
Faculty Advisor: Alexander Kranjec, Ph.D.

Abstract: 38

The Impact of Societal Perceptions of ADHD

Tessa Schlechter | Sociology and Philosophy | McAnulty College and Graduate School of Liberal Arts | Senior

Faculty Advisor: Matthew Schneirov, Ph.D

Abstract: 59

Department of Physician Assistant Studies

Award for Initiative and Potential for Future Research as a Physician Assistant

An Analysis of Mental Health Representation in Physician Assistant Programs' Technical Standards

Matthew Swift | Physician Assistant Studies | Rangos School of Health Sciences | Sophomore

Jordan Baney | Physician Assistant Studies | Rangos School of Health Sciences | Sophomore

Faculty Advisor: Bridget Calhoun, DrPH, PA-C

Abstract: 108

Grefenstette Center for Ethics in Science, Technology, and Law

Top Undergraduate Research Project

The Digital Divide

Sydney Lynch | Criminal Justice Concentration - Sociology | McAnulty College and Graduate School of Liberal Arts | Junior

Natalie Onofrey | Psychology | McAnulty College and Graduate School of Liberal Arts | Junior

Sociology 415/515 Students

Justin LeWinter

The Big Idea Team

Faculty Advisor: Cathleen Appelt, Ph.D.

Abstract: 109

Honorable Mention

Clinical Ethics Seen with Machine Learning in Healthcare

Caitlyn Brannon | Biology for Physical Therapy | McAnulty College and Graduate School of Liberal Arts | Junior

Faculty Advisor: Rebecca Maatta, Ph.D.

Abstract: 126

Gumberg Library

Gumberg Library Award for Undergraduate Research

Micro Is Not Meaningless: A Focus on Asian Women

Elisha Schoeneck | Physical Therapy: Health Sciences | Rangos School of Health Sciences | Junior

Faculty Advisor: Elisabeth Vasko, Ph.D.

Abstract: 116

Honorable Mention

How English Colonialism in Ireland Led to the Troubles

Delaney Fiore | Sociology and Political Science | McAnulty College and Graduate School of Liberal Arts | Senior

Faculty Advisor: Sarah MacMillen, Ph.D.

Abstract: 63

Oral History Initiative Award

Now Screening...Teachers: Developing a Community-Engaged Voice Screening

Kathryn Leash | Speech-Language Pathology | Rangos School of Health Sciences | Junior

Megan Mathias | Speech-Language Pathology | Rangos School of Health Sciences | Junior

Faculty Advisor: David S. Ford, Ph.D.

Abstract: 117

Honors College

Outstanding Poster

From Gyl Music to Dog Meat: A Gastromusicological Autoethnography of Traditional Dagara Culture

Gordon Cortney | Music Performance | Mary Pappert School of Music | Junior

Faculty Advisor: Nicole Vilknor, Ph.D.

Abstract: 144

Outstanding Video

Objective Beauty and an Individual's Abstract Approach to Its Classification

Zachary Strennen | Data Science | McAnulty College and Graduate School of Liberal Arts | Senior

Faculty Advisor: Russell Walsh, Ph.D.

Abstract: 89

Institute for Ethics and Integrity in Journalism

Top Undergraduate Research Paper

The Makings of a High-profile Case; How Media Bias Influences Forensic Investigations in Missing-Person Cases

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

Faculty Advisor: Pamela Marshall, Ph.D.

Abstract: 10

Mary Pappert School of Music

Mary Pappert School of Music Undergraduate Award

Music Technology in Music Education: Prevalence, Challenges, and Potential

Christian Sullivan | Music Education | Mary Pappert School of Music | Freshman

Faculty Advisor: Paul Miller, Ph.D.

Abstract: 55

McAnulty College and Graduate School of Liberal Arts

Outstanding Research Merit

Integrating Data to Recognize Community Need Across Pennsylvania

Valerie Koester | Data Science | McAnulty College and Graduate School of Liberal Arts | Senior

Faculty Advisor: Lauren Sugden, Ph.D.

Abstract: 66

Office of the Provost

Provost Award for Outstanding Research

Rare Chemical Bonding Scheme of Urea: Stereoelectronic Competition between Amino Groups

Lindsay Moskal | Chemistry and Mathematics | McAnulty College and Graduate School of Liberal Arts,

School of Science and Engineering | Senior

Faculty Advisor: Jeffrey Evanseck, Ph.D.

Abstract: 123

Office of Research and Innovation Award for Outstanding Research

Effects of Pesticides and Stress Hormones on Amphibian Liver Function

Madison Mellott | Biology | School of Science and Engineering | Senior

Faculty Advisor: Sarah Woodley, Ph.D.

Abstract: 82

Provost Award for Best Presentation

Women of the Irish Revolution

Ireland Parker | History | McAnulty College and Graduate School of Liberal Arts | Senior

Faculty Advisor: John Mitcham, Ph.D.

Abstract: 122

Office of Disability Services

Outstanding Undergraduate Research, 2 Awards

Improving Frick Park's Accessibility for People with Disabilities

Joseph Benson Guthrie | Inclusive Post-Secondary Ed | Rangos School of Health Sciences | Senior

Nathan Pearson | Occupational Therapy | Rangos School of Health Sciences | Senior

Faculty Advisor: Meghan Blaskowitz, Ph.D.

Abstract: 24

Against All Odds: Psychosocial Intervention for Homeless Youth

Hannah Davis | Occupational Therapy | Rangos School of Health Sciences | Senior
Lauren Rose | Occupational Therapy | Rangos School of Health Sciences | Senior
Sara Foster | Occupational Therapy | Rangos School of Health Sciences | Senior
Faculty Advisor: Ann Stuart, OTD, OTR/L
Abstract: 149

Peace Justice and Conflict Resolution

The Peace, Justice and Conflict Resolution (PJCR) Minor Program Award

How English Colonialism in Ireland Led to the Troubles

Delaney Fiore | Sociology and Political Science | McAnulty College and Graduate School of Liberal Arts | Senior
Faculty Advisor: Sarah MacMillen, Ph.D.
Abstract: 63

Honorable Mention

The Impact of Systemic Racism on Food Insecurity and Disparities in Pittsburgh

Brittany Ketter | Health Sciences | Rangos School of Health Sciences | Senior
Faculty Advisor: Bridget Calhoun, Ph.D.
Abstract: 131

Rangos School of Health Sciences

Rangos School of Health Sciences Award for Undergraduate Research, 2 Awards

The Cor Unum Garden: Using Hydroponics and Community Engagement to Address Food Disparity in Pittsburgh

Burton Carbino | Biomedical Engineering | Rangos School of Health Sciences | Senior
Faculty Advisor: Sarah Wright, Ph.D.
Abstract: 136

A Biomimetic Cardiac Tissue Model Towards Understanding Etiology of Congenital Heart Disease

Jackson Jewell | Biomedical Engineering | Rangos School of Health Sciences | Sophomore
Ryan Slusser | Biomedical Engineering | Rangos School of Health Sciences | Sophomore
Faculty Advisor: Melikhan Tanyeri, Ph.D.
Abstract: 73

School of Nursing

School of Nursing Undergraduate Research Award

CAUTI-gone: Redesigning Urinary Catheter Tubing To Prevent Catheter Associated Urinary Tract Infections (CAUTIs)

Taylor Short | Biomedical Engineering | Rangos School of Health Sciences | Senior

Nathan Watkins

Austin Connor | Biomedical Engineering & Nursing | Rangos School of Health Sciences, School of Nursing | Senior

Katie Haley | Biomedical Engineering and Nursing | Rangos School of Health Sciences, School of Nursing | Senior

Lucia Secaida Del Cid | Biomedical Engineering | Rangos School of Health Sciences | Senior

Faculty Advisor: Leda Kloudas, Ph.D.

Abstract: 142

School of Pharmacy

Award for Undergraduate Research, 2 Awards

Human APE1 Overexpression in Transgenic Rats Modifies the Neurological Impact of Alpha-synucleinopathy

Roxanne Kim | Psychology | McAnulty College and Graduate School of Liberal Arts, School of Pharmacy | Senior

Faculty Advisor: Rehana Leak, Ph.D.

Abstract: 95

Evaluating the Impact of Concomitant Medications on Inpatient Potassium Supplementation

Marissa Parisi | Pharmacy | School of Pharmacy | Senior

Mackenzie Bortmas | Pharmacy | School of Pharmacy | Senior

Maura Fleming

Samantha Gaffey | Pharmacy | School of Pharmacy | Senior

Faculty Advisor: Branden Nemecek, PharmD, BCPS

Abstract: 114

School of Science and Engineering

Excellence in Research in the Basic Sciences, 2 Awards

Rare Chemical Bonding Scheme of Urea: Stereoelectronic Competition between Amino Groups

Lindsay Moskal | Chemistry and Mathematics | McAnulty College and Graduate School of Liberal Arts, School of Science and Engineering | Senior

Faculty Advisor: Jeffrey Evanseck, Ph.D.

Abstract: 123

Investigating the Function of PCNA during Herpes Simplex Virus Type-1 Infection

Maya Williams | Biological Sciences | School of Science and Engineering | Senior

Faculty Advisor: Jill Dembowski, Ph.D.

Abstract: 71

Honorable Mention, 4 Awards

[The Effects of Topoisomerase 1 Inhibition and Knockdown on Herpes Simplex Virus Type-1 Infection](#)

Raegen Esenwein | Biological Sciences | School of Science and Engineering | Senior

Faculty Advisor: Jill Dembowski, Ph.D.

Abstract: 103

[Investigating the Function of Host RECQL in Herpes Simplex Virus Type 1 Infection](#)

Julia Gibson | Biology | School of Science and Engineering | Senior

Faculty Advisor: Jill Dembowski, Ph.D.

Abstract: 106

[Progress Towards the Synthesis of Chrysosporazine D](#)

Tyler Kiss | Biochemistry | School of Science and Engineering | Sophomore

Faculty Advisor: Thomas Montgomery, Ph.D.

Abstract: 101

[A Myositis Mouse Model Induced through Histidyl-tRNA Protein](#)

Shaelyn Walker | Biology / Pre-medicine | School of Science and Engineering | Sophomore

Faculty Advisor: Matthew Kostek, PhD, FACSM

Abstract: 86

University Sustainability Committee

[Award for Excellence in Sustainability & the Environment](#)

[The Cor Unum Garden: Using Hydroponics and Community Engagement to Address Food Disparity in Pittsburgh](#)

Burton Carbino | Biomedical Engineering | Rangos School of Health Sciences | Senior

Faculty Advisor: Sarah Wright, Ph.D.

Abstract: 136

Honorable Mention, 3 Awards

[Designing a Polyprotein for Paratransgenesis To Halt the Transmission of Malaria](#)

Jessica Wellmann | Biological Sciences | School of Science and Engineering | Junior

Faculty Advisor: David Lampe, Ph.D.

Abstract: 90

[Characterizing Manganese Reducing Bacteria That Contaminate Abandoned Coal Mine Drainage](#)

Kayla Brennan | Biology | School of Science and Engineering | Senior

Faculty Advisor: Nancy Trun, Ph.D.

Abstract: 31

[Are Plastic Nurdles Entering the Food Chain in the Ohio River?](#)

Mackenzie Leszczynski | Biological Sciences | School of Science and Engineering | Sophomore

Faculty Advisor: Brady Porter, Ph.D.

Abstract: 45

Office of Research and Innovation

Video Competition Award, 2 Awards

Occupational Therapy Community Engaged Learning at the St. Anthony's Apartment

Abigail Kilkelly | Occupational Therapy | Rangos School of Health Sciences | Senior
Hannah Thornton | Occupational Therapy | Rangos School of Health Sciences | Senior
Emily Burk | Occupational Therapy | Rangos School of Health Sciences | Senior
Nathan Pearson | Occupational Therapy | Rangos School of Health Sciences | Senior
Faculty Advisor: Ann Stuart, OTD, OTR/L
Abstract: 147

Against All Odds: Psychosocial Intervention for Homeless Youth

Hannah Davis | Occupational Therapy | Rangos School of Health Sciences | Senior
Lauren Rose | Occupational Therapy | Rangos School of Health Sciences | Senior
Sara Foster | Occupational Therapy | Rangos School of Health Sciences | Senior
Faculty Advisor: Ann Stuart, OTD, OTR/L
Abstract: 149