

# Pitt-Greensburg Undergraduate Research & Creativity Symposium

PURCS ANNUAL CONFERENCE 2024 APRIL 11, 2024

UNIVERSITY OF PITTSBURGH AT GREENSBURG 150 FINOLI DRIVE GREENSBURG, PA 15601-5860

# **Interdisciplinary Division**

Evolving Landscapes: Perspectives on Reproductive Rights and Justice

Time	Role/ Presenters	Title	Location
10:00-10:50 a.m.	Chair, Rin Alford	Gender Affirming Care Changes in America	Life Sciences Building, Room 210
	Florence Zhang	The Race to Maturity	
	Zora Harris	Modern Reproductive Justice in the United States	
	Yamina Sidmohand	Medical Racism and The Black Body	

# **Interdisciplinary Division**

Challenges and Solutions in Contemporary Society: Reproductive Rights and Sex Education

Time	<b>Role/ Presenters</b>	Title	Location
11:00-11:50 a.m.	Chair, Shianne Steck	Issues in Reproduction for Same-Sex Couples	Life Sciences Building, Room 210
	Mollie Dreistadt	Falling Fertility Rate Crisis	
	Basant Mansour	Sex Education in the United States	
	David Chizmar	Pro-Natalist and Anti-Natalist Agendas and the Factors Behind Their Implementation	

# **Natural Science Division**

Natural Science Panel Oral Presentations: Understanding Biochemical Pathways and Regulation

Time	Role/ Presenters	Title	Location
11:00-11:50 a.m.	Chair, Mackenzie Taylor, Taylor Podob, Riley Lesko	Effects of Lithium Chloride on Huntington's Disease and Longevity and Motility as Modeled in <i>C. elegans</i>	Life Sciences Building, Room 214
	Madison Stonbraker	Insight into how Jazf-1 regulates gene expression in the eye nervous system	
	Stephanie Bodner, Naomi Custer, Mariana Bajich	The Effects of Jazf-1 on the Nervous System of Drosophila melanogaster	

## **Natural Science Division**

**STEM Posters** 

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Time	<b>Role/ Presenters</b>	Title	Location
12:00-12:50 p.m.	Justin Crookston	Roo and Hopper Transposable Elements causing Lobe mutations in Drosophila melanogaster	Life Sciences Building, 2nd Floor Corridor
	Matthew Miller, Cole McGurk, Max Weiser	Searching for copper and finding gold: Using microalgae to	

	remediate acid mine drainage and wastewater to produce lipids for biofuel
Kiaura Vargo, Evonna Chisom, Ian McAlister	Observation of UV-B Radiation and Nutrient Supplemented <i>Chlorella</i> <i>vulgaris</i> on Lipid Accumulation
Christopher Zona, Ashley Dancu, Owen Jaffre	The Effects of <i>Jazf-1</i> Expression on Wing Phenotype in Fruit Flies ( <i>Drosophila Melanogaster</i> )
Gabrielle Weber, Hayley Felix	Microalgae Lipid Production used for Biofuels in Pharmaceutical Wastewater
Anthony Gray	The Medicinal and Historical Aspects of Scopolamine
Jacob Calleja, Benjamin Tomasino, Alayna Beam, Melanie Mienke, Yamina Sidmohand	Comparative Genomics of the F, D, and E Elements in <i>Drosophila</i> willistoni
Sophia Kessler, Evan Hodil, Sadie Kelly, Julia Jastrzebski	A Study of the Engrailed Gene in Drosophila Melanogaster
Kaylee Huber	A Rubik's Fantasy
Mya Hartley, Michelle Awan, Alex Vandergraft	Exploring the Impact of Homeopathic Oils on the Growth of Microalgae

# **Social Science Division**

Panel: Navigating Societal Crossroads: Perspectives on Contemporary Challenges in America

Time	Role/ Presenters	Title	Location
12:00-12:50 p.m.	Chair, Morgan Fong	Gun Violence: America's Wicked Problem	Life Sciences Building, Room 210
	Breanna Tomsey	Crossing Borders: The Struggles to Reforming Immigration Policy	
	Orlando Burzese	Talking through it	
	Jamie Harrover	Navigating the Depths of Reproductive Rights: A Call for Advocacy	

# **Social Science Division**

Panel: Shaping America's Future: Action, Rights, and Resilience

Time	Role/ Presenters	Title	Location

•	Chair, Alexander Velasquez	Changing America Through Action	Life Sciences Building, Room 210
N	Matthew Miscio	Divided By Our Rights: The Future of Gun Policy in America	
F	Riley Bedner	"We Are a Nation of Survivors"	
E	Eve Carter	Perhaps	

# **Natural Science Division**

Science Posters			
Time	Role/ Presenters	Title	Location
1:00-1:50 p.m.	Abigale Jablonski, Kyle Glance, Rachel Flood, Thomas Fornof	Ey Gene Expression in <i>Drosophila</i> <i>Melanogaster</i>	Life Sciences Building, 2nd Floor Corridor
	Riley Benvin, Kimberly Linderman, Lillian Cool, Alex Gardiner	The Creb A Gene is Located in the Salivary Gland of Drosophila melanogaster Larvae	
	Dominic DePaul, Anthony Kalvi, Ethan Heidel-Roberts, Charles Karadus	A study of the vasa in <i>Drosophila</i> melanogaster	
	Hae Paw, Hunter Taylor, Devon Ulmer	Study of Hedgehog (hh) Gene of Drosophila Melanogaster	
	Kenesha Lawrence, Makala Ruffin, Kacey Weller	Changes in the size of <i>Drosophila</i> eye lobe	
	Hallee Greene	Better Understanding of Protein Interactions with <i>Jazf-1</i>	
	Madison George, Mila Hoover, Kaylee Schaefer, Collin Smith, Ryan McGrath	The Effects of Over- and Under-Expressing Jazf-1 on the Histone Variant H2A.V	
	Tatum Marcyjanik	Derivatives of Hydroxybenzoic Acids and Their Impact on Biofuel Production in the Oleaginous Microalgae Microchloropsis salina	
	Alaina Oldfield, Nate Henry, Taylor Uplinger	The Comparison of Microalgae and Lipid Production in Nitrogen Depletion	
	Brianna Bicker, Justine Penar	Microalgae Lipid Production used for Biofuels in Pharmaceutical Wastewater	

### **Social Science Division**

Panel: Navigating the Sociopolitical Terrain: Insights on Key Issues

Time	Role/ Presenters	Title	Location
2:00-2:50 p.m.	Chair, Zakery Wiles	Unraveling Roe: The Landmark Shift in Reproductive Rights	Life Sciences Building, Room 210
	Tevin Walsh	The Themes of the 2024 Election	
	Olivia Petry	Immigration and the Political Deadlock	
	Nichole Weinman	Understanding Sexual Assault Victims: The Impact of Toxic Masculinity	

### **Interdisciplinary Division**

Panel: Cultivating Growth through Innovations, Experiences, and Insights

Time	<b>Role/ Presenters</b>	Title	Location
2:00-2:50 p.m.	Chair, Shianne Steck	Community Garden Director's Concept	Life Sciences Building, Room 214
	Olexei Nuttall	My experience through Professional Education and Resources for Learning (PEARL)	
	Aaron Zavatchan	Hymns to Saint Rita: Music and Its Role in Ethnic Preservation	
	Breanna Tomsey	Generative AI at Pitt-Greensburg: Strategies for Students	

Keynote Speaker/Awards

Time	Presenters		Location
4:00-4:50 p.m.	Professor M.E. Yancosek Gamble, Keynote Speaker	Research Branding: Elevating Your Academic Identity in a Competitive Landscape	Mary Lou Campana Chapel and Lecture Center
	Dr. Pilar M. Herr	Social Science Awards	
	Dr. Danielle R. Mehlman-Brightwell	Interdisciplinary Awards	
	Drs. Jordan Boothe/ Logan Johnson	STEM Awards (Posters and Oral Presentations)	

Keynote Address: "Research Branding: Elevating Your Academic Identity in a Competitive Landscape"



Professor Mary Elizabeth "M. E." Yancosek Gamble (M.B.A., West Virginia University; A.B.D. St. Francis University) is an associate professor in the College of Business and Aviation at Fairmont State University. She is a Wall Street Journal Opinion Leader and a Wikipedia Education instructor. Her expertise is in management, organizational behavior, and marketing. Formally, she was the State Director of the Small Business Division of the West Virginia Development Office and Small Business Developer for Loudoun County, Virginia. In 2023, she received the Faculty Recognition Award from Fairmont State University. In 2018, she was named Bethany College's nominee to the Faculty Merit Foundation's annual Professor of the Year. In 2017, she was the Scripts Howard Fellow for Entrepreneurial Studies at the University of Arizona.

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**Keynote Description:** In today's increasingly competitive research landscape, the ability to effectively market and brand yourself is essential for success. This keynote explores the unique challenges and opportunities associated with branding in the research domain, and it is designed to empower researchers and academics with the knowledge and strategies to strategically position themselves, amplify their impact, and build a strong and recognizable personal brand within their field. From crafting a compelling research narrative to leveraging digital platforms and networks, attendees will learn how to distinguish themselves, attract collaborators, and enhance their visibility in a crowded academic arena.

### Workshop

Time	Presenters	Session Title/Description	Location
5:00-5:50 p.m.	Dr. Sean DiLeonardi	Generative AI at	Life Science Building 218
	and Breanna Tomsey	Pitt-Greensburg:	
		Strategies for Students	



Dr. Sean DiLeonardi (Ph.D., University of North Carolina, Chapel Hill) is an assistant professor of English and Digital Studies at the University of Pittsburgh at Greensburg. He is associated with the Center for the Digital Text and teaches courses in American Literature, digital humanities, contemporary fiction, Modernism, and popular culture, including detective fiction and film. Sean's research examines the aesthetics and institutions of contemporary literature, clarifying how literary forms, such as the novel, shape and are themselves shaped by histories of media, technology, science, and mathematics. His peer-reviewed scholarship explores literature's relationship to machine translation, artificial intelligence, and the history of quantification, and appears most recently in *Post45* and *Twentieth-Century Literature* (forthcoming).



Breanna Tomsey is a senior Public Policy major at the University of Pittsburgh at Greensburg. Her senior public policy capstone project explored the ethics of using Artificial Intelligence utilizing a mixed methods approach. Breanna has garnered experience during her undergraduate years by working for Honorable President Judge Christopher Feliciani as a court assistant and legal assistant for Rishor Simone Attorneys at Law. Breanna was also selected to attend the Inside Washington seminar through The Washington Center in Washington, D.C., where she completed her policy practicum and engaged with policy experts. Breanna serves as student government president and pre-law society vice president. After graduating from the University of Pittsburgh at Greensburg, Breanna plans to attend law school.

"Generative AI at Pitt-Greensburg: Strategies for Students"

**Workshop Description:** In this brief workshop, we will cover how the introduction of AI tools such as ChatGPT presents students at Pitt-Greensburg with unique challenges and opportunities. In a series of activities, we will consider the ethics of using AI, good uses for students, and the limits that we all must consider as these tools become more ingrained in our daily lives.

### **PURCS Research Committee Members**

Co-Chairs: Dr. Danielle R. Mehlman-Brightwell and Dr. Pilar M. Herr

Dr. Jordan Boothe, Dr. Sheila Confer, Dr. Sayre Greenfield, Dr. Logan Johnson, Dr. Sean DiLeonardi, Dr. Natalie Taylor, Kelly Safin, Justin Antoszewski, and Renee Kiner.