



UWG Scholars' Day

UNDERGRADUATE RESEARCH CONFERENCE

A Celebration of Undergraduate Scholarship

April 23, 2024



UNIVERSITY OF
WEST GEORGIA

OFFICE OF UNDERGRADUATE RESEARCH (OUR)

Faculty-mentored undergraduate research and creative activity complement classroom learning through learning by doing and reflection on doing. In the process, these endeavors offer students an experiential learning opportunity that transforms them into scholars. The Office of Undergraduate Research was established to facilitate collaboration between faculty and staff mentors and student researchers and creators, coordinate university-wide research events, assist students in their preparation and travel to research conferences and professional meetings, and aid students in applying to national scholarships and fellowships. We are dedicated to facilitating undergraduate student involvement in research and creative activity in all disciplines.

westga.edu/our

UNDERGRADUATE RESEARCH COMMITTEE

Logan Arrington, Associate Professor and Interim Chair, Department of Educational Technology and Foundations

Ryan Currier, Associate Professor of Geology

Amy Ellison, Senior Lecturer of First-Year Writing, Assistant Director of Academic Transition Programs

Kathleen Morales, Associate Professor of Nursing, Student Success Coordinator

Nathan Rees, Associate Professor of Art History

Craig Schroer, Professor and Systems Librarian, Ingram Library

Michael Sinkey, Associate Professor of Economics

Rossella Traversa, Assistant Professor of Psychology

Jeffrey Zamostny, Professor of Spanish, Director of the Office of Undergraduate Research

UWG Scholars' Day UNDERGRADUATE RESEARCH CONFERENCE

A Celebration of Undergraduate Scholarship

Tuesday, April 23, 2024

The Scholars' Day Undergraduate Research Conference supports the University of West Georgia's Strategic Plan, *Becoming UWG*, as well as its proposed Quality Enhancement Plan, *Career Readiness through Experiential Learning*.

- The conference advances the strategic priority of **relevance** by showcasing research and creative projects that typically take a semester or more to complete and involve close mentorship between faculty, staff, and students.
- As a venue for the display of student success in research and creative endeavors, the event highlights **competitiveness** in a supportive setting that fosters a culture of excellence.
- Now in its eighth year, the conference is an annual tradition that brings together members of the University community from across colleges, schools, divisions, and units and enlivens a sense of pride and belonging that is essential to **placemaking**.

For the second time in 2024, the Office of Career Services will host a drop-in workshop during the conference to assist participants with featuring their presentations on their resumes. The event thus connects **experiential learning** through undergraduate research and creative activity with the Quality Enhancement Plan's emphasis on **career readiness**.

The Scholars' Day Undergraduate Research Conference is an inclusive celebration of undergraduate research and creative activity at the University of West Georgia. We invite all in attendance to engage with the many panels and posters presented today!

SCHEDULE AT A GLANCE

12:00-3:30 pm: Check-in, Campus Center Atrium

12:00-3:30 pm: Drop-in Resume Workshop, Campus Center Atrium

12:30-2:30 pm: Poster and Visual Arts Session, Campus Center Ballrooms

12:30-1:30 pm: Concurrent Panel Session 1, Pafford Social Science Building

1:40-2:40 pm: Concurrent Panel Session 2, Pafford Social Science Building

2:50-3:50 pm: Concurrent Panel Session 3, Pafford Social Science Building

4:00-5:00 pm: Concurrent Panel Session 4, Pafford Social Science Building

DROP-IN RESUME WORKSHOP

Campus Center Atrium 12:00-3:30

The Office of Career Services will offer student presenters advice about how to best showcase their conference participation on their resumes. Students, please consider stopping by with your resume! The Office will also share information about its wide-ranging services as you prepare for your next steps.

PANEL PRESENTATIONS

Session I 12:30-1:30

Studies in Religion and Philosophy: Beliefs, Values, and Judgments

Pafford 102

Bryson Burnette, "Discoveries of the Nag Hammadi Library through the Lens of The Apocryphon of John"

Mentored by Dr. Beth Sheppard

Jewell Burson, "A Commentary on Locke's Pluralism"

Mentored by Dr. Robert Lane

Gabriel Benson, "Political Evidentialism"

Mentored by Dr. Robert Lane

Peer Mentoring as a Tool for Growth and Hope

Pafford 106

Kailey Covera, "The Power of Peer Mentoring as a Tool for Growth"

Mentored by Dr. Lisa Connell

Alie Clark, "Finding Hope within Troubled Youth"

Mentored by Dr. Thomas Peterson

Deconstructing the Ideal Body in Western Art

Mentored by Dr. Nathan Rees

Pafford 109

Hannah Lyle, "Hidden Eyes"

Emma Petras, "Ephemeral Echoes: Deconstructing Michelangelo's *Libyan Sibyl*"

Zaila Williams-Gullette, "Déesse de la Beauté"

Art, Culture, and History: Local and National Perspectives on Modernity and its Tensions

Pafford 110

Mackenzie Kollbaum, "Examining Folk Art through the Local Lens"

Mentored by Prof. Maria Lundin

Mark Elmore, "Exchanged Roles: When the Paths of Two National Heroes Crossed, American William Walker and Costa Rican Juan Santamaría"

Mentored by Dr. Betsy Dahms

Dakota Cox-Moilanen, "Poverty and Prosperity: The Socio-Economic Duality of the 'Roaring 20s'"

Mentored by Prof. Candice Badgero

Session II 1:40-2:40

Supporting Parents, Young People, and Athletes Pafford 102

Haylee Milligan, "I Wish There Was a Manual for This: How Access to Child-Rearing Resources Impacts Experiences of American Mothers"

Mentored by Dr. Jennifer Beggs Weber

Hannah Davenport, "A Parent's Greatest Nightmare: Teen Mental Health in America"

Mentored by Dr. J. Salvador Peralta

Courtney Clay, "Technological Tools for Student-Athlete Brand Building in the NIL Era"

Mentored by Dr. E. Su Jara-Pazmino

Representing the Family and the Domestic Realm

Mentored by Dr. Nathan Rees

Pafford 109

Emma Eady, "The Fruits of Our Labor"

Eve Olsen, "The Baby Contest"

Maria Rivadeneira, "Depicting Youth and the Intimacy of Dreams"

Approaches to Film, Media, and Fandom

Pafford 110

Selah Burley, "Subverting Stereotypes: An Examination of Female-Directed LGBTQ+ Films"

Mentored by Dr. Alison Umminger

Kendall Ussery, "A MikuMiku Dance Inquiry: Studies of Fandom, Technology, and Dance (1980s-Now)"

Mentored by Dr. Marjorie Snipes

Jacob Rivera, "*Shin Megami Tensei*: Fears of Humanity"

Mentored by Dr. Michael Chiddo

Session III 2:50-3:50

Georgia on Our Mind: Studies in Business and Policy

Pafford 102

Leland Alexander, "Determinants of Business Locations in Douglas County"

Mentored by Dr. Michael Sinkey

Asher Pate, "Got Data? The Lack of Racial Traffic Stop Data for Atlanta"

Mentored by Dr. J. Salvador Peralta

Leetavious Maines, "Six Feet Under: Gaining Access to Life Insurance in Georgia"

Mentored by Dr. J. Salvador Peralta

Familia e identidad en tres novelas hispanas: *Como agua para chocolate*, *La ciudad y los perros* e *Hija del camino*

Mentored by Dr. Ana Zapata-Calle

Pafford 106

Tony Blake, "La conexión entre el amor, la gastronomía y el uso del realismo mágico en *Como agua para chocolate* de Laura Esquivel"

Jael Lawton, "Los efectos de la separación familiar en *La ciudad y los perros* de Mario Vargas Llosa"

Ana Pacheco-Báez, "La vida entre dos culturas en *Hija del camino* de Lucía Mbonío"

Gender in Art and Literature

Pafford 109

Kitt Day, "In Response to Jenny Saville's *Propped: Grotesque*"

Mentored by Dr. Nathan Rees

Lexie Moton, "Portia's Secrets"

Mentored by Dr. Nathan Rees

Zoë Ward, "How Commodities and Gender Play a Significant Role in Angela Carter's 'The Tiger's Bride' and 'The Courtship of Mr. Lyon'"

Mentored by Dr. Maria Doyle

#medievalsdiditfirst

Mentored by Dr. Leah Haught

Pafford 110

Paige Flotz, "Discussing the Perpetuation of Masculine Superiority in 'Bisclavret'"

Rowan Stamatellos, "From Medieval to Modern: Deconstructing the Narrative of Christian Martyrdom"

Eric Scarantino, "The Chivalric Hero's Journey: Joseph Campbell's Monomyth and *Sir Gawain and the Green Knight*"

Session IV 4:00-5:00

Seeking Justice for Social and Legal Ills

Mentored by Dr. J. Salvador Peralta

Pafford 102

Jesimina Walker, "Fighting Two Monsters: The Financial Burden of Fighting Childhood Cancer"

Chase Williams, "Screw This: The Longer the Wait, The Less Support for Disabled Americans"

Evan Willis, "Guilty or Not: How Much is Innocence Worth?"

Gender and Women in Irish Society and History

Mentored by Dr. Jeffrey Zamostny

Pafford 106

Arabella Brown, "The Experiences of Irish Women in Christianity throughout History: An Honors in Ireland Study Abroad Project"

Ev Fuhrey, "Being Non-Binary in Ireland: What Does the Culture Say?"

Kathleen Pine, "Censorship Influenced by the Irish Catholic Church: An Honors in Ireland Study Abroad Project"

Riley Steptoe, "Irish Women on the Titanic: Third-Class Experiences and Survival"

Equitable Access to Care and Communication

Pafford 109

Jessica Friedl, "Struggling to Access Healthcare: Immigrant Latino Children in the United States"

Mentored by Drs. Nancy Capponi and Katie Morales

Katrina Rossi, "The Jezebel and Sappho Dilemma: Disparities in Health Care for Black Women"

Mentored by Prof. Ashley Dycus

Kamari Watson, "Silent but Loud: The Manual Dialect of Black Deaf Americans"

Mentored by Dr. Aleah Brock

Microbial Life on Earth and Mars

Pafford 110

C.J. Okpala, "Isolation and Biochemical Characterization of a New Microbaterium Species that is a Vitamin B Auxotroph"

Mentored by Dr. Mautusi Mitra

Logan Chastain, "Development of a Novel, Inexpensive, and Stringent Minimal Medium for Screening the Abilities of Bacterial Vitamin B Auxotrophs to Utilize Xenobiotics as the Sole Carbon Source"

Mentored by Dr. Mautusi Mitra

Trinidad Dena, "Functional Annotation of Bacterial Genes Using Recurrent Neural Networks"

Mentored by Dr. Ana Stanesco

Hannah Register, "Using Mineralogy to Understand Liquid Water and the Potential for Microbial Life on Mars"

Mentored by Dr. Nicholas Sterling

POSTER AND VISUAL ARTS PRESENTATIONS

12:30-2:30 | Campus Center Ballrooms

Listed alphabetically by first presenter's last name

Melody Ahuchaogu, "Synthetic Studies to a Novel Pyrimidodiazepine-based Anti-folate as a Potential Anti-cancer Drug"

Mentored by Dr. Partha Ray

Allie Arrington, "Cooped Up"

Mentored by Dr. J. Salvador Peralta

Kimberly Barker, "A Polarized Republic"

Mentored by Dr. J. Salvador Peralta

Julia Barnett, "Intangible Cultural Resources: Identity and Collaboration in the Digital Age"

Mentored by Dr. Nathan Lawres

Elaine Berg, "Cationic Dyes: Photodegradation"

Mentored by Dr. Farooq Khan

Juliet Bernard, "The Photodegradation of Pyronin Y"

Mentored by Dr. Farooq Khan

Tony Blake, "The Impact of an Adult Community Education Center's English as a Second Language Programming on the Mental Health of Immigrant English Language Learners in a Rural-Suburban Community in the Deep South"

Mentored by Dr. Tiffany Parsons

Dalton Blue, "(Hogs Acting Sus) The Effect of Feral Pig Presence on Mammal Communities in the Southeastern U.S."

Mentored by Dr. Andrew Edelman

Luke Brumm, "The Correlation between NIL Spending and a University's High School and Transfer Portal Recruiting Classes"
Mentored by Dr. HyunSeok Song

TaShaun Bryant and Nicole Price, "The Role of Economic Factors in Shaping Criminal Behavior"
Mentored by Dr. Hilde Patron Boenheim

Ozborne Burns, "Rocks Here, Rocks There, Rocks Everywhere: Evaluating the Provenance of Debitage from a Lithic Scatter Site in Carroll County, GA"
Mentored by Dr. Nathan Lawres

Brisa Calvillo and Lizbeth Martinez-Canel, "Fishy Business: A Sushi Sleuth's Quest for Truth in Sashimi"
Mentored by Dr. Frank Fontanella

Alma Paloma Calvillo-Diaz De Leon, "Inductive Influence of 4'-Substituted Terpyridines on the Redox Behavior of the Mn(III/II) Couple (An Electrochemical Analysis of Photon-Coupled Electron Transfer)"
Mentored by Dr. Spencer Slattery

Lauren Coy, "'Guess That Mineral!' The Microcharacterization of Minerals through SEM"
Mentored by Dr. Marian Buzon

Keniya Cureton, "The Importance of Positive Solutions for the Mental Health of Athletes"
Mentored by Dr. HyunSeok Song

Conrad Dearing III, "Stratigraphic Evidence for Evolution of the Paleo-Colorado River in Blythe Basin, USA"
Mentored by Dr. Cody Mason

Miles Debro, "Exploring UI Design for MR Applications"
Mentored by Dr. Anja Remshagen

Jena Desormo, "Analysis of Reaction Byproducts in the Synthesis of SnS Nanocrystals"
Mentored by Dr. Martin McPhail

Camron Donatlan, "Impact of the Covid-19 Pandemic on the Financial Performance of Global Sports Organizations"
Mentored by Dr. HyunSeok Song

Ana Dos Santos, "Stratigraphic Evidence of Evolution of the Paleo-Colorado River in Chemehuevi Valley, California USA"
Mentored by Dr. Cody Mason

Justin Douglas, "NIL and Transfer Portal Impact on Athletes' Decision-Making for Universities to Attend"
Mentored by Dr. HyunSeok Song

Kyree Durham, "Unidentified"
Mentored by Prof. Bryan Perry

Cole Fisher, "Fruits vs. Vegetables: An Analysis of Antioxidant Activity"
Mentored by Dr. Vickie Geisler

Bryson Frederick, "Improving the Automation of Sending Emails from Google Sheet Data"
Mentored by Dr. Li Yang

Sierra Freeman, "Exploring Participants' Experience of Beneficial Effects of Support Groups and How These Might Be Transferred to Different Environments"
Mentored by Dr. Marie-Cécile Bertau

Ev Fuhrey, "What Happens After We Die and How Can Humans Influence Objects?"
Mentored by Dr. Christine Simmonds-Moore

Zachary Goins, "The Key for Success to UWG Baseball Moving to D-1"
Mentored by Dr. HyunSeok Song

Sarah Gordon, "A Look In: The Sketchbook Show"
Mentored by Prof. Stephanie Smith

Aaron Hanson, "Verification of Sharing in Tiered Spectrum-Shared Markets"
Mentored by Dr. Mostafizur Rahman

Mason Harden, "Coffee: Antioxidant Capability of the World's Most Popular Drink"
Mentored by Dr. Vickie Geisler

Arion Harris, "Invisible Heroes: Examining Mental Health among Black Women in the Military"
Mentored by Prof. Bryan Perry

Deontay Hayes, "Evaluating User Utility in Tiered Spectrum-Shared Markets"
Mentored by Dr. Mostafizur Rahman

Edylson Hernandez, "Analyzing Autumn's Delay: Exploring Fall Color Shifts in the Great Smoky Mountains National Park Using Satellite Imagery"
Mentored by Dr. Jeong Seong

Alexander Herrero, Jonathan Casimir, and Raymond Eyo, "Tracking Seafood Mislabeling in Georgia Fish Markets"
Mentored by Dr. Frank Fontanella

Ryan Jackman, "Grinding Your Teeth: An Experimental Archaeology Study"
Mentored by Dr. Nathan Lawres

Rayanna Janke, "Would Adding Sports Nutrition to UWG Athletics Be Worth It?"
Mentored by Dr. HyunSeok Song

Jamaiya Johnson, "Gender Wage Gap in Soccer"
Mentored by Dr. HyunSeok Song

Janai Johnson, "Redox Properties of Cobalt (II) Terpyridyl Complexes with Varying 4' Substituents"
Mentored by Dr. Spencer Slattery

Marissa Keeler, "Determining the Binding Constant of Hydrocortisone with Cucurbit[8]Juri"
Mentored by Dr. Farooq Khan

Sabrina Kheder, "Fresh Breath? Or Toothless? Quantification of Menthol, Eucalyptol, and Fluoride in Commercial Mouthwash Products"
Mentored by Dr. Megumi Fujita

Ashley Kidd and Christiana Gleissner, "Sampling the Mycological Diversity within West Georgia"
Mentored by Dr. Frank Fontanella

Jayla Marcus, "Medicinal Component Analysis of Chamomile (*Matricaria Chamomilla*) and Pot Marigold (*Calendula Officinalis*)"
Mentored by Dr. Megumi Fujita

Kaylor Murray, "An Investigation of Strategies for Special Educators' Recruitment and Retention"
Mentored by Prof. Ashley Sutton

Leroy Naza, "Environmental Catalysts of Mental Toughness in Sports: Unraveling the Key Factors for Athletic Resilience"
Mentored by Dr. HyunSeok Song

Nonso Nnwanye, Raymond Eyo, Heidi Perez, and Alayna Lisbon, "Can We Use a Linear Correlation Model to Substitute for Individually Counting Olfactory Sensory Neurons Expressing the M72 Odor Receptor?"
Mentored by Dr. Melissa Johnson

Vekondja Ogbogu, "Factors Affecting Postpartum Hemorrhage"
Mentored by Drs. Katie Morales and Nancy Capponi

Samantha Olivo, "Binding Studies between Tricyclic Dyes with Cucurbit[8]uril using Absorbance and Fluorescence"
Mentored by Dr. John Hansen

Krista Ozment, "The Basics: Caregiver Impact"
Mentored by Dr. Aleah Brock

Jay Patel and Derek Emelogu, "Unveiling the Buzz: Investigating Key Floral Resources for Bee Pollination in Our Community"
Mentored by Dr. Frank Fontanella

Brandon Douglas Pogue, "Insulin Costs in the United States: It's Not Vial-Able"
Mentored by Dr. J. Salvador Peralta

Paulina Ramirez, "How Many Guests are There? Binding of Cucurbit[n]urils (Hosts) and Pyronin Y (Guests)"
Mentored by Dr. Farooq Khan

Jacob Read, "The Effects of Expanding the College Football Playoff"
Mentored by Dr. HyunSeok Song

Hannah Register, "The Search for Liquid Water and Microbial Life on the Red Planet"
Mentored by Dr. Nicholas Sterling

Mari Reynolds, "Community Programs' Impact on Decreasing Juvenile Delinquency"
Mentored by Dr. Ericka Wentz

Lee Roberts, "New Information on the Upper Ordovician (Katian) Crinoid Fauna from Sardinia, Italy"
Mentored by Dr. Bradley Deline

Karen Rodas, "Stabilizing Characteristics of CB[7]: Can CB[7] Slow the Degradation of Methylene Blue? Guest-Host Interaction Measured with Absorption Spectrometry"
Mentored by Dr. Farooq Khan

Ashley Rossman, "Memory Mapping"
Mentored by Prof. Keri Adams and Dr. Andy Walter

Zoe Santorello, "Analysis of the Antioxidant Capacity of Cat Food"
Mentored by Dr. Vickie Geisler

Carlee Sarna, "The Relationships among Sex, Childhood Sexual Abuse, and Perpetrated Sexual Violence in Serial Killers"
Mentored by Dr. Gavin Lee

Allyson Simmons, "Recruitment and Retention of Speech-Language Pathologists in the Public School System"
Mentored by Dr. Brandy M. Locchetta

Britton Slifka, "Consumerization Impacting the Culture of the Super Bowl"
Mentored by Dr. HyunSeok Song

Parker Smitherman and Jarek Bates, "Photophysics of Coumarin 343 Complexed with Cucurbit[7]uril"
Mentored by Dr. John Hansen

Dylan Somers, "Impact of Budget on Collegiate Esports Performance"

Mentored by Dr. HyunSeok Song

Samuel Sotade-George, "Vertebrate Diaphonization"

Mentored by Dr. Christopher Tabit

Maeve Spoor, "Examining the Influence of a Professional Development Series on Implementing the Universal Design for Learning Framework for Inclusive Student Engagement"

Mentored by Dr. Katy Green

Katie Sticher, "Antioxidant Activity of Oregano"

Mentored by Dr. Vickie Geisler

Jake Stubbs, "Financial Fair Play within the EPL"

Mentored by Dr. HyunSeok Song

Jordan Thornton, "High School NIL and Future Projections"

Mentored by Dr. HyunSeok Song

Mykel Tubbs, "Artificial Grass versus Natural Grass"

Mentored by Dr. HyunSeok Song

Charlie Tull, "Why Can't Gen Z Afford Houses?"

Mentored by Dr. Michael Sinkey

Pedro Adrian Vega, "A Comparison of Methods to Determine the Degree of Deacetylation in Chitosan Samples"

Mentored by Dr. Megumi Fujita

Trinity Velez, "The Role that Childhood Sexual Abuse and Mental Illness Play in Serial Killers' Sexual Violence"

Mentored by Drs. Gavin Lee, Lynn Pazzani, and Jason Nicholson

Nicholas Virgle, "Players' Sports Betting and Evolution"

Mentored by Dr. HyunSeok Song

Abigail Watson, "Comparison of Antioxidant Gallic Acid Found in Leaves and Fruit of Bitter Melon"

Mentored by Dr. Megumi Fujita

Mae Whirlledge, "Are Your Waters Clean?"

Mentored by Dr. J. Salvador Peralta

Lauren Williams, "The Basics: Child Vocalizations"

Mentored by Dr. Aleah Brock

Acknowledgements and Sponsors

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