



UWG Scholars' Day

UNDERGRADUATE RESEARCH CONFERENCE

A Celebration of Undergraduate Scholarship

April 22, 2025





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

Nathan Lawres, Associate Professor of Anthropology, Co-Director of the Office of Undergraduate Research

Lisa Connell, Professor of French, Co-Director of the Office of Undergraduate Research

UWG-

Scholars' Day UNDERGRADUATE RESEARCH CONFERENCE

A Celebration of Undergraduate Scholarship

Tuesday, April 22, 2025

The Scholars' Day Undergraduate Research Conference supports the University of West Georgia's Strategic Plan, *Becoming UWG*, as well as its newly launched 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 ninth 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 third time in 2025, 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

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

12:30-2:30 pm: Poster and Visual Arts Session, Campus Center Ballroom 108.2 2:00-4:00 pm: Quality Enhancement Plan (QEP) Info Table, Campus Center Atrium

12:30-1:30 pm: Concurrent Panel Session 1, Campus Center 1:40-2:40 pm: Concurrent Panel Session 2, Campus Center 2:50-3:50 pm: Concurrent Panel Session 3, Campus Center 4:00-5:00 pm: Concurrent Panel Session 4, Campus Center

DROP-IN RESUME WORKSHOP

Campus Center Atrium 12:30-3:30

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

Best Practices in Pedagogies (Moderator: Jennifer Blake)

Campus Center 108.3

Raleigh Pritchard, "Putting Theory to Practice: A Case Study of Proposed Best Practices in Public Archaeology"

Mentored by Dr. Nathan Lawres

Adrianne Askew, "Supporting Asset-Based Pedagogies in P-5 Mathematics Classrooms" Mentored by Dr. Natasha Ramsay-Jordan

Barbara Hart, "Igniting the Spirit of Hope and Discovery in our Youth" Mentored by Dr. Thomas Peterson

Framing Identity (Moderator: Kaleigh Solis Wilson)

Campus Center 108.4

Kate Fussell, "Fractured Identities: Exploring Native American Experience in Tommy Orange's There There"

Mentored by Dr. Patrick Erben

Devin Encarnacion, "Western Psychedelic Appropriation of Mazatec Shaman María Sabina"

Mentored by Dr. Betsy Dahms

Charity Paschall, "The Linguistic and Criteria Evolution of the DSM Editions"

Mentored by Dr. Corri Johnson

Challenges in Contemporary Peruvian Life (Moderator: Meggie Miller)

Campus Center 105

Meggie Miller, "Education Access Disparities: A Comparison between the US & Peru"

Mentored by Dr. Elizabeth Falconi

Tanya Anderson, "Life in the Andes: Environmental Challenges to Living in the Peruvian Highlands" Mentored by Dr. Betsy Dahms

Am Canil, "Commonalities of Contemporary Communities in Peru and the United States" Mentored by Dr. Elizabeth Falconi

STORE IN

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Undergraduate Research in Biological and Physical Sciences (Moderator: Shari Mane De La Pena)

Campus Center Game Room

Isabela Pitts, "The Effects of Obesity and Pregnancy on Olfaction" Mentored by Dr. Melissa Johnson

Carter Reed, "Unified Study of the Classical Hall Effect" Mentored by Dr. Javier Hasbun

Delight Okere, "Isolation and Physiological Characterizations of a Novel Antibiotic-Resistant, Xenobiotic-Degrading, and Heavy Metal-Tolerant Microbacterium species" Mentored by Dr. Mautusi Mitra

Democratic Erosion in Latin America, Part 1 (Moderator: Claire Jennings) Campus Center 104

Corey Chambers, "Now You See It, Now You Don't: Authoritarianism and Democratic Erosion in Brazil"

Mentored by Dr. J. Salvador Peralta

Sebastian Lee, "Running Away from Democracy: Democratic Erosion in Suriname from 2010-2020"

Mentored by Dr. J. Salvador Peralta

Venture Herndon, "Chainsawing Democracy in Argentina" Mentored by Dr. J. Salvador Peralta

Session II 1:40-2:40

Addressing Difference in Vulnerable Populations (Moderator: Osborne Burns) Campus Center Game Room

Kamari Watson, "Policing Fears and Solutions: Law Enforcement and Interactions with Those with Communication Disorders"

Mentored by Dr. Aleah Brock

Selah Burley, "Death to the Diabetics-Type One Diabetes Representation in Film" Mentored by Dr. Alison Umminger

Destin Simmons, "Neurodivergence and Autism in Japanese Tokusatsu" Mentored by Dr. Margaret Mitchell

Approaches to Peruvian Healthcare (Moderator: Tanya Anderson) Campus Center 105

Sara Reed, "Nature of Health Care" Mentored by Dr. Elizabeth Falconi

Melanie Corrales, "Complementary Medicine in Peru" Mentored by Dr. Betsy Dahms

Lauren Burgess, "Barriers to Medical Access in Peru" Mentored by Dr. Betsy Dahms Learning Spanish: Language, culture, critical analysis, and professional skills/Aprender español: lengua, cultura, análisis crítico v habilidades profesionales (Moderator: Rylea Swafford)

Campus Center 108.3

Alex Morin, "Aprender castellano como estudiante no tradicional en la Universidad de West

Mentored by Dr. Ana Zapata-Calle

Yashira Roman-Feliciano, "Aprender sobre la historia de Puerto Rico a través de la música de Bad Bunny"

Mentored by Dr. Karen Dollinger

Luke Mitchell, "Análisis crítico de la masculinidad tóxica y su dificultad de superación en "El libro de los americanos desconocidos" de Cristina Henríquez"

Mentored by Dr. Ana Zapata-Calle

Madison Galvan, "Spanish Skills for Nursing Success: Internship in Neva Lomason Memorial library"

Mentored by Dr. Ana Zapata-Calle

Reflections on Pedagogical Experience (Moderator: Zoë White) Campus Center 108.4

Logan Chastain, "My Experience in Undergraduate Research" Mentored by Dr. Mautusi Mitra

Nahsir Johnson, "What Do We Want? Poetry! When? Now!" Mentored by Dr. J. Salvador Peralta

Zoë White, "Recruiting Underrepresented Students into Speech-Language Pathology" Mentored by Dr. Jairus Matthews



Session III 2:50-3:50

Anxious Identities (Moderator: Lina Martinez)

Campus Center 108.3

Adrianne Askew, "Examining Elementary Teachers' Mathematica Identity and Self-

Mentored by Dr. Natasha Ramsay-Jordan

Kathleen Pine, "Anxiety in Female Collegiate Athletes" Mentored by Dr. Corri Johnson

Megan Allison, "How Do You Feel: Exploring the Influence of Attitudes Towards Mental Health Care on Help-seeking Behavior in College Students" Mentored by Dr. Cassandra Bolar

Geographic Profiling of Serial Murderers (Moderator: Shari Mane De La Pena) Campus Center 104

Carlee Sarna, "Testing Two GIS Programs Used by Police to Aid in Geographic Profiling of Serial Killers"

Mentored by Dr. Lynn Pazzani

Madison Teague, "Geographic Profiling Programs' Predictions of Serial Killer Anchor Points Compared to Student Predictions" Mentored by Dr. Lynn Pazzani

Trinity Velez, "Practitioners and Programs: Evaluating Predictions of Serial Killer Anchor Points"

Mentored by Dr. Gavin Lee

Peruvian Culture, Past and Present (Moderator: Am Canil)

Campus Center 105

Dexter Clements, "Walking Through History: From the Inca Empire to Modern Cusco" Mentored by Dr. Betsy Dahms

Grayson Motes, "Peru Spring Break 2025 Media Analysis" Mentored by Dr. Elizabeth Falconi

Madison Long, "Peruvian textile art and Its role in cultural heritage preservation" Mentored by Dr. Elizabeth Falconi

Studies in Gender and Sexuality (Moderator: Rylea Swafford) Campus Center 108.4

Jonathan Bissette, "Biphobia and Binegativity Within LGBTQ+ Communities" Mentored by Dr. Betsy Dahms

Charity Paschall. "The Intersectionality of Gender and Sexuality" Mentored by Dr. Elroi Windsor

Eshkar Kaidar-Heafetz, "Cuts, Bruises, and Pretty Words: Queer/Trans Non-Reproduction as Gender Affirming "Care"" Mentored by Dr. Alzbeta Hajkova

Hannah Lewis, "The Roles of Space and Society in Ma vie en rose" Mentored by Dr. Lisa Connell

Redefining Intelligence (Moderator: Trystyn Hovey)

Campus Center Game Room

Trinidad Dena, "An Agent-Based Al Framework for Distributed Internet of Things Network"

Mentored by Dr. Md Shirajum Munir

Gavin Sharkey, "Pseudo-Genius" Mentored by Dr. John Garner

Bryson Frederick, "Exploring Full-Scale Application of Cloud Computing Services" Mentored by Dr. Jonathan Corley

Session IV 4:00-5:00

Research in Linguistics, Language, and Identity (Moderator: Hannah Lewis)
Campus Center Game Room

Rylea Swafford, "Exploring Limitations and Realism in Proto-Languages" Mentored by Claire Ezekiel

Hawke Wilkins, "Linguistic History of Ireland: From Colonization to Today" Mentored by Dr. Feliz Tweraser

Dylan Wynne, "The Weimar Republic's Weakened People" Mentored by Dr. Felix Tweraser

Kamryn Williams, "The Language, Culture, and Society of Kenya" Mentored by Dr. Felix Tweraser

Enhancing QEP Awareness: Student-Driven Strategies for Experiential Learning Success (Moderator: Rhian Deroko)
Campus Center 108.4



Historical Approaches to Culture and Science (Moderator: Kennedy Ragin) Campus Center 108.3

Victoria Boone, "Georgia's Varied Population: Attorney General Robert F. Kennedy's Remarks on the Dedication of the Kennedy Chapel"

Mentored by Dr. Yvonne Fuentes

Sarah Capps, "The Institutional Censorship of Women in Twentieth Century Ireland" Mentored by Dr. Charles Lipp

Bryson Burnette, "Hermeticism: The Esoteric Origins of Modern Science" Mentored by Dr. Beth Sheppard

Violence, Fandom, Toxicity, Oh My! (Moderator: Jonathan Bissette) Campus Center 104

Hannah Butler, "Negative Effects of Violent Video Games in Adolescents" Mentored by Dr. Corri Johnson

Jacob Rivera, "Fandom Toxicity and Alt Right Movement" Mentored by Dr. Stacy Boyd

Abby Sneve, "Delineating the Criterion/Criteria Under Which Hacktivism is a Morally Permissible Form of Protest/Activism"

Mentored by Dr. Alzbeta Hajkova

Roundtable: Language Podcasts: Exploring the Evolution of English (Moderator: Kate Fussell)

Campus Center 105

Kate Fussell, Yadiel Medina, Maggie Fitts, Zoe Ward, Morgan Ablashi, Marcus Phillips Mentored by Dr. Maria Doyle

POSTER AND VISUAL ARTS PRESENTATIONS

12:30-2:30 | Campus Center Ballroom 108.2

Listed alphabetically by first presenter's last name

Aayush Adhikari, "Predictive Analysis of Inpatient Healthcare Cost by Leveraging the LSTM Model"

Mentored by Dr. Md Shirajum Munir

Eddie Angeles, "How Can Social Expectations Affect Men's Approach to the Dating Landscape and its Psychological Implications"

Mentored by Dr. Noah Cochran

Nate Barber, Thomas Brodie Montalto, Logan Jennings, Sean Michael Simmons, Hayden L. Anderson, and Beau Dalton Brand, "Drone-Based LiDAR Surveying for Enhanced Campus Mapping at the University of West Georgia: Challenges and Lessons"

Mentored by Dr. Jeong Chang Seong

Jarek Bates and Christian Hess, "Supramolecular Binding Analysis of Coumarin 343 with Cucurbit[7]uril Across Varying Mole Fractions of Aqueous Alcohol Solvents" Mentored by Dr. John Hansen

Lucian Bitner, "Automated DIY Depth from Focus Instrument - Placing Surface Profilometry Within Reach"

Mentored by Dr. Ryan Currier

Brooke Blalock, "Direct Anion Binding with Valinomycin" Mentored by Dr. Megumi Fujita

Bailey Bolton, Taylor Caprio, Drew Shell, Hunter Martin, and Christian Swanner, "Supplemental Winter Feed Preferences of Honey Bees" Mentored by Dr. Joe Hendricks

Jaepil Choi, "Evaluating the Impact of Pitching and Fielding on Defensive Performance: A Case Study of the University of West Georgia Baseball Team"

Mentored by Dr. Hyunseok Song

Emi Collins, "Product Development for 3D Printing Awards" Mentored by Dr. Anja Remshagen

Trinidad Dena, "Economic Stability Fact Checking by Financial Rumor Detection" Mentored by Dr. Md Shirajum Munir

Ana dos Santos, "Geospatial Analysis of Fluvial Geomorphology of the Little Tallapoosa River Watershed"

Mentored by Dr. Andrew Ivester

Seth Dudley, "The Impact of Name, Image, and Likeness (NIL) Deals on High School Athletes: Opportunities and Challenges"

Mentored by Dr. Hyunseok Song

JaNiyah Dunn and Anna Marie Wingertsahn, "Caregiver's Use of Naturalistic Developmental Behavioral Intervention Strategies with Their Children with Complex Communication and Behavior Needs"

Mentored by Dr. Aleah Brock

Lauren Finch, "The Use of Pectin for the Maceration of Infant Pig Remains for Forensic Anthropology"

Mentored by Dr. Corey Maggiano

Megan Flowers, "The Soulful Reflection of My South" Mentored by Mark Schoon



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Mentored by Dr. Cody Mason

Ciera Garrison, "Transforming Incarcerated Students: The Impact of Higher Education on Identity, Choices, and Behavior"

Mentored Dr. Tiffany Parsons

Parker Gore, "The Impact of Streaming Services on Live Sports Consumption" Mentored by Dr. Hyunseok Song

Juliana Gozdick, "Feeding Preferences and Camouflage Strategies in Elysia clarki" Mentored by Dr. Janet Genz

Dorothy Griffin, "Is the sea slug eating poison for self defense?" Mentored by Dr. Megumi Fujita

Jacob Haas, "Plastiscope: A DNA-Language Model Trained on Genomes of Plastic-Degrading Bacteria for Next Nucleotide Prediction" Mentored by Dr. Ana Stanescu

Gracie Hamm, "Can Social Disorganization Theory Explain the Crime Rate in Albany, GA?" Mentored by Dr. Sarah Hupp Williamson

Angelina Houston, "Influence of Water Sources on Mammal Communities in the Western US Deserts"

Mentored by Dr. Andrew Edelman

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

Mentored by Dr. Partha Ray

Keanna Jackson, "The Binomial Theorem: Exploring Different Patterns in Pascal's Triangle" Mentored by Dr. David Leach

Ujunwa Johnson-Obi, "Nigeria's Currency Redesign: Why, and How it was Done, and How it Affected Digital Payments in the Country"

Mentored by Dr. Hilde Patron

Elle Jones, "How Do College Athletes Transition to Career?" Mentored by Dr. Michael Sinkey

Tegan Jones, "Diel Activity Patterns of Gray Foxes and Eastern Gray Squirrels in the Southeastern U.S."

Mentored by Dr. Andrew Edelman

Matthew Kirkham, "Geology of Graves Mountain" Mentored by Dr. Marian Buzon

Savanna Landry, "Bed Fluidization Experiments as Magma Chamber Analogs" Mentored by Dr. Ryan Currier

Alayna Lisbon, Isabela Pitts, Johnathan Baxter, and Jazmin Dominguez, "Linear Correlation Model Comparing the Number of Olfactory Sensory Neurons Expressing the M72 Odor Receptor to the volume of the M72 Glomeruli" Mentored by Dr. Melissa Johnson

Daisy Lugo, "The Relationship Between Spirituality, Spiritual Practices, and Post-Traumatic Growth"

Mentored by Dr. Tobin Hart

Cedrick Marshall, "Pros and Cons of NIL Deals"

Mentored by Dr. Hyunseok Song

Lina Martinez Montero, "Financial Study: A Comprehensive Analysis of Amazon's 10-K Reports"

Mentored by Michael Hopper

Chiamaka Mbeledogu, "African American Maternal Disparities in the USA" Mentored by Dr. Charles Carter

Brae Mooney, "Benefits and Challenges of Gen Al Literacy Education: A Mass Communication Major's Perspective"

Mentored by Dr. Claire Youngnyo Joa

Tabitha Mooney and Kaitlyn Pierce, "Fluorescence Quenching of CdSe Quantum Dots by Methylene Blue"

Mentored by Dr. Martin McPhail

Jennifer Morris, "Animal Essentialism and the Experience Machine" Mentored by Dr. Robert Lane

Ibrahim Oladimeji, "Development of an HPLC Method to Detect Vitamin B5 and B7 from Green Microalgae"

Mentored by Dr. Megumi Fujita

Amber Payne, "Post-Pandemic Impacts on Academic and Socio-Emotional Development in Pre-Kindergarten Students"

Mentored by Dr. James Dillon

Josh Pelletier, Alexis Lattimore, Emily Grissett, and Cristian Aparicio-Cruz, "Another Mite Bites the Dust"

Mentored by Dr. Joe Hendricks

Gabriel Phillips, "3D Printing Challenges and Possibilities" Mentored by Dr. Neal Chesnut

Jayden Pritchett, "Sports Betting and the Negative Effect it has on College Students" Mentored by Dr. Hyunseok Song

Kennedy Ragin, "A Critical Analysis of US Foreign Policy and Forced Labor in the Xinjiang region"

Mentored by Dr. Dylan McLean

Carter Reed, Jonathan Mast, and William Welchel, "The Use of Azo Dyes as Structural Components in Designing New Materials"

Mentored by Dr. John Hansen

Ash Rossman, "University History Project: 50 Years of Tracing the Big Three"
Mentored by Keri Adams



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Reese Scott, "A Qualitative Investigation of Community Engagement and College Transition for Dual Enrollment Students"

Mentored by Cheryl Brown

Rebecca Shoemake, "High-Resolution Near-Infrared Spectroscopy of the s-Process Enriched Large Magellanic Cloud Planetary Nebula SMP 58"

Mentored by Dr. Nick Sterling

Sean Simmons, "Using LiDAR Data to Enhance Powerline Surveillance: A Geospatial Analysis of Hazard Detection and Mitigation Strategies"

Mentored by Dr. Jeong Chang Seong

Justin Smith, "HAPI Prevention & Increasing Compliance of Q2 Turn Teams" Mentored by Dr. Susie Jonassen

Riley Steptoe and Lauren Finch, "Are You Sure It's Bone? An Experiential Learning Collection for the Histological Comparison of Bone and Other Materials"

Mentored by Dr. Isabel Maggiano

Matthew Stitz and Ulises Alonso de la Sierra, "An Exploration of Crystal Structure and Magnetic Properties in the Ti-doped Kagome Metal KV3Sb5" Mentored by Dr. Ganesh Pokharel

Shae Thaxton, "Hypothesis Testing of Flight Data" Mentored by Dr. David Leach

Melinda Thompson, "Preparation of Aqueous CdSe Quantum Dots for Photocatalysis Studies" Mentored by Dr. Martin McPhail

Matthew Waldron, "Preferential Association of Acridine Orange and CB[n] and Effects on Aggregation"

Mentored by Dr. Farooq Khan and Dr. Martin McPhail

Mae Whirledge, "The Effect of US Tariffs in the US and China's Economy on Chinese Goods" Mentored by Dr. Dylan McLean

Jaida White, "The Impact of Spaying on Mammary Tumors in Female Dogs and Cats: Timing, Risk Factors and Long-Term Health Outcomes"

Mentored by Dr. Gregory Payne

Aricca White, "Behind Sources of Strength" Mentored by Jamie Brandenburg

Jacob Wilson and John Simpson, "Interfacing Universal Software Radio Peripheral Devices" Mentored by Dr. Mostafizur Rahman

Macy Wood, "Comparing the Success of Caribbean versus Chinese Piracy" Mentored by Dr. Michael de Nie

Liam Worthington, "Intelligent Obstacle Detection System" Mentored by Dr. Md Shirajum Munir

Cole Young, Jary Zelaya-Hernandez, Valerie Marrero-Erazo, Ansley Pannell, and Sydney Robinson, "Bees' Pollen Pantry" Mentored by Dr. Joe Hendricks

Clifford Young, "Turf Related Injuries" Mentored by Dr. Hyunseok Song

Acknowledgments and Sponsors

Office of the Provost and Vice President for Academic Affairs

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