



**FRIDAY, MARCH 29, 2024**

**MARTHA T. NESBITT BUILDING, GAINESVILLE CAMPUS**

**9:00 - 10:00 AM**

**PANEL A: CULTURE, LANGUAGE AND VALUES IN EAST ASIA**

**Nesbitt Room 3201 | Moderator: Destani Fountain**

*DEATH FROM OVERWORK IN JAPAN AND THE ROOTS OF THE CULTURAL VALUES THAT LEAD TO IT*

**Alexander Howell**

*COLLOCATIONAL PREFERENCES OF THE BA 把 CONSTRUCTION IN MANDARIN: A CORPUS ANALYSIS OF VERBAL, PREPOSITIONAL, NOMINAL AND MEASURE WORD USES*

**Taylor Berry, Mentor: Dr. Micah Corum**

**PANEL B: FAITH, HISTORY AND THE AMERICAN SOUTH**

**Nesbitt Room 3204 | Moderator: Emilyn Slemmons**

*COL. PRICE AND HIS CHURCH: CONNECTING FAITH, EDUCATION, AND THE LOST CAUSE IDEAL*

**Reagan Smith, Mentors: Dr. Ana Pozzi-Harris & Dr. Elissa Ferguson**

*PROTESTANT FOUNDATIONS: HOW CHURCH FORMATIONS EXEMPLIFIED MILITARY SCHOOL IDEOLOGY AT NORTH GEORGIA COLLEGE AND STATE UNIVERSITY (UNG) FROM ITS FOUNDING UNTIL THE 1960S*

**Stephanie McBride, Mentors: Dr. Ana Pozzi-Harris & Dr. Elissa Ferguson**

# 9:00 - 10:00 AM

## PANEL C: LEADERSHIP, VALUES AND VIRTUES

Nesbitt Room 3212 | Moderator: Carson Teems

*THE EFFECTS OF CONFLICT AVOIDANT LEADERSHIP ON TEAM DYNAMICS*

**Jenna Wesson**, Mentor: Dr. Jie Guo

*UNRAVELING LEADERSHIP AND COMMUNITY: A STUDY OF GREEK VIRTUES IN THE ODYSSEY*

**Anna Rundbaken**

# 10:00 - 11:00 AM

## PANEL D: PERSPECTIVES ON LITERATURE, ART, AND HISTORY

Nesbitt Room 3107 | Moderator: Dr. Ana Pozzi Harris

*BINARIES, SPECTRA, AND UNITY: POSTGENDERISM AND THE PAINTINGS OF HILMA AF KLINT*

**Whitney Little**

*J.D. SALINGER'S NARRATIVE STYLE ACROSS SELECTED SHORT STORIES AND ITS IMPACT ON THE MEANING OF "TEDDY"*

**Zoie Brown**

*LEGACIES OF MISSIONARY TECHNIQUES FROM AFRICAN EXPEDITIONS*

**Timothy Beauchamp**, Mentor: Dr. Walter Lorenz

## PANEL E: NOVEL METHODOLOGICAL APPROACHES IN STEM

Nesbitt Room 3201 | Moderator: Dr. David Patterson

*INSTABILITIES IN UNDERGROUND HYDROGEN STORAGE*

**David Olsen**, Mentor: Dr. Patrick Bunton

*ANALYTICAL DETERMINATION OF IRON AND MANGANESE CONCENTRATIONS IN NORTH GEORGIA WELL WATER VIA TOTAL REFLECTION X-RAY FLUORESCENCE*

**Riley Rowland**

*FROM DARKNESS TO LIGHT: A QUALITATIVE ANALYSIS OF THE EFFICACY OF BLUESTAR® ON CERAMIC TILES*

**Cara (CJ) Giordiano and Madison Harner**

# 10:00 - 11:00 AM

## PANEL F: NEW MEDIA AND SOCIETY

Nesbitt Room 3204 | Moderator: Tiffany Tran

*INTO THE INCELOSHERE: APPLICATIONS OF CONCEPTUAL METAPHOR TO DECONSTRUCT INCEL LANGUAGE*

**Julianne Branham**, Mentor: Dr. Micah Corum

*THEORETICAL BASIS FOR USING INTERACTIVE METRONOME™ IN SUBSTANCE USE DISORDER REHABILITATION*

**Danica Barron**, Mentor: Dr. Troy Smith

## PANEL G: LABOR MARKETS AND COMPENSATION

Nesbitt Room 3212 | Moderator: Dr. Rana Gautam

*THE GROWTH OF THE INTERNSHIP*

**CJ Ryan**, Mentors: Prof. Michele Ruby & Dr. Joel Potter

*SALARY DETERMINANTS IN A MONOPSONISTIC LABOR MARKET: THE CASE OF MAJOR LEAGUE BASEBALL DURING THE DEADBALL ERA FROM 1901-1919*

**Katherine Woodrough**, Mentors: Dr. Justin Ehrlich, Syracuse University, and Dr. Joel Potter

*UNIFORMAL METHOD FOR INFLUENCING PROPERTY RIGHTS ASSIGNMENTS: THE CASE OF NBA PLAYER TRADER DEMANDS*

**Garrison King**, Mentor: Dr. Joel Potter

# 11:00 AM - 12:00 PM

## PANEL H: MARGINALIZATION OF VULNERABLE POPULATIONS

Nesbitt Room 3107 | Moderator: Dr. Victoria Hightower

*THE SEXUALIZATION AND MISREPRESENTATION OF NATIVE AMERICAN WOMEN: 1920-2020*

**Christina Whitlock**

*SUBJUGATED TO THE SUBHUMAN: THE RIGHTS OF THE UNHOUSED AND THEIR ENCAMPMENT IN PAOLO BACIGALUPI "THE WINDUP GIRL"*

**Andrew Moreshead**

# 11:00 AM - 12:00 PM

## **PANEL H (CONT.): MARGINALIZATION OF VULNERABLE POPULATIONS**

**Nesbitt Room 3107** | Moderator: Dr. Victoria Hightower

*DISCRIMINATION IN DEATH ROW: HOW IT SHOWS WITH SEX AND RACE*

**Heana Lim**

## **PANEL I: GENDER, GENDER ROLES AND SOCIAL EXPECTATIONS**

**Nesbitt Room 3201** | Moderator: Dr. Jeanelle Morgan

*THE EXTREMES AND CRITIQUES OF GENDER ROLES IN FILMS*

**Julio Anaya**

*STAY-AT-HOME DADS*

**Grace Haag**

## **PANEL J: SPANISH LANGUAGE LITERATURE AND FICTION**

**Nesbitt Room 3204** | Moderator: Jorge Romero

*SIRENA DEL RÍO Y LA TEORIA DEL CUENTO*

**Maria Jose Lopez Vincero**

*UNA VOZ QUE EXISTE: AN ANALYSIS OF MICROFICTION IN THE 21ST CENTURY*

**Ruth Moreno Carpio**

## **PANEL K: BODY AND MIND**

**Nesbitt Room 3212** | Moderator: Dr. Zachary Ellison

*SENSORY ROOM*

**Susannah Hooton**

*CAN MINDFUL SELF-COMPASSION LESSEN THE IMPACT OF SOCIAL MEDIA USE ON MENTAL HEALTH?*

**Ariana Harvey, Mentor: Dr. Shelley Aikman**

# 12:00 - 1:00 PM: POSTER SESSION #1

1. An Investigation into the Hegemony of the US Dollar in Recent Years as Threats of a Proposed BRICS Currency Persist | **Jenna Gardner**. Mentor: Dr. Ruohan Wu
2. How has marianismo as an ideology dictated norms for Mexican women within the political arena? | **Jorge Romero**
3. The Significance of Woodblock Prints and Other Forms of Propaganda in a Hypothetical East Asian Imperialism Museum | **Thorin Beard**. Mentor: Dr. Sung Shin Kim
4. Lasers are cool but are they better? A comparative analysis of surveying techniques | **Madison M. Rollins**. Mentor: Dr. Jacob Bateman McDonald
5. The N-Back Task: What Does It Measure? | **Ashley Bellamy, Kathleen Colletta, Isabelle Harrel, and Elizabeth Hoyer**. Mentor: Dr. Tyler Harrison
6. Isolation and Characterization of *Mycobacterium smegmatis* Phage Landor | **Audrey Nesbit**. Mentor: Dr. Alison Kanak
7. A Preliminary Analysis of Bovid Mesowear Data from East Turkana (Northern Kenya) from 2.0 – 1.4 Million Years Ago: Implications for Pleistocene Hominin Environments | **Jake Gardner**. Mentor: Dr. David Patterson
8. Effects of Rotational Grazing on Soil Health and Forage Quality on a Microdairy in Dahlenega, Ga. | **Anna Cronan**. Mentor: Prof. Jessy Patterson
9. Eco-friendly Synthesis of Silver Nanoparticles using Ascorbic Acid and its Optical Characterization | **Briana Andronicescu**. Mentor: Dr. Bhawani Sigdel Regmi
10. Perinatal Carbaryl Exposure Differentially Alters Nicotine-mediated Locomotor Behavior in Adolescent and Adult Mice | **Lauren Gately**. Mentors: Dr. Abby Meyer and Dr. Wei-Lun Sun
11. Investigating the Cytotoxicity of Bacteriophage Cepens Genes in Host *Mycobacterium Smegmatis* | **Alexis McCarty**. Mentor: Dr. Alison Kanak
12. Using MNE, python-based package, to create a pipeline for EEG data analysis | **Eddie Ramirez**.
13. The Computational Study of Neurological Binding Affinity of Cocaine | **Dominique Cunningham and Hasten Veal**. Mentor: Dr. Rosi Gunasinghe
14. Mathematical Model of Tumor Growth | **Sebastian Chu and Muhammad Woday**. Mentors: Dr. Alla Balueva and Dr. Piotr Hebda
15. Native American Assimilation through Buffalo Bill's Wild West | **William Ward**. Mentor: Dr. Clay Ouzts



# 12:00 - 1:00 PM: POSTER SESSION #1

16. The Effects of E-cigarette Exposure on Lung Histology and the Immunolocalization of Angiotensin Converting Enzyme 2 (ACE-2) in the Common House Mouse, *Mus musculus* | **Robert Keenan, Josie Ayers, Daleana Reyes Alejo, and Tristyn Le.** Mentor: Dr. Cathy Whiting
17. Memories from a Disaster: Importance of Close Relationships in Japan | **Susana Olivo Sandoval**
18. History of Palestinian Embroidery | **Samson Larsen**
19. How Art Was Used as Indirect Propaganda During the First World War | **Ariana Mohr**
20. The Impact of Artificial Intelligence in Education | **Michaela Lucina.** Mentor: Dr. Lu Xu
21. Identification of *Vibrio spp.* Toxin Production in Oysters (*Crassostrea virginica*) from Georgia's Coast | **Jessica Howard.** Mentors: Dr. Dobrusia Bialonska, Dr. Paul Johnson, and Dr. Nancy Dalman
22. Prison Overcrowding | **Jessica Doan**
23. How the persecuted become the persecutors, and how its legacy is seen in modern America | **Samuel Harwood**
24. Perceived Acceptability of Violence Against People with Different Gender Expressions | **Chloe Wilson and Alex Jordan**
25. Emerging Adult Sexting Behavior and Sexual Behavior | **Nancy Shafer, Eduardo Velazquez, Naydelin Trejo Martinez, and Sabrina Boggs.** Mentor: Dr. Efren Velazquez
26. Analyzing Avoidance of Healthcare among Emerging Adults | **Christian Dale, Sabrina Boggs, and Naydelin Trejo Martinez.** Mentor: Dr. Efren Velazquez
27. Predictive Policing Algorithms: How Do They Affect Prison Sentencing and When Do They Fail? | **Arpit Mittal.** Mentor: Dr. Tanya Bennett
28. Investigating how Autonomy and Maternal Influence Affect Disordered Eating Behaviors | **Rosemary Beck.** Mentor: Dr. Amanda Halliburton
29. Why Do Individuals Choose to Precrastinate? Discovering the Motivational Drivers of Precrastination | **Svetlana Teterina.** Mentor: Dr. Inchul Cho
30. Reviewing the Recidivism Rates Between the United States and Norway Based on Their Varying Prison Systems | **Faith Burns**
31. Attachment, Traits and Reward Processing | **Danica Barron.** Mentor: Dr. Diane Cook



# 1:00 - 2:00 PM

## PANEL L: EXAMINING THE TRIUMPHS AND TRAGEDIES OF THE 20TH CENTURY

Nesbitt Room 3107 | Moderator: Dr. Brynna Quarles

*INSTITUTIONALIZED CORRUPTION: CHAEBOL RESILIENCE DESPITE ECONOMIC DEMOCRATIZATION ATTEMPTS*

**Jessica Woods**, Mentor: Dr. Dae-oup Chang, Sogang University

*THE PRESIDENCY AND LABOR: A POLICY OF PRAGMATISM*

**Marshall VandenOever**, Mentor: Dr. Erin Bush

## PANEL M: SENTENCING, PRISON LIFE, AND THE CRIMINAL JUSTICE SYSTEM

Nesbitt Room 3204 | Moderator: Ethan Belisle

*PHYSICAL AND MENTAL HEALTH IN RELATION TO BEHAVIOR AND OVERALL WELL-BEING OF INMATES*

**Allie Holbrook**

*THE RELATIONSHIP BETWEEN CAPITAL PUNISHMENT AND DETERRENCE THEORY*

**Ella DeVries**

*THE STATE OF SENTENCING: EXAMINING THE DISPARITY OF MALE AND FEMALE SENTENCES*

**Brandon Kilby**, Mentor: Dr. Stu Batchelder

## PANEL N: PLACES AND PERSPECTIVES

Nesbitt 3212 | Moderator: Maci Tucker

*ACTIVISM AND ADVOCACY FOR APPALACHIA: THE WOMAN WHO DEVELOPED APPALACHIAN STUDIES*

**Emilyn Slemons**, Mentor: Dr. Barry Whittemore

*TIME AND PLACE: TEMPORALITY AND DIASPORA IN JIA QING WILSON-YANG'S SMALL BEAUTY*

**Bethany Adams**, Mentor: Dr. Cameron Crawford

*TOUCHING THE UNTOUCHED: TOUCH AND AFFECT IN ARUNDHATI ROY'S THE GOD OF SMALL THINGS*

**Rebecca Payne**, Mentor: Dr. Cameron Crawford

# 2:00 - 3:00 PM: POSTER SESSION #2

1. Detection of antibiotic resistant genes in northeast Georgia water | **Noemi Leal-Lara, Michelle Vo, and Shreyas Somashekar**. Mentors: Prof. Margi Flood, Dr. Jeanelle Morgan, and Dr. Swapna Bhat
2. Copy number variations in AKAP11 in patients diagnosed with bipolar I disorder associated with misfolding of protein and inability to bind to GSK3b | **Shabnam Rezai**. Mentor: Dr. Neal Lin
3. Exploring potential threats of antibiotic resistance in *Vibrio. spp* isolated from oysters on Georgia's coast | **Alyssa Pold**. Mentors: Dr. Dobrusia Bialonska, Dr. Paul Johnson, and Dr. Nancy Dalman
4. Effects of xanthotoxin on parasitoid-host systems in generalist herbivores *Trichoplusia ni* and *Chrysodeixis includens* parasitized by *Copidosoma floridanum* | **Wyatt McManus, Rediate Degu, Kaitlyn Timmons, and Eamon McDaniel**. Mentor: Dr. Evan Lampert
5. Risk Factors for Flea Infection for a Canine Population in Commerce, GA | **Clare Garcia**. Mentor: Dr. Evan Lampert
6. Immunolocalization of Two Inflammatory Chemicals (IL-1 and IBA1) in the Brain Tissue of Mice Exposed to E-Cigarettes | **Jessica Cisneros Lerma, Adrian Kim, and Dominique Cunningham**. Mentors: Dr. Cathy Whiting and Dr. Abby Meyer
7. Computational modeling, synthesis and enzymatic assay of terpenoid, phenol, and benzaldehyde derivatives as tyrosinase inhibitors | **Dorothea Tecar, Kaitlyn Vick, and Hailey Pruitt**. Mentors: Dr. Nicole Hollabaugh and Dr. Brynna Quarles
8. Elucidating the Effects of Artificial Lighting on African Mammal Behavior | **Lillian Hayes and Atticus Tomcho**. Mentor: Prof. Jessy Patterson
9. Evaluating the chronological distribution of late Pleistocene fossil-bearing localities in southeastern North America | **Mary Dickens**. Mentors: Dr. Christopher Seminack, Dr. Alfred J. Mead (GCSU), and Dr. David Patterson
10. Refinement of behavioral and locomotive data acquisition in caterpillars, through Python programming and 3D modeling software | **Dylon Quiros and Giuseppe Casella**. Mentors: Dr. Erin Barding, Dr. Margaret Smith, and Dr. Ryan Shanks
11. A preliminary evaluation of deer body size trends across Georgia | **Michael Cole Carter and Sarah Holgate**. Mentors: Dr. David Patterson, Dr. Erin Barding, and Dr. Michael Bender
12. Investigating the Effects of Urban Watershed Hydrology on Hybridization Rates | **Rachel Boyer, Madison Callas, Lindsey Currie, Ryan Edge, and Madison Shiery**. Mentor: Dr. Andrew Taylor
13. The University of North Georgia Herbarium: Preserving the Flora of North Georgia for Conservation and Teaching Purposes | **Catherine Cook, Alicia Rodriguez, Debbie Carranza, Yalda Najafi, and Oneika Bigby**





# 2:00 - 3:00 PM: POSTER SESSION #2

14. Ion Channels as Targets for Parasiticides: A Brief Review of Past, Present, and Future Directions | **Mallory Mendenhall**. Mentor: Dr. Josette Ricker
15. Zeolitic Imidazolate Framework Materials for Removal of Dye Pollution from Water | **Tyler Simpson**
16. Life Insurance Trends Pre- and Post-COVID-19: Insights from the Survey of Consumer Finances | **Kevin Terry**. Mentor: Dr. Ning Wang
17. The Star-Child: Adolescent Boyhood as Gender | **Jackson Owen**
18. Inflation 2023-2024 in Athens-Clarke and Oconee Counties, Georgia | **Abby Pickle**  
Mentors: Dr. Kelly Manley and Dr. Yongseung Han
19. Individual Difference Factors and Social Behavior | **Ashleigh Sargent**. Mentor: Shelley Aikman
20. George C. Spence, Sr.: The Man Who Would Profit from the Proposed Roswell Dam | **Jennifer Hardy**
21. Oral Histories of Enslaved Lifeways in the South Carolina Lowcountry | **Lauren Bowman**.  
Mentor: Dr. Robin O'Day
22. Fannie Harrell's Diary as a Representation of Women's Leisure in the Early Twentieth Century | **Asa Conroy**. Mentor: Dr. Melissa Schindler
23. Investigating the Use of Metacognitive Strategies in Reading Primary Scientific Literature | **Sarah Miller**. Mentor: Dr. Miriam Segura
24. How do researchers measure precrastination?: A literature review | **Steven Wilson**.  
Mentor: Dr. Inchul Cho
25. The Details are [ ]: Connections Between TPAjax and PBSuccess | **David Revering**.  
Mentors: Dr. Tamara Spike and Dr. Victoria Hightower
26. Comparing the Mismatch Negativity of Musicians and Nonmusicians in a Melodic Memory Task | **Christian Dale**. Mentor: Dr. Troy Smith
27. For the Greater Good: The Concept of Necessary Evil in Horror Fiction | **Herbert Thomas**
28. Deciding on Sexting? Emerging Adult Risky Sex and Sexual Intention | **Eduardo Velazquez, Naydelin Trejo Martinez, Christian Dale, and Nancy Shafer**. Mentor: Dr. Efren Velazquez
29. Investigation of Rechargeable LED Lamp Circuitry Using Solar Power | **Cayla Scott and Lillianna Marcum**. Mentor: Dr. Ted Forringer
30. AI effect on UX design | **Matt Gallups**

**CURCA would like to thank the following UNG students, faculty, and staff for making ARC 2024 possible:**

The CURCA Administrative team: Diogo Pinheiro, Allison Grundel, Dawid Zajac, and Maci Tucker

Sarah Grace Glover, Allison Galloup, and the UNG libraries

**ARC Planning Committee and Moderators:**

Tyler Hagy, Tiffany Tran, Steffani Pass, Destani Fountain, Emilyn Slemmons, Carson Teems, Jorge Romero, Ana Pozzi-Harris, Brynna Quarles, Ethan Belisle, Maci Tucker, Zachary Elison, Rana Gautam, Jeanelle Morgan, Julianne Reynolds, Lillie Holtzclaw, Victoria Hightower, David Patterson, Diogo Pinheiro (Chair)

**ARC Best Paper and Best Poster Committee:**

Diogo Pinheiro, Victoria Hightower, Matthew Horton, Alla Balueva, Ghulam Hasnain, Andrew Taylor

**ARC Reviewers:**

Rana Gautam, Andrew Jakiel, Brynna Quarles, Bibek Chand, Elissa Ferguson, Abby Meyer, Ghulam Hasnain, Matthew Horton, Michael Lanford, Alla Balueva, Rahul Shahni, Johanna Luthman, Evan Lampert, Efren Velazquez, Tony Zschau, Zachary Elison, Bhawani Sigdel Regmi, Cenate Pruitt, Bryan Dawson, Raphael Palermo dos Santos, Sam Rohrer, Tiffany Kearney, Victoria Hightower, and David Patterson

