2021 VIRTUAL CONFERENCE

Friday, March 26, 2021

Zoom link: https://go.ung.edu/26annualresearchconference

9:00 AM – 9:50 AM (on Zoom)

Panel 1A: **Latix Literature and Cultural Production along the US-Mexico Border** | 9:00 AM – 9:50 AM

**Susana Olivio Sandoval**, Moderator

*Borders and Identity in Bless me, Ultima (1972)*

**Colton Glaze**, Faculty Mentor: Dr. Joshua Martin

*Selena Quintanilla: Deconstructing the Feminine Script*

**Marylee Pelletier**, Faculty Mentor: Dr. Joshua Martin

*Bless Me, Ultima (1972) and Masculinity on the Borderlands*

**Cassidy Clifford**, Faculty Mentor: Dr. Joshua Martin
Panel 2B: Literature Panel 1 | 9:00 AM – 9:50 AM

Dr. Kathryn Quinto, Moderator

Paralanguage of Beloved Fictional Film Characters
Matthew Karshna, Faculty Mentors: Dr. Miriam Moore and Dr. Elisa Carlson

Lilith in Dawn
Keeli Barney, Faculty Mentor: Dr. Derek Thiess

Symbolism of Oxbridge and Fernham
Michaela Smith, Faculty Mentor: Dr. Tanya Bennett

Panel 3C: Graduate Education Panel 1 | 9:00 AM – 9:50 AM

Mandy Losito, Moderator

Effects of Movement Integration on Students’ Academic Success, Time On-Task, and Self-Efficacy
Elaine Orange, Faculty Mentor: Dr. Joshua Cuevas

Intentional Representation in Instructional Materials: Impact on Self-Perceptions and Self-Efficacy in Elementary Students
Emily Mayfield, Faculty Mentor: Dr. Joshua Cuevas

Is Flexible Grouping Beneficial? Small Group Instructional Practices In Elementary School Math on Achievement, Motivation, and Self-Efficacy
Victoria Bottoms, Faculty Mentor: Dr. Joshua Cuevas

10:00 AM – 10:50 AM (on Zoom)

Panel 1D: Vulnerability in Hacking and History | 10:00 AM – 10:50 AM

Dr. Kathryn Quinto, Moderator

Hacking an Air-Gapped Machine: Principles and Practice
Maria Marquez, Faculty Mentor: Dr. Bryson Payne

Gold Boom Gone Bust: The History of Auraria, Georgia
Leah Jarrett, Faculty Mentor: Dr. Phillip Guerty

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Panel 2E: Religion and Spirituality | 10:00 AM – 10:50 AM

Susana Olivio Sandoval, Moderator

Curse or Chemicals: An Examination of Religious Treatment of Mental Illness as Described in "Women Talking"

Abigail Rogers, Faculty Mentor: Dr. Derek Thiess

Predictors of Happiness: Religion and Spirituality

Elizabeth Wilcauskas, Faculty Mentor: Dr. Joel Potter

Romanticizing the Orient: Colonial India and its Influence on Victorian Spiritualism

Lesley Jones, Faculty Mentor: Dr. Alex Wisnoski

Panel 3F: Graduate Education Panel 2 | 10:00 AM – 10:50 AM

Mandy Losito, Moderator

Using Historical Thinking Strategies for Improving Elementary Students’ Content Knowledge

Lydia Burnett, Faculty Mentor: Dr. Joshua Cuevas

The Effects of Dual Coding Theory on Social Studies Vocabulary and Comprehension in a 5th grade Classroom

Jennifer Wooten, Faculty Mentor: Dr. Joshua Cuevas

Prompted Journal Writing for Increased Metacognition in Middle Grades Math

Julia Neal, Faculty Mentor: Dr. Joshua Cuevas

11:00 AM – 11:50 AM (on Zoom)

Panel 1G: Transdisciplinary Approaches to Arts Education and Basketball | 11:00 AM – 11:50 AM

Aida Alarcon, Moderator

Effective Virtual Music Lessons

Tamara (Tami) Stroup, Faculty Mentor: Dr. Joanna Kim

Smarter Coaching to Adapt to Basketball's New Analytical Landscape

Jackson McKillip, Faculty Mentor: Dr. Derek Thiess

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Panel 2H: Sociology and Criminal Justice | 11:00 AM – 11:50 AM

Kat Torres, Moderator

*The Division of America: A Content Analysis of Individual Factors that Discourage Productive Political Conversations*

Sharrell Canty, Sydney Kahle, Antonia Ramirez, & Megan Segars, Faculty Mentor: Toralf Zschau

*Disappearing Discourse: Qualitative Analysis of Social Network Dynamics that Affect Political Discussions*

Megan Miner & Chloe Hoover, Faculty Mentor: Toralf Zschau

*Public Defenders and Time Management of Cases*

Marion Crossfield, Faculty Mentor: Dr. Scott Meachum

Panel 3I: Graduate Education Panel 3 | 11:00 AM – 11:50 AM

Mandy Losito, Moderator

*The Importance of Explicit Instruction in Literacy Strategies in History Classes: An Examination of Student Performance and Motivations*

Mallory Swanson, Faculty Mentor: Dr. Joshua Cuevas

*Environment Based Education and Environmental Literacy: Instructional Strategies to Improving the Employability Skills of High School Students*

Mary McGovern, Faculty Mentor: Dr. Joshua Cuevas

*How Can Teachers Use MobyMax to Increase Math Proficiency? The Use of Computer Assisted Technology to Impact Daily Student Learning*

Simona Albarado, Faculty Mentor: Dr. Joshua Cuevas

Poster Session 12:00 PM – 1:00 PM

Posters will stream live on the ARC Digital Commons site: [https://ung.edu/ungarc](https://ung.edu/ungarc).

Poster presenters will be on hand from noon to one to answer questions via live chat here.

1. *The Effects of Schema-Based Instruction on Word- Problems in a Third-Grade Mathematics Classroom*

   Mallory Skinner, Faculty Mentor: Dr. Josh Cuevas

2. *The Effects of Changing Electron Withdrawing Groups to Shift the Maximum Absorption Wavelengths*

   [https://ung.edu/ungarc](https://ung.edu/ungarc)
Kathryn Monheim, Faculty Mentor: Dr. Jeremy Olson

3. **Skeletal variation in Didelphis virginiana**
   Wesley Rhinehart, Faculty Mentors: Dr. Erin Barding & Dr. David Patterson

4. **Visual memories before conscious awareness: How fragile is our Fragile Memory (FM) system?**
   Erin Conway, Faculty Mentor: Dr. Ralph Hale

5. **Assessing scavenging dynamics in the Southern Appalachian Mountains**
   Nicolas Szabo, Faculty Mentor: Prof. Jessica Patterson

6. **AN EVALUATION OF THE INFLUENCE OF LIGHT BAITS ON AQUATIC TURTLE TRAP SUCCESS**
   Maggie M. Woodall & Jenna B. Myers, Faculty Mentors: Dr. Michael J. Bender & Dr. Jennifer Mook

7. **malSET: An Automated Symbolic Execution Toolkit for Assisting Malware Classification Systems**
   Daniel Haugen, Faculty Mentors: Dr. Sara Sartoli & Dr. Bryson Payne

8. **Characterization of Pleomorphic Bacteriophage and their Endolysin Proteins using Arthrobacter globiformis**
   Taylor Berry, Faculty Mentor: Dr. Alison Kanak

9. **Molecular characterization of songbird Mycoplasma gallisepticum isolates**
   Keelan Geraghty & Melanie D Majors, Faculty Mentors: Dr. Linda Purvis & Dawn E.W. Drumtra

10. **Absorption of N-Hexanes via a Microwaved Synthesis of Zif-8**
    Emily Shrewsbury, Faculty Mentor: Dr. Megan Foley

11. **Access to Urban Greenspace: a preliminary analysis of the Hispanic population’s accessibility to urban greenspace in Hall County, Georgia**
    Catlin Corrales, Faculty Mentor: Dr. Yu Sun

12. **Mag Stripe Hacking: Exposing the Fatal Flaw with Student ID Cards**
    Nathan Alden, Faculty Mentor: Dr. Bryson Payne

13. **The effect of spatial, temporal, and anthropogenic factors on the transmission of Ebola Virus Disease amongst Great Apes in West Central Africa**
    Zdenka Janderova, Faculty Mentor: Dr. Jason Lang

14. **Human disturbance effects on white blood cell profiles of Anaxyrus americanus in northern Georgia**
    Chloe Allen, Faculty Mentors: Dr. Lauren A Oliver, Dr. Abby A Neyer, Dr. Mark S. Davis, and Dr. Alexandria V. Tremblay

15. **An analysis of groundhog burrow site characteristics**
    Natalia Reyes, Faculty Mentors: Prof. Jessica Patterson & Dr. Erin Barding

16. **Development of an ethogram for Trichoplusia ni**
    Chloe Meewes, Faculty Mentors: Dr. Ryan Shanks, Dr. Margaret Smith, & Dr. Erin Barding

17. **Side directed mutagenesis studies of PyrD and PyrR genes involved in riboflavin biosynthesis**
    Ann Nguyen, Lilia Saber, & Briana Sargent, Faculty Mentor: Dr. Ghulam Hasnain

18. **Cloning and expression of functional domains of PyrD and PyrR as a bifunctional enzyme for potential use in the biofortification of Riboflavin in plants**
    Mai Tran & Sam Haddad, Faculty Mentor: Dr. Ghulam Hasnain

19. **100 Years Ago in Gainesville; Digital Restoration of The Ramsey Collection**
    Mary Abbott, Faculty Mentor: Dr. Phillip Guerty

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20. Measuring Differences in Academic Beliefs of First-Generation and Non-First-Generation College Students
Rachel Redman, Faculty Mentor: Dr. David Chirinos

21. Cadet Involvement in the UNG Honors Program and the Office of Nationally Competitive Scholarships
Holden Armstrong, Faculty Mentors: Dr. Victoria Hightower & Dr. Royce Dansby-Sparks

22. The effect of natural products on the growth of docetaxel-resistant triple-negative breast cancer cells
Sonali Dutta, Faculty Mentor: Dr. Ramneet Kaur

23. The Effects of Low Frequency Ultrasound on Pseudomonas aeruginosa Pathogenicity Factors
Ryan Beavers & Destinee Barbosa, Faculty Mentors: Dr. Dobroslawa Bialonska & Dr. Paul Johnson

24. The Four-Year Police Academy: An Examination of Attrition Rate Patterns in the University of North Georgia’s Public Safety Academy
Elisabeth Edler, Faculty Mentor: Dr. Butch Newkirk

25. Mental health consequences associated with college students’ negative interactions on social media
Cassidy Clifford & Robert Duran, Faculty Mentor: Dr. Amanda Halliburton

Jessica Wood, Faculty Mentors: Robin Fouts (of Long Branch Elementary School) and Dr. Royce Dansby-Sparks

27. The effect of natural products on the growth of docetaxel resistant androgen independent prostate cancer cells expressing cancer stem cell markers
Briana Sargent, Faculty Mentor: Dr. Ramneet Kaur

28. Cyberwarfare: Weapons of Mass Distraction, Disruption, or Destruction?
Emily Cooper, Faculty Mentor: Dr. Bryson Payne

29. Participatory Ideology of the Workers’ Party of Brazil from a Regional Comparative Perspective
Maria Julia Bortolucci, Faculty Mentor: Dr. Alexander Wisnoski

30. Qualitative Analysis of Antibiotic Resistant Bacteria in Tumbling Creek
Shreya Patel & Tyler A. Henderson, Faculty Mentor: Dr. Swapna Bhat

1:00 PM – 1:50 PM (on Zoom)

Panel 1J: STEM Approaches | 1:00 PM – 1:50 PM

Averi Hardwick, Moderator

Effect of Brominated Indole-3-carboxaldehydes on the Communication and Biofilm Formation in Bacteria

Madison Bunch, Faculty Mentor: Dr. Dobrusia Bialonska & Dr. Paul Johnson

Chemically selective self-assembled monolayers for lowered limits of detection of Cr(VI)

Brooke Tate, Faculty Mentor: Dr. Royce Dansby-Sparks
A Novel Flow-Based Synthetic Technique for the Production of Polyglycolic Acid (PGA)

**Emily Shrewsbury**, Faculty Mentor: Dr. L. Zane Miller & Dr. N. Eric Huddleston

Panel 2K: Literature Panel 2 | 1:00 PM – 1:50 PM

**Dr. Kathryn Quinto**, Moderator

*The Evolution of "The Yellow Wallpaper" from horror story to feminist classic*

**Eris Fields**, Faculty Mentors: Dr. Derek Thiess

*Labyrinth of Love: Aeneas and Dido in Chaucer and Vergil*

**Angela Rhilinger**, Faculty Mentor: Dr. Laura Getty

*A Space of Her Own*

**Alexis Young**, Faculty Mentor: Dr. Derek Thiess

Panel 3L: International Affairs | 1:00 PM – 1:50 PM

**Dr. Victoria Hightower**, Moderator

*Consumerism in Russia: An Intercultural Perspective*

**Tucker Coan and Scott Hicks**, Faculty Mentor: Dr. Tatiana Maslova

*Participatory Budgeting: Analysis of Institutional Fragility through Crises*

**Maria Julia Bortolucci**, Faculty Mentor: Dr. Cristian Harris

*Examining Female Genital Mutilation in Indonesia through a Tanzanian Lens*

**Katherine Torres**, Faculty Mentor: Dr. Kerry Stewart
CURCA would like to thank the following UNG students, faculty, and staff for making ARC 2021 possible:

Allison Galloup, and the UNG libraries

The CURCA Administrative team: Allison Grundel and Mandy Losito

**ARC Planning Committee (moderators and workshop leaders):**
Aida Alarcon, Amanda Ash, Lani Chastain, Sonali Dutta, Averi Hardwick, Susana Olivio Sandoval, Jacey Sherman, Kat Torres, Victoria Hightower, Kathryn Quinto

**ARC faculty reviewers:**