TWENTY-SEVENTH ANNUAL
GRADUATE RESEARCH SYMPOSIUM
APRIL 3-4, 2019
RAMSEY CENTER
UNIVERSITY CENTER

M.A. English Students, Crystal Ellwood and Michael Redman

RESEARCH.WCU.EDU | #RASC19
Sponsored by: Graduate School and Research, Office of the Provost, Graduate Student Association
Dear Participants,

Welcome to the Twenty-Seventh Annual Graduate Research Symposium! Since 1992, the Graduate Research Symposium, sponsored by Graduate School and Research, has provided graduate students the opportunity to showcase their scholarly research and projects, and I want to express my sincere appreciation to you for sharing your excellent work with your fellow students, colleagues, and faculty. I wish to express a heartfelt thank you to all participating faculty and staff mentors - your active student mentorship, support and encouragement of their research is the hallmark of Western’s graduate education experience.

For many students, this will be your first opportunity to share empirical findings and creative works with the academic community. Today, you take a step in becoming recognized as a scholar in your chosen discipline. The skills you learn as part of the research process and your ability to convey that research in writing and in person will enable you to share your knowledge, intellectual passion, and commitment to ideas and to your discipline and profession. Congratulations on this significant milestone in your academic development!

It is my hope that your experience inspires you to continue to contribute to our understanding of all areas of knowledge in the arts, humanities, education, health, social sciences, business, and sciences. You are helping to shape the future and the solutions to important issues facing our region, state, and world, and what you are doing today as students is just the beginning of all you can do to make a true difference. Thank you. I look forward to meeting each of you personally and to talking with you about your important work and your plans for the future.

Please join your faculty mentors, colleagues, and members of the Graduate School at the research posters that will be viewable starting at 3:00 pm on Wednesday, 03 April, at the Ramsey Center. The concurrent oral presentation sessions will be starting at 9:00 am in the University Center on Thursday, 04 April. We have featured undergraduate oral presentations leading off some of the oral sessions to better integrate our graduate and undergraduate research. Our keynote speaker, Dr. Laura Wright, Professor of English at WCU, will deliver her address on Thursday 04 April, at 12:00 pm in the University Center Theater. Following the oral presentations, there will be a reception and awards ceremony, in your honor, in the University Center Grand Room starting at 5:00 PM, on Thursday 04 April. We look forward to seeing you and celebrating your excellence!

Brian D. Kloeppel, Ph.D.
Dean, Graduate School and Research

Laura Wright is Professor of English at Western Carolina University, where she specializes in postcolonial literatures and theory, ecocriticism, and animal studies. Her monographs include Writing Out of All the Camps: J. M. Coetzee’s Narratives of Displacement (Routledge, 2006 and 2009) and Wilderness into Civilized Shapes: Reading the Postcolonial Environment (U of Georgia P, 2010). She is lead editor (with Jane Poyner and Elleke Boehmer) of Approaches to Teaching Coetzee’s Disgrace and Other Works (MLA, 2014). Her most recent monograph, The Vegan Studies Project: Food, Animals, and Gender in the Age of Terror, was published by the U of Georgia P in 2015. Her edited collection Through a Vegan Studies Lens: Textual Ethics and Lived Activism was published by the University of Nevada Press in February of 2019. University of Nevada Press.
Are You an Ass? Environmental Pressures Impacting College Students’ Political Ideologies
Daniel Kerns; Sponsor: April Perry

Examining Gen Z: Coping Skills and Maladaptive Behavior
Jessica Koett; Sponsor: April Perry

Flywheel Impact on WECs’ Peak to Average Power Ratio
Connor McIntyre; Sponsor: Bora Karayaka, Art

Artificial Burrows Mitigate the Effects of Fire-Suppression on the Growth of Juvenile Dusky Gopher Frogs
Joseph Nacy; Sponsor: Joseph Pechmann

The Path to Higher Education: Correlation Between Undergraduate Involvement and Careers in Higher Education
Ashley Palmer; Sponsor: April Perry

Catamount Pride: Experiences of LGBTQ+ Faculty & Staff @ WCU
Dean Paulk; Sponsor: April Perry

Introverts in An Extroverted World: Rethinking Leadership in Higher Education
Ariel Phillips; Sponsor: April Perry

Trailer Thing: Mobile Public Engagement in Art
Kylie Price; Sponsor: Tom Ashcraft

Historical and Contemporary Experiences of Female Students at Western Carolina University
Alexis Rutishauser; Sponsor: April Perry

The Next Generation Neural Prosthesis to Improve Gait in People with Muscle Weakness
Premkumar Subbukutti; Sponsor: Martin Tanaka

Smart Trash Can Based on Image Processing, Automation and Internet of Thing (IOT) Technologies
Rumana Sultana; Sponsor: Yanjun Yan

Student Attitudes Towards Gun Violence Solutions
Adrian Szugye; Sponsor: Josephine Crolley-Simic

Shape-Formation by Swarm Robotics
Anik Tahabilder; Sponsor: Yanjun Yan

Solar Roadway for the Induction Charging of Electric Vehicles using Sustainable Energy Production
Joshua Turnbull; Sponsor: Bora Karayaka

Multilingualism, Language Restriction and Revival: A comparative analysis in language education and policies between Russification efforts in former Soviet territories and Americanization efforts in U.S. colonies
Rachel Walker; Sponsor: Erin Callahan

DNA Polymerase Gamma in the Basidiomycetous Yeast, Cryptococcus neoformans
Samuel Walter; Sponsor: Indrani Bose, Jamie Wallen

Not Enough Hours in the Day: A Study on How Being an RA Impacts the Social and Academic Lives of Students
Lila Welsh; Sponsor: April Perry

Teaching Styles and the College Instructor
Jessie Whitman, Rebecca Peterson; Sponsor: Ellen Sigler

The Efficacy of Sexual Education Programs for Individuals with Intellectual Disabilities: Through the Eyes of Facilitators
Davis Wilson; Sponsor: April Perry

POSTER SESSION

Student Attitudes Towards Gun Violence Solutions
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Higher Education Student Affairs
9:00 – 10:00 am → UC 215 – Catamount Room

Moderator: April Perry

Imposter Syndrome
Presenter: Morgan Gill, Sophia Calhoun
Sponsor: April Perry

High-Touch Low-Cost Initiatives Provide Low-SES Student Access
Presenter: Dean Martin
Sponsor: April Perry

Introverts in An Extroverted World: Rethinking Leadership in Higher Education
Presenter: Ariel Phillips
Sponsor: April Perry

Telling Their Stories: Barriers to Success
Presenter: Dean Martin
Sponsor: April Perry

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**HISTORY / ANTHROPOLOGY / SOCIOLOGY**

**10:00 – 11:00 AM → UC 212 – DOGWOOD ROOM**

**MODERATOR: ALEX MACAULAY**

**Featured Undergraduate Presenter → Empowerment Against Adversity: The Obstruction of Lithuanian Women’s Identities, 1940-1953**
- Presenter: Emily Johnson
- Sponsor: Scott Philyaw

**Featured Undergraduate Presenter → Race and Gender Within YA Genre Fantasy: It’s Not All White Boys with Swords**
- Presenter: Ryan Tompkins
- Sponsor: Munene Mwanki

**From Candlemakers to Conquistadors: How Small Towns Utilize Public History Programs to Engage Youth**
- Presenter: Mandy Jolly
- Sponsor: Alexander Macauley

**Blood of Attila: How Early 20th Century Germans Became “the Hun”**
- Presenter: Franklin Taylor
- Sponsor: Vicki Szabo

**ENGLISH**

**11:00 AM – 12:00 PM → UC 215 – CATAMOUNT ROOM**

**MODERATOR: MICHAEL BOATRIGHT**

**Featured Undergraduate Presenter → Closing the Gap: Roles & Responsibilities of K-12 English as a Second Language (ESL) Teachers for Service Coordination with Speech-Language Pathologists (SLPs)**
- Presenters: Kelsey Williams, Amelia Wall
- Sponsor: Erin Callahan

**Sea, The First Final Frontier: Ahab’s Self-Reliant Fall and the Presence of Moby-Dick in Modern Science Fiction Horror**
- Presenter: Diana New
- Sponsor: Michael Boatright, Mae Claxton

**Education and Hospitality in Appalachia**
- Presenter: Kellie Willcox
- Sponsor: Mae Claxton, Liz Skene

**Classical Elocution as a Modern Rhetorical Tool**
- Presenter: Yustin Riopko
- Sponsor: Jonathan Bradshaw

**HEALTH SCIENCES / CHEMISTRY**

**10:00 – 11:00 AM → UC 232 – MULTIPURPOSE ROOM**

**MODERATOR: RANGIKA KORALEGE**

**Impact of Exercise as a Component of Treatment for Depression in Young Adults: A Systematic Review**
- Presenter: Sally Woerner
- Sponsor: Marianne Hollis

**Characterization of Unmodified and Bleached Peanut Hulls**
- Presenter: Michael Sands
- Sponsor: Carmen Huffman
**TECHNOLOGY**
11:00 AM – 12:00 PM → UC 212 – DOGWOOD ROOM

**MODERATOR: SUDHIR KAUL**

Controlling Material Stiffness Through Mesoscale Design Using Direct Metal Laser Sintering
   Presenter: Terail Clonts
   Sponsor: Martin Tanaka

A Novel Engine Head Design Using a Rotary Valve System in Traditional Four-Stroke Internal Combustion Engines
   Presenter: Erik Myers
   Sponsor: Martin Tanaka

Redesigning a Bicycle Crank Arm for Metal Additive Manufacturing by Applying DFMAM Guidelines to the Topology Optimization Process
   Presenter: Jeremy Smith
   Sponsor: Martin Tanaka, Patrick Gardner, Sudhir Kaul

**FINE ARTS / MUSIC**
11:00 AM – 12:00 PM → UC 214 – CARDINAL ROOM

**MODERATOR: SHELBY HICKS**

Featured Undergraduate Presenter → Edward MacDowell’s Contributions to American Music During the Late Romantic Period
   Presenter: Savannah Bennett
   Sponsor: Christina Reitz

Threads of Connection: An Investigation of Environment Through Art
   Presenter: Sara Method
   Sponsor: Tom Ashcraft, Karen Britt

hear + there
   Presenter: Raymond Baccari
   Sponsor: Justin Morgan Kennedy

Art and Organizing: Expanding What is Possible through Changing the Frame
   Presenter: Mo Kessler
   Sponsor: Tom Ashcraft

**PSYCHOLOGY / ANTHROPOLOGY / SOCIOLOGY**
11:00 AM – 12:00 PM → UC 232 – MULTIPURPOSE ROOM

**MODERATOR: DAVID SOLOMON**

Featured Undergraduate Presenter → Transgender Athletes and the Media: A 2017 Discourse Analysis
   Presenter: Aria Ashburn
   Sponsor: Munene Mwanki

Size Matters: Associations Between Personality and Sexual Dysfunction for Men with Penis Concerns
   Presenter: Robert Wyatt
   Sponsor: David de Jong, David McCord

Perceptions of Self-Deprecating Humor: Relatable or Incompetent?
   Presenter: Hannah Buie
   Sponsor: Thomas Ford

Humor’s Impact on Perceived Trustworthiness: Does Target Matter?
   Presenter: Andrew Olah
   Sponsor: Thomas Ford
GRADUATE STUDENT PANEL
11:00 AM – 12:00 PM → UC 315 – THEATER

MODERATOR: RACHEL WALKER

KEYNOTE ADDRESS – DR. LAURA WRIGHT
12:00 – 1:00PM → UC 315 – THEATER

MBA / PUBLIC AFFAIRS / SOCIAL WORK
1:00 – 2:00 PM → UC 212 – DOGWOOD ROOM

MODERATOR: HEATHER RIMES

Irregularities Between Sustainability Practices and Website Reporting in the Professional Sport Industry: The Case of Major League Soccer
   Presenter: Jamee Pelcher
   Sponsor: Charles Parrish

A Look at Cross-Sector Collaborations: Maintaining & Enhancing Charlotte’s Arts & Science Partnerships
   Presenter: Laurie Sickles
   Sponsor: Heather Rimes

School to College Pipe-line: Changing the Narrative on Black Males and their Achievement in Education through Access to Post-secondary Education and Post-secondary Completion
   Presenter: Samuel Garmon
   Sponsor: Tasha Alston, Ricardo Colon, Tacquice Davis

FINE ARTS / ART EDUCATION
1:00 – 2:00 PM → UC 214 – CARDINAL ROOM

MODERATOR: RICHARD TICHICH

Featured Undergraduate Presenter → Our Global Trash Problem
   Presenter: Grace Woodard
   Sponsor: Karen Britt

Experience and The Essence of What Remains
   Presenter: Matthew Hellgeth
   Sponsor: Tom Ashcraft

Art as a Practice in Meditation
   Presenter: Shelley Steffey
   Sponsor: Erin Tapley

ENGLISH / ANTHROPOLOGY / SOCIOLOGY
1:00 – 2:00 PM → UC 232 – MULTIPURPOSE ROOM

MODERATOR: JONATHAN BRADSHAW

Featured Undergraduate Presenter → Understanding the Kardashian Empire and Mass Consumption of Black Culture
   Presenter: Drue Stinnett
   Sponsor: Munene Mwanki

Recovering and Enacting: The Social Justice Implications of the Racial Enthymeme
   Presenter: Crystal Elwood
   Sponsor: Jonathan Bradshaw

“Does this Sound Good?”
   Presenter: John Falter
   Sponsor: Jonathan Bradshaw

Exploring Tragedy Through The Book of Job
   Presenter: Grant McMillan
   Sponsor: Annette Debo
ENGLISH
2:00 – 3:30 PM → UC 215 – CATAMOUNT ROOM

MODERATOR: BRIAN GASTLE

Transcribing and Annotating Manuscripts from Hunter Library’s Special Collections: A Digital Humanities Service-Learning Project
1919 Letter from King George V (Windsor Castle) and Letter from Charles A. Webb to NC Representative Dan Tompkins, 1920
   Presenter: Whitney Waters
   Sponsor: Brian Gastle

Love Letter from Emily Weigle to NC Representative Dan Tompkins, 1927
   Presenter: Andrew Poole
   Sponsor: Brian Gastle

Letters from WNC Educator A.C. Reynolds to his daughter, 1948 and 1950
   Presenter: Victoria Allen
   Sponsor: Brian Gastle

Obituary of Margaret Reynolds, 1915: A Unique Version of a Turn-of the Century Elegiac Lyric
   Presenter: Brittany Grooms
   Sponsor: Brian Gastle

BIOLOGY
3:45 – 4:45 PM → UC 212 – DOGWOOD ROOM

MODERATOR: MAUREEN HICKMAN

Dendroecology of Carolina Hemlock (Tsuga carolinana Engelm.) Stands in the Southern Appalachian Mountains
   Presenter: Marcus Wind
   Sponsor: Laura DeWald

Examining the Structural Fluctuations of Bacterial Communities throughout Human Decomposition
   Presenter: Emily Ashe
   Sponsor: Sean O’Connell, Katie Zejdlik-Passalacqua, Brittania Bintz

PHYSICAL THERAPY
2:00 – 4:45 PM → UC 315 – THEATER

MODERATOR: JOHN CARZOLI

Shift Your Learning: Do Focus of Attention Strategies Impact Seated Lateral Excursion Performance and Learning in Adults Post Acute Stroke?
   Presenter: Joseph Lopez, Lindsey Greene, Ana Mari Parker, Meredith Suwak, Emily Waugh,
   Sponsor: Ashley Hyatt

Foundational Research and Collaboration for Impactful Community Programs for Persons with Parkinson’s Disease
   Presenter: Sarah Bailey, Susan Albert, Janie Donaldson, Maria Hammon, Blake Schnurr
   Sponsor: Lori Schrodt

Effects of Core Stability and Fatigue on Backpacking
   Presenter: John Knox, Trae Mingus
   Sponsor: David Hudson

The Use of Video-based eLearning to Enhance Access to Preventative Musculoskeletal Health Education for Individuals Involved in Agricultural Work
   Presenter: Emily Bogen, Jackson Faught, Grace Pulsifer, Santiago Patino, Maggie Stewart
   Sponsor: John Carzoli
TECHNOLOGY
3:45 – 4:45 PM → UC 214 → CARDINAL ROOM

MODERATOR: PAUL YANIK

Featured Undergraduate Presenter → Design and Construction of Heel Strike Detection Device for Post-Stroke Gait Rehabilitation
Presenter: Jazz Click
Sponsor: Martin Tanaka

Process Parameter Influence on High Cycle Fatigue Life of Direct Metal Laser Sintered Parts
Presenter: Riley Seyffert
Sponsor: Sudhir Kaul, Patrick Gardner, Wes Stone

Damage Diagnostics in Direct Metal Laser Sintered Parts using Vibration Mode Shapes
Presenter: James Walker
Sponsor: Sudhir Kaul, Wes Stone, Patrick Gardner

RESEARCH PAPER COMPETITION PARTICIPANTS

JUDGES: LITERATURE REVIEW: JOSIE CROLLEY-SIMIC, TONYA SNIDER, SCOTTIE KAPEL
ACADEMIC PAPER: TURNER GOINS, MAUREEN HICKMAN, ANDY RITENOUR

Student Goal Setting in the Classroom
Maggie Bailey, Elementary Education | Literacy – M.A.Ed.

Globalization in Construction - What are the Legal Issues?
Chitra Baskaran, Construction Management – M.C.M

Cooperative Learning Literature Review
Amy Brawley, Middle Grades Education | Mathematics – M.A.Ed.

The English Language Learners Academic Achievement with Enhanced Reading Instructional Strategies
Nora Cates, Elementary Education | Literacy – M.A.Ed.

Use of Therapeutic Environment by Leaders for Nurses Recovering From Substance Use Disorder: Concept Analysis Derived From Orem’s Self-Care Deficit Nursing Theory
Robert Credeur, Nurse Leadership – M.S.

Approaches to Writing Instruction: A Review of the Research
Robert Diebold, Middle Grades Education | Literacy – M.A.Ed.

Recovering and Enacting The Social Justice Implications of the Racial Enthymeme
Crystal Ellwood, English – M.A.

Determining the Effect on Classroom-wide Behavior When One Challenging Student is Presented with Different Forms of Reinforcement
Traci Hartson, Elementary Education | Literacy – M.A.Ed.

Thematic Literature Review
Kristen List, Elementary Education | Literacy – M.A.Ed.

Literature Review: The Effects of Peer-led Discussions on Comprehension
Ashley Lynch, Elementary Education | Literacy – M.A.Ed.

The Effects of Implementing Executive Functioning Strategies in the Classroom
Kayleigh McAlister, Middle Grades Education | Literacy – M.A.Ed.

Title I Student Higher Education Access Initiative
Dean Martin, Higher Education Student Affairs – M.Ed.

Growing Up Poor in Appalachia and the Rural South: Defining Attitudes Toward Work
Mary Martinez, Social Work – M.S.W.

Sea, The First Final Frontier: Ahab’s Self-Reliant Fall and the Presence of Moby-Dick in Modern Science Fiction Horror
Diana New, English – M.A.

The Impacts of Daily Oral Reading Fluency in the Upper Grades
Paige Turner, Elementary Education | Literacy – M.A.Ed.

Vocabulary Support for Reading Comprehension
Hannah Whitehead, Elementary Education | Literacy – M.A.Ed.

The Effects of Teaching Social and Emotional Skills in Morning Meetings
Sarah Wolfe, Elementary Education | Literacy – M.A.Ed.
WCU’s English graduate programs serve aspiring scholars who wish to become college instructors, professionals who need to develop their skills as writers and editors and teachers who wish to expand their portfolios. Classes are offered at both the main campus in Cullowhee and in Asheville at WCU’s Biltmore Park facility. The English Department offers the following graduate degrees:

- Master of Arts in English with concentrations in literature, professional writing, and rhetoric and composition (M.A.)
- Master of Arts in Education (M.A.Ed.)
- Master of Arts in Teaching (M.A.T.)
- Certificate in Technical and Professional Writing
- Online Certificate in Teaching English to Speakers of Other Languages

Guiding the way is our experienced, dedicated faculty, many of whom have followed this same path and made their mark as successful professionals and award-winning authors and scholars. Our graduate classes are taught by full-time professors with terminal degrees—acclaimed experts.

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