Oral Presentations

ART

The Psychology of Scale: Miniatures and Model Building in Artistic Practice
  Presenter: Eli Blasko – Fine Arts
  Sponsor: Tom Ashcraft

Taking Art Education to the Next Level
  Presenter: Angela Babb – Art Education
  Sponsor: Tom Ashcraft

Papermaking with Invasive Plants: Japanese Knotweed (Fallopia japonica) (Campus Theme)
  Presenter: Sara Method
  Faculty Sponsor: Matt Liddle, James Costa

Looking Back to Move Forward: Examining Overlooked Histories Through Art Praxis to Build Community and Facilitate a More Equitable Future
  Presenter: Lydia See – Fine Arts
  Sponsor: Tom Ashcraft

BIOLOGY

Examining Morphological and Habitat Variation within Stenanthium gramineum (Eastern Featherbells, Melanthiaceae)
  Presenter: Hannah Cook
  Sponsor: Katherine Mathews, Beverly Collins

The Effects of Habituation on Boldness of Urban and Rural Song Sparrows (Melospiza melodia) (Campus Theme)
  Presenter: Taylor Fossett
  Sponsor: Jeremy Hyman

The Isolation and Characterization of Bacteria Associated with the Deep Sea Coral Lophelia Pertusa (Campus Theme)
  Presenter: S Gold
  Sponsor: Sean O’Connell
Assessing the Efficacy of Laricobius Nigrinus Egg Releases in Western North Carolina (Campus Theme)

Presenter: Lauren Gonzalez
Sponsor: James Costa, Angela Mech, Jane Dell

The Effect of Parenting Styles and Biparental Cooperation on Reproductive Success in the Carolina Chickadee (Poecile carolinensis)

Presenter: Molly Gooden
Sponsor: Barbara Ballentine

DNA Polymerase Gamma in Cryptococcus neoformans (Campus Theme)

Presenter: Samuel Walter
Sponsor: Indrani Bose

CHEMISTRY

Equilibrium and pH Studies of Copper Adsorption onto Peanut Hulls (Campus Theme)

Presenter: Stephen Adom
Sponsor: Carmen Huffman

Synthesis and Characterization of Conductive Polymers: Polyaniline Derivatives (Campus Theme)

Presenter: Daniel Free
Sponsor: Brian Dinkelmeyer, Kamal Butrouna

Synthesis, Characterization, and Evaluation of Oxidative Behavior of Aqueous Colloidal Suspensions of Fullerene Oxide (C60O(aq)) (Campus Theme)

Presenter: Jesse Ingham, Mitzy Garner
Sponsor: Rangika Hikkaduwa Koralege

Computational Chemistry Studies of Europium(III) Metal-based Coordination Complexes for Potential Skin Cancer Detection

Presenter: Nickolas Joyner, Adam Gregory
Sponsor: Channa de Silva

Characterization of Unmodified and Bleached Peanut Hulls (Campus Theme)

Presenter: Mike Sands, Malisa Glatte, Stephen Adom
Faculty Sponsor: Carmen Huffman
Selective Mono Reduction of Aromatic Di-esters Using In Situ Generated Lithium Borohydride

Presenter: Theodore Strayer
Sponsor: William Kwochka

Chemoostratigraphy of the Upper Stick Elliott Tributary Using Trace Metal Analyses *(Campus Theme)*

Presenter: Samantha Sullivan - Chemistry
Sponsor: Carmen Huffman, Jerry Miller

The Luminescent Properties of Europium Thenoyltrifluoroacetone Complexes with 2-Phenyl-1H-imidazo[4,5-f][1,10]phenanthroline Based Ligands

Presenter: Paul Venturo
Sponsor: Brian Dinkelmeyer, Channa De Silva

COUNSELING

Field Staff Wellness and Therapeutic Resources – Beyond “Good Practice” *(Campus Theme)*

Presenter: Jennifer Gift
Sponsor: Phyllis Robertson

ENGLISH

Sarah Rosetta Wakeman or Private Lyons Wakeman? Queering Appalachian History and a Soldier of the Civil War

Presenter: Aria Ashburn
Sponsor: Jessica Cory

Horace Kephart Transcription Project: Laura Mack Kephart’s Letter to Leonard W. Kephart, March 14, 1934

Presenter: Hailey Blevins
Sponsor: Brian Gastle

A Southern Appalachia Heritage: Laura Mack Kephart’s Letter To Leonard W. Kephart, March 26, 1934

Presenter: Jessie Clay, Hailey Blevins, Alissa Perske, Kevin Jenson, Jordon Upton, Nicole Palpalatoc, Galena Mosovich
Sponsor: Brian Gastle
Rhetoric and the Ecosystem of Sustainability: A Case Study of the Joyce Kilmer-Slickrock Wilderness (Campus Theme)

Presenter: Kevin Jenson
Faculty Sponsor: Travis Rountree

“Does Anyone Actually Read These?”: A Tinder Rhetorical Analysis

Presenter: Nicole Palpalato
Sponsor: Travis Rountree

Kephart’s Sharpshooters: Chas Askins’s and J.W. Barre’s Letters to Horace Kephart, May 8, 1898, and May 22, 1898

Presenter: Alissa Perske
Sponsor: Brian Gastle

Women During Conflict as Represented in Sheila Kay Adams’ My Old True Love

Presenter: Muath Qadous
Sponsor: Mae Claxton

Tsisti Dangarembga, Nervous Conditions, and the First Recorded Case of Anorexia in a Black Zimbabwean Person (Campus Theme)

Presenter: Sarah Rhu
Sponsor: Laura Wright

Transcribing and Annotating Letters from Laura Kephart to Leonard Kephart, 1933

Presenter: Jordan Upton
Sponsor: Brian Gastle

**NURSING**

Preventing La Crosse Encephalitis, a Growing Threat for the Pediatric Population of the Southeastern United States (Campus Theme)

Presenter: Bevin McGahey
Sponsor: Lydia Elliott, Brian Byrd

**PHYSICAL THERAPY**

Addressing Health Disparities in Rural Honduras

Presenter: Mark Clarke, Michelle Davis, Rachel Strickland, Jamie Hedgecock, April Duke
Sponsor: Todd Watson, Jessica Graning
EnhanceFitness: Can a Community-Based Exercise Program Improve Balance and Mobility Among Older Adults?
   Presenter: Zach DeMeester, Virginia Wilson, Taylor Darrow, Emily Farris, Dustin Rowland, Anna McElrath
   Sponsor: Lori Schrodt

The Effect of Focus of Attention on Seated Weight Shifting in Individuals Post Acute Stroke: A Randomized Control Trial
   Presenter: Zachary Houston, McKenzie Stevens, Rachel Seyler, Sarah Irsik, Alex Miller, Katelyn Haney
   Sponsor: Ashley Hyatt

Human Movement Analysis: Development of a Video-Based Learning System
   Presenter: Colin Hunt, Tyler Cobb, Zach Crabb, Dan Camacho
   Sponsor: David Hudson, John Carzoli

Impacting the Student Physical Therapist/Physical Therapist Assistant Relationship through Service Learning (Campus Theme)
   Presenter: Morgan Pillsbury, Duskin Henard, Emily Schulte, Maranda Mazur
   Sponsor: Elizabeth Wark

The Effects of Lower Limb Torsion on Foot Mechanics During Gait
   Presenter: Anne Pursifull, Asa Walker
   Sponsor: David Hudson, Kim Hudson

Dynamic Knee Valgus and Bone Stress Injury Risk: The Jump-ACL Study (Campus Theme)
   Presenter: Jaimie Vancil, Cody Jacks, Brandon Ostrander
   Sponsor: Timothy Eckard

Hybridizing Musculoskeletal Health Education for Farmworkers and Agricultural Health Workers
   Presenter: Jordan Wright, Daniel Holchin
   Sponsor: John Carzoli

PSYCHOLOGY

Perception of Dog Breeds in a Therapeutic Setting (Campus Theme)
   Presenter: Ashley Addonisio
   Faculty Sponsor: Nathan Roth
Screening for Substance Misuse in Primary Medical Care
Presenter: Alexa Barrett, Adam Hicks, Norman Hoffmann, David McCord
Faculty Sponsor: David McCord

Situational Factors Impacting Cheating Behavior
Presenter: Nicole Dennis
Faculty Sponsor: Cathy Grist, Alvin Malesky

Clinical Utility of the Multidimensional Behavioral Health Screen
Presenter: Annabel Franz
Sponsor: David McCord

Classifying Suicide Risk Using the Depressive Symptom Inventory
Presenter: Adam Hicks
Sponsor: David McCord

Detailing the Association Between Substance Use and Recidivism in Females Detained in Jail
Presenter: Dani Moody
Sponsor: Albert Kopek

The Role of Genital Self-Image in Women’s Sexual Pleasure
Presenter: Kasey Morey, Erin Van Gorkom, Kendall Poovey
Sponsor: David de Jong

Women’s Body Image in the Bedroom: The Role of Sexual Motives and Distraction
Presenter: Kendall Poovey
Sponsor: David de Jong

Examining External and Internal Predictors of Cheating Behavior
Presenter: Kendall Poovey, Lacey Rutherford, Kasey Morey, Erin Van Gorkom
Sponsor: Cathy Grist, Alvin Malesky

Behavioral Health and Length of Incarceration Among Rural Jail Inmates (Campus Theme)
Presenter: Alyssa Raggio
Sponsor: Norman Hoffmann, Albert Kopak
Camp Experiences for Children with Neurodevelopmental Disorders: A Meta-Analysis

Presenter: Bethany Spencer, Nicole Dennis
Sponsor: Jonathan Campbell

Relationship between Cheating Behaviors and Openness to Experience

Presenter: Stephanie Taylor, Alexa Barrett
Sponsor: Cathy Grist, Alvin Malesky

Women’s Romantic Relationships and Sex

Presenter: Erin Van Gorkom, Kasey Morey, Kendall Poovey
Sponsor: David de Jong

TECHNOLOGY

Implementation of a Semi-active damping for an Off-road Bicycle Suspension Utilizing a Magneto-rheological Damper

Presenter: Jacob Friesen, Thomas Morgan
Sponsor: Scott Pierce, Sudhir Kaul, Wes Stone

Comparison of Search Algorithms in Two-Stage Neural Network Training for Optical Character Recognition of Handwritten Digits

Presenter: Patrik Gilley
Sponsor: Yanjun Yan

Analysis of Factors Affecting Peak to Average Ratio and Mean Power in a Slider Crank Wave Energy Converter (Campus Theme)

Presenter: Connor McIntyre
Sponsor: Bora Karayaka
A Next Generation Neural Prosthesis to Improve Gait in People with Muscle Weakness (Campus Theme)

Presenter: Premkumar Subbukutti
Sponsor: Martin Tanaka

Trash and Recycled Material Identification using Convolutional Neural Networks (CNN) (Campus Theme)

Presenter: Rumana Sultana
Sponsor: Robert Adams

Building Kilobots for Shape-Formation in Swarm Robotics (Campus Theme)

Presenter: Anik Tahabilder
Sponsor: Yanjun Yan

Sustainable Wireless Power Transfer using Solar Energy and A Strongly Coupled Resonant Circuit (Campus Theme)

Presenter: Joshua Turnbull
Sponsor: Hayrettin Karayka

POSTER PRESENTATIONS

DAVID ORR BELCHER COLLEGE OF FINE AND PERFORMING ARTS

Papermaking with Invasive Plants: Japanese Knotweed (Fallopia japonica) (Campus Theme)
Sara Method - Fine Arts | M.F.A.
Sponsor: Matt Liddle, James Costa

Printed (still) Matters
Alexa Turnbull – Fine Arts | M.F.A.
Sponsor: Tom Ashcraft

COLLEGE OF ARTS AND SCIENCES

Characterization of Novel Protein Domains in the DNA Polymerase Gamma from the Human Pathogenic Yeast Cryptococcus Neoformans
Cecilia Baumgardner, Samuel Walter – Chemistry | M.S.
Sponsor: Jamie Wallen, Indi Bose

Examining Morphological and Habitat Variation within Stenanthium gramineum (Eastern Featherbells, Melanthiaceae)
Hannah Cook – Biology | M.S.
Sponsor: Katherine Mathews, Beverly Collins

Bioinformatic and In Vitro Characterization of Primase-polymerase Enzymes from Viruses that Infect Actinobacterial Hosts
Nathan Folse, Shelby Watson – Chemistry | M.S.
Sponsor: Jamie Wallen

The Effect of Parenting Styles and Biparental Cooperation on Reproductive Success in the Carolina Chickadee (Poecile carolinensis)
Molly Gooden – Biology | M.S.
Sponsor: Barbara Ballentine

Using CRISPR Interference to Test the Lethality of Selected Viral Genes (Campus Theme)
William Green – Chemistry | M.S.
Sponsor: Jamie Wallen, Maira Gainey

Computational Chemistry Studies of Europium(III) Metal-based Coordination Complexes for Potential Skin Cancer Detection
Nickolas Joyner, Adam Gregory – Chemistry | M.S.
Sponsor: Channa De Silva

The French Broad River: Leveraging River Recreation to Promote Economic Development Campus Theme
Rachel Taylor – Public Affairs | M.P.A.
Sponsor: JoBeth Shafran

Investigating the Effects of Lethal Toxin Neutralizing Factor on Insulin Degrading Enzyme Activity
Samantha Varner, Sierra Rice, Michael Severance – Biology | M.S.
Sponsor: Robert Youker, Channa De Silva

Method Development for the Determination of Surface Zeta Potential of Silver Nanocoated Nylon Materials
Jace Walk – Chemistry | M.S.
Sponsor: David Evanoff, Channa De Silva, Rangika Koralege
Concentrations and Sources of Trace Metals in Water and Sediments of the South Fork New River, Ashe County, North Carolina, and their Potential Effects on Aquatic Biota
Zay Watkins – Chemistry | M.S. (Campus Theme)
Sponsor: Cynthia Atterholt, Jerry Miller

Transient and Transgenic Expression of the Rabies Glycoprotein in Soybean (Campus Theme)
Grayson Williams – Biology | M.S.
Sponsor: Amanda Storm

COLLEGE OF EDUCATION AND ALLIED PROFESSIONS
Perceptions of Dog Breeds
Ashley Addonisio – Psychology | M.A. (Campus Theme)
Sponsor: Nathan Roth

Examining Perceived Stress and Support in School Psychology Programs
Hannah Anderson – Psychology | S.S.P.
Sponsor: Lori Unruh

Individual Differences in Mind Blanking and ADHD Symptoms
Leila Beikmohamadi, Rebecca Daniel, Allyson Jones, Lauren Testerman – Psychology | M.A.
Sponsor: Matt Meier

Effectiveness of Digital Recruitment Among Undergraduates for Increasing Interest in Pursuing A Graduate Education in School Psychology
Benjamin Clasen – Psychology | S.S.P.
Sponsor: Ethan Schilling

Getting Gritty With It: An Examination of Grit, Conscientiousness, and Mind Wandering
Rebecca Daniel – Psychology | Psy.D.
Sponsor: Matt Meier, Alleyne Broomell

Mental Health Experiences of Music Majors at Western Carolina University
Jessica Davis – Higher Education Student Affairs | M.Ed.
Sponsor: April Perry, Emily Virtue (Confirm Sponsors)

The Perceptions of Greek Life
Jonathan Davis – Higher Education Student Affairs | M.Ed. (Campus Theme)
Sponsor: Emily Virtue, April Perry
**The Relationship between Physical Activity and Self-Regulation Skills in a Preschool Population**
Nicole Dennis – Psychology | M.A.
Sponsor: Cathy Grist

**The Relationship between Personality Traits and Self-Regulation in a Preschool Population**
Nicole Dennis – Psychology | M.A.
Sponsor: Cathy Grist

**First-Year Seminars: Student Opinions on Effectiveness**
Emily Freeze – Higher Education Student Affairs | M.Ed.
Sponsor: April Perry, Emily Virtue

**Field Staff Wellness and Therapeutic Resources – Beyond “Good Practice” (Campus Theme)**
Jennifer Gift – Counseling: Clinical Mental Health | M.S.
Sponsor: Phyllis Robertson

**Reading Comprehension Across Content Areas**
Tori Golden – Elementary Education: Literacy | M.A.Ed.
Sponsor: Roya Scales

**Latinx Student Perceptions of Support (Campus Theme)**
Jessica Gonzalez – Higher Education Student Affairs | M.A.Ed.
Sponsor: Emily Virtue

**Betrayal Trauma, Event Centrality, and PTSD Symptoms**
Marcia Gralha – Psychology | M.A.
Sponsor: Erin Myers

**Transfer Students Transition Process: A Qualitative Study**
Jacquelyn Henry – Higher Education Student Affairs | M.A.Ed.
Sponsor: April Perry

**Faculty Members Perceptions of Transgender and Gender Non-Conforming (TGNC) Students**
Riley Jelenick – Higher Education Student Affairs | M.Ed. (Campus Theme)
Sponsor: Emily Virtue

**Understanding and Improving Internship Involvement**
Amy Kalayjian – Higher Education Student Affairs | M.Ed.
Sponsor: Emily Virtue
Home Away from Home: The Importance of Safe Spaces & Cultural Programming to Black & Latinx Students
Elijah McCoy – Higher Education Student Affairs | M.Ed.
Sponsor: April Perry

The Role of Genital Self-Image in Women's Sexual Pleasure
Kasey Morey, Erin van Gorkom, Kendall Poovey – Psychology: M.A.
Sponsor: David de Jong

Resident Assistant Training Courses
Kristen Nichols – Higher Education Student Affairs | M.Ed.
Sponsor: April Perry

The Relationship between Post-traumatic Stress Disorder, Family Support, Combat Experience, and Post-battle Experience
Kiana M. Perez-Jimenez – Psychology | M.A.
Sponsor: David Solomon

Women’s Body Image in the Bedroom: The Role of Sexual Motives and Distraction
Kendall Poovey, Lacey Rutherford, Kasey Morey, Erin van Gorkom – Psychology | M.A.
Sponsor: David de Jong

First Generation Journeys: Identity Development of First Generation College Students
Katherine Rufalo – Higher Education Student Affairs | M.Ed.
Sponsor: Emily Virtue

Historical and Contemporary Experiences of Female Students at Western Carolina University
Alexis Rutishauser – Higher Education Student Affairs | M.Ed.
Sponsor: Brandi Hinnant-Crawford

Camp Experiences for Children with Neurodevelopmental Disorders: A Meta-Analysis
Bethany Spencer, Nicole Dennis – Psychology | M.A.
Sponsor: Jonathan Campbell

Impact of Child’s Trauma Symptomatology on Perceived Credibility Following Instances of Child Sexual Abuse
Heather Styles-Turbyfill - Psychology | Psy.D. (Campus Theme)
Sponsor: David Solomon, Alleyne Bromell
The Impact of Maternal History on Belief of Child Sexual Abuse Victims
Kimberly Taylor, David Solomon, Brynn Shaver, Daniel Smith – Psychology | M.A. (Campus Theme)
Sponsor: David Solomon

The Impact of Home-based Parental Involvement on School Readiness in Preschool-aged Children
(Campus Theme)
Mariel Valino – Psychology | S.S.P.
Sponsor: Cathy Grist

Women’s Romantic Relationships and Sex
Erin Van Gorkom, Kendall Poovey, Kasey Morey – Psychology | M.A.
Sponsor: David de Jong

The Effects of Perceived Self-Care Practices on Stress of School Psychology Graduate Students
(Campus Theme)
Nicole Zelhofer – Psychology | S.S.P.
Sponsor: Lori Unruh, Candace Boan-Lenzo, Ethan Schilling

COLLEGE OF HEALTH AND HUMAN SCIENCES

Social Work in Public Health
Justin Barlow – Social Work: Advanced Standing | M.S.W.
Sponsor: Emma Miller

Building Integrated Health Through BHWET Scholar Contributions
John Avery – Social Work | M.S.W.
Sponsor: Emma Miller

Preventive Services Pilot with a Family Safety Embedded Hospital Social Worker
Sasha Jumper, Emma Miller, Barbra Parker – Social Work | M.S.W.
Sponsor: Emma Miller

Salud Mental en el Campo, Developing a Program for Latino Migrant and Seasonal Agriculture Workers (MSAW)
Eliana Martin – Social Work | M.S.W.
Sponsor: Emma Miller

Impact of Interprofessional Education Program on Western Carolina University’s Master of Social Work Students Receiving HRSA Stipends
Mary Martinez – Social Work | M.S.W.
Sponsor: Emma Miller

A Narrative Review: Diet Approaches for Weight Loss Maintenance in Overweight/Obese Individuals
Elyssa Mulheron – Health Sciences | M.H.S.
Sponsor: Marianne Hollis

COLLEGE OF ENGINEERING AND TECHNOLOGY

Design and Analysis of Bidirectional Rack and Pinion for Wave Energy Converter (Campus Theme)
Md Shohel Amin – Technology | M.S.
Sponsor: Bora Karayaka

Analysis of a Novel Head Support for People with Hypermobile-type Ehlers-danlos Syndrome Campus Theme
Ana Muniz-Fernandez – Technology | M.S.
Sponsor: Scott Pierce, Martin Tanaka

Proportional Control Feedback for an MR-Damper on a Mountain Bike
Marshall Murphy – Technology | M.S.
Sponsor: Scott Pierce

Using Artificial Intelligence in a Neural Prosthesis for Gait Rehabilitation
Pablo Valenzuela, Premkumar Subbukutti – Technology | M.S.
Sponsor: Martin Tanaka

Relations of Theoretical Waterwheel Power Generation to Tested Results Campus Theme
George Whisnant – Technology | M.S.
Sponsor: Yusef Fahmy

Larval Rearing Temperature Impacts the Fitness and Size-Fecundity Relationship of Autogenous Aedes atropalpus (Diptera: Culicidae) (Campus Theme)
Corey Day, Biology – M.S.

Field Staff Wellness and Therapeutic Resources – Beyond “Good Practice” (Campus Theme)
Jennifer Gift, Counseling | Clinical Mental Health – M.S.

Reading Comprehension Across Content Areas: Literature Review (listed as research paper- follow up)
Tori Golden, Elementary Education | Literacy – M.A.Ed.
Using CRISPR Interference to Test the Lethality of Selected Viral Genes *(Campus Theme)*
William Green, Chemistry – M.S.

Recoil and Reemergence in the Circulation of Civic Rhetoric
Nikki Jones, English, M.A.

Literature Review—Reading Intervention Strategies for Struggling Middle School Readers
Denise Lampe, Middle Grades Education | Literacy – M.A.Ed.

Landfills as a Valuable Source of Renewable Energy *(Campus Theme)*
Mark Ogg, Construction Management – M.C.M.

Behavioral Health and Length of Incarceration Among Rural Jail Inmates *(Campus Theme)*
Alyssa Raggio, Psychology | Clinical – M.A.

Maker Spaces—Buzzwords or Beneficial? *(Campus Theme)*
Britney DeShe" Ross, Elementary Education | STEM – M.A.Ed.

The Integration of Sustainable Construction Practices and BIM-Based Assessment Techniques *(Campus Theme)*
Matthew Sheffield, Construction Management – M.C.M.

Impact of Child's Trauma Symptomatology on Perceived Credibility Following Instances of Child Sexual Abuse *(Campus Theme)*
Heather Styles-Turbyfill, Psychology | Health Service Psychology – Psy.D.

Trash and Recycled Material Identification using Convolutional Neural Networks (CNN) *(Campus Theme)*
Rumana Sultana, Technology, M.S.

Transcribing and Annotating Letters From Laura Kephart to Leonard Kephart, 1933
Jordan Upton, English – M. A.