



Celebration

of

Academic Excellence

Eleventh Annual Research Colloquium

Poster Presentations

November 12, 2024

12:15 pm – 1:15 pm

Cumberland University

Lebanon, Tennessee

Dallas Floyd Phoenix Arena

Edward A. Labry School of Science, Technology, and Business

Science

Foot Microbiome Diversity: A Gender Comparison
Ms. Morgan Harlin and Ms. Lexie Stacey

ZZZ, How Marine Mammals Sleep vs. Terrestrial Mammals
Mr. Hussain Al-turaihi and Ms. Tanya Gray

The Science of Sound: Exploring Whale Sonar Physiology and Echolocation
Ms. Jocelyn Buchannan, Ms. Abigail Minchey, and Mr. Cody Woodham

Bottom's Up! An Exploration of Trophic Cascade from the Lowest Level
Ms. Clara Eck, Ms. Lilah Mohler, and Ms. January Ohana

Causation of Fecal Shape Within the Common Wombat, *Vombatus Ursinus*
Ms. Aubrey Hood and Ms. Layla Pruitt

Winter Constipation: Studying the Digestion System of Hibernating Carnivores
Mr. Dylan Hudson, Mr. Nathan Johnston, and Mr. Ian Krump

A Cup of Clarity: The Role of Coffee in Enhancing Memory
Ms. Maria Arbelaez and Ms. Astu Patel

Development for Hard-to-Treat Cancer: Lymphoma
Ms. Brylee Byrd and Ms. Alyssa Phillips

Geochemical and Structural Markers: Insights into CO₂ and Earth's Temperature
Ms. Itzel Campos and Mr. Aiden Nunn

Moldy Culture to Pharmacy
Ms. Alexia Douglas and Ms. Ashlyn Knight

The Paradox of 'Sudden Death' and Superconductivity
Mr. Evan Huling and Mr. Joe Parisi

Cresomycin: Superbug Killer
Mr. Blaze Kleehammer

What Neural Mechanisms Underlie Phonetic Planning and Articulation During Speech Production in the Human Brain?
Ms. Camila Martinho

The Clusters That Compose Our Memories
Mr. David Tran

Genetic Susceptibility of Strokes
Ms. Gracie Arnemann, Ms. Abigail Chappell, and Mr. Cassius Thorpe

Accidental Discovery: The Origins of a Life Saving Mold
Ms. Madeline Brillhart and Mr. William Sanchez

Effects of the Black Death: A Genetic Trade-Off
Mr. Spencer Carlton and Ms. Stephanie Stilts

The Papa of Polymerase, Arthur Kornberg
Mr. Alexander Chansler and Ms. Alana Medlin

Revitalizing Aging: The Role of NAD+
Mr. Egon Chen and Ms. MaRiyah Person

Nature, Nurture, and Narcotics: The Genetics behind Schizophrenia
Ms. Marina Fekry and Ms. Melanie Garcia

The Duality of Bipolar Disorder in Environmental Factors and Genetics
Ms. Shelby Green

The Genetic Background of ADHD
Ms. Kyrillos Saad and Mr. Beshoy Sabry

HLA-HIV Connection: What Do All These Numbers and Letters Mean?
Ms. Reed Steplowski and Mr. Brooks Tune

The Jeanette Cantrell Rudy School of Nursing & Health Professions

Nursing

Social Battery Low: 10% Remaining

Ms. Megan Blackwell, Ms. Ashley Evans, Ms. Savannah Lowrey, Ms. Chelsea Odom, and Mr. Sawyer Vaught

Are You Consuming Social Media or Is Social Media Consuming You?

Ms. Alivia Boles, Ms. Miranda Driver, Ms. Abbey Justice, Ms. Addison Melton, and Ms. Jasma Taylor

Did You Get "THE TALK?"

Ms. Sabree Carling, Ms. Alexis Hutton, Ms. Deeqa Mahamud, Ms. Haylee Reece, and Ms. Denesha Whitley

Did I Cause My Child's Autism?

Ms. Melany Chavez, Ms. Summerlyn Hysell, Ms. Faith Mayfield, Ms. Charity Sink, and Ms. Rachel Williams

Mirror Mirror On the Screen, Is It Messing with My Self Esteem?

Ms. Olivia McGlory, Ms. Sharon Jerop, Ms. Latray Speight, Ms. Kristin Winter, and Ms. Yuliya Zervas

Exercise and Sport Science

Achilles Tendon Repair Rehabilitation Protocol

Ms. Nicole Bott

Core Strengthening and Lower Back Pain

Mr. Nicholas Burge

Leading and Managing: Effective Conference Planning

Mr. Tyler Hanes

Shoulder Instability Rehabilitation Protocol

Ms. MaKayla Johnson

The Effects of Proprioceptive Neuromuscular Facilitation on Overhead Range of Motion for Patient's with
Adhesive Capsulitis

Ms. Grace Rittenberry

Tendon Adaptations Based on Load Intensity and Types of Contraction

Mr. Jaylon Tharpe

Mental Health in Injured Athletes

Mr. Henry Whitfield

The Millard and J.J. Oakley School of Humanities, Education, and the Arts

Criminal Justice

Fingerprint analysis
Mr. Ruairi Behan

Application of MacDonald Triad to Forensic Science
Ms. Madeline Bittle

Planting Evidence: How Forensic Botany Solves Crimes
Ms. Allie Clark

Seen Through Glass: A Study of Ballistic Fracture Patterns In Forensics
Ms. Brooke Evans, Mr. Logan Cripps, Mr. Corben Guillot, and Ms. Emily Maxfield

Van Gogh of Violence
Mr. Aaron Fulcher and Mr. Terrence Harris

The Bone-Chilling Science Behind Forensic Anthropology
Mr. Matthew Jackson

Bad to the Bone
Mr. Logan Martin, Ms. Erica Olalde, and Ms. Alexandra Wright

Your Bones Talking
Ms. Jocelyn Orea-Barrera

Serial Killer or CEO? How Common Psychopathy Really Is.
Ms. Eleanor Russell and Ms. Taylor Watkins

Lead By Example: Relearning Life Through Positive Mentorship
Mr. Parker Arvin, Ms. Sarah Conrad, and Mr. Christopher Jordan

Pathways to Purpose
Mr. Carter Baylog, Mr. Jaxson Henley, and Mr. Isaac Johnson

Juvenile-Anti-Recidivism-Program (JARP)
Mr. Will Blackwood, Mr. Stanley Bradley, Mr. Trevon Dangerfield, and Mr. Hunter Moser

EmpowerU: Fostering the Future
Mr. Jaelin Eumont, Ms. Jordyn Luster, and Mr. Jeremiha Williams

Pathways to Progress
Ms. Abby Howard, Ms. Divine Ingabire, Ms. Alyssa Mayberry, and Ms. Lily McPeak

Juvenile as Judiciaries
Ms. Kendyle Pickett and Ms. Olivia Stranahan

History

Monticello Plantation

Mr. Kayden Buck, Mr. Mark Sullivan Compton, and Mr. Andrew Miller

Angola Prison Rodeo: Exploitation or Entertainment

Mr. Jesse Cochran and Ms. Jacie Yocum

Blandford Cemetery

Mr. James Guethlein, Ms. Alexis Netherton, and Ms. Macy Park

Juneteenth

Mr. Niklaus Heimdal, Ms. Ashli Townsend, and Ms. Alexis Turner

The Whitney Plantation

Ms. Erin Kelley, Ms. Kelsey Suddarth

“We Were the Good Guys, Right?” New York City

Mr. Gavin Lamkin, Ms. Alexis Tomlinson, and Ms. Kathryn Wright

Goree

Mr. Joshua Maxwell

Psychology

How does Music Influence Cognitive Speed?

Ms. Alyssa Hicks, Ms. Arsheen Shroff, and Ms. Halie Wiggins

The Negative Impact of Social Media on Executive Functioning in Young Adults

Ms. Ashley Gamboa, Ms. Nataly Perez, and Ms. Alicia Rodgers

Loneliness in the Digital Age: How Screen Time Impacts Sense of Belonging across Generations

Mr. Ivan Carruyo Finol, Ms. Kaitlyn Rodgers, and Ms. Mira Van Hooreweghe

How Academic Field and Personality Type Influence Stress Levels

Ms. Gabriella Clapa and Ms. Naomi Napier

How Instagram Usage and Childhood Trauma Associate with View on Body Image

Ms. Madeline Bittle, Ms. Carissa Lurie, and Ms. India Mastin,

Stirring Up the Mind: The Connection Between Gender, Anxiety, and Caffeine

Ms. Ella Burns, Ms. Carolina Garcia, Ms. Abby Howard, Ms. Jordyn Luster

Unpacking the Relationship between Childhood Trauma and Academic Performance

Ms. Calli Boles, Ms. Maddie Davis, and Ms. Annabelle Vanhook

How Religion and Gender Affect Marijuana Use in College Students

Ms. Emma Bedree, Ms. Allie Clark and Ms. Breona Sanchez

How Sleep and Exercise influence Academic Success
Mr. Toshiki Kuriya, Mr. Kyle Nyblod, and Ms. Emilin Olivares

The Impact of Animal Interaction and Gender on Anxiety Level
Ms. Zoe Collyer, Ms. Bailey Pope, and Mr. Ashton Truelove