



Celebration

of

*Academic Excellence*

Eleventh Annual Research Colloquium

November 12, 2024

Cumberland University

Lebanon, Tennessee



**BAIRD CHAPEL**

**Taylor Swift: Why She Never Goes Out of Style**

Presenter: Dr. Andrea Davis

Let's be in our Swiftie Era! This talk will cover Taylor's albums, why she is rerecording some of them, her economic and cultural impact, and analyze some of her lyrics. Attendees are encouraged to bring friendship bracelets to trade with others!

**HEYDEL AUDITORIUM**

**Making a Living as an Artist: Music and Music City Murals with CU Alum Anthony Billups**

Presenter: Mr. Anthony Billups

Hear from Anthony Billups, a 2006 baseball alumni from CU about how he ended up at Cumberland University to play baseball while earning a degree in Fine Arts. Following graduation, he began his career as an artist and later founded The Building—a renowned art/music venue in East Nashville from 2009-2015 and events like The Germantown Art Crawl (now 100 Taylor Arts Market)— the monthly event that brings music and art to the masses in Nashville’s historic Germantown neighborhood. His mural business, Music City Murals, is responsible for bringing custom murals to the facades of local businesses and national brands, alike. Anthony is working on his fourth studio album and has opened for music artists such as Luke Bryan and Billy Currington. Anthony is excited to share more of his story and how he makes a living as an artist!

**CLEMONS LECTURE HALL LABRY HALL 130**

**Starting A Business with No Marketable Skills**

Presenter: Dr. Noa D. Stroop

Many want to start a business but think they have no skills. Well, Dr. Stroop begs to differ. Join him to discuss skills that you already possess that can create a legitimate income as a (side or main) business.

**LIBRARY READING ROOM**

**Modern Day Witchcraft**

Presenter: Dr. Michael Rex

The presenter will look at and explore the ideas of contemporary witchcraft.

**LABRY HALL 117**

**Creativity and Applied Physics**

Presenter: Dr. André L. Churchwell

There is a need to develop your “right brain’s” activities as it is the “left brain’s” where your deterministic practices, mathematics, science, and other tools are used to address daily workday problems. The right brain is where most of your creativity and epiphanies spring from. This is where art, poetry, and prose are mostly housed and if not developed and practiced it will not be available in those moments in your life when creative spontaneity is needed to solve a workday problem. The current courses and curriculum on design thinking that many schools are developing spring from the interaction of the left and right brain. The presenter will use personal examples and three people whose careers exemplify the best of this needed “dual mind” approach to problem solving. As a tease, one is Leonardo Da Vinci!

## **LABRY HALL 118**

### **LEADERSHIP**

Presenter: Dr. Paul M. Percy

Using the acrostic LEADERSHIP, Dr. Percy discusses 10 behaviors that make a leader effective.

## **LABRY HALL 116**

### **Coping with Trauma**

Presenter: Ms. Sandra Fields

Managing trauma symptoms while at school can be challenging. This presentation will give some very practical ideas and end with a guided relaxation time.

## **LABRY HALL 207**

### **Phoenix Flyers: What Exploring the World has Taught Us**

Presenters: Mr. Abdulrahman Albarati, Ms. Yamaris Garfias, Ms. Claire Hopkins, Ms. Shelby Lopez, Dr. Sean McDaniel, and Ms. Summer Vertrees

Come and hear from Cumberland students that have traveled abroad with the Phoenix Flyers travel group. Listen to the life lessons and learn from the growth they encountered while exploring the world and seeing its beauty through travel.

## **LABRY HALL 209**

### **How Data Drives Our World: Making Smarter Decisions Every Day**

Presenter: Mr. Lain Tomlinson

Discover how data impacts our daily lives, from personalized recommendations to innovations in banking, healthcare, and education. This presentation highlights AI, predictive analytics, and ethical considerations, while offering a look at future data-driven trends.

## **LABRY HALL 210**

### **Getting Lost in the Woods**

Presenter: Ms. Mia Harris

Being a wildlife technician includes a remarkable amount of undocumented experiences and unconventional learning, things that are rarely discussed in scientific manuscripts or academic settings. From hiking across a mountain ridge to meeting new animals, getting lost in the woods makes for some funny stories and forces individuals, especially those aspiring to be lifetime biologists, to recreate themselves with each new challenge.

### **A Perspective on Summer Undergraduate Research Programs (REU)**

Presenters: Ms. Emily Foster and Dr. Julie Phillips

A great talk for students interested in gaining professional research experience. We will discuss the application process and what to expect from an undergraduate research program.

## **LABRY HALL 211**

### **Why Are Martin Van Buren's Papers at Cumberland University?**

Presenters: Dr. Mark Cheatham and Dr. Andrew Wiley

Since 2015, Cumberland University has hosted a presidential papers project focused on Martin Van Buren. Learn the story of what this project is and how it wound up at CU.

### **Hawaii: The Prototype of US Imperialism**

Presenter: J. C. Nichols

The presenter will investigate the congressional discourse over the annexation of Hawaii and the capitalist interests under the guise of domestic security (aided by the colonial settlement that created a non-indigene government in Hawaii) which came to serve as a template for US imperialism at the turn of the twentieth century.

## **LABRY HALL 122**

### **And the Award Goes To...**

Presenter: Mr. Rusty Richardson

Are you a movie fan? Come learn about the history of the Academy Awards and the Best Pictures of the Year winners.

## **MEMORIAL HALL 202**

### **Connecting Environment and Health in Italy**

Presenters: Dr. Beth Chatham and Dr. Sean McDaniel

The presenters will be introducing an interdisciplinary course proposal on Health and Ecology. The course will include a 10-day trip in Italy. The presentation will give an overview of the trip to Italy scheduled for May 2025.

### **War by Other Means: Office-seeking and Political Polarization**

Presenter: Dr. Max Matherne

Dr. Matherne will share his research on the men who applied for political offices in the early American republic, with findings that may shed light on the political polarization we witness today.

## **MEMORIAL HALL 203**

### **Is Running a Gateway Drug?**

Presenter: Ms. Holly Gothard

A runner's high, marked by reduced anxiety and a feeling of "euphoria", is thought to be driven by endocannabinoids—naturally occurring compounds in the body that resemble the effects of cannabis. In this talk, Ms. Gothard will explore how endocannabinoids impact the body during running and highlight current research on their role in this exercise-induced state.

## **MEMORIAL HALL 205**

### **Speed Stacking: Importance on Learning**

Presenter: Dr. George Walker

Speed Stacking is a psychomotor bi-manual task. This presentation will show participants how to speed stack and how it plays a part in learning.

## **MEMORIAL HALL 206**

### **Recovery Ally/Collegiate Recovery Initiative**

Presenter: Tennessee Association of Mental Health Organizations

This presentation will discuss how to address people with substance misuse. It will also work to raise awareness and build confidence in those eager to help people who may be struggling.

## **MEMORIAL HALL 208**

### **How Are You Sabotaging Your Wellness?**

Presenters: Ms. Leighanne Fulmer and Ms. Kerry Ann Moore

Learn to recognize avoidance and other habits that drain your energy and time. Instead, cultivate habits that save and replenish your energy in the long run.

## **MEMORIAL HALL 306**

### **Plant-Microbe Interactions and Soil Microbial Dynamics: Key to Mitigating Climate Change**

Presenter: Dr. Mitra Ghotbi

Elevated CO<sub>2</sub> levels from climate change are altering plant-microbe interactions, leading to reduced microbial diversity and affecting soil nutrient retention, which could exacerbate greenhouse gas emissions and climate feedback loops. The purpose of this talk is to describe ongoing research aimed at understanding these complex interactions and determining what is vital for improving soil health to mitigate the negative impacts on global food security.

### **Cross-Species Gut Microbiome Transplantation Influences Larval Amphibian Heat Tolerance**

Presenter: Dr. Jason W. Dallas

The gut microbiome is a complex and diverse community of microbes, particularly bacteria, in the gastrointestinal tract that have a substantial role in influencing the performance of their host. In this study, the presenter found that transplanting the gut microbiome of a more heat-tolerant frog (green frog) species into a more heat-sensitive frog (wood frog) resulted in an increase in heat tolerance of the recipient wood frogs suggesting the microbiome plays an important role in modulating host thermal physiology.

**BAIRD CHAPEL**

**Steps of Faith in Times of Doubt: Finding God in the Questions**

Presenters: Ms. Whitney R. Simpson and Dr. Sheridan Henson

This presentation explores the natural tension between faith and doubt on the Christian journey, encouraging students to view questioning as a vital part of their spiritual formation. It offers practical steps for navigating uncertainty, will be ecumenical and inclusive, and emphasizes that seasons of doubt can lead to deeper trust and growth in one's faith and connection with God.

**HEYDEL AUDITORIUM**

**Disney's Version of History and Culture**

Presenter: Dr. Natalie Inman

Disney's portrayals of history and culture have for generations shaped the ways Americans perceive the stories of their nation and people throughout the world. This talk will spotlight how Disney movies and Walt Disney World, in particular, have shaped how Americans think and act.

**CLEMONS LECTURE HALL LABRY HALL 130**

**Marketing Strategy: Invention Convention**

Presenters: MKT/MGT 490 students and Dr. Valerie King

Marketing strategy students are presenting marketing plans for inventions that solve a market problem.

**LIBRARY READING ROOM**

**Alpha-gal Syndrome and Surviving a Rattlesnake Bite**

Presenter: Dr. Danny Bryan

Working in and visiting the great outdoors can be quite enjoyable, but what is it like when nature bites back?

**LABRY HALL 117**

**QPR - Question Persuade and Refer**

Presenter: Ms. Brenda Harper

QPR stands for Question, Persuade, and Refer — the 3 simple steps anyone can learn to help save a life from suicide. As a QPR-trained Gatekeeper you will learn to recognize the warning signs of suicide, know how to offer hope, and know how to get help and save a life.

## **LABRY HALL 118**

### **The Importance of Investing in Real Estate**

Presenter: Mr. Andy Garretson

Real estate is the number one way Americans build wealth, and the presenter's goal is to teach young adults the pathway to buying their first home and the importance of investing long-term. Buying a home earlier in life will pay off in HUGE ways because you reap the benefits of long-term appreciation, tax deductions, and potential rental income.

## **LABRY HALL 115**

### **A Voyage Through the Warped Universe**

Presenter: Dr. Stephen Taylor

This presentation will discuss the search and discovery for gravitational waves in space. We will cover the journey to this point, the discoveries that have been made so far, and what lies ahead for this dramatically new type of astronomy.

## **LABRY HALL 116**

### **BFA Senior Artist Talks**

Presenters: Ms. Catherine Kawasaki, Ms. Kristina Looper, Ms. Saralyn Wiggins, and Ms. Alena Mehić

Graduating seniors will give in-depth talks about their practice, focusing on work displayed in their senior thesis exhibition and the influences, ideas, and intentions behind it.

### **Reel Talk: Mental Health Portrayal in Films**

Presenter: Ms. Alexandria Trull

This presentation breaks down mental health portrayals in various films. It analyzes how films accurately portrayed mental health and how they did not.

## **LABRY HALL 207**

### **See the World with CU- Travel to Ireland**

Presenters: Dr. Sean McDaniel and Ms. Summer Vertrees

We will discuss what adventure awaits when you travel abroad with the Cumberland community in the summer of 2025. From the pubs and dancing of the city to the rolling hills and castles of the country, Ireland has so much for us to explore!

## **LABRY HALL 209**

### **What Does $x$ Equal? Famous Math Problems**

Presenters: Ms. Brooke Turner, Mr. Daniel Wessels, Ms. Lara Zugasti Esteban, and Dr. Will Tune

Ever wonder what keeps mathematicians awake at night? Come and learn about some famous mathematical problems, both solved and unsolved. The presenters will explain what the problems are, some of the history behind them, and what efforts have been made to solve them.



## **LABRY HALL 210**

### **Ask the Experts: Current Research by CU Humanities, Sciences and Health Professions Faculty**

Presenters: Dr. Mark Cheatham, Dr. Laura Bechard, Dr. Jason Grindstaff, and Dr. Julie Phillips

Ever wonder what your professors do besides teach? Join several faculty members as they describe their research, how it fits into their specific field, and why research is important for graduate school and professional careers.

## **LABRY HALL 211**

### **An Era of Change: The Progressive Era (History Senior Seminar Presentations)**

Presenters: Ms. Jesse D. Cochran, Ms. Lexie Netherton, Ms. Kelsey Suddarth, and Dr. Tara Mitchell Mielnik

Three senior history majors will present their independent research projects. Jesse Cochran has researched the treatment of women in mental asylums and prisons in the late 19th century into the 20th century. Lexie Netherton will discuss the changing treatment of orphans in the same period, looking at the Orphan Train movement as well as the controversial Children's Home Societies in Tennessee and Texas. Kelsey Suddarth will present on the impact of lynching in Wilson County in the early 20th century.

## **MEMORIAL HALL 202**

### **Transcultural Nursing in Honduras**

Presenters: Mr. Joseph Mullins, Ms. Delaney Eldred, Mr. Braxton Washer, Ms. Grace Harris, Ms. Jasmin Tatum, and Ms. Michelle Zuercher

Students will be sharing their experience of the transcultural nursing trip to Honduras in Spring 2023

### **From IVs to EKGs: The Hospital Experience, Explained**

Presenters: Ms. Michelle Zuercher and Mr. Joe Callis

This presentation will work to demystify the hospital experience. The presenters will discuss the ins and outs of everything from IVs to why we measure your bodily fluids.

## **MEMORIAL HALL 203**

### **Nature's Goths: Studying the Misunderstood in a Time When They Need Our Help**

Presenters: Ms. Estie C. Holman and Dr. Michael C. Fulbright

Bats are ecologically important, but widely misunderstood nighttime flyers. Their roles as pest controllers and pollinators are essential to maintaining the health of ecosystems while promoting biodiversity. These fascinating creatures are facing declines in populations globally due to many factors including habitat fragmentation, development, habitat destruction and disease. White-nose syndrome, which is caused by a fungus, has decimated our native bat populations. We want to tell you the story of why bats are so important and how we are studying them here at Cumberland.

## **MEMORIAL HALL 205**

### **Educational Journey - What's Your Why?**

Presenters: Dr. Sandy Smith, Dr. Katherine Gilligan, Dr. Whitney Matthews, Dr. George Walker, Dr. Cyndy Stone Allen, and Professor Barbara Parker

This presentation will be a panel discussion with the EPP faculty on their educational journeys. Faculty will share experiences in hopes of inspiring future educators.

## **MEMORIAL HALL 206**

### **Mental Health Cooperative**

Presenters: Mr. Michael Randolph

Presenters from the Mental Health Cooperative will share information about mental health.

## **MEMORIAL HALL 207**

### **Five Movie Scenes that Changed Everything**

Presenter: Dr. Sara Hays

Film professor Dr. Sara Hays will show five movie scenes that she feels had a lasting impact on the film industry - and culture in general - and then discuss each one in terms of production, narrative, and characterization.

## **MEMORIAL HALL 208**

### **Let's Celebrate! Five Years of the Novus Literary Arts Journal**

Presenter: Ms. Sandee Gertz

Celebrate the 5th Anniversary of Novus Literary Arts Journal with a Reading of the Best Works since 2019 and a viewing of fine art from our contributors. Meet Novus Editors and find out more about Cumberland's international journal and opportunities here and in Dublin Ireland.

## **MEMORIAL HALL 306**

### **Using AI to Understand Microbiomes**

Presenter: Dr. Joshua L. Phillips

In this lecture, we will examine several projects in the presenter's research lab which explore the use of multi-modal models for processing and understanding complex biological/ecological systems involving prairie plants and their soil microbiomes, snake skin microbiomes and their connection to snake skin metabolomes in the presence/absence of fungal pathogens, and on-going work integrating metabolomic/metagenomic data from wood frog gut samples

**BAIRD CHAPEL**

**Secrets in the Hills: Who Killed Tracy Sue Walker**

Presenter: Mr. Brandon Elkins

In 1985, bones were found in the Elk Valley area of Tennessee. The unidentified remains would only come to be known as “Baby Girl.” It wouldn’t be until 2022, with the help of Othram, that “Baby Girl” would finally have a name.

She was 15-year-old Tracy Sue Walker of Lafayette, Indiana. She'd gone missing in 1978.

Since giving her a name, Brandon Elkins and the Tennessee Bureau of Investigation (TBI) have been working tirelessly to determine who is responsible for Walker’s murder. Someone out there knows something. Someone knows what happened to Tracy--and that person needs to be brought to justice.

Join Agent Elkins as he takes attendees into a cold case unlike any other. From remains found in a desolate area, to the long-sought identification, and now, finally, to the need to find secrets in the hills of Tennessee. It's a case that only YOU can help solve.

**HEYDEL AUDITORIUM**

**Musical Theatre Showcase**

Presenters: Ms. Mae Jenkins, Ms. Takiah Ledo, Ms. MaryAnn Waters, Mr. Max Taylor, Ms. Christina Shandor, Ms. Noelle Duke, Ms. Ally Barnett, Ms. Alex Sain, Mr. J.D. Moore, and Ms. Jenny Ballard,

Students will be presenting songs from Little Women, as well as their upcoming production of Sister Act.

**CLEMONS LECTURE HALL LABRY HALL 130**

**FBI Investigation of the Terrorist Bombings in Riyadh Saudi Arabia in May 2003**

Presenter: Mr. David Mitchell

Mr. Mitchell was the On-Scene Commander of FBI resources in the joint investigation of three bombings by Al Qaeda Terrorists in Riyadh, Saudi Arabia where 27 individuals were killed, including 9 Americans on May 12, 2003. He will discuss his experiences during this time.

**LIBRARY READING ROOM**

**12 O'clock High and Masters of the Air: The Story of the Airmen and Their Struggle**

Presenter: Dr. Luke Truxal

This presentation will examine how the 1949 film "Twelve O'clock High" and the 2024 Apple Television series "Masters of the Air" rip away the romanticism of air warfare.

## **LABRY HALL 117**

### **QPR - Question Persuade and Refer**

Presenter: Ms. Brenda Harper

QPR stands for Question, Persuade, and Refer — the 3 simple steps anyone can learn to help save a life from suicide. As a QPR-trained Gatekeeper you will learn to recognize the warning signs of suicide, know how to offer hope, and know how to get help and save a life.

## **LABRY HALL 115**

### **HIV and Alcohol**

Presenter: Ms. Stephanie Davis

The presenter will discuss the dangers of HIV and Alcohol.

### **The Overlap of Mental Health and the LGBTQ+ Community**

Presenters: Ms. Caroline O'Brien and Ms. Stephanie Davis

This presentation will discuss the mental health crises that is happening in the LGBTQ+ community. It will also include resources from the Trevor Project.

## **LABRY HALL 116**

### **Strategies for Cultivating your Mental Health**

Presenter: Dr. Eddie Christian

This program is designed to learn practical ways for accepting life challenges and enhancing one's emotional, psychological, and social well-being.

## **LABRY HALL 202**

### **Facts About Fentanyl and Harm Reduction**

Presenter: Will Taylor, Drug Free Wilco

A representative from Drug free Wilco will discuss Fentanyl and Harm Reduction.

## **LABRY HALL 207**

### **What Are You Thinking About? A Pre-Game Checklist and Curriculum for No-Limit Holdem Study**

Presenter: Dr. Stuart Harris

This presentation will talk about the importance of focus while playing No-Limit Holdem poker and will suggest a series of things that a player should be thinking about as a hand unfolds.

## **LABRY HALL 209**

### **Star Wars, A Collecting Story**

Presenter: Mr. Milton Sager

Collecting toys, comics, and other memorabilia of Star Wars, what could go wrong?

### **Castles, Dragons, and Fantasy: Medievalism in LEGO**

Presenter: Dr. Rory Sellgren

The presenter will showcase the current state of his LEGO collection and management.

## **LABRY HALL 210**

### **Ask the Experts: Current Research by CU Social Sciences, Humanities, and Sciences Faculty**

Presenters: Dr. Sean McDaniel, Dr. Michael Rex, Dr. Michael Fulbright, and Dr. Chelsea Sterne

Ever wonder what your professors do besides teach? Join several faculty members as they describe their research, how it fits into their specific field, and why research is important for graduate school and professional careers.

## **LABRY HALL 211**

### **Questions of Leadership (History Senior Seminar Presentations)**

Presenters: Mr. Mark Sullivan Compton, Mr. Niklaus Heimdal, Mr. Joshua Maxwell, and Dr. Tara Mitchell Mielnik

Three senior history majors will present their independent research projects. Sullivan Compton analyzes the conditions of slavery of several slave-holding American presidents in the early American republic. Niklaus Heimdal will compare the relationship between Ulysses S. Grant and President Andrew Johnson at the end of the American Civil War. Joshua Maxwell will discuss Operation Enduring Freedom, the American military operation in Afghanistan and the formation of the modern Afghan state.

## **MEMORIAL HALL 202**

### **Open Your World: Study Abroad**

Presenters: Ms. Györgyi Mihályi, Dr. Mark Hanshaw, and others.

Join us to explore Cumberland University's global partnerships with universities across the world, while hearing inspiring stories from past participants. This info session will gather your input on preferred destinations and programs, as we plan to launch study abroad courses where you can earn academic credit.

## **MEMORIAL HALL 203**

### **Novel Energy Generation for the Future**

Presenter: Dr. Joshua Klaassen

The presenter will give an overview of novel energy generation methods that have the possibility to change how humans power our lives.

## **MEMORIAL HALL 205**

### **From Where Does Money Come?**

Presenter: Dr. Richard Grant

What is money? How does it come into existence and what gives it value?

## **MEMORIAL HALL 206**

### **Navigating First Episode Psychosis: Insights into Symptoms, Diagnosis, and Treatment**

Presenter: Ms. Kaylee Wilson

First episode psychosis represents a critical period in mental health, where early detection and intervention can lead to better long-term outcomes. This presentation will provide a comprehensive overview of the signs and symptoms of FEP, focusing on how they manifest in various populations. We will examine early intervention strategies, including integrated and coordinated care approaches that combine medical, psychological, and community support. Join us to discuss practical tools to identify FEP early, understand treatment options available and gain insight into supporting individuals experiencing their first episode of psychosis.

## **MEMORIAL HALL 208**

### **Zine Scene: Honors Students Present Their Zines**

Presenters: Honors English Students and Mr. Wyatt Keener

The students of Honors English Seminar have been working on zines (DIY magazines) that tell a story about their life. In this session, they'll present their work and talk about the process of making a zine.

## **MEMORIAL HALL 306**

### **Green Meets Unseen: Boosting Nature's Carbon Capture through Plant-Microbe Interactions**

Presenter: Dr. Alyssa A. Carrell

Dr. Alyssa Carrell is a research scientist at Oak Ridge National Laboratory. Her research in ecology is focused on understanding plant and microbial community dynamics with a special interest in ecosystem resilience and resistance to environmental perturbations. In this presentation she will share recent research in her lab.