



CENTENARY COLLEGE OF LA

Thursday, April 23rd, 2026

Centenary College of Louisiana Campus

Mickle Hall • Kilpatrick Auditorium • Jackson Hall • Whited Room

8:20 am – 5 pm

**34th Annual
Centenary College Academic Research Conference
Thursday, April 23, 2026**

Each year Centenary students and faculty present their best works of exploration and invention at our annual Research Conference. A community event for over 30 years, the Research Conference is modeled on long-standing academic traditions of conference-based information sharing and feedback.

The 2026 Research Conference is sponsored by the Office of the Provost, Attaway Scholars Fund, and the Student Government Association.

This year's Research Conference was organized by Dr. Scott Chirhart (Biology), Dr. Jessica Alexander (Psychology), Dr. Amanda Donahoe (Political Science), Dr. Chrissy Martin (English), and Dr. Kyra Rietveld (Art). Special thanks to Jeremy Johnson and Aubrey Salazar for their graphic design skills, Candace Metoyer for her web skills, and to Connie Whittington for her unwavering support of our students and faculty.

Generous thanks to all our judges of oral presentations and posters. We could not accomplish this conference without the work and support of the entire Centenary community, from mentoring student research to printing programs to moderating and judging sessions. Thank you all!

Winners from this year's Research Conference will be presented with awards at the Annual Honors Convocation on May 8 in Brown Chapel.

Schedule of Events

8:00-9:20	Oral Presentations Session 1	8
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Oral Presentation Sessions by location:

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Abstracts by Session	11
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Keynote Address:

Patricia Matthew, Ph.D.

"What Woman Here": Britain's Abolitionist Movement and Racial Hierarchies, Then and Now

Patricia Matthew is Associate Professor of English at Montclair State University where she teaches courses on the History of the Novel and Romantic abolitionist culture. She writes about Regency-era literature and culture for scholars and the public in journals and publications including *Texas Studies in Literature and Language*, *Women's Writing*, *Lapham's Quarterly*, *The Times Literary Supplement*, and *Slate*. In addition to editing special journal issues of *English Romantic Review* and *Studies in Romanticism*, she co-edits the Oxford University Press book series *Race in Nineteenth-Century Literatures and Cultures*. She is editor of Penguin Random House's 250th anniversary editions of Jane Austen's *Pride and Prejudice* and *Northanger Abbey*. Winner of fellowships from the National Humanities Center, the British Association for Romanticism Studies, and The Folger Institute, she is currently editing *Austen's Mansfield Park* for Norton Library and writing a book about abolitionist literary and material culture and gender for Princeton University Press. She is the director of the Race and Regency Lab.

WHITED ROOM SCHEDULE**SESSION 1A – 8:20-9:20 – Humanities Panel****Moderator: Patrick Morgan**

1. Imaginary Indexing: Worldbuilding Through Classification in Memory of Mundanity – Kai Young
2. The Black Theatre Students of Centenary College of Louisiana – Jaszmyne Jackson
3. Shaping Reality: An Analysis of Documentary Form in Flag Wars – Arionna Thomas

SESSION 2A – 9:30-10:30 – Humanities Panel**Moderator: Michelle Glaros**

1. Breaking the Fourth Wall in Hindi Cinema – Kendra Christopher
2. Voices of Resistance: How Folk Music Shapes Political Movements – Sydney Welch
3. Historical Creation in a Museum Environment: The Meadows Museum in the 90's – Reilly Dymond

KEYNOTE ADDRESS (Whited Room) – 11:00-12:00**SESSION 3A – 1-2:20 – Humanities Panel****Moderator: Bellee Jones-Pierce**

1. Physical Disability in Children's Literature – Mary Catherine Wellman
2. The Change: Virginia Woolf, Menopause, the Body, and the Modernist Aesthetic – A.D. Kimmey
3. The Metamorphosis, Biopolitics, and Eugenic Modernity – Braydon Gaston
4. From Sound to Stanza: Symphonic Structure Reimagined as a Heroic Crown – Kaylee Roberts

SESSION 4A – 2:30-3:50 – Humanities Panel**Moderator: Ryan Doherty**

1. Incest: Shock Horror or Decadently Designed? – Milo Neal
2. The Ham Fat Man, Performance, and Loss of Identity in "Dave's Neckliss" – Sophia Cadena
3. The Fear Within Decay: Defining Decadence Through Horror – Alyxandra Murov
4. Jack London: A Modern Earl of Oxford, What Does it Mean to "Create" – Rhys Deupree

SESSION 5A – 4-5:00 – Creative Writing**Moderator: Chrissy Martin**

1. Audrey M. Smith Endowed Poetry Award Finalists:
 - Kendra Christopher - "How to be Kind to Yourself"
 - Jo Hoffman - "When Hurston Killed Teacake"
 - Jackson Melancon - "Night Moves or: Oxford English Dictionary's Fourth Definition of 'Pious'"
2. Zeak Monroe Buckner Writing Award Finalists:
 - Aaliyah Vines - "A Collection of Roads Well-Travelled"
 - Megan McHugh - "Out Hunting"
 - Kaylee Roberts - "Over the Thinking: A Guide for Handling OCD"

CARLILE AUDITORIUM (MICKLE 114) SCHEDULE

SESSION 1B – 8:20-9:20 – Natural Science Panel

Moderator: Scott Chirhart

1. Synthesis of Copper Oxide for Harnessing Light in Producing Reactive Oxygen Species from Water – Isabela Vasquez
2. Inherently Safer Process for Recovering Cobalt and Nickel from Battery Electrodes – Lavender Stripling
3. Modification of Nail Polish Formulations for Conductivity to Operate Capacitive Touchscreens – Manasi Desai

SESSION 2B – 9:30-10:50 – Social Science Panel

Moderator: Pete Zunick

1. Painting An Identity-Safe Picture: Repainting Anatomical Models to Combat Identity-Threat in Classrooms – Julianna Malloy
2. AI Assistance and the Illusion of Learning: Effects on Academic Self-Efficacy, Metacognitive Calibration, and Memory Retention – Man Cing
3. Prosodic Expectancy Violation in Synthetic Speech – Camille Ball, Tuyen Chau, Jacob Nguyen, Jayden Nguyen, & Abigail Rinaudo
4. Text-Based Distraction: The Meaning of Noise – Kendall Knotts, Julianna Malloy, Sean Nguyen, & Heather Parker

KEYNOTE ADDRESS (Whited Room) – 11:00-12:00

SESSION 3B – 1-2:20 – Social Science Panel

Moderator: Jessica Alexander

1. The "AI Label" Effect on Aesthetic Perception – Marta Bohaichuk, Teagan Hayes, Brooklyn Howard, Feven Kidanu, & Henry Pudwill
2. The "Warmth" of Sound: Timbre and Temperature – Vega Burton, Megan McHugh, Ma'kayla Perkins, & Avary Toms
3. The "Weapon Focus" Effect in Simple Scenes – Joshua Brents, Lydell Hunter, Riley Myers, & Cecilia Paredes
4. The Uncanny Valley in AI-Generated Hands and Faces – Tyler Bullard, Baleigh Hardman, & Trinity Thomas

SESSION 4B – 2:30-3:30 – Social Science Panel

Moderator: Michelle Wolkomir

1. Gendered Fragrances: Social Sight and Biological Scent – Lauren Holley
2. Transmisogyny: How the Fetishization of Transgender Women Reinforces Hegemonic Masculinity – Sarah Martin
3. The Social Contract and Its Discontents: Blackness, Gender, and Slavery – Braydon Gaston

KILPATRICK AUDITORIUM SCHEDULE**SESSION 1C – 8:20-9:20 – Humanities Panel****Moderator: Chad Fulwider**

1. The Backbone of Religion – Adriauna Wade
2. Methodist Missionaries in Asia: Arrival of God's Glory or Elimination of Old Traditions – Hannia Zavala
3. An Analysis of the Connection Between Montessori Schooling and Inclusion in the Classroom – Jordan Hall

SESSION 2C – 9:30-10:50 – Social Science Panel**Moderator: Adam Golob***Panel Title: Narratives, Rhetoric, Stories: Their Impact on Power*

1. Women's Impact on Healthcare Policies in Northern Ireland – Amber Shaw
2. Policing Political Moments: The Behavior of ICE During 2026 Raids Compared to Police Behavior During 2020 Black Lives Matter Protests – Kylee DeVore
3. What Are We to Do? Exploring the Intersection of Gendered Identity Work and Political Narrative Among Evangelical Christians – Lauren Holley
4. Religion in Guatemala: How Different Christianity Denominations Has Affected the Political Landscape in Guatemala – Gibson Harvill

KEYNOTE ADDRESS (Whited Room) – 11:00-12:00**SESSION 3C – 1-2:20 – Social Science Panel****Moderator: Adam Golob***Panel Title: Polarization, Media, & Influence on Policy*

1. Partisan Alignment on the Bench: Examining Polarization in the U.S. Supreme Court – Sarah Crenshaw
2. The Impacts of Increased Polarization on the Legislative Practices of Congress – Clay Lewandowski
3. Trial by Media: Media Influence and the Integrity of the Judicial Process – Sydney Welch
4. Political Polarization and Partisan social media during U.S. Presidential transitions: Joseph Biden through Donald J. Trump (2020-2025) – Nevaeh Briscoe
5. Social Media and Politics: 2024 Election – Jordan Taylor

SESSION 4C – 2:30-3:50 – Social Science Panel**Moderator: Amanda Donahoe**

1. From Script to Audience: Evaluating Responses to Political Rhetoric – Kaylee Roberts
2. Violence in Conflict and Peace: How Ethiopia's Failure to Include Women in Peace Processes Maintains Gender-Based Violence – Madilyn McCrary
3. Killing the Daughter to Save the Mother: Russia's Neglect of Domestic Violence Survivors – Catherine Collette
4. The Reimagining of Pornography in the AI Era: A Study of the Rapid Production and Rapid Reproduction in Social Media – Chana Williams

JACKSON 304 SCHEDULE**SESSION 1D – 8:20-9:20 – Humanities Panel****Moderator: Alissa Klaus***Art Major Senior Exhibitions*

1. "In (Joy) the Red" - Finding Joy Within the Chaos – Jude Williams
2. "A Walk Through Dogwood" – Emma Foster
3. Neomia Ruth: The Life, The Death, The Legacy – Teddy Graves
4. "The Garden He Planted" – Kaitlyn Moton

SESSION 2D – 9:30-10:50 – Social Science Panel**Moderator: Terrie Johnson**

1. Engaging Classroom Activities and Their Impact on Chronic Absenteeism – Clayton Sawyer
2. Action Research: Effective Transitions in Elementary School Classrooms – Sarina Gordon & Abigail Hodgson
3. Centenary College Student Managed Investment Fund 2025 Results – Daniel Lewis, Ethan Hewett, James Jackson, Hayden McConnell, Philip Pugh, Ubaldo Ayala, & Nina Guerrero

KEYNOTE ADDRESS (Whited Room) – 11:00-12:00**SESSION 3D – 1-2:20 – Humanities Panel****Moderator: Chad Fulwider**

1. Centenary's Feminist Organizations and Their Histories – Beth Vogler
2. Race and the Decline of Public Transit in Shreveport – Jady Nourse
3. "What Can YOU Do?": Shreveport Women's Political Activism in the 1970s and 1980s – Madilyn McCrary

SESSION 4D – 2:30-3:30 – Humanities Panel**Moderator: Jessica Hawkins***Designing for Impact: Student Identity and Advertising Campaigns*

1. Nehemiah Brown
2. A.D. Kimmey
3. Sofia Poliakova
4. Bryce Stephens

Poster Presentations – 1:00-2:30 and 2:45-4:00**Moderator: Scott Chirhart****SESSION 1P - 1:00-2:30**

1. An Inexpensive Schlieren Setup for Everyday Use – Hunter Hedges
2. The Effects of Mortality and Birth Rates of *Hippocampus whitei* – Ayla Purdy
3. Measuring Boltzmann's Constant Using Video Microscopy of Brownian Motion – Jasmine Jones
4. Basaltic Geochemistry in Kimberly Corehole, Central Snake River Plain, Idaho: Evidence for Magmatic Recharge, Fractional Crystallization, and Assimilation – Matia Adkins, Vernon Batchelor, Amy Foret, Katerina Jacobsen, & Dylan Phillips
5. The Influence of Lifestyle and Genetics on Vitamin Metabolism: How Do Macronutrients, Exercise, and Melanin Impact Vitamin D Efficacy? – Kennadi St. Clair
6. DYRK is an Important Factor in HSV-1 Replication – Jolie England
7. The Impact of Practice Disruptions Due to Academics on Student-Athletes' Mental Health and Sport Engagement – Kane Broussard & Hilary Pillaro
8. The Influence of Prior Musculoskeletal Injury on Exercise Behavior and Confidence in College Students – J'Anna Sweat, Jalen Brown, Libby Guidry, & Cameron Randolph

SESSION 2P - 2:45-4:00

9. Pilot Study in Collegiate Gymnasts: Effects of Ankle Taping on Balance and Center of Gravity – Olivia Stratmann
10. Characterization of Soil Bacteria Diversity and Antimicrobial Profiles: Comparing Rural vs. Urban Soil Environments in Northwest Louisiana – Savanna Arevalo & Abigail Rinaudo
11. The Campus Microbiome: Insights into Soil Bacterial Diversity from 16S V3-V4 rRNA Amplicon Sequencing – Jayden Nguyen & Thach Chau
12. Rational Design of a "Soft" Topical Retinoid to Improve Tolerability while Maintaining Efficacy – Manasi Desai
13. Novel Strategy to Reduce Exposure to Ionizing Radiation for Humeral Fracture Prediction – Victoria Todman, Alexandra Nolen, Malcom Goldsby, Audrey Welch, Benjamin Lee, Mario Lobao, & Giovanni F. Solitro
14. Sleep Quality and Perceived Difficulty in Centenary College Student-Athletes – Ahmad Garner, Jaden Braden, Paige Stowers, & Jebediah Gordon

ORAL PRESENTATIONS – by Session

SESSION 1 – 8:20-9:20

1A – 8:20-9:20 – Humanities Panel (Whited)

Moderator: Patrick Morgan

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Moderator: Scott Chirhart

1. Synthesis of Copper Oxide for Harnessing Light in Producing Reactive Oxygen Species from Water – Isabela Vasquez
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Moderator: Alissa Klaus

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3. Neomia Ruth: The Life, The Death, The Legacy – Teddy Graves
4. "The Garden He Planted" – Kaitlyn Moton

SESSION 2 – 9:30-10:50

2A – 9:30-10:30 – Humanities Panel (Whited)

Moderator: Michelle Glaros

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2. Voices of Resistance: How Folk Music Shapes Political Movements – Sydney Welch
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KEYNOTE ADDRESS (Whited Room) – 11:00-12:00**SESSION 3 – 1-2:20****3A – 1-2:20 – Humanities Panel (Whited)****Moderator: Bellee Jones-Pierce**

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3. “What Can YOU Do?": Shreveport Women’s Political Activism in the 1970s and 1980s – Madilyn McCrary

SESSION 4 – 2:30-3:50**4A – 2:30-3:50 – Humanities Panel (Whited)****Moderator: Ryan Doherty**

1. Incest: Shock Horror or Decadently Designed? – Milo Neal
2. The Ham Fat Man, Performance, and Loss of Identity in “Dave’s Neckliss” – Sophia Cadena
3. The Fear Within Decay: Defining Decadence Through Horror – Alyxandra Murov
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4B – 2:30-3:30 – Social Science Panel (Mickle 114)**Moderator: Michelle Wolkomir**

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4D – 2:30-3:50 – Humanities Panel (Jackson 304)**Moderator: Jessica Hawkins***Designing for Impact: Student Identity and Advertising Campaigns*

1. Nehemiah Brown
2. A.D. Kimmey
3. Sofia Poliakova
4. Bryce Stephens

SESSION 5 – 4-5:00**Creative Writing (Whited)****Moderator: Chrissy Martin**

1. Audrey M. Smith Endowed Poetry Award Finalists:
 - Kendra Christopher - "How to be Kind to Yourself"
 - Jo Hoffman - "When Hurston Killed Teacake"
 - Jackson Melancon - "Night Moves or: Oxford English Dictionary's Fourth Definition of 'Pious'"
2. Zeak Monroe Buckner Writing Award Finalists:
 - Aaliyah Vines - "A Collection of Roads Well-Travelled"
 - Megan McHugh - "Out Hunting"
 - Kaylee Roberts - "Over the Thinking: A Guide for Handling OCD"

ABSTRACTS – BY SESSION

SESSION 1 – 8:00-9:20

1A – 8:20-9:20 – Humanities Panel (Whited)

1. Imaginary Indexing: Worldbuilding Through Classification in Memory of Mundanity

Presenter: Kai Young

Research Advisor: Mr. Patrick Morgan

Art and Visual Culture, English, Information Sciences, Centenary College of Louisiana

As both an exercise in worldbuilding and an experiment involving the troubles of real-world cataloging systems, I have taken on the task of creating a fictional library classification system for the sci-fi story Memory of Mundanity. Memory of Mundanity is a personal writing project and webcomic about five synthetic children who experience rapid aging. These five teenagers live in relative isolation in one sector of a large space station and struggle with building a sense of identity given their shorter lifespans and environment. This rapid development also means the children are collecting, using, and creating different vessels of information that need to be housed efficiently. This presentation serves as a pseudo methodology report outlining the catalog's principles related to the Five Laws of Library Science and an execution of this catalog as a visual narrative device in the webcomic.

2. The Black Theatre Students of Centenary College of Louisiana

Presenter: Jaszmyne Jackson

Research Advisor: Dr. Michelle Glaros

Communication, Performing Arts, Theatre, Centenary College of Louisiana

This video shows some of the Black students of the Centenary Theatre Department. This video shows what they do, how they thrive, and share their opinions about whether the theatre department is diverse enough or if there needs to be more diversity in the department!

3. Shaping Reality: An Analysis of Documentary Form in Flag Wars

Presenter: Arionna Thomas

Research Advisor: Dr. Michelle Glaros

Communication, Art and Visual Culture, Centenary College of Louisiana

This video essay examines how documentary film constructs meaning through narrative techniques often perceived as “neutral.” Focusing on the 2003 documentary Flag Wars, the project analyzes how persuasion, voice, and mode shape audience interpretation. Although the film adopts an observational style, its use of selective framing, scene sequencing, and subject focus subtly guides viewer sympathies, particularly within the context of gentrification and community conflict. By unpacking these techniques, the essay challenges the assumption that documentaries present objective reality, arguing instead that they actively construct it through intentional storytelling choices.

1B – 8:00-9:20 – Natural Science Panel (Mickle 114)

1. Synthesis of Copper Oxide for Harnessing Light in Producing Reactive Oxygen Species from Water

Presenter: Isabela Vasquez

Research Advisor: Dr. Dewan Russel Rahman

Chemistry, Centenary College of Louisiana

This work will present the preparation of copper oxide from copper acetate hydroxide, a layered copper hydroxide synthesized via a new hydrolysis process. The hydrolysis process used propylene oxide and copper acetate in water, which uniquely produced crystalline copper acetate hydroxide, unlike methods commonly reported in the literature. The crystalline material was characterized by using X-ray powder diffraction to confirm its layered structure, while FTIR spectroscopy, Thermogravimetric Analysis (TGA), and elemental

analysis established its chemical formula. The presentation aims to discuss a proposed mechanism by which propylene oxide facilitates the production of layered copper hydroxide. Upon pyrolysis at 600 °C, the synthesized layered copper hydroxide was readily converted to copper(II) oxide, CuO. The prepared CuO was evaluated as a photocatalyst in an advanced oxidation process to generate reactive oxygen species (ROS) from water under visible light, thereby effectively degrading methylene blue dye. Exploiting methylene blue degradation, the work will also aim to quantify the average rate of ROS production by CuO, thereby establishing the efficiency of CuO prepared via copper acetate hydroxide in the advanced oxidation process.

2. Inherently Safer Process for Recovering Cobalt and Nickel from Battery Electrodes

Presenter: Lavender Stripling

Research Advisor: Dr. Dewan Russel Rahman

Chemistry, Centenary College of Louisiana

The most widely used chemical process for recovering cobalt and nickel from spent battery electrode materials typically employs corrosive inorganic acids. These corrosive acids pose a significant potential risk (or source) of serious chemical accidents in large-scale applications. At the same time, treating battery active materials with corrosive acids can generate toxic fumes and particulate matter, so the acid treatment must be conducted properly in industrial settings, which also pose inherent chemical safety risks. In terms of inherently safer chemistry to prevent chemical accidents, it is desirable for industrial-scale battery recycling to employ an alternative chemical process that avoids the use of corrosive inorganic acids for dissolving battery active materials. In this work, we present such an alternative approach, HydroTechX^a, that employs ReagentX1^b and ReagentX2^b to dissolve nickel and cobalt from battery electrodes. We discovered these reagents react with nickel-based and lithium-cobalt-based electrode materials in water at 80 °C. The dissolved nickel and cobalt aqueous solutions from the battery electrodes were treated with base under hydrothermal conditions, which produced nickel and cobalt as solid-state compounds. After recovering nickel and cobalt, ReagentX1 and ReagentX2 can be retrieved from the reaction solutions, thereby making HydroTechX a zero-chemical-waste process.

a. HydroTechX is a two-step chemical process as described herein that efficiently produces nickel- and cobalt-based materials from battery electrodes.

b. ReagentX1 and ReagentX2 are non-hazardous organic compounds that are inexpensively available from commercial chemical vendors.

3. Modification of Nail Polish Formulations for Conductivity to Operate Capacitive Touchscreens

Presenter: Manasi Desai

Research Advisor: Dr. Joshua D. Lawrence

Chemistry, Centenary College of Louisiana

Most smartphones use capacitive touchscreen technology, the operation of which relies on skin conductivity. This is challenging for users with long manicures or “zombie fingers.” We describe nail polish formulations that achieve sufficient conductivity to disrupt the stored electrical field in capacitive touchscreens and register as touch events. Commercial nail polishes were used to test additives for formula compatibility and electrical performance. Nail polish formulations were coated onto a silicone mat, and the resistance of the dried films were measured; formulations with noninfinite resistance were tested on capacitive touchscreens.

1C – 8:20-9:20 – Humanities Panel (Kilpatrick)

1. The Backbone of Religion

Presenter: Adriauna Wade

Research Advisor: Dr. Jama Grove

History, Centenary College of Louisiana

Women are a major foundation in religion often unrecognized for the things they do for the church. The research on them is very vast and has spread throughout the years. The goal is to walk the reader through the life of a methodist women. Primarily focus on women who become ministers in the methodist church which is arguably one of the more open denominations. Also focusing on the simple church going women and a strong

focus on African American women who chose the methodist denomination and their struggles. Overall creating a modern synopsis of why the methodist women should be valued, promoted, and acknowledged as well as their struggle to get there.

2. Methodist Missionaries in Asia: Arrival of God's Glory or Elimination of Old Traditions

Presenter: Hannia Zavala

Research Advisor: Dr. Jama Grove

History, Centenary College of Louisiana

During the late 19th to early 20th century, when the majority religion in Asian countries was one of the “Three Teachings,” the introduction of a new religion was seen as intimidating and often as a threat to their already established teachings/traditions. Methodist Missionaries in Asia were beginning their mission of spreading the Gospel, focusing on the integration of Methodism, instead of forceful conversion. This resulted in integration being seen through the establishment of schools, social reform, the construction of churches, etc. Inspirational figure leaders, such as the Lambuth family, played major roles in the spread of Methodism by not letting the idea of forceful conversion or gender roles stop their mission. This research will present two perspectives of Methodism integration: the perspective of the preacher and of the recipient, primarily focusing on the cultural, political, and social change that Methodism can effect across multiple Asian countries.

3. An Analysis of the Connection Between Montessori Schooling and Inclusion in the Classroom

Presenter: Jordan Hall

Research Advisor: Dr. Jama Grove

History, Centenary College of Louisiana

The Montessori Theory is largely accepted as one of the most inclusive types of schooling in the educational field. This project aims to answer the question of whether Montessori schools in the United States leads educational inclusivity, as what is largely accepted, or if it is simply following the social context of its time. The methods of research follow two main points. First, examining what the Montessori Theory is and what qualities of this school system lead those in the educational field to find it inclusive. Secondly, it will look at a case study of U.S. history in which all Montessori schools were closed after WWI due to the anti-immigration and nationalistic sentiment. This research does not intend on leading to a direct answer, yet it aims to make a claim beyond reasonable doubt.

1D – 8:20-9:20 – Humanities Panel (Jackson 304)

Art Major Senior Exhibitions

1. “In (Joy) the Red” - Finding Joy Within the Chaos

Presenters: Jude Williams

Research Advisor: Ms. Alissa Klaus

Art and Visual Culture; English, Centenary College of Louisiana

Thoughtfully reflecting on chaos and uncontrollable events, without succumbing to it and letting it overtake you, allows you to appreciate the joy inside it and give it meaning in retrospect. This work is focused on the paradox of contradictory emotions throughout a lived experience. Grief and pain exist side by side with joy and beauty, often in a reflective nature. Curiosity, loss, and love fluctuate through a person’s life like the seasons. This exhibition explores these concepts through painting, drawing, collaging, assemblage sculpture, and poetry. Throughout this exhibition, the red that borders each piece represents the chaos that attempts to confine you to the physical world. These borders also mimic the framing of the artist’s glasses, a nod to their constant perspective and lens on life. The four seasons represent joy, the passage of time, and inevitable cycles of life, leading to reflection and meditative self-examination of these universal human experiences that we face in our own time.

2. "A Walk Through Dogwood"

Presenter: Emma Foster

Research Advisor: Ms. Alissa Klaus

Art and Visual Culture, Centenary College of Louisiana

While describing this exhibition, words like “landscape” may be used; however, with the exception of a few paintings, it is inaccurate to describe the artwork as landscapes. Though they explore natural beauty, most of the works depict tightly cropped compositions to highlight observed details.

In 2024, the artist started taking her own reference photos for her painting practice on walks through her neighborhood – Dogwood. The resulting artworks are included in this exhibition.

This body of work attempts to explore the beauty that can be found in the mundane, which is visible to those who wish to observe it.

3. Neomia Ruth: The Life, The Death, The Legacy

Presenter: Teddy Graves

Research Advisor: Ms. Alissa Klaus

Art and Visual Culture, Centenary College of Louisiana

Neomia Ruth Lum, 90 of Huttig, Arkansas passed away Saturday, May 21, 2022, at her home surrounded by family. Storytelling plays a crucial role in memory shaping and preserving the legacy of a loved one. By sharing stories and reflecting on the deceased's impact on their friends and family, those grieving can ensure that the person's values, contributions, and personality continue to live on.

This exhibit explores how artist Teddy Graves is reminded of their great-grandmother, Neomia Ruth Lum, as they live their life without her. Graves achieves this by loaning eight pieces from the Meadows Museum of Art and the Longview Museum of Fine Art, taking inspiration from their compositions, and making their own pieces that narrate her life and thereafter. Though the artist called her “Mamaw Lum”, this exhibit refers to Graves’ great-grandmother as “Neomia Ruth” or simply “Neomia” or “Ruth.” This choice is intentional, as the purpose of this exhibit is not to celebrate who she was as a great-grandmother to the artist, but to tell the story of who she was as a person.

4. "The Garden He Planted"

Presenter: Kaitlyn Moton

Research Advisor: Ms. Alissa Klaus

Art and Visual Culture, Centenary College of Louisiana

My goal is always to point people to Christ, uplift them no matter where they are in life, especially in Black communities, who are deserving of feeling encouraged. I create artworks that explore themes of the Christian faith, joyfulness, family dynamics, and cultural empowerment. Through acrylic paintings, mixed media, or poetry, I aim to cultivate spaces where the viewer feels seen and valued through my art. I also like to draw people into deeper contemplation of the God-given Afrocentric features. Every curl and melanated skin color matters to me. I make art to honor the beauty that's found in the Black community. My process is both intuitive and intentional. My work is rooted in a desire to nurture others through creativity by offering comfort, hope, and provoking thought. I begin with prayer and reading the bible. Then I move into exploring Conceptual themes and composition.

SESSION 2 – 9:30-10:50

2A – 9:30-10:30 – Humanities Panel (Whited)

1. Breaking the Fourth Wall in Hindi Cinema

Presenter: Kendra Christopher

Research Advisor: Dr. Michelle Glaros

Communication, Centenary College of Louisiana

In cinema, the fourth wall is the invisible barrier that separates an audience from what is happening in the world on screen. “Breaking” the fourth wall is a technique used to pull the audience past that invisible barrier and involve them more directly in the world through various means. Instances of this technique have largely only been studied through a western lens with analyses performed on films from the U.S. and Europe. This research project seeks to broaden the conversation by addressing instances found in Hindi cinema.

2. Voices of Resistance: How Folk Music Shapes Political Movements

Presenter: Sydney Welch

Research Advisor: Dr. Jama Grove

History, Centenary College of Louisiana

Folk music is the accumulation of creativity of the common people within a specific culture or nature, passed down through generations by oral tradition, and reflects the life experiences, stories, and emotions of the people at the time of its creation. Folk music has strong ties to rural communities, such as the Appalachian region, but has also bled into urban contexts in recent years. Throughout history, folk music has served as a powerful tool for political expression, strengthening oppressed communities through shared struggle and fostering resistance to social and political oppression. This research examines the role of folk music in political movements, from the American Civil War to contemporary activism, to define how powerful music is as a political tool. This research will also provide a comparative analysis of Northern Ireland during The Troubles to examine the impact of folk music in different countries and cultures.

3. Historical Creation in a Museum Environment: The Meadows Museum in the 90's

Presenter: Reilly Dymond

Research Advisor: Dr. Jama Grove

Art and Visual Culture; History; Museum Studies, Centenary College of Louisiana

In this presentation I will briefly discuss my journey and process of performing primary source research and creating a written history for past exhibitions of the Meadows Museum of Art, specifically during the period of 1995 to 1999. I will then describe some choice anecdotes from my findings.

2B – 9:30-10:50 – Social Science Panel (Mickle 114)

1. Painting An Identity-Safe Picture: Repainting Anatomical Models to Combat Identity-Threat in Classrooms

Presenter: Julianna Malloy

Research Advisor: Dr. Peter Zunick

Psychology, Centenary College of Louisiana

Black people are underrepresented in STEM in part due to racial identities being devalued and dismissed. This identity-threat can be counteracted by environmental cues signaling racial identities are valued. We repainted White anatomical models to Black skin tones to measure if they increase belonging and act as identity-safety cues. 373 Black participants watched a learning video from a mock biology class and answered surveys measuring belonging and self-efficacy, among other variables. There was a significant 3-way interaction between condition, stigma consciousness, and student status predicting belonging, $F(1, 361) = 3.71, p = .03$. For current students there was a simple 2-way interaction between stigma consciousness and condition, $p = 0.07$, such that the Black model condition led to more belonging for students high in stigma consciousness than the White model condition, $p = .05$. Repainted anatomical models are a low-budget cue that may increase identity-safety and help diversify STEM fields.

2. AI Assistance and the Illusion of Learning: Effects on Academic Self-Efficacy, Metacognitive Calibration, and Memory Retention

Presenter: Man Cing

Research Advisor: Dr. Jessica Alexander

Psychology, Centenary College of Louisiana

The widespread adoption of AI tools in higher education has outpaced research on their learning impacts. Grounded in the self-generation effect (Slamecka & Graf, 1978) and desirable difficulties framework (Bjork, 1994), this study examines whether AI assistance creates an "illusion of learning" by allowing students to bypass mental effort needed for deep understanding. The study employs a two-phase design. Study 1 surveyed Centenary psychology students to establish baseline patterns of AI usage, self-efficacy, and retention problems. Study 2 was an experiment where students completed two summarization tasks: one without AI and one with standardized AI assistance. Dependent measures included confidence ratings, summary quality, metacognitive calibration, and both immediate and delayed recall. We hypothesize AI will increase confidence while reducing retention, creating confidence-performance gaps that inform evidence-based AI integration practices.

3. Prosodic Expectancy Violation in Synthetic Speech

Presenters: Camille Ball, Tuyen Chau, Jacob Nguyen, Jayden Nguyen, & Abigail Rinaudo

Research Advisor: Dr. Jessica Alexander

Psychology, Centenary College of Louisiana

In spoken language, prosody is a characteristic of speech that allows listeners to perceive emotion. Prosody may include things like tone, intonation, rhythm, and stress. Intonation is necessary for distinguishing between declarative sentences and questions. Stress can be used when placing emphasis on specific words or placing emphasis on specific sounds of a word. AI voices often struggle with "prosodic focus," specifically in emphasizing the correct words and portray rhythmic non-human delays within a full sentence. The current study examines whether listeners detect "emotional" incongruence faster in human voices than in AI voices. We presented participants with various sentences spoken with emotional congruence and incongruence. We aim to test their accuracy and reaction time of congruency detection, comparing human vs. AI speakers. We hypothesize that if AI cannot properly utilize and structure prosodic elements in speech, listeners are more easily/quickly able to detect "emotional" incongruence compared to human speakers.

4. Text-Based Distraction: The Meaning of Noise

Presenters: Kendall Knotts, Julianna Malloy, Sean Nguyen, & Heather Parker

Research Advisor: Dr. Jessica Alexander

This study examines whether intelligible background speech disrupts reading comprehension more than unintelligible background speech. Previous research on the irrelevant sound effect suggests background noise can interfere with cognitive performance. However, it remains unclear whether semantic meaning makes that interference stronger when reading. In the current study, participants will read a passage while exposed to normal speech, reversed speech, or silence. After reading, participants will answer comprehensive questions to assess how well they understood the text. We hypothesize that comprehension will be lowest in the normal speech condition, higher in the reverse speech condition, and highest in the silence condition which suggests that semantically meaningful speech causes a greater distraction than unintelligible noise.

2C – 9:30-10:50 – Social Science Panel (Kilpatrick)

1. From Script to Audience: Evaluating Responses to Political Rhetoric

Presenter: Kaylee Roberts

Research Advisor: Dr. Amanda Donahoe

Political Science, Centenary College of Louisiana

This study examines the growing shift toward emotional rhetoric in political discourse by analyzing audience responses to different types of speeches. Focusing on college students at Centenary College, the research compares reactions to logically driven versus emotionally driven rhetoric. Participants were presented with guided speech excerpts and asked to evaluate their effectiveness and appeal. The findings reveal a clear preference for emotionally resonant speeches over those grounded primarily in logic. Importantly, this preference does not stem from stronger argumentation, but from the speech's ability to create personal connection and emotional engagement, suggesting a broader change in how audiences interpret and value political communication.

2. Violence in Conflict and Peace: How Ethiopia's Failure to Include Women in Peace Processes Maintains Gender-Based Violence

Presenter: Madilyn McCrary

Research Advisor: Dr. Amanda Donahoe

Political Science, Centenary College of Louisiana

The formal peacemaking processes that ended Ethiopia's civil war lacked women in those processes. This study aims to determine the effects of the failure to include women in the formal peacemaking process on gender-based violence (GBV) in Ethiopia by asking whether Ethiopia's exclusion of women in their peace-making processes perpetuated gender-based violence after conflict. This study hypothesizes that the high rates of GBV in Ethiopia during peace result from high rates of GBV during conflict, alongside the excluding women during peace-making processes. Rwanda's process after its genocide in 1994 and its path post-genocide is compared to Ethiopia's path after the civil war. Rates of GBV before, during, and after conflict for both countries are analyzed to determine how peace processes affected the status of women. A potential cause of this increase is that marriages after genocide have an unequal power dynamic, potentially resulting from fewer men being available for marriage.

3. Killing the Daughter to Save the Mother: Russia's Neglect of Domestic Violence Survivors

Presenter: Catherine Collette

Research Advisor: Dr. Amanda Donahoe

Political Science, Centenary College of Louisiana

Russia has a domestic violence crisis due to past legislation that legalized abuse that does not result in serious injury. This legislation reflects both cultural beliefs around women's role in society and Vladimir Putin's emphasis of the Russian Orthodox Church's traditional values. This paper looks at testimonies of domestic violence survivors, Russian legislation, statistics on gender equality, and reports of sexual violence in Ukraine. These sources show that there is a widely held acceptance of domestic violence, so there is a lack of legal support and protection for domestic violence survivors. Russia has silenced women's rights advocates with imprisonment. This acceptance of violence towards women has also led to the use of genocidal rape in Ukraine. The prioritization of Russian traditional values has created insecurity both inside and outside the state.

4. The Reimagining of Pornography in the AI Era: A Study of the Rapid Production and Rapid Reproduction in Social Media

Presenter: Chana Williams

Research Advisor: Dr. Amanda Donahoe and Dr. Adam Golob

Political Science, Centenary College of Louisiana

The rapid advancement of artificial intelligence in a vast media landscape has contributed to the violations of women and children through intimate image abuse. People hidden behind the internet are able to use pictures and videos from social media or monetary platforms, like only fans to create and produce intimate images of women and children through ai. Legal prosecution has yet to catch up to the amount of content being spread and its intent of use. This project examines how tools such as deepfake generation, declothing applications, algorithmic content distribution, and social media are accelerating the production and reproduction of sexualized media while eroding consent and legal accountability.

2D – 9:30-10:50 – Social Science Panel (Jackson 304)

1. Engaging Classroom Activities and Their Impact on Chronic Absenteeism

Presenter: Clayton Sawyer

Research Advisor: Dr. Terrie Johnson

Education, Centenary College of Louisiana

Chronic absenteeism negatively affects all students, even those who regularly attend school. The goal of this study is to determine whether or not intentionally designed classroom activities encourage students to attend school and decrease absences.

2. Action Research: Effective Transitions in Elementary School Classrooms

Presenters: Sarina Gordon & Abigail Hodgson

Research Advisor: Dr. Terrie Johnson

Education, Centenary College of Louisiana

This research examines how effectively teachers transition from closing one classroom activity to beginning another and how these transitions impact the overall learning environment. The study focuses on analyzing our own teaching practices to determine how smoothly ending and starting activities maximizes instructional time. Through observation and reflection on our personal transition strategies, the research aims to identify practices that promote efficiency, reduce disruptions, and maintain a structured classroom routine. Ultimately, this study explores how intentional and effective transitions between activities can strengthen classroom management and provide maximum instructional time.

3. Centenary College Student Managed Investment Fund 2025 Results

Presenters: Daniel Lewis, Ethan Hewett, James Jackson, Hayden McConnell, Philip Pugh, Ubaldo Ayala, & Nina Guerrero

Research Advisor: Dr. Barbara Davis

Business/Finance/Economics, Centenary College of Louisiana

The purpose of the Student Managed Investment Fund is to facilitate the academic objective of teaching theory and practice of managing long-term investment portfolios with annual spending objectives through a real-world environment. The SMIF began operations on April 23, 2004 with an initial contribution of \$100,000. Since inception, there have been \$166,081, tax deductible, contributions, \$143,564 investment policy directed distributions to Centenary College, and \$25,000 of funds have been invested with EAP's NLAF 2 and 3. As of December 31, 2025, the ending market value was \$261,127 and the dollar gain since inception has been \$263,610. Since the beginning of operations, the annual compound rate of return has been 7.20% and SMIF blended benchmark return has been 7.91%. Student presenters will focus on the 2025 returns for the asset classes of the portfolio. Comparisons of the actual returns to the designated benchmarks will be made and explained.

3A – 1-2:20 – Humanities Panel (Whited)**1. Physical Disability in Children’s Literature**

Presenter: Mary Catherine Wellman

Research Advisor: Dr. Bellee Jones-Pierce

English, Centenary College of Louisiana

Disability is significantly underrepresented throughout all forms of media. This project aims to bring awareness to this through showcasing how physical disability is portrayed in children’s literature. It covers how portrayal of physical disability has evolved over time, how past representations have been harmful, and how disability can be represented in a positive way for children.

2. The Change: Virginia Woolf, Menopause, the Body, and the Modernist Aesthetic

Presenter: A.D. Kimmey

Research Advisor: Dr. Bellee Jones-Pierce

English, Centenary College of Louisiana

In Mrs. Dalloway, Virginia Woolf notably explores the gendered nature of aging through Clarissa Dalloway’s concerns about menopause, her body, and how she is perceived by others. While much of the scholarship on this subject agrees that Woolf’s commentary is dependent on her position as a feminist and activist in the early twentieth century, they often do not consider her positionality as being both gendered and medicalized. This project seeks to fill that gap by analyzing Mrs. Dalloway and “Mrs. Dalloway in Bond Street” alongside On Being Ill to show how Woolf relates menopause to illness as a cultural response and how her gendered, medicalized positionality informs her modernist aesthetic.

3. The Metamorphosis, Biopolitics, and Eugenic Modernity

Presenter: Braydon Gaston

Research Advisor: Dr. Bellee Jones-Pierce

English, Centenary College of Louisiana

The Metamorphosis by Franz Kafka is deeply emblematic of the industrialized Modern world. The text contains within it a fundamental critique of the bureaucratic, capitalist nature of modernity as well as its implications for the ill and disabled. The text shows the biopolitical nature of modernity through the treatment of Gregor Samsa as he moves from the position of breadwinner to someone who needs caretaking. The text has a ghastly conclusion that makes clear that the Modern world is fundamentally eugenic as Gregor is subjected to biopolitical violence from his family and others.

4. From Sound to Stanza: Symphonic Structure Reimagined as a Heroic Crown

Presenter: Kaylee Roberts

Research Advisor: Dr. Chrissy Martin

English, Centenary College of Louisiana

“The Dissolution of the Union,” participates in the ekphrastic tradition by engaging directly with Edvard Grieg’s Symphonic Dances, Op. 64 (1897). Drawing from theories of musical meaning, synthetic perception, historicism, ekphrasis, and the sonnets poetic form, the collection shows the Dissolution of the Union between Norway and Sweden. Through the formal constraint of the heroic crown of sonnets, the manuscript enacts musical recurrence, tension, and resolution, ultimately constructing a mythic narrative of political unrest and emergence that parallels both the symphonic structure of Grieg’s work and Norway’s historical dissolution from Sweden. In this way, the project intervenes in an area ekphrasis scholars tend to neglect. Through this manuscript, I not only argue that ekphrasis can prioritize time and sound, not just visual art, but poetry can meaningfully respond to music by embodying its emotional, rhythmic, and political structures, rather than just attempting to describe sound itself.

3B – 1-2:20 – Social Science Panel (Mickle 114)

1. The "AI Label" Effect on Aesthetic Perception

Presenters: Marta Bohaichuk, Teagan Hayes, Brooklyn Howard, Feven Kidanu, & Henry Pudwill

Research Advisor: Dr. Jessica Alexander

Psychology, Centenary College of Louisiana

The purpose of this research is to determine if the aesthetic appeal of an image differs when it is labeled as “AI-generated” or “Human-made.” Grounded in theories related to top-down processing, this study examines how expectations influence perception. It specifically seeks to determine whether the aesthetic appeal of an image differs based on labeling, regardless of the image’s actual origin. Participants will view a total of 20 images across five categories: animals, humans, nature, food, and artwork. Within each category, there will be four different conditions structured in a 2 x 2 factorial design. Participants will then rate each image with respect to its aesthetic attractiveness. The research hypothesis suggests that images labeled as “AI-generated” will have lower ratings compared to those labeled as “Human-made,” regardless of their origin. Ultimately, this study aims to further demonstrate the impact of cognitive bias on perceptions of beauty in an increasingly AI-saturated world.

2. The "Warmth" of Sound: Timbre and Temperature

Presenters: Tyler Brents, Lydell Hunter, Riley Myers, & Cecilia Paredes

Research Advisor: Dr. Jessica Alexander

Psychology, Centenary College of Louisiana

In recent years, the exploration of cross-modal correspondences has been of great interest, with correspondences being found between visual, auditory, and tactile stimuli. One area within this research that is understudied is the associations between the auditory system and the tactile ones. Specifically, our research is investigating the cross-modal associations between timbre and perceived temperature. We found psychology students at Centenary College of Louisiana to participate in our study. In our study, the participants were presented with different instruments in the brass, woodwind, and strings categories, controlling for notes and octave. They were given a survey afterwards and were asked to rate the perceived temperature on a scale of 1-5 (1=cold, 2=cool, 3=neutral/room temperature, 4=warm, 5=hot).

3. The "Weapon Focus" Effect in Simple Scenes

Presenters: Tyler Brents, Lydell Hunter, Riley Myers, & Cecilia Paredes

Research Advisor: Dr. Jessica Alexander

Psychology, Centenary College of Louisiana

To see how the “weapon focus” effect takes a toll on perception of a chaotic robbery scene we will be showing videos or pictures of two kinds of robberies. One of the robberies will take place with no weapon to be seen by the viewer the other robbery will have a deadly weapon present in the image or video. There will be two different groups one group viewing each kind of robbery. Both groups will then be tested on the other things they could remember perceiving about the scene. These questions will vary in difficulty to properly gauge level of perception that took place with and without the weapon. Starting off with things as simple as what objects were there and progressing to specific details such as placement or color of objects in the scene. Our hypothesis is that the people viewing the robbery with the weapon present in the scene will be able to answer less questions about the placement of other objects in the scene than the other groups. The independent variable would be the group viewing the robbery with the weapon

4. The Uncanny Valley in AI-Generated Hands and Faces

Presenters: Tyler Bullard, Baleigh Hardman, & Trinity Thomas

Research Advisor: Dr. Jessica Alexander

Psychology, Centenary College of Louisiana

The Uncanny Valley response arises from looking or viewing something that is meant to be human, but it is not quite for whatever reason or another. This response is elicited with AI images because the way that AI tends to

make humans and faces tends to lack well a human element, that is to say variation and or imperfection in a natural way. We will be testing how much of this response is invoked by AI imagery after first allowing the test subjects to determine if the images are AI or natural. Following this they will rate the AI images on a creepiness scale in terms of how creepy it is that it looks so real on a scale of 1-10. So as to have some variation, there were images of both faces and hands in part to see if the effect is magnified when it comes to faces as opposed to something like hands.

3C – 1-2:20 – Social Science Panel (Kilpatrick)

Panel Title: Polarization, Media, & Influence on Policy

1. Partisan Alignment on the Bench: Examining Polarization in the U.S. Supreme Court

Presenter: Sarah Crenshaw

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

This research investigates polarization within the Supreme Court by examining whether the justices' decisions in the past years have become increasingly aligned with the political party of the president who appointed them. This study examines academic articles and documentation of Supreme Court decisions. Previous research indicates that the decisions made by the U.S. Supreme Court justices are based on their ideology and the political party affiliation of the president who appointed the justice. Political polarization on a larger scale, in the US, has also led to increased focus and attention on the partisan alignment within the Supreme Court which, in turn, impacts public perception and the Court's legitimacy. This study is important because the perceived polarization within the Supreme Court shapes public perception and confidence in the United States judiciary.

2. The Impacts of Increased Polarization on the Legislative Practices of Congress

Presenter: Clay Lewandowski

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

Political partisan polarization has been a recurring issue in the United States since the inception of political parties. However, prior to the 1970s, party members still found ways to cut across lines to discuss common goals to fix issues around the nation. Now, however, party loyalty has risen, and legislators tend to vote solely with their party, rather than their personal politics. To work around this issue, legislators have taken to regularly adopting a measure that is usually seen as unorthodox in Congress legislation: Omnibus bills. A thorough literature review of pre-existing research suggests that party polarization has reached such a level that legislators are forced to use unorthodox methods to achieve political goals and pass their policies. Phase two of this project will analyze the current amount and types of legislation passed in the United States government through investigation of the bills Congress has passed from 2016 to 2026.

3. Trial by Media: Media Influence and the Integrity of the Judicial Process

Presenter: Sydney Welch

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

“Trial by media” is the phenomenon in which media coverage, such as news broadcasts, printed journalism, and social media, may influence or manipulate the public perception of criminal cases and the judicial process. This typically occurs before a verdict has been reached and involves the media constructing narratives surrounding the case that can affect juror bias, public opinion, and the perception of legal legitimacy. This is particularly noticeable in high-profile cases, like those of Casey Anthony, or cases involving high-profile figures, such as O.J. Simpson. Another facet of this phenomenon comes from documentaries or television shows, like “Law and Order,” which can corrupt potential jurors' perceptions of real judicial proceedings and create prejudicial bias. This research is designed to determine whether trial by media has had any impact on the Northern Louisiana area, as well as whether lesser-profile cases are also affected by this phenomenon but have not been studied.

4. Political Polarization and Partisan social media during U.S. Presidential transitions: Joseph Biden through Donald J. Trump (2020-2025)

Presenter: Nevaeh Briscoe

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

This study explores the U.S. Presidential timeline between 2020 to 2025 on voters' perceptions of election legitimacy constructed by political polarization and partisan social media. Political polarization is growing tremendously amongst groups with unbalanced perspectives. The political issue under analysis is investigating political polarization and exposure to partisan content through social media and how it affects perceptions of election legitimacy. This study includes two phases. Phase one concludes prior research, capturing emotional rhetoric impact on the public that stems from comparative studies of Trump's and Biden's usage on the social media platform X (formally known as Twitter). Phase two will use a timeline content analysis to demonstrate longitudinal data relationship with an emphasis on the "sleeper effect" and identity-based networks. Themes include parties indulging in partisan content during 2020 through 2025 and voters being left with effects of trauma, electoral process skepticism, and fear within voters, reducing their political participation.

5. Social Media and Politics: 2024 Election –

Presenter: Jordan Taylor

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

The rapid growth of social media has fundamentally transformed how young Americans engage with politics, particularly during the 2024 U.S. presidential election. TikTok, X, and Instagram have become primary sources of political news for voters under thirty, reshaping how they form political attitudes, access information, and participate in elections. This study examines how influencer-driven messaging, algorithmic curation, and the spread of misinformation impact youth political behavior. Drawing on existing scholarship the research highlights three key themes—the increasing reliance on social media as a news source, the role of algorithms and misinformation in shaping political perceptions, and the growing influence of content creators as political actors. The findings suggest that young voters who rely heavily on social media are more likely to experience shifts in political attitudes and turnout behavior, which highlights the complex role these platforms play in shaping democratic participation in the United States.

3D – 1-2:20 – Humanities Panel (Jackson 304)

1. Centenary's Feminist Organizations and Their Histories

Presenter: Beth Vogler

Research Advisor: Dr. Jama Grove

History, Centenary College of Louisiana

This presentation will provide an overview of the historical background for an ongoing project exploring feminist organizations at Centenary, such as the school's chapter of N.O.W. By examining these organizations and the wider cultural context they were created in, a larger conclusion about the state of college activism in the 1990s and beyond can be drawn.

2. Race and the Decline of Public Transit in Shreveport

Presenter: Jady Nourse

Research Advisor: Dr. Jama Grove

History, Centenary College of Louisiana

The primary purpose of this research project is to examine motonormativity in the United States with a focused interest on political and possibly corporate motivations. The timeline will be from the first automobile hitting the market in 1895 to the arguable cementing of car dependency in 1956 with the Interstate Highway Act. The

end of the research timeline is subject to change as more research is done, but the intent is to finish the history with the final entrenchment of motonormativity, and the Interstate Highway Act seemed the most solid point. Going further would only needlessly broaden the research and warp the original intent. Opposition following the entrenchment of motonormativity remains, for now, outside of the scope of research. Therefore, it should be planned that the research timeline is 1895-1956, with an openness to slight variation as research progresses.

3. “What Can YOU Do?”: Shreveport Women’s Political Activism in the 1970s and 1980s

Presenter: Madilyn McCrary

Research Advisor: Dr. Chad Fulwider

History, Centenary College of Louisiana

The Shreveport League of Women Voters was a women’s organization aimed at raising awareness around voting and other issues they perceived as affecting the democratic rights of citizens in Shreveport. They represent a type of feminism that has been left out of the national narrative, particularly the narrative of the failure to pass the ERA. The Shreveport League of Women Voters was a group of progressive women who loved being wives and mothers just as much as they loved fighting for the rights they believed in. This is shown through the feminine tactics they and other southern chapters of the League of Women Voters utilized in their campaign to get the ERA passed by Congress.

SESSION 4 – 2:30-3:50

4A – 2:30-3:50 – Humanities Panel (Whited)

1. Incest: Shock Horror or Decadently Designed?

Presenter: Milo Neal

Research Advisor: Dr. Ryan Doherty

Comparative Literature, Centenary College of Louisiana

A paper from Literatures in Translation comparing two texts we read in class and their themes of incest, along with other examples from outside of class. I use *Blood of the Wallsungs* by Thomas Mann, *The Lurking Fear* by H. P. Lovecraft, and other pieces of media not taken from class including the movie, *Crimson Peak*, and the game, *The Coffin of Andy and Leyley*.

The paper explores both the scientific and literary sides of incest to make the argument that incest is an inherently decadent theme because of its ties with degeneration. The paper has dedicated segments for the scientific side of incest as a degenerative theme, as well as multiple literary interpretations analyzing this theme.

2. The Ham Fat Man, Performance, and Loss of Identity in “Dave’s Neckliss”

Presenter: Sophia Cadena

Research Advisor: Dr. John Linstrom

English, Centenary College of Louisiana

During the late nineteenth century, African American author Charles Chesnutt appropriated the popular genre of the "plantation story" to subvert the derogatory racial stereotypes typical of the genre. This paper examines how “Dave’s Neckliss,” one of Chesnutt’s series of "conjure tales," does this through a reference, via the story's haunting central image, to blackface minstrel performances and the song "The Ham-fat Man." This reference has not previously been recognized in Chesnutt scholarship. As the protagonist, the enslaved man Dave, experiences a psychological breakdown and imagines himself turning into a ham, Chesnutt plays on the grotesque performativity of the minstrel as "hamfatter" to illustrate the erasure of Dave’s identity under slavery. My research reveals the depth of the story's engagement with contemporary performance and how, for Chesnutt, the forced performances of slavery were central to the institution's horrific violence.

3. The Fear Within Decay: Defining Decadence Through Horror

Presenter: Alyxandra Murov

Research Advisor: Dr. Ryan Doherty

English, Centenary College of Louisiana

In my talk, I will discuss two short stories titled "The Lurking Fear" by H.P. Lovecraft and "Pour Out Thy Wrath" by Lamed Shapiro and draw connections between the genres of decadence and horror displayed between them. Specifically, I will anchor my points in the use of the uncanny valley effect as defined by Sigmund Freud and the subgenre of body horror seen within the two works. In narrowing my focus to these elements of the larger horror category I can show more efficiently with specific examples how the authors unsettle the audience and create horrific circumstances. I am arguing that decadent literature actually exists under the horror umbrella. In the tradition of decadence, the subject matter is often dark and depressing. It aims to pull the most evil, shameful sides of humanity into the forefront and turn a critical eye onto those parts of ourselves and our society we would rather ignore. This is done in a specific way that captures that same feeling as when you read horror. It is uncomfortable, off-putting, and it elicits fear. To create an environment for forced confrontation of what is so often buried is horrific to experience. That is the key to understanding decadence despite its tendency to escape a defined understanding. It is a complex genre that aims at exposing our destructive habits, warning us that if we ignore them, we are headed towards an apocalyptic world.

4. Jack London: A Modern Earl of Oxford, What Does it Mean to "Create"

Presenter: Rhys Deupree

Research Advisor: Dr. Jefferson Hendricks

English, Centenary College of Louisiana

Jack London was a prolific writer throughout the early and mid-20th centuries, travelling, challenging norms, and breaking rules in the creative industry in a way that many considered to be taboo. He was often known to have a fascination with his doubles. He would often seek them out to buy their plots given that he was more suited for writing into plots than building them. When he could not find inspiration from his own journalism. One of these people was Sinclair Lewis who later became the first American Nobel Laureate in Literature. Lewis sold London a variety of plots that he later wrote into stories such as A Thousand Deaths and later the novel The Sea Wolf. What is true authorial integrity and how can it be tracked?

4B – 2:30-3:30 – Social Science Panel (Mickle 114)

1. Gendered Fragrances: Social Sight and Biological Scent

Presenter: Lauren Holley

Research Advisor: Dr. Michelle Wolkomir

Sociology, Centenary College of Louisiana

In 2026, the fragrance market was valued at 82.38 billion dollars, highlighting how common fragrance consumption is in contemporary society (Mordor Intelligence). Through advertising, corporations link fragrance to traditional (and heterosexual) gendered meanings. Masculinity is framed as strong and dominant, while femininity is cast as soft, seductive, and subordinate. This industry not only commodifies and recreates traditional gendered power structures but may link these meanings to the biological response of scent. To examine this, I analyzed fragrance advertisements as social artifacts and conducted a content analysis. Findings show how these ads link fragrance to gendered meanings. Using Connell's theoretical framework, this study explains how these linkages work. Incorporating neuroscience, this study posits a possible scenario in which the lived bodily experience of socially constructed gender might impact the biology of brain pathways. This exploratory work's purpose is to open a new angle on the enduring "nature vs. nurture" debate.

2. Transmisogyny: How the Fetishization of Transgender Women Reinforces Hegemonic Masculinity

Presenter: Sarah Martin

Research Advisor: Dr. Michelle Wolkomir

Sociology, Centenary College of Louisiana

Contemporary academia has struggled over the past decades to keep up with the increasing visibility of transgender individuals in society. As such, while there is scholarship on the fetishization of transgender individuals, there is insufficient research on the exact ways the fetishization of transgender individuals occurs, specifically in regards to transgender women. By analyzing social artifacts and testimonies of the lived experiences of trans women utilizing a mixed approach of both conflict theory and symbolic interactionism, I propose that we can understand the fetishization of transgender women as a process of demonization through developing what I refer to as a “veil of malice” that progresses to fetishization. This fetishization serves to reinforce already existing hermeneutical injustice which serves to reinforce hegemonic Eurocentric heteronormative masculinity as an ideology.

3. The Social Contract and Its Discontents: Blackness, Gender, and Slavery

Presenter: Braydon Gaston

Research Advisor: Dr. Michelle Wolkomir

Sociology, Centenary College of Louisiana

Civil Society is fundamentally structured via an antagonism between the Citizen and Blackness. This is made evident by social contract theory which necessarily places Black people in the position of Other as they are placed into the pre-political state of nature. This antagonism is at its most violent in the Transatlantic Slave Trade, however, Black people remain in the ontological position of the slave as they are forced to reckon with the afterlives of slavery. This has massive implications for all gendered racial analysis as it raises questions about the fundamental sexual violability of the Black subject as well as about the impossibility of the Black subject

4C – 2:30-3:30 – Social Science Panel (Kilpatrick)

Panel Title: Narratives, Rhetoric, Stories: Their Impact on Power

1. Women’s Impact on Healthcare Policies in Northern Ireland

Presenter: Amber Shaw

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

In recent decades, more women have been elected to legislatures around the world, which raises the question: does electing more women lead to different policy priorities? Scholars posit that women legislators are more likely to focus on social issues such as healthcare, family policy, and social welfare; others argue that party politics and political institutions may limit how much influence individual legislators have. Since the creation of the Northern Ireland Assembly in 1998, the number of women elected has gradually increased whilst healthcare has remained one of the most important political issues in the region. This study examines whether increasing female representation affects healthcare policy priorities in Northern Ireland. This document review analyzes legislative debates, bill sponsorship, and policy discussions related to women legislators and their impact on healthcare policies. The study focused on themes of reproductive health, maternal services, mental health, and community healthcare.

2. Policing Political Moments: The Behavior of ICE During 2026 Raids Compared to Police Behavior During 2020 Black Lives Matter Protests

Presenter: Kylee DeVore

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

This study seeks to research and potentially unearth a problem of unfettered behavior from “law enforcement” individuals in politically polarizing times. The methodology includes researching academic and news articles

during the 2020 BLM protests and comparing police behavior to that of ICE during the 2026 raids through news articles. At this phase of the research, early analysis is that both the 2020 BLM protests and the 2026 ICE raids in Minnesota have involved the use of aggressive enforcement tactics, including tear gas, pepper spray, physical force and other militarized policing strategies. Comparison indicates that justification and oversight of these actions differ, with local police responses to protests framed as crowd control and public order enforcement, while ICE operations are justified through the federal government using immigration authority. These findings suggest broader patterns in the expansion of coercive state power, highlighting differences in accountability structures between local and federal law enforcement.

3. What Are We to Do? Exploring the Intersection of Gendered Identity Work and Political Narrative Among Evangelical Christians

Presenter: Lauren Holley

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

Income and wealth inequalities in the United States have increased dramatically in recent decades, and these disparities continue to accelerate. One striking feature of contemporary U.S. society is the strong and consistent support of white evangelical Christians for Trump, despite economic challenges and rhetoric that often conflicts with traditional Christian values. This research examines how gender influences perceptions of the 2024 presidential election and policy changes implemented since Trump took office. Specifically, it explores how conservative, white, evangelical Christian men and women in northwest Louisiana report their experiences, perception, and feelings about Trump and his public policies, focusing on identity and emotion work within political narratives. Preliminary findings suggest support is shaped less by policy preferences than identity, emotion, and moral narratives, including perceived cultural threat and the fusion of religious and partisan identity.

4. Religion in Guatemala: How Different Christianity Denominations Has Affected the Political Landscape in Guatemala

Presenter: Gibson Harvill

Research Advisor: Dr. Adam Golob

Political Science, Centenary College of Louisiana

This research examines how different religions influence political participation and policy preferences in Guatemala. In recent decades, Evangelical Protestant and Pentecostal churches have grown rapidly alongside the historically dominant Catholic Church. During the Guatemalan Civil War, Evangelical movements expanded, while Catholic groups, especially those influenced by liberation theology, became active in social justice and community organizing. Religion shapes values, social networks, and civic engagement, affecting political participation and policy preferences.

This study argues that religious affiliation influences political behavior through church organization, teachings, and community ties. Using a comparative politics approach, it finds that many Protestants—especially Pentecostals—emphasize personal conversion and conservative social values, while Catholics often align with community development and Christian democratic ideals. These differences highlight religion’s continued role in shaping political participation and democratic development.

4D – 2:30-3:50 – Humanities Panel (Jackson 304)

Designing for Impact: Student Identity and Advertising Campaigns

1. Nehemiah Brown
2. A.D. Kimmey
3. Sofia Poliakova
4. Bryce Stephens

This presentation highlights student work from COMM 451: Multimedia Campaign, in which advanced undergraduate designers create comprehensive visual identities and integrated, cross-platform advertising campaigns for local clients. Each project is grounded in strategic research, including analysis of client goals, target audiences, and market context.

Students chose organizations such as Stage Center, Sound Minds, the Shreveport Railroad Museum, and Sci-Port for which to develop cohesive branding systems and targeted messaging across digital and print media. Emphasis is placed on aligning creative execution with research-driven insights to produce effective, audience-centered campaigns.

The presentation showcases both final campaign deliverables and the processes behind them, demonstrating how experiential, client-based learning equips students with the skills and strategic thinking necessary for contemporary communication design practice.

Poster Presentations – SESSION 1P - 1:00-2:30

1. An Inexpensive Schlieren Setup for Everyday Use

Presenter: Hunter Hedges

Research Advisor: Dr. David Kordahl

Physics, Centenary College of Louisiana

Schlieren imaging employs a concave mirror, a point light source, a camera, and a knife edge to visualize otherwise invisible density and temperature gradients in fluids. The goal of this project is to evaluate the practicality and affordability of this imaging process by constructing a Schlieren imaging system from 3D-printed and prefabricated components. These systems can be used to visualize phenomena such as hot air rising from a heated liquid or cold gas released from a pressurized can.

2. The Effects of Mortality and Birth Rates of *Hippocampus whitei*

Presenter: Ayla Purdy

Research Advisor: Dr. Scott Chirhart

Biology, Centenary College of Louisiana

This project explores the birth and mortality rates of *Hippocampus whitei*, commonly known as white seahorses, examining how these factors influence their survival and longevity into adulthood. It also investigates strategies and environmental conditions that can enhance the survival and thriving of seahorse juveniles, aiming to support healthier populations and promote the flourishing of these remarkable marine creatures from their earliest stages of life.

3. Measuring Boltzmann's Constant Using Video Microscopy of Brownian Motion

Presenter: Jasmine Jones

Research Advisor: Dr. David Kordahl

Physics, Centenary College of Louisiana

Brownian motion is the random motion of microscopic particles suspended in a fluid. By observing and quantifying this motion using video microscopy, Boltzmann's constant can be experimentally determined. In this project, the Brownian motion of 1 μm polystyrene spheres suspended in water was analyzed by extracting particle positions as a function of time using automated tracking techniques. From these trajectories, the mean squared displacement was calculated and plotted versus time. The slope of this relationship was then used to determine a value for Boltzmann's constant. This experiment demonstrates that quantitative

measurements of Brownian motion provide a direct method for experimentally determining fundamental physical constants.

4. Basaltic Geochemistry in Kimberly Corehole, Central Snake River Plain, Idaho: Evidence for Magmatic Recharge, Fractional Crystallization, and Assimilation

Presenters: Matia Adkins, Vernon Batchelor, Amy Foret, Katerina Jacobsen, & Dylan Phillips

Research Advisor: Dr. Scott Vetter

Geology, Centenary College of Louisiana

This study examines basaltic eruptions from the Central Snake River Plain (CSRP) using data from the 1,958 m Kimberly corehole. The Kimberly corehole provides an important subsurface record of basaltic volcanism and contributes to understanding the magmatic processes that control basalt eruption and evolution within the CSRP. Three basaltic horizons have been identified within the upper 370 meters of the core. Everything below 370 m within the corehole horizons is composed of rhyolitic rock and sediment layers. Samples were analyzed for both whole rock major and trace elements. Geochemical data indicates that these basalt flows consist of olivine and feldspar. By examining the geochemistry with depth, it indicates several periods of crystallization separated by periods of recharge. When we apply an assimilation-fractional crystallization (AFC) model, it supports the seen variation in trace elements and the assimilation of mid-crustal gabbroic sills. Data suggests that these samples have undergone AFC.

5. The Influence of Lifestyle and Genetics on Vitamin Metabolism: How Do Macronutrients, Exercise, and Melanin Impact Vitamin D Efficacy?

Presenter: Kennadi St. Clair

Research Advisor: Dr. Ellyn Evans

Biology, Centenary College of Louisiana

Vitamin D₃ is vital for calcium and phosphorus absorption, which are both essential for maintaining bone strength. Vitamin D absorption can increase by more than 50% when supplements are taken with food compared to when they are taken on an empty stomach. The type of fat consumed also plays an important role as monounsaturated fats are associated with higher vitamin D levels, whereas polyunsaturated fats are associated with lower levels. This research will explore how lifestyle practices such as diet, exercise, and stress levels impact vitamin D absorption vs. storage. Our hypothesis is that individuals who are clinically obese and/or eat a diet high in simple carbohydrates/unhealthy fats will have lower serum vitamin D levels. Such research will allow us to explore how lifestyle practices influence the solubility, metabolism, and efficacy of fat-soluble over-the-counter vitamins, particularly vitamin D. Finally, we will also examine the impact of ethnic variability, drug distribution, and additional clinical implications related to vitamin D metabolism.

6. DYRK is an Important Factor in HSV-1 Replication

Presenter: Jolie England

Research Advisors:

Dr. Jarret Richardson, Department of Biology, Centenary College of Louisiana; Oluwamuyiwa T. Amusan, & Hongyan Guo, Department of Microbiology and Immunology, Louisiana State University Health Sciences Center Shreveport

Dual-specificity tyrosine phosphorylation-regulated kinase 1 (DYRK1) is a protein kinase that regulates cellular processes such as proliferation and differentiation. While the function of this protein has been explored in cancer and neurological defects, the role of DYRK1 during replication or lifecycle of herpes simplex virus (HSV-1), a neurotropic virus, has been relatively unexplored. To investigate this, we infected two different cell lines with WT HSV-1 (F strain), in the presence/absence of AZ191, a drug that inhibits DYRK1. We harvested the viruses at different time points and then measured the replicative viral particles using the plaque assay. Our results showed that the inhibition of DYRK1 decreases the overall replication of HSV-1 at both low and high MOIs. We also found, through western blotting, that at 48 hours, the late phase viral protein VP16 production is decreased in the presence of AZ191, further indicating that the inhibition of DYRK1 is suppressing HSV-1's ability to express genes coding for structural proteins necessary to complete the replication cycle of the virus.

Future studies will investigate whether this effect is due to the activity of DYRK1A or DYRK1B alone, or if both isoforms are necessary, and what stage(s) of replication are impacted by the absence of DYRK1.

7. The Impact of Practice Disruptions Due to Academics on Student-Athletes' Mental Health and Sport Engagement

Presenter: Kane Broussard & Hilary Pillaro

Research Advisor: Professor Taylor Jeans

Kinesiology, Centenary College of Louisiana

It is well known that practice is crucial to an athlete's performance; however, limited research has examined what happens when student-athletes must give up practice time for academic purposes. The purpose of this survey study was to examine how academically related practice disruptions influence student-athletes' mental health, including stress, guilt, confidence, and perceptions of support, within Centenary College of Louisiana's athletic program. Approximately 30 current Centenary student-athletes (20 female, 12 male) completed an anonymous online survey assessing both anticipated and actual emotional responses to missing practice for academic reasons. Likert-scale items measured stress, guilt, perceived opportunity loss, confidence, teammate perception, and coach understanding, and chi-square analyses were conducted to evaluate whether these responses differed by gender. Two variables demonstrated statistically significant gender differences. Female athletes were more likely than male athletes to believe their coach would be understanding if they had to miss practice or were understanding when they had to miss practice. However, further research with larger and more diverse samples is recommended to explore how coach support influences athlete mental health and the balance between academics and athletics.

8. The Influence of Prior Musculoskeletal Injury on Exercise Behavior and Confidence in College Students

Presenter: J'Anna Sweat, Jalen Brown, Libby Guidry, & Cameron Randolph

Research Advisor: Professor Taylor Jeans

Kinesiology, Centenary College of Louisiana

This study examined how prior musculoskeletal injuries influence exercise behavior and confidence among college students. Using a cross-sectional survey of approximately 30 participants, data were collected on injury history, physical activity patterns, and self-reported confidence levels. Results showed that individuals with previous injuries demonstrated differences in exercise behavior and psychological responses. Males reported significantly higher confidence in performing and intensifying exercise, as well as greater trust in their injured body part, while females reported higher levels of concern about reinjury. Additionally, more recent injuries were associated with increased caution during exercise, whereas confidence improved as more time passed since the injury. Overall, the findings suggest that musculoskeletal injuries impact both physical and psychological aspects of exercise, highlighting the importance of incorporating confidence-building strategies into rehabilitation to support long-term activity participation.

Poster Presentations – SESSION 2P - 2:45-4:00

9. Pilot Study in Collegiate Gymnasts: Effects of Ankle Taping on Balance and Center of Gravity

Presenter: Olivia Stratmann

Research Advisors and Collaborators: Dr. Scott Chirhart, Biology, Centenary College of Louisiana; Rose Deshler, Dr. Stephanie Aldret, DO, Family Medicine, Osteopathic Manipulative Medicine, and Sports Medicine; & Dr. Randy Aldret, EdD, Family Medicine and Sports Medicine, Edward Via College of Osteopathic Medicine.

This study aimed to examine the significance of ankle taping and balance in the sport of artistic gymnastics in the pre-season and post-season. The Centenary College of Louisiana Division III gymnastics team was recruited to participate in this study. Those who chose to participate completed questionnaires to provide demographic information, medical history, perception of performance, and quality of movement. Each participant then completed four 30-second balance tests, which measured the following conditions once with eyes open and once with eyes closed: standing barefoot and standing with ankles taped. The IsoBALANCE® balance plate system was used to evaluate gymnasts' Center of Gravity. Post practice, participants repeated the four 30-second balance tests. During a second visit (post-season), gymnasts repeated surveys and the four

balance tests. Significant results of this study benefited the field of sports medicine and provided insight about ankle stability in college gymnastics.

10. Characterization of Soil Bacteria Diversity and Antimicrobial Profiles: Comparing Rural vs. Urban Soil Environments in Northwest Louisiana

Presenter: Savanna Arevalo & Abigail Rinaudo

Research Advisor: Dr. Ellyn Evans

Biology, Centenary College of Louisiana

Soil bacteria represent one of the most diverse groups of living organisms on Earth and they play a crucial role in nutrient cycling, ecosystem stability, plant health, and animal health. Soil microorganisms not only impact environmental health via nutrient production and acquisition, but also by exacerbating antimicrobial resistance (AMR), a crisis we are facing in conjunction with climate change. Thus, a stronger understanding of soil microbe diversity overall, impacts of varying climates/environments, microbe-microbe, and microbe-human interactions is extremely necessary. This study focused on comparing rural vs. urban soil samples in Northwest LA (Figure 1). We hypothesized that urban soil communities will have higher diversity therefore lower antimicrobial resistance. To address our key questions, we enriched soil samples, determined CFUs for each, assessed resistance profiles to eight antibiotics, and sequenced samples via 16S V3-V4 amplicon sequencing. Future work will focus on characterizing heavy metal resistance, assessing co-resistance (antimicrobials and heavy metals), as well as biofilm formation.

11. The Campus Microbiome: Insights into Soil Bacterial Diversity from 16S V3-V4 rRNA Amplicon Sequencing

Presenter: Jayden Nguyen & Thach Chau

Research Advisor: Dr. George Tiller

Biology, Centenary College of Louisiana

Understanding soil diversity is an underappreciated aspect of global health (environmental and animal). Soil bacteria interactions directly affect soil quality through nutrient cycling via decomposition, suppression of pathogen growth, soil aggregation and water retention which improves growth conditions for plants. An increasingly important example is how soil bacteria act as reservoir for antimicrobial resistance (AMR) and heavy metal resistance (HMR), which affects humans. These examples illustrate the importance of understanding the bacterial community within our local soil. To this end, we characterized soil bacteria diversity via 16S rRNA V3-V4 sequencing, on the Centenary College of Louisiana campus (CCLA). We collected soil samples near college dormitories close to air conditioning units. We observed Acidobacteriota, Pseudomonadota, and Actinomycetota were the three most represented phyla at all sites. Additionally, we observed high diversity at each dormitory site ranging from 1,077 to 2,125 unique bacterial sequences represented between the six dormitories.

12. Rational Design of a "Soft" Topical Retinoid to Improve Tolerability while Maintaining Efficacy

Presenter: Manasi Desai

Research Advisor: Dr. Ellyn Evans

Chemistry, Centenary College of Louisiana

Retinoids are a class of biologically active compounds derived from vitamin A that are widely used as prescription topicals and cosmetic skincare. These actives work by regulating cellular processes such as epithelial cell growth, differentiation, and immune signaling. Despite their clinical effectiveness, retinoid use is often limited by the irritation and inflammation associated with the increased rate of cell turnover at the surface of the skin. Skin composition and metabolism can vary based on anatomical location of skin, age, sex, skin tone and skin conditions. Variations in anatomical site, age, and sex can result in huge variation the skin's microbiome enzymatic profile. Notably, there is a gap for retinoids that are designed with dermatological conditions kept a primary consideration. Our hypothesis is that modifying the structure of retinoids using metabolically labile functional groups will enable localized activity within the skin, followed by controlled

enzymatic deactivation into safe metabolites, thus, creating a “soft drug” version of the retinoid that improves tolerability compared to currently available retinoids.

13. Novel Strategy to Reduce Exposure to Ionizing Radiation for Humeral Fracture Prediction

Presenters: Victoria Todman, Alexandra Nolen, Malcom Goldsby, Audrey Welch, Benjamin Lee, Mario Lobao, & Giovanni F. Solitro

Research Advisor: Scott Chirhart

Biology, Kinesiology, Centenary College of Louisiana

Proximal Humerus Fractures are the third most common fragility fractures in the aging population and are associated with significant complications. Osteoporosis is mostly asymptomatic and often revealed by first fragility fracture. Current screening for upper limbs is performed through DEXA and CT, with the latter being highly indicative of fracture risk but incurring extensive exposure to ionizing radiation. In our study, we aimed to determine whether a novel CT scan protocol with reduced axial exposure could provide a bone density assessment comparable to currently used protocols. The study was performed on CT scans of ten cadaveric human shoulders, extracting both clinically adopted measures and those from the novel approach. We found that the medial region with reduced axial exposure correlated with all three greater-exposed regions used in current protocols ($R^2 = 0.86$). This region is suitable for densitometric screenings and exposes the patient to lower radiation than current approaches.

14. Sleep Quality and Perceived Difficulty in Centenary College Student-Athletes

Presenters: Ahmad Garner, Jaden Braden, Paige Stowers, & Jebediah Gordon

Research Advisor: Professor Taylor Jeans

Kinesiology, Centenary College of Louisiana

Sleep deprivation is associated with impaired athletic performance in student-athletes, affecting movement efficiency, reaction time, cognitive function, and recovery. This study examined the relationship between perceived workout difficulty and sleep quality, specifically whether higher perceived training intensity influenced sleep on the night following exercise. Participants completed a PAR-Q+ screening prior to participation. A pre- and post-exercise survey design assessed perceived sleep quality and recovery, and participants were randomly assigned to one of two workout conditions. Data were analyzed using independent-samples t-tests, Pearson and Spearman correlations, and Cohen's d. Results revealed a significant positive relationship between sleep quality and perceived physical recovery, with better sleep linked to greater recovery satisfaction. This was the only statistically significant correlation observed. Participants reporting fewer than six hours of sleep demonstrated reduced mental sharpness, indicating diminished cognitive readiness. Academic workload and screen time were the most frequently reported contributors to poor sleep, more so than training or social factors. Most participants also reported that exercise reduced stress and improved sleep quality. Overall, sleep quality influenced both physical recovery and cognitive performance, while lifestyle factors limited adequate sleep. The relationship between perceived workout difficulty and sleep quality appears potentially bidirectional, offering insight for future training and recovery strategies in student-athletes.