# **SCHOLARS DAY**

# 2022

### **PROGRAM OF EVENTS**

# **SCHOLARS DAY**

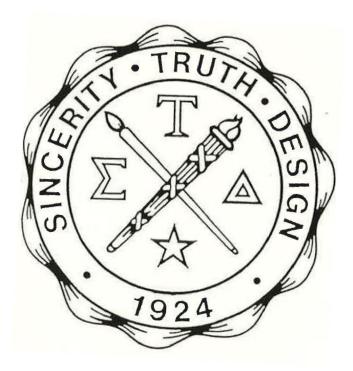
# April 27, 2022



### **PROGRAM OF EVENTS**

THE CARL GOODSON HONORS PROGRAM WELCOMES YOU TO SCHOLARS DAY

THANK YOU FOR SUPPORTING THE HARD WORK OF OUACHITA'S SCHOLARS



Sigma Tau Delta Presents

# SCOPE

#### Ouachita's Literary Magazine

Pick up a copy in Walker Conference Center!

### Table of Contents

Alpha Chi Inductions	4
Poster Presentations	
Group 1	5
Group 2	9
McBeth Recital Hall	13
Theatre Arts Showcase	16
Art Exhibit	17
Honors Theses	
Walker Conference Center A	20
Walker Conference Center C	22
Young Auditorium	24
Berry-Peeples Bible Building 126	26
Presentations	
Berry-Peeples Bible Building 126	26
Hickingbotham 200	28
McClellan Hall 204	30
Acknowledgements	32
Notes	34

# Alpha Chi Inductions

Come to the purple tent on the lawn in the middle of campus to celebrate the initiation of our students into one of the nation's top honor societies for all academic disciplines. Alpha Chi inducts juniors and seniors whose GPAs rank in the top ten percent of their respective classes.

The entire campus community and Scholars' Day guests are welcome to this brief ceremony. In the event of inclement weather, we will meet in Berry Chapel.

12:30

### **Poster Presentations**

#### Group 1

Walker Conference Center B Coleman Callan, Host 1:45-3:00

#### 1. Khennedy Brunson

Exploring Correlations Between Participation in Extracurricular Activities at the High School Level with the Likelihood of Adult Criminal Record

#### 2. Cole Edrington

Recreational Sport's Relationship to Violent Crime Rates

#### 3. Luke Falco

Is Incarceration the Best Solution to Consequent Criminal Activity in the Black Community?

#### 4. Nathan Scolaro

Connections Between Alcohol and Illegal Drug Use and Violent Crime Within the Black Community

#### 5. Perry Taylor

How Can After School Programs Lower the Crime Rate

#### 6. Kiki Youmans

Adverse Childhood Experiences (ACEs) & Violent Crime Within the Black Community

#### 7. Paul Harwood & Will Weir

Improving Military Performance of Load Bearing Exercises

#### 8. Madison Montgomery

Screening Balance of Division II Athletes

#### **9.** Johnathon Callum & Caleb Woodfield Comparison of Postural Variable in Division II

Athletes and Non-Athlete College Students

#### 10. Libby Tomlin

Comparison of Knee Flexion in Athletes and Non-Athletes

#### 11. Sarah Tuller

The statistical Analysis Comparing the Heat Index Temperatures to the Rare Football Related Heat Illnesses in Prescott, Arkansas

# 12. Jay Brumsey, Dawson Goodwin, Annika Jostad & Saba Esho

Effects of Gender Stereotyping on Learning

#### 13. Elizabeth Byrd & Bella Bevel

Perceived vs Actual Learning in Virtual and In-Person Classes

#### 14. Alex Delgado & Karigan Clay The Effect of Social Media on Self Esteem

- **15.** Taylor Langston, Kelby Cansler & Joseph Lattier Emotional Regulation by Socioeconomic Status
- 16. Lauren McCann, Natalie Helms & Mea Heard The Effect of Sadism and Racism Levels on a Person's Willingness to Harm an Innocent Victim
- 17. AubrieKate Moseley, Lacy Ornelas, Cameron Marchant & Lauren Jenkins The Effects of Personality on Chills and the Response to Live or Recorded Music

#### 18. Seth Curl

Spawn Patterns of Largemouth Bass on DeGray Regulating Lake

#### 19. Makenna Kager

New Paenibacillus Bacteria Genome Assembly

#### 20. John Peyton

Phage Discovery Research

#### 21. Franco Zuniga

Bacteriophage Infection on Different Host Bacteria

#### 22. Kaleigh Thomas

Tree Canopy Cover Influences Habitat Use of Breeding Birds at Jack Mountain Wildlife Management Area

#### 23. Grace Tidwell

Bird Diversity and Abundance in Relation to Habitat Complexity at Jack Mountain Wildlife Management Area

#### 24. Anderson Fulton

Bioinformatic Analysis of Transcription Factor ZNF16 Removal from Blood Cells

#### 25. Lauren McCann

Identification of miRNA Targets as Lung Cancer Therapeutics

#### 26. Reese Chesshir

The Effects of Light Wavelength and Gravity on *Physarum polycephalum* Growth

#### 27. Thomas Harrington

The Effects of Gibberellic Acid and Light on *Brassica rapa* Growth and Development

#### 28. Natalie Moore, Sarah Spakes, Dakota Furr, Emma Dennis, Makena Munger & Hannah Webber

Cemetery Preservation Workshop: Public History at Work

#### Group 2

Walker Conference Center B Alex Browning, Host 3:15-4:30

#### 1. Sidney Pigott

The Potential Advancement of Photodynamic Therapy Using a Novel Water-Soluble Zinc Porphyrin, ZnTPP-5AP

#### 2. Emma Rouse

The Development of a New Water-Soluble Zinc Porphyrin, ZnTTP-3AP, and Its Potential as Photodynamic Therapy Agent

#### 3. Marly Welborn

ZnTPPEA as a Potential Photosensitizer in Photodynamic Therapy

#### 4. Jimmy Castro & Bennett Hasley

Using Emitted Vibrational Frequencies to Determine Watermelon Sweetness

#### 5. Adrian Salazar-Rivera

Optimizing a Passive Tracking Solar Panel System

#### 6. Josh Spiva

Incorporating a Bioengineered Protein and a Collagen Analog into Modern Wound Dressings

#### 7. Andrew Tarlton

Alternative to Modern Wound Dressings: Developing a Biodegradable Collagen Analog

#### 8. Keren Fernandez

Monitoring the Leaching of Bisphenol-A From Panty Liners Using Fluorescence Spectrophotometry

#### 9. Keren Fernandez

Sensory Evaluation of Banana Bread Using Different Fat Substitutes

#### 10. Erica Gaddie & Keren Fernandez

The Effects of Eating Habits on the Mental Health of College Students

#### 11. Erica Gaddie

Sensory Evaluation of Black Bean Brownies Prepared with Sugar Substitutes

#### 12. Erica Gaddie

Effects of COVID-19 Lifestyle Changes on Eating Habits of Individuals and Families: Is There an Increase in Obesity and Other Health Problems?

#### 13. Gwyneth Hadasa

The Effects of COVID-19 on Childhood Obesity: A Quasi-Systematic Review

#### 14. Gwyneth Hadasa

Sensory Evaluation of Biscuits Prepared with Flour Alternatives

#### 15. Maria Urbina

Assessment of Malnutrition in Elderly Adults Implementing the Nutrition Focused Physical Exam

#### 16. Maria Urbina

Sensory Evaluation of Brownies Prepared with Different Types of Fat

#### 17. Meg Atchison

Use of Milk Alternatives in a Muffin Mix to Determine Acceptance for Lactose Intolerant Individuals

#### 18. Michelle Byers

Sensory Evaluation of Different Egg Substitutes in Pancakes

#### 19. Cannon Fisher

Sensory Evaluation on Adding Collagen Powder to Desserts.

#### 20. Tony Threadgill

Sensory Evaluation of Chocolate Chip Cookies with Egg Substitutes

#### 21. Erica Klitz & Molly Hunter

An Assessment of Energy Drink Consumption Among Students and Their Knowledge Regarding the Potential Health Implications

### 22. Allison Robertson & Blanca Rodriguez

The Comparison of Nutrition Knowledge Between Male and Female Athletes

#### 23. Alyssa Huber

The Correlation Between a Nutritious Diet and a Ouachita Baptist University Student's Academic Performance

#### 24. Ashleigh Batte & Angelica Montes

Weekly Consumption of Fruits and Vegetables Among Undergraduate Students

#### 25. Emily Garrett & Latina Robinson

Nutritional Knowledge of Faculty and Staff at Ouachita Baptist University in Comparison to the Standards of USDA

#### 26. Jessie Golden & Amanda Almand

Nutritional Knowledge of Fiber Consumption in Undergraduate Students

#### 27. Calley Maples, Rue Ragsdale & Drew Crutchfield A Combined Analysis of the Benefits of Breastfeeding for Mothers and Infants

### **Music Recital**

McBeth Recital Hall Alex Browning, Moderator 2:00 P.M.

#### **Music Program**

Clarinet Concerto No. 1, Op. 26 Lo

Louis Spohr

II. Adagio

Lane Dunman, Clarinet Kristen La Madrid, Piano

Memento

Ivan Trevino (1983-)

Chloe Spraggins, Marimba

Fantastic Dance No. 2

Dmitri Shostakovich

Jenna Barnes, Piano

**Two Little Lines** 

Drew Gasparini (1986-)

Payton Mixon, Mezzo-Soprano Susan Monroe, Piano Killer Instinct from Bring It On

Tom Kitt, Lin-Manuel Miranda and Amanda Green

Sara Kate Cole, Mezzo-Soprano Phyllis Walker, Piano

#### A Green Lowland of Pianos

Samuel Barber

Cordell Hufstedler, Tenor Susan Monroe, Piano

#### Maybe I Like It This Way

The Wild Party

Erin Bagley, Soprano Phyllis Walker, Piano

Toccata

Khachaturian (1903-1978)

Andrew Pierce, Piano

Strive to be Happy

Ivan Trevino (1983-)

Braden Crawley, Marimba

#### **Cute Boys with Short Haircuts** from **Vanities**

David Kirshenbaum

Isabella Owen, Soprano Phyllis Walker, Piano

Lost in the Brass from Band Geeks

Mark Allen, Gaby Alter and Tommy Newman

Kailey May, Mezzo-Soprano/Belter Phyllis Walker, Piano

Distance

Michael Barnes

Jonathan Sandy, Marimba

Heart of Stone from Six

Toby Marlow and Lucy Moss

Halle Jones, Mezzo-Soprano/Belter Susan McGee, Piano

#### Tango Virtuoso

Terry Escaich

#### **Ouachita Saxophone Quartet**

Craig Crawford, soprano Graham Scarborough, alto Cross Brandon, tenor Josh Sutton, baritone

# Theatre Arts Performances

#### 4:00 p.m.

April 27<sup>th</sup>, 2022 Verser Theatre

#### **Original Works:**

S\*\*\* and Joy

Kassidy Bond, Abby Burlison, Maddy Moore & Savannah Staggs

**Chaos and Joy** 

#### Eli Butler, Kinder Hinrichs, Marion Webb & Grace Woodward

#### Inside the creation of Tanglewood:

- 1. Sam Campione- On Direction, Writing & Composition
- 2. Brynlee Beams- On Scenic Design
- 3. Grace Woodward- On Costume Design (assisted by Kinsey Potts)

#### Max and Betsy's Bloomin' Perfume and Fragrance

Erin Bagley and Mac Ricks

# Art Exhibitions

# Rosemary Gossett Adams Gallery, Moses-Provine Hall 2:00 P.M.

#### **Senior Exhibitions**

Erica Dixon Cheers

Grace Avery Rogue

Emma Gregory Contemplation

Mikayla Williams Reflection

#### 2022 Student Juried Art Show Reception and Award Ceremony Sponsored by the OBU Art Club Hammons Gallery, Mabee Fine Arts 4:30 P.M.

Juried by alumnus Jared Tohlen

Maegan Royster Falling French Fries

Blooming

Lauren Bridgeman Texas Citrus

Madeline McKay Organized Chaos

**Allie Mooney** 

Triptych: Hyperactivity, Absent-Mindedness, Impulsivity

Katye Leggett Collision of Thought

Avery Womack Untitled

Emma Gregory Still Life

#### **Jill Parsons**

Hercules and Hydra The Marilyn of Bauhaus

Tehya Hinkson

Terra Infirma

#### Jozie Burson

Family Land Deer

Thomas Parsons

Pushed Perspective

#### Erica Dixon

Fall Sidewalk

#### **Kasey Dumas**

Heart of Gold Holding On

#### Sarah Dean

Girl in Shadow

#### Sabaoot Esho

Arta Givarkes Exhibit Poster Melanated Mona

# Honors Theses

#### Walker Conference Center A Alex Moore, Moderator 1:30 P.M. - 5:10 P.M.

#### 1:30 Kayla Whittington

Developing Novel Water-Soluble Porphyrins for Potential Use as Photosensitizers in Photodynamic Therapy

#### 1:50 Emma Bynum

Effects of Storage Conditions on BPA Leaching from Infant Oral Hygiene Products Using Fluorescence Spectroscopy

#### 2:10 Cori Clower

Comparative Analysis of Drug Inclusion Techniques in Nanofiber Mats

#### 2:30 Gwyneth Hadasa

Evaluation of Artificial Sweeteners: Their Effects on Ice Cream Properties and Public Acceptance

#### 2:50 Emily McMaster

Counseling for Psychosocial Stress Factors Associated with Hearing Loss

#### 3:10 Jonah Mears

A Fractal Geometry for Hydrodynamics

#### 3:30 Rylie Davis

Analyzing Viral and Host Gene Expression in *Gammaherpesviruses* 

#### 3:50 Luke Brinkerhoff

Bacteriophages: Paving the Road for the Future of Medicine

#### 4:10 Hyland Alfonso

Comparing Genetic Diversity Along Populations of Rock Sandpipers (*Calidris ptilocnemis*)

#### 4:30 Jade Dorman

Effect of Lung Carcinoma Exosomes on the Tumor Microenvironment and Characterization of Contents as Novel Therapy

#### 4:50 Dane Jester

Investigating the Impact of Enhancer Inhibition in ETO2-GLIS2 Expressing Pediatric Acute Myeloid Leukemia

#### Walker Conference Center C Kensley Flynn- Moderator 1:30 P.M. - 5:10 P.M.

#### 1:30 Josie Collins

Two Peas in a Pod? An Investigation of Friendship and Personality Perception

#### 1:50 Allison Martin

The Effects of Parenting on the Behavior of Children with Autism: A Meta-analysis

#### 2:10 Isabella Wood

A Comparison of Stigma Levels for Individuals with Psychological Disorders and Individuals with Intellectual Disabilities

#### 2:30 Victoria Martin

A Meta-Analysis on the Differences in Neuroplasticity Between Women and Men After Traumatic Brain Injuries

#### 2:50 Hannah Herrington

An Oncoviral Analysis: Breaking Down the Genetic Mutations of Cancer Causing Viruses and How They Compare with the Genetic Mutations of the Cancer They Cause

#### 3:10 Lauren McCann

Identification of miRNA Targets as Lung Cancer Therapeutics

#### 3:30 Maddie Bailey

Next Steps: Arkansas's Journey in the Fight Against Sex Trafficking

#### 3:50 Brianna Taylor

Memory and Memoirs: A Study of the Battle of Shiloh

#### 4:10 Rachel Sansano

Monsters in Media: A textual Analysis of True Crime in Narrative Journalism

#### 4:30 Katelyn Still

The Hidden Voices: Peggy Gilbert and The International Sweethearts of Rhythm

#### 4:50 Brennan Saunders

A New Generation of the NCAA: How Two Major Rules have Changed the College Landscape

#### Young Auditorium

#### Elizabeth Phifer- Moderator 1:30 P.M. - 5:10 P.M.

#### 1:30 Anna Leicht

Teaching Music in the Age of Zoom: How to Run a Multimedia Piano Studio

#### 1:50 Sam Youmans

Grasping the Intangible: The Perseverance of Physical Music Media in a Digital World

#### 2:10 Jael Winterholter

A Biblical-Theological Analysis of the Term "Doxa" (Glory) in the New Testament

#### 2:30 Jacob Thomas

Why "Monotheistic" May Not Be the Best Description of the Old Testament

#### 2:50 Lacey Pettigrew

An Investigation of Prominent Christian Women in the Early Church

#### 3:10 Lucas McCann

The Scribe, The Prophet, and The Monk: Three Archetypes for Pursuing God through the Word of God

#### 3:30 Cora Saddler

A Bag of Marbles

#### 3:50 Elysian Majeske

Effects of Aquatic Therapy for Children with Autism

#### **4:10 Haddon Smead** Of Spies and Assassins

#### 4:30 Grace Loftin

Rock Climbing Therapy for Individuals with Disabilities

#### 4:50 Langley Leverett

Challenging White Fragility Through Black Feminish Political Poetry

### Presentations

**Berry Bible Building 126** 

Isabella Bejarano, Moderator Dr. Jerusa Carvajal, Co-Moderator (for Spanish Series) 1:30 P.M. - 5:10 P.M.

- **1:30 Emma Gregory (Honors Thesis Presentation)** The Architecture of Movement
- **1:50 Piper Fain** Glaucoma
- 2:10 Chris Bryan, Jacob Street, Grant Winger, & Noah Worley Finance Major Opportunities
- 2:30 Kayla Whittington Improving Healthcare Disparities for Hispanic Patients in the United States

#### 2:50 Karlee Kindy

Latin American Universities (The University of Buenos Aires)

#### 3:10 Breanna Watson

Venezuela y Su Situación Económica (Venezuela and Its Economic Situation)

#### 3:30 Graca Webster

New Direction in Foreign Language Learning: Leisure Learning

3:50 Jillian Jones

Sacred Spaces

#### 4:10 Kaitlyn Stoddard

An Analysis of the Arkansas Poll from 2000-2020

#### 4:30 Izzy Baughn

Factors Influencing Females and State Legislature Involvement

4:50 Hannah Smith Though I May Slip

#### **Hickingbotham 200**

Sydney Motl, Moderator 1:30 P.M. - 4:50 P.M.

#### 1:30 Jacob Bowman

The Correlation of Winning and Money-Baseball

#### 1:50 Julianna Parsons

How Baking Healed My Trauma

#### 2:10 Sara Hulse

Exercise Is Medicine

#### 2:30 Austin Crook

Kanji: Origins and Formation

#### 2:50 Andy Strauss

Mountains in the Deep: My Process For Writing a Fantasy Novel Based on Daniel

#### **3:10** Caroline Derby

Barbara Walters: Beating the Odds in Journalism

#### 3:30 Isabella Wood & Sydney Motl

Rewritten: Biblical Womanhood and the Concept of Feminism

#### 3:50 Mason Campbell

Diwali and Its Origins

#### 4:10 Jael Winterholter

The Western Wall: A Discussion of Its History and Jewish Significance

#### 4:30 Anna Kate Velasquez

Messianic Judaism

#### McClellan Hall 204

Noah Smith, Moderator 1:30-4:50

#### 1:30 Caroline Derby

An Analysis of Characteristics of Places with a High Undocumented Worker Population

#### 1:50 Kathryn Totty

Analyzing Potential Impacts of Poverty in the United States

#### 2:10 Alexis Perry

How Phage Therapy Can Combat the Antibiotic- Resistance Crisis

#### 2:30 Aiden Doss

Factors That Influence the Severity of Ebola Virus Symptoms

3:10 Olivia Nethercutt, Reece Gray, Glenna Ratcliff, & Kailey May

The Laas Geel Caves

#### 3:30 Baker Kendrick

Chronic Wasting Disease in Deer and Elk Herds in Arkansas

#### 3:50 Harry Jeffrey

Biomimetic Poly (Acrylic Acid) Fiber Scaffolds for Biomedical Applications

#### 4:10 Aubree Seibert

The Photodynamic Therapy Potential of a Novel Water-Soluble Gallium Porphyrin

#### 4:30 Reagen Neal

Exploration into a Modern Wound Healing: A Synthesis of a Biomimetic Polymer

#### 4:50 Grace Bornemeier

What an Expecting Mother Should Know

### Acknowledgements

The Carl Goodson Honors Program appreciates the following people for contributing their time, talent, and resources to Scholars Day 2022:

Dr. Ben Sells President

Dr. Stan Poole Vice President for Academic Affairs

Dr. Barbara Pemberton Director of the Carl Goodson Honors Program

> Mike Ayres & June Whitley OBU Print Shop

> Kevin Yerby Media Services Coordinator

> > Sodexo

Jonathan Hughes, Randall Quillin, and Facilities Management

Will Johnson

Patricia Fowler

Adam Wheat

Tracey Knight

Donnie Copeland

Dr. Sharon K. Hamilton

Dr. Sara Hubbard

Tammy Barnes

Stephanie Murry

The Faculty Honors Council

The Alpha Tau Honors Society Leadership and Volunteers

# Notes