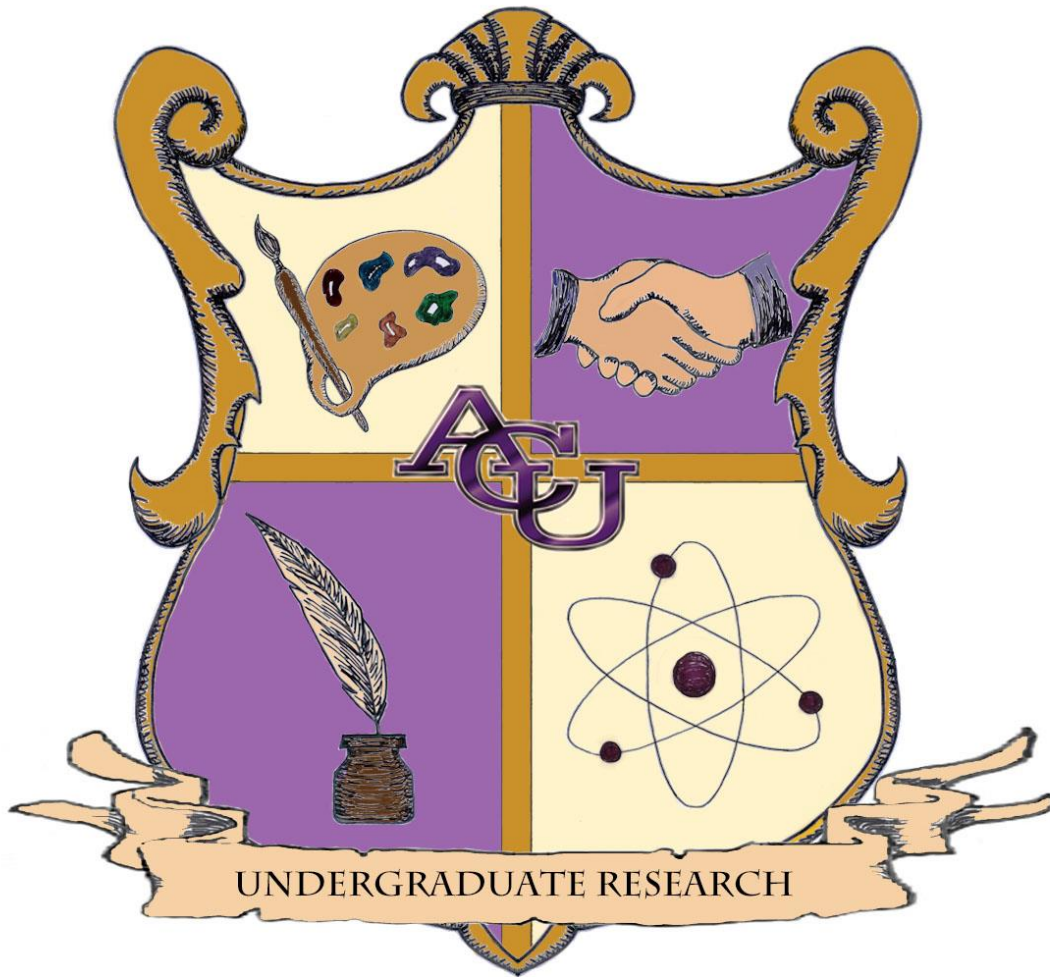


2019 ACU Undergraduate Research Festival



April 2, 2019

2019 ACU Undergraduate Research Festival

8:30 – 9:20 AM Oral Presentations

- Pop Culture and Current Events (Social Science) - Zone A McCaleb Conference Center
- Art & Design (Arts & Humanities) - Zone B McCaleb Conference Center
- Survey Says... (STEM) - Zone C McCaleb Conference Center
- Biblical Studies (Arts & Humanities) - Alumni Conference Room
- Greek Writers (Arts & Humanities) - LYNAY Classroom

9:30 – 10:50 AM Oral Presentations

- Health and Health Education (Social Science) - Zone B McCaleb Conference Center
- STEM Mix - Zone C McCaleb Conference Center
- Cancer and Disease (STEM) - Alumni Conference Room
- Literature (Arts & Humanities) - LYNAY Classroom
- Exploring Race and Ethnicity (Social Science) - ATT Theater

11:00 – 11:30 AM Chapel

LYNAY Classroom

11:40AM-1:20PM – Lunch for registered participants

McCaleb Zone C

12:00 – 12:40 PM Poster Session I

Atrium of the Hunter Welcome Center

12:45 – 1:20 PM Poster Session II

Atrium of the Hunter Welcome Center

1:30 – 2:50 PM Oral Presentations

- Communicating Ideas (Humanities) - Zone B McCaleb Conference Center
- Nuclear Physics (STEM) - Zone C McCaleb Conference Center
- International Relations (Social Science) - Alumni Conference Room
- Chemistry and Biochemistry - LYNAY Classroom
- Kids, Parents, and Older Adults (Social Science) - ATT Theater

3:00 – 4:20 PM Oral Presentations

- Biology Research - Zone B McCaleb Conference Center
- Physics Research - Zone C McCaleb Conference Center
- Students and Education (Social Science) - Alumni Conference Room
- Gender Studies (Humanities) - LYNAY Classroom

5:30 – 6:30 Awards Banquet (Pre-registration required)

McCaleb Zone C

Pop Culture and Current Events

8:30 AM - 9:20 AM

Zone A McCaleb Conference Center

Fashion as Political Rhetoric: Melania Trump's Approach to Affecting Policy in the Midst of Negative Media Coverage

Bethany Sergeant

Slavery is a Choice? Kanye West and The Impact of Social Media on a Personal Brand

Aleria Martin

Attitudes Towards Rape Myths

Laura Kate Carlock

Art & Design

8:30 AM - 9:20 AM

Zone B McCaleb Conference Center

When, Where, and Why: Experiential Elements in the Work of Pierre Bonnard, Edward Hopper, and Contemporary Relational Aesthetics

Julia Teel

Art Will Shape the World: A Series of Case Studies Examining the Intersection of Art and Design with other disciplines

Hannah Johnson

Adaptations of the Gothic Style within French Medieval Cathedrals

Maia Bell

Survey Says...

8:30 AM- 9:20 AM

Zone C McCaleb Conference Center

Examining the Business Model and Market of the Modern Gaming Industry

Steven Liu

Visit a College Virtually: A Survey of University Virtual Tours

Kolton Burkhalter

2008-2018 Environmental Audit of ACU Dorm Facilities

Kaitlyn Saucedo

Biblical Studies

8:30 AM- 9:20 AM

Alumni Conference Room

Jesus and the Lukewarm: An Exegetical Analysis on Revelation 3:16 in Miniscule 2329

Riley Stirman

New Wine in Old Wineskins: Re-vision in Victorian Revivalist Christianity

Jacob Buller

Abandoned Mother: Searching for Biblical Image of Maternity in the Christian Church
Vittoria Quintana

Greek Writers

8:30 AM- 9:20 AM

LYNAY Classroom

Stories Make the Culture: An Exploration of Ancient Greek Mythology and How it Influenced Ancient Greek Culture

Sarah Fantinel

The Historical Socrates: An Analysis of The Contemporary Sources

Aaron Peckham

Caveman of The Future: Analyzing the Use of Plato's Cave Allegory in The Dystopian Genre

Lauren Hampton

Health and Health Education

9:30 AM -10:50 AM

Zone B McCaleb Conference Center

Let's Talk About HPV: Awareness and Education of College Students Regarding Human Papillomavirus and the HPV Vaccine

Sarah Sakakeeny

Mental Illness in the Media

Elizabeth Young

The Ethical Evolution of Organ Donation

Hannah Vermillion

The Effects of Outdoor Behavioral Healthcare on the Mental Health of College Students

Kate Nettles

Public Display of Human Remains

Abigail Griffith

STEM Mix

9:30 AM- 10:50 AM

Zone C McCaleb Conference Center

Heat Exchanger Design for Advanced Liquid Fueled Molten Salt Reactor Development

Michael Arrasmith

Synthesis of Novel Capsinoids and Ester TRPV1 Agonists

Brandon Hanaway

Forward Upgrade for the STAR Experiment at Brookhaven National Laboratory

Roy Salinas

Thermodynamic Analysis of a Ternary Nitrate Salt by Differential Scanning Calorimetry

Ronald Laehn

Molten Salt Test System for Advanced Liquid Fueled Molten Salt Reactor Development
Michael Arrasmith

Cancer and Disease

9:30 AM- 10:50 AM

Alumni Conference Room

Biological Activities of Dihydroxamic Acid Derivatives in HDAC1 and HDAC8 in MDA-MB-231 and MCF-7 Breast Cancer Cells

Mark Izbrand

SIRT1 in the Progression of Castrate-Resistant Prostate Cancer

Claire Shudde

Data Analysis: The Complement System in Cancer Biology

Samuel Mulder

Disease Rating Scale Subjective and Objective Improvements After 8 Weeks of Resistance Training with Instability and/or Cadence Walking in Persons with Mild to Moderate Parkinson's Disease

Cayla Clark

Analyses, Using Computer Modeled Docking Studies, Of potential anti-cancer drugs as HDAC inhibitors

Bao Yuwei

Literature

9:30 AM- 10:50 AM

LYNAY Classroom

A Matter of The Heart

Elizabeth Wong

A Magical/Apocryphal Conception: A Canonical Analysis of The Cursed Child

Sarah Fantinel

Shakespeare's Princess Holds Her Own in Disney World

Hope Cordes

The Whale Cannot Hear the Whaler: Chaos and Dramatic Form in Melville's Moby Dick

Raiden Sawyer

Exploring Race and Ethnicity

9:30 AM- 10:50 AM

ATT Theater

The Influence on a Writer: Juan Rulfo and The Existential México

Magda Rodriguez

The Influence on Spanish Within The Identity of Chicano Children: Discourse Analysis in Sandra Cisnerros, Rudolfo Anaya, Erika Sánchez, and Mario Alberto Zambrano

Magda Rodriguez
Dear White People
Summer Thompson
Future Narratives in The Goals of Refugee Children
Tori Ford
Foreign Aid in Sub-Saharan Africa: Optimizing Foreign Aid
Kane Wilson

Poster Session I

12:00 PM- 12:40 PM

Atrium

Real-Time Computer Generated Imagery With Game Engines
Lauren Mullin
Procedurally Generated Video Game Narratives
Drake Pamplin
Traditionally Untraditional: Pictorial Representation of Mexican Women's Bodies in The Early 20th Century
Brijin Hartrick
Picturing Mexico's Past Project: Team Guadalupe
Kayley McCalmont
The Impact of Program Size on Enrollment and Retention of Women in Undergraduate Engineering Programs
Olive Tuyishimire
Parentification and Future Sibling Relationships
Jacqueline Cassell
Nuremberg Trials and International Law
Emily McCarty
Providing Metacognitive Scaffolding for Interpreting Problem Prompts: A Large Scale Replication
Zachary Albrecht
Hispanic Enrollment, Retention, and Graduation Rates in Texas Post-Secondary Education
Adam Andrade
Metacognition in Novice Programmers
John Marsden
Improving Communication Through The Use of AAC Devices
Nancy Preston
Secondary Metabolite Production in Cave Isolates From Sorcerer's Cave, TX
Lucas Tobar
Reasons for Failed Linkage to Care Across Four Facilities in Lusaka, Zambia
Salome-Joelle Gass

Mammals of Southern Yunnan Province China

Jonathan Jasper

Antibiotic Resistance and of Microbes Isolated From Sorcerer's Cave, Texas Kaitlyn Santineau,
Seng Mahkaw, and Dr. Jennifer Huddleston

Kaitlyn Santineau

Pesticide Resistance in Texas Strains of Spider Mites

Ranj Lohony

Design of Ancillary Systems for a Molten Salt Test Loop

Michael Ranger

Investigation of Sand Size on Water Quality in Biosand Filter

Alyssa Borquez

Synthesis of Capsaicin and Acrylate Copolymers

Halle Raine

Implementation of Engineering Design Processes for Molten Salt Storage and Transfer Systems

Timothy Doty

Data Acquisition System for Automated Hydroponics Research

Keaton Brewster

Assessment of the Rhoden Field Laboratory for Beekeeping Purposes

Kaitlyn Saucedo

Design of an Automated Hydroponic System

Roy Salinas

*Using Flame Atomic Absorbents to Detect Corrosion of Stainless Steel 316 in a Molten Ternary
Nitrate Salt Mixture*

Lezlei Haag

Poster Session II

12:45 PM- 1:20 PM

Atrium

Picturing Mexico's Past: The Mexican Struggle for Identity During the Mexican Revolution

Keila Gabel

Los Chicanos: Complex Identity Through Artistic Expression

Gema Perez

Autism in the Third Reich: Hans Asperger and The Nazi Euthanasia Program

Grace Carriger

Innovating the Writing Process for College Students

Shelby Weddle

Religion and Sacrifice: How Colonial Spanish Society Viewed Aztec Religious Practices

Charles Monroe

*The Relationship Between Gender, Age, and Political Affiliation with Religious Commitment and
Beliefs*

Emma Tidwell
Positive Functions of Denying Marriage to LGBTQ+ Couples Within The Southern Baptist Convention

Ari Gee
Political Affiliation, Religious Beliefs, and Compassion

Jenny Foster
Don't @ me: Tracking Student Perception of Autogenerated Social Media Encouragement

Jessica Wininger
"When Objects Speak: An Action Research Approach to Establishing a CDCP of Community Practice."

Samantha Hill
What Factors Are Prevalent Among Sex Trafficking Victims in the Nation

Tsion Amare
Who is The Represent of Asia?

Hitomi Onoda
Making Sense of The Metal-Metal Bond Distances in Diosmium Sawhorse Compounds

Henry Touchton
A Survey of PCA and Phl Gene Cassettes in Sorcerer's Cave Isolates

Destiny Brokaw
Water Quality Assessment on The Cedar Creek and Anthropogenic Impact

Kendall Hydock
Habitat Use By Meso-Mammals at The Rhoden Field Lab

Ryan Cobb
Towards a Synthesis of Phorbasone A

Kotono Babaguchi
Worship Experience With Virtual Reality

Adriana Mott
Predicting Flow Rate Using Calibrated System Curves

Bethany Witemeyer
Detecting in Vivo Expression of Haloalkane Dehydrogenase for Use in a Biochemistry Lab Curriculum

Austin Parsons
Design of Gas Blanket System for Molten Salt Test Loop

Samuel Mulder
Evaluation of Use of Feral Cat Feeding Stations on the Abilene Christian University Campus

ReAnna Carpenter
Searching for Novel Antibiotics Through Combinatorial Chemistry

Carolina Ramirez & Breanna Alonzo
Are Smartphone Fitness Trackers Accurate Representations of Metabolic Activity?

HollyAnn Wells

Communicating Ideas

1:30 PM- 2:50 PM

Zone B McCaleb Conference Center

Why Suicide, Sexual Assault, and Rape Should Matter: 13 Reasons Why Rhetorical Analysis

Sahori Hernandez- Quinones

Missing the Mark: An Analysis of Sony Entertainment's Failed Image Repair

Rachel Jones

What do you meme? A look into copyright laws and its application towards internet memes

Mariana Cedillo

Reading Banned Books: An Analysis of PTSD, Mental Health, and Trauma in Catcher in the Rye and Perks of Being a Wallflower

Hattie Johnson

A History of the Flat-Earth Theory

Aaron Peckham

Nuclear Physics

1:30 PM- 2:50 PM

Zone C McCaleb Conference Center

Improving Particle Detector Signal Quality for SpinQuest

Mitchell Schneller

Redesign and Assembly of Improved Electronics for SpinQuest

Nate Rowlands

Using Machine Learning to Differentiate Signals from Background Events for SeaQuest

John Marsden

Performance Evaluation of Improved SpinQuest/E1039 Hardware

Thomas Fitch

Remodeling of E906 spectrometer to be used for E1039

Yves Ngenzi

International Relations

1:30 PM- 2:50 PM

Alumni Conference Room

The Nicaraguan Canal, China, and International Relations: Tracing the Feasibility and Implications

Hayden Howell

Israeli Security and the American Military Withdrawal from Syria

Zachary Hellen

What Do We Do About the Honduran Refugees?

McKenzie McPherson

The Advantages and Disadvantages of Contacting Isolated Tribes

Samantha McMillan

Chemistry and Biochemistry

1:30 PM- 2:50 PM

LYNAY Classroom

Chirality and Pharmaceuticals

Hanna Harris

Will More Than One Type of Diphosphine Ligand Bond to a Triosmium Molecule?

Ashley Archambeau

Synthesis of Polyneuclear Sawhorse Clusters from dodecacarbonyltriosmium(0), dodecacarbonyltriruthenium(0), and tricarboxylato ligands

Diego Zometa Paniagua

Incorporation of Hydrophobic Gadolinium Compound into Polystyrene Nanoparticles as Potential High-Relaxivity MRI Contrast Agents

Austin Parsons

Alternative Pathway for Polyurea Synthesis

Alan Ritchie

Kids, Parents, and Older Adults

1:30 PM- 2:50 PM

ATT Theater

Foster Care: How Do We as God's People Reach Out?

Heather Cannon

Determining The Appropriate Method for Connecting Elderly Communities to Music Groups?

James Melson

The Effects that Interracial Adoption Has on The Biological Children of The Adoptive Parents

Alexandria Washburn

Biology Research

3:00 PM- 4:20PM

Zone B McCaleb Conference Center

Redefining the Drake Equation: A New Approach for Astrobiology

Jackson Shoültz

A new species in Mentzelia section Bicuspidaria (Loasaceae) from Baja California Sur and Cedros Island.

Destiny Brokaw

Mammals of Quimsacocha, Azuay province, Ecuador

Seth Crockett

Molecular Mechanisms of Pesticide Resistance in Tetranychus urticae

Ranj Lohony

Ex-Situ Reintroduction of Giant Otters in South America.

Daniel Thompson

Physics Research

3:00 PM- 4:20 PM

Zone C McCaleb Conference Center

Recent Upgrades to the Time Projection Chamber for the NIFFTE collaboration

Jared Barker

Schmidt Camera to a Modern USB

Kalin Sadler

A Saturated Absorption Locking Technique Based on a Dual Frequency AOM

Benjamin Edwards

Testing and Simulations of a Cosmic Ray Test Stand

Kolby Kiesling

Development of a Cosmic Ray Stand Test for Detector Analysis

Keaton Brewster

Students and Education

3:00 PM- 4:20 PM

Alumni Conference Room

Creationism vs. Evolution: The Study of America's Epistemological Change Through Scientific Textbooks

Lyric Kinkade

Models of Resistance: Novice Teachers Negotiating Barriers to Best Practice

Jordan Arendse

What is in a Name? Bias in Academic Abstract Evaluation

Emily Studer

Saoirse, Sara, or Something Else Entirely?

Miriam Dawson

SNAP benefits on CCCU College Campuses: Christian Universities' Responses to Food insecurity

Shannon Que

Gender Studies

3:00 PM- 4:20 PM

LYNAY Classroom

Women Frozen in Snow

Daniel Garcia

Tracing the History of Queer Women in Germany: 1933-1945

Jenna Leigh Bonner

There's Nothing Gender About a Sexy Cat: A Rhetorical Analysis of Brooklyn Nine-Nine

Jenna Salzman

*The Real Housewives of Norfolk: Margaret Paston's Letters and Christine De Pizan's A
Medieval Woman's Mirror of Honor: The Treasury of the City of Ladies*

Sarah Sells