



**STEPHEN F. AUSTIN  
STATE UNIVERSITY**  
THE UNIVERSITY OF TEXAS SYSTEM  
NACOGDOCHES, TEXAS

# *SFA Undergraduate Research Conference*

**2026**



**4 TO 7 P.M. | APRIL 7**

**BAKER PATTILLO STUDENT CENTER  
THEATER AND GRAND BALLROOM**



# Schedule of Events

## Baker Pattillo Student Center Theater

- 4 p.m.** Opening announcements: Dr. Alyx Frantzen, URC Executive Committee member
- 4:10 p.m.** Presentation of awards to faculty mentor and top scholars: Dr. Jordan Barkley, provost and executive vice president for academic affairs

## Top Scholar Presentations

### **4:30-4:42 p.m. Justyn Morris**

The Effects of AI on Educational Outcomes: An Umbrella Report  
Faculty Sponsor: Dr. Kelly Noe, Nelson Rusche College of Business

### **4:42-4:54 p.m. Savannah Bunn**

Ephemeral Patterns: A Choreographic Study of "The Yellow Wallpaper"  
Faculty Sponsor: Heather Samuelson, Micky Elliott College of Fine Arts

### **4:54-5:06 p.m. William Koehler, Lena Slater, Macauley Parker, Claire Costello, Yaireth Escobedo**

Invasive Plant Effects on Habitat Use by Treefrogs for Calling Behavior  
Faculty Sponsor: Dr. Matthew Kwiatkowski  
College of Sciences and Mathematics

### **5:06-5:18 p.m. Enrique Reyes**

The Metabolic Cost of Three Different Modes of Interval Exercise Versus Continuous Running  
Faculty Sponsor: Dr. James Rowe Jr.,  
James I. Perkins College of Education

### **5:18-5:30 p.m. Camron Liston-Wallace**

Accessible Spaces vs. Usable Spaces: A Task-Based Evaluation of Campus Accessibility  
Faculty Sponsor: Dr. Andrea R. Hathcote, Tyler Junior College

### **5:30-5:42 p.m. Richard Thornton, Maximus Davis**

Rural vs. Urban Enrollment for the Departments of Agriculture, Forestry, Environmental Science and Geology at Stephen F. Austin State University From 2014 to 2024  
Faculty Sponsor: Dr. Yanli Zhang  
Arthur Temple College of Forestry and Agriculture

### **5:42-5:54 p.m. Mia Bradley**

Anti-Money Laundering Laws and Counter Terrorism: An Effective Strategy?  
Faculty Sponsor: Dr. Lee Payne, College of Liberal and Applied Arts

### **5:55 p.m. Poster Presentations of Finalists**

Grand Ballroom, refreshments served

# Faculty Mentor of the Year

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## Pamela Rogers

### *Associate Professor*

Dr. Pamela Rogers brings a rich blend of real-world experience into the classroom, with a professional background spanning inventory and quality control, corporate and military training, advertising, website design, and project management. She leverages this diverse expertise to create engaging, practical learning environments that connect theory to application, ensuring students are well-prepared for today's dynamic business landscape.

Her research interests — manufacturing, supply chain management, quality and business education — are closely aligned with her teaching philosophy, emphasizing relevance, innovation and continuous improvement in student learning. Rogers is especially passionate about experiential learning, having mentored 27 student projects since joining SFA in 2017, guiding students through hands-on experiences that build confidence, critical thinking and career readiness.

A strong advocate for student engagement and leadership development, Rogers serves as advisor for the Beta Gamma Sigma business honor society. Her dedication to teaching excellence has been widely recognized, including the AARC Bravo Award (2024), the Southwest Decision Sciences Institute Outstanding Educator Award (2023), the Rusche College of Business Outstanding Service/Experiential Learning Award (2022) and Beta Gamma Sigma Professor of the Year (2020).

In addition to her teaching and mentoring, Rogers contributes to the broader academic community as a member of several professional organizations, including the Decision Sciences Institute, and serves as co-chair of the Scholarship of Teaching and Learning Special Interest Group for DSI. Across all her roles, she remains deeply committed to fostering student success, academic excellence and meaningful, real-world learning experiences.

# Nelson Rusche College of Business Top Scholar



## Justyn Morris

### The Effects of AI on Educational Outcomes: An Umbrella Report

This report is an umbrella systematic review and meta-analysis. The purpose of this paper is to fill the gap in the literature by examining the effect size of AI in education without moderator analysis while introducing new guidance on how to perform and expand on the literature.

The author endeavors to provide qualitative information through a systematic review and quantitative information through a lengthy meta-analysis using statistical methods to arrive at a statistical conclusion. Database searches include EBSCO, ERIC, Science Direct and ProQuest, yielding 5,376 studies; an additional 482 were accessed via backward/forward citation chasing.

The author finds that the main outcomes using random effect model was pooled  $g = 0.679$ , 95% CI [0.512,0.845]  $k = 26$ ,  $I^2 = 0.155$ , and  $Q = 598.04$ , d.f. = 25,  $p < 0.001$ . Time, dependence of studies and effect size cause limitations on the control of bias and reliability. This paper is an indicator of the overall effect direction for artificial intelligence on educational outcomes.

# Micky Elliott College of Fine Arts Top Scholar

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## Savannah Bunn

### Ephemeral Patterns: A Choreographic Study of "The Yellow Wallpaper"

This project investigates how the central themes of Charlotte Perkins Gilman's "The Yellow Wallpaper" (1892) can be translated into an embodied, abstract choreographic form of research. The purpose of this study is to explore how dance can function as a method of critical analysis, using the body as a site through which literary symbolism, psychological

experience and systems of power may be examined and made visible to an audience.

The research is guided by literary analysis, feminist criticism and theories of embodiment and performance. Gilman's short story is situated within the historical context of 19th century medical practices, particularly the "rest cure," which pathologized women's mental health and reinforced patriarchal authority under the guise of care. While the project draws on feminist frameworks to examine themes of confinement, autonomy and resistance, it also critically acknowledges the ideological limitations and exclusions present in early feminist Thought.

The methodology of this project is practice-based and arts-centered. Choreographic development functioned as the primary research method, with movement generation, rehearsal and performance used to investigate psychological states and relational power dynamics described in the text. Abstract movement motifs, evolving spatial relationships and shifting group structures were employed to embody themes of confinement, hallucination, fragmentation and liberation. Reflective writing and iterative rehearsal processes supported the translation of literary analysis into embodied form.

The resulting choreographic work presents liberation as an unstable and contradictory process rather than a singular moment of resolution. Through the dancer's progressively fractured movement quality and changing relational dynamics, the choreography embodies the narrator's psychological unraveling and contested sense of autonomy. The project demonstrates that dance can serve as an interdisciplinary mode of research, offering a visceral and embodied perspective on mental health, literary interpretation and the politics of women's autonomy that complements traditional academic analysis.

# College of Sciences and Mathematics Top Scholars

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**William Koehler**



**Lena Slater**



**Macauley Parker**



**Claire Costello**

**Yaireth Escobedo**

## **Invasive Plant Effects on Habitat Use by Treefrogs for Calling Behavior**

Successful treefrog reproduction depends on suitable environmental conditions at calling sites, which influence their ability to attract mates. Human-driven habitat changes can disrupt these reproductive cues, potentially altering mating success. This project examined whether invasive tree species influence calling behavior and habitat use of native treefrogs in East Texas wetlands in urbanized and natural sites. We focused on two widespread invasive trees — Chinese Privet and Chinese Tallow — and three native treefrog species: Green, Gray and Cope's Gray. We combined recordings of calling behavior with detailed measurements of calling sites (tree species identity, structure and temperature) and frog characteristics (mass, length and temperature). By comparing tree availability with observed calling locations across multiple breeding ponds, we assessed whether frogs preferentially selected or avoided invasive tree species.

We found that treefrog and tree species varied by call sites, with natural sites having more variability than urban sites where invasive trees were more abundant. In natural sites, we found that treefrogs avoided invasive tree species, while in the urban sites, where only Cope's Gray Treefrogs were observed, we found that they readily used invasive trees for calling behavior. This research addresses a critical link between urbanization, plant invasions and treefrog reproductive behavior. Understanding how invasive vegetation alters breeding habitat quality, and affects frog species presence, can improve wetland management and restoration strategies aimed at conserving treefrog populations. Our findings help us better understand whether invasive trees merely coexist with native frogs or actively shape the reproductive landscape on which they depend.

# James I. Perkins College of Education Top Scholar



## Enrique Reyes

### The Metabolic Cost of 3 Different Modes of Interval Exercise Versus Continuous Running

Our lab has previously reported that Tabata performed with body calisthenics expends less energy when performed at the same intensity and duration as interval running and continuous running and that Excess Post-Exercise Oxygen Consumption (EPOC) and energy expenditure (EE) during recovery were similar between these 3 exercises. How EE and EPOC would respond to interval resistance exercise remains unclear. PURPOSE:

Compare the metabolic response to 4

exercise bouts when performed at a self-selected pace. METHODS: Active men (n=6) and women (n=4) performed 4 separate exercise bouts in a counterbalanced order: total body Tabata (TBT), treadmill running Tabata (TRT), continuous running (CONT) and interval resistance training (IRT).

Bouts consisted of a 10-minute rest period, 25 minutes of exercise and 25 minutes of recovery. TBT consisted of repeated cycles of body calisthenics for 20 seconds with 10 seconds of rest in between. TRT consisted of repeated sprints on a treadmill in the same manner as TBT. CONT was continuous running on a treadmill with no rest intervals. IRT was repeated cycles of resistance training using both barbell and dumbbell exercises for 30 seconds with 30 seconds of rest in between. Participants wore a portable metabolic analyzer (CosMedK-5) to assess EE, EPOC and rate of fat oxidation (RFO). Heart rate (HR) was recorded during each exercise bout. Significant differences ( $p < 0.05$ ) between bouts were determined using a one-way, repeated measures ANOVA and Bonferroni post-hoc test. RESULTS: Average HR (% of HRmax) during TBT ( $80.0 \pm 8.3\%$ ) was lower than CONT ( $87.9 \pm 8.1\%$ ) ( $p = 0.022$ ; ES = .81). Exercise EE (kcal) was lowest ( $p < 0.05$ ) in IRT ( $208.0 \pm 53.4$ ) compared to TBT ( $257.8 \pm 74.1$ ; ES = -.69), TRT ( $299.4 \pm 83.2$ ; ES = -1.3) and CONT ( $348.3 \pm 73.1$ ; ES = -2.0). Exercise EE was highest ( $p < 0.05$ ) in CONT compared to all other bouts. During the final 15 minutes of recovery, EPOC (liters/min) was significantly higher ( $p = .036$ ; ES = 1.2) with TBT ( $.86 \pm .92$ ) compared to CONT ( $-.27 \pm .80$ ) and tended to be higher ( $p = .071$ ; ES = 1.1) with IRT ( $.75 \pm .66$ ) compared to CONT. Similarly, EE (kcal) during the final 15 minutes of recovery was higher ( $p < 0.05$ ) in both TBT ( $30.3 \pm 8.3$ ; ES = .55) and IRT ( $31.4 \pm 6.8$ ; ES = .71) compared to CONT ( $26.6 \pm 6.5$ ). The participants' RFO (gmin<sup>-1</sup>) were similar ( $p > 0.05$ ) while resting prior to each exercise bout. However, when the participants' resting RFO was compared to their RFO during the final 15 minutes of recovery, the RFO during recovery was significantly higher ( $p < 0.05$ ) in both TBT ( $0.10 \pm 0.04$  vs.  $0.16 \pm 0.08$ ; ES = .95) and IRT ( $0.08 \pm 0.07$  vs.  $0.17 \pm 0.08$ ; ES = 1.16).

CONCLUSION: This study supports previous studies that have suggested the greatest rises in EPOC occur following high-intensity (HI) anaerobic exercise and weight training. Short-duration HI regimens like TBT and IRT that incorporate multiple muscle groups might elicit more energy (particularly from fat stores) to help the body recover more so than from HI regimens using fewer muscle groups. Future studies need to clarify how short-duration HI regimens could impact long-term health and performance.

# Regional Colleges Top Scholar



## Camron Liston-Wallace Accessible Spaces vs. Usable Spaces: A Task-Based Evaluation of Campus Accessibility

The purpose of this research was to determine whether campus spaces that meet Americans with Disabilities Act accessibility requirements are also usable in practice and to identify whether gaps exist between technical accessibility and daily use.

Accessibility, according to ADA.gov, is "the 2010 Standards set minimum requirements — both scoping and technical — for ... facilities ... to be readily accessible to and usable by individuals with disabilities." Usability, according to the International Organization for Standardization

(ISO), is "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use." Although the ADA definition includes "usable," actually checking for usability is not required for compliance. Individuals using mobility devices know this firsthand because being able to access the facility is different from being able to use the facility. This shows there is no checkbox for practicality. Accessibility does not equal usability.

The study included 67 participants who are students, staff, faculty and administrators at a regional community college. They completed a brief pre-survey, performed a common campus task while using a mobility device (wheelchair, walker or crutches), and completed a brief post-survey reflecting on their experience. The task involved following a campus route to high-traffic buildings and locating and using an accessible restroom within that building. After participants received standardized definitions and completing the task, results included the following:

- 31 participants (46%) rated campus usability as a major or severe issue.
- 28 participants (42%) rated navigating campus independently as a major or severe issue.
- 24 participants (36%) rated campus accessibility as a major or severe issue.
- 62 participants (93%) reported that their perception between accessibility and usability changed after their experience.

When given an emergency evacuation scenario involving the mobility device they used, 52 participants (78%) reported uncertainty about how to evacuate safely. Anecdotal comments included:

- “There is no signage indicating what to do in case of emergency or who to call.” (administrator using a walker)
- “I got stuck in the bathroom.” (student using a wheelchair)
- “The wheelchair was difficult to move in and out of doors.” (staff using a wheelchair)
- “I owe you an apology” (administrator using a wheelchair)

Although many of these spaces met technical compliance, participants frequently encountered barriers that affected their navigation and confidence in emergency procedures. The results are not atypical. The distinction of accessibility and practical usability within ADA-adjusted facilities affects many public spaces. Individuals using mobility devices should not have their independence and safety hindered by poor facility design.

# Arthur Temple College of Forestry and Agriculture Top Scholars

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## Richard Thornton and Maximus Davis

### Rural vs. Urban Enrollment for the Departments of Agriculture, Forestry, Environmental Science and Geology at Stephen F. Austin State University From 2014 to 2024

Understanding whether students originate from rural or urban areas provides insight into enrollment patterns within natural resource-focused majors. This project examines the geographic origins of students enrolled in forestry, agriculture, environmental science and Earth science majors by analyzing and mapping enrollment data from the fall semesters of 2014, 2019 and 2024.

Student zip codes from the Arthur Temple College of Forestry and Agriculture and the Department of Earth Sciences and Geologic Resources at SFA were classified according to rural or urban status and visualized by the number of students from each zip code. This showed specific spatial trends across a 10-year period.

The resulting maps and data reveal that students in these majors consistently come from rural areas at higher rates than from urban areas. This trend appears stable across all years studied, indicating a long-standing connection between rural residency and interest in natural resource disciplines.

While this is interesting, using this technique in identifying the specific school districts that most frequently send students can help improve outreach, strengthen school district partnerships and direct targeted promotional materials. This research has helped to identify 37 school districts in Texas that consistently send the most students to these programs.

# College of Liberal and Applied Arts Top Scholar

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## Mia Bradley

### Anti-Money Laundering Laws and Counter Terrorism: An Effective Strategy?

A primary goal of the “War on Terror” has been to undermine the finances of terrorist organizations, especially through Anti-Money Laundering (AML) laws. Despite the prominence of AML regulations as components of counter-terrorism strategy, there are no published academic studies that analyze the impact these laws have had on terrorist behaviors since their enactment.

For this study, I sought to answer two primary research questions. First, is there a relationship between AML laws and the number of terrorist attacks in a country? Second, is there a relationship between AML laws and the cost of weapons terrorists choose for their attacks? I hypothesized that there would be a positive relationship between both AML laws and number of attacks and AML laws and the cost of weapons.

I conducted a quantitative analysis using data collected from several databases to create multiple bivariate and multivariate Ordinary Least Squares regression models. I failed to reject the null hypotheses.

This finding could, if supported by future studies with better data, have significant ramifications for counter-terrorism policy. If there is no relationship between AML regulations and terrorist behavior, as my findings suggest, then AML regulations should be disregarded as a counter-terrorism tool.

# Nelson Rusche College of Business Finalists

## **Bridget Collier**

*Determinants of Electric Consumption for Residential Customers Across the U.S.*

Faculty Sponsor: Dr. Rebecca Davis

## **Vanessa Coronado**

*Depreciation methods and aircraft valuation*

Faculty Sponsor: Dr. Emiliano Giudici

## **Colby England**

*Gender's Role in Political Ideology: An Analysis of College Voters*

Faculty Sponsor: Dr. Hannah Wich

## **Cameron Ferguson, Eva Hampton**

*SFA Outdoor Pursuits*

Faculty Sponsor: Dr. Wenjing Li, Dr. Pamela Rogers

## **Ellie Glaeser, Britelyn Zeleskey, Jolie P. Rizzo, Linnea E. Gorman**

*Sephora Kids*

Faculty Sponsor: Dr. Wenjing Li, Dr. Pamela Rogers

## **Ella Hollis, Violet Ames, Reed M. Ogrady, En-Qi Charis Yiow**

*Nacogdoches' Impact on SFA Students*

Faculty Sponsors: Dr. Pamela Rogers, Dr. Wenjing Li

## **Eric McCulloh**

*Arbitrage Opportunities in High Frequency Trading of Cryptocurrencies*

Faculty Sponsor: Dr. Emiliano Giudici

## **Logan Pantoja, Bella Alford, Faith Long**

*Understanding Customer Loyalty and Repurchase Behavior for Summer Fridays*

Faculty Sponsors: Dr. Pamela Rogers, Dr. Wenjing Li

## **Elysa Ripley, Jason Madden, Hayden Medley, Kyle Sinopoli**

*Meta Data Practices and Consumer Trust*

Faculty Sponsors: Dr. Pamela Rogers, Dr. Wenjing Li

## **Isabel Jedmears, Jacob Crosby, Julio Espinoza, Juliana Frigo**

*AT&T: Create Change Campaign*

Faculty Sponsor: Dr. Marlene Kahla

## **Ashley Girard**

*High School Financial Literacy Coursework and Undergraduate Financial Confidence and Knowledge: Evidence from Business Students*

Faculty Sponsor: Dr. Charles Oberweiser

# **James I. Perkins College of Education Finalists**

## **Lauren Kirk**

*Prevalence of Internalizing and School Adjustment Symptoms in SFA Students Diagnosed with ADHD*

Faculty Sponsor: Dr. Luis Aguerrevere

## **Molly Scheidt, Autumn Andrusick, Megan Goodyear, Amy Fugiel**

*Title: Sex Differences in Force Production During Static and Dynamic Round-Offs in Tumblers*

Faculty Sponsor: Dr. Amber Chelette

## **Alexandria Nichols**

*Designing a Customizable Mental Health Resource in Collaboration with the Burke Center*

Faculty Sponsor: Dr. John Stewart

# Micky Elliott College of Fine Arts Finalists

## **Jorden Zepeda**

*Affective Soundscapes: Music, Emotion, and the Imposed Listening Experience in Sigur Rós*

Faculty Sponsor: Dr. Hannah Snively

## **Cassandra Sarmiento**

*Dine On Campus User Experience Improvements*

Faculty Sponsor: Mr. Zachary Howell

## **Matthew Sims**

*YOU'RE NOT LISTENING!: Popular Music and Political Weaponry During the Cold War*

Faculty Sponsor: Dr. Hannah Snively

## **Ashley Crittenden**

*Sculpture and Digital Media Combined*

Faculty Sponsors: Mr. Benjamin Anderson and Mr. Jason Millward

## **Darcy Alleman**

*Wrestling Costume and Culture*

Faculty Sponsor: Dr. Angela Bacarisse

## **Logan Burse**

*Growing Support*

Faculty Sponsor: Dr. William Nieberding

## **Noah Lakey**

*Built for the Contemporary: Institutional Exclusion and the Technical Culture of the Saxophone*

Faculty Sponsor: Dr. Hannah Snively

## **Justice Johnson**

*Pina: A Study of the Life and Works of Pina Bausch*

Faculty Sponsor: Dr. Haley Jameson

# Arthur Temple College of Forestry and Agriculture Finalists

## **Ane Elizondo**

*Effects of Experimental Venue on Chinese Tallow (Triadica sebifera) Leaf Litter Decomposition: Implications for Wetland Research*

Faculty Sponsor: Dr. Cord Eversole

## **Colten Carpenter**

*Shortleaf Pine Survival and Growth for Insecticide Treated Seedlings of Different Provenances in East Texas*

Faculty Sponsor: Dr. Rebecca Kidd

## **James Keeling**

*A Case Study of the Accuracy and Precision of GNSS Receivers and Mobile Devices*

Faculty Sponsor: Dr. Yanli Zhang

## **Raviyah Anderson, Matthew Petre**

*Mapping Lights Using Trimble R12i GNSS Receiver on Stephen F. Austin State University Campus*

Faculty Sponsor: Dr. David Kulhavy

## **Christopher Marroquin**

*Attitudes Towards Mass Timber as a Sustainable Building Material*

Faculty Sponsor: Dr. John Kidd

## **Meghan McIlroy, Madison Adams, Mia Rivers, Kaitlin Eckert, Kenna Peveto**

*Evaluating Functional Ecology of Beaver Dams vs. Human-made Water Structures*

Faculty Sponsor: Dr. Sheryll Jerez

## **Bowen Andel, Carson Snead, Noah Howard, Sydney Krupa**

*Environmental Health on Campus: Comparing Formaldehyde Concentrations of Buildings on Campus of Stephen F. Austin State University*

Faculty Sponsor: Dr. Sheryll Jerez

## **Kaitlin Eckert**

*Wax Worms and Their Ability to Reduce Single Use Plastic*

Faculty Sponsor: Dr. Sheryll Jerez

## **Heather Lillibridge, Alayna Wagner**

*Diatom Fauna Along the Angelina River Site on Highway 7, Angelina County, Texas, USA*

Faculty Sponsor: Dr. Jenny Rashall

# College of Liberal and Applied Arts Finalists

## Halee Lopez

*Food Insecurities for Native Americans on Reservations*

Faculty Sponsor: Dr. James Morris

## Alistair Criswell

*Investigating Gender Differences in Environmental Education Podcasts*

Faculty Sponsor: Dr. Jessica Gordon

## Ethan Kanetzky

*A'ole i 'Ae i ka Ho'ohui 'Aina: Na Leo Ku'e o Hawai'i: Refusing Annexation: Hawaiian Voices of Opposition*

Faculty Sponsor: Dr. Lydia Towns

## Chloe Kerns

*The Impact of Bullying in Schools and a Policy Analysis of Texas Education Code 37.0832*

Faculty Sponsor: Dr. Mohammad Khan

## Abigail Gilmore, Marii Merchant

*Recognition of AI-Generated Faces in Rapid Exposure*

Faculty Sponsor: Dr. Gregory Drury

## Jordan Segelken, Madden Bennett, Emily Lecureux, Madeline Bass

*Starbucks Iced Energy: Audiences and Analysis*

Faculty Sponsor: Dr. Bailey Thompson

## Madelyn Edwards

*Piano Man, Take Two: How Social Media Revived Billy Joel*

Faculty Sponsor: Dr. Tyler Welsh

## Jacklynn Lydia-River Husak

*The Creation and Continuation of the Tahitian "Dusky Maiden"*

Faculty Sponsor: Dr. Lydia Towns

## Ethan Robertson

*Wrestling Culture: How Professional Wrestling Reflects Gender Identity and Conflict in American Culture*

Faculty Sponsor: Dylan Parkhurst

## Stephen Rauch

*Serendipitous Turn in the Himalayas*

Faculty Sponsor: Dr. Lydia Towns

## Azucena Reyes

*Artificial Intelligence: A Savior or Threat?*

Faculty Sponsor: Dr. Micheal Tkacik

## Marlie Leathers

*The Kinosphere: A Proposal on the Effects of Dance on Spatial and Working Memory*

Faculty Sponsor: Katheryne Wood

# College of Sciences and Mathematics Finalists

## **Andrew Do**

*A Molecular Cleft for Colorimetric Detection of Heavy Metals*

Faculty Sponsor: Dr. Rashid Mia

## **Sadie Ryan, Emily Zavala, Kaitlyn Curtis, Grace Mata**

*A Scope into Interpersonal Healthcare Communication: How to Break Bad News*

Faculty Sponsor: Dr. Katy Trotty

## **Hayden Hargett**

*The Chromatic Symmetric Function of Extended Cycle Windmill Graphs*

Faculty Sponsor: Dr. Colin Lawson

## **Rylie Brantley**

*Cognitive Mitigation of Anthropogenic Noise Masking in Bottlenose Dolphin Signature Whistles: Exploring Evidence for a Cocktail Party Effect in a Non-Human Species.*

Faculty Sponsor: Dr. Jason Bruck

## **Evelyn Crowe**

*The Grapes of Wrath: How to Store Wine Without Letting It Go Bad (and Other Oenological Adventures)*

Faculty Sponsor: Dr. Alyx Frantzen

## **Joseph Sheffield**

*Neotropical Catfishes Display Trophic Niche Variation as Revealed by Stable Isotope Analysis*

Faculty Sponsor: Dr. Carmen Montaña-Schalk

## **Brandon Lovell, Kadin Green**

*Pharmaceutical Contaminant Analysis in the Nacogdoches Wastewater Treatment Process using SPE and UHPLC-MS/MS*

Faculty Sponsor: Dr. Kefa Onchoke

## **Benjamin Watrous, Tristan Burgess**

*Multifunctional Treatment Composition and Method Comprising of TMPyP and Metal (II) Ions as Possible Phototherapeutic, Chemotherapeutic, and Antimicrobial Agents*

Faculty Sponsor: Dr. Matibur Zamadar

## **Alicia Trejo, Thanh Tien Dao, Georgetta Zuo**

*Investigation of the Inhibiting Effect of Flavonoid on 6-PGD in Silico*

Faculty Sponsor: Dr. Bidisha Sengupta

## **Aiyana Gonzalez, Emma Patton, Hadley Watts**

*Battle for Communication: Role of Energy Matching, Metal Geometry, and Organic Component Identity in Modulating Redox Communication*

Faculty Sponsor: Dr. John Gary

## **Jake Swallow**

*Occurrence and Quantitation of Microplastic Contamination in Deep East Texas Wastewater Treatment Plants*

Faculty Sponsor: Dr. Kefa Onchoke

# Regional Colleges Finalists

## **Anishka Ande**

*Elucidating the Mechanisms of Obesity-Induced Cholangiocyte Reactive Activation and Biliary Liver Injury*

Faculty Sponsor: Dr. Chaodong Wu, Texas A&M University, College Station

## **Anahi Borja**

*Athletic Legs: A Quantitative Study on Athlete Leg Composition and Performance Metrics*

Faculty Sponsor: Dr. Andrea R. Hathcote, Tyler Junior College

## **Peter Beam**

*Surviving Life: The Relationship between Physical Activity and Overall Health in Early and Late Adulthood*

Faculty Sponsor: Dr. Andrea R. Hathcote, Tyler Junior College

# Council on Undergraduate Research

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The Council on Undergraduate Research, founded in 1978, is a national organization of individual and institutional members representing over 950 colleges and universities. The mission of CUR is to support and promote high-quality undergraduate student-faculty collaborative research and scholarship.

CUR believes that faculty members enhance their teaching and contribution to society by remaining active in research and by involving students in these activities. CUR's leadership works with agencies and foundations to enhance research opportunities for faculty members and students. It also:

- supports faculty development through expert-designed institutes and offers the option of customizable campuswide or departmental institutes.
- publishes books and articles related to creating, managing and evaluating undergraduate research programs, and mentoring undergraduate researchers.
- assists administrators and faculty members in improving and assessing the research environment at their institutions.
- hosts annual undergraduate research conferences, one of which is on Capitol Hill and another that brings together over 3,000 students from across the nation.
- and provides information on the importance of undergraduate research to state legislatures, private foundations, government agencies and the U.S. Congress.

CUR's divisional structure includes arts and humanities, biology, chemistry, engineering, geosciences, health sciences, mathematics and computer science, physics and astronomy, psychology, social sciences, an at-large division that serves administrators and other disciplines, and a division for directors of undergraduate research programs.

# Finalist Poster Competition

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This is your chance to pick your favorite student poster. The winner of the Best Student Poster Award will be announced on mySFA and will hold this title for the coming year.

## How to participate:

1. Go to the Grand Ballroom and view the posters.
2. Decide which student poster you enjoy most.
3. Put the SFA logo affixed below in the envelope located next to the poster.

After the conference, the logos will be counted and the winner announced.

Thank you for your participation!

# *Special Thanks to:*

**Dr. Jordan Barkley, Provost and  
Executive Vice President for Academic Affairs**

**School of Honors**

**University Marketing Communications**

**Office of Research and Graduate Studies**

**Center for Student Research  
and Creative Discovery**

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