



2025 GRADUATE RESEARCH CONFERENCE

APRIL 22



**STEPHEN F. AUSTIN
STATE UNIVERSITY**

THE UNIVERSITY OF TEXAS SYSTEM
NACOGDOCHES, TEXAS

PAPER PRESENTATIONS

All sessions will be held at the Baker Pattillo Student Center.

11 a.m. to Noon

- ▶ Session A – Tiered Classroom (Room 2.201)
- ▶ Session B – Multimedia Room (Room 2.106)
- ▶ Session C – Room 2.306
- ▶ Session D – Room 2.307

12:15 to 1:15 p.m.

- ▶ Session E – Tiered Classroom (Room 2.201)
- ▶ Session F – Multimedia Room (Room 2.106)
- ▶ Session G – Room 2.306
- ▶ Session H – Room 2.307

1:30 to 2:30 p.m.

- ▶ Session I – Tiered Classroom (Room 2.201)
- ▶ Session J – Multimedia Room (Room 2.106)
- ▶ Session K – Room 2.306

Thanks to Our Graduate Faculty Research Judges

Dr. Jennifer Cantu

Dr. Linda Levitt

Dr. Gina Fe Causin

Dr. Ja'von Long

Dr. Amber Chelette

Dr. Ying Lu

Ms. Christy Collins

Dr. Lisa McCleary

Ms. Wilma Cordova

Dr. Daniel McCleary

Dr. Crystal Evans

Dr. Rashid Mia

Dr. Jessica Glasscock

Dr. Muswamba Mwamba

Dr. Md Hossain

Dr. Charles Oberweiser

Dr. Christopher Ivancic

Dr. Brian Oswald

Dr. Dusty Jenkins

Dr. Amanda Rudolph

Dr. Marlene Kahla

Dr. Bidishi Sengupta

Dr. Matthew Kwiatkowski

Dr. Anusha Shrestha

Dr. Colin Lawson

Dr. Lydia Towns

PAPER SESSION A

11 a.m. to Noon – Tiered Classroom (Room 2.201)

Discussants

Cyndra Krogen-Morton

“Yoga Interventions for the Treatment of Mental Health Symptoms among Trauma Survivors: A Systematic Review”

Advisor: Dr. Jose Carbajal

Katheryne Wood

“Gender Differences in Mental Rotation and Short-Term Recall in Gender Minorities”

Advisor: Dr. Steven Estrada

Lisa Trahan

“A Systematic Review Examining the Effects of Domestic Violence: The Cognitive Development of Children”

Advisor: Dr. Jose Carbajal

Katie Alexander

“Intimate Partner Violence in the LGBTQIA+ Community”

Advisor: Dr. Jose Carbajal

PAPER SESSION B

11 a.m. to Noon – Multimedia Room (Room 2.106)

Discussants

Teresa Tarver

“Faith in Action: A Solution-Focused Approach to Racial Healing in Communities; Beyond the Divide: Faith, Justice and Healing”

Advisor: Dr. Emmerentie Oliphant

Jessica Ekezie

“Mental Health Challenges Faced by African Immigrants in the U.S.”

Advisor: Dr. Muswamba Mwamba

Thabsile Lukhele

“Socio-Cultural Factors Associated with Gender-Based Violence Against Women in Eswatini”

Advisor: Dr. Emmerentie Oliphant, Dr. Jose Carbajal

Thanks to Our Graduate Research Conference Organizers, Contributors and Volunteers

Dr. Perky Beisel
Department of History

Dr. Linda Levitt
Department of Languages, Cultures and Communication

Dr. Forrest Lane
Office of Research and Graduate Studies

Micki Gunter
Office of Research and Graduate Studies

Meagan Rice
University Marketing Communications

Jae Luna
Department of History

Mak Ray
Office of Research and Graduate Studies

and more!

Outstanding Graduate Faculty Mentor Awards

Presented by Dr. Judy Abbott,
Interim Provost and Executive Vice President for Academic
Affairs

Nelson Rusche College of Business
Dr. Derek Walton

James I. Perkins College of Education
Dr. Rachel Jumper

Micky Elliott College of Fine Arts
Mr. Neal Cox

Arthur Temple College of Forestry and Agriculture
Dr. Brian Oswald

College of Liberal and Applied Arts
Dr. Perky Beisel

College of Sciences and Mathematics
Dr. Della Connor

PAPER SESSION C

11 a.m. to Noon – Room 2.306

Discussants

Anastasia Umstott

“Disentangling Drivers of β -Diversity in Fish Assemblages of East Texas Streams: Taxonomic, Functional and Phylogenetic Approaches”

Advisor: Dr. Carmen Montaña-Schalk

Ethan Menzel

“The Impact of Southern Pine Plantation Developmental Stage on Vertebrate Wildlife Diversity Using a Multi-taxa Approach”

Advisor: Dr. Reuber Antoniazzi

Callie Lynn

“The Use of Drones in Conservation: Passive Health Assessment of Sea Mammals (P.H.A.S.M.)”

Advisor: Dr. Jason Bruck

PAPER SESSION D

11 a.m. to Noon – Room 2.307

Discussants

Ginger Gore-Russell

“The Artistic Fascination with Women of Ill Repute”

Advisor: Dr. Jill Carrington

Shiuly Akter

“Aesthetic Culture of Royal Mughal Women”

Advisor: Dr. Perky Beisel

Victoria Hoover

“How Much is a Woman Worth? Agency and the Commodification of Women in Plays by Centlivre and Gay”

Advisor: Dr. Elizabeth Tasker

PAPER SESSION E

12:15 to 1:15 p.m. – Tiered Classroom (Room 2.201)

Discussants

George Umachi

“Simulating Social Work-Led Case Management: Enhancing Care Coordination and Cost Efficiency in Rural Hospital Nursing Home”

Advisor: Dr. Jose Carbajal

Megan Whiteside

“Nonprofit Visibility: How Clients Find Rural Nonprofit Organizations and Services”

Advisor: Dr. Jose Carbajal

Hema Iyer

“Food Insecurity in Austin County: An Analysis of Food Insecurity in Rural Areas”

Advisor: Ms. Christy Collins

Michael Adams

“Understanding the Importance of HIV/AIDS Interventions, Preventions and Awareness in Rural Areas”

Advisor: Dr. Jose Carbajal

PAPER SESSION F

12:15 to 1:15 p.m. – Multimedia Room (Room 2.106)

Discussants

Olabisi Ogunlewe

“Using Microbial Biofilm To Access the Water Quality of Treated Wastewater from Deep East Texas Wastewater Treatment Plants”

Advisor: Dr. Bidishi Sengupta

Prabin Adhikari

“Analysis of Water Quality Parameters in East Texas: A Temporal Study of Attoyac Bayou Watershed Between 2010 to 2024”

Advisor: Dr. Matthew McBroom

Nkeiruka Aziekwu

“Exploring the Antioxidant Properties of Watercress Extract with Plant Flavonoid Kaempferol against Oxidative Damage in Human Serum Albumin”

Advisor: Dr. Bidisha Sengupta

Swastika Acharya

“Quantifying Escherichia coli (E. coli) and Assessing Human Fecal Contamination Using Optical Brighteners in Lanana Creek, Banita Creek and Its Tributaries in Nacogdoches, Texas”

Advisor: Dr. Matthew McBroom

PAPER SESSION G

12:15 to 1:15 p.m. – Room 2.306

Discussants

Genevieve "Faith" Gleason

"Factors Impacting Mental Health in College-Aged Individuals"

Advisor: Dr. Jose Carbajal

Misty Wilburn

"From Small Towns to Big Dreams: Understanding the College Experience for Rural First-Generation Students"

Advisor: Dr. Barbara Qualls

Alexis Granito

"Sleep Deprivation's Effects on College Students' Cognitive Performance, Mental Health and Physical Health"

Advisor: Dr. Jose Carbajal

PAPER SESSION H

12:15 to 1:15 p.m. – Room 2.307

Discussants

Justin Hughes

“The Reach of the Machine-Shaped Hand: Applying Posthumanist Theory to the Current Capabilities of Generative AI”

Advisor: Dr. Kevin West

Craig Fuchs

“What Are We Really Talking About?: A Case Study in Integrating Pop Culture Conversations and Public History”

Advisor: Dr. Paul Sandul

Hugh Taylor

“Evaluating Genre Through A Harmonic Lens: A Juxtaposition of Stevie Wonder and His Contemporaries”

Advisor: Dr. Kathryn Fenton

PAPER SESSION I

1:30 to 2:30 p.m. – Tiered Classroom (Room 2.201)

Discussants

Will Peterson

“Transformative Power of Leadership Through Wilderness Education”

Advisor: Dr. Perky Beisel

Pragya Rijal

“Diameter Distribution Model of Mid-Rotation Thinned Loblolly Pine Plantations Using Weibull Function”

Advisor: Dr. Yuhui Weng

Kimberly Birrer

“Evaluating Native Bee Communities in Habitat Restored for Upland Game Birds in East Texas”

Advisor: Dr. Daniel Bennett, Dr. Reuber Antoniazzi

PAPER SESSION J

1:30 to 2:30 p.m. – Multimedia Room (Room 2.106)

Discussants

Joseph Owolabi

“The Effect of Academic Achievement Badges on Student Motivation and Academic Performance in the AXcel Mentoring Program”

Advisor: Dr. Nathan Sparkman, Dr. Scott Hutchens

Cynthia Medina

“Understanding the Link Between Mental illness and Recidivism: A Path to Reform”

Advisor: Ms. Christy Collins

Cameron Antoine

“Personality, Conservatism and Judgment of Criminality”

Advisor: Dr. Nathan Sparkman, Dr. Scott Hutchens

PAPER SESSION K

1:30 to 2:30 p.m. – Room 2.306

Discussants

Austin Dunn

“The Caloric Cost of Self-Paced Interval Resistance Training Versus Interval Body Calisthenics, Interval Running and Continuous Running”

Advisor: Dr. James Rowe

Tiffani Snider and Tammy Licari

“The Long-Term Mental Health Impact of Military Sexual Trauma: A Systematic Review”

Advisor: Ms. Christy Collins

Nicholas Granito

“Tabletop Roleplaying Games as a Therapeutic Intervention”

Advisor: Dr. Jose Carbajal

Tran Ngo

“Simultaneous Application of Multiple Process Control Rules”

Advisor: Dr. Robert Henderson

POSTER SESSION

1 to 3 p.m. – Regents' Suite A (Room 2.401)

1. Alsha Alexander

“Implementing Mental Health Practices for Rural Youth”

Advisor: Dr. Jose Carbajal

2. Kabita Sapkota

“Modeling the Hydrologic Impact of Land Cover on Storm Water Detention Basins in Harris County, TX”

Advisor: Dr. Yanli Zhang

3. Amber Youngblood

“Strengths and Burdens of Caring for Juvenile Mental Health Patients”

Advisor: Dr. Nathan Sparkman, Dr. Scott Hutchens

5. Madelyn Beard

“The Impact of Fentanyl on Teens in Rural Areas”

Advisor: Ms. Christy Collins

6. Kat Springer

“Impacts of Industrialization on Diatom Communities in the Sabine-Neches Estuary, Texas, USA”

Advisor: Dr. Jenny Rashall

7. Tenisha Phillips

"Investigating Barriers to Accessing Virtual Mental Health Services in Rural Areas and the Impact of Social Isolation on Service Utilization"

Advisor: Ms. Christy Collins

8. Callie Dunkerson

"Infectious Disease and Nutrition: Immunity Begins on Your Plate"

Advisor: Dr. Darla O'Dwyer

9. Lauren Ahlstrom

"Improving Canopy Fire Fuel Models in the Netherlands using East Texas Canopy Bulk Density Data"

Advisor: Dr. Brian Oswald

10. Kwadwo Baah-Akyamfuor

"Coping Strategies, Life Satisfaction and Depression in Emerging Adults"

Advisor: Dr. Luis Aguerrevere

11. Zachary Forest

"Veterans Experiencing PTSD and Coping Mechanisms: A Systematic Review"

Advisor: Ms. Christy Collins

12. Sabina Sigdel

"Assessing the Short-Term Response of Yaupon (Ilex vomitoria) to Thinning in Loblolly Pine (Pinus taeda) Plantations"

Advisor: Dr. Jeremy Stovall

13. Shelby Schober

"Effects of Menstrual Cycle on Balance"

Advisor: Dr. Amber Chelette

14. Shelby Schober

"Health and Fitness Professionals' Attitudes and Beliefs Regarding Obesity"

Advisor: Dr. Robyn Whitehead, Dr. Todd Whitehead

15. Justin Loosier

"Autism-traits and Health Promoting Behaviors in College Students"

Advisor: Dr. Nathan Sparkman

16. Emmi Hasselbach

"The Press Persists"

Advisor: Mr. Neal Cox

17. Pragya Rijal

"Diameter Distribution of Loblolly Pine Plantations in Response to Mid-rotation Thinning Intensities"

Advisor: Dr. Yuhui Weng

18. Crystal Odom

"Understanding and Addressing the Strong Black Woman Schema: A Guide for Mental Health Clinicians Working with African American Women"

Advisor: Dr. Jose Carbajal

19. Vanessa Gomez

"Barriers and Challenges: Access to Healthcare for Immigrant Children in the U.S."

Advisor: Ms. Christy Collins

20. Emile Smith

"Holistic Development or Diminished Well-Being: A Mixed-Method Review Investigating the Detrimental Impact of Leadership Roles on the Seven Dimensions of Student Wellness"

Advisor: Dr. Hollie G. Smith, Dr. Lacey Folsom

21. Prabin Adhikari

"Status of Escherichia coli (E. coli) in the Attoyac Bayou Watershed and its Tributaries, Texas Between 2010 to 2024"

Advisor: Dr. Matthew McBroom

22. Miranda de Bruin

“The Art of Interpretation: Articulation Misinterpretations in Wind Band Works by Orchestral and Piano Composers”

Advisor: Dr. Tamey Angley

23. Katheryne Wood

“Beliefs of Communicating Commitment in LGBTQ+ Relationships”

Advisor: Dr. Steven Estrada

24. Mohit Prodhan

“Social Work Model for Practicing Humanity in Rural Areas”

Advisor: Dr. Emmerentie Oliphant, Dr. Freddie Avant, Dr. Michael Tkacik

25. Chase Nimee

“Life History Strategies Predict Species Responses to Environmental Gradients in the Upper Brazos River, Texas”

Advisor: Dr. Carmen Montaña-Schalk

26. Anthony Cantu

“Ideological Rigidity, Openness and Need for Cognition”

Advisor: Dr. Lauren Brewer, Dr. Nathan Sparkman

27. Alberto Barbusana Perez

"The 11th of July 2021"

Advisor: Mr. Shaun Roberts

28. Shanta Scott

"Hidden in Plain Sight: Combating Human Trafficking in Rural Communities"

Advisor: Dr. Emmerentie Oliphant

29. Falon Costigan

"Medical Practitioners' Perceptions of Healthcare Artificial Intelligence"

Advisor: Dr. Steven Estrada

30. Lauren Ivy Sieja

"Maternal Burnout in Deep East Texas: An Exploratory Study"

Advisor: Dr. Steven Estrada

31. Swastika Acharya

"Quantifying Escherichia coli (E. coli) and Assessing Human Fecal Contamination Using Optical Brighteners in Lanana Creek, Banita Creek, and its Tributaries in Nacogdoches, Texas"

Advisor: Dr. Matthew McBroom

32. Bella-Jace Moreno

"Everything before ACTION"

Advisor: Mr. Derek Johnson

33. Khená Minor and Rebel Bonette

"How Older Adults Experiencing Homelessness Find Long-term Care Placement Through Hospitalization"

Advisor: Ms. Christy Collins

34. Brandon Vannatta

"Exploring the Influence of University Traditions on Student Identity, Belonging and Well-being"

Advisor: Dr. Hollie G. Smith

35. Julia Martin

"How to Throw an Axe for Dummies"

Advisor: Dr. Amber Chelette, Dr. Jeremy Stovall

36. Sabekun Nahar

"Body Size Variation of the American Bumble Bee, *Bombus pensylvanicus*, and The Effect of Latitude and Longitude on Their Body Size"

Advisor: Dr. Daniel Bennett

37. Emily Atchinson

"Enhancing Life Through Nature"

Advisor: Ms. Christy Collins

38. Ju'lea Bravo-Geche

"Social Anxiety, Social Desirability and Imposter Phenomenon: A Correlational Analysis"

Advisor: Dr. Steven Estrada

39. Ju'lea Bravo-Geche

"Examination of Free-Choice Learning in Learning Environments"

Advisor: Dr. Steven Estrada

40. Ju'lea Bravo-Geche

"Birth Order and Word Recall in College Students"

Advisor: Dr. Steven Estrada

41. Omar Espinoza

"Technology-Based Mindfulness Intervention and Social Work Burnout"

Advisor: Ms. Christy Collins

42. Launa Castañeda

“Exploring the Impact of Student Involvement: Correlation Between Involvement and Belonging at SFA”

Advisor: Dr. Hollie G. Smith

43. Maikol Garcia

“Bridging AI and Equity: Culturally Responsive Pedagogy in STEM”

Advisor: Dr. Amanda Rudolph

44. Rylee Gabbert

“Water Quality Assessment in Relation to Land Cover Change within the La Nana Bayou Watershed in East Texas”

Advisor: Dr. I-Kuai Hung, Dr. Dan Unger

45. Ashten Waddill

“Perceptions of School Social Workers on Student Mental Health”

Advisor: Ms. Christy Collins

46. Daniel Neff

“Utilization of Lower Body Compression Following Exhaustive Exercise”

Advisor: Dr. Todd Whitehead

47. Amy Peralta

"Effects of Phytochemicals on Mental Health"

Advisor: Dr. Darla O'Dwyer

48. Tiana Rachal and Natasha Washington

"Sexual Assault on College Campuses"

Advisor: Ms. Christy Collins

49. Sean Clark

"Molding and Casting Homemade Lithography Crayons"

Advisor: Mr. Neal Cox

50. Caleb Mullins

"Breeding in Troubled Waters: How Chinese Tallow Leaf Litter Alters Amphibian Oviposition Site Selection"

Advisor: Dr. Cord Eversole

51. Gabriel Gallegos

"Evaluation of Mentorship Program of Boys & Girls Club of Abilene"

Advisor: Ms. Christy Collins

52. Frank Stinson

"Autism-traits and Health Promoting Behaviors in College Students"

Advisor: Mr. Weelynd McMullan

53. Julie Arnold

"The Validity of Trauma Informed Care"

Advisor: Dr. Jose Carbajal

54. Lillian Smith

"Evaluating Demographics of Campus Event Participants: Enhancing Marketing Strategies for Campus Programming"

Advisor: Dr. Lacey Folsom, Dr. Amanda West

55. Skye Davis

"The Importance of Pre-Production in Filmmaking"

Advisor: Mr. Derek Johnson

56. Makinzy Hoxsey, Maranda Willis and Justin Loosier

"The Effect of Narrated and Silently Rendered Artificial Intelligence (AI) Output on Comprehension and Satisfaction"

Advisor: Dr. Scott Drury

57. Christina Villanueva

“Psychosocial Effects of Children with Divorce Parents”

Advisor: Ms. Christy Collins

58. Edith Koah

“Applying Hazard Analysis Critical Control Point (HACCP) Principles to Mitigate Aflatoxin Contamination in Maize of Corn Production: A Case Study, Ghana”

Advisor: Dr. Leland Thompson

59. Daisy Ngetich

“Profiling the Cervicovaginal Microbiome: Impact of Biological, Health and Demographic Factors Through 16S rRNA High-Throughput Gene Sequencing”

Advisor: Dr. Alexandra Van-Kley

60. Dagon Blank

“Thresholds”

Advisor: Mr. Shaun Roberts

