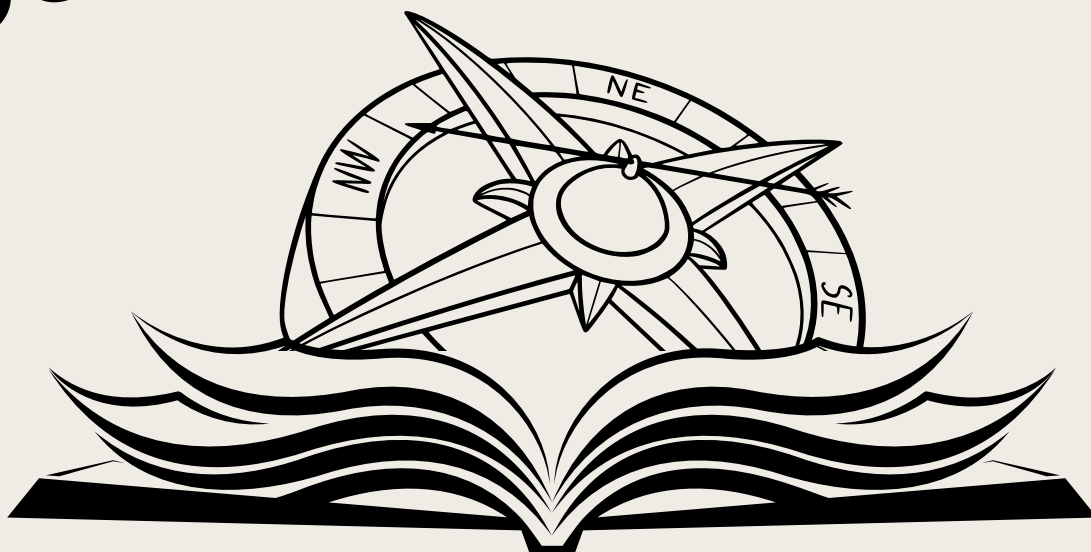
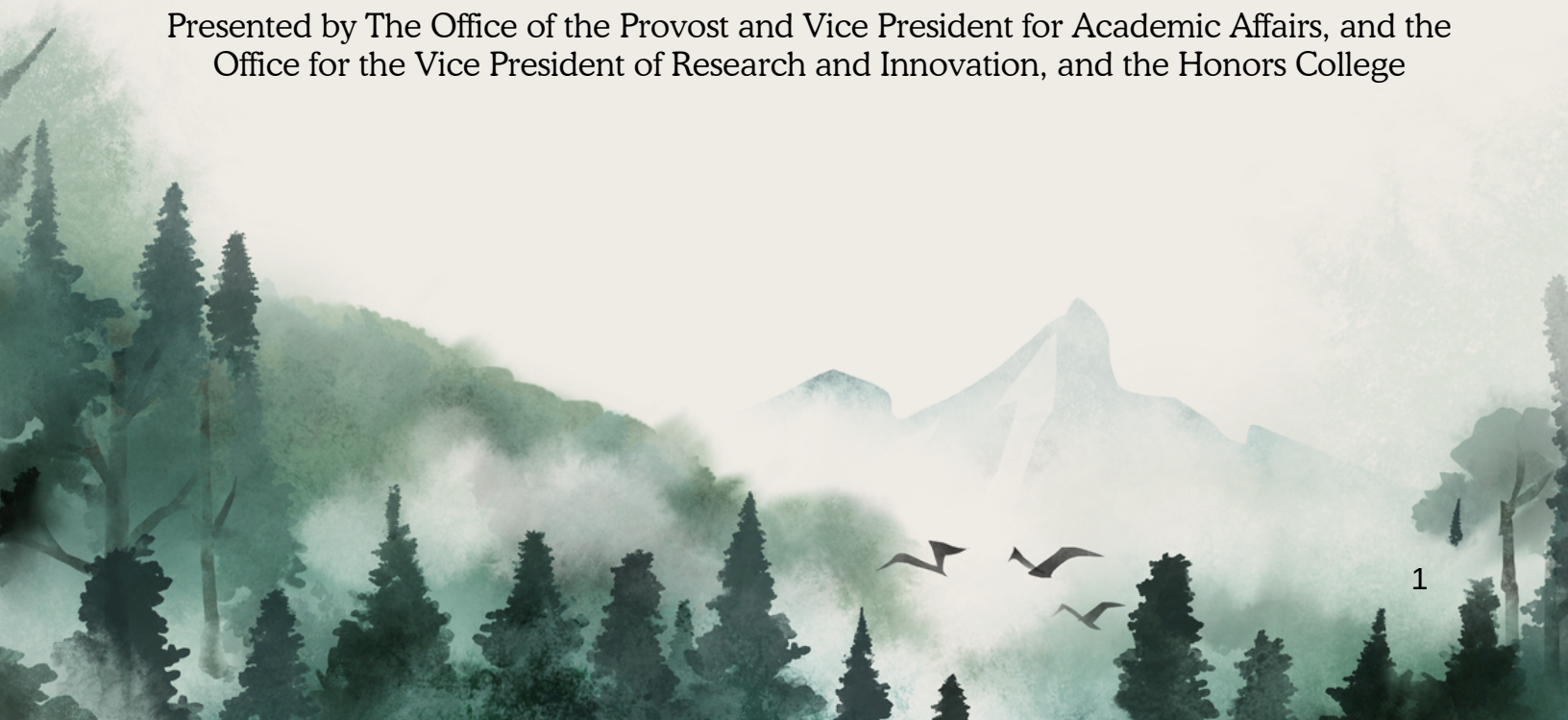


# Scholars Day 2025



## “Search and Re-search”

Presented by The Office of the Provost and Vice President for Academic Affairs, and the Office for the Vice President of Research and Innovation, and the Honors College





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# Event Schedule

9:30- 10:45	Oral Presentations of Research: Session 1	Union 333 A, B, C
11:00 - 12:15	Oral Presentations of Research: Session 2	Union 333 A, B, C
12:30 - 1:45	Oral Presentations of Research: Session 3	Union 333 A, B, C
2:00 - 2:45	Check- in for Poster Presentations	Union 314
3:00 - 3:45	Poster Presentations	Union 314
3:45- 4:30	Reception	Union 314

Welcome: Dr. Glénisson de Oliveira, Dean, TAMS and the Honors College

Keynote Address: Angelina Miljanic, the Honors College

Special Awards: Dr. James Duban, Associate Dean, TAMS and the Honors College

Final Prize Giveaway: Anne Green, TAMS and the Honors College



# Oral Presentations

**9:30 - 10:45 | Union 333A | Moderated by Dr. Melanie Ecker**

Mothers of Color

**Wanda Bengtzen**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Joanna Davis-McElligatt, College of Liberal Arts & Social Sciences

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Reframing Femininity and Grief: The Rebozo Luto de Aroma

**Mercedes Muratalla**, College of Visual Arts & Design

Faculty Mentor: Dr. Denise Baxter, College of Visual Arts & Design

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The Effect of Boron Addition on Fe<sub>43.5</sub>Mn<sub>34</sub>Al<sub>15</sub>Ni<sub>7.5</sub>B<sub>x</sub> Shape Memory Alloy

**Nathan Tran**, College of Engineering

Faculty Mentor: Dr. Marcus Young, College of Engineering

**9:30 - 10:45 | Union 333B | Moderated by Kayla Canis, M.S.**

How does grazing management affect plant communities on North Texas Rangelands?

**Jada Martinez**, College of Science

Faculty Mentor: Dr. Elinor Lichtenberg, College of Science

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Self-Esteem, Social Scenes & Spending Sprees: Materialism Across College Cohorts

**Angelina Miljanic**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Calvin Sims, College of Liberal Arts & Social Sciences

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The "Grand" in Grandparents: An Examination of Intergenerational Co-Parenting and Its Effects on the Socio-emotional Development of Children and Adolescents

**Trinity Ner**, College of Education

Faculty Mentor: Dr. Jason Chiang, College of Education



# Oral Presentations

## 9:30 - 10:45 | Union 333C | Moderated by Dr. Jyoti Shah

Design Thinking for Accessibility: Reimagining Onboarding for Blind and Low-Vision Users with Glidance

**Sophia Carswell**, College of Visual Arts & Design

Faculty Mentor: Professor Cassini Nazir, College of Visual Arts & Design

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Evaluation and examination of the structure of criminal governance in Medellín, Colombia

**Thomas Metcalf**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. James Meernik, College of Liberal Arts & Social Sciences

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Assessment of  $17\beta$ -Estradiol by way of Mass Spectrometry Based Proteomics in Model Organism *Planaria Dugesia Dorocephala*

**Rithika Raghavan**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Vladimir Shulaev, College of Science

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## 11:00 - 12:15 | Union 333A | Moderated by Dr. Anondah Saide

Assessing the Impact of Textile Waste Initiatives: A Qualitative Analysis of Community Engagement and Financial Relief at UNT

**Madeline Blackburn**, College of Merchandising, Hospitality & Tourism

Faculty Mentor: Dr. Iva Jestratijevic, College of Merchandising, Hospitality & Tourism

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Investigating mTOR's Role in Oligodendrocyte Differentiation

**Lynn Farhat**, College of Science

Faculty Mentor: Dr. Jannon Fuchs, College of Science

---

The Impact of Family Structure on Adolescent Self-Esteem: The Moderating Role of Familism in Immigrant Families

**Yogita Sethi**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Jason Chiang, College of Education



# Oral Presentations

## 11:00 - 12:15 | Union 333B | Moderated by Dr. Amy Anderson

Macro-influencers Vs. Micro-influencers: Impact of Changing Consumer Behavior

**Alicia Langlais**, College of Merchandising, Hospitality & Tourism

Faculty Mentor: Dr. Sanjukta Pookulangara, College of Merchandising, Hospitality & Tourism

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The Atmospheric Chemistry of Fluoroacetonitrile and the Characterization of the Major Product, Cyanoformyl Fluoride

**Trang Nguyen**, College of Science

Faculty Mentor: Dr. Paul Marshall, College of Science

---

Everything Is Gone: Effects of Digital Precarity on an Online Community of Drug Users.

**Leonardo Vargas**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Jara Carrington, College of Liberal Arts & Social Sciences

## 11:00- 12:15 | Union 333C | Moderated by Dr. Kimi King

Exploring Complex Base Number Expansions and Fractals

**Miguel Gonzalez-Carriedo**, College of Science

Faculty Mentor: Dr. Kiko Kawamura, College of Science

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Gender-Based Values and Environmental Priorities in Colombia

**Kathryn Krueger**, College of Science & College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Kimi King, College of Liberal Arts & Social Sciences

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From Goddess to Ghost: Sexual Violence and Colonial Legacies, Regional Disparities, and the Battle for Justice

**Ridhi Panchakarla**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Kimi King, College of Liberal Arts & Social Sciences

---

Interferometric Autocorrelation

**Mari Salinas**, College of Science

Faculty Mentor: Dr. Jens Neu, College of Science

# Oral Presentations

## 12:30-1:45 | Union 333A | Moderated by Dr. Olga Velikanova

Anticorrosive Strategies for Cu-Al Wire-Bonded Devices in Extreme Automotive Applications

**Pavan Ahluwalia**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Oliver Chyan, College of Science

---

Necessity Has No Law: Soviet Passportization in the 1930s

**Alex Chanaa**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Olga Velikanova, College of Liberal Arts & Social Sciences

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Effects of Acclimation to UV-B on *Daphnia magna* morphology and PAH Photo-Induced Toxicity Exposures

**Kymie Creswell**, College of Science

Faculty Mentor: Dr. Brianne Soulen, College of Science

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## 12:30-1:45 | Union 333B | Moderated by Dr. Jannon Fuchs

Embedded in the Head

**Sabriena Duvall**, College of Visual Arts & Design

Faculty Mentor: Dr. Jennifer Way, College of Visual Arts & Design

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Role of Primary Cilia in the Fate Determination of Oligodendrocyte Precursor Cells

**Surie Guo**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Jannon Fuchs, College of Science

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Comparisons and Application of Machine Learning Algorithms

**Dominick Ohara**, College of Science

Faculty Mentor: Dr. Yanyan He, College of Science



# Oral Presentations

**12:30- 1:45 | Union 333C | Moderated by Dr. Jaime Jimenez**

SPARCS: Spectral Processing and Analysis for Recognition of Chemical Species Machine learning of optical spectra for identification of diverse unknown chemical species

**Aniruth Ananthanyaran**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Guru Khalsa, College of Science

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Motivation for Prescribed Burning and Wildfire Mitigation in Texas

**Tyler Cunningham**, College of Health & Public Service

Faculty Mentor: Dr. Ronald Schumann, College of Health & Public Service

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The Application of a Closed-Loop Textile Waste System to Displace Negative Social-Environmental Impacts in the Case of UNT's Zero Waste Textile Initiative

**Rosalyn Zuniga**, College of Merchandising, Hospitality & Tourism

Faculty Mentor: Dr. Iva Jestratijevic, College of Merchandising, Hospitality & Tourism



# Poster Presentations

## College of Business

### Poster Lot # 1

Support Types

**Linh Tran**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Thuy Nguyen, College of Business

### Poster Lot # 2

Understanding Trustworthiness Levels in Generation Z of Electronic Commerce

**Saanvi Veera Bomma**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Gurpreet Dhillon, College of Business

## College of Education

### Poster Lot # 3

Demystifying The Page: An Examination of Fantastical Imagery and Educational Messages in Children's Death Literature

**Allie Claville**, College of Education

Faculty Mentor: Dr. Anondah Saide, College of Education

### Poster Lot # 4

"To Eminently New Directions" (TEND)

**Zoe Crider**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Anondah Saide, College of Education

### Poster Lot # 5

Core vs. Capital Mentoring in First-Generation College Students

**Justin Dick**, College of Education

Faculty Mentor: Dr. Amy Anderson, College of Education

### Poster Lot # 6

Comparing the Detectability of Parent Screening Tools to Identify Motor Deficits in Preschool Age Children: Ages and Stages Questionnaire Vs. the Little Developmental Coordination Disorder Questionnaire

**Taelyn Echols**, College of Education

Faculty Mentor: Dr. Jerraco Johnson, College of Education

# Poster Presentations

## College of Education (cont.)

### Poster Lot # 7

Gender Differences in Performance of the Movement Assessment Battery in Preschool-age Children

**Addison Harmon**, G. Brint Ryan College of Business

Faculty Mentor: Dr. Jerraco Johnson, College of Education

### Poster Lot # 8

Mentoring among first generation college students: Descriptive statistics and the role of gender

**Ashyrian Johnson**, College of Education

Faculty Mentor: Dr. Amy Anderson, College of Education

### Poster Lot # 9

Beyond the Veil: Understanding Developmentally Appropriate Death Concepts in Children's Literature

**Liliana Mlcak**, College of Education

Faculty Mentor: Dr. Anondah Saide, College of Education

### Poster Lot # 10

Metabolic Response to Arm Ischemia-Reperfusion Injury

**Ayrion Moody**, College of Education

Faculty Mentor: Dr. Justin Sprick, College of Education

### Poster Lot # 11

The relationship between infancy motor development and risk of DCD in preschool-age children

**Mesoma Onejeme**, College of Education

Faculty Mentor: Dr. Jerraco Johnson, College of Education

### Poster Lot # 12

Validating Methods of Genomic DNA Isolation

**Anyla Paschall**, College of Science

Faculty Mentor: Dr. Brian McFarlin, College of Education



# Poster Presentations

## College of Education (cont.)

### Poster Lot # 13

“If bro is cute enough, would you?": Mostly Straight Men and the Intersection of Masculinity, Social Perception, and Identity Development

**Phong Pham**, College of Liberal Arts & Social Sciences

Faculty Mentor: Professor Payton Birlew, College of Education

### Poster Lot # 14

Parent-Involved Behavior Intervention Strategies for Children with ADHD: A Systematic Review and Analysis of Suitability for Implementation in Single-Parent Households

**Carly Salmi**, College of Liberal Arts & Social Sciences

Faculty Mentor: Professor Payton Birlew, College of Education

### Poster Lot # 15

A qualitative exploration of emerging adults' self-care methods to combat loneliness

**Aliyah Schwarz**, College of Education

Faculty Mentor: Dr. Amy Anderson, College of Education

## College of Engineering

### Poster Lot # 16

AI-Driven Risk Stratification in Ischemic Stroke Patients: Identifying Key Predictors for Recurrence and Complications

**Areeb Ashraf**, College of Engineering

Faculty Mentor: Dr. Satya Parupudi, College of Engineering

### Poster Lot # 17

Objective Classification of Hemiplegic Cerebral Palsy: Objective Cluster Analysis of Whole Time Series Gait Data

**Lakhisha Balaji**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Mark Albert, College of Engineering

# Poster Presentations

## College of Engineering (cont.)

### Poster Lot # 18

Optimizing Cardiac Differentiation for Disease Modeling and Drug Testing

**Celine Chacon**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Huaxiao Yang, College of Engineering

### Poster Lot # 19

Draw Signature in Air

**Sahil Chhotulal Chaudhari**, College of Engineering

Faculty Mentor: Professor Amar Maharjan, College of Engineering

### Poster Lot # 20

Using Transcriptional Regulators to Genetically Engineer E.Coli Nissle 1917 For Heavy Metal Detection

**Audrey Chen**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Clement Chan, College of Engineering

### Poster Lot # 21

SWAY

**Chaitanya Chunduri**, College of Engineering

Faculty Mentor: Dr. Mark Albert, College of Engineering

### Poster Lot # 22

Clustering Single Cells with Graph Contrastive Learning

**Sarthak Engala**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Serdar Bozdog, College of Engineering

### Poster Lot # 23

Self Propelled Soft Robot for Navigating Confined Spaces

**Xinyu He**, Texas Academy of Mathematics & Science

Faculty Mentor: Rashmi Wijesundara Mudiyanse, College of Engineering

### Poster Lot # 24

A Novel Stem Cell Bioreactor Design Utilizing Mechanical Stretching and Extracellular Matrix Mimicry

**Benjamin Hu**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Yong Yang, College of Engineering

# Poster Presentations

## College of Engineering (cont.)

### Poster Lot # 25

Using Head-Driven Control to Navigate Unmapped Areas with Continuum Robots

**Aditya Jain**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Amir Jafari, College of Engineering

### Poster Lot # 26

CP-Phenotyping

**Vishal Jonnalagadda**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Mark Albert, College of Engineering

### Poster Lot # 27

Effect of Elevated Pressure on Astrocytes on an Optic Nerve Head chip

**Nelly Juarez Carrillo**, College of Engineering

Faculty Mentor: Dr. Yong Yang, College of Engineering

### Poster Lot # 28

Immune-Mediated Killing of Tumor Cells Under Static Conditions on a Pillar Plate Platform

**Brian Koo**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Moo-Yeal Lee, College of Engineering

### Poster Lot # 29

Enzyme-Induced Self-Assembly of Peptides for Treatment Against Drug-Resistant Triple-Negative Breast Cancer

**Ananya Kumar**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Neda Habibi, College of Engineering

### Poster Lot # 30

Untitled

**Aakarshan Kumar**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Saraju Mohanty, College of Engineering

### Poster Lot # 31

Using reflection strategies to improve mathematical reasoning in large language models

**Gengwen Li**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Yunhe Feng, College of Engineering



# Poster Presentations

## College of Engineering (cont.)

### Poster Lot # 32

Developing a Dual-Stage Vision Transformer Model for Lung Disease Classification

**Anirudh Mazumder**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Saraju Mohanty, College of Engineering

### Poster Lot # 33

Fabrication of Patient-Specific Aortic Models

**Nagavenkat Modugula**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Fateme Esmailie, College of Engineering

### Poster Lot # 34

Coronary Heights as an Indicator for Post Transcatheter Aortic Valve Replacement  
Thrombosis Risk

**MacKenzie Moore**, College of Engineering

Faculty Mentor: Dr. Fateme Esmailie, College of Engineering

### Poster Lot # 35

Development of Self-Assembled Hydrogels For Cell Encapsulation

**Rajiv Morthala**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Neda Habibi, College of Engineering

### Poster Lot # 36

Differentiating Human Pluripotent Stem Cells Into Cardiomyocytes For Modeling  
Hypertrophic Cardiomyopathy Through Applied Mechanical Strain

**Jyotsna Nagarapu**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Huaxiao Yang, College of Engineering

### Poster Lot # 37

Investigating the Use of Chemical Oxidative Polymerization of Polyaniline as an Approach to  
Making Conductive Textiles

**Praises Ogunbanwo**, College of Engineering

Faculty Mentor: Dr. Melanie Ecker, College of Engineering

### Poster Lot # 38

Shaping Minds: Ethical Considerations in Children's Tech-Based Entertainment

**Douglas Parks**, College of Engineering

Faculty Mentor: Dr. Ervin Frenzel, College of Engineering

# Poster Presentations

## College of Engineering (cont.)

### Poster Lot # 39

Patient-Specific Aorta Phantom Model With Native Leaflets

**Jai Anish Penumarthi**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Fateme Esmailie, College of Engineering

### Poster Lot # 40

Possibility of indoor navigation

**Bisesh Rana**, College of Engineering

Faculty Mentor: Professor Amar Maharjan, College of Engineering

### Poster Lot # 41

An Optic Nerve Head Organ-on-Chip for Glaucomatous Neurodegeneration

**Ria Rana**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Yong Yang, College of Engineering

### Poster Lot # 42

Blood-Brain Barrier on Chip

**Chloe Tang**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Yong Yang, College of Engineering

### Poster Lot # 43

Navigating AI Cybersecurity: Challenges and Safeguards in Conversational Systems

**Vedansh Tembhre**, College of Engineering

Faculty Mentor: Dr. Pradhumna Shrestha, College of Engineering

### Poster Lot # 44

Spark plasma sintering of novel niobium-based refractory high entropy alloys

**Ella Nicole Viray**, College of Engineering

Faculty Mentor: Dr. Thomas Scharf, College of Engineering

### Poster Lot # 45

Predicting Material Properties Using Molecular Dynamics and Quantitative Structure-Property Relationship

**Bryan Wang**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Jincheng Du, College of Engineering

# Poster Presentations

## College of Engineering (cont.)

### Poster Lot # 46

2D dynamic Lidar Sensing Integration for Boston Dynamics quadruped robot

**Shuopu Wang**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Vijay Vaidyanathan, College of Engineering

### Poster Lot # 47

Design and Simulation of a Soft Pipe-Climbing Robot for Scalable and Energy-Efficient Pipe Inspection Operations

**Victor Xu**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Amir Jafari, College of Engineering

### Poster Lot # 48

Cooperative End-to-End Autonomous Driving

**Cathy Du**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Song Fu, College of Engineering

## College of Health & Public Service

### Poster Lot # 49

Effects of Gender, Age, and Ethnicity on Nasality in Texan and Non-Texan Speakers

**Alyson Charnas**, College of Health and Public Service

Faculty Mentor: Professor Hedieh Hashemi Hosseinabad, College of Health and Public Service

### Poster Lot # 50

The Comparison of Phonetic Inventories in Singing and Speaking

**Addison Kaser**, College of Health and Public Service

Faculty Mentor: Dr. Katsura Aoyama, College of Health and Public Service

### Poster Lot # 51

Acoustic Analysis of /Êf/ and /o/

**Makayla Kubasiak**, College of Health and Public Service

Faculty Mentor: Dr. Katsura Aoyama, College of Health and Public Service



# Poster Presentations

## College of Health & Public Service (cont.)

### Poster Lot # 52

Patterns and Frequency of consonants in children's early words

**Leigh Loewenstein**, College of Health and Public Service

Faculty Mentor: Dr. Katsura Aoyama, College of Health and Public Service

### Poster Lot # 53

Wilms Tumor and Congenital Abnormalities

**Kennedy Montgomery**, College of Health and Public Service

Faculty Mentor: Dr. Julia Heck, College of Health and Public Service

### Poster Lot # 54

Predictors of Vaccine Exemptions in Texas Schools

**Funmi Owolabi**, College of Health and Public Service

Faculty Mentor: Dr. Andrea Traylor, College of Health and Public Service

### Poster Lot # 55

Evaluating the Difference in Nasalance Scores Between Speakers of the Texas South Dialect and Non-Texas Dialect

**Maggie Stanfield**, College of Health and Public Service

Faculty Mentor: Professor Hedieh Hashemi-Hosseiniabad, College of Health and Public Service

### Poster Lot # 56

Improving Constructional Fear Treatment Effectiveness for Treating Spider Phobias Using Physiological Measures of Arousal

**Natalie Torres**, College of Health and Public Service

Faculty Mentor: Dr. April Becker, College of Health and Public Service

### Poster Lot # 57

A Window for Change: How did COVID-19 Create Opportunities for Post-Pandemic Transit System Renewal

**Raine Walker**, College of Health and Public Service

Faculty Mentor: Dr. Laura Keyes, College of Health and Public Service

# Poster Presentations

## College of Information

### Poster Lot # 58

Assessing the Human Likeness of AI-Generated Counterspeech

**Sujana Mamidisetty**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Lingzi Hong, College of Information

### Poster Lot # 59

Creating Datasets to Model Next-day Wildfire Spread Implementing Data of Topographical and Meteorological Features

**Saanvi Mhatre**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Ting Xiao, College of Information

### Poster Lot # 60

From Text to Immersion: Designing a Hybrid Chatbot for a Virtual Environment

**Adrian Pedraza**, College of Engineering

Faculty Mentor: Dr. Xun Ge, College of Information

### Poster Lot # 61

Real time adaptaion in virtual training environments using EEG technology

**Sebastian Ting**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Fred McMahan, College of Information

### Poster Lot # 62

Comprehensive Dataset Utilizing Meteorological and Topographical Features for Next-Day Wildfire Spread Prediction

**Sunny Zhang**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Ting Xiao, College of Information

## College of Liberal Arts & Social Sciences

### Poster Lot # 63

The Protestant Reformation and the Supernatural

**Arkadina Cadena**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Walter Roberts, College of Liberal Arts and Social Sciences

# Poster Presentations

## *College of Liberal Arts & Social Sciences (cont.)*

### Poster Lot # 64

Heterosexist Discrimination and Mental and Physical Health: A Meta-Analysis

**Lawrence Castro**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Kiet Huynh, College of Liberal Arts and Social Sciences

### Poster Lot # 65

Between the Family Lines: Baptismal Records, Social Networks, and Enslaved Communities in eighteenth-century French India

**Aster Fohl**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Jakob Burnham, College of Liberal Arts and Social Sciences

### Poster Lot # 66

Prefrontal fNIRS-Based Cortical Activity Patterns Differ during Negative Emotional Recall in Young Adults with Complex PTSD

**Prisha Goyal**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Anthony Ryals, College of Liberal Arts and Social Sciences

### Poster Lot # 67

Coping with Internalized LGBTQ+ Stigma

**Mars Hines**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Kiet Huynh, College of Liberal Arts and Social Sciences

### Poster Lot # 68

Predictors of Dream Recall: The Role of Childhood Experiences, Mental Health, and Dream-Related Factors

**Danya Husein**, College of Liberal Arts & Social Sciences, College of Health and Public Service

Faculty Mentor: Dr. Danica Slavish, College of Liberal Arts and Social Sciences

### Poster Lot # 69

Out of Sight, Out of Rights: How Forced Disappearances of Activists in China Threaten Human Rights

**Annika Kang**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Kimi King, College of Liberal Arts and Social Sciences

### Poster Lot # 70

Women, Nature, and Resistance: The Role of Ecofeminism in Resisting Violence and Capacity Building

**Nicole King**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Kimi King, College of Liberal Arts and Social Sciences

# Poster Presentations

## ***College of Liberal Arts & Social Sciences (cont.)***

### Poster Lot # 71

Tracing Darwin's Path - Subantarctic Biocultural Conservation

**Giovanna Kirschner**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Michael Thompson, College of Liberal Arts and Social Sciences

### Poster Lot # 72

Over-represented and Under-protected: The Rhetorical Debility of LGBTQ+ Foster Youths in Texas

**Alexis Lara**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Matthew Heard, College of Liberal Arts and Social Sciences

### Poster Lot # 73

Beyond Borders: The Political, Economic, and Environmental Forces Driving Sudan's Crisis

**Hatoon Lutfi**, College of Health and Public Service

Faculty Mentor: Dr. James Meernik, College of Liberal Arts and Social Sciences

### Poster Lot # 74

ADHD and Identity

**Arianna Michaud**, College of Liberal Arts & Social Sciences, College of Visual Arts

Faculty Mentor: Dr. Jara Carrington, College of Liberal Arts and Social Sciences

### Poster Lot # 75

Does Perceived Social Support Relate to Rapport in Neuropsychological Testing?

**Noelle Miner**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Michael Barnett, College of Liberal Arts and Social Sciences

### Poster Lot # 76

Word List Task Outperforms Cognitive Screener in Neurocognitive Disorder Detection

**Débora Peixoto**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Michael Barnett, College of Liberal Arts and Social Sciences

### Poster Lot # 77

Neurocognitive Domains that Moderate the Relationship Between Self-Report and Performance-Based Adaptive Functioning in Older Adults

**Ramya Priya Ravinuthala**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Michael Barnett, College of Liberal Arts and Social Sciences



# Poster Presentations

## ***College of Liberal Arts & Social Sciences (cont.)***

### Poster Lot # 78

Student Experiences in Texas Higher Education

**Berkeley Robinson**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Mariela Nunez-Janes, College of Liberal Arts and Social Sciences

### Poster Lot # 79

A Qualitative Investigation of Sense of Belonging Among Black Students Attending a Minority Serving Institution

**Asia Watkins**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Martinque Jones, College of Liberal Arts and Social Sciences

### Poster Lot # 80

Premorbid Intellectual Functioning and Not Education Predicts Memory Performance  
Virtual Environment Grocery Store

**Caroline Watson**, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Michael Barnett, College of Liberal Arts and Social Sciences

### Poster Lot # 81

Understanding Texas' COPD Crisis: A Geographic and Statistical Analysis of Mortality Hotspots

**Rhizhene Pullen-Parnes**, College of Science

Faculty Mentor: Dr. Joseph Oppong, College of Liberal Arts and Social Sciences.

## ***College of Merchandising, Hospitality & Tourism***

### Poster Lot # 82

Case Study on Branded Recommerce: An Exploratory Study on the Business Leadership and Consumers

**Caroline Bowen**, College of Merchandising, Hospitality and Tourism

Faculty Mentor: Dr. Jiyoung Kim, College of Merchandising, Hospitality and Tourism

### Poster Lot # 83

AI Generated Beauty: An Investigation of Same Face Syndrome

**Cassandra Castro**, College of Merchandising, Hospitality and Tourism

Faculty Mentor: Dr. Christy Crutsinger, College of Merchandising, Hospitality and Tourism

# Poster Presentations

## ***College of Merchandising, Hospitality & Tourism (cont.)***

### Poster Lot # 84

Macro-influencers Vs. Micro-influencers: Impact of Changing Consumer Behavior

**Alicia Langlais**, College of Merchandising, Hospitality and Tourism

Faculty Mentor: Dr. Sanjukta Pookulangara, College of Merchandising, Hospitality and Tourism

### Poster Lot # 85

Fate of Prepared Food in UNT Dining Halls

**Nathaniel Rotunno**, College of Merchandising, Hospitality and Tourism

Faculty Mentor: Dr. Priscilla Connors, College of Merchandising, Hospitality and Tourism

## ***College of Science***

### Poster Lot # 86

Design and Enhancement of a Custom Untargeted Mass Spectrometry Database for Metabolomic Profiling

**Cindy Alonso-Cocuron**, College of Engineering, College of Science

Faculty Mentor: Dr. Ana Paula Alonso, College of Science

### Poster Lot # 87

Impacts of Cortical Trauma and Stroke on Hippocampus

**Surya Anand**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Feng Gu, College of Science

### Poster Lot # 88

Tardigrades: In-Depth Analysis

**Shaktivel Anand**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Jaime Jimenez, College of Science

### Poster Lot # 89

CHOMP 1-30 2-L

**Pranshu Bhardwaj**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Lior Fishman, College of Science

# Poster Presentations

## College of Science (cont.)

### Poster Lot # 90

Impacts of Cortical Trauma and Stroke on Hippocampus

**Riddhish Bommineni**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Feng Gu, College of Science

### Poster Lot # 91

The expression and purification of the AtFCH1 protein with GST tag

**Rashel Bullon**, College of Science

Faculty Mentor: Dr. Xiaoqiang Wang, College of Science

### Poster Lot # 92

Are there Morphometric Differences between Resident and Migratory American Kestrels in Denton County, TX?

**Jonothan Cantu**, College of Science

Faculty Mentor: Dr. Jim Bednarz, College of Science

### Poster Lot # 93

Remnants of Fire: The Preservation of Charred Documents by Adhesive Sprays

**Vy Chac**, College of Science

Faculty Mentor: Dr. Teresa Golden, College of Science

### Poster Lot # 94

Developing Classification Models with ESM-2: From Binary to Drug Mechanism

**Ajooni Chandi**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Rajeev Azad, College of Science

### Poster Lot # 95

Effect of Intramolecular Hydrogen Bond Formation on the Abraham Model Solute

Descriptors for Oxybenzone

**Jocelyn Chen**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. William Acree, College of Science

### Poster Lot # 96

Taxonomic and Functional dynamics of macroinvertebrate communities occupying drought-prone streams

**Benjamin Copeland**, College of Science

Faculty Mentor: Dr. David Hoeinghaus, College of Science

# Poster Presentations

## College of Science (cont.)

### Poster Lot # 97

Restoration Insights: Evaluating River Health Through Dissolved Organic Carbon Composition Dynamics

**Emily Coronado**, College of Science

Faculty Mentor: Dr. Juliana D'Andrilli, College of Science

### Poster Lot # 98

The Design of Prebiotic Coiled Coil Proteins

**Victoria Dobbs**, College of Science

Faculty Mentor: Dr. Douglas Root, College of Science

### Poster Lot # 99

Graph Theory in Cops and Robbers

**Shriya Dontula**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Lior Fishman, College of Science

### Poster Lot # 100

Using qPCR to Assess Changes in the Expression of TR-  $\beta$  in North Fur Seals (*Callorhinus ursinus*) and the Relationship to Persistent Organic Pollutant Exposure

**Lacey Eddleman**, College of Science

Faculty Mentor: Dr. Brianne Soulen, College of Science

### Poster Lot # 101

Investigation of the Impact of Lipases on Fatty Acids in Cotton

**Dhrithi Gambhirrao**, College of Science

Faculty Mentor: Dr. Patrick Horn, College of Science

### Poster Lot # 102

Applications of Photobiomodulation for Hearing Preservation: An Investigation of Non-equilibrium Thermal Radiation in Porous Media

**Naren Ganesh**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Yuzhe Xiao, College of Science

### Poster Lot # 103

Painted Bunting (*Passerina ciris*) nesting success in North Texas

**Ashley Giron**, College of Science

Faculty Mentor: Dr. James Bednarz, College of Science



# Poster Presentations



## ***College of Science (cont.)***

### Poster Lot # 104

Characterization of the obesogenic outcomes of diesel exhaust particulate matter exposure in adipose tissue of C57BL/6 mice

**Amaya Green**, College of Science

Faculty Mentor: Dr. Amie Lund, College of Science

### Poster Lot # 105

Conjectures on Upper and Lower Cop Number Bounds for N-Speed Robbers

**Hunter Hoinkes**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Lior Fishman, College of Science

### Poster Lot # 106

CancerNet Extension Project

**Anav Jain**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Rajeev Azad, College of Science

### Poster Lot # 107

Characterizing Protein Interactions in Arabidopsis thaliana for Insights into Gene Functions

**Meher Jammalamadaka**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Patrick Horn, College of Science

### Poster Lot # 108

Expression and Purification of AtOXC, an Enzyme Involved in Oxalate Catabolism Pathway in Arabidopsis thaliana.

**Matias Jaramillo**, College of Science

Faculty Mentor: Dr. Xiaoqiang Wang, College of Science

### Poster Lot # 109

: Role of UPR and autophagy in HR4 mediated green peach aphid resistance in Arabidopsis

**Jenny Ju**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Jyoti Shah, College of Science

### Poster Lot # 110

Reductions of Elliptic Curves and Their Galois Representations

**Ethan Karpeles**, College of Science

Faculty Mentor: Dr. Lea Beneish, College of Science

# Poster Presentations

## College of Science (cont.)

### Poster Lot # 111

Notch Receptor Expression is Altered in the Adipose Tissue of Female C57Bl/6 mice exposed to Diesel Exhaust Particulate Matter

**Molly Kelly**, College of Science

Faculty Mentor: Dr. Amie Lund, College of Science

### Poster Lot # 112

Dispersal Movements of Marked Harris's Hawks Among Territories in South Texas

**Alex Kent**, College of Science

Faculty Mentor: Dr. James Bednarz, College of Science

### Poster Lot # 113

Impact on Distance Decay on Limno-terrestrial Tardigrades

**Chaewoo Kim**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Jaime Jimenez, College of Science

### Poster Lot # 114

Video Footage Surveillance and Assessment of the Western Population of Female Painted Buntings (*Passerina ciris*) and their Nesting Behaviors in North Texas

**Remington Kirchner**, College of Science

Faculty Mentor: Dr. Jim Bednarz, College of Science

### Poster Lot # 115

Acute Toxicity Assessment of Caffeine and Humic Acid on *Daphnia Magna*

**Mrunal Kosaraju**, College of Science

Faculty Mentor: Dr. Edward Mager, College of Science

### Poster Lot # 116

Biochemical Study of AtFCH2-GST which is a key enzyme involved in Oxalate Catabolism Pathway in *Arabidopsis Thaliana*

**Samriddhi Kuinkel**, College of Science

Faculty Mentor: Dr. Xiaoqiang Wang, College of Science

### Poster Lot # 117

Predicting Pollutant Uptake For Plant Cuticle Membranes and Polymer Matrix Membranes via A Free Energy Parameter Approach

**Dhishithaa Kumarandurai**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Dr. William Acree Jr., College of Science

# Poster Presentations

## College of Science (cont.)

### Poster Lot # 118

Time Dependent Depth Temperature Profiling Through Machine Learning

**Kevin Li**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Yuzhe Xiao, College of Science

### Poster Lot # 119

Predicting Pollutant Uptake For Plant Cuticle and Polymer Matrix Membranes via A Free Energy Parameter Approach

**Bradley Lin**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. William Acree, College of Science

### Poster Lot # 120

Investigating the Role of Calcium-Binding Proteins in Zebrafish Hemostasis Using Gene Knockdown and Gill Bleeding Assays

**Srinithya Manthana**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Pudur Jagadeeswaran, College of Science

### Poster Lot # 121

Synthesis and Application of Photoluminescent, Biocompatible Metal Complex

**Mahek Mehta**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Mohammad Omary, College of Science

### Poster Lot # 122

IEMR Lab: Advanced Characterization of Transition Metal Dichalcogenides and their Wet Cleaning Interactions for High Efficiency Transistor Fabrication

**Shree Mishra**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Oliver Chyan, College of Science

### Poster Lot # 123

Compiling an In-House Untargeted Mass Spectrometry Database for Metabolite Identification

**Julia Moreira**, College of Science

Faculty Mentor: Dr. Ana Paula Alonso, College of Science

### Poster Lot # 124

Improvement of Successful Transplants and Arbuscular Mycorrhizal Fungi (AMF) Application: Understanding Barriers to Native Texas Prairie Grass Establishment

**Calvin Nering**, College of Science

Faculty Mentor: Dr. Jaime Baxter-Slye, College of Science

# Poster Presentations



## College of Science (cont.)

### Poster Lot # 125

Investigation of alpha oxidation pathways in cotton.

**Michael Newton**, College of Science

Faculty Mentor: Dr. Patrick Horn, College of Science

### Poster Lot # 126

Characterizing the effects of diesel exhaust particulate matter and glucagon-like peptide-1 agonist treatment on pancreatic inflammation across sexes in C57BL/6 mouse models

**Mikella Nguyen**, College of Science

Faculty Mentor: Dr. Amie Lund, College of Science

### Poster Lot # 127

Determining the Impact of Acclimation Periods on Sequential Physiological Tolerance Tests

**Sarah Paroski**, College of Science

Faculty Mentor: Dr. David Hoeinghaus, College of Science

### Poster Lot # 128

Predicting Solubilities In Organic Solvents Using the Abraham Model

**Gabriel Perez**, College of Science

Faculty Mentor: Dr. William Acree, College of Science

### Poster Lot # 129

How Is Native, Cavity-Nesting Bee Colonization Driven By Resource Availability & Habitat Coverage Within An Urban College Campus?

**Ethan Phillips**, College of Science

Faculty Mentor: Dr. Jaime Baxter-Slye, College of Science

### Poster Lot # 130

Spatial and Temporal Dynamics in Size Structure of Endangered Sharpnose and Smalleye Shiner in the Upper Brazos River Basin

**Sara Puentes**, College of Science

Faculty Mentor: Dr. David Hoeinghaus, College of Science



# Poster Presentations



## College of Science (cont.)

### Poster Lot # 132

Morphological and Physiological responses of developing zebrafish (*Danio rerio*) exposed to intermittent hypoxia

**Shriya Raja**, Texas Academy of Mathematics & Science

Faculty Mentor: Gil Martinez-Bautista, College of Science

### Poster Lot # 133

Identification and Characterization of Electron Donor Proteins Involved in Cyclic Fatty Acid Biosynthesis in Cotton Using Virus-Induced Gene Silencing

**Jeevaprakash Rajendran**, College of Science

Faculty Mentor: Dr. Patrick Horn, College of Science

### Poster Lot # 134

Rational Design and Functionalization of MOF Materials for Catalysis

**Sanjay Ravella**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Shengqian Ma, College of Science

### Poster Lot # 135

An Efficient Finite Element Numerical Scheme for a Gray-Scott Reaction-Diffusion Model

**Dipansh Regmi**, College of Science

Faculty Mentor: Dr. Giordano Tierra Chica, College of Science

### Poster Lot # 136

Using Arbuscular Mycorrhizal Fungi to Improve Establishment of Prairie Grasses in an Urban Reconstructed Habitat

**Dylan Reinart**, College of Science

Faculty Mentor: Dr. Jaime Baxter-Slye, College of Science

### Poster Lot # 137

Video Footage of Nesting Behaviors With Female Painted Bunting's Offsprings at Lewisville Lake Environmental Learning Area (LLELA)

**Mia Rice**, College of Science

Faculty Mentor: Alejandra Gage, College of Science

### Poster Lot # 138

Effects of flow cessation on trophic dynamics in a drought-prone stream

**Breanna Ross**, College of Science

Faculty Mentor: Dr. David Hoeinghaus, College of Science



# Poster Presentations

## College of Science (cont.)

### Poster Lot # 139

Elucidating the Cyclic Fatty Acid Biosynthetic Pathway in Cotton using Virus Induced Gene Silencing

**Gabrielle Rust**, College of Science

Faculty Mentor: Dr. Patrick Horn, College of Science

### Poster Lot # 140

Possible Drivers of Similarity of Terrestrial Food Webs

**Abbey Schedler**, College of Science

Faculty Mentor: Dr. Elinor Lichtenberg, College of Science

### Poster Lot # 141

Thermal Tolerance on Vinegar Eels (*Turbatrix Aceti*) Across Generations

**Rian Shah**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Warren Burggren, College of Science

### Poster Lot # 142

Devising Metal-Organic Framework Technology for Scalable Direct Air Capture of CO<sub>2</sub>

**Elliott Slaughter**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Shengqian Ma, College of Science

### Poster Lot # 143

Understanding the Expression of Hox Genes on Factor IX Expression

**Lucille Tagnon**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Pudur Jagadeeswaran, College of Science

### Poster Lot # 144

Leveraging Electrostatic Differences in Metal-Organic Frameworks for On-Demand Drug Release

**Abby Tian**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Shengqian Ma, College of Science

### Poster Lot # 145

Protein expression and purification of AtOXC-TEV

**Brisa Valdez Piza**, College of Science

Faculty Mentor: Dr. Xiaoqiang Wang, College of Science

# Poster Presentations

## College of Science (cont.)

### Poster Lot # 146

Development of Cu Selective Passivation Coating and Corrosion Prevention Strategy in Different Copper-Aluminum (Cu-Al) Wire-Bonded Devices

**Nandini Voruganti**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Oliver Chyan, College of Science

### Poster Lot # 147

Analysis of MOFs and Enzymes

**Paige Walsh**, College of Science

Faculty Mentor: Dr. Shengqian Ma, College of Science

### Poster Lot # 148

An Exploration of the Mathematical Games of Cops and Robbers

**Jingyuan Wang**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Lior Fishman, College of Science

### Poster Lot # 149

Unititled

**Sophie Wang**, Texas Academy of Mathematics & Science

Faculty Mentor: Dr. Jose Perez, College of Science

### Poster Lot # 150

Abraham Solvation Model: A Comparison of Experimentally Determined Solute Descriptors with Predictive Models.

**Adam Witterstaetter**, College of Science

Faculty Mentor: Dr. Bill Acree, College of Science

# Poster Presentations

## *College of Visual Arts & Design*

### Poster Lot # 151

Shining a Light on Learning: Investigating the Role of Lighting in Classroom Design

**Hannah Matthews**, College of Visual Arts

Faculty Mentor: Professor Jeannine Vail, College of Visual Arts and Design

### Poster Lot # 152

Abschied und Tod: The Impact of Grief and Faith on Käthe Kollwitz from 1914 to 1924

**Isabella McCord**, College of Visual Arts, College of Liberal Arts & Social Sciences

Faculty Mentor: Dr. Kurt Rahmlow, College of Visual Arts and Design

### Poster Lot # 153

UNT and Glidance

**Carlos Reyna**, College of Visual Arts

Faculty Mentor: Professor Cassini Nazir, College of Visual Arts and Design