



URCAF2025

➔ Undergraduate Research and
Creative Activity Forum

April 25, 2025



WICHITA STATE
UNIVERSITY

Schedule

8:45 – 9:30am	Student Registration, WO 231 Judge Registration, WO 232
9:30a – 12:30pm	Poster Presentations: Atrium of Woolsey Hall
12:30 – 2:00pm	Lunch: Boxed lunches will be provided for each presenter and the judges
2:00 – 2:30pm	URCAF Awards Ceremony, WO 231

Organizing Committee

Semih Tartaroglu, Chair
Associate Professor, Finance, Barton School of Business

Heidi VanRavenhorst-Bell
Chair and Associate Professor, Human Performance Studies, College of Applied Studies

Shirlene Small
Senior Educator, Sociology, Fairmount College of Liberal Arts and Sciences

Kim Wilson
Professor and Asst Department Head Intervention Services & Leadership in Education, College of Applied Studies

Andrew Bowman
Senior Educator and Director of Intensive English Language Center, Fairmount College of Liberal Arts and Sciences

Alyssa Lynne-Joseph
Assistant Professor, Sociology LAS Social Sciences

Michelle Lamp
Assistant Educator, School of Nursing, College of Health Professions

Ikram Ahmed
Associate Professor, Mechanical Engineering, College of Engineering

Xiaolong Li
Assistant Professor, Mathematics and Statistics LAS Natural Sciences

Susan Matveyeva
Associate Professor, University Libraries

Andrew Swindle
Associate Professor, Geology, Fairmount College of Liberal Arts and Sciences

Applied Sciences Poster Presentations

1	Jessica McIntosh	The Power of Prevention: The Key to Lifelong Oral Health
2	Tara Henton	EDUCATING UNDERGRADUATE STUDENTS ABOUT SWALLOWING PRETREATMENT FOR HEAD AND NECK CANCER PATIENTS
3	Sunny Doffing	Melodic Intonation Therapy via Zoom for a Person With Severe Broca's Aphasia
4	Juan Hernandez	EVALUATING HORIZONTAL DISTANCE MEASUREMENTS IN ERGONOMIC RISK ASSESSMENTS FOR LIFTING TASKS

Natural Sciences & Engineering Poster Presentations

5	Muhammad Hazim Zubair	Rheological Analysis of Crosslinking Behaviors of Polysiloxanes Catalyzed by Karstedt's Catalyst
6	Pedro Cupertino	PARAMETRIC CAD DESIGN FOR LIFECYCLE-BASED RC PLANE DEVELOPMENT
7	Dameron Cook	LUNA AI NAVIGATION SYSTEM FOR NASA SPACESUIT USER INTERFACE TECHNOLOGIES FOR STUDENTS (SUITS) CHALLENGE
8	Nazanin Kasirosafar	Investigation of Intrinsically Disordered Regions in the Drosophila Matrisome
9	Eddie Allen	Evaluating alternatives to GPUs for power and cost efficiency

10	Breanna Leach	Patterns of Brain Ferritin Expression in the Drosophila Divalent Cation Transporter Mutant Malvolio
11	Bryson Murphy Taylor Spinelli	Cardiovascular Health Monitoring Using Multiple Conformal PPG and ECG Devices
12	Ryan Gibson	Design Modifications and Fabrication of Endcaps and Loading-Unloading Mechanism for a Chemical Vapor Deposition System
13	Luke Cotter	MODELING AND COMPARING THE EFFICIENCY OF QUADCOPTER DRONE DESIGNS
14	Vanessa Carey	Development of Dioxolenium Ion Crosslinking Chemistry for Molecules Based on 2-Bromo-3-Hydroxypropionic Acid
15	Farouk Gamaleldin	CHANGES IN FREQUENCY AND ABUNDANCE OF VERNONIA BALDWINII AND SOLIDAGO RIGIDA UNDER CATTLE GRAZING
16	Adam Slagle	Neuroimaging Motion Artifact Simulation
17	Emma Simmons	DEVELOPING A WEARABLE FETAL HEART MONITOR: AN EVALUATION OF FETAL ELECTROCARDIOGRAM EXTRACTION ALGORITHMS
18	Zane Hubble	Increasing the Efficiency of Mechanically Exfoliating 1T-CrTe ₂ Flakes Using the "Easy-Peel" Process
19	Abby Bui	Effects of pH, Denaturants, and Salts on the refolding and aggregation of Lethal Factor in Anthrax Toxin
20	Hafsa Sadaf	Fabrication of Uniform Copper Wick Structures using High Voltage Press Sinter Method for Enhanced Thermal Management
21	Eddie Allen	Evaluating alternatives to GPUs for power and cost efficiency

22	Lauren Hughes	What's Linker Got To Do With It? Examining the Structure and Stability of Palladin's Ig3-4 Linker Region
23	Pedro Cupertino Kubeshavarsha Kalithasan Anubhav Pant Ami Goto Yuto Minami	MODULAR STOL UAV DESIGN FOR RAPID MISSION DEPLOYMENT

Social Sciences & Humanities Poster Presentations

24	Dave Joshua Del Mar	DEXA ASSESSMENT EFFECTS ON BODY IMAGE AND PHYSICAL ACTIVITY CHANGES IN YOUNG ADULTS
25	Max, Gosch	The Impact of Fluvial Erosion on Archaeological Sites in Kansas
26	Garett Knight	From Sound to Synapses: How Music Impacts Psychological States and Emotional Intelligence
27	Braeden Miller	The Effects of Leading Questions on Opinion of News Media
28	Kevin Aguilar-Maldonado	ASSESSING USAGE OF SPANISH AMONG NON-FIRST GENERATION HERITAGE SPEAKERS

Wichita Collegiate High Scholl will present poster during URCAF 2025, but they will not judged

29	Wichita Collegiate	The Possibility of Sustainable Human Life on Mars: A Literature Review
----	--------------------	--