## I OFFICE OF RESEARCH AND CREATIVE ACTIVITY



## **REVIEW AND RESULTS**

FRIDAY, APRIL 11, 2025 | BARBARA WEITZ COMMUNITY ENGAGEMENT CENTER



# STUDENT RESEARCH AND CREATIVE ACTIVITY FAIR AT A GLANCE

# 300 Projects

Graduate Students



Undergraduate Students

## PARTICIPATION FROM ALL SIX UNO COLLEGES AND UNL COLLEGE OF ENGINEERING | 126 FACULTY ADVISORS

## COMMUNITY JUDGES REPRESENTED THESE ORGANIZATIONS

- Kindred CFI
- University of Nebraska-Lincoln
- J.B. Hunt
- National Strategic Research Institute
- University of Nebraska Medical Center
- University of Nebraska at Omaha
- College of Saint Mary
- Emerging Ladies Academy
- NV5
- HDR (retired)
- Noteworthy Music of Nebraska
- Cover Genius
- National Indemnity Company
- Nebraska Arts Council
- Creighton University

- University of Nebraska Foundation
- University of Nebraska at Omaha Alumni Association
- Bio Nebraska
- U.S. House of Representatives
- UNeMed
- Baird Holm LLP
- Lozier Corporation
- Roger Humphries Photography
- ICA
- Buildertrend
- UNeTech Institute
- Genoma Bioinformatics
- Omaha Public Library
- Physicians Mutual
- Nebraska Medicine

- Nebraska Business Development Center
- Metropolitan Utilities District
- Midwest Surgical Hospital
- NTT Data, Inc.
- Invest Nebraska
- Office of U.S. Senator Pete Ricketts
- Fidelity National Financial
- University of Nebraska System
- NebDev
- Hanger Clinic
- Noddle Development (retired)
- Syndicate of Sound Synapse
- Physician (retired)
- Midwest Disabilities Services

The Student Research and Creative Activity Fair is grateful to our sponsors, whose generous support brings UNO's students and their groundbreaking work to the Omaha community, and beyond. Please contact <u>unoorca@unomaha.edu</u> if you are interested in being a sponsor for the 2026 Fair.

## 👾 PLATINUM SPONSORSHIP

Bio Nebraska Nebraska National Guard UNO Alumni Association 🙀 GOLD SPONSORSHIP

🔶 SILVER SPONSORSHIP

## Invest Nebraska

## ADDITIONAL SPONSORS

UNeMed

Great Plains IDeA-CTR Holland Computing Center

# 2025 FAIR AWARDEES

## UNDERGRADUATE

## PERFORMANCES

BEST: MATEA JERKOVIC, CAMERON JORDAN, HAYDEN JOHNSON, ROBERT RUSSELL "UNO Maverick Saxophone Quartet"

**OUTSTANDING: ISA WRIGHT** "Twisted Apples" Advised by: Teresa Carmody

Advised by: Matthew Storie

MERITORIOUS: ALEX MARTINEZ "Spanish Daydream: Spain's Music on the Guitar" Advised by: Mary Perkinson

## **POSTER PRESENTATIONS**

**BEST: PAW THLAY WAH** 

"Improving Health Outcomes for the Karen Community: Understanding Perceived Barriers to Physical Activity" Advised by: Richard Stacy

### **OUTSTANDING: MEGAN ALTHOUSE**

"Empowering Future Medical Professionals Through Math, Physics, and Computer Science" Advised by: Michael Matthews

## MERITORIOUS: BROOKLYNN SCHMIDT

"Exploring Teamwork in Children's Literature: Enhancing Character Strength Recognition in the Classroom" Advised by: Lisa Scherer

## HONORABLE MENTION: CLAIRE WING

"Examining Fertilization Through the Knockdown of Ife-2 in C. elegans" Advised by: Karen Kim Guisbert

## **ORAL PRESENTATIONS**

### **BEST: ISABELLE WEBER**

"Optimization of natural killer cell simultaneous ADCC and direct killing assay to increase data output for each human donor" Advised by: Paul Denton

#### **OUTSTANDING: IZZY VARGAS**

"Character Strengths in Classical Music Compositions of the Romantic Period" Advised by: Lisa Scherer

#### MERITORIOUS: CHARLESTON BERRYMAN

"Using ADAM17 inhibition to boost human natural killer cell-mediated antibody-dependent cell-mediated cytotoxicity" Advised by: Paul Denton

## HONORABLE MENTION: CHERYLYNN GIBSON

"The Relationship Between Antioxidants and Anxiety: Manipulation of GPX1B on Stress Coping" Advised by: Ryan Wong

## **EXHIBITS OR DEMONSTRATIONS**

**BEST: KENNEDY WALLMAN** "Experiences in Femininity" Advised by: Adrian Duran

OUTSTANDING: IAN ANDRESS "Mixing in Surround Sound: A Comparative Study" Advised by: Thomas Wilson

## **MERITORIOUS: JEN RIEDL**

"Compassion in Crisis: Unveiling the Dangers of AI in Healthcare Settings" Advised by: Kristin Girten

HONORABLE MENTION: ALYSSIAH GREEN "An Invisible Illness on the Outside" Advised by: Roma Subramanian

## GRADUATE

## PERFORMANCES

BEST: KYLE PAOLETTI

"Syncing Senses: The Impact of Visual Art on Audience Engagement with live Music" Advised by: Hannah Weaver

### OUTSTANDING: AARON SCOBIE

"Sun and Dust Through the Blinds" Advised by: John Price

## **POSTER PRESENTATIONS**

## **BEST: CHUKWUMA ADINCHEZOR**

"Developing a Translational Model for Nutritional Microbiology Research at the Callitrichid Research Center: A Proof-of-Concept Dietary Intervention Study" Advised by: Jonathan Clayton

#### **OUTSTANDING: CHRISTOPHER ENGSBERG**

"Temporal Symmetry Instruction Through Plantar Tactile Stimulation" Advised by: Mukul Mukherjee

## MERITORIOUS: SARAH WOELFEL

"Ultrasound-Based Spatial Frequency Analysis to Differentiate Patellar Tendon Quality in Tendinopathy and Healthy Participants" Advised by: Adam Rosen

#### HONORABLE MENTION: MAHBOUBEH GHANBARI

"Nitric Oxide Delivery in Chitosan Nanofibrous Dressings: A Comparison of Three Loading Techniques" Advised by: Yury Salkovskiy

## **ORAL PRESENTATIONS**

### **BEST: SARAH LEHN**

"The Eagles and the Kaiser: World War I, Anti-Germanism and Omaha Central High School-Historical Research and Instructional Materials" Advised by: Danielle Battisti

## OUTSTANDING: RAMIN SHAHBAD

"Quantifying the Impact of Stent-Graft Compliance on Aortic Windkessel Effect" Advised by: Anastasia Desyatova

## MERITORIOUS: TOKA MOOTAZ ABOELNOUR AHMED

"Neural plasticity before and after Targeted Muscle Reinnervation in an upper limb amputee" Advised by: Jorge Zuniga

## HONORABLE MENTION (TIE): MEHRNOUSH HAGHIGHATNEJAD

"Bilateral Gait Variability Responds Asymmetrically to External Cueing" Advised by: Aaron Likens

#### HONORABLE MENTION (TIE): THOMAS FORKE "Religious Expression in the Soviet Gulag" Advised by: Mark Celinscak

## **EXHIBITS OR DEMONSTRATIONS**

**BEST: CHELSEA KAVICH** "Documentary Film" Advised by: Peter Szto

## OUTSTANDING: SAVANNAH BOEDIGHEIMER

"Cybersecurity for Older Adults" Advised by: Melissa Cast-Brede







## **Dear UNO Community and Friends,**

The number and scope of student scholarly and creative activities on campus keep growing, and this is reflected during our annual Student Research and Creative Activity Fair. This year marked a milestone: our 17th year of celebrating and showcasing the incredible work our students are doing on campus. In 2025, the Fair showcased 300 student projects representing all six UNO colleges, as well as the UNL College of Engineering from UNO's Scott Campus.

We invite you to join us next year for the:



This event is a reflection of the community-university collaboration for which UNO has become known. We are grateful to all community members who serve as judges and to those that attend the fair.

The Office of Research and Creative Activity wishes to sincerely thank all students, faculty mentors, and faculty moderators who made the 2025 Fair a resounding success. As always, we look forward to exhibiting the research, scholarly, and creative activities of UNO's students at the 2026 Fair. We invite you to join us for this exciting annual event.

## We look forward to seeing you at the Fair!

Sara A. Myers, Ph.D. Associate Vice Chancellor for Research and Creative Activity

## 2026 GUIDELINES COMING SOON!

Interested in serving as a judge or volunteering for the 18th Annual Student Research and Creative Activity Fair on March 27, 2026? Know someone who might be? Contact us to learn more.

OFFICE OF RESEARCH AND CREATIVE ACTIVITY 203 Eppley Administration Building 6001 Dodge Street | Omaha, NE 68182 402.554.2286 | <u>unoorca@unomaha.edu</u>



The University of Nebraska does not discriminate based on race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation in its education programs or activities, including admissions and employment. The University prohibits any form of retaliation being taken against anyone for reporting discrimination, harassment, or retaliation for otherwise engaging in protected activity. UNO is an AA/EEO/ADA institution. For Title IX concerns, please contact the Title IX Coordinator (phone: 402.554.2120). For ADA/504 accommodations or assistance, please call/contact the ADA/504 Coordinator (phone 402.554.2463) or the Accessibility Services Center (phone: 402.554.2872). 1575BROMC0725