

# 16<sup>TH</sup> ANNUAL STUDENT RESEARCH AND CREATIVE ACTIVITY FAIR

**REVIEW AND RESULTS**

FRIDAY, MARCH 22, 2024 | BARBARA WEITZ COMMUNITY ENGAGEMENT CENTER

# STUDENT RESEARCH AND CREATIVE ACTIVITY FAIR AT A GLANCE

# 199

*Projects*

# 105

*Graduate Students*

# 86

*Undergraduate Students*

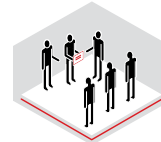
PARTICIPATION FROM ALL SIX UNO COLLEGES AND UNL COLLEGE OF ENGINEERING | 85 FACULTY ADVISORS

## COMMUNITY JUDGES REPRESENTED THESE ORGANIZATIONS

- 211 Outreach
- AT&T
- Alzheimer's Association
- American Diabetes Association
- Amoi Studio & Labs, LLC
- Amplify Arts (retired)
- Berkshire Hathaway
- Bio Nebraska
- Blue Cross Blue Shield of Nebraska
- Children's Square
- City of Omaha Mayor's Office
- College of St. Mary
- Concentrix
- CRNA
- Cultural Tourism DC
- Elevate Omaha
- Empower
- Fiserv
- Gallup Inc.
- George Butler Associates
- Hewlett Packard Enterprise
- Institute for Community Alliances
- Invest Nebraska
- KANEKO
- Kids Can Community Center
- Kiewit Luminarium
- KWS Seeds, Inc
- Learning Community of Douglas and Sarpy Counties
- Lincoln Financial Group
- Midwest Laboratories
- Mutual of Omaha
- National Strategic
- NebDev
- Nebraska Arts Council
- Nebraska Department of Health and Human Services
- Nebraska Expressive Arts Therapy (NExT) Foundation
- Nebraska Health Network
- Nebraska Medicine
- Nebraska State Legislature
- Nelson Mandela Elementary
- NV5
- Omaha Conservatory of Music
- Omaha Public Library (retired)
- Paladin LLC
- Research Institute (NSRI)
- The Salvation Army
- The Salvation Army Kroc Center
- U.S. Probation Office
- UNeMed
- UNeTech Institute
- University of Nebraska at Kearney (UNK)
- University of Nebraska at Omaha Libraries
- University of Nebraska Foundation
- University of Nebraska-Lincoln (UNL)
- University of Nebraska Medical Center (UNMC)
- University of Nebraska System
- UNO Alumni Association Board Member
- UNO Alumni Office
- UNO - Samuel Bak Museum
- UNO Service-Learning Academy
- USMCR
- Vee's MultiArtiVerse
- Veterans Yoga Project
- Wells Fargo
- WEX Inc
- Wipro



# 2024 FAIR AWARDEES



## UNDERGRADUATE

### PERFORMANCES OR DEMONSTRATIONS

**BEST: ETHAN ROBLES**

"Spirit Ingredient"

Advised by: Lilly Lu

**OUTSTANDING: LUKE KOESTERS**

"10,000 Years of Happiness, Selected Thesis Poems"

Advised by: Todd Robinson

**MERITORIOUS: AMANDA OVERFIELD**

"From Script to Scene: A Directing Capstone"

Advised by: Ron Zank

### POSTER PRESENTATIONS

**BEST: ANDREW HUANG**

"Using common marmoset (*Callithrix jacchus*) feces to isolate and characterize *Acinetobacter*"

Advised by: Jonathan B. Clayton

**OUTSTANDING: VICTOR RIVERO**

"Critical First Step in our Laboratory's immunobiology Experimental protocols"

Advised by: Paul Denton

**MERITORIOUS: BAILEY SHUBERT**

"When is 'I'm Sorry' Not Enough?: An exploration of breaking bad news in a simulated clinical setting"

Advised by: Timi Barone

**HONORABLE MENTION: KATHRYN CHAIN,****DYLAN HERRMAN, AND JULIO NAVAS**

"Solving Two-Dimensional Schrödinger Equation for a Double Well Potential Using Analytical and Variational Methods"

Advised by: Wai-Ning Mei

### ORAL PRESENTATIONS

**BEST: NATHANIEL BOOHER**

"BET Inhibitor Exposure Impacts on Cancer Cells' Surface Expression of NK Cell Ligands"

Advised by: Paul Denton

**OUTSTANDING: ANGELA TRUONG**

"Surface CD16 Modulation by Toll-Like Receptor 9 (TLR9) Agonism on Human Natural Killer Cells"

Advised by: Paul Denton

**MERITORIOUS: DIYA JOY VARUGHESE**

"Employing an experimental approach to study the killing capacity of natural killer cells"

Advised by: Paul Denton

**HONORABLE MENTION: DONALD ROGERS**

"Validation and Implementation of Human-specific Multiplex Analysis to Quantify the Inflammatory Response in the Plasma of Common Marmosets (*Callithrix jacchus*)"

Advised by: Paul Denton

### EXHIBITS

**BEST: AMIEY ELSASSER**

"DERMA: Experiences in Body Paint Post Spinal Injury"

Advised by: Mark Gilbert

**OUTSTANDING: KENNEDY WALLMAN**

"Experiences in Femininity"

Advised by: David Helm

**MERITORIOUS: KIARA HERNANDEZ PADRON**

"Desolation"

Advised by: Rebecca Norris

**HONORABLE MENTION: SAVANA SCHILTZ**

"Spring"

Advised by: Rebecca Norris

## GRADUATE

### PERFORMANCES OR DEMONSTRATIONS

**BEST: CLAIRE JAMES**

"Charanga': Cuban and Classical Flutistry"

Advised by: Christine Beard

**OUTSTANDING: MATTHEW SHEPPARD**

"Debussy through the Ears of Falla"

Advised by: Hadley Heavin

**MERITORIOUS: ETHAN CHRISTIANSEN**

"Nothing is Real: A Discussion of Sound and Music"

Advised by: Hannah Weaver

### POSTER PRESENTATIONS

**BEST: KENNADY RUFFCORN**

"Does Lack of Psychological Readiness Influence Reinjury in Athletes at Return to Play After Anterior Cruciate Ligament Reconstruction Surgery?"

Advised by: Adam Rosen

**OUTSTANDING: SEUNG KYEOM KIM**

"Bridge the Predictability and Complexity in Human Gait"

Advised by: Aaron Likens

**MERITORIOUS: SARAH WOELFEL**

"The relationship between patellar tendon anthropometrics and modifiable risk factors of patellar tendinopathy"

Advised by: Adam Rosen

**HONORABLE MENTION: CHRISTINE STASI-ARISPE**

"How to Successfully Implement Practical Functional Assessment in School Settings"

Advised by: Adam Weaver

### ORAL PRESENTATIONS

**BEST: ADARSHA BHATTARI**

"Security Mechanisms and Communication Strategies for the Adaptive Partition of Remote Electrocardiogram (ECG) Diagnosis Between Wearable Sensor Net and Cloud"

Advised by: Dongming Peng

**OUTSTANDING: THEODORE DELIGIANNIS**

"Negative Impact of Aging on Gait Autocorrelation: A Mixed-Effects Analysis of Stride Interval Dynamics"

Advised by: Aaron Likens

**MERITORIOUS: DIANA MWIKISA**

"Uterine Fibroids: A Silent Crisis"

Advised by: Roma Subramanian

**HONORABLE MENTION: ALEXIA RAINS**

"The Relationship Between Compensatory Behavior and Balance Control During Walking in Stroke Survivors"

Advised by: Mukul Mukherjee



## 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 16th year of celebrating and showcasing the incredible work our students are doing on campus. In 2024, the Fair showcased nearly 200 student projects representing all six UNO colleges, as well as the UNL College of Engineering from UNO's Scott Campus.

Special Thanks to  
Our 2024 Sponsors!



We invite you to join us next year for the:

# 17<sup>TH</sup> ANNUAL STUDENT RESEARCH AND CREATIVE ACTIVITY FAIR

FRIDAY, APRIL 11, 2025

REGISTRATION DEADLINE: MARCH 12, 2025

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 who attend the fair.

The Office of Research and Creative Activity wishes to sincerely thank all students, faculty mentors, and faculty moderators who made the 2024 Fair a resounding success. We look forward to exhibiting the research, scholarly, and creative activities of UNO's students at the 2025 Fair. We invite you to join us for this exciting annual event.

2025 Guidelines coming soon!

Interested in serving as a judge, volunteering, or sponsoring the 17<sup>th</sup> Annual Student Research and Creative Activity Fair on April 11, 2025? Know someone who might be? Contact us to learn more: [unoorca@unomaha.edu](mailto:unoorca@unomaha.edu)

We look forward to seeing you at the Fair!

**Kristin Girten, Ph.D.**

Assistant Vice Chancellor  
for Research and Creative Activity

**Sara A. Myers, Ph.D.**

Associate Vice Chancellor  
for Research and Creative Activity



SUPPORT ORCA  
WITH A DONATION

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UNIVERSITY OF  
**Nebraska**  
Omaha



# Support UNO's 2025 Student Research and Creative Activity Fair

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*Become a Sponsor or Judge!*

Date: April 11, 2025

Location: Weitz Community Engagement Center, Omaha, NE

The UNO Office of Research and Creative Activity (ORCA) is thrilled to present this event as an outstanding opportunity for community partners to engage with our talented student scholars. These students will be showcasing their innovative research and creative projects, many of which highlight their potential to become future leaders and experts in their respective fields. This event offers a unique platform for potential employers to meet some of the brightest minds at UNO.

We offer multiple levels of sponsorship and are open to customizing opportunities—such as sponsoring a specific award that aligns with the focus of your organization. In addition to our sponsorship packages, we also invite community partners to serve as judges. Participating as a judge allows for meaningful engagement with the student projects, offering feedback and support without a sponsorship commitment. It's an excellent chance to interact with the work firsthand and contribute to the students' academic and creative growth.

## **Why Participate?**

Join us in celebrating the innovative spirit of UNO students as they showcase their year-long research and creative projects. These projects have been developed with the guidance of dedicated UNO faculty mentors and reflect the hard work and passion of our top students.

## **Benefits of Involvement:**

- Connect with talented UNO students who are future leaders in their fields.
- Make a Difference: By becoming a sponsor or a community judge, you can impact the next generation of innovators and creators.
- Be honored as a key supporter of education, research, and creativity at UNO.

## **How You Can Get Involved:**

- Sponsors: Help make this event a success while aligning your brand with innovation and academic excellence.
- Judges: Share your expertise or provide valuable feedback and evaluation of student projects across various categories.

## **Who You'll Meet:**

- Outstanding UNO Students: Talented scholars presenting the projects they've worked on throughout the year with faculty advisors.
- UNO Faculty and Leaders: Collaborate with experienced educators.

## **Get Started:**

For more information on sponsorships or participating as a community judge, please contact [unoorca@unomaha.edu](mailto:unoorca@unomaha.edu).