14th Annual
Student Research and Creative Activity Fair

Year in Review

Friday, March 4, 2022 | Milo Bail Student Center
STUDENT RESEARCH AND CREATIVE ACTIVITY FAIR AT A GLANCE

167 | 112 | 55
Projects | Graduate Students | Undergraduate Students

PARTICIPATION FROM ALL SIX UNO COLLEGES AND UNL COLLEGE OF ENGINEERING | 83 FACULTY ADVISORS

COMMUNITY JUDGES REPRESENTED THESE ORGANIZATIONS

- Bio Nebraska
- BlackTopp Studios
- Boys Town National Research Hospital
- Kids Can Community Center
- Learning Community
- National Security Innovation Network (NSIN)
- UNO’s Nebraska Business Development Center
- Omaha Children’s Museum
- Omaha Public Library
- Omaha Public Schools

- Papillion-LaVista Schools
- Salesforce
- UNeMed Corporation
- UNeTech Institute
- University of Nebraska Foundation
- University of Nebraska Medical Center (UNMC)
- University of Nebraska System (NU)
- University of Nebraska – Kearney (UNK)
- University of Nebraska – Lincoln (UNL)
GRADUATE

ORAL PRESENTATIONS OR PERFORMANCES

BEST: NIKOLAOS PAPACHATZIS AND SAMUEL F. RAY
Biomechanics
“Do anatomical variations in human feet allow some individuals to walk faster with less effort?”
Advisor: Kota Takahashi, Ph.D.

OUTSTANDING: TYLER HAMER
Biomechanics
“Evaluation of a Baseball Pitching Program and Its Impact on Pitching Performance Biomechanics”
Advisor: Brian Knarr

MERITORIOUS: DAVID SALAZAR
Biomechanics
“3D Printed Anatomical Models Improve Student Comprehension of Complex Anatomy: A Systematic Review and Meta-analysis”
Advisor: Jorge Zuniga, Ph.D.

HONORABLE MENTION: LIZ PEKAS
Biomechanics & Kinesiology
“Integrative function of microcirculation and skeletal muscle function in peripheral artery disease”
Advisor: Song-young Park, Ph.D.

POSTER PRESENTATIONS

BEST: FARAHNAZ FALLAHTAFTI
Biomechanics
“Ankle Foot Orthoses Improves Ground Reaction Forces in Patients with Peripheral Artery Disease”
Advisor: Sara Myers

OUTSTANDING: JOHN RECH
Biomechanics & Kinesiology
“Exploring preschool teachers’ physical activity and their impact on children’s physical activity”
Advisor: Danae Dinkel, Ph.D.

MERITORIOUS: JUDITH KIM
Gerontology
“Cognitive Complexity under High Cognitive Load situation (HCLS) in Older Adults”
Advisor: Julie Blaskewicz Boron, Ph.D.

HONORABLE MENTION: ISAAC LINDQUIST
Psychology
“Examining Role Clarity’s Effects in Collegiate Baseball Player Motivation”
Advisor: William Kramer, Ph.D.

UNDERGRADUATE

ORAL PRESENTATIONS OR PERFORMANCES

BEST: MAIA BENNETT
Biology
“Impact of Helper-like Innate Lymphoid Cells in NK Cell-Mediated Cancer Cell Killing”
Advisor: Paul Denton, Ph.D.

OUTSTANDING: MAVERICK BERKLAND
Mathematics
“n-Link Robot Manipulator: Simulation and Control Design”
Advisor: Mahboub Baccouch, Ph.D.

MERITORIOUS: EMILY CHAMPION
Psychology
“The Role of Physician Empathy, Patient Trust and Coping Resilience on Compliance to Treatment Regimen”
Advisor: Lisa Scherer, Ph.D.

HONORABLE MENTION: RYAN CHAPMAN
Biology
“Utilization of Bioinformatics to Identify Novel Regions of the Toxoplasma gondii Genome with Improved Diagnostic Capability”
Advisor: Paul Davis, Ph.D.

POSTER PRESENTATIONS

BEST: SYDNEY ANDREASEN
Biomechanics
“Developing an Immersive Environment for Visual Scanning Assessment and Training of Unilateral Spatial Neglect After Stroke and Healthy Baseline Assessment”
Advisor: Brian Knarr, Ph.D.

OUTSTANDING: MEGHAN PRUSIA
Biomechanics
“Relationships between finger tapping and gait timing in musicians and non-musicians”
Advisor: Vivien Marmelat, Ph.D.

MERITORIOUS: LIZETH BASILIO
Biology
“The Genetics of Filamentation and Pathogenesis in Divergent Clinical C. albicans Isolates”
Advisor: Jill Blankenship, Ph.D.

HONORABLE MENTION: ALICIA ANDERSEN
Biomechanics
“Determining the impact of supervised exercise therapy on gait variability in patients with peripheral artery disease”
Advisor: Hafizur Rahman
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. Last year marked a milestone: our 14th year of celebrating and showcasing the incredible work our students are doing on campus. In 2022, the Fair showcased over 160 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 this year for the

**15TH ANNUAL STUDENT RESEARCH AND CREATIVE ACTIVITY FAIR**

**FRIDAY, MARCH 24, 2023**  
**REGISTRATION DEADLINE: FEBRUARY 10, 2023**

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 2022 Fair a resounding success. As always, we look forward to exhibiting the research, scholarly, and creative activities of UNO’s students at the 2023 Fair. We invite you to join us for this exciting annual event.

We look forward to seeing you at the Fair!

**Ken Bayles, Ph.D.**  
Associate Vice Chancellor for Research and Creative Activity

**Sara A. Myers, Ph.D.**  
Assistant Vice Chancellor for Research and Creativity Activity

**Kristin Girten, Ph.D.**  
Assistant Vice Chancellor for Arts and Humanities

**Emily Wright, Ph.D.**  
Assistant Vice Chancellor for Social Sciences

2023 Guidelines will be forthcoming

Interested in serving as a judge or volunteering for the 15th Annual Student Research and Creative Activity Fair on March 24, 2023? Know someone who might be? Contact us to learn more.