



August 6th, 2024: Directory of Student Presenters

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Advisor: Arthur "Trey" Andrews III

Abdelkarim, Angel

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Poster Title: Synthesis of Nanoparticles

Advisor: Yinsheng Guo

Acosta, Sofia

Research Group: Nebraska Summer Research Program

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Advisor: Arthur "Trey" Andrews

Aga, Meklit

Research Group: McNair Scholars Program

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Poster Title: Traumatic Brain Injury Outcomes: Emotion Recognition and Age

Advisor: Kathy Chiou

Amaya, Jasmine

Research Group: UCARE

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Poster Title: Stories of Humanity: Making Holocaust Testimony Accessible

Advisor: Beth Dotan

Anderson, Hunter

Research Group: UCARE

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Poster Title: Decontamination of Mustard Gas Using Hydrogel with Enhanced Oxidation Capability

Advisor: Barry Cheung

Andrade, Melinna

Research Group: Nebraska Summer Research Program

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Poster Title: Constructing a Library of Thermostable Archaeal Enzymes for Refining Lignocellulose into Biofuel Feedstock

Advisor: Nicole Buan

Andrews, Josiah

Research Group: Nebraska Summer Research Program

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Poster Title: Analyzing Effectiveness of UAV-mounted soil probe measurement of Volumetric Water Content

Advisor: Justin Bradley

Arrazcaeta Duray, Kendry

Research Group: Nebraska Summer Research Program

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Poster Title: Characterizing Performance of Drone-based Soil Probe Insertion in Diverse Soil

Advisor: Justin Bradley

Ascencio, Ellian

Research Group: Nebraska Summer Research Program

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Poster Title: Characterizing High Lysine and Colored Sweetcorn Crosses

Advisor: David Holding

Auchtung, Julian

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Poster Title: Superhydrophobization of Stainless Steel

Advisor: Yongfeng Lu

Ayars, Jada

Research Group: Nebraska Summer Research Program

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Advisor: David S. Hage

Baez Rivera, Jean

Research Group: Nebraska Summer Research Program

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Poster Title: Novel Synthesis and Patterning Approaches for Lead Halide Perovskites

Advisor: Steven Wignall

Ballentine, Ash

Research Group: McNair Scholars Program

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Poster Title: The Institute in Basic Life Principles, The Duggars, and Bad Behavior: How Religion, Social Media, and Purity Culture Intersect

Advisor: Angela Bolen

Banks, Hayden

Research Group: Nebraska Summer Research Program

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Poster Title: Chemical Vapor Deposition of Ti₂CCl₂ MXenes and its Delamination

Advisor: Alexander Sinitskii

Barbato, Owen

Research Group: Nebraska Summer Research Program

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Advisor: Lorey Wheeler

Barber, Austin

Research Group: Nebraska Summer Research Program

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Advisor: Leen-Kiat Soh

Baron, Julia

Research Group: Nebraska Center for Energy Sciences Research

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Advisor: Mona Bavarian

Bitterman, Emma

Research Group: Nebraska Summer Research Program

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Advisor: Donald Becker

Blair, Brittany

Research Group: Nebraska Summer Research Program

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Poster Title: Accelerated Storage vs Ambient Storage of Tortilla Chips Using Different Kinds of Maize

Advisor: Devin Rose

Bolton, Mackenzie

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Poster Title: Repairing a THz Ellipsometer for Precision Instrumentation

Advisor: Mathias Schubert

Brady, Mason

Research Group: Nebraska Summer Research Program

Poster Location: 131

Poster Title: Characterization and Control of Single-Photon Emitter Properties in Hexagonal Boron Nitride

Advisor: Abdelghani Laraoui

Brennan, Luke

Research Group: Nebraska Summer Research Program

Poster Location: 114

Poster Title: Safe reinforcement learning for autonomous racing without prior track knowledge

Advisor: Dung Hoang Tran

Brink, Kaleb

Research Group: Nebraska Summer Research Program

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Poster Title: Biophysical and Structural Characterization of Human Sodium Calcium Exchangers in Lipid Nanodisc

Advisor: Yihe Huang

Brinkley, Roshawna

Research Group: Nebraska Summer Research Program

Poster Location: 8

Poster Title: Maternal Chains: Black Women's Legal Battles for Freedom in Pre-Emancipation America

Advisor: Katrina Jagodinsky and William Thomas III

Brown, Riley

Research Group: UCARE

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Poster Title: Enumerating Lozenge Tilings of a Hexagon with Holes

Advisor: Tri Lai

Bryant, Amara

Research Group: UCARE

Poster Location: 91

Poster Title: Investigating the Role of Human Cytomegalovirus UL2 During Myeloid Infection

Advisor: Lindsey Crawford

Caldwell, Luke

Research Group: Nebraska Summer Research Program

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Advisor: Yinsheng Guo

Camacho, Christopher

Research Group: Nebraska Summer Research Program

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Poster Title: Self-Reported Knowledge Gains from Reflection

Advisor: Heidi Diefes-Dux

Campbell, Kyle

Research Group: Nebraska Summer Research Program

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Advisor: Ming Guo

Caraballo-Casiano, Francheska

Research Group: Nebraska Summer Research Program

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Advisor: Edward Deehan

Carrillo, Sophia

Research Group: Nebraska Summer Research Program

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Advisor: Dr. Katie Edwards

Charleville, Samantha

Research Group: Nebraska Summer Research Program

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Poster Title: Bioactive fungicides to combat chemical fungicide resistance

Advisor: Dr. Liangcheng Du

Chen, Jeff

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Poster Title: Selective laser sintering of (ZrNbTaTiW)C compositionally complex carbide

Advisor: Bai Cui

Chijioke, Chikamso

Research Group: Nebraska Summer Research Program

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Advisor: Katrina Jagodinsky

Cole, Skyler

Research Group: Nebraska Summer Research Program

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Poster Title: Safe Navigation for UAV Fleets Through Dynamic Environments Using A-Star and RRT

Advisor: Dung Hoang Tran

Cover, James

Research Group: Nebraska Summer Research Program

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Poster Title: Why do More When You Can Do LMS?: Mechanical Engineering Instructor Trends in LMS Feature Use Preceding, During, and Succeeding a Disruption to Higher Education

Advisor: Heidi Diefes-Dux & Grace Panther

Cureton, Marcus

Research Group: McNair Scholars Program

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Poster Title: A Survey of Over-the-Counter Substance Stability in Animal Tissue

Advisor: Charles Murrieta

De Leon, Jessica

Research Group: Nebraska Summer Research Program

Poster Location: 105

Poster Title: Undergraduate Engineering Students' Strategies for Overcoming Visuo-Spatial Challenges

Advisor: Grace Panther

Del Rello, Magaly

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Advisor: Xia Hong

DeNatale, Nikhil

Research Group: Nebraska Summer Research Program

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Advisor: Joe Louis

Denning, Audrey

Research Group: UCARE

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Advisor: Ken Wakabayashi

Diaz, Stephanie

Research Group: Nebraska Summer Research Program

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Advisor: Lorey Wheeler

Dunivan, Adrian

Research Group: Nebraska Summer Research Program

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Advisor: Nicole R. Sexton

Duralia, William

Research Group: Nebraska Summer Research Program

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Poster Title: Procedures for Verifying Safe Intensity Levels for a Diagnostic Ultrasound Medical Device

Advisor: Greg Bashford

Eche, Divine

Research Group: Nebraska Summer Research Program

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Advisor: Andrew K. Benson

Faagau, Kavika

Research Group: Nebraska Summer Research Program

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Advisor: Justin Bradley, Brittany Duncan

Ferrell, Isabella

Research Group: Nebraska Summer Research Program

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Advisor: Katrina Jagodinsky, William Thomas, III

Figueroa Amaro, Kevin

Research Group: Nebraska Summer Research Program

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Poster Title: Fearful of Seeking Care: Anti-Immigration Climate Diminishing Healthcare Utilization

Advisor: Arthur "Trey" Andrews III

Fitzpatrick, Emily

Research Group: UCARE

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Advisor: Jessica Deters

Florea, Avery

Research Group: UCARE

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Poster Title: Design of a Wearable Ultrasound Patch to Measure Blood Flow in the Middle Cerebral Artery

Advisor: Greg Bashford

Foss, Silvia

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Advisor: Yusong Li

Ganesh, Ronav

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Advisor: Ryan Wong

George, Elizabeth

Research Group: Nebraska Summer Research Program

Poster Location: 106

Poster Title: First-Year Architectural Engineering & Construction Students' Flow State in VR/AR Modules

Advisor: Heidi Diefes-Dux

Gibbons, Trevor

Research Group: Nebraska Summer Research Program

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Poster Title: Effects of Substrate and Annealing Temperature on Organic Thin Films

Advisor: Bibek Tiwari, Xiaoshan Xu

Gonzales, Isaac

Research Group: Nebraska Summer Research Program

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Poster Title: Size-Dependant Degradation Dynamics of Polystyrene Nanoplastic Remediation in Aqueous Solutions via Plasma-Assisted Destruction

Advisor: Barry Cheung

Gonzalez, Cristian

Research Group: McNair Scholars Program

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Poster Title: Applying DMS-Mapseq to Evaluate RNA-Ligand Binding

Advisor: Joseph Yesselman

Gonzalez, Naira

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Advisor: Jayne Stratton

Greve, Trae

Research Group: UCARE

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Poster Title: Investigating the Relationship Between Drinking and Mental Health in College Students

Advisor: Amy Anderson

Grinberg, Aaron

Research Group: Nebraska Summer Research Program

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Advisor: Patrick Habecker

Gudas, Jamie

Research Group: Nebraska Summer Research Program

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Poster Title: Reflecting on Reflection: Insights from Engineering Instructors and Teaching Assistants

Advisor: Logan Perry

Hanway, Chelsea

Research Group: UCARE

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Poster Title: The Vikings in North America

Advisor: William Belcher

Haridas, Nitya

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Poster Title: Investigating trends of wind speed across Nebraska

Advisor: Liang Chen

Harzman, Hamelynn

Research Group: Nebraska Summer Research Program

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Advisor: Eric Weaver

Hassiki, Shams

Research Group: UCARE

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Advisor: Ilya Kravchenko

Havranek, Rowan

Research Group: UCARE

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Advisor: Kevin McMullen

Helmuth, Grace

Research Group: UCARE

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Advisor: Zac Porter

Hendrix, Devin

Research Group: Nebraska Summer Research Program

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Poster Title: Mechanistic Investigation of SigM-Dependent Distributive Conjugal Transfer in Mycobacteria

Advisor: Limei Zhang

Hernandez, Maria

Research Group: Nebraska Summer Research Program

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Poster Title: Evaluating Terrain Effects on Tornado Intensity via Treefall Method

Advisor: Richard Wood

Hernandez, Lillianne

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Advisor: Brian Knarr

Hind, Lexi

Research Group: John Woollam Scholars

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Poster Title: Temperature Dependent Study of ZnO

Advisor: Eva Schubert

Hunt, Kolby

Research Group: UCARE

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Poster Title: Animating History; A Space Between

Advisor: Michael Burton

Jacks, Dylan

Research Group: Nebraska Summer Research Program

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Poster Title: Cryogenic Quantum Diamond Sensing Microscopy of Magnetic Materials

Advisor: Abdelghani Laraoui

Jackson, Trinity

Research Group: Nebraska Summer Research Program

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Advisor: Amanda Ramer-Tait

Johnson, Adoniram

Research Group: Nebraska Summer Research Program

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Advisor: Eric Markvicka

Johnson, William

Research Group: UCARE

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Poster Title: Improving Ion-transport properties of ion-exchange membranes using cyclic aromatics

Advisor: Shudipto Dishari

Jones, Troy

Research Group: Nebraska Summer Research Program

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Poster Title: Proposed Mechanism of the Antagonistic Relationship Between Terbinafine and a Novel Antifungal in Bakers Yeast

Advisor: Wayne Riekhof

Kaiser, Katherine

Research Group: Nebraska Summer Research Program

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Poster Title: Editing the Target of Rapamycin (TOR) gene to induce rapid cell growth in the microalgae Chlamydomonas reinhardtii

Advisor: Heriberto Cerutti

Kamrath, Adam

Research Group: UCARE

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Poster Title: NFC Tag Identification Using Machine Learning

Advisor: Hongzhi Guo

Kerr, Gracie

Research Group: Nebraska Summer Research Program

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Poster Title: Variation in Instructional and Personal Supports for Engineering Students Identified in Syllabi over Five Years

Advisor: Grace Panther

Kodali, Abhijay

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Advisor: Eva Schubert

Koehler, Truman

Research Group: Nebraska Center for Energy Sciences Research

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Poster Title: Using Additive Manufacturing to Develop Bimetallic Strips for Rollers

Advisor: Joseph Turner

Kopplin, Madelyn

Research Group: Schmidt Lab

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Poster Title: Evaluation of Cornstalks and Cellulose Fiber Mixtures to Minimize Leaching Potential in Animal Mortality Disposal Units

Advisor: Amy Schmidt

Kroll, Piper

Research Group: Nebraska Summer Research Program

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Poster Title: Characterizing Effective Implementation of a Lakota Lifespan Mentoring Program

Advisor: Katie Edwards

Kurth, Octave

Research Group: UCARE

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Advisor: Benjamin Reed

Kurtz, Misha

Research Group: Nebraska Summer Research Program

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Poster Title: Human-multi-Drone Interaction: A Comparison of Formations and their Effect on User Distancing in a Virtual Reality Environment

Advisor: Brittany Duncan

Lammes, Anne

Research Group: UCARE

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Poster Title: The Impact of Weather on Recent U.S. Protests in the Washington, D.C., Area

Advisor: Matthew Van Den Broeke

Li, Nicholas

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Poster Title: Seasonal trends of precipitation throughout Nebraska

Advisor: Liang Chen

Liekhus, Jordan

Research Group: National Nanotechnology Coordinated Infrastructure Research Experience for Teachers

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Poster Title: 2D Material Transfer, Raman and FTIR Spectroscopy

Advisor: Yanan (Laura) Wang

Litterer, Lauren

Research Group: Nebraska Summer Research Program

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Poster Title: Detecting Proteins at Chloroplast Membrane Contact Sites

Advisor: Rebecca Roston

Lo Presti, Angelina

Research Group: Nebraska Summer Research Program

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Poster Title: Upcycling Camelina Seed: Developing and Assessing Stability of 3D Food Printing Inks Made From Camelina Mucilage

Advisor: Ozan N. Ciftci

Lofton, Hermione

Research Group: UCARE

Poster Location: 85

Poster Title: Mapping Tectonic Features and Sedimentary Thickness in The Northern Atlantic from Analog Seismic Reflection Data

Advisor: Irina Filina

Lopez Medina, Brian

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

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Poster Title: Crystallography and the Application of Atoms

Advisor: Vitaly Alexandrov

Lopez Olivares, Jesus

Research Group: Nebraska Summer Research Program

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Poster Title: Designing a virtual reality environment with real settings and flight paths to conduct human-drone interaction experiments.

Advisor: Brittany Duncan

Lopez Quintana, Ivette

Research Group: UCARE

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Poster Title: Monte Carlo Simulation of Electron-Molecule Scattering

Advisor: Timothy Gay

Macias, Andrew

Research Group: Nebraska Summer Research Program

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Poster Title: Illuminating the Future: Principles and Applications of Two-Photon Polymerization (TPP) 3D Printing

Advisor: Yongfeng Lu

Malnar, Jack

Research Group: Nebraska Summer Research Program

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Poster Title: The Adventures of Tor and ROS in Microalgae

Advisor: Jithesh Vijayan

Mann, Chloe

Research Group: UCARE

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Poster Title: Enduring Commitment: Exploring Why Economically Disadvantaged Students Choose to Stay in Engineering

Advisor: Jessica Deters

Martinez, Miranda

Research Group: Nebraska Summer Research Program

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Poster Title: To Have and To Hold: Habeas Corpus and the Mobilization of Female Petitioners, 1832-1924

Advisor: Katrina Jagodinsky

Maya Morales, David

Research Group: Nebraska Summer Research Program

Poster Location: 123

Poster Title: Raman Spectroscopy of Monolayer Graphene on Device Platform

Advisor: Yanan Wang

McConnell, Kyler

Research Group: Nebraska Summer Research Program

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Poster Title: Synthesis of Stable Phototetrazolanyl Radicals

Advisor: Andrzej Rajca

Mendiola, Madison

Research Group: Nebraska Summer Research Program

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Poster Title: Equal Protection of Life, Liberty, and Labor: Habeas Corpus & the 14th Amendment, 1901-1904

Advisor: Katrina Jagodinsky

Meyer, Acacia

Research Group: Nebraska Summer Research Program

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Poster Title: Examining the Association Between Preschool Negative Life Events and Physical Activity, Sedentary Behavior, and Sleep in Adolescence

Advisor: Timothy Nelson

Meyer, Nia

Research Group: UCARE

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Poster Title: SPATIAL ECOLOGY OF BULLSNAKES (PITUOPHIS CATENIFER) UNVEILED: INSIGHTS FROM RADIO TELEMTRY AT CEDAR POINT BIOLOGICAL STATION

Advisor: Dennis Ferraro

Minton, Ryan

Research Group: Nebraska Summer Research Program

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Poster Title: The Harding Brothers and Underage Military Enlistment in the Age of American Expansion, 1851-1857

Advisor: Katrina Jagodinsky

Mitchell, Amelia

Research Group: Nebraska Summer Research Program

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Poster Title: Mobile User Scheduling and Optimization for UAV-aided 5G Wireless Networks

Advisor: Shuai Nie

Moeller, James

Research Group: UCARE

Poster Location: 2

Poster Title: Examining The Rhetoric of The Red Pill

Advisor: Casey Kelly

Morales, Sofia

Research Group: Nebraska Summer Research Program

Poster Location: 95

Poster Title: Colocalization of Intracellular Organelles and Single Walled Carbon Nanotubes Sensors

Advisor: Nicole M. Iverson

Moreno, Sandro

Research Group: Nebraska Summer Research Program

Poster Location: 108

Poster Title: Constructing New Perspectives of Engineering and Culture in Brazil

Advisor: Logan Perry

Ortega-Colon, Sofia

Research Group: Nebraska Summer Research Program

Poster Location: 62

Poster Title: Clostridium perfringens strains vary in their sensitivity to inhibition by Caco-2 cells

Advisor: Jennifer M. Auchtung, Thanh Do Thi Van

Osorio, Luis

Research Group: Nebraska Summer Research Program

Poster Location: 109

Poster Title: An eye tracking analysis on the visual impact interfaces have on novice programmers' code comprehension

Advisor: Grace Panther

Parent, Symone

Research Group: McNair Scholars Program

Poster Location: 29

Poster Title: The Influence of Attitudes For Support of Mental Health Services for Legal System and Prison Populations

Advisor: Cynthia Willis Esqueda

Parker, Dana

Research Group: Nebraska Summer Research Program

Poster Location: 89

Poster Title: TMC1 and USH1G Regulation During Lytic Cytomegalovirus Infection and Implications for Congenital Disease

Advisor: Lindsey Crawford

Perkins, Bret

Research Group: Nebraska Summer Research Program

Poster Location: 48

Poster Title: Top-down proteomics characterization of ribosome heterogeneity

Advisor: Jared Shaw

Petersen, Mollie

Research Group: Discipline-Based Education Research (DBER) Initiative

Poster Location: 68

Poster Title: Identification of Midwest Engineering Student Cross-Cultural Experiences

Advisor: Jessica Deters

Peterson, Sam

Research Group: Nebraska Center for Energy Sciences Research

Poster Location: 165

Poster Title: Powering Zinc-Air Batteries with Porphyrin-Based Covalent Organic Frameworks

Advisor: Siamak Nejati

Pfister, Joiner

Research Group: Nebraska Center for Energy Sciences Research

Poster Location: 166

Poster Title: Synthesis and Properties of Gold Nanoparticle Solution and Nanoparticle Necklace Networks

Advisor: Ravi Saraf

Pierce, Collin

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 153

Poster Title: Differences in peak EMG activity from backpack loads during overground walking: Proof of concept

Advisor: David Kingston

Pracapchuk, Timofei

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 154

Poster Title: Changing Magnetic Properties of Thin Films

Advisor: Xiaoshan Xu

Prosocki, Kevin

Research Group: Nebraska Summer Research Program

Poster Location: 78

Poster Title: pH dependent structural characterization of ICH ensembles needed for catalysis

Advisor: Nathan Smith

Pruitt, Hailey

Research Group: Nebraska Summer Research Program

Poster Location: 49

Poster Title: Characterization of Electrochemical Aptamer-Based Sensors for the Detection of Neuropeptide Y

Advisor: Rebecca Lai

Qin, Youyang

Research Group: Nebraska Summer Research Program

Poster Location: 120

Poster Title: Empirical Fragility Functions and Structural Stability Factors for Poultry Houses Under High Wind Loads

Advisor: Christine Wittich

Radalla, Ahmed

Research Group: Nebraska Summer Research Program

Poster Location: 126

Poster Title: Vision-Based Control for Autonomous Vehicles

Advisor: Dung Hoang Tran

Reiter, Ethan

Research Group: Nebraska Summer Research Program

Poster Location: 14

Poster Title: Legal Proxies and Advocates: Exploring Inter-Case Relationships in 19th & 20th Century Habeas Corpus

Advisor: Katrina Jagodinsky and Will Thomas

Ross, Grant

Research Group: Complex Materials Optics Network (CMON) Lab

Poster Location: 16

Poster Title: Sensing chiral molecules using all dielectric L-Shape metamaterial platforms

Advisor: Ufuk Kilic

Ross, Alana

Research Group: UCARE

Poster Location: 81

Poster Title: Social Media's Impact on the Regulation of Premium Tobacco

Advisor: Bryan Wang

Ryan, Noah

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 160

Poster Title: Double slit electron diffraction with sound waves and quantum dots

Advisor: Herman Batelaan

Ryan-Jensen, Soren

Research Group: Nebraska Summer Research Program

Poster Location: 36

Poster Title: *Arabidopsis thaliana* Protein AtNHR2B Co-localizes with Endosomes and Vacuolar Markers

Advisor: Clemencia Rojas

Sanketh, Samarth

Research Group: UCARE

Poster Location: 146

Poster Title: The Kirby-Thompson Invariant of Knotted Surfaces in 4-manifolds

Advisor: Alexander Zupan

Sargbah, Veronica

Research Group: UCARE

Poster Location: 7

Poster Title: Black Motherhood in Habeas: The Titius Family Freedom Petitions

Advisor: Katrina Jagodinsky

Sayer, Jo

Research Group: UCARE

Poster Location: 1

Poster Title: Animating History; A Space Between

Advisor: Micheal Burton

Schneller, Teresa

Research Group: Nebraska Summer Research Program

Poster Location: 50

Poster Title: UV-Cured Poly(dimethylsiloxane) Facilitated Polymer Microstructures

Advisor: Stephen Morin

Schuhmacher, Adam

Research Group: UCARE

Poster Location: 82

Poster Title: Reproductive tradeoffs of *Terrapene ornata* in Western Nebraska (Cedar Point Biological Station)

Advisor: Benjamin Reed

Schwab, Heather

Research Group: Nebraska Summer Research Program

Poster Location: 103

Poster Title: Changes in Engineering Students' Metacognitive Regulation Strategies in Written Reflections From First- to Second-Year

Advisor: Heidi Diefes-Dux

Schwaninger, Luke

Research Group: UCARE

Poster Location: 171

Poster Title: Microscale Characterization of Additively Manufactured Nickel Aluminum Bronze via Laser Powder Bed Fusion

Advisor: Wen Qian

Scully, Cassandra

Research Group: Nebraska Summer Research Program

Poster Location: 79

Poster Title: How HCMV UL4 Changes Mitochondrial Function Through SLC25A22 and H2O2

Advisor: Lindsey Crawford

Shareef, Dakarai

Research Group: Nebraska Summer Research Program

Poster Location: 58

Poster Title: Development of Tuned Aryl Diazoniums For Use in Protein Labeling

Advisor: James Checco

Shogar, Maab

Research Group: McNair Scholars Program

Poster Location: 39

Poster Title: The Influence of Essentialist Ideology on Perceptions of Incarcerated Black men and Mental Health

Advisor: Cynthia Willis-Esqueda

Sliger, Wes

Research Group: National Nanotechnology Coordinated Infrastructure Research Experience for Teachers

Poster Location: 173

Poster Title: Laser shock peening effects on filler-enhanced polyethylene

Advisor: Li Tan

Sorto, Xavier

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 156

Poster Title: Magnetic and Electronic Transport Properties of Amorphous Iron-Germanium Thin Films

Advisor: Robert Streubel

Spiering, Jagger

Research Group: Nebraska Center for Energy Sciences Research *Poster Location:* 167

Poster Title: Cloning and Expression of MA3299 – An Fe-S Enzyme in the Biosynthesis of CoM in *Methanosarcina acetivorans*

Advisor: Limei Zhang

Stamp, Joslyn

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 157

Poster Title: Stress Intensity Levels Impact Male and Female Zebrafish in Pavlovian Fear Conditioning

Advisor: Ryan Wong

Starnes, Kevin

Research Group: Nebraska Summer Research Program

Poster Location: 110

Poster Title: Creating an Event System for an Online Community of Practice

Advisor: Leen-Kiat Soh

Starns, Nick

Research Group: UCARE

Poster Location: 143

Poster Title: Tabulation of Symmetric Ribbon Knots

Advisor: Alexander Zupan

Stoller, Truman

Research Group: Nebraska Center for Energy Sciences Research

Poster Location: 168

Poster Title: Pool Boiling with a Dielectric Fluid and Femtosecond Laser Surface Processed Silicon for Heat Transfer Enhancement

Advisor: George Gogos

Stone, Edward

Research Group: UCARE

Poster Location: 80

Poster Title: Construction and Validation of a Comprehensive Genome-scale Metabolic Model for *Treponema pallidum*

Advisor: Rajib Saha

Stowell, Ethan

Research Group: UCARE

Poster Location: 86

Poster Title: Geophysical Mapping of the Kolbeinsey Ridge Region

Advisor: Irina Filina

Streicher, Madeline

Research Group: Nebraska Summer Research Program

Poster Location: 90

Poster Title: An evolutionary investigation of human PYHIN family proteins: implications for mammalian viral immunity and placentation

Advisor: Luwen Zhang

Struwe, Elizabeth

Research Group: UCARE

Poster Location: 17

Poster Title: Nitrosatable Medications, Exposure to Pesticides and Adverse Birth Outcomes

Advisor: Martha Rhoades

Suarez, Shaunjae

Research Group: Nebraska Summer Research Program

Poster Location: 99

Poster Title: Eye Movement Modeling Examples for Program Comprehension and Debugging

Advisor: Bonita Sharif

Suriano, Bryan

Research Group: McNair Scholars Program

Poster Location: 38

Poster Title: How Human Cytomegalovirus UL4 Controls the Proinflammatory Cytokine TNFSF10 to Control Cellular Functions

Advisor: Lindsey Crawford

Sylvester, Aphid

Research Group: Nebraska Summer Research Program

Poster Location: 65

Poster Title: Population Structure and Dynamics of Stored Product Insects and Phosphine Resistance in Nebraska

Advisor: Georgina Bingham

Tam, Kaitlyn

Research Group: Nebraska Summer Research Program

Poster Location: 28

Poster Title: Effect of Experiences With Drug Use on Perceived Community Stigma Against People Who Use Drugs

Advisor: Patrick Habecker

Taniguchi, Misaki

Research Group: Nebraska Summer Research Program

Poster Location: 74

Poster Title: Evaluating Sorghum Association Panel Subset for Fall Armyworm Resistance using Morphological and Physiological Traits

Advisor: Joe Louis

Tanikawa-Brown, Maya

Research Group: Nebraska Summer Research Program

Poster Location: 63

Poster Title: Investigating the AMPK- α Pathway in Metabolically Dysfunctional Microbiomes through Insulin Responsiveness in Epididymal white adipose tissue (eWAT)

Advisor: Amanda Ramer-Tait

Taylor, Jermame

Research Group: Nebraska Summer Research Program

Poster Location: 73

Poster Title: Identifying Fall Armyworm-Resistant Germplasm Through Screening of Maize Association Panel Subset

Advisor: Joe Louis

Teraguchi, Yusaku

Research Group: Nebraska Summer Research Program

Poster Location: 135

Poster Title: Additive manufacturing of yttria-stabilized zirconia ceramics

Advisor: Bai Cui

Thomas, Genesis

Research Group: Nebraska Summer Research Program

Poster Location: 64

Poster Title: Investigating Eceriferum (CER) Genes for polyacetylene biosynthesis in Carrots

Advisor: Ed Cahoon

Timm, Alexander

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 158

Poster Title: Electroosmotic Pumps for Soft Robots

Advisor: Eric Markvicka

Tribble, Kevius

Research Group: Nebraska Summer Research Program

Poster Location: 127

Poster Title: Smart City Skies: Reinforcement Learning for Minimizing Delay in UAV-Aided 5G Networks

Advisor: Shuai Nie

Turner, Leo

Research Group: Nebraska Summer Research Program

Poster Location: 136

Poster Title: Simulation of Magnetic Skyrmions Under Strain

Advisor: Alexey Kovalev

Unlu, Jaden

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 159

Poster Title: Effect of Mucilage Aerogels for 3D Food Printability and Controlling Microstructure via Particle Engineering

Advisor: Ozan Ciftci

Van Cott, Grace

Research Group: Nebraska Center for Energy Sciences Research

Poster Location: 169

Poster Title: Heterologous Expression of Terpene Synthase Enzymes in Methanosarcina

Advisor: Nicole Buan

Vargas, Rubén

Research Group: Nebraska Summer Research Program

Poster Location: 128

Poster Title: Leveraging Data Visualization and Adaptive Algorithms for Improved Decision Making in Robotics

Advisor: Justin Bradley

Vasquez, Abigail

Research Group: Nebraska Summer Research Program

Poster Location: 134

Poster Title: Piezoresponse Force Microscopy Study of Electrode Effect on Ferroelectricity in PbZr_{0.2}Ti_{0.8}O₃ Thin Films and Membranes

Advisor: Xia Hong

Vohland, Alexandria

Research Group: Nebraska Summer Research Program

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Poster Title: Optimization of a Wearable Ultrasound Device for Detecting Blood Flow in the Internal Carotid Artery

Advisor: Dr. Greg Bashford

Warenda, Emily

Research Group: Nebraska Summer Research Program

Poster Location: 129

Poster Title: Improving Robotic Autonomy: Adaptive Path Planning and Simulation through Markov Decision Processes

Advisor: Justin Bradley

Wignall, Caleb

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 160

Poster Title: Double Slit Electron Diffraction and Diffraction of Quantum Dots

Advisor: Herman Batelaan

Williams, Zoë

Research Group: Nebraska Summer Research Program

Poster Location: 15

Poster Title: Profiled Pickpockets: Seattle's Black Community and Late 19th Century Habeas Mobilization

Advisor: Katrina Jagodinsky

Wills, Paris

Research Group: Nebraska Summer Research Program

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Poster Title: Increased Anti-Microbial Activity of Plasma-Treated Antibiotics

Advisor: Chin Li Cheung

Wulf, Hayden

Research Group: Nebraska Summer Research Program

Poster Location: 111

Poster Title: Changes in Fairness and Academic Integrity Policies Across Nine Semesters as Evidenced in Mechanical Engineering Syllabi

Advisor: Grace Panther

Yu, Elaine

Research Group: Nebraska Center for Materials and Nanoscience and Young Nebraska Scientists High School Interns

Poster Location: 161

Poster Title: Enhancing Public Awareness of Flood Risks through Generative AI

Advisor: Zhenghong Tang

Zabala Paniagua, Everianny

Research Group: Nebraska Summer Research Program

Poster Location: 130

Poster Title: Characterizing Error in RealSense Depth System for Navigation

Advisor: Justin Bradley and Brittany Duncan