



OFFICE OF RESEARCH AND  
ECONOMIC DEVELOPMENT

# RESEARCH AND CREATIVE ACTIVITY

JULY 01, 2022 -  
JUNE 30, 2023

Major Sponsored Programs and  
Faculty Accomplishments in  
Research and Creative Activity



## Sherri M. Jones

Interim Vice Chancellor for  
Research and Economic Development

This booklet highlights successes in research, scholarship and creative activity by University of Nebraska–Lincoln faculty during the fiscal year running July 1, 2022, to June 30, 2023.

It lists investigators, project titles and funding sources on major grants and sponsored awards received during the year, including early career awards; fellowships and other recognitions and honors bestowed on our faculty; books, chapters and journal articles published by faculty; performances, exhibitions, creative literature and other examples of creative activity; patents, licensing agreements and National Science Foundation I-Corps teams; and conference presentations. In recognition of the important role faculty have in the undergraduate experience at Nebraska, this booklet notes the students and mentors participating in the Undergraduate Creative Activities and Research Experience (UCARE) and the First-Year Research Experience (FYRE) programs.

Increasing impact through research and creative activity is one of the six core aims of the N2025 strategic plan. A few measurements of progress made this year:

- UNL achieved a record \$340 million in total research expenditures in FY 2022, a 34% increase over the past decade.
- Our faculty earned 1,668 sponsored research awards in FY 2022.
- Contributions in the fine and performing arts, and through the humanities disciplines, are shaping the culture and understanding of the world. For example, in 2023 Nebraska researchers earned the largest arts and humanities research grant in university history to study lesser-known civil rights cases.

N2025 aims also include contributing to economic growth throughout the state and broadening Nebraska’s engagement in community, industry and global partnerships. Some measures of our efforts to commercialize university-sponsored research and partner with industry include:

- Nebraska Innovation Campus has 58 diverse public- and private-sector partners.
- Industry sponsorship supported \$19.8 million in research expenditures.
- NUtech Ventures brought in \$5.7 million in licensing income in FY 2023.

Through the Grand Challenges initiative, Nebraska faculty are addressing some of society’s most complex problems. Grand Challenges is a \$40 million investment from the Office of Research and Economic Development and the Office of the Chancellor to advance areas in which Nebraska has unique expertise and knowledge. So far, \$20 million has been allocated to highly innovative and interdisciplinary projects. About 130 faculty, staff and students are involved in projects funded in the initiative’s second year.

The Nebraska Research community is changing the world through research, scholarly and creative activity. We are proud to be Nebraska’s flagship land-grant university and the only Carnegie R1 institution in the state. Those designations also place UNL in the unique position to significantly impact economic growth and innovation.

Thank you for your many efforts to advance your disciplines, this university and the state. I am pleased to present this record of accomplishments.

Sherri M. Jones

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The Nebraska Research community is changing the world through research, scholarly and creative activity. We are proud to be Nebraska’s flagship land-grant university and the only Carnegie R1 institution in the state.”

# Awards of \$5 Million or More

Active awards, July 1, 2022–June 30, 2023

\* Indicates new in 2022–2023

## Bevins, Rick

## Psychology/

### Rural Drug Addiction Research Center

Rural Drug Addiction Research Center

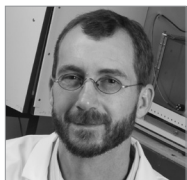
\$11,854,178 ..... NIH-NIGMS

4/5/19 – 2/29/24

Habecker, Patrick ..... Sociology/Rural Drug Addiction Research Center

Tyler, Kimberly ..... Sociology/Rural Drug Addiction Research Center

Nelson, Timothy ..... Psychology



The Rural Drug Addiction Research Center was created in 2019 as a National Institutes of Health Center of Biomedical Research Excellence, or COBRE. Under the leadership of Rick Bevins, Mildred Francis Thompson University Professor of psychology, the center's mission is to advance understanding of causes, impacts and interventions related to

rural drug addiction in the Midwest, a geographic area that has been historically understudied. Designed to be interdisciplinary and data-driven, the research links pre-clinical studies to field-based behavioral, neural, social, clinical and translational research and dissemination.

## Binek, Christian

## Physics and Astronomy/Nebraska Center for Materials and Nanoscience

R11 Track-1:

Emergent Quantum Materials and Technologies (EQUATE)

\$6,333,238 ..... NSF-EPSCoR

6/1/21 – 5/31/26

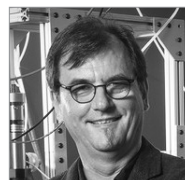
Argyropoulos, Christos ..... Electrical and Computer Engineering/  
Nebraska Center for Materials and Nanoscience

Bao, Wei ..... Electrical and Computer Engineering/  
Nebraska Center for Materials and Nanoscience

Dowben, Peter ..... Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience

Griep, Mark ..... Chemistry/  
Nebraska Center for Materials and Nanoscience

Guo, Yinsheng .....	Chemistry/ Nebraska Center for Materials and Nanoscience
Hong, Xia .....	Physics and Astronomy/ Nebraska Center for Materials and Nanoscience
Kovalev, Alexey .....	Physics and Astronomy/ Nebraska Center for Materials and Nanoscience
Lai, Rebecca .....	Chemistry/ Nebraska Center for Materials and Nanoscience
Laraoui, Abdelghani .....	Mechanical & Materials Engineering/ Nebraska Center for Materials and Nanoscience
Liou, Sy-Hwang .....	Physics and Astronomy/ Nebraska Center for Materials and Nanoscience
Schubert, Eva .....	Electrical and Computer Engineering/ Nebraska Center for Materials and Nanoscience
Schubert, Mathias .....	Electrical and Computer Engineering/ Nebraska Center for Materials and Nanoscience
Streubel, Robert .....	Physics and Astronomy/ Nebraska Center for Materials and Nanoscience
Tsymbal, Evgeny .....	Physics and Astronomy/ Nebraska Center for Materials and Nanoscience
Xu, Xiaoshan .....	Physics and Astronomy/ Nebraska Center for Materials and Nanoscience



Funded by the National Science Foundation, the Emergent Quantum Materials and Technologies collaboration was formed to put Nebraska at the forefront of research and education in quantum materials and technology, which will be a major driver of the state and national economy in the future.

Christian Binek, Charles Bessey Professor of physics, leads the EQUATE team, made up of Husker researchers and other partners. The collaboration pursues scientific discovery in quantum materials, which could revolutionize technologies in communication and information processing, medical technology and cryptography. The team also is working toward STEM workforce development, training and education, particularly in Native American and rural communities.

**Bloom, Kenneth****Physics and Astronomy**

U.S. CMS Operations at the LHC

\$51,250,000 ..... NSF  
 1/1/22 - 12/31/26



Ken Bloom, professor of physics and astronomy, oversees Nebraska's leadership of the National Science Foundation-funded portion of the U.S. CMS Operations Program. The university's role in this effort is advancing cutting-edge work in subatomic physics at CERN, the European Organization for Nuclear Research in Switzerland, site of the Large Hadron Collider, the world's largest, most powerful particle accelerator.

**Brank, Eve****Center on Children, Families and the Law**

Training on Family and Policy Services

\$13,541,118. .... DHHS-ACF through  
 Nebraska Department of Health and Human Services

1/1/18 - 12/31/23

Olson, Kathryn ..... Center on Children, Families and the Law



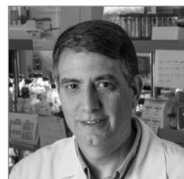
Eve Brank, Aaron Douglas Professor of psychology and director of the Center on Children, Families and the Law, and Kathryn Olson, associate director of CCFL and research assistant professor of psychology, lead this effort to develop and deliver training to child and family services specialists consistent with federal and state statutes and policy. With the

support of the Nebraska Department of Health and Human Services and the Administration for Children and Families in the U.S. Department of Health and Human Services, the program encompasses development and delivery of child protection and safety training for child protection and safety workers in Nebraska.

**Cahoon, Edgar****Biochemistry/Center for Plant Science Innovation**

\*B5: Bigger Better Brassicaceae Biofuels and Bioproducts

\$12,839,678 ..... DOE  
 9/1/22 - 8/31/2027



Ed Cahoon, George W. Holmes University Professor of biochemistry, leads an eight-institution team that is exploring how two oilseeds, camelina and pennycress, can help meet the escalating demand for renewable fuels, industrial chemicals and other bioproducts. With U.S. Department of Energy funding, the team will research oilseeds' metabolic circuitry, produce genetically enhanced oilseeds and develop synthetic biology tools for crop improvement that could help scientists nationwide. By tapping the full potential of oilseeds, the team's work could help pave the way for Nebraska farmers to diversify their operations and expand into new markets.

**Chambers, Jeffrey****Center on Children, Families and the Law**

COVID: NE Housing Assistance Common Fund - Balance of State

\$6,486,296 ..... HUD through  
 Nebraska Department of Economic Development

6/1/21 - 5/31/23



The Center on Children, Families and the Law received a \$6.5 million grant to respond to rural Nebraska homeowners who have been unable to make mortgage and utility payments due to the COVID-19 pandemic and are in jeopardy of losing their homes. Led by Jeff Chambers, senior project director in CCFL, the center is partnering with five community-based organizations to administer assistance to families. The funding is sponsored by the U.S. Department of Housing and Urban Development Community Development Block Grant COVID-19 program and administered through the Nebraska Department of Economic Development. This work is part of the CCFL Community Services Division's larger efforts to build an infrastructure in Nebraska to respond to families in housing crisis after the pandemic. It is an extension of CCFL's mission of "Helping the Helpers."

**Corman, Jessica****Natural Resources**

RII Track-2 FEC: From Ecosystems to Evolution:  
 Harnessing Elemental Data to Detect Stoichiometric  
 Control-Points and their Consequences for Organismal Evolution  
 \$5,987,352 ..... NSF-EPSCoR  
 1/1/21 – 12/31/24  
 Anania, Katie ..... Art, Art History and Design  
 Clarke, Jennifer ..... Food Science and Technology  
 Guan, Yawen ..... Statistics  
 Thomas, Steven ..... Natural Resources



With a \$6 million grant from the National Science Foundation's Established Program to Stimulate Competitive Research, Jessica Corman is leading a team in developing a first-of-its-kind national environmental database. This tool will help researchers and policymakers study, predict and manage the ever-changing balance of elements in the

environment and their impact on ecosystems regionally and nationally. The database, a collection of information from streams, lakes and the organisms that reside in them, will unlock major potential in ecological stoichiometry, a framework that explores the mismatch between available environmental elements and what organisms need. Corman, assistant professor of natural resources, is working with partners from the University of Wyoming, Central Arkansas University and Middlebury College.

**Emery, Mary****Rural Prosperity Nebraska**

\*Midwest/Central Plains Regional Food Business Center  
 \$25,000,000 ..... USDA-AMS  
 07/01/2023 – 06/30/2027  
 Hibbeler, Theodore ..... Nebraska Extension Engagement Zone 8



Rural Prosperity Nebraska, a university hub focused on advancing rural communities, is leading formation of the Heartland Regional Food Business Center. The center, an online platform aimed at connecting and strengthening locally grown food systems, will bring together buyers, sellers, producers, processors and market managers. Funded by a

\$25 million cooperative agreement award from the U.S. Department of Agriculture (among the largest awards ever received by the university), the center will serve Nebraska, Missouri, Kansas, Oklahoma and Iowa. It is one of 12 such centers funded by the USDA, all designed to help historically underinvested communities in their respective regions.

**Fischer, Jean Ann****Nutrition and Health Sciences**

Supplemental Nutrition Assistance Program (SNAP-ED)  
 \$5,593,571 ..... USDA-FNS through  
 Nebraska Department of Health and Human Services  
 10/1/20 – 9/30/24  
 Behrends, Donna ..... Nutrition and Health Sciences  
 Franzen-Castle, Lisa ..... Nutrition and Health Sciences  
 Johnson, Mary Ann ..... Nutrition and Health Sciences  
 Sehi, Natalie ..... Nutrition and Health Sciences  
 Wielenga, Vanessa ..... Nutrition and Health Sciences

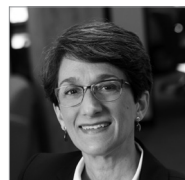


The Nebraska SNAP-Ed program was designed to encourage improved behavioral outcomes in nutrition, physical activity and obesity prevention, with an eye toward the needs of target populations and barriers to accessing healthy foods and activity. Jean Ann Fischer, extension educator in nutrition and health sciences and human sciences program leader

in Nebraska Extension, leads this effort. SNAP-Ed is focused on food systems and health equity; childhood health; and adults, families and communities. The overarching goal is to reduce the level of obesity, chronic disease and health disparities through various evidence-based interventions. The program leverages partnerships with stakeholders at the local, state, regional and national levels.

**Graef, Michelle****Center on Children, Families and the Law**

Quality Improvement Center for Workforce Development  
 \$17,895,500 ..... DHHS-ACF  
 9/30/16 – 9/29/23  
 Ells, Mark ..... Center on Children, Families and the Law  
 Paul, Megan ..... Center on Children, Families and the Law



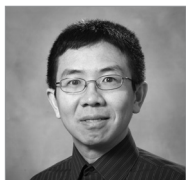
The University of Nebraska-Lincoln established the Quality Improvement Center for Workforce Development with a grant to the Center on Children, Families and the Law from the U.S. Department of Health and Human Services Administration for Children and Families-Children's Bureau. Under the leadership of Michelle Graef, research professor in the

Center on Children, Families and the Law, this multidisciplinary project studies and tests promising strategies to help child welfare agencies recruit and retain staff workers. Nebraska collaborates with three national child welfare consultants and researchers at the University of Colorado, Denver; University of Louisville; and University of Tennessee, Knoxville. The center draws on a range of expertise, including social work, industrial organizational psychology, human resource management, educational psychology, implementation science and the law.

**Guo, Jiantao****Chemistry/Nebraska Center for Integrated Biomolecular Communication**

Nebraska Center for Integrated Biomolecular Communication (NCIBC), Phase 2

\$10,667,732 ..... NIH-NIGMS  
 9/14/21 - 7/31/26  
 Crawford, Lindsey ..... Biochemistry/Nebraska Center for Integrated Biomolecular Communication  
 Lai, Rebecca ..... Chemistry/Nebraska Center for Integrated Biomolecular Communication  
 Meng, Fanben ..... Mechanical & Materials Engineering/Nebraska Center for Integrated Biomolecular Communication  
 Morton, Martha ..... Chemistry/Nebraska Center for Integrated Biomolecular Communication  
 Niu, Wei ..... Chemical and Biomolecular Engineering/Nebraska Center for Integrated Biomolecular Communication  
 Powers, Robert ..... Chemistry/Nebraska Center for Integrated Biomolecular Communication  
 Riethoven, Jean-Jack ..... Center for Biotechnology/Nebraska Center for Integrated Biomolecular Communication  
 Takacs, James ..... Chemistry/Nebraska Center for Integrated Biomolecular Communication



A five-year, \$11 million grant from the National Institutes of Health provides continuing support for a research center focused on investigating cellular-level miscommunications that contribute to complex diseases like cancer, diabetes and chronic liver disease. The Nebraska Center for Integrated Biomolecular Communication serves as a hub for

interdisciplinary collaborations among Nebraska's biomedical researchers and involves faculty at the University of Nebraska Medical Center, as well. The center, directed by Jiantao Guo, professor of chemistry, fosters a systems approach, combining the research activities of chemists, biochemists, engineers and bioinformaticists. It connects researchers developing new molecular probes and analytical techniques with those unraveling molecular mechanisms of diseases.

**Heng-Moss, Tiffany****College of Agricultural Sciences and Natural Resources**

Developing the Next Generation of Rwandan Agricultural Leaders  
 \$47,492,836 ..... Various Associations/Foundations  
 7/1/15 - 5/31/24  
 Davis, Josh ..... Global Affairs  
 Waller, Steven ..... Center for Grassland Studies



With grants totaling more than \$47,000,000, the College of Agricultural Sciences and Natural Resources at the University of Nebraska-Lincoln is partnering with various associations and foundations to provide educational opportunities for Rwandan students to participate in the CASNR Undergraduate Scholars Program. In support of a Practical Agriculture Institute in Rwanda, Rwandan students are identified and selected to participate in CUSP to pursue a Bachelor of Science degree in integrated science - an individualized program of study focused on conservation agriculture, entrepreneurship, leadership and innovative thinking. The students' degree programs are specifically designed to be relevant to Rwandan agricultural production and the country's goal of building resilience into its agricultural ecosystems. CASNR dean Tiffany Heng-Moss leads this effort.

**Khattak, Aemal****Civil and Environmental Engineering/Nebraska Transportation Center**

University Transportation Centers Open Competition 2016  
 \$15,584,200 ..... DOT  
 12/5/16 - 9/30/24



The Mid-America Transportation Center, a consortium of academic institutions led by the University of Nebraska-Lincoln, leads a multi-million-dollar research center, funded by the U.S. Department of Transportation through the Fixing America's Surface Transportation Act, to improve transportation safety in Nebraska and neighboring states. The center,

which emphasizes challenges facing rural areas and underserved communities, was designated the University Transportation Center of its four-state region after a competitive review. Aemal Khattak, MATC



director and professor of civil and environmental engineering, leads the research center. Funding enables MATC to leverage its track record of success in transportation research and education to improve safety in the four Region 7 states: Nebraska, Iowa, Kansas and Missouri. MATC is housed in the university's College of Engineering. Its partner institutions include the University of Nebraska at Omaha, University of Nebraska Medical Center, University of Iowa, University of Kansas, University of Kansas Medical Center, Missouri University of Science and Technology, Lincoln University and Nebraska Indian Community College. The consortium also has partnerships with several private- and public-sector entities, including a longstanding relationship with the Nebraska Department of Transportation.

**Riley, Mark**

**Engineering**

\*Heartland Robotics Cluster: COE

- \$9,360,538 ..... DOC-EDA
- 8/29/22 - 2/28/26
- Duncan, Brittany ..... Computing
- Nelson, Carl ..... Mechanical & Materials Engineering
- Pitla, Santosh ..... Biological Systems Engineering
- Qiao, Wei ..... Electrical and Computer Engineering



The university plays a leading role in a multi-million-dollar federal award from the U.S. Department of Commerce to advance robotics innovation, industry partnerships and training for Husker students to become next-level robotics entrepreneurs. Mark Riley, associate dean for research in the College of Engineering, is the principal

investigator. The university's portion of the award will benefit multiple research and teaching spaces on campus; the Nebraska Manufacturing Extension Partnership; and Nebraska Innovation Studio and The Combine, both located at Nebraska Innovation Campus. The overarching goal is to bolster Nebraska's automation infrastructure and grow the talent pipeline in robotics, automation, computer vision and artificial intelligence.

**Schachtman, Daniel**

**Agronomy and Horticulture/  
Center for Plant Science Innovation/  
Center for Biotechnology**

Systems Analysis of the Physiological and Molecular Mechanisms of Sorghum Nitrogen Use Efficiency, Water Use Efficiency and Interactions with the Soil Microbiome

- \$13,460,684 ..... DOE
- 8/15/15 - 8/14/22
- Dweikat, Ismail ..... Center for Plant Science Innovation/  
Agronomy and Horticulture
- Ge, Yufeng ..... Biological Systems Engineering



Daniel Schachtman, George Holmes Professor of agronomy and horticulture and director of the university's Center for Biotechnology, leads a \$13.5 million, multi-institutional research effort to improve sorghum as a sustainable source for biofuel production. A five-year grant from the U.S. Department of Energy funds this highly collaborative project that takes a

comprehensive approach to understanding how plants and microbes interact and to learn which sorghum germplasm can grow with less water and nitrogen. The University of Nebraska-Lincoln is collaborating with scientists at Danforth Plant Science Center, Washington State University, University of North Carolina-Chapel Hill, Boyce Thompson Institute, Clemson University, Iowa State University, Colorado State University and the DOE Joint Genome Institute.

**Sinitskii, Alexander**

**Chemistry**

DNA-Enabled Hierarchical Assembly of Graphene Electronics

- \$7,499,996 ..... DoD-ONR
- 8/1/19 - 7/31/24

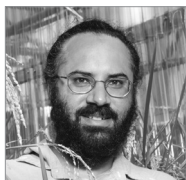


Alexander Sinitskii, professor of chemistry, leads a team aiming to unlock the potential of graphene nanoribbons, narrow strips of graphene that are only a few carbon atoms wide. Because of their miniscule size and tunable electronic properties, these nanoribbons are considered promising components for the miniature electronic

devices of the future. To realize this potential, researchers are exploring methods for assembling graphene nanoribbons into electronic circuits - a challenging task. With Department of Defense funding, Sinitskii's team is investigating approaches using DNA nanotechnology, which could facilitate controlled self-assembly of graphene nanoribbons up to macroscopic scales.

**Walia, Harkamal .....Agronomy and Horticulture**

RII Track-2 FEC: Comparative Genomics and Phenomics Approach to Discover Genes Underlying Heat Stress Resilience in Cereals  
 \$5,983,737 ..... NSF-EPSCoR  
 8/1/17 - 7/31/23  
 Morota, Gota ..... Animal Science  
 Obata, Toshihiro ..... Biochemistry  
 Yu, Hongfeng ..... Computing  
 Zhang, Chi ..... Biological Sciences  
 Zhang, Qi ..... Statistics



Harkamal Walia, Heuermann Chair of agronomy, leads a project to explore the effects of high nighttime temperatures on wheat and rice. Temperature stress can lead to severe losses in the yield and quality of crops, especially wheat and rice, two major cereal crops worldwide. With the support of a \$5.98 million grant from the National Science

Foundation’s Established Program to Stimulate Competitive Research, Walia’s team is investigating genes and genetic variants in wheat and rice to identify genetic markers and physiological characteristics tied to heat tolerance. The team also collaborates with researchers from Arkansas State University and Kansas State University.

**Wilhelm, Bob .....Office of Research and Economic Development**

Nebraska Center for Energy Sciences Research  
 \$7,500,000 ..... Nebraska Public Power District  
 4/1/21 - 3/31/26

The Nebraska Center for Energy Sciences Research is a collaboration between the university and the Nebraska Public Power District. The center was established in 2006 to support energy research that produces new technologies, processes and systems that provide new or significantly enhanced renewable energy sources, improves the quality of life and boosts economic opportunity. The center fosters interdisciplinary collaboration among Nebraska faculty and with other research institutions, public-sector agencies and private-sector companies with similar interests. The center supports both basic and applied research and has a broad mandate to explore a range of renewable energy opportunities (including biofuels and wind/solar energy), as well as opportunities for energy conservation.

**Yoder, Ron .....Institute of Agriculture and Natural Resources**

Rwandan Institute of Conservation Agriculture (RICA)  
 \$17,210,366 ..... Various Sources  
 10/13/17 - 12/31/23  
 Davis, Josh ..... Global Affairs  
 Heng-Moss, Tiffany .....College of Agricultural Sciences and Natural Resources



The Rwanda Institute for Conservation Agriculture is a unique and innovative English language institution dedicated to preparing the next generation of agricultural leaders of Rwanda and East Africa. Under the leadership of Ron Yoder, senior associate vice chancellor for IANR, the University of Nebraska is serving as a critical academic partner, helping to

design and implement the curriculum and campus operations. RICA students learn the principles of conservation agriculture and One Health while emphasizing written communication, leadership and entrepreneurship. Students at RICA are exposed to six different enterprises, including beef cattle and small ruminants, dairy, poultry and swine, row and forage crops, vegetable and tree crops, irrigation and mechanization.

**Zempleni, Janos**

**Nutrition and Health Sciences/  
Nebraska Center for the  
Prevention of Obesity Diseases**

COBRE: Nebraska Center for the Prevention of Obesity Diseases  
through Dietary Molecules

- \$12,461,656 ..... NIH-NIGMS
- 8/5/14 - 5/31/24
- Lim, Jung Yul ..... Mechanical & Materials Engineering
- Sukumaran, Sunil ..... Nutrition and Health Sciences
- Vechetti, Ivan ..... Nutrition and Health Sciences
- Wang, Yongjun ..... Nebraska Center for the  
Prevention of Obesity Diseases
- Yao, Qiuming ..... Computing



With the support of a \$12.4 million grant from the National Institutes of Health’s Center of Biomedical Research Excellence program, the university has established the Nebraska Center for the Prevention of Obesity Diseases through Dietary Molecules. The center, under the leadership of Janos Zempleni, Willa Cather Professor of molecular nutrition, focuses on

understanding nutrition and obesity at the molecular level. Answering molecular-level questions regarding obesity and related diseases is a crucial first step toward curbing this national epidemic. The University of Nebraska Medical Center collaborates on the center, which aims to establish a community of nationally recognized researchers in nutrition, genetics, biochemistry, food science, immunology and computer science. The long-term goal is to become a leader in nutrient signaling and the prevention of obesity and obesity-related diseases, including non-alcoholic fatty liver disease, cardiovascular disease and Type 2 diabetes.

# Awards of \$1 Million to \$4,999,999

Active awards, July 1, 2022–June 30, 2023

\* Indicates new in 2022–2023

## **Allen, Craig** **Natural Resources**

RII Track-2 FEC: Resilience Informatics for the Convergence of Critical Capacities to Address Regional-Scale Environmental Change  
\$3,953,265 ..... NSF-EPSCoR  
Banerjee, Simanti ..... Agricultural Economics  
Twidwell, Dirac Jr. .... Agronomy and Horticulture  
Uden, Daniel. .... Agronomy and Horticulture

NRT-INFEWS: Training in Theory and Application of Cross-scale Resilience in Agriculturally Dominated Social Ecological Systems  
\$2,998,886 ..... NSF  
Muñoz-Arriola, Francisco ..... Biological Systems Engineering  
PytlíkZillig, Lisa ..... Public Policy Center  
Soh, Leen-Kiat. .... Computing  
Twidwell, Dirac Jr. .... Agronomy and Horticulture

## **Allmand, Matthew** **Nebraska Manufacturing Extension Partnership**

\*Automation Demo Space and Program  
\$1,390,837 ..... DOC-EDA

Manufacturing Extension Partnership Center for Nebraska  
\$4,478,500 ..... DOC-NIST

## **Anderson, Troy** **Entomology**

Development of an Efficacious Attractive Toxic Sugar Bait Station  
\$1,432,037 ..... Bill and Melinda Gates Foundation

## **Andrews, Trey** **Psychology/Institute for Ethnic Studies/ Rural Drug Addiction Research Center/ Center for Brain, Biology and Behavior**

Allostatic Load, Response to Discrimination Stress, Discrimination Exposure Frequency, and Social Network Structure and Function  
\$2,525,029 ..... NIH-NIMHD  
Habecker, Patrick . . Sociology/Rural Drug Addiction Research Center/  
Center for Brain, Biology and Behavior  
Lorenz, Tierney . . . Psychology/Rural Drug Addiction Research Center/  
Center for Brain, Biology and Behavior  
Nelson, Timothy . . Psychology/Rural Drug Addiction Research Center/  
Center for Brain, Biology and Behavior

## **Angeletti, Peter** **Biological Sciences**

Cancer Research International Training and Intervention Consortium (CRITIC)  
\$4,425,389 ..... NIH-NCI

## **Awada, Tala** **Natural Resources/Agricultural Research Division**

Agricultural Intensification in the Western Corn Belt  
\$1,024,929 ..... USDA-ARS  
Giannakas, Konstantinos. .... Agricultural Economics  
Suyker, Andy ..... Natural Resources

## **Balkir, Sina** **Electrical and Computer Engineering**

Low-Power Signal-Processing Electronics for Unattended Radiation Monitoring Sensors  
\$1,060,772 ..... DoD-DTRA  
Hoffman, Michael. .... Electrical and Computer Engineering

## **Barlow, Steven** **Special Education and Communication Disorders**

Somatosensory Modulation of Salivary Gene Expression and Oral Feeding in Preterm Infants  
\$2,797,503 ..... NIH-NICHD

## **Basche, Andrea** **Agronomy and Horticulture**

Cover Crop Initiative: A Collaborative Project to Advance Knowledge and Utilization of Cover Crops for Conservation Measures in Nebraska  
\$1,049,500 ..... USDA-NRCS  
Creech, Cody ..... Panhandle Research and Extension Center  
Easterly, Amanda ..... Agronomy and Horticulture  
Kaiser, Michael. .... Agronomy and Horticulture  
Koehler-Cole, Katja ..... Agronomy and Horticulture  
Maharjan, Bijesh ..... Panhandle Research and Extension Center  
Redfearn, Daren. .... Agronomy and Horticulture  
Yu, Hongfeng ..... Computing

## **Becker, Donald** **Biochemistry/ Nebraska Center for Redox Biology**

Molecular Mechanisms of Disease  
\$1,214,052 ..... NIH-NIGMS  
Harris, Edward ..... Biochemistry

## **Benson, John** **Natural Resources**

Assessment of Adult Female and Neonatal Mule Deer (*Odocoileus hemionus*) Survival, Movements and Habitat Use in Nebraska  
\$1,358,070 ..... Nebraska Game and Parks Commission

**Berkowitz, David** **Chemistry**  
 Medical Countermeasure Drug Discovery and Development  
 \$4,678,024 . . . . . DoD-Offutt Air Force Base-STRATCOM through  
 National Strategic Research Institute  
 Dussault, Patrick . . . . . Chemistry  
 Helikar, Tomas . . . . . Biochemistry  
 Powers, Robert . . . . . Chemistry

**Bevins, Rick** **Psychology/Rural Drug Addiction Research Center**  
 \*Understanding and Mitigating Exacerbated Nicotine Use  
 Resulting from Pavlovian Interoceptive Conditioning  
 \$1,798,880 . . . . . NIH-NIDA  
 Barrett, Scott . . . . . Psychology/Rural Drug Addiction Research Center

Interoceptive Conditioning with Nicotine: Changes in Abuse Liability  
 \$1,786,220 . . . . . NIH-NIDA

**Bilder, Christopher** **Statistics**  
 Group Testing for Infectious Disease Detection:  
 Multiplex Assays and Back-End Screening  
 \$2,164,953 . . . . . NIH-NIAID

**Binek, Christian** **Physics and Astronomy/Nebraska  
 Center for Materials and Nanoscience**  
 Nebraska Nanoscale Facility of NNCI  
 \$3,500,000 . . . . . NSF  
 Ducharme, Stephen . . . . . Physics and Astronomy/  
 Nebraska Center for Materials and Nanoscience  
 Hong, Xia . . . . . Physics and Astronomy/  
 Nebraska Center for Materials and Nanoscience  
 Lai, Rebecca . . . . . Chemistry/  
 Nebraska Center for Materials and Nanoscience  
 Lu, Yongfeng . . . . . Mechanical & Materials Engineering/  
 Nebraska Center for Materials and Nanoscience  
 Shield, Jeffrey . . . . . Mechanical & Materials Engineering/  
 Nebraska Center for Materials and Nanoscience

**Brozovic, Nicholas** **Daugherty Water for Food Global Institute**  
 Promoting Sustainability and Resilience of  
 Smallholder Irrigation Impacts in Sub-Saharan Africa  
 \$1,000,000 . . . . . International Fund for Agricultural Development

**Bulling, Denise** **Public Policy Center**  
 Nebraska Youth Suicide Prevention 2019-2024  
 \$3,610,121 . . . . . DHHS-SAMHSA  
 Hoffman, Stacey . . . . . Public Policy Center  
 Lewandowski, Quinn . . . . . Public Policy Center

**Centurion, Martin** **Physics and Astronomy**  
 Nuclear and Electronic Dynamics in  
 Ultrafast Ring-Conversion Molecular Reactions  
 \$2,940,000 . . . . . DOE  
 Ultrafast Electron Diffraction from Aligned Molecules  
 \$1,566,385 . . . . . DOE

**Checco, James** **Chemistry**  
 Chemical Approaches to Interrogate Neuropeptide and  
 Peptide Hormone Signaling in Disease  
 \$2,053,927 . . . . . NIH-NIGMS

**Clemente, Thomas** **Agronomy and Horticulture/  
 Center for Plant Science Innovation**  
 RII Track-2 FEC: Functional Analysis  
 of Nitrogen Responsive Networks in Sorghum  
 \$1,337,633 . . . . . NSF-EPSCoR through  
 HudsonAlpha Institute for Biotechnology  
 Ge, Yufeng . . . . . Biological Sciences/  
 Center for Plant Science Innovation  
 Schnable, James . . . . . Agronomy and Horticulture/  
 Center for Plant Science Innovation  
 Yang, Jinliang . . . . . Agronomy and Horticulture/  
 Center for Plant Science Innovation

Center for Advanced Bioenergy and Bioproducts Innovation  
 \$4,827,081 . . . . . DOE through  
 University of Illinois Urbana-Champaign  
 Cahoon, Edgar . . . . . Biochemistry/  
 Center for Plant Science Innovation

**DiLillo, David** **Psychology**  
 \*RCT of a Combined MI Intervention to Address  
 Bystander Behaviors in the Context of Alcohol Use  
 \$2,005,024 . . . . . NIH-NIAAA  
 Gervais, Sarah . . . . . Psychology

Promoting Prosocial Bystander Behavior in Intoxicated Men:  
 Evaluation of RealConsent2.0  
 \$1,172,103 . . . . . NIH-NIAAA through Georgia State University  
 Gervais, Sarah . . . . . Psychology

**Dodd, Michael** **Psychology/  
 Center for Brain, Biology and Behavior**  
 RII Track-2 FEC: Neural Networks Underlying the Integration  
 of Knowledge and Perception  
 \$1,172,504 . . . . . NSF through University of Delaware

**Duppong Hurley, Kristin****Special Education and  
Communication Disorders/  
Academy for Child and Family Well Being**

Randomized Clinical Trial of the Boys Town In-Home Program  
 \$1,112,775 ..... Father Flanagan's Boys' Home  
 Lambert, Matthew ..... Special Education and  
 Communication Disorders/  
 Academy for Child and Family Well Being

**Edwards, Katie****Educational Psychology/  
Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Rural Drug Addiction Research Center**

\*An Innovative, Prospective Model to Understand Risk and  
 Protective Factors for Sexual Assault Experiences and  
 Outcomes among Sexual Minority Men  
 \$3,851,134 ..... NIH-NIMHD  
 Wheeler, Lorey ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

The Impact of an Adapted Version of the  
 Strengthening Families Program on Reducing IPV among  
 Caregivers and ACEs among Their Children  
 \$1,049,996 ..... DHHS-CDC

Crawford, Devan ..... Sociology/Nebraska Center for Research on  
 Children, Youth, Families and Schools/  
 Rural Drug Addiction Research Center  
 Wheeler, Lorey ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools/  
 Rural Drug Addiction Research Center

Indigenous-led Research on Sex Trafficking Among  
 Native Americans in the Northern Great Plains  
 \$1,000,000 ..... DOJ-NIJ  
 Yellow Robe, Colette ..... Teaching, Learning and Teacher Education

**Eichhorn, Catherine****Chemistry**

Structural Dynamics of Regulatory RNAs and Ribonucleoproteins  
 \$1,845,838 ..... NIH-NIGMS

**Engen-Wedin, Nancy****Teaching, Learning and Teacher Education**

Indigenous Roots Teacher Education Program  
 \$1,174,067 ..... ED

**Erixson, John****Nebraska State Forest Service**

Cooperative Forestry Program  
 \$3,632,412 ..... USDA-FS

**Faller, Ronald****Midwest Roadside Safety Facility/  
Nebraska Transportation Center**

Crash Testing of Various Bridge Guardrails and Transitions, Phase III  
 \$2,369,485 ..... Hawaii Dept of Transportation  
 Bielenberg, Robert ..... Midwest Roadside Safety Facility  
 Holloway, Jim ..... Midwest Roadside Safety Facility  
 Kim, Seunghee ..... Civil and Environmental Engineering  
 Lechtenberg, Karla ..... Midwest Roadside Safety Facility  
 Pajouh, Mojdeh A. .... Midwest Roadside Safety Facility  
 Rosenbaugh, Scott ..... Midwest Roadside Safety Facility  
 Sim, Chungwook ..... Civil and Environmental Engineering  
 Song, Chung ..... Civil and Environmental Engineering  
 Steelman, Joshua ..... Civil and Environmental Engineering  
 Stolle, Cody ..... Midwest Roadside Safety Facility

Low-Cost, Sacrificial, Energy-Absorbing, Crash Cushion  
 \$1,218,785 ..... Traffic Devices Inc.  
 Bielenberg, Robert ..... Midwest Roadside Safety Facility  
 Holloway, Jim ..... Midwest Roadside Safety Facility  
 Lechtenberg, Karla ..... Midwest Roadside Safety Facility  
 Rosenbaugh, Scott ..... Midwest Roadside Safety Facility  
 Stolle, Cody ..... Midwest Roadside Safety Facility

**Pooled Fund Year 2022**

\$1,365,000 ..... DOT-FHWA through  
 Nebraska Department of Transportation  
 Bielenberg, Robert ..... Midwest Roadside Safety Facility/  
 Nebraska Transportation Center  
 Holloway, Jim ..... Midwest Roadside Safety Facility/  
 Nebraska Transportation Center  
 Lechtenberg, Karla ..... Midwest Roadside Safety Facility/  
 Nebraska Transportation Center  
 Pajouh, Mojdeh A. .... Midwest Roadside Safety Facility  
 Rosenbaugh, Scott ..... Midwest Roadside Safety Facility/  
 Nebraska Transportation Center  
 Steelman, Joshua ..... Midwest Roadside Safety Facility/  
 Nebraska Transportation Center  
 Stolle, Cody ..... Midwest Roadside Safety Facility/  
 Nebraska Transportation Center

**Fernando, Samodha****Animal Science**

\*Biomarkers for Dysbiosis-Related HIV-Associated Cognitive  
 Disorders among Persons Who Inject Drugs in Puerto Rico  
 \$1,060,491 ..... NIH-NIDA through  
 Louisiana State University Health Sciences Center  
 Chiou, Kathy ..... Psychology  
 Gocchi Carrasco, Nova ..... Sociology

**Garcia-Ruiz, Hernan** **Plant Pathology/  
Nebraska Center for Virology**  
Recognition and Recruitment of RNA Viruses  
into RNA Silencing Pathways  
\$1,312,105 ..... NIH-NIGMS

**Ge, Yufeng** **Biological Systems Engineering**  
High Intensity Phenotyping Sites:  
Transitioning to a Nationwide Plant Phenotyping Network  
\$3,000,000 ..... USDA-NIFA  
Sandall, Leah ..... Agronomy and Horticulture  
Schnable, James ..... Agronomy and Horticulture  
Shi, Yeyin ..... Biological Systems Engineering

**Gervais, Sarah** **Psychology**  
Integrating Alcohol Myopia and Objectification  
to Understand Sexual Assault  
\$1,097,073 ..... NIH-NIAAA  
DiLillo, David ..... Psychology  
Dodd, Michael ..... Psychology  
Fritz, Matthew ..... Educational Psychology

**Graef, George** **Agronomy and Horticulture**  
Increasing Genetic Diversity, Yield, and Protein of  
U.S. Commercial Soybean Germplasm  
\$2,135,860 ..... United Soybean Board/Smith/Bucklin  
Alvarez Y Albala, Sophie ..... Biotechnology  
Clemente, Thomas ..... Agronomy and Horticulture  
Holding, David ..... Agronomy and Horticulture  
Hyten, David Jr. .... Agronomy and Horticulture

**Grassini, Patricio** **Agronomy and Horticulture**  
Developing Solutions for Closing the Yield Gap  
in Smallholder Oil Palm Plantations in Indonesia  
\$4,246,035 ..... Norwegian Ministry of Foreign Affairs

**Guo, Jiantao** **Chemistry/Nebraska Center for  
Integrated Biomolecular Communication**  
\*Defining, Studying, and Targeting Sulfated  
Tyrosine Residues in Cell Surface Receptors  
\$1,201,719 ..... NIH-NIGMS  
Dodds, Eric ..... Chemistry/Nebraska Center for Integrated  
Biomolecular Communication  
Niu, Wei ..... Chemical and Biomolecular Engineering/  
Nebraska Center for Integrated  
Biomolecular Communication

**Harris, Edward** **Biochemistry**  
\*Metabolism of Antisense Oligonucleotides and  
Other Polyaniions in Liver  
\$1,254,692 ..... NIH-NIGMS  
Sun, Xinghui ..... Biochemistry

**Hatton-Bowers, Holly** **Child, Youth and Family Studies/  
Nebraska Center for Research  
on Children, Youth, Families and Schools**  
Cultivating Healthy Intentional Mindful Educators (CHIME):  
Evaluating the Use of Mindfulness and Compassion to  
Promote Early Head Start/Head Start Education Staff's Well-Being  
\$1,498,844 ..... DHHS-ACF  
Clark, Carrie ..... Educational Psychology/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Foged, Jaci ..... Extension/Nebraska Center for Research on  
Children, Youth, Families and Schools  
Knoche, Lisa ..... Nebraska Center for Research on  
Children, Youth, Families and Schools  
Sheridan, Susan ..... Nebraska Center for Research on  
Children, Youth, Families and Schools  
Wheeler, Lorey ..... Nebraska Center for Research on  
Children, Youth, Families and Schools

**Helikar, Tomas** **Biochemistry**  
Multi-Cellular and Multi-Scale Systems Modeling to  
Understand the Dynamics of the Human Immune System in  
Interdisciplinary Applications  
\$2,326,355 ..... NIH-NIGMS

Innovating Life Sciences Education  
Through Computational Modeling and Simulations  
\$1,896,570 ..... NSF  
Dauer, Joseph ..... Natural Resources  
Smith, Wendy ..... Center for Science, Mathematics  
and Computer Education

A Predictive Multi-Scale Model of the Immune System:  
An Integrated Resource for Interdisciplinary Applications  
\$2,025,567 ..... NIH-NIGMS

**Hope, Debra** **Office of Graduate Studies**  
Ronald E. McNair Postbaccalaureate Achievement Program  
\$1,309,440 ..... ED

**Iverson, Nicole** **Biological Systems Engineering**  
 New and Improved Sensor Platforms and Quantification of  
 Nitric Oxide for In Vitro and In Vivo Systems  
 \$2,027,158 .....NIH-NIGMS

**Jacobson, Beth** **Student Affairs**  
 UNL Educational Talent Search  
 \$2,635,070 .....ED

**Khalimonchuk, Oleh** **Biochemistry/  
 Nebraska Center for Redox Biology**  
 Mitochondrial Fidelity and Homeostasis  
 \$1,846,766 .....NIH-NIGMS

**Khattak, Aemal** **Civil and Environmental Engineering/  
 Nebraska Transportation Center**  
 \*Mid-America Transportation Center for  
 Transportation Safety and Equity (MATC-TSE)  
 \$3,000,000 ..... DOT

**Kievit, Forrest** **Biological Systems Engineering**  
 Nanoparticle-Mediated Reduction of Oxidative Stress  
 for the Treatment of Traumatic Brain Injury  
 \$2,216,406 ..... NIH-NINDS

**Knoche, Lisa** **Nebraska Center for Research on  
 Children, Youth, Families and Schools**  
 Coaching in Early Intervention (CEI): Promoting Outcomes for Infants/  
 Toddlers with Disabilities Through Evidence-Based Practices  
 \$1,599,991 .....ED  
 Nugent, Gwen ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools  
 Schachter, Rachel ..... Child, Youth and Family Studies  
 Sheridan, Susan ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools  
 Getting Ready 0-3 (GR03): Supporting the Development of  
 Infants/Toddlers Through an Integrated Parent-Teacher  
 Relationship-Based Approach  
 \$2,498,510 ..... DHHS-ACF  
 Bovaird, Jim ..... Educational Psychology  
 Marvin, Christine ..... Special Education and  
 Communication Disorders/  
 Nebraska Center for Research on  
 Children, Youth, Families and Schools  
 Sheridan, Susan ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

**Koziol, Natalie** **Nebraska Center for Research on  
 Children, Youth, Families and Schools**  
 \*WORDS (Workshops on Reading Development Strategies)  
 for Pandemic Recovery in Nebraska  
 \$1,879,219 ..... ED through University of California-Irvine  
 Witte, Amanda ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools  
 Yoon, HyeonJin ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

**Kravchenko, Ilya** **Physics and Astronomy**  
 \*Physics at the Large Hadron Collider: Understanding  
 Fundamental Interactions and Upgrading the CMS Experiment  
 \$1,800,000 .....NSF  
 Bloom, Ken ..... Physics and Astronomy  
 Claes, Daniel ..... Physics and Astronomy  
 Maximizing Returns from the CMS Experiment: Analysis of  
 Run 2 Data and Preparation for the High-Luminosity LHC  
 \$1,500,000 .....NSF  
 Bloom, Kenneth ..... Physics and Astronomy  
 Claes, Daniel ..... Physics and Astronomy

**Lechtenberg, Karla** **Midwest Roadside Safety Facility**  
 NYSDOT-MASH-1: MASH 2016 Safety Facility  
 Hardware Evaluations - Phase I System C1 and C3  
 \$3,228,715 .....DOT-NYDOT through  
 Nebraska Department of Transportation  
 Faller, Ronald ..... Midwest Roadside Safety Facility  
 Holloway, Jim ..... Midwest Roadside Safety Facility  
 Pajouh, Mojdeh A. .... Midwest Roadside Safety Facility  
 Song, Chung ..... Civil and Environmental Engineering  
 Steelman, Joshua ..... Civil and Environmental Engineering  
 Stolle, Cody ..... Midwest Roadside Safety Facility

**Lehn, Joyce** **Student Affairs**  
 Student Support Services Program  
 \$2,952,820 .....ED



**Lewis, Elizabeth**      **Teaching, Learning and Teacher Education/  
Center for Science, Mathematics  
and Computer Education**

Meeting the Needs of Diverse Students Through  
Next Generation of Science Teacher Leadership in Nebraska  
\$2,916,074 ..... NSF  
Claes, Daniel ..... Physics and Astronomy  
Harwood, David ..... Earth and Atmospheric Sciences  
Helding, Brandon ..... Social and Behavioral Sciences  
Research Consortium  
Heng-Moss, Tiffany ..... College of Agricultural Sciences  
and Natural Resources  
Matkin, Gina ..... Agricultural Leadership,  
Education and Communication  
McElravy, L.J. .... Agricultural Leadership,  
Education and Communication  
Menon, Deepika ..... Teaching, Learning and Teacher Education/  
Center for Science, Mathematics  
and Computer Education  
Moon, Alena ..... Chemistry  
Searls, Mindi ..... Earth and Atmospheric Sciences/  
Center for Science, Mathematics  
and Computer Education  
Smith Wendy ..... Center for Science, Mathematics  
and Computer Education

**Lewis, Jim**      **Mathematics/Center for Science,  
Mathematics and Computer Education**

Educating Undergraduate Students for STEM  
Career Opportunities in Nebraska: Networks,  
Experiential Learning, and Computational Thinking  
\$3,580,869 ..... NSF  
Donsig, Allan ..... Mathematics  
Duncan, Brittany ..... Computing  
Goodburn, Amy ..... Executive Vice Chancellor and  
Chief Academic Officer  
Radu, Petronela ..... Mathematics  
Sharif, Bonita ..... Computing  
Smith, Wendy ..... Center for Science, Mathematics  
and Computer Education  
Soh, Leen-Kiat ..... Computing

**Li, Qingsheng**      **Biological Sciences/Nebraska Center for Virology**

\*Lentivirus-like Particle Specific Delivery of Cas12 Ribonucleoprotein  
(RNP) to HIV Reservoir Cells in vivo for an HIV Cure  
\$1,928,770 ..... NIH-NIAID through Temple University

Next Generation Broadly Neutralizing Antibodies  
to Clear HIV-1 Reservoir  
\$1,526,720 ..... NIH-NIAID through University of Maryland

**Li, Xu**      **Civil and Environmental Engineering**

Mitigating the Risk of Antibiotic Resistance at Critical Control Points  
in the Beef Cattle Manure Management Systems  
\$1,200,000 ..... USDA-NIFA  
Bartelt-Hunt, Shannon ..... Civil and Environmental Engineering  
Erickson, Galen ..... Animal Science  
Schmidt, Amy ..... Animal Science/Biological Systems Engineering  
Wang, Bing ..... Food Science and Technology

**Libault, Marc**      **Agronomy and Horticulture/  
Center for Plant Science Innovation**

Single-Cell Analysis of the Dynamics and Evolution of  
Gene Expression in Legumes  
\$1,500,000 ..... NSF

**Lingard, Jill**      **4-H State Office**

\*YEA: Empowering the Next Generation Ag &  
Food Systems Workforce via Experiential Learning,  
Engaging Diverse Youth & Enhanced PYD Programs  
\$1,243,913 ..... USDA-NIFA through Ohio State University  
Xia, Yan ..... Child, Youth and Family Studies  
Yoon, HyeonJin ..... Nebraska Center for Research on  
Children, Youth, Families and Schools

**Linzell, Daniel**      **Civil and Environmental Engineering**

\*SMART Analytics for Critical Infrastructure inside a  
Resilient Data Fabric (SMART RDF)  
\$1,250,000 ..... DoD-Army-ERDC through  
University of Nebraska Omaha  
Detweiler, Carrick ..... Computing  
Sim, Chungwook ..... Civil and Environmental Engineering  
Zhu, Jinying ..... Civil and Environmental Engineering

Multilevel Analytics and Data Sharing for  
Operations Planning (MADS-OPP)

\$1,392,384 ..... DoD-Army-ERDC through  
University of Nebraska at Omaha  
Detweiler, Carrick ..... Computing  
Sim, Chungwook ..... Civil and Environmental Engineering  
Zhu, Jinying ..... Civil and Environmental Engineering

**Louis, Joe** **Entomology/Biochemistry**  
 Elucidating the Role of *Brown Midrib12 (Bmr12)* Gene in  
 Modulating Sorghum Defense Against Sugarcane Aphid  
 \$1,193,000 ..... USDA-NIFA  
 Helikar, Tomas ..... Biochemistry

**Lu, Yongfeng** **Electrical and Computer Engineering**  
 Fabrication and Verification of Fuel Targets  
 for Laser Fusion Research  
 \$1,915,377 ..... DOE through University of Rochester  
  
 3D-Printing of Diamond-Composite Structures  
 using Selective Laser Semi-Melting  
 \$1,187,483 ..... DoD-MDA

**Lubben, Bradley** **Agricultural Economics**  
 North Central Risk Management Education Center  
 \$4,334,650 ..... USDA-NIFA

**Luck, Joe** **Biological Systems Engineering**  
 Nitrogen Research for Agriculture Transformation and Enhancement  
 \$1,328,400 ..... USDA-ARS  
 Awada, Tala ..... Natural Resources  
 Basche, Andrea ..... Agronomy and Horticulture  
 Blanco, Humberto ..... Agronomy and Horticulture  
 Drijber, Rhae ..... Agronomy and Horticulture  
 Ge, Yufeng ..... Biological Systems Engineering  
 Iqbal, Javed ..... Agronomy and Horticulture  
 Kaiser, Michael ..... Agronomy and Horticulture  
 Little, Andrew ..... Natural Resources  
 Mahmood, Rezaul ..... Natural Resources  
 Mieno, Taro ..... Agricultural Economics  
 Neale, Christopher ..... Daugherty Water for Food Global Institute  
 Pitla, Santosh ..... Biological Systems Engineering  
 Puntel, Laila ..... Agronomy and Horticulture  
 Shi, Yeyin ..... Biological Systems Engineering  
 Snow, Daniel ..... Nebraska Water Center  
 Suyker, Andy ..... Natural Resources  
 Thompson, Laura ..... Eastern Nebraska Research  
 and Extension Center  
 Weber, Karrie ..... Biological Sciences

**MacDonald, James** **Animal Science**  
 Enhancing Animal Protein Through Crops and Cattle  
 \$1,000,000 ..... Foundation for Food and Agriculture Research  
 Awada, Tala ..... Natural Resources  
 Banerjee, Simanti ..... Agricultural Economics  
 Blanco, Humberto ..... Agronomy and Horticulture  
 Drewnoski, Mary ..... Animal Science  
 Erickson, Galen ..... Animal Science  
 Okalebo, Jane ..... Natural Resources  
 Parsons, Jay ..... Agricultural Economics  
 Redfearn, Daren ..... Agronomy and Horticulture  
 Suyker, Andy ..... Natural Resources

**Mahmood, Rezaul** **Natural Resources**  
 High Plains Regional Climate Center  
 \$3,247,500 ..... DOC-NOAA

**Martin, David** **Nebraska Innovation Campus**  
 \*Robotics Lab Space and Program  
 \$4,102,400 ..... DOC-EDA

**McQuillan, Julia** **Sociology**  
 Worlds of Connections: Engaging Youth with Health Research  
 Through Network Science and Stories in Augmented Reality  
 \$1,289,707 ..... NIH-NIGMS  
 Diamond, Judy ..... University of Nebraska State Museum

**Meiklejohn, Colin** **Biological Sciences**  
 Investigating the Special Role of Sex Chromosomes in Speciation:  
 Discovering the Molecular Identities, Functions, and Evolutionary  
 Histories of X-Linked Hybrid Male Sterility Genes in *Drosophila*  
 \$1,298,165 ..... NIH-NIGMS

**Mendoza-Gorham, Joan** **Student Affairs**  
 Lincoln Upward Bound  
 \$1,612,396 ..... ED  
  
 Upward Bound Math/Science Program  
 \$1,562,400 ..... ED

**Namkung, Jessica** **Special Education and Communication Disorders/ Nebraska Center for Research on Children, Youth, Families and Schools**

Exploring Cognitive and Foundational Processes Underlying Pre-Algebra Among Students With and Without Mathematics Learning Difficulties

\$1,399,534 ..... ED-IES

Bovaird, James ..... Educational Psychology/ Nebraska Center for Research on Children, Youth, Families and Schools

Koziol, Natalie ..... Nebraska Center for Research on Children, Youth, Families and Schools

Smith, Wendy ..... Center for Science, Mathematics and Computer Education/ Nebraska Center for Research on Children, Youth, Families and Schools

**Napolitano, Scott** **Educational Psychology/ Center for Brain, Biology and Behavior/ Nebraska Center for Research on Children, Youth, Families and Schools**

School Psychology Specialization in Concussion/ Mild Traumatic Brain Injury (mTBI)

\$1,191,884 ..... ED

**Neale, Christopher** **Daugherty Water for Food Global Institute**

Novel Commercial Farm-Field Network to Quantify Emissions from Agricultural Bioenergy Feedstock Production

\$3,052,157 ..... DOE-ARPA

**Nelson, Timothy** **Psychology/ Center for Brain, Biology and Behavior**

Modifiable Predictors of Neural Vulnerabilities for Obesity

\$3,049,571 ..... NIH-NIDDK

Brock, Becca ..... Psychology/Center for Brain, Biology and Behavior

Nelson, Jennifer ..... Research/Center for Brain, Biology and Behavior

Savage, Cary ..... Psychology/Center for Brain, Biology and Behavior

Schultz, Douglas ..... Center for Brain, Biology and Behavior

Executive Control and Adolescent Weight Trajectories

\$2,564,739 ..... NIH-NIDDK

Brock, Becca ..... Psychology/Center for Brain, Biology and Behavior

Lopez, Marla ..... Psychology

Nelson, Jennifer ..... Research and Economic Development/ Center for Brain, Biology and Behavior

**Neta, Maital** **Psychology/ Center for Brain, Biology and Behavior**

Functional Brain Networks Mediating Individual Differences in Valence Bias

\$1,826,454 ..... NIH-NIMH

**Nugent, Gwen** **Nebraska Center for Research on Children, Youth, Families and Schools**

Testing the Efficacy of INSIGHTS for Promoting Positive Learning Environments and Academic Achievement in Nebraska: A Replication Study

\$3,299,957 ..... ED-IES

Bovaird, James ..... Educational Psychology/ Nebraska Center for Research on Children, Youth, Families and Schools

Sheridan, Susan ..... Educational Psychology/Nebraska Center for Research on Children, Youth, Families and Schools

**Olson, Kathryn** **Center on Children, Families and the Law**

New Worker Pre-Service Training in the Eastern Service Area (Douglas and Sarpy Counties)

\$3,162,692 ..... DHHS-ACF through

Nebraska Department of Health and Human Services

Brank, Eve ..... Center on Children, Families and the Law

**Pannier, Angela** **Biological Systems Engineering**

Using Cell Priming and Telecommunications Modeling to Enhance Gene Delivery for Stem Cell Therapies (DP2)

\$2,777,572 ..... NIH-NIBIB

**Pegg, Mark** **Natural Resources**

Pallid Sturgeon Biology in the Platte River and Its Tributaries

\$1,201,000 ..... DOI-BR through Headwaters Corporation

Spurgeon, Jonathan ..... Natural Resources

**Pope, Kevin** **Natural Resources**

Human Dimensions of Nebraska's Fisheries

\$1,747,225 ..... DOI-FS through

Nebraska Game and Parks Commission

Chizinski, Christopher ..... Natural Resources

**Rajca, Andrzej** **Chemistry**

New Nitroxide Spin Labels for Distance Measurements in Biological Systems

\$1,745,253 ..... NIH-NIGMS

Rajca, Suchada ..... Chemistry

**Redfearn, Daren** **Agronomy and Horticulture**  
 EXCHANGE: Expanding the Conversion of Habitat in the  
 Northern Great Plains Ecosystem  
 \$3,200,000 ..... DOE-EERE  
 Little, Andrew ..... Natural Resources  
 Parsons, Jay ..... Agricultural Economics  
 Peterson, Julie ..... West Central Research and Extension Center

**Saha, Rajib** **Chemical and Biomolecular Engineering**  
 A Predictive Modeling Framework to Dissect the Dynamic  
 Immunometabolic Responses to Pathogenic Infection and the  
 Kinetic Reprogramming of Metabolism in Cancer Cell System  
 \$1,828,734 ..... NIH-NIGMS

**Savaiano, Mackenzie** **Special Education and  
 Communication Disorders**  
 Interdisciplinary Training for Early Intervention and  
 Visual Impairment (IT-EIVI)  
 \$1,243,542 ..... ED  
 Loveall-Hague, Susan ..... Special Education and  
 Communication Disorders  
 Yoon, HyeonJin ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

Mid-Plains Professional Upgrade Partnership - Visual Impairment  
 \$1,162,200 ..... ED  
 Caruso, Eric ..... Special Education and Communication Disorders

Mid-Plains Professional Upgrade Partnership - Sensory Disabilities  
 \$1,082,718 ..... ED  
 Thomas, Anne ..... Special Education and Communication Disorders

**Scalora, Mario** **Public Policy Center**  
 Supporting School Threat Assessment Teams Via the  
 Implementation of a Statewide Anonymous Reporting System  
 \$1,281,919 ..... DOJ-BJA  
 Bulling, Denise ..... Public Policy Center

**Schnable, James** **Agronomy and Horticulture/  
 Center for Plant Science Innovation**  
 TGCM: (T)rait, (G)ene, and (C)rop Growth (M)odel-Directed Targeted  
 Gene Characterization in Sorghum  
 \$2,675,039 ..... DOE  
 Ge, Yufeng ..... Biological Systems Engineering/  
 Center for Plant Science Innovation  
 Sigmon, Brandi ..... Plant Pathology/  
 Center for Plant Science Innovation

**Schoengold, Karina** **Agricultural Economics**  
 RII Track-2 FEC BioWRAP (Bioplastics with Regenerative  
 Agricultural Properties): Spray-on Bioplastics with Growth  
 Synchronous Decomposition and Water, Nutrient, and  
 Agrochemical Management for Enhanced Field Crop Production  
 \$1,800,000 ..... NSF through Kansas State University  
 Haacker, Erin ..... Earth and Atmospheric Sciences  
 Isom, Loren ..... Industrial Agricultural Products Center  
 Proctor, Christopher ..... Agronomy and Horticulture  
 Ray, Chittaranjan ..... Civil and Environmental Engineering/  
 Nebraska Water Center  
 Rudnick, Daren ..... Biological Systems Engineering  
 Wilkins, Mark ..... Biological Systems Engineering/  
 Food Science and Technology/  
 Industrial Agricultural Products Center

**Sheridan, Susan** **Educational Psychology/  
 Nebraska Center for Research on  
 Children, Youth, Families and Schools/  
 Buffett Early Childhood Institute**  
 \*Systematic Efficacy Replication Study of Conjoint Behavioral  
 Consultation in Elementary Schools  
 \$1,133,388 ..... ED-IES through University of Wisconsin-Madison  
 Witte, Amanda ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

Efficacy of Virtual Professional Development in  
 Rural Schools to Enhance Teacher-Parent Partnerships for  
 Students with Behavioral Challenges  
 \$3,800,000 ..... ED-IES  
 Wheeler, Lorey ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools  
 Witte, Amanda ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

Early Learning Contexts in Rural and Urban Nebraska  
 \$4,913,268 ..... ED-IES  
 Knoche, Lisa ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools/  
 Buffett Early Childhood Institute  
 Koziol, Natalie ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

Early Learning Network Lead  
 \$2,064,983 ..... ED  
 Knoche, Lisa ..... Nebraska Center for Research on  
 Children, Youth, Families and Schools

**Smith, Adam** **Nebraska State Forest Service**  
 Nebraska Forest Restoration Partnership  
 \$4,500,000 . . . . . USDA-NRCS

**Smith, Wendy** **Mathematics/Center for Science,  
 Mathematics and Computer Education**

\*Using Networked Improvement Communities to  
 Scale Up Program Transformation for Secondary Mathematics  
 Teacher Preparation (NIC-Transform Scale Up)  
 \$1,837,638 . . . . . NSF  
 Augustyn, Lindsay . . . . . Center for Science, Mathematics  
 and Computer Education  
 Funk, Rachel . . . . . Center for Science, Mathematics  
 and Computer Education  
 Klimes, Debra . . . . . Center for Science, Mathematics  
 and Computer Education  
 Lai, Yvonne . . . . . Mathematics/Center for Science,  
 Mathematics and Computer Education

Achieving Critical Transformations in  
 Undergraduate Programs in Mathematics (ACTUP Math)

\$1,500,000 . . . . . NSF  
 Bennett, Amy . . . . . Mathematics/Center for Science,  
 Mathematics and Computer Education  
 Funk, Rachel . . . . . Center for Science, Mathematics and  
 Computer Education  
 Wonch Hill, Trish. . . . . Social and Behavioral Science  
 Research Consortium

Practices and Research on Student Pathways in  
 Education from Community College and  
 Transfer Students in STEM (PROSPECT S-STEM)

\$1,421,247 . . . . . NSF  
 Duncan, Brittany . . . . . Computing  
 Funk, Rachel . . . . . Center for Science, Mathematics and  
 Computer Education  
 Searls, Mindi . . . . . Earth and Atmospheric Sciences/  
 Center for Science, Mathematics and  
 Computer Education  
 Soh, Leen-Kiat . . . . . Computing

**Soh, Leen-Kiat** **Computing/Center for Science,  
 Mathematics and Computer Education**

Anticipating Social Unrest Using Integrated Model- and  
 Data-Driven Approaches: The Impact of Socio-Demographic  
 and Environmental Factors in Post-Colonial Nations  
 \$1,086,060 . . . DoD-National Geospatial Intelligence Agency through  
 Citadel University  
 Hayes, Michael . . . . . Natural Resources  
 Samal, Ashok . . . . . Computing  
 Werum, Regina . . . . . Sociology

Adapt, Implement and Research at Nebraska:  
 A Statewide Implementation Study of a Researcher-Practitioner  
 Partnership for K-8 Computer Science Education

\$2,000,000 . . . . . NSF  
 Nugent, Gwen . . . . . Nebraska Center for Research on  
 Children, Youth, Families and Schools  
 Smith, Wendy . . . . . Center for Science, Mathematics  
 and Computer Education  
 Trainin, Guy . . . . . Teaching, Learning and Teacher Education

**Sonsthagen, Sarah** **Natural Resources**

\*Evaluating Reproduction, Harvest, Timing of Season,  
 Connectivity, and Spatial Ecology of Wild Turkeys in Nebraska  
 \$1,885,893 . . . . . Nebraska Game and Parks Commission  
 Little, Andrew . . . . . Natural Resources  
 Vrtiska, Mark . . . . . Natural Resources

**Stolle, Cody** **Midwest Roadside Safety Facility**

\*Safe and Efficient Entry Control Points at Military Installations:  
 Phase I  
 \$3,625,000 . . . . . DoD-Army-ERDC  
 Faller, Ronald . . . . . Midwest Roadside Safety Facility  
 Steelman, Joshua . . . . . Civil and Environmental Engineering/  
 Midwest Roadside Safety Facility

**Storz, Jay** **Biological Sciences**

\*Genomic and Physiological Mechanisms of Hypoxia Adaptation in High-Altitude Mice

\$1,920,229 ..... NIH-NHLBI

R11 Track-2 FEC: Using Natural Variation to Educate, Innovate, and Lead (UNVEIL): A Collaborative Research Network to Advance Genome-to-Phenome Connections in the Wild

\$1,856,000 ..... NSF through University of Montana  
Meiklejohn, Colin ..... Biological Sciences  
Montooth, Kristi ..... Biological Sciences

Mutational Pleiotropy, Epistasis, and the Adaptive Evolution of Hemoglobin Function

\$1,437,536 ..... NIH-NHLBI

**Sun, Xinghui** **Biochemistry**

Role of lncRNA Meg3 in Obesity-Induced Endothelial Senescence and Insulin Resistance

\$1,955,473 ..... NIH-NHLBI  
Harris, Edward ..... Biochemistry  
Khalimonchuk, Oleh ..... Biochemistry

**Sutter, Peter** **Electrical and Computer Engineering**

Exploring and Embracing Heterogeneity in Atomically Thin Energy Materials

\$1,238,000 ..... DOE  
Sutter, Eli ..... Mechanical & Materials Engineering

**Svoboda, Mark** **Natural Resources**

\*USDA Support for Enhancements to the U.S. Drought Monitor and Engaging the USDA Climate Hubs 2022-2023

\$1,325,000 ..... USDA-OCE  
Bathke, Deborah ..... Natural Resources  
Fuchs, Brian ..... Natural Resources  
Haigh, Tonya ..... Natural Resources  
Knutson, Cody ..... Natural Resources  
Mieno, Taro ..... Agricultural Engineering  
Rimsaite, Renata ..... Natural Resources  
Smith, Kelly ..... Natural Resources  
Tadesse, Tsegaye ..... Natural Resources  
Wardlow, Brian ..... Natural Resources

USDA Support of the U.S. Drought Monitor and Hub Activities with the National Drought Mitigation Center for the Period of 2020 to 2023

\$2,375,000 ..... USDA-OCE  
Bathke, Deborah ..... Natural Resources  
Fuchs, Brian ..... Natural Resources  
Haigh, Tonya ..... Natural Resources  
Knutson, Cody ..... Natural Resources  
Smith, Kelly ..... Natural Resources  
Tadesse, Tsegaye ..... Natural Resources

Providing Drought Information Services for the Nation: The National Drought Mitigation Center

\$1,600,000 ..... DOC-NOAA  
Bathke, Deborah ..... Earth and Atmospheric Sciences  
Fuchs, Brian ..... Natural Resources  
Haigh, Tonya ..... Natural Resources  
Knutson, Cody ..... Natural Resources  
Smith, Kelly ..... Natural Resources  
Tadesse, Tsegaye ..... Natural Resources

**Thomas, Amanda** **Teaching, Learning and Teacher Education/ Nebraska Center for Research on Children, Youth, Families and Schools**

Nebraska STEM: Supporting Elementary Rural Teacher Leadership  
\$1,499,493 ..... NSF  
Homp, Michelle ..... Center for Science, Mathematics and Computer Education/  
Nebraska Center for Research on Children, Youth, Families and Schools  
Nugent, Gwen ..... Nebraska Center for Research on Children, Youth, Families and Schools  
Scharmann, Lawrence ..... Teaching, Learning and Teacher Education/  
Nebraska Center for Research on Children, Youth, Families and Schools  
Smith, Wendy ..... Center for Science, Mathematics and Computer Education/  
Nebraska Center for Research on Children, Youth, Families and Schools  
Soh, Leen-Kiat ..... Computing/  
Nebraska Center for Research on Children, Youth, Families and Schools  
Thomas, Julie ..... Teaching, Learning and Teacher Education/  
Nebraska Center for Research on Children, Youth, Families and Schools  
Trainin, Guy ..... Teaching, Learning and Teacher Education/  
Nebraska Center for Research on Children, Youth, Families and Schools

**Thomas, Anne**      **Special Education and Communication Disorders**

\*Mid-Plains Professional Upgrade Partnership Speech-Language Pathology, Audiology, and Deaf Education (MPUP-SPADE)  
\$1,174,731 .....ED  
Brennan, Katie .....Special Education and Communication Disorders  
Brennan, Marc .....Special Education and Communication Disorders  
Pritchett, Kelly .....Special Education and Communication Disorders  
Weissling, Kristy ...Special Education and Communication Disorders

Mid-Plains Professional Upgrade Partnership: Interdisciplinary Preparation in Deaf Education and Speech-Language Pathology  
\$1,052,376 .....ED  
Weissling, Kristy. ...Special Education and Communication Disorders

**Thompson, Laura**      **Eastern Nebraska Research and Extension Center**

Promoting Adoption of Innovative Precision Ag Nitrogen Management Technologies Through the Nebraska On-Farm Research Network for Improved Conservation Stewardship  
\$1,267,747 ..... USDA-NRCS  
DeBoer, Karen ..... Panhandle Research and Extension Center  
Glewen, Keith .....Southeast Extension District  
Krienke, Brian ..... Agronomy and Horticulture  
Lesoing, Gary .....Southeast Extension District  
Luck, Joe ..... Biological Systems Engineering  
Maharjan, Bijesh ..... Panhandle Research and Extension Center  
Mamo, Mitiku ..... Northeast Extension District  
Mieno, Taro ..... Agricultural Economics  
Milander, Jeremy ..... Northeast Extension District  
Mueller, Nathan ..... Metro Extension District  
Nygren, Aaron ..... Northeast Extension District  
Puntel, Laila. .... Agronomy and Horticulture  
Rees, Jennifer .....Southeast Extension District  
Sindelar, Michael .....Southeast Extension District  
Sivits, Sarah ..... West Central Research and Extension Center  
Thomas, John ..... Panhandle Research and Extension Center  
Whitney, Todd ..... West Central Research and Extension Center

**Torkelson-Trout, Alexandra**      **Special Education and Communication Disorders/ Academy for Child and Family Well Being**

A Missing Link to a Better Tomorrow: Developing Health Literacy in Transition-Age Youth with High Incidence Disabilities  
\$1,499,994 .....ED  
Duppoging Hurley, Kristin ..... Special Education and Communication Disorders/ Academy for Child and Family Well Being  
Lambert, Matthew ..... Special Education and Communication Disorders/ Academy for Child and Family Well Being

**Torquati, Julia**

**Child, Youth and Family Studies/ Nebraska Center for Research on Children, Youth, Families and Schools**

\*Responsive Equitable System for Preparing Early Childhood Teachers (RESPECT) across Nebraska  
\$2,159,125 ..... Buffett Early Childhood Fund  
Buchheister, Kelley ..... Child, Youth and Family Studies/ Nebraska Center for Research on Children, Youth, Families and Schools  
Corr Kiewra, Christine ..... Child, Youth and Family Studies/ Nebraska Center for Research on Children, Youth, Families and Schools  
Engen-Wedin, Nancy .....Teaching, Learning and Teacher Education/ Nebraska Center for Research on Children, Youth, Families and Schools  
Hong, Soo-Young ..... Child, Youth and Family Studies/ Nebraska Center for Research on Children, Youth, Families and Schools  
Knoche, Lisa ..... Nebraska Center for Research on Children, Youth, Families and Schools  
Morales, Amanda .....Teaching, Learning and Teacher Education/ Nebraska Center for Research on Children, Youth, Families and Schools  
Schachter, Rachel ..... Child, Youth and Family Studies/ Nebraska Center for Research on Children, Youth, Families and Schools

**Trainin, Guy**

**Teaching, Learning and Teacher Education/ Nebraska Center for Research on Children, Youth, Families and Schools**

Art TEAMS: Nurturing Educators Who Integrate Art, Core Subjects, and Culturally Responsive Teaching to Support Students in Becoming Makers of Change  
\$1,942,920 .....ED  
D'Adamo, Kimberley .....Teaching, Learning and Teacher Education/ Nebraska Center for Research on Children, Youth, Families and Schools  
Yoon, HyeonJin ..... Nebraska Center for Research on Children, Youth, Families and Schools

**Twidwell, Dirac Jr.**

**Agronomy and Horticulture**

Juniper Invasions and Landscape Intervention Potential: A Statewide Assessment  
\$1,361,472 ..... DOI-FWS through Nebraska Game and Parks Commission  
Allen, Craig ..... Natural Resources

**Tyler, Kimberly**      **Sociology/Rural Drug Addiction Research Center**

\*Street Experiences, Affect, and Coping: Harnessing Computational Models for the Development of a Cellphone-Based Intervention to Prevent Drug Use among Youth Experiencing Homelessness  
\$3,404,167 ..... NIH-NIDA  
DiLillo, David ..... Psychology/Rural Drug Addiction Research Center  
Olson, Kristen ..... Sociology/Rural Drug Addiction Research Center

**Umstadter, Donald**      **Physics and Astronomy**

LaserNetUS  
\$2,100,000 ..... DOE

**Van Etten, James**      **Plant Pathology/  
Nebraska Center for Virology**

R11 Track-2 FEC: G2P in VOM:  
An Experimental and Analytical Framework for  
Genome to Phenome Connections in Viruses of Microbes  
\$1,192,224 ..... NSF through University of Delaware  
DeLong, John ..... Biological Sciences/  
Nebraska Center for Virology  
Dunigan, David ..... Plant Pathology/  
Nebraska Center for Virology

**Vecchio, Alex**      **Biochemistry**

Elucidating Structures and Functions of  
Membrane Protein Interactions at Tight Junctions  
\$1,973,388 ..... NIH-NIGMS

**Vuran, Mehmet**      **Computing**

\*CNS Core: Medium: Field-Nets:  
Field-to-Edge Connectivity for Joint Communication and  
Sensing in Next-Generation Intelligent Agricultural Networks  
\$1,000,000 ..... NSF  
Argyropoulos, Christos ..... Electrical and Computer Engineering  
Ge, Yufeng ..... Biological Systems Engineering  
Liu, Qiang ..... Computing  
Nie, Shuai ..... Computing  
Pitla, Santosh ..... Biological Systems Engineering

**Wachs, Rebecca**      **Biological Systems Engineering**

Decoupling Mechanical and Inflammatory Stimuli in  
Degenerative Low Back Pain  
\$1,589,840 ..... NIH-NIAMS  
Ramer-Tait, Amanda ..... Food Science and Technology

**Weaver, Eric**      **Biological Sciences/Nebraska Center for Virology**

Rapid Manufacturing of a Universal Flu Vaccine Using TMV-  
Conjugated Centralized Antigens  
\$3,229,833 ..... NIH-NIAID

**Wiebe, Matthew**      **Veterinary Medicine and Biomedical Sciences/  
Nebraska Center for Virology**

\*Subversion of Cellular Mitotic and  
Antiviral Signaling by Poxviral Kinases  
\$2,241,889 ..... NIH-NIAID

**Williams, Robert**      **Mechanical & Materials Engineering**

Nebraska Industrial Assessment Center (NIAC)  
\$1,749,944 ..... DOE  
Dvorak, Bruce ..... Civil and Environmental Engineering  
Stelling, Karen ..... Mechanical & Materials Engineering

**Wilson, Mark**      **Biochemistry/Nebraska Center for Redox Biology**

Time-Resolved X-ray Crystallography of Dynamics in  
Cysteine-Dependent Enzymes  
\$1,183,976 ..... NIH-NIGMS

**Yang, Jinliang**      **Agronomy and Horticulture**

\*Phenotypic and Molecular Characterization of Genes  
Associated with Vegetative Nitrogen Use Efficiency in Sorghum  
\$2,697,284 ..... DOE  
Clemente, Thomas ..... Agronomy and Horticulture  
Ge, Yufeng ..... Biological Systems Engineering  
Schnable, James ..... Agronomy and Horticulture

**Yesselman, Joseph**      **Chemistry**

\*Next-Generation Biophysical Models for  
RNA Dynamics, Ligand Binding, and Catalysis  
\$1,882,247 ..... NIH-NIGMS

**Yin, Yanbin**      **Food Science and Technology/  
Nebraska Food for Health Center**

Carbohydrate Enzyme Gene Clusters in Human Gut Microbiome  
\$1,490,979 ..... NIH-NIGMS  
Cui, Juan ..... Computing  
Zhou, Yuzhen ..... Statistics

**Yu, Bin**      **Biological Sciences/  
Center for Plant Science Innovation**

Understand the Function of the MOS4-Associated Complex  
in MicroRNA Biogenesis  
\$1,570,405 ..... NIH-NIGMS



**Yu, Jiujiu** **Nutrition and Health Sciences/  
Nebraska Center for the  
Prevention of Obesity Diseases**  
Role of Chive-derived Exosome-like Nanoparticles in  
Suppressing Inflammation in Obesity  
\$1,734,810 ..... NIH-NIDDK  
Roston, Rebecca ..... Biochemistry/Nebraska Center for the  
Prevention of Obesity Diseases

**Zempleni, Janos** **Nutrition and Health Sciences/  
Nebraska Center for the  
Prevention of Obesity Diseases**  
Molecular Signatures of New Bioactive Compounds in Humans:  
Cows Milk MicroRNAs  
\$1,785,715 ..... USDA-NIFA  
Adamec, Jiri ..... Biochemistry/  
Nebraska Center for the  
Prevention of Obesity Diseases  
Cui, Juan ..... Computing/  
Nebraska Center for the  
Prevention of Obesity Diseases

**Zhang, Limei** **Biochemistry/Nebraska Center for Redox Biology**  
Structures and Mechanisms of Iron-Sulfur Proteins in  
Redox Control and Stress Response  
\$2,046,616 ..... NIH-NIGMS

**Zuhlke, Craig** **Electrical and Computer Engineering**  
Fundamental Studies on Functionalizing Metallic Surfaces  
Using Femtosecond Lasers with Applications  
to Enhanced Heat Transfer; Novel Power  
\$1,660,889 ..... DoD-ONR  
Gogos, George ..... Mechanical & Materials Engineering  
Ianno, Natale ..... Electrical and Computer Engineering  
Shield, Jeffrey ..... Mechanical & Materials Engineering

## Awards of \$250,000 to \$999,999

Active awards, July 1, 2022–June 30, 2023

\* Indicates new in 2022–2023

### Adamowicz, Michael **College of Agricultural Sciences and Natural Resources**

Application of the Human Virome to Touched Objects and Hair Shafts

\$443,931 ..... DOJ-NIJ  
Clarke, Jennifer. .... Food Science and Technology  
Fernando, Samodha. .... Animal Science

### Adenwalla, Shireen **Physics and Astronomy**

Funszie Physics Version 3:

Past Achievements, Lessons Learnt and the Way Forward

\$365,777 ..... NSF

### Aich, Nirupam **Civil and Environmental Engineering**

\*Collaborative Research: Transformation, Interaction and Toxicity of Emerging 2D Nanomaterials Free-Standing and Embedded onto Nanocomposite Membranes for PFAS Degradation

\$254,833 ..... NSF

### Alexandrov, Vitali **Chemical and Biomolecular Engineering**

Corrosion and Passivation Mechanisms of Li-Ion Battery Cathodes from Ab Initio Interfacial Reaction Dynamics

\$302,291 ..... NSF

### Allen, Craig **Natural Resources**

DISES-RCN: Resilience in Agricultural Socio-Environmental Systems

\$403,020 ..... NSF  
Awada, Tala ..... Natural Resources

### Alsalem, Fadi **Durham School of Architectural Engineering and Construction**

Microsystems Based AI for SWaP-C @ Edge

\$492,704 ..... Intelligence Advanced Research Projects Activity through General Electric

Micro-Electro-Mechanical Neural Integrated Sensing and Computing Units for Wearable Device Applications

\$391,532 ..... NSF

### Andrews, Trey **Psychology/Institute for Ethnic Studies**

REU Site: Community-Engaged Training for Advancing Health Equity \$402,120 ..... NSF

Edwards, Katie ..... Nebraska Center for Research on Children, Youth, Families and Schools

Habecker, Patrick ..... Sociology

Nelson, Timothy ..... Psychology

Wheeler, Lorey ..... Nebraska Center for Research on Children, Youth, Families and Schools

### Asadollahipajouh, Mojdeh **Midwest Roadside Safety Facility**

\*AASHTO Guidelines for Implementation of MASH Sign Supports, Breakaway Poles, and Work Zone Traffic Control Devices

\$500,000 ..... DOT-FHWA through National Academy of Sciences-NCHRP

Faller, Ronald ..... Midwest Roadside Safety Facility

### Banerjee, Simanti **Agricultural Economics**

\*Improving the Retention and Uptake of Tillable and Non-Tillable Grazing Land in the Conservation Reserve Program: A Qualitative and Quantitative Analysis of Economic and Environmental Factors

\$499,868 ..... USDA-FSA

Allen, Craig ..... Natural Resources

Dennis, Elliott ..... Agricultural Economics

Meredith, Gwendwr ..... Natural Resources

Stephenson, Mitchell ..... Panhandle Research and Extension Center

### Bao, Wei **Electrical and Computer Engineering**

Robust, Compact, On-Chip Microlaser Enabled by Merging Bound States in the Continuum

\$350,000 ..... DoD-ONR

### Barletta, Raul **Veterinary Medicine and Biomedical Sciences**

Development and Testing of *Mycobacterium avium* subsp. *paratuberculosis* DIVA Vaccines in Ruminants

\$500,000 ..... USDA-NIFA

### Barrett, Scott **Psychology**

Non-opioid Anesthetic Countermeasures

\$323,117 ..... DoD-DTRA through National Strategic Research Institute

Bevins, Rick ..... Psychology

**Bartelt-Hunt, Shannon**      **Civil and Environmental Engineering**

CAMRADES Connecting AntiMicrobial Resistance, Agricultural Decisions, and Environmental Systems: A Tool for Mitigating AMR and Assessing Risk to Human Health in Agro-Ecosystems  
\$309,037 ..... USDA-NIFA through Iowa State University  
Schmidt, Amy ..... Animal Science/Biological Systems Engineering  
Wang, Bing ..... Food Science and Technology

Influence of Agrochemical Mixtures on Treatment Wetland Ecosystems Services  
\$499,999 ..... USDA-NIFA  
Snow, Daniel ..... Nebraska Water Center

REU Site: Sustainability of Horizontal Civil Networks in Rural Areas  
\$445,241 ..... NSF  
Eun, Jongwan ..... Civil and Environmental Engineering  
Jones, Elizabeth ..... Nebraska Transportation Center  
Kim, Seunghee ..... Civil and Environmental Engineering  
Li, Xu ..... Civil and Environmental Engineering  
Li, Yusong ..... Civil and Environmental Engineering  
Linzell, Daniel ..... Civil and Environmental Engineering  
Sim, Chungwook ..... Civil and Environmental Engineering  
Steelman, Joshua ..... Nebraska Transportation Center  
Wittich, Christine ..... Civil and Environmental Engineering  
Wood, Richard ..... Civil and Environmental Engineering

**Basche, Andrea**      **Agronomy and Horticulture**

\*Catalyzing a Billion Dollar Cover Crop Seed Industry  
\$512,000 ..... USDA-NIFA through University of Missouri  
Drewnoski, Mary ..... Animal Science

Enhancing the Sustainability of U.S. Cropping Systems Through Cover Crops and an Innovative Information and Technology Network  
\$370,607 ..... USDA-NIFA through North Carolina State University  
McMechan, Justin ..... Entomology  
Wortman, Samuel ..... Agronomy and Horticulture

**Bashford, Gregory**      **Biological Systems Engineering**

REU Site: Undergraduate Research Opportunities in Biomedical Devices at the University of Nebraska-Lincoln  
\$414,979 ..... NSF  
Markovicka, Eric ..... Mechanical & Materials Engineering

**Batelaan, Herman**      **Physics and Astronomy**

Coherent Electron Control  
\$588,032 ..... NSF

**Becker, Donald**

**Biochemistry/  
Nebraska Center for Redox Biology/  
Center for Plant Science Innovation**

Direct Removal of Groundwater Nitrate Coupling Water Treatment and Algae Growth  
\$456,962 ..... Nebraska Environmental Trust  
Allen, James ..... Biochemistry  
Demirel, Yasar ..... Chemical and Biomolecular Engineering

Investigating the Proline Cycle as a Potential Cancer Therapy Target  
\$291,983 ..... NIH-NIGMS through University of Missouri-Columbia

REU Site: Training in Redox Biology  
\$298,186 ..... NSF  
Adamec, Jiri ..... Biochemistry/Nebraska Center for Redox Biology/  
Center for Plant Science Innovation  
Du, Liangcheng ..... Chemistry/Nebraska Center for Redox Biology/  
Center for Plant Science Innovation  
Franco Cruz, Rodrigo . . . Veterinary Medicine and Biomedical Sciences/  
Nebraska Center for Redox Biology/  
Center for Plant Science Innovation  
Khalimonchuk, Oleh ..... Biochemistry/  
Nebraska Center for Redox Biology/  
Center for Plant Science Innovation  
Lee, Jaekwon ..... Biochemistry/Nebraska Center for Redox Biology/  
Center for Plant Science Innovation  
Ro, Seung-Hyun . . . Biochemistry/Nebraska Center for Redox Biology/  
Center for Plant Science Innovation  
Wilson, Mark ..... Biochemistry/Nebraska Center for Redox Biology/  
Center for Plant Science Innovation  
Zhang, Limei ..... Biochemistry/  
Center for Plant Science Innovation/  
Nebraska Center for Redox Biology/

**Belashchenko, Kirill**      **Physics and Astronomy/Nebraska Center  
for Materials and Nanoscience**

First-Principles Studies of Spin-Orbit Torque and Magnetoresistance in Magnetic Nanostructures  
\$363,787 ..... NSF

**Benson, John**      **Natural Resources**

Elk Resource Selection, Movement, Survival, and Population Dynamics in Western Nebraska  
\$831,942 ..... DOI-FWS through Nebraska Game and Parks Commission

**Bevins, Rick** **Psychology**

Extracellular Vesicles, Meth Relapse and Sex Differences  
\$470,593 ..... NIH-NIDA through  
University of Nebraska Medical Center

**Bianchini Huebner, Andrea** **Food Science and Technology**

Alliance for Food Security Through Reduction of  
Postharvest Loss and Food Waste  
\$935,827 ..... USAID through Kansas State University

**Bielenberg, Robert** **Midwest Roadside Safety Facility**

Development of an Optimized MASH TL-4 Kansas Corral Rail  
(Kansas, Iowa, South Dakota and Virginia)  
\$401,400 ..... DOT-KS DOT through  
Nebraska Department of Transportation  
Faller, Ronald ..... Midwest Roadside Safety Facility  
Holloway, James ..... Midwest Roadside Safety Facility  
Lechtenberg, Karla ..... Midwest Roadside Safety Facility  
Rosenbaugh, Scott ..... Midwest Roadside Safety Facility

**Binek, Christian** **Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience**

\*MRI: Acquisition of Optical Access in a Cryogenic Scanning  
Probe Microscope for Quantum Sensing Capabilities  
\$358,171 ..... NSF  
Hong, Xia ..... Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience  
Laraoui, Abdelghani ..... Mechanical & Materials Engineering/  
Nebraska Center for Materials and Nanoscience  
Xu, Xiaoshan ..... Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience

Magnetolectrics and Spinorbitronics in  
Topological Heterostructures and Superlattices  
\$838,679 ..... DoD-ONR through  
University of California, Los Angeles

**Blanco, Humberto** **Agronomy and Horticulture**

Managing Cover Crops to Enhance Soil Ecosystem Services  
in Soils Vulnerable to Environmental Pressures  
\$500,000 ..... USDA-NIFA  
Parson, Jay ..... Agricultural Economics  
Proctor, Christopher ..... Agronomy and Horticulture  
Ruis, Sabrina ..... Agronomy and Horticulture  
Thompson, Laura ..... Eastern Nebraska Research  
and Extension Center  
Yang, Haishun ..... Agronomy and Horticulture

Enhancing the Health of Low C, Sandy and Sloping Soil  
with Biochar and Cover Crops  
\$499,999 ..... USDA-NIFA  
Creech, Cody ..... Panhandle Research and Extension Center  
Drijber, Rhae ..... Agronomy and Horticulture  
Easterly, Amanda ..... Agronomy and Horticulture  
Jasa, Paul ..... Biological Systems Engineering  
Ruis, Sabrina ..... Agronomy and Horticulture

Assessing Innovative Strategies to Maximize Cover Crop Yields  
for Biofuel Across Precipitation Gradient  
\$500,000 ..... USDA-NIFA  
Creech, Cody ..... Panhandle Research and Extension Center  
Francis, Charles ..... Agronomy and Horticulture  
Koehler-Cole, Katja ..... Agronomy and Horticulture  
Parsons, Jay ..... Agricultural Economics  
Ruis, Sabrina ..... Agronomy and Horticulture  
Yang, Haishun ..... Agronomy and Horticulture

**Bobaru, Florin** **Mechanical & Materials Engineering**

Corrosion-Induced Fracture and Failure: Transforming Computations  
from Micrometers and Minutes to Meters and Years  
\$748,375 ..... NSF  
Larios, Adam ..... Mathematics

**Bradley, Justin** **Computing**

\*CPS: Medium: Dig, Sip, Breathe: Automated Monitoring of  
Carbon and Water Cycles in Agriculture  
\$990,697 ..... USDA-NIFA  
Detweiler, Carrick ..... Computing  
Franz, Trenton ..... Natural Resources  
Muñoz-Arriola, Francisco ..... Biological Systems Engineering

\*REU Site: Undergraduate Research Opportunities in  
Unmanned Systems Foundations and Application  
\$404,759 ..... NSF  
Detweiler, Carrick ..... Computing  
Duncan, Brittany ..... Computing  
Nie, Shuai ..... Computing  
Tran, Dung Hoang ..... Computing

**Brennan, Marc** **Special Education and Communication Disorders**

Restoration of Spectral Resolution with Hearing-Aid Amplification  
\$448,983 ..... NIH-NIDCD

**Brewer, Gary** **Entomology**

A Multi-Tactic Push-Pull Strategy for Controlling Stable Flies on Pasture Cattle in Nebraska and Florida

\$325,000..... USDA-NIFA  
Boxler, David..... West Central Research and Extension Center  
Hanford, Kathryn..... Statistics  
Stockton, Matt..... West Central Research and Extension Center

**Brown-Brandl, Tami** **Biological Systems Engineering**

FACT-CIN: A Coordinated Innovation Network for

Advancing Computer Vision in Precision Livestock Farming

\$286,058..... USDA-NIFA through Michigan State University

Assessing the Effects of Farrowing Crate Design and Mothering Phenotype on Pre-Weaning Piglet Survival

\$439,110..... National Pork Board  
Keshwani, Deepak..... Biological Systems Engineering  
Shi, Yeyin..... Biological Systems Engineering  
Stowell, Rick..... Biological Systems Engineering

**Buan, Nicole** **Biochemistry**

Identifying Coupled Metabolic Processes in Methanogenic Archaea  
\$598,983..... NSF

**Bulling, Denise** **Public Policy Center**

Prevention and Promotion Program

\$785,956..... DHHS-SAMHSA through  
Nebraska Department of Health and Human Services  
Walther, Janell..... Public Policy Center

**Cahoon, Edgar** **Biochemistry/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center**

Expanding Opportunities in Agricultural Sciences:  
Crop-to-Food Innovation

\$742,668..... USDA-NIFA  
Auchtung, Jennifer..... Food Science and Technology/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Benson, Andrew..... Food Science and Technology/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Ciftci, Ozan..... Food Science and Technology/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center

Clemente, Thomas..... Agronomy and Horticulture/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Danao, Mary-Grace..... Food Science and Technology/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Frels, Katherine..... Agronomy and Horticulture/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Holding, David..... Agronomy and Horticulture/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Ramer-Tait, Amanda..... Food Science and Technology/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Rose, Devin..... Agronomy and Horticulture/  
Food Science and Technology/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Schnable, James..... Agronomy and Horticulture/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Wilkins, Mark..... Biological Systems Engineering/  
Industrial Agricultural Products Center/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center  
Xu, Changmou..... Food Science and Technology/  
Center for Plant Science Innovation/  
Nebraska Food for Health Center

High-Value Oilseed Design and Optimization: Camelina- and Soybean-Based Astaxanthin Production

\$450,000..... USDA-NIFA  
Obata, Toshihiro..... Biochemistry/Center for Plant Science Innovation

High-throughput Mutagenesis in *Arabidopsis*

\$357,763..... Google Inc.  
Yu, Bin..... Biological Sciences/Center for Plant Science Innovation

Dissecting the Sphingolipid Metabolic and Regulatory Network

\$750,000..... NSF  
Markham, Jonathan..... Biochemistry/  
Center for Plant Science Innovation  
Saha, Rajib..... Chemical and Biomolecular Engineering/  
Center for Plant Science Innovation

**Cerutti, Heriberto****Biological Sciences/  
Center for Plant Science Innovation**

Mechanisms of Small RNA-Mediated Silencing in *Chlamydomonas*  
\$794,803.....NSF

Epigenetic Inheritance in the Crenarchaeota  
\$618,472.....NSF

Van Cott, Kevin..... Chemical and Biomolecular Engineering  
Wilson, Mark..... Biochemistry

REU Site: Integrated Development of Bioenergy Systems  
\$323,325.....NSF

Mechanisms of Small RNA-Mediated Translation Repression  
in *Chlamydomonas*  
\$560,000.....NSF

**Chan, Hau****Computing**

\*Collaborative Research: NSF-CSIRO:  
Fair Sequential Collective Decision-Making  
\$300,000.....NSF

**Chaves Elizondo, Byron****Food Science and Technology**

Improving the Development of Food Safety Plans Through  
the Advanced Preventive Controls School Initiative  
\$299,559..... USDA-NIFA  
Baumert, Joseph..... Food Science and Technology  
Downs, Melanie..... Food Science and Technology  
Martinez, Bismarck..... Food Science and Technology  
Wang, Bing..... Food Science and Technology

**Chizinski, Christopher****Natural Resources**

Motivations, Preferences, Attitudes, and  
Expenditures of Kansas Anglers  
\$375,504..... Kansas Department of Wildlife and Parks

Exploring Links Between Hunting and Conservation Organization  
Participation to Increase Effectiveness of R3 Programs  
\$315,809..... Nebraska Game and Parks Commission

Human Dimensions of Wildlife Survey Analysis  
\$545,594..... DOI-FWS through  
Nebraska Game and Parks Commission

Comprehensive Evaluation of the Nebraska Outdoor Enthusiast  
\$288,371..... DOI-FWS through  
Nebraska Game and Parks Commission  
Pope, Kevin..... Natural Resources

**Christensen, Alan****Biological Sciences**

Double-Strand Break Repair in Plant Mitochondria:  
Products and Proteins  
\$820,000.....NSF

**Ciftci, Ozan****Food Science and Technology**

An Innovative Green Platform Technology to Manufacture Novel  
Multifunctional Hollow Solid Lipid Micro- and Nanoparticles  
\$481,960..... USDA-NIFA  
Ciftci, Deniz..... Food Science and Technology  
Hutkins, Robert..... Food Science and Technology

An Innovative Approach to Increasing Bioavailability  
of Curcumin Using Nanoporous Starch Bioaerogels  
\$468,000..... USDA-NIFA  
Meneses Gonzalez, Yulie..... Food Science and Technology  
Moreau, Regis..... Nutrition and Health Sciences  
Rose, Devin..... Food Science and Technology

Development of an Integrated Green Process to Obtain  
a High-value, Stable and Bioavailable Lycopene Product  
from Tomato Processing Industry Waste  
\$489,781..... USDA-NIFA  
Demirel, Yasar..... Chemical and Biomolecular Engineering

**Ciobanu, Daniel****Animal Science**

\*Understanding Host X Pathogen Associations in  
Swine Infectious Diseases  
\$635,000..... USDA-NIFA  
Fernando, Samodha..... Animal Science  
Kachman, Stephen..... Statistics  
Loy, Dustin..... Veterinary Medicine and Biomedical Sciences

Deconstructing the Role of SYNGR2 in  
Viral Disease Susceptibility in Livestock  
\$500,000..... USDA-NIFA  
Vu, Hiep..... Animal Science

**Clark, Carrie****Educational Psychology/  
Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Center for Brain, Biology and Behavior**Evaluating Psychophysiological Mechanisms of  
Early Childhood Teachers' Stress Resilience and  
Their Relevance for Preschoolers' Self-Regulation

\$412,863 ..... NIH-NICHD

Calvi, Jessica ..... Center for Brain, Biology and Behavior/  
Nebraska Center for Research on  
Children, Youth, Families and SchoolsHatton-Bowers, Holly ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Center for Brain, Biology and BehaviorParra, Gilbert ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Center for Brain, Biology and BehaviorTyler, Kimberly ..... Sociology/Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Center for Brain, Biology and BehaviorWheeler, Lorey ..... Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Center for Brain, Biology and Behavior**Clarke, Jennifer****Food Science and Technology/  
Agricultural Research Division**\*ODF: National Agricultural Producers Data Cooperative:  
A Strategic Framework for Innovation

\$960,000 ..... USDA-NIFA

Calvert, Scout ..... University Libraries

Franz, Trenton ..... Natural Resources

Luck, Joe ..... Biological Systems Engineering

Spangler, Matthew ..... Animal Science

Thompson, Laura ..... Nebraska Extension Engagement Zone 11

Yu, Hongfeng ..... Computing

National Ag Producer Data Cooperative:  
A Strategic Framework for Innovation

\$500,000 ..... USDA-NIFA

Franz, Trenton ..... Natural Resources

Lorang, Liz ..... University Libraries

Luck, Joe ..... Biological Systems Engineering

Spangler, Matthew ..... Animal Science

Thompson, Laura ..... Eastern Nebraska Research  
and Extension Center

Yu, Hongfeng ..... Computing

**Coenen, Jason****Earth and Atmospheric Sciences**

\*OCE-PRF: Windows into Cretaceous Diatom Paleobiology:

Seasonal Responses in Laminated Sediments and Survivability and  
Response to the Cretaceous-Paleogene Extinction Event

\$329,660 ..... NSF

**Corman, Jessica****Natural Resources**

StreamNet: Building Capacity to Improve Water Quality

\$491,726 ..... Nebraska Environmental Trust

Chizinski, Christopher ..... Natural Resources

Thomas, Steven ..... Natural Resources

**Couch, Brian****Biological Sciences/  
Nebraska Center for Virology**From Community to Practice: Evaluating How Open Educational  
Resources Facilitate Implementation of Vision and  
Change Principles Across Diverse Institutions

\$778,131 ..... NSF

Student Engagement with Online Formative Assessments:  
Identifying Access and Barriers to Resource Use at  
Two-Year and Four-Year Institutions

\$250,724 ..... NSF

Brazeal, Kati ..... Biological Sciences  
Wheeler, Lorey ..... Nebraska Center for Research on  
Children, Youth, Families and SchoolsMapping Change in Higher Education Social Networks  
and STEM Reforms

\$524,243 ..... NSF

**Creech, Cody****Agronomy and Horticulture**The Effects of Solid-and Semi-Solid Stemmed Wheat Varieties and  
Wheat Stem Sawfly Infestation on Wheat Residue Longevity and  
Soil Water Content

\$250,000 ..... USDA-NIFA through University of Minnesota-SARE

Bradshaw, Jeffrey ..... Entomology

Easterly, Amanda ..... Agronomy and Horticulture

Frels, Katherine ..... Agronomy and Horticulture

Maharjan, Bijesh ..... Agronomy and Horticulture

Stephenson, Mitchell ..... Agronomy and Horticulture

**Cressler, Clay****Biological Sciences**

\*Ecology of Expulsion:

Within-Host Dynamics Driving Nematode Infection  
\$308,161 .....NSF

Habitat and Coinfection as Drivers of Heterogeneity in  
Cross-Scale Wildlife Infectious Disease Processes  
\$348,171 ..... NSF through University of Arkansas

**Cui, Bai****Mechanical & Materials Engineering**

Additively Manufactured Graded Composite  
Transition Joints for Dissimilar Metal Weldments in  
Advanced Ultra-Supercritical Power Plant  
\$300,000 ..... DOE through West Virginia University

High-throughput Computational Guided Development of  
Refractory Complex Concentrated Alloys-based Composite  
\$510,626 ..... DOE-ARPA-E through West Virginia University

Understanding the Mechanisms of the Pulsed Electric Current  
Process for Joining Oxide-Dispersion-Strengthened Alloys  
\$307,825 .....NSF  
Zhou, Qin..... Mechanical & Materials Engineering

**Cupp, Andrea****Animal Science**

Metabolic Regulators of Corpus Luteum Function  
\$388,210..... NIH-NICHD through  
University of Nebraska Medical Center  
Wood, Jennifer ..... Animal Science

**Dauer, Jenny****Natural Resources**

Supporting Students' Critical Evaluation of  
Evidence in Socioscientific Issues Contexts  
\$299,983 .....NSF  
Moon, Alena ..... Chemistry

Bridging Science Education and Psychology Perspectives to  
Support Science Literacy Theory and Instruction  
\$349,836 .....NSF

**Dauer, Joseph****Natural Resources**

Quantitative Modeling in Undergraduate Biology Courses:  
Teaching Approaches and Student Outcomes  
\$402,926 .....NSF  
Couch, Brian ..... Biological Sciences

ECR DBER DCL: Describing the Neurobehavioral Effects of  
Modeling-Based Instruction in Undergraduate Life Sciences Education  
\$320,878 .....NSF  
Clark, Carrie ..... Educational Psychology

**de Guzman, Maria****Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools**

Youth Civic Engagement: Using Simulations and Design Thinking  
\$648,242 ..... USDA-NIFA  
Do, Kieu-Anh ..... Child, Youth and Family Studies  
Kim, Surin ..... Textiles, Merchandising and Fashion Design/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Larson, Andy ..... 4-H State Office/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Parra, Gilbert ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools

**DeLong, John****Biological Sciences**

\*ORCC: Evaluating the Effect of Predation on  
Thermal Adaptation in Response to Climate Change  
\$918,907 .....NSF  
Montooth, Kristi ..... Biological Sciences

\*Predicting Eco-Evolutionary Consequences of an  
Ongoing Invasion by a Key Herbivore in Temperate Reefs  
\$266,000 .....U.S.-Israel Binational Science Foundation

Understanding the Consequences of  
Body Size Evolution in Ecological Communities  
\$450,000 ..... James S. McDonnell Foundation

**Desaulniers, Amy****Veterinary Medicine and Biomedical Sciences**

\*Enhancing Boar Fertility in the Face of Climate Change through the  
Mitigation of In Utero Heat Stress  
\$650,000 ..... USDA-NIFA  
White, Brett ..... Animal Science



**Detweiler, Carrick****Computing**

Real-time Weather Awareness for  
Enhanced Safety Assurance in UTM  
\$805,406.....NASA through Oklahoma State University  
Houston, Adam.....Earth and Atmospheric Sciences

NRI: INT: Raining Drones: Mid-Air Release and  
Recovery of Atmospheric Sensing Systems  
\$643,600.....NSF  
Houston, Adam.....Earth and Atmospheric Sciences

**Diefes-Dux, Heidi****Biological Systems Engineering**

Research: Evidencing Epidemic Change in Engineering Education:  
Shedding Light on Instructor Adaptability and  
Course Complexity for Sustained Change  
\$419,039.....NSF  
Panther, Grace.....Civil and Environmental Engineering

**Dixon, Ross****Earth and Atmospheric Sciences**

\*The Impact of Surface Fluxes on Rain-On-Snow Events in the  
U.S. and Improving Their Representation in Numerical Models  
\$334,621.....DOC-NOAA  
Roy, Tirthankar.....Civil and Environmental Engineering

**Dohrt, Mitchell****Nebraska Extension/  
Nebraska Local Technical Assistance Program**

Nebraska Local Technical Assistance Program  
\$818,039.....DOT-FHWA through  
Nebraska Department of Transportation

**Douglass, Matthew****Natural Resources**

Long-Term Perspectives on Water Security, Food Security, and  
Land Management Among Daasanach Pastoralists of  
East Turkana, Northern Kenya  
\$748,870.....NSF  
Powell, Larkin.....Natural Resources  
Qi, Yi.....Natural Resources

**Dowben, Peter****Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience**

Heteromolecular Interface Design for  
Better Multiferroic Molecular Spintronics  
\$563,690.....NSF

**Downs, Melanie****Food Science and Technology**

\*Food Proteomics Research and  
Extension Mass Spectrometry Platform  
\$500,000.....USDA-NIFA  
Baumert, Joseph.....Food Science and Technology  
Benson, Andrew.....Food Science and Technology  
Johnson, Philip.....Food Science and Technology  
Majumder, Kaustav.....Food Science and Technology  
Schnable, James.....Agronomy and Horticulture

**Duncan, Brittany****Computing**

\*NRI: Collaborative Research: Adaptive Multi-Robot  
Configurable Teams Investigating Changing Ecosystem  
\$991,860.....NSF  
Bradley, Justin.....Computing  
Detweiler, Carrick.....Computing

NRI: INT: Leveraging Environmental Monitoring UAS in Rainforests  
\$722,804.....NSF  
Detweiler, Carrick.....Computing

REU Site: Undergraduate Research Opportunities in  
Unmanned Systems Foundations and Applications  
\$400,649.....NSF  
Bradley, Justin.....Computing  
Detweiler, Carrick.....Computing

**Dzenis, Yuris****Mechanical & Materials Engineering**

Ultratough Lightweight High-Temperature  
Nanofibers for Aerospace Composites  
\$599,374.....DoD-AFOSR

**Edwards, Katie****Educational Psychology/  
Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Rural Drug Addiction Research Center**

Development and Pilot Evaluation of an Online Intervention to Prevent  
Dating Violence and Problem Drinking in Sexual Minority Youth  
\$877,453.....NIH-NIAAA  
Wheeler, Lorey.....Nebraska Center for Research on  
Children, Youth, Families and Schools/  
Rural Drug Addiction Research Center

The Role of Stigma in Partner Violence  
\$413,900.....NSF

**Elkins, Lynne** **Earth and Atmospheric Sciences**

Testing Extrusion Tectonics, Rifting, and  
Lithosphere-Asthenosphere Coupling Models for the  
Central Highlands Diffuse Igneous Province, Vietnam  
\$413,347 ..... NSF  
Burberry, Cara ..... Earth and Atmospheric Sciences

Assessing Segment-scale Compositional Control over  
Slow-spreading Ridge Morphology  
\$278,905 ..... NSF

**Engen-Wedin, Nancy** **Teaching, Learning and Teacher Education**

Indigenous Roots School Leaders  
\$585,526 ..... ED  
Holman, Shavonna ..... Educational Administration  
Pace, Nick ..... Educational Administration

**Erickson, Galen** **Animal Science**

Integrated Crop Livestock Systems for the Western Corn Belt  
\$540,000 ..... USDA-ARS  
MacDonald, James ..... Animal Science  
Watson, Andrea ..... Animal Science

**Erixson, John** **Nebraska State Forest Service**

Genomic Tools, Genetic Resources, and Outreach to  
Expand Commercial U.S. Hazelnut Production  
\$685,869 ..... USDA-NIFA through Oregon State University  
Clare, Aaron ..... Nebraska State Forest Service

Community Assistance Funds Adjacent  
\$300,000 ..... USDA-FS

**Eun, Jongwan** **Civil and Environmental Engineering**

\*Development of Novel Barrier Materials for  
Geological Repository to Advance Long-term Storage of  
High-level Nuclear Waste (HLW) and Spent Nuclear Fuel (SNF)  
\$675,000 ..... DOE-EPSCoR  
Dzenis, Yuris ..... Mechanical & Materials Engineering  
Kim, Seunghee ..... Civil and Environmental Engineering

Multiscale and Multiphysical Testing-Modeling of  
Inorganic Microfiber-Reinforced Engineered Barrier Materials  
(IMEBM) for Enhancing Repository Performance  
\$640,000 ..... DOE-NEUP  
Kim, Seunghee ..... Civil and Environmental Engineering

**Fabrikant, Ilya** **Physics and Astronomy**

\*Laser-Assisted Electron and Positronium Collisions  
\$277,644 ..... NSF  
Electron and Positronium Collisions with Molecules  
\$270,000 ..... NSF

**Faller, Ronald** **Midwest Roadside Safety Facility**

\*Application of MASH Test Criteria to Breakaway Sign and Luminaire  
Supports and Crashworthy Work-Zone Traffic Control Devices  
\$414,999 ..... National Academy of Sciences-NCHRP through  
George Mason University  
Asadollahipajouh, Mojdeh ..... Midwest Roadside Safety Facility  
Lechtenberg, Karla ..... Midwest Roadside Safety Facility  
Stolle, Cody ..... Midwest Roadside Safety Facility

\*MASH TL-2 Crash Testing and Evaluation of a  
Steel Tube Rail and Steel WF Post Bridge Railing System  
Attached to Precast Concrete Box Girders  
\$277,586 ..... WSP Canada Inc.  
Bielenberg, Robert ..... Midwest Roadside Safety Facility  
Rosenbaugh, Scott ..... Midwest Roadside Safety Facility  
Steelman, Joshua ..... Civil and Environmental Engineering/  
Midwest Roadside Safety Facility

Crash-Tested Bridge Railings and Transitions for Wood Bridges -  
Phase IIB  
\$500,000 ..... USDA-FS through  
U.S. Endowment for Forestry and Communities  
Bielenberg, Robert ..... Midwest Roadside Safety Facility  
Rosenbaugh, Scott ..... Midwest Roadside Safety Facility  
Steelman, Joshua ..... Civil and Environmental Engineering/  
Midwest Roadside Safety Facility  
Stolle, Cody ..... Midwest Roadside Safety Facility

Crash Testing of a Precast Concrete Barrier  
\$414,128 ..... Iowa Department of Transportation  
Bielenberg, Robert ..... Midwest Roadside Safety Facility  
Rosenbaugh, Scott ..... Midwest Roadside Safety Facility  
Steelman, Joshua ..... Civil and Environmental Engineering/  
Midwest Roadside Safety Facility

**Fernandez-Ballester, Lucia** **Mechanical & Materials Engineering**

Nucleation Control of Conjugated Polymers Through  
Melt-crystallization and Self-seeding  
\$345,000 ..... NSF

**Fernando, Samodha** **Animal Science**

\*Risks Associated with Genetically Engineered Microbes in Beef Cattle Production: Evaluation of Persistence, Transmission and Ecological Consequences  
\$499,913 ..... USDA-NIFA

Investigating the Emergence and Ecology of Antimicrobial Resistance in High-Risk Beef Cattle  
\$332,437 ..... USDA-AFRI through Texas Tech University  
Schmidt, Amy ..... Animal Science/Biological Systems Engineering

Investigating Mobile Genetic Elements and Resistance Gene Reservoirs Towards Understanding the Emergence and Ecology of Antimicrobial Resistance in Beef Cattle Production Systems  
\$830,751 ..... USDA-NIFA  
Bartelt-Hunt, Shannon ..... Civil and Environmental Engineering  
Loy, Dustin ..... Veterinary Medicine and Biomedical Sciences  
Schmidt, Amy ..... Animal Science/Biological Systems Engineering  
Snow, Daniel ..... Nebraska Water Center  
Stowell, Rick ..... Biological Systems Engineering

Moving Beyond Rumen Microbiota Composition to Identify Interactions Between Host Genotype and Rumen Function Towards Identifying Genetic Markers and Microbial Functions That Influence Feed Efficiency  
\$500,000 ..... USDA-NIFA  
Morota, Gota ..... Animal Science  
Spangler, Matthew ..... Animal Science

**Frels, Katherine** **Agronomy and Horticulture**

\*Characterization of Resistance to Fusarium Head Blight in Wheat and Its Relatives  
\$279,178 ..... USDA-ARS

Breeding Scab-Resistant and Low DON Winter Barley Varieties for the Great Plains  
\$284,038 ..... USDA-ARS

Plant Breeding Partnerships: Continuing to Develop and Validate the Tools for Hybrid Wheat  
\$650,000 ..... USDA-NIFA

**Fuchs, Matthias** **Physics and Astronomy**

High-Efficiency, High-Current Laser-driven Electron Injector  
\$749,622 ..... DOE  
Shadwick, Bradley ..... Physics and Astronomy

**Gardner, Scott** **Biological Sciences/  
University of Nebraska State Museum**

Digitization TCN: Digitizing Collections to Trace Parasite-Host Associations and Predict the Spread of Vector-Borne Disease  
\$426,149 ..... NSF

**Gay, Timothy** **Physics and Astronomy**

Polarized Electron Physics  
\$689,917 ..... NSF

**Ge, Yufeng** **Biological Systems Engineering**

A Rapid In-Field System to Measure Deep Soil C Stock and Flux  
\$624,997 ..... DOE-ARPA-E through Soil Health Institute

CPS: 3D Dynamic Soil Information System Enabled by UAV and Proximal Depth Sensing  
\$717,698 ..... USDA-NIFA  
Shi, Yeyin ..... Biological Systems Engineering  
Yu, Hongfeng ..... Computing  
Zhou, Yuzhen ..... Statistics

**Ghose, Nirnimesh** **Computing**

\*SaTC: CORE: Small: Towards Robust, Scalable and Resilient Radio Fingerprinting  
\$299,997 ..... NSF

**Gilmore, Troy** **Natural Resources**

\*Advancing Image-Based Hydrology for USGS Stream Gage Applications  
\$271,000 ..... DOI-USGS

Evaluation of Watershed-scale Groundwater Transit Time Distributions from Field Sampling and Numerical Modeling  
\$387,030 ..... NSF  
Mittelstet, Aaron ..... Biological Systems Engineering

**Golf, Frank** **Physics and Astronomy**

Pursuing a Non-standard Higgs Boson Off the Beaten Path  
\$525,000 ..... NSF

**Golick, Douglas** **Entomology**  
 Building Undergraduate Research and Science  
 Communication Skills Through Beneficial Insects Protection  
 Research and Extension Experiences (FACT)  
 \$344,767 . . . . . USDA-NIFA  
 Anderson, Troy . . . . . Entomology  
 Brewer, Gary . . . . . Entomology  
 Dauer, Jenny . . . . . Natural Resources  
 Louis, Joe . . . . . Entomology  
 McMechan, Justin . . . . . Entomology  
 Peterson, Julie . . . . . West Central Research and Extension Center  
 Smart, Autumn . . . . . Entomology  
 Velez Arango, Ana Maria . . . . . Entomology  
 Weissling, Tom . . . . . Entomology  
 Wu-Smart, Judy . . . . . Entomology

**Graef, George** **Agronomy and Horticulture**  
 Winter Nursery Support for Soybean Breeding and Genetics Studies  
 \$265,692 . . . . . Nebraska Soybean Board  
 Increasing Soybean Genetic Gain for Yield by  
 Developing Tools, Know-How and Community  
 Among Public Breeders in the North Central U.S.  
 \$253,260 . . . . . North Central Soybean Research Program through  
 Ohio State University  
 Hyten, David Jr. . . . . Agronomy and Horticulture

Soybean Breeding and Genetic Studies for Nebraska  
 \$304,247 . . . . . Nebraska Soybean Board

**Grassini, Patricio** **Agronomy and Horticulture**  
 \*Identifying Pathways to Mitigate the  
 Impact of Urbanization Trends on Croplands  
 \$500,000 . . . . . NSF

\*Global Assessment of Potassium Limitation to Crop Yields  
 \$296,587 . . . . . International Fertilizer Association

Niche  
 \$685,000 . . . . . Bill and Melinda Gates Foundation through  
 Regrow Agriculture Inc.

Extrapolation Domains for Aggregating Environmental  
 Outcomes from Local to Regional Levels  
 \$375,000 . . . . . DOE-ARPA-E

**Griep, Mark** **Chemistry**  
 REU Site: Research Experiences for Undergraduates  
 in Chemical Assembly at the University of Nebraska  
 \$387,249 . . . . . NSF

**Groskopf, Jessica** **Panhandle Research and Extension Center**  
 North Central Farm and Ranch Stress Assistance Center:  
 Engaging Programs to Support Well-being  
 \$437,193 . . . . . USDA-NIFA through University of Illinois

**Grosskopf, Kevin** **Durham School of Architectural  
 Engineering and Construction**  
 Modular Construction: A Field Study of Energy Efficiency and  
 Code Compliance Through Offsite Prefabrication  
 \$400,000 . . . . . DOE

**Grover, Piyush** **Mechanical & Materials Engineering**  
 \*Dynamics and Control of Active Nematics using  
 Nonlinear Reduced-Order Models  
 \$450,000 . . . . . DOE  
 Park, Jae Sung . . . . . Mechanical & Materials Engineering

Inducing and Exploiting Criticality in Collective Behavior by  
 Phase Space Analysis of Mean Field Type Control Problems  
 \$311,533 . . . . . NSF

Dynamics and Control of Active Nematics Using  
 Nonlinear Reduced-order Models  
 \$450,000 . . . . . DOE  
 Park, Jae Sung . . . . . Mechanical & Materials Engineering

**Gruverman, Alexei** **Physics and Astronomy/  
 Nebraska Center for Materials and Nanoscience**  
 \*Mechanical Control of the Electronic Properties of 2D Ferroelectrics  
 \$252,000 . . . . . NSF

**Guan, Yawen** **Statistics**  
 \*Improved Coupled Climate Simulations in  
 E3SM Through Enhanced Sea Ice Mechanics  
 \$467,856 . . . . . DOE through University of New Mexico

**Guo, Jiantao** **Chemistry**  
 Development of Proximity-Induced Fluorogenic Reactions for Imaging  
 Biomolecular Interaction  
 \$613,476 . . . . . NIH-NIGMS  
 Niu, Wei . . . . . Chemical and Biomolecular Engineering

**Guretzky, John** **Agronomy and Horticulture**  
Fostering Resilience and Ecosystem Services in Landscapes by  
Integrating Diverse Perennial Circular Systems  
\$371,410 . . . . . USDA-NIFA through University of Wisconsin-Madison

**Habecker, Patrick** **Sociology**  
Promoting Community Conversations About Research  
to End Native Youth Suicide in Rural Alaska  
\$310,778 . . . . . NIH-NIMH through University of Michigan

**Hage, David** **Chemistry**  
Ultrafast Affinity Extraction Fundamental Studies and  
Use in Environmental Applications  
\$400,000 . . . . . NSF  
Snow, Daniel . . . . . Nebraska Water Center

New Approaches to Catalyst Screening and Development  
\$575,000 . . . . . NSF  
Berkowitz, David . . . . . Chemistry

**Hagshenas Fatmehsari, Hamzeh** **Civil and  
Environmental Engineering**  
Effect of Antioxidant Additives and Recycling Agents on  
Performance of Asphalt Binders and Mixtures Phase I  
\$397,788 . . . . . DOT-FHWA through  
Nebraska Department of Transportation

**Haigh, Tonya** **Natural Resources**  
Climate-smart Indigenous Agriculture: Drought Planning and  
Adaptation with New Mexico Pueblos  
\$297,800 . . . . . USDA-NRCS  
Bathke, Deborah . . . . . Natural Resources  
Knutson, Cody . . . . . Natural Resources

**Harwood, David** **Earth and Atmospheric Sciences/  
Antarctic Drilling Program**  
Sensitivity of the West Antarctic Ice Sheet to 2o Celsius (SWAIS 2C)  
\$757,689 . . . . . NSF

Subglacial Antarctic Lakes Scientific Access (SALSA):  
Integrated Study of Carbon Cycling in  
Hydrologically Active Subglacial Environments  
\$349,956 . . . . . NSF through Montana State University

**Hasan, Mohammad Rashedul** **Computing**  
Towards an AI to Deliver Individualized Just-in-Time Interventions that  
Enhance Student Performance in STEM Disciplines  
\$599,891 . . . . . NSF  
Kantamneni, Neeta . . . . . Educational Psychology  
McQuillan, Julia . . . . . Sociology  
Soh, Leen-Kiat . . . . . Computing  
Wheeler, Lorey . . . . . Nebraska Center for Research on  
Children, Youth, Families and Schools

**Hastings, Lindsay** **Agricultural Leadership,  
Education and Communication**  
\*Beyond the Farm Gate: Building a Leadership Development System  
to Support Rural Community Wellbeing and Prosperity  
\$647,932 . . . . . USDA-NIFA  
Emery, Mary . . . . . Agricultural Leadership,  
Education and Communication  
Grummert Rasmussen, Jordan . . . . . Nebraska Extension  
Engagement Zone 2  
McElravy, L.J. . . . . Agricultural Leadership,  
Education and Communication  
Thompson, Eric . . . . . Economics

**Hebets, Eileen** **Biological Sciences**  
Navigation and the Neural Integration of  
Multimodal Sensory Information in the Brain of an Arthropod  
\$331,353 . . . . . NSF

**Heitman, Carrie** **Global Integrative Studies (Anthropology)**  
(Re)Connections Through Time: Developing a Model for Multi-Modal  
Storytelling About Indigenous Communities and Their Collections  
\$310,000 . . . . . Andrew W. Mellon Foundation

**Hibbeler, Theodore** **Nebraska Extension**  
Umonhon Nation Agricultural Economic Development Program  
\$400,000 . . . . . USDA  
Grummert Rasmussen, Jordan . . . . . Nebraska Extension

**Holding, David** **Agronomy and Horticulture/  
Center for Plant Science Innovation**  
Advancing CRISPR Generated High-Digestibility High-Lysine Sorghum  
from Proof of Concept to Large-Scale Production  
\$500,000 . . . . . USDA-NIFA  
Rose, Devin . . . . . Food Science and Technology/  
Center for Plant Science Innovation

**Hong, Xia** **Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience**

DMREF: Accelerated Discovery of Artificial Multiferroics with  
Enhanced Magnetolectric Coupling  
\$450,000 .....NSF

Exploring Spin-Orbit Coupling and Correlated Phenomena  
in Iridate-based Ferroelectric Transistors and Tunnel Junctions  
\$499,012 .....NSF

**Houston, Adam** **Earth and Atmospheric Sciences**

\*Collaborative Research: Investigation of Supercell  
Left-Flank Boundaries and Coherent Structures: TORUS-LitE  
\$385,103 .....NSF

NRI: Dispersed Autonomy for Marsupial Aerial Robot Teams  
\$454,570 .....NSF

Targeted Observation by Radars  
and UAS of Supercells (TORUS)  
\$939,784 .....NSF

**Hutkins, Robert** **Food Science and Technology**

Digestive Tract Microbiome in Healthy Term Infants Receiving  
Mothers-own Breast Milk or Cows Milk-based Infant Formulas  
\$315,749 .....Mead Johnson Nutrition  
Izard, Jacques .....Food Science and Technology

**Huynh, Nathan** **Civil and Environmental Engineering/  
Nebraska Transportation Center**

Rural Rail Safety Center  
\$535,500 .....DOT-FRA through Kansas State University  
Sharif-Kashani, Hamid .....Electrical and Computer Engineering/  
Nebraska Transportation Center  
Turner, Joseph .....Mechanical & Materials Engineering/  
Nebraska Transportation Center

**Iqbal, Javed** **Agronomy and Horticulture**

\*Evaluating Nitrogen Balance and Fertilizer Equivalence of  
Cover Crop Nitrogen Using the University Long-Term Tillage Trials  
\$585,340 .....USDA-NRCS  
Basche, Andrea .....Agronomy and Horticulture  
Jasa, Paul .....Biological Systems Engineering  
Puntel, Laila .....Agronomy and Horticulture

Demonstrating an Integrated Nutrient Management Approach for  
Improving Drinking Groundwater Quality in Nebraska  
\$298,631 .....USDA-NIFA  
Johnson, Leslie .....Extension  
Malakar, Arindam .....Nebraska Water Center  
Milander, Jeremy .....Extension  
Proctor, Christopher .....Agronomy and Horticulture  
Schmidt, Amy .....Animal Science/Biological Systems Engineering  
Snow, Daniel .....Nebraska Water Center

**Jacobs, Margaret** **Center for Great Plains Studies**

\*Expansion of Historic Resource Study on  
African American Homesteaders  
\$286,041 .....DOI-NPS

**Jaffe, Anna** **Psychology/Rural Drug Addiction Research Center**

\*Connecting Alcohol Myopia to Real-World Risk Behaviors through  
Cognitive Ecological Momentary Assessment  
\$434,445 .....NIH-NIAAA

Leveraging Social Networks to Promote Sexual Assault Recovery and  
Reduce Drinking to Cope through Web-Based Intervention  
\$897,913 .....NIH-NIAAA

**Jagodinsky, Katrina** **History/Center for Digital  
Research in the Humanities**

REU Site: Freedom Stories Digital Legal Research Lab  
\$331,568 .....NSF  
Thomas, William .....History/Center for Digital  
Research in the Humanities

**Jin, Congrui** **Civil and Environmental Engineering**

From Agricultural Waste to Lithium-Ion Battery Anodes: Deciphering  
the Feedstock Processing-Property-Performance Relationship  
\$320,000 .....USDA-NIFA  
Clarke, Bertrand .....Statistics  
Wilkins, Mark .....Biological Systems Engineering/  
Food Science and Technology/  
Industrial Agricultural Products Center

**Johnson, Allison** **Biological Sciences**

\*Resolving the Drivers of Variation in Cooperative Social Groups  
Along Environmental Gradients  
\$812,181 .....NSF  
Shizuka, Dai .....Biological Sciences

**Johnson, Phillip** **Food Science and Technology**  
 Robust Methods for Food Allergen Detection  
 and Quantitative Risk Assessment  
 \$424,742 ..... USDA-NIFA  
 Baumert, Joseph. .... Food Science and Technology  
 Downs, Melanie ..... Food Science and Technology  
 Marsh, Justin ..... Food Science and Technology

**Jones, David** **Biological Systems Engineering**  
 Water Use and Soil-Water Storage Effect of Individual &  
 Mixed Cover Species and Impacts on Soil Quality Variables  
 \$391,756 ..... Nebraska Environmental Trust

**Kaskie, Shawn** **Extension**  
 Nebraska Entrepreneurial Communities Pandemic Response  
 \$415,261 ..... DOC-EDA  
 Barrera Fuentes, Sandra ..... Extension  
 Schlake, Marilyn ..... Agricultural Economics  
 Tuller, Jason ..... Extension  
 Weigle, Jason ..... Extension

**Kazyak, Emily** **Sociology/Women's and Gender Studies**  
 Religious Exemption Laws and the Rights  
 of Sexual and Gender Minorities  
 \$328,582 ..... NSF  
 Burke, Kelsy ..... Sociology

**Keshwani, Deepak** **Biological Systems Engineering**  
 Immersive Educational Game Simulations to Enhance  
 Understanding of Corn-Water Ethanol-Beef System Nexus  
 \$999,644 ..... NSF  
 Keshwani, Jenny ..... Biological Systems Engineering  
 Rosenbaum, David ..... Bureau of Business Research  
 Thompson, Eric ..... Bureau of Business Research

**Kidambi, Srivatsan** **Chemical and Biomolecular Engineering**  
 Extracellular Vesicles as the Vehicles for  
 Promoting Liver Injury Induced by HIV and Alcohol  
 \$344,520 ..... NIH-NIAAA through  
 University of Nebraska Medical Center

**Kim, Panya** **Center for Plant Science Innovation**  
 IOS: The Microtubule Network and Plant Immunity  
 \$600,000 ..... NSF  
 Van Dijk, Karin ..... Biochemistry/Center for Plant Science Innovation

**Kim, Seunghee** **Civil and Environmental Engineering**  
 \*Improvement on the Treatment of Recycled Concrete  
 Aggregates (RCA) Using Carbon Dioxide (CO<sub>2</sub>) for Its  
 Commercial Application Phase II  
 \$300,000 ..... Hawkins Construction Company  
 Hu, Jiong ..... Civil and Environmental Engineering

**Kim, Surin** **Textiles, Merchandising and Fashion Design**  
 Leveraging Community Connections, Local Issues,  
 and Youth High Tech Entrepreneurship Education  
 to Nurture Rural Economic Opportunities  
 \$493,560 ..... USDA-NIFA  
 de Guzman, Maria ..... Child, Youth and Family Studies

**Kingery, Heather** **Nebraska State Forest Service**  
 Great Plains Biochar Initiative II:  
 Supply and Demand for Biochar as a Cattle Feed Additive  
 \$250,000 ..... USDA-FS  
 Erickson, Galen ..... Animal Science  
 MacDonald, James ..... Animal Science  
 Watson, Andrea ..... Animal Science

**Knoche, Lisa** **Nebraska Center for Research on  
 Children, Youth, Families and Schools**  
 Getting Ready Preschool Development Grant PDG  
 \$292,723 ..... DHHS-ACF-Nebraska Department of  
 Health and Human Services through  
 Nebraska Children and Families Foundation

**Korus, Jesse** **Natural Resources**  
 Aquifer Recharge and Sustainability in the Republican Basin  
 \$269,008 ..... Nebraska Natural Resources Commission through  
 Middle Republican NRD

**Kovalev, Alexey** **Physics and Astronomy**  
 Spin Currents in Magnetic Systems and Heterostructures  
 \$344,671 ..... DOE

**Kravchenko, Ilya** **Physics and Astronomy**  
 \*RII Track-2 FEC: The IceCube EPSCoR Initiative (IEI) -  
 IceCube and the Data Revolution  
 \$395,935 ..... NSF through  
 South Dakota School of Mines and Technology

**Krull, Dean** **Agronomy and Horticulture**  
 Managing Irrigation Systems Today  
 \$552,982 ..... Central Platte NRD

**Lackey, Susan** **Natural Resources**  
Developing Hydrogeologic Databases to Assist  
in Water Resources Management  
\$654,700..... Lower Elkhorn NRD

**Lai, Rebecca** **Chemistry**  
\*Detection of Toxins via Electrochemical Sensors (DTECS)  
\$438,280 ..... DoD-DTRA through  
National Strategic Research Institute

A Wireless, Closed-Loop Neural Probe for Optogenetics,  
Pharmacology and Neurochemical Monitoring  
\$339,325..... NIH-NINDS through University of Connecticut

**Lau, Josephine** **Durham School of Architectural  
Engineering and Construction**  
The Efficacy of Air Filters in Classrooms on  
Student Academic and Learning Outcomes  
\$556,003..... Nebraska Department of Education  
Bovaird, Jim..... Educational Psychology

**Lawrence, Nevin** **Panhandle Research and Extension Center**  
BARRAL - Bioenergy, Advanced Biofuel  
and Rubber Research Agricultural Linkages  
\$500,001..... USDA-NIFA through Ohio State University  
Maharjan, Bijesh ..... Panhandle Research and Extension Center  
Qiao, Xin ..... Panhandle Research and Extension Center

**Lee, Kevin** **Physics and Astronomy/Center for Science,  
Mathematics and Computer Education**  
Development and Research on Smartphone Simulations in  
Introductory College Astronomy  
\$299,344..... NSF  
Menon, Deepika ..... Teaching, Learning and Teacher Education/  
Center for Science, Mathematics  
and Computer Education

**Lewis, Ronald** **Animal Science**  
Improving Robustness and Climatic Resilience in  
U.S. Sheep Populations Through Genomics  
\$650,000..... USDA-NIFA

**Li, Haorong** **Durham School of Architectural  
Engineering and Construction**  
Smart Operations of Common HVAC Systems  
\$591,055..... Turntide Technologies

**Li, Qingsheng** **Biological Sciences/  
Nebraska Center for Virology**  
Effects of CSF1R Blockade on Repopulation of SIV Reservoirs from the  
CNS to the Periphery After Antiretroviral Therapy Interruption  
\$356,068..... NIH-NINDS through Boston College

Targeted In Vivo Delivery of Gene Therapeutics for HIV Cure  
\$609,884..... NIH-NIAID through Temple University

Impact of Fc N-glycan Structure on HIV-specific Antibody Functions  
\$586,217..... NIH-NIAID through University of Wyoming

**Li, Xu** **Civil and Environmental Engineering**  
Antibiotic Resistance Genes in the Soil-Plant Ecosystem  
\$330,000..... NSF  
Snow, Daniel ..... Nebraska Water Center  
Walia, Harkamal ..... Agronomy and Horticulture

**Libault, Marc** **Agronomy and Horticulture/  
Center for Plant Science Innovation**  
Single Cell Characterization of the Transcriptional  
Programs Controlling Plant Root Organ Initiation  
\$626,827..... USDA-NIFA

Development of Advanced Multi-Modal  
Capabilities for Plant Single-Cell  
\$649,009..... Syngenta

**Limpert, George** **Natural Resources**  
Ensemble Sensitivity Analysis to Investigate Mesoscale Heterogeneity  
in Southeast U.S. Tornado Events  
\$260,822..... DOC-NOAA  
Houston, Adam..... Earth and Atmospheric Sciences

**Little, Andrew** **Natural Resources**  
Identifying and Prioritizing Habitat for Pheasant Conservation and  
Management in Agriculturally Dominated Landscapes  
\$699,940..... Nebraska Game and Parks Commission  
Carroll, John ..... Natural Resources  
Powell, Larkin ..... Natural Resources  
Twidwell, Dirac Jr. .... Agronomy and Horticulture  
Uden, Daniel ..... Natural Resources

**Louis, Joe** **Entomology/Biochemistry**  
Characterizing the Interplay Between Sorghum and Fall Armyworm  
\$429,248..... USDA-NIFA



**Loveall-Hague, Susan** **Special Education and Communication Disorders**  
 Designing and Providing Academic Interventions  
 \$955,034 .....ED  
 Lambert, Matthew ..... Special Education and Communication Disorders  
 Savaiano, Mackenzie ..... Special Education and Communication Disorders

**Lu, Yongfeng** **Electrical and Computer Engineering**  
 Multifunctional Laser Processing for Repair and Mitigation of Pitting and Cracks in Welded Stainless Steel Dry Storage Canisters  
 \$800,000 .....DOE  
 Cui, Bai ..... Mechanical & Materials Engineering

**Luck, Joe** **Biological Systems Engineering**  
 Initiation of Nitrogen and Cover Crop Application Technology Demonstration  
 \$452,540 ..... EPA through Nebraska Department of Environment and Energy  
 Koehler-Cole, Katja ..... Agronomy and Horticulture  
 Pekarek, Katie ..... Natural Resources  
 Proctor, Christopher ..... Agronomy and Horticulture  
 Puntel, Laila ..... Agronomy and Horticulture  
 Thompson, Laura .. Eastern Nebraska Research and Extension Center

Reducing Field Worker Exposure to Pesticides Via Agricultural Data Connectivity and Mobile Apps  
 \$299,529 ..... USDA-NIFA  
 Thompson, Laura .. Eastern Nebraska Research and Extension Center  
 Thorson, Nathan .. Eastern Nebraska Research and Extension Center

Next-generation Spray Drift Mitigation Via Field-deployable, Real-time Weather Monitoring and Novel Spray Nozzle Control Technologies  
 \$499,916 ..... USDA-NIFA  
 Kruger, Greg ..... West Central Research and Extension Center  
 Pitla, Santosh ..... Biological Systems Engineering

**Lyons, Kate** **Biological Sciences**  
 RCN: Ecological and Evolutionary Effects of Extinction and Ecosystem Engineers (E6)  
 \$500,131 .....NSF  
 Wagner, Peter ..... Earth and Atmospheric Sciences/Biological Sciences

**MacDonald, James** **Animal Science**  
 Characterizing Digestion Aspects of Bran  
 \$365,864 ..... Cargill  
 Erickson, Galen ..... Animal Science

**Mahmood, Rezaul** **Natural Resources**  
 The Great Plains Irrigation Experiment (GRAINEX) for Understanding the Influence of Irrigation on the Planetary Boundary Layer and Weather Events  
 \$287,636 .....NSF

**Malakar, Arindam** **Nebraska Water Center**  
 Identifying Reactive Nitrogen Dynamics in the Deep Vadose Zone to Protect Groundwater Quality  
 \$749,861 ..... USDA-NIFA  
 Haacker, Erin ..... Earth and Atmospheric Sciences  
 Ray, Chittaranjan ..... Nebraska Water Center  
 Snow, Daniel ..... Nebraska Water Center

**Markvicka, Eric** **Mechanical & Materials Engineering**  
 Additive Manufacturing of Functional Emulsions: Materials and Printing for Designer Microstructures  
 \$354,293 .....NSF

**McChargue, Dennis** **Psychology/ Rural Drug Addiction Research Center**  
 Mapping the Co-evolution of Craving, Affect, Stressors, and Access to Alcohol (CASA) Using Responsive EMA  
 \$408,187 ..... NIH-NIAAA  
 Andrews, Trey ..... Psychology/Rural Drug Addiction Research Center  
 Tyler, Kimberly ..... Sociology/Rural Drug Addiction Research Center

**McQuillan, Julia** **Sociology**  
 \*Center for Scalable and Intelligent-Automation in Poultry Processing (CSI-APP)  
 \$399,960 ..... USDA-NIFA through University of Arkansas

**Menon, Deepika** **Teaching, Learning and Teacher Education/ Center for Science, Mathematics and Computer Education**  
 Research on Integrated STEM Efficacy (RISE): A Study of Elementary Preservice Teachers and Noyce Scholars  
 \$481,065 .....NSF

**Montooth, Kristi** **Biological Sciences**

\*RII-BEC: STEM-POWER Research Program:

Empowering Students from the Start with Purpose, Ownership, and Well-being as They Engage in Research Relationships

\$999,125 ..... NSF  
Burks, Marianna ..... Biological Sciences  
Wonch Hill, Trish ..... Sociology

RoL: FELS: EAGER: A Predictive Framework of Metabolism as an Engine of Functional Environmental Responses across Levels of Biological Organization

\$354,998 ..... NSF  
DeLong, John ..... Biological Sciences

**Moon, Alena** **Chemistry**

Developing Educational Measurement Competency to Support Investigations of Students' Conceptions of Light

\$300,112 ..... NSF

**Morin, Stephen** **Chemistry**

\*Powering Soft Actuators Directly with Small Molecule Fuels for Operational Versatility

\$478,683 ..... DoD-ARO

**Mower, Jeff** **Agronomy and Horticulture/  
Center for Plant Science Innovation**

\*Investigating Recurrent Cooption of the Mitochondrial Cytochrome c Maturation System in Archaeplastida

\$528,654 ..... NSF

**Muñoz-Arriola, Francisco** **Biological Systems Engineering**

From Gene to Global Hydroclimatic Controls on Hybrid Performance Predictability

\$490,000 ..... USDA-NIFA  
Hernandez Jarquin, Juan Diego ..... Agronomy and Horticulture

**Natarajan, Sathish Kumar** **Nutrition and Health Sciences/  
Nebraska Center for the  
Prevention of Obesity Diseases/  
Nebraska Center for Redox Biology/  
Nebraska Food for Health Center**

\*Bioactive Components of Macadamia Nut Protects against Maternal Obesity-induced Complications

\$638,000 ..... USDA-NIFA  
Ramer-Tait, Amanda ..... Food Science and Technology/  
Nebraska Center for the

Prevention of Obesity Diseases/  
Nebraska Center for Redox Biology/  
Nebraska Food for Health Center

Wood, Jennifer ..... Animal Science/Nebraska Center for the  
Prevention of Obesity Diseases/  
Nebraska Center for Redox Biology/  
Nebraska Food for Health Center

**Neale, Christopher** **Biological Systems Engineering/  
Daugherty Water for Food Global Institute**

Improving Agricultural Water Use and Nutrient Management to Sustain Food and Energy Crops Production in the Corn Belt

\$847,117 ..... USDA-NIFA through University of Maryland  
Luck, Joe ..... Biological Systems Engineering  
Masih, Ashish ..... Daugherty Water for Food Global Institute  
Puntel, Laila ..... Agronomy and Horticulture  
Thompson, Laura .. Eastern Nebraska Research and Extension Center

Irrigation Innovation Consortium-Base Funding

\$343,000. .... Foundation for Food and Agriculture Research through  
Colorado State University

Garcia Nascimento, Jessica ..... Daugherty Water for Food  
Global Institute

Masih, Ashish ..... Daugherty Water for Food Global Institute  
Rudnick, Daran ..... Daugherty Water for Food Global Institute

Reconfiguring Farmers' Behavior to Reduce Irrigation Water Use Through Water Measurements and Social Norms Interventions: A Case Study in the Republican River Basin

\$453,539 ..... USDA-NIFA  
Olson, Kristen ..... Sociology

**Nelson, Carl** **Mechanical & Materials Engineering**

\*Simulation Based Surgical Training for High Risk Low Resourced Procedures Using a Novel Simulator with Smart Mentoring

\$611,305 ..... NIN-NIBIB

Peritoneal Oxygen Delivery for Treatment of  
Acute Respiratory Distress Syndrome  
\$441,472 ..... NIH-NHLBI through University of Colorado

**Nelson, Timothy** **Psychology/  
Center for Brain, Biology and Behavior**

Role of Executive Control in Adolescent Substance Use  
and Co-occurring Problems  
\$689,191 ..... NIH-NIDA through  
University of Tennessee  
Nelson, Jennifer ..... Psychology/  
Center for Brain, Biology and Behavior

**Ngoko Djiokap, Jean Marcel** **Physics and Astronomy**

\*Dynamics of Two-Electron Atomic and Molecular Processes  
\$300,000 ..... DOE  
  
Strong Field & Ultrafast Atomic and Molecular Processes  
\$548,398 ..... NSF

**Nguyen, Lim** **Electrical and Computer Engineering**

ABC Group SRA: Center for Electromagnetic  
Concrete R&D and Shielding Innovations  
\$301,408 ..... American Business Continuity Domes, Inc.

**Niu, Wei** **Chemical and Biomolecular Engineering/  
Nebraska Center for Energy Sciences Research**

Engineering Carboxylic Acid Reductase  
for the Biosyntheses of Industrial Chemicals  
\$335,516 ..... NSF  
Guo, Jiantao ..... Chemistry/Nebraska Center for  
Energy Sciences Research  
Wilson, Mark ..... Biochemistry/Nebraska Center for  
Energy Sciences Research

**Obata, Toshihiro** **Biochemistry/  
Center for Plant Science Innovation**

Elucidating the Health-Beneficial Traits of Kernels of  
Maize Relatives Digested in the Human Gastrointestinal Tract  
\$500,000 ..... USDA-NIFA  
Majumder, Kaustav ..... Food Science and Technology/  
Center for Plant Science Innovation  
Yang, Jinliang ..... Agronomy and Horticulture/  
Center for Plant Science Innovation

**Pajouh, Mojdeh A.** **Midwest Roadside Safety Facility**

AASHTO Guidelines for Implementation of MASH Sign Supports,  
Breakaway Poles, and Work Zone Traffic Control Devices  
\$500,000 ..... DOT-FHWA through  
National Academy of Sciences-NCHRP  
Faller, Ronald ..... Midwest Roadside Safety Facility  
Reid, John ..... Mechanical & Materials Engineering

**Pannier, Angela** **Biological Systems Engineering**

Influence of Maternal and Embryonic-Derived Extracellular Vesicles  
on the Initiation of Porcine Conceptus Elongation  
\$500,000 ..... USDA-NIFA

**Panther, Grace** **Civil and Environmental Engineering**

\*REU Site: Unpacking the Significance and Rigor of  
Engineering Education Research  
\$392,226 ..... NSF  
Diefes-Dux, Heidi ..... Biological Systems Engineering

**Park, Jae Sung** **Mechanical & Materials Engineering**

Exploring Flow Enhancements of Hydrophobic Particles in  
Confined Fluid Flow  
\$418,120 ..... NSF  
Li, Yusong ..... Civil and Environmental Engineering

Nonlinear Electrokinetics at Polarizable Soft Interfaces: Implications  
for Cell Membrane Characterization and Nanopore Transport  
\$387,356 ..... NSF  
Yang, Ruiguo ..... Mechanical & Materials Engineering

**Pedrigi, Ryan** **Mechanical & Materials Engineering**

Ultrasound as a Mechanotherapy for Endothelial Cell Dysfunction  
\$602,769 ..... NIH-NIBIB  
Kievit, Forrest ..... Biological Systems Engineering  
Sun, Xinghui ..... Biochemistry  
Turner, Joseph ..... Mechanical & Materials Engineering

**Pegg, Mark** **Natural Resources**

\*Assessing Movement and Entrainment of Walleye in  
Lewis and Clark Lake and Its Tailwaters  
\$464,400 ..... DOR-FWS through South Dakota Department of  
Game, Fish and Parks  
  
Spatial Distribution and Population Demographics of  
Asian Carp in the Missouri River Basin, Nebraska  
\$333,994 ..... DOI-FWS through  
Nebraska Game and Parks Commission

**Pekarek, Katie** **Natural Resources**

\*Evaluation and Demonstration of Broadcast  
Interseeded Cover Crops to Reduce Nitrogen Loss  
\$300,000 ..... USDA-NIFA  
Cafaro La Menza, Nicolas ..... West Central Research  
and Extension Center  
Iqbal, Javed ..... Agronomy and Horticulture  
Proctor, Christopher ..... Agronomy and Horticulture

**Pérez, Lance** **Electrical and Computer Engineering**

Spatial Visualization Skills and Engineering Problem Solving  
\$645,943 ..... NSF  
Panther, Grace ..... Civil and Environmental Engineering

**Petersen, Jessica** **Animal Science**

\*Improving the Efficiency of Beef Production by Understanding the  
Untapped Potential of Mitochondrial Variation  
\$650,000 ..... USDA-NIFA  
Yates, Dustin ..... Animal Science

Annotation of Functional Regulatory Regions in the Horse  
\$500,000 ..... USDA-NIFA

**Peterson, Julie** **West Central Research and Extension Center**

\*Do Persistent Entomopathogenic Nematodes Applied for  
Western Corn Rootworm Control Negatively Affect the  
Non-Target Soil Fauna in Cornfields?  
\$309,999 ..... USDA-NIFA through Texas A & M University  
Powers, Thomas ..... Plant Pathology

\*Chemical Application for WBC Control  
\$300,000 ..... USDA-NIFA  
Golus, Jeff ..... West Central Research and Extension Center  
Katimbo, Abia ..... West Central Research and Extension Center  
Rudnick, Daran ..... West Central Research and Extension Center

Insect Resistance Management:  
Evaluating the Impact of Blended Refuges and the  
VIP3A *Bacillus thuringiensis* Toxin on Western Bean Cutworm  
\$500,000 ..... USDA-NIFA

Corteva Innovation Farms  
\$315,991 ..... Pioneer Hi-Bred

**Pierobon, Massimiliano** **Computing**

CIF: Small: WetComm: Foundations of Wet Communication Theory  
\$515,528 ..... NSF  
Niu, Wei ..... Chemical and Biomolecular Engineering

**Pitla, Santosh** **Biological Systems Engineering**

UGV and UAV Collaboration for Automated Seed Refilling in  
Row Crops (U2AGV Refill)  
\$452,783 ..... USDA-NIFA  
Luck, Joe ..... Biological Systems Engineering  
Rohrer, Rodney ..... Biological Systems Engineering  
Shi, Yeyin ..... Biological Systems Engineering

In-field Tractor Operational Load Profile Generation in  
Support of Advanced Tractor Testing in Mixed-mode Power States  
\$472,887 ..... USDA-NIFA  
Hoy, Roger ..... Biological Systems Engineering  
Luck, Joe ..... Biological Systems Engineering  
Rohrer, Rodney ..... Biological Systems Engineering

**Pope, Kevin** **Natural Resources**

Monitoring, Mapping, Risk Assessment and  
Management of Invasive Species in Nebraska  
\$441,326 ..... Nebraska Game and Parks Commission  
Zach, Allison ..... Natural Resources

**Powers, Robert** **Chemistry**

\*Further Development of 5-AED (Androstenediol, Neumune) for the  
Protection from Acute Radiation Syndrome (ARS)  
\$659,073 ..... DoD-CDMRP through  
University of Nebraska Medical Center  
Dussault, Patrick ..... Chemistry  
Helikar, Tomas ..... Biochemistry

The Molecular Mechanism Linking Respiratory NADH Oxidation and  
Virulence in *Staphylococcus aureus*  
\$837,706 ..... NIH-NIAID through  
University of Illinois Urbana-Champaign  
Somerville, Greg ..... Veterinary Medicine and Biomedical Sciences

**Proctor, Christopher** **Agronomy and Horticulture**

Development of Research and Demonstration Sites in the  
BGMA for Nitrate Reduction  
\$272,574 ..... Nebraska Environmental Trust through  
Lower Elkhorn NRD  
Heeren, Derek ..... Biological Systems Engineering  
Mamo, Martha ..... Nebraska Extension  
Milander, Jeremy ..... Nebraska Extension  
Powers, Crystal ..... Nebraska Water Center  
Ray, Chittaranjan ..... Civil and Environmental Engineering/  
Nebraska Water Center  
Rudnick, Daran ..... Biological Systems Engineering  
Timmerman, Amy ..... Nebraska Extension

**Qian, Yi** **Electrical and Computer Engineering**  
 CNS Core: Small: Secure and Efficient Mobile Edge Computing in  
 Wireless Heterogeneous Networks  
 \$250,000.....NSF

**Qiao, Wei** **Electrical and Computer Engineering**  
 Learning to Adapt and Control for Complex Power Systems  
 \$300,000 . . . . .DOE through Battelle-Pacific NW National Laboratory  
 Qu, Liyao . . . . . Electrical and Computer Engineering

**Qiao, Xin** **Panhandle Research and Extension Center**  
 SCC: An Integrated and Smart System  
 for Irrigation Management in Rural Communities  
 \$541,048 . . . . .USDA-NIFA through University of Iowa  
 Rudnick, Daran . . . . . West Central Research and Extension Center  
 Yang, Haishun . . . . . Agronomy and Horticulture

**Qu, Liyao** **Electrical and Computer Engineering**  
 A Hot-Swappable, Fault-Tolerant, Modular Power  
 Converter System for Solar Photovoltaic Plants  
 \$300,000 . . . . .DOE  
 Qiao, Wei . . . . . Electrical and Computer Engineering

**Radu, Petronela** **Mathematics**  
 Nonlocality in Continuum Mechanics,  
 Population Dynamics, and Neural Networks  
 \$343,085 . . . . .NSF  
 Foss, Mikil . . . . .Mathematics

Higher Order Nonlocal Models in Continuum Mechanics  
 \$418,805 . . . . .NSF  
 Foss, Mikil . . . . .Mathematics

**Rajca, Andrzej** **Chemistry**  
 Organic Nanoparticles for Dual MRI-Guided Therapeutic Selection  
 and Ovarian Cancer Drug Delivery  
 \$251,487 . . . . .NIH-NCI through  
 Massachusetts Institute of Technology

Nitrogen-Centered Radicals  
 \$602,004 . . . . .NSF

**Ramamurthy, Byravamurthy** **Computing**  
 NeTS: Small: Intelligent Optical Networks  
 Using Virtualization and Software-Defined Control  
 \$615,996 . . . . .NSF

**Rasby, Rick** **Nebraska Extension**  
 Nebraska Extension Implementation Program  
 \$339,974 . . . . .USDA-NIFA

Bradshaw, Jeffrey . . . . . Panhandle Research and Extension Center  
 Green, Jody . . . . . Southeast Research and Extension Center  
 Jackson-Ziems, Tamra . . . . . Plant Pathology  
 Jhala, Amitkumar . . . . . Agronomy and Horticulture  
 McMechan, Justin . . . . . Entomology  
 Nygren, Aaron . . . . . Nebraska Extension  
 Proctor, Christopher . . . . . Agronomy and Horticulture  
 Stine, Emily . . . . . Panhandle Research and Extension Center  
 Weisbrod, Jennifer . . . . . Agronomy and Horticulture  
 Wright, Robert . . . . . Entomology  
 Wu-Smart, Judy . . . . . Entomology

**Ray, Chittaranjan** **Civil and Environmental Engineering/  
 Nebraska Water Center/  
 Daugherty Water for Food Global Institute**  
 Development of Data Bases for Model Development and  
 Field Testing of Crop Models in Midwest Farms  
 \$790,000 . . . . .USDA-ARS

**Reddy, N.R. Jayagopala** **Veterinary Medicine  
 and Biomedical Sciences**  
 Trained Immunity in the Prevention of  
 Viral Myocarditis and Pancreatitis  
 \$398,306 . . . . .NIH-NIAID

Barletta, Raul . . . . .Veterinary Medicine and Biomedical Sciences  
 Seravalli, Javier . . . . . Biochemistry  
 Steffen, David . . . . .Veterinary Medicine and Biomedical Sciences

TCR Transgenic Models for Dilated Cardiomyopathy  
 \$402,906 . . . . .NIH-NIAID

Kidambi, Srivatsan . . . . . Chemical and Biomolecular Engineering  
 Kievit, Forrest . . . . . Biological Systems Engineering  
 Steffen, David . . . . .Veterinary Medicine and Biomedical Sciences

**Redfearn, Daren** **Agronomy and Horticulture**  
 Developing Adaptive Grazing Management Strategies for  
 Optimizing Corn Residue Use  
 \$300,000 . . . . .USDA-NIFA

Drewnoski, Mary . . . . . Animal Science  
 Parsons, Jay . . . . . Agricultural Economics  
 VanderPlas, Susan . . . . . Statistics

**Reiling, Bryan** **Animal Science**

Enhancement of Agricultural Literacy Through  
Inquiry-Based Professional Development

\$291,000..... USDA-NIFA  
Ciobanu, Daniel..... Animal Science  
Conner, Nathan..... Agricultural Leadership,  
Education and Communication  
Cupp, Andrea..... Animal Science  
Ruth, Taylor..... Agricultural Leadership,  
Education and Communication  
Stowell, Rick..... Biological Systems Engineering  
Sullivan, Gary..... Animal Science

**Roohi, Arman** **Computing**

\*Integrated Sensing and Normally-off  
Computing for Edge Imaging Systems

\$260,664.....NSF

**Rosenbaugh, Scott** **Midwest Roadside Safety Facility**

31-in. Midwest Guardrail System (MGS) and  
Curb Combination Guidelines for MASH TL-3

\$600,000.....DOT-FHWA through  
National Academy of Sciences-NCHRP-TRB  
Bielenberg, Robert.....Midwest Roadside Safety Facility  
Faller, Ronald.....Midwest Roadside Safety Facility  
Lechtenberg, Karla.....Midwest Roadside Safety Facility  
Linzell, Daniel.....Civil and Environmental Engineering  
Song, Chung.....Civil and Environmental Engineering  
Steelman, Joshua.....Civil and Environmental Engineering  
Stolle, Cody.....Midwest Roadside Safety Facility

**Roston, Rebecca** **Biochemistry/  
Center for Plant Science Innovation**

Membrane Contact Site Components Enabling  
Biogenesis of the Photosynthetic Membrane

\$400,000.....DOE

**Roy, Tirthankar** **Civil and Environmental Engineering**

\*Improving Hydrological Drought Monitoring  
Capability of the U.S. Drought Monitor

\$555,362.....NASA  
Haigh, Tonya.....Natural Resources  
Svoboda, Mark.....Natural Resources

**Rudnick, Daran** **West Central Research and Extension Center**

Accelerating Adoption of Water Conservation  
Technologies and Management Practices Through  
Innovative Engagement Programming

\$850,000.....USDA-NRCS  
Burr, Chuck.....West Central Research and Extension Center  
Caswell, Katherine.....West Central Research and Extension Center  
Ingram, Troy.....Northeast Research and Extension Center  
Ray, Chittaranjan.....Civil and Environmental Engineering/  
Nebraska Water Center  
Rees, Jennifer.....Southeast Extension Center  
Stockton, Matt.....West Central Research and Extension Center  
Tigner, Robert.....West Central Research and Extension Center  
Whitney, Todd.....West Central Research and Extension Center

**Ryherd, Erica** **Durham School of Architectural  
Engineering and Construction**

Improving Engineering Student Engagement, Self-efficacy,  
Diversity Awareness and Retention Using Visualization and  
Virtual/Augmented Reality Technologies

\$493,001.....NSF through Georgia Institute of Technology  
Diefes-Dux, Heidi.....Biological Systems Engineering  
Kim, Kyungki.....Durham School of Architectural  
Engineering and Construction  
Konstantzos, Iason.....Durham School of Architectural  
Engineering and Construction  
Lather, Jennifer.....Durham School of Architectural  
Engineering and Construction  
Lau, Josephine.....Durham School of Architectural  
Engineering and Construction

**Saha, Rajib** **Chemical and Biomolecular Engineering**

PlantSynBio: Deciphering the Roles of Genetics and  
Biochemical Redundancy and Pathway Regulation Via  
Refactoring the Protective Plant Cuticle

\$313,425.....NSF

**Saraf, Ravi** **Chemical and Biomolecular Engineering**

\*Non-invasive Electrophysiology of  
Individual Microbes in a Colony in Real-time

\$360,000.....DoD-ARO

**Saviano, Mackenzie****Special Education and  
Communication Disorders/  
Nebraska Center for Research on  
Children, Youth, Families and Schools**

\*Project VIEW: Visual Impairments Education in Writing  
\$730,043 ..... ED through University of California-Irvine  
Koziol, Natalie ..... Nebraska Center for Research on  
Children, Youth, Families and Schools

\*Collaborative Intervention Design

\$498,622 ..... ED through University of Tennessee  
Daly, Ed ..... Educational Psychology  
Kemp, Suzanne ..... Special Education and Communication Disorders  
Lambert, Matthew ..... Special Education and Communication Disorders  
Loveall-Hague, Susan ..... Special Education and  
Communication Disorders  
Schachter, Rachel ..... Child, Youth and Family Studies

**Scalora, Mario****Psychology/Public Policy Center**

Incidence of Ideologically Influenced Threatening and  
Violent Activity in Rural Communities

\$772,955 ..... DOJ-NIJ  
Bulling, Denise ..... Public Policy Center  
Hoffman, Stacey ..... Public Policy Center

The Role of Leadership Identity in Developing  
Noncommissioned Officers for the Future Force (B4)

\$719,589 ..... DoD-ARI  
Bulling, Denise ..... Public Policy Center  
McElravy, L.J. .... Public Policy Center

**Schachter, Rachel****Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools**

Language Gains During Early Childhood:

Prediction of Later Outcomes and Multiple Methods  
Exploration of Relevant Classroom Factors

\$417,183 ..... ED-IES through Ohio State University  
Gabas, Ma Clarielle ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools

**Schachtman, Daniel****Agronomy and Horticulture/  
Center for Biotechnology/  
Center for Plant Science Innovation**

The Role of Plant Root Exudates in Shaping  
Soil Microbial Community Composition and the Influence  
That Has on Nutrient Cycling and Nitrogen Use

\$749,812 ..... USDA-NIFA

**Schmidt, Tyler****Animal Science**

Utilization of an Advanced Computer Vision Platform  
to Identify Changes in the Physiological and Behavioral Changes  
Associated with Illness and Aggressive/Damaging Behavior  
During the Nursery and Finisher Phase

\$301,793 ..... Foundation for Food and Agriculture Research through  
National Pork Board

Mote, Benny ..... Animal Science  
Pérez, Lance ..... Electrical and Computer Engineering

**Schnable, James****Agronomy and Horticulture/  
Center for Plant Science Innovation**

CPS: Medium: Field-scale, Single Plant Resolution Agricultural  
Management Using Coupled Molecular and Macro Sensing and  
Multi-scale Data Fusion and Modeling

\$264,581 ..... USDA-NIFA  
Shi, Yeyin ..... Biological Systems Engineering/  
Center for Plant Science Innovation

High Intensity Phenotyping Sites: A Multi-Scale, Multi-Modal Sensing  
and Sense Making Cyber-Ecosystem for Genomes to Fields  
\$389,320 ..... USDA-NIFA through Iowa State University

Crops In Silico: Increasing Crop Production by  
Connecting Models from the Microscale to the Macroscale  
\$387,960 ..... Foundation for Food and Agricultural Research through  
University of Illinois Urbana-Champaign

RoL: FELS: EAGER: Genetic Constraints on the Increase  
of Organismal Complexity Over Time  
\$299,801 ..... NSF

**Schubert, Eva****Electrical and Computer Engineering**

\*Broadband and Tunable Enhanced Chiral Light-Matter Interactions  
at the Visible with New Ultrathin Helical Metamaterials  
\$567,000 ..... NSF  
Argyropoulos, Christos ..... Electrical and Computer Engineering

NSF-DFG: Advances in Ion-Surface Interaction-Driven  
Manufacturing of One-Dimensional Metal Oxide Heterostructures  
\$343,615 ..... NSF

**Schubert, Mathias**                      **Electrical and Computer Engineering**

Terahertz Electron Paramagnetic Resonance Ellipsometry  
Defect Characterization in Ultrawideband Gap Monoclinic  
Gallium Oxide and Related Alloys  
\$499,987 ..... DoD-AFOSR  
Korlacki, Rafal ..... Electrical and Computer Engineering

The Influence of Doping and Annealing onto the Lattice Dynamics,  
Band Structure and Free Charge Carrier Properties in  
Monoclinic Gallium Aluminum Oxide Semiconductor Alloys  
\$485,052 ..... NSF  
Korlacki, Rafal ..... Electrical and Computer Engineering

**Secord, Ross**                              **Earth and Atmospheric Sciences/  
University of Nebraska State Museum**

Paleoenvironmental and Paleoecological Responses to  
Climate Change in the Early Eocene Climatic Optimum  
\$337,950 ..... NSF  
Diamond, Judy ..... University Libraries/  
University of Nebraska State Museum

**Shadwick, Bradley**                      **Physics and Astronomy**

High Fidelity Fluid-Kinetic Hybrid Modeling of Intense,  
Short Pulse Laser Plasma Interactions  
\$480,000 ..... NSF

**Sharif-Kashani, Hamid**                      **Electrical and Computer Engineering**

CYVET: A Cyber-Physical Security Assurance Framework  
Based on a Semi-Supervised Vetting Approach  
\$844,529 ..... DOE-NETL through UT-Battelle LLC-Oak Ridge  
Alahmad, Moe ..... Durham School of Architectural  
Engineering and Construction  
Hempel, Michael ..... Electrical and Computer Engineering  
Peng, Dongming ..... Electrical and Computer Engineering

**Shen, Zhigang**                              **Durham School of Architectural  
Engineering and Construction**

A Fast and Low-cost Method to Automate Detecting,  
Locating and Mapping Internal Gas Pipeline Corrosion  
Using Pig-mounted Thermal and Stereo Cameras  
\$299,980 ..... DOT-PHMSA

**Shi, Yeyin**                                      **Biological Systems Engineering**

CPS: Medium: CPS-Enabled Variable Rate Technology  
\$935,756 ..... USDA-NIFA  
Ge, Yufeng ..... Biological Systems Engineering  
Heeren, Derek ..... Biological Systems Engineering  
Puntel, Laila ..... Agronomy and Horticulture  
Rudnick, Daran ..... Biological Systems Engineering  
Zhang, Kuan ..... Electrical and Computer Engineering  
Zhou, Yuzhen ..... Statistics

FACT-AI: Cyberinformatic Tools for Exploring and  
Validating Sow Posture and Piglet Activity  
\$500,000 ..... USDA-NIFA  
Brown-Brandl, Tami ..... Biological Systems Engineering

An Intelligent Unmanned Aerial Application System for  
Site-Specific Weed Management  
\$453,775 ..... USDA-NIFA  
Jhala, Amit ..... Agronomy and Horticulture  
Knezevic, Stevan ..... Agronomy and Horticulture  
Luck, Joe ..... Biological Systems Engineering  
Riggan, Benjamin ..... Electrical and Computer Engineering  
Zhang, Kuan ..... Electrical and Computer Engineering

**Shield, Jeffrey**                              **Mechanical & Materials Engineering/  
Nebraska Center for Materials and Nanoscience**

\*Non-equilibrium Phase Discovery in Finite-sized Systems  
\$451,624 ..... NSF

Understanding the Thermal Physics and Metallurgy of  
Metal Big Area Additive Manufacturing  
\$670,000 ..... DOE  
Cole, Kevin ..... Mechanical & Materials Engineering

**Sim, Chungwook**                              **Civil and Environmental Engineering**

Spokes: MEDIUM: MIDWEST: Smart Big Data Pipeline for  
Aging Rural Bridge Transportation Infrastructure (SMARTI)  
\$476,933 ..... NSF through University of Nebraska at Omaha  
Detweiler, Carrick ..... Computing  
Faller, Ronald ..... Midwest Roadside Safety Facility  
Linzell, Daniel ..... Civil and Environmental Engineering  
Sharif-Kashani, Hamid ..... Electrical and Computer Engineering  
Song, Chung ..... Civil and Environmental Engineering  
Wittich, Christine ..... Civil and Environmental Engineering  
Wood, Richard ..... Civil and Environmental Engineering  
Zhu, Jinying ..... Civil and Environmental Engineering



**Sinitskii, Alexander** **Chemistry**

Topological Spin Qubits Based on Graphene Nanoribbons  
\$627,324 ..... DoD-ONR through University of Pittsburgh

**Smith, Wendy** **Mathematics/Center for Science,  
Mathematics and Computer Education**

Student Engagement in Mathematics Through  
an Institutional Network for Active Learning  
\$398,904 ..... NSF  
Donsig, Allan ..... Mathematics  
Wakefield, Nathan ..... Mathematics

**Snow, Daniel** **Nebraska Water Center**

Vadose Zone Nitrate Accumulation Upper Big Blue  
Natural Resources District, Relation to Fertilizer Management  
and Groundwater Nitrate Concentrations  
\$297,104 ..... Upper Big Blue NRD  
Malakar, Arindam ..... Nebraska Water Center

**Soh, Leen-Kiat** **Computing**

Computational Creativity to Improve Computer Science Education for  
CS and non-CS Undergraduates  
\$873,250 ..... NSF  
Ingraham, Elizabeth ..... Art, Art History and Design  
Moore, Brian ..... Music  
Ramsay, Stephen ..... English

**Song, Hyun-Seob** **Biological Systems Engineering/  
Food Science and Technology**

\*Phenotypic Response of the Soil Microbiome to  
Environmental Perturbations  
\$480,000 ..... DOE through Battelle-Pacific NW National Laboratory

\*Influences of Hydrologic Exchange Flows on River Corridor and  
Watershed Biogeochemical Function  
\$399,893 ..... DOE through Battelle-Pacific NW National Laboratory

MIM: Microbial Division of Labor in  
Polysaccharide-degrading Communities  
\$648,819 ..... NSF through Purdue University

**Spurgeon, Jonathan** **Natural Resources**

\*Sampling Efficiency Assessment for Silver Carp and  
Bighead Carp in Nebraska Mid Order Streams and Rivers  
\$261,786 ..... DOI-FWS through  
Nebraska Game and Parks Commission  
Pegg, Mark ..... Natural Resources

Assessment of Silver Carp and Bighead Carp in the  
Platte River, Nebraska: Emphasis on Population Distribution,  
Population Demographics and Reproduction  
\$301,498 ..... DOI-FWS through  
Nebraska Game and Parks Commission  
Pegg, Mark ..... Natural Resources

**Steelman, Joshua** **Civil and Environmental Engineering/  
Midwest Roadside Safety Facility**

MASH Railing Load Requirements for Bridge Deck Overhang  
\$440,000 ..... DOT-FHWA through  
National Academy of Sciences-NCHRP-TRB  
Faller, Ronald ..... Midwest Roadside Safety Facility

MASH Testing of Single Sign Supports (Florida)  
\$750,000 ..... DOT-FL DOT through  
Nebraska Department of Transportation  
Bielenberg, Robert ..... Midwest Roadside Safety Facility  
Faller, Ronald ..... Midwest Roadside Safety Facility  
Fang, Chen ..... Midwest Roadside Safety Facility  
Lechtenberg, Karla ..... Midwest Roadside Safety Facility  
Pajouh, Mojdeh A. .... Midwest Roadside Safety Facility

**Stephenson, Mitchell** **Panhandle Research and Extension Center**

Improving Livestock Production through the Development of Precision  
Rangeland Management Technologies  
\$900,000 ..... USDA-ARS  
Shi, Yeyin ..... Biological Systems Engineering  
Xiong, Yijie ..... Animal Science

Impact of Milk Production on Cow-Calf Productivity,  
Grazing Behavior, and Profitability  
\$299,999 ..... USDA-NIFA  
Fernando, Samodha ..... Animal Science

Grazing Land Monitoring Cooperative for Adaptive Management  
\$250,000 ..... USDA-NRCS  
Volesky, Jerry ..... West Central Research and Extension Center

**Stevens, Jeffrey** **Psychology/  
Center for Brain, Biology and Behavior**

Similarity as a Process Model of Intertemporal Choice  
\$655,576 ..... NSF  
Soh, Leen-Kiat ..... Computing/  
Center for Brain, Biology and Behavior

**Stevens-Liska, Maegan** **Office of Global Strategies**  
 U.S.-Rwanda Training Program and Mentorship Exchange on  
 University Advancement and International Partnerships  
 \$250,000. . . . . U.S. Department of State  
 Sharpe, Blayne . . . . . Office of Global Strategies  
 Van Hoosen, Courtney. . . . . Office of Global Strategies

**Stolle, Cody** **Midwest Roadside Safety Facility**  
 \*UARC III TOPR 2209 Midwest Guardrail System  
 \$804,166 . . . . . DoD-Offutt Air Force Base-STRATCOM through  
 National Strategic Research Institute  
 Faller, Ronald . . . . . Midwest Roadside Safety Facility  
 Steelman, Joshua . . . . . Civil and Environmental Engineering/  
 Midwest Roadside Safety Facility

\*Implementation of MASH Surrogate Test Vehicles for Sign Supports,  
 Breakaway Poles, and Work Zone Traffic Control Devices  
 \$750,000 . . . . . DOT through National Academy of Sciences-NCHRP  
 Asadollahipajouh, Mojdeh . . . . . Civil and Environmental Engineering  
 Faller, Ronald . . . . . Midwest Roadside Safety Facility  
 Steelman, Joshua . . . . . Civil and Environmental Engineering/  
 Midwest Roadside Safety Facility

**Storz, Jay** **Biological Sciences**  
 Physiology of Hypoxia Adaptation in the  
 World's Highest-Dwelling Mammal  
 \$827,312 . . . . . NSF

**Stowell, Rick** **Biological Systems Engineering**  
 Water and Nutrient Recycling:  
 A Decision Tool and Synergistic Innovative Technology  
 \$496,646. . . . . USDA-NIFA through University of Arkansas  
 Heemstra, Jill . . . . . Northeast Research and Extension District  
 Schmidt, Amy . . . . . Biological Systems Engineering

**Streubel, Robert** **Physics and Astronomy/  
 Nebraska Center for Materials and Nanoscience**  
 Magnetic Order in Disordered Dipolar Nanostructures  
 \$517,069 . . . . . NSF

**Sukumaran, Sunil** **Nutrition and Health Sciences/  
 Nebraska Center for the  
 Prevention of Obesity Diseases**  
 \*Mucosal Immune Surveillance at the Taste Papillae  
 \$311,000 . . . . . NIH-NIDCR

**Sutter, Eli** **Mechanical & Materials Engineering**  
 \*Ultrafast Shift-Current Photodetection Using Polar Group IV  
 Chalcogenide van der Waals Semiconductors and Heterostructures  
 \$512,976 . . . . . DoD-ARO  
 Sutter, Peter . . . . . Electrical and Computer Engineering

**Sutter, Peter** **Electrical and Computer Engineering**  
 \*Tunable Few-Layer van der Waals Crystals and Heterostructures as  
 Emerging Energy and Quantum Materials  
 \$747,387 . . . . . DOE-EPSCoR  
 Sutter, Eli . . . . . Mechanical & Materials Engineering

Nanowires from Layered van der Waals Crystals: Opportunities for  
 Tuning Structure and Function in 1D-2D Hybrid Nanostructures  
 \$520,000. . . . . NSF  
 Sutter, Eli . . . . . Mechanical & Materials Engineering

Riemann Surfaces in Layered Van der Waals Nanowires:  
 Precision Twist Moires, Nanoscale Solenoids,  
 and Screw Dislocation Spin Orbit Coupling  
 \$496,037 . . . . . DoD-ONR  
 Sutter, Eli . . . . . Mechanical & Materials Engineering

**Suyker, Andy** **Natural Resources**  
 Long-Term Maize-Based Agro-Ecosystem Core Sites as  
 Part of the AmeriFlux Management Project Network  
 \$565,000. . . . . DOE through  
 University of California-Berkeley National Laboratory  
 Blanco, Humberto . . . . . Agronomy and Horticulture  
 Franz, Trenton . . . . . Natural Resources  
 Gamon, John. . . . . Natural Resources  
 Liska, Adam. . . . . Agronomy and Horticulture/  
 Biological Systems Engineering  
 Yang, Haishun. . . . . Agronomy and Horticulture

**Svoboda, Mark** **Natural Resources**  
 Building a Global Composite Drought Indicator (GCDI)  
 Hot Spot Early Warning and Information System  
 \$998,218 . . . . . DoD-Air Force  
 Bathke, Deborah. . . . . Natural Resources  
 Fuchs, Brian. . . . . Natural Resources  
 Haigh, Tonya. . . . . Natural Resources  
 Knutson, Cody . . . . . Natural Resources  
 Roy, Tirthankar . . . . . Civil and Environmental Engineering  
 Smith, Kelly . . . . . Natural Resources  
 Tadesse, Tsegaye . . . . . Natural Resources  
 Wardlow, Brian. . . . . Natural Resources

**Torquati, Julia** **Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools**

\*Responsive Equitable System for Preparing  
Early Childhood Teachers (RESPECT) across Nebraska  
\$503,774 ..... Early Educator Investment Collaborative  
Buchheister, Kelley ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Corr Kiewra, Christine ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Engen-Wedin, Nancy ..... Teaching, Learning and Teacher Education/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Hong, Soo-You ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Knoche, Lisa ..... Nebraska Center for Research on  
Children, Youth, Families and Schools  
Morales, Amanda ..... Teaching, Learning and Teacher Education/  
Nebraska Center for Research on  
Children, Youth, Families and Schools  
Schachter, Rachel ..... Child, Youth and Family Studies/  
Nebraska Center for Research on  
Children, Youth, Families and Schools

**Tsymbol, Evgeny** **Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience**

\*Quantum Phenomena in Two-Dimensional Ferroelectrics  
\$486,189 ..... DOE  
  
Partnership for Research and Education in Multiferroic  
Polymer Nanocomposites between Tuskegee University  
and University of Nebraska-Lincoln  
\$627,217 ..... NSF through Tuskegee University  
Dowben, Peter ..... Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience  
Ducharme, Stephen ..... Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience  
Shield, Jeffrey ..... Mechanical & Materials Engineering/  
Nebraska Center for Materials and Nanoscience

**Turner, Joseph** **Mechanical & Materials Engineering**

Integrated Analysis of the Cell Biological, Biomechanical, and  
Physiological Dynamics of Stomatal Guard Cells in Plants  
\$307,395 ..... NSF  
  
STTR: Ultrasonic Method to Quantify Ablative Material Liners  
\$450,000 ..... DoD-NAVSEA through Intelligent Automation, Inc.  
  
PCC-3: Non-Destructive Testing (NDT) Microstructural  
Response Characterization and Impact  
\$564,399 ..... DoD-Air Force Research Lab through  
Rolls Royce Corporation  
  
An Integrated Experimental and Computational Approach  
to Discover Biomechanical Mechanisms  
of Leaf Epidermal Morphogenesis  
\$385,927 ..... NSF

**Twidwell, Dirac Jr.** **Agronomy and Horticulture**

Enhancing Livestock Production from Rangelands in the Great Plains  
\$745,202 ..... USDA-NIFA through  
Texas A & M University-Texas AgriLife  
Keshwani, Jenny ..... Biological Systems Engineering

**Uiterwaal, Kees** **Physics and Astronomy**

REU Site: Lasers and Optics  
\$310,555 ..... NSF

**Umstadter, Donald** **Physics and Astronomy**

Novel Approach to Imaging through  
Dense Shielding with Penetrating Radiation  
\$621,875 ..... DoD-DTRA

**Van Den Broeke, Matthew** **Earth and Atmospheric Sciences**

\*Developing a Structural, Morphological, and  
Microphysical Understanding of Left-moving Supercells  
\$473,485 ..... NSF  
  
Aeroecology as a Test-Bed for Interdisciplinary STEM Training  
\$332,708 ..... NSF through University of Oklahoma

**VanderPlas, Susan** **Statistics**

Center for Statistics and Forensic Evidence  
\$456,930 . . . . .DOC-NIST through Iowa State University  
  
Automatic Acquisition and Identification of  
Footwear Class Characteristics  
\$380,405 . . . . .DOJ-NIJ

**Variyam, Vinod** **Computing**

AF: Small: Weak Derandomizations in Time and Space Complexity  
\$279,995 . . . . .NSF

**Velez Arango, Ana Maria** **Entomology**

Exosomes as Intercellular Delivery Vehicles in Insects  
\$340,270 . . . . .USDA-NIFA through Kansas State University

**Vrtiska, Mark** **Natural Resources**

\*Southeast Kansas Mallard Wintering Ecology Study  
\$362,619 . . . . .DOI-FWS through  
Kansas Department of Wildlife and Parks

**Vu, Hiep** **Animal Science/Nebraska Center for Virology**

\*Molecular Determinants of Porcine Reproductive and  
Respiratory Syndrome Virus Cell Tropism  
\$627,000 . . . . .USDA-NIFA  
Sillman, Sarah . . . . .Veterinary Medicine and Biomedical Sciences/  
Nebraska Center for Virology

Partnership: Systemic Screening of ASFV Proteome for  
Identification of Immunogenic Antigens  
\$770,000 . . . . .USDA-NIFA  
McVey, Scott . . . . .Veterinary Medicine and Biomedical Sciences/  
Nebraska Center for Virology

Development of a Broadly Protective Vaccine  
Against Swine Influenza Virus  
\$500,000 . . . . .USDA-NIFA

**Vuran, Mehmet** **Computing**

\*Deep Complex-valued Convolutional Neural Networks (DCCNN) for  
Joint Spectrum Sensing and Channel Estimation  
\$429,998 . . . . .DoD-Naval Surface Warfare Center/NAVSEA

SWIFT: LARGE: DYNAMmWIC: Dynamic mmWave Spectrum  
Sharing Techniques for Public Safety Communications  
\$500,000 . . . . .NSF  
Batur, Demet . . . . .Supply Chain Management and Analytics  
Ryan, Jennifer . . . . .Supply Chain Management and Analytics

NeTS: Small: Connected Barriers: Vehicle-to-barrier Communication  
and Networking for Single-vehicle Crash Safety Facility  
\$319,513 . . . . .NSF  
Faller, Ronald . . . . .Midwest Roadside Safety Facility  
Stolle, Cody . . . . .Midwest Roadside Safety Facility

SpecEES: CoSeC-RAN: Cognitive Secure Cloud RAN  
for Efficient Spectrum Sharing  
\$435,399 . . . . .NSF  
Batur, Demet . . . . .Supply Chain Management and Analytics  
Ryan, Jennifer . . . . .Supply Chain Management and Analytics

**Wachs, Rebecca** **Biological Systems Engineering**

\*Engineering Models of Neuroimmune Sensitization to  
Elucidate Mechanisms of Pain Resolution  
\$339,062 . . . . .NSF

**Wagner, Peter** **Earth and Atmospheric Sciences/  
Biological Sciences**

Associations Between Climate Shifts and Ammonoid Turnover Across  
Second-Tier Extinctions During the Early Late Cretaceous Greenhouse  
\$296,242 . . . . .NSF

**Walia, Harkamal** **Agronomy and Horticulture**

UNL-VBC Collaboration: Using Plant Phenomics  
to Capture Dynamic Growth Responses in Maize  
\$599,009 . . . . .Valent USA

**Walker, Mark** **Mathematics**

Multiplicities of Modules and Complexes and the  
NC Hodge Conjecture  
\$282,638 . . . . .NSF

Free Resolutions, K-Theory and dg-Categories  
\$257,571 . . . . .NSF

**Walters, Cory** **Agricultural Economics**

Northern Plains Regional Farm Business  
Management and Benchmarking Partnership  
\$492,580 . . . . .USDA-NIFA  
Banerjee, Simanti . . . . .Agricultural Economics  
Yiannaka, Emie . . . . .Agricultural Economics

**Wang, Jian** **Mechanical & Materials Engineering**  
A Metamodeling Framework for Multiscale Mechanical Modeling of  
Nano Architectural Crystalline-amorphous Composites  
\$333,267 .....NSF

Plasticity of High-strength Multiphase Metallic Composites  
\$645,019 .....DOE through University of Michigan

**Wang, Yingying** **Special Education and Communication Disorders/  
Center for Brain, Biology and Behavior/  
Nebraska Center for Research on  
Children, Youth, Families and Schools**

Neural Predictors of Speech Perception Outcomes  
in Adults with Cochlear Implants  
\$460,356 .....NIH-NIDCD  
Hughes, Michelle .....Special Education and  
Communication Disorders/  
Center for Brain, Biology and Behavior/  
Nebraska Center for Research on  
Children, Youth, Families and Schools

**Weaver, Eric** **Biological Sciences/Nebraska Center for Virology**  
One Health Universal Swine Influenza Vaccines  
\$452,442 .....USDA-NIFA

Comparative Virology Research Training Program  
\$843,579 .....NIH-NIAID  
Van Etten, James .....Plant Pathology

**Weitzel, Derek** **Computing**  
CC\* Team: Great Plains Regional CyberTeam  
\$282,909 .....NSF through University of Missouri-Columbia

**White, Troy** **Agricultural Leadership,  
Education and Communication**  
\*Agricultural Automation in the Heartland  
\$500,000 .....USDA-NIFA  
Conner, Nathan .....Agricultural Leadership,  
Education and Communication

**Wiebe, Matthew** **Veterinary Medicine and Biomedical Sciences/  
Nebraska Center for Virology**  
Engagement of Cellular Mitotic and  
Antiviral Signaling by Poxviral Kinases  
\$425,778 .....NIH-NIAID

**Wilson, Mark** **Biochemistry**  
Engineering Enzymes for New Stereoselective and Stereodynamic  
Processes: An Integrated Chemistry-Bioengineering- X-Ray  
Crystallography Molecular Dynamics Approach  
\$603,881 .....NSF  
Berkowitz, David .....Chemistry  
Niu, Wei .....Chemical and Biomolecular Engineering

**Wilson, Richard** **Plant Pathology**  
On the Nature and Regulation of the  
Plant-Fungal Biotrophic Interface  
\$700,000 .....NSF

**Witte, Amanda** **Nebraska Center for Research on  
Children, Youth, Families and Schools**  
Nebraska Multi-Tiered System of  
Support Implementation Support Team  
\$858,808 .....ED through Nebraska Department of Education  
Yoon, HyeonJin .....Nebraska Center for Research on  
Children, Youth, Families and Schools

**Wolf, Marilyn** **Computing**  
SHF: Small: System-Level Design  
of Attack-Resistant Safety-Critical Systems  
\$343,061 .....NSF

**Wortman, Samuel** **Agronomy and Horticulture**  
A Bio-based Mulch Innovation for Organic Spinach and Carrots  
\$475,000 .....USDA-NIFA

**Wragge, Annette** **Special Education and  
Communication Disorders**  
Nebraska Autism Spectrum Disorders Network,  
State Coordinator Project  
\$357,995 .....ED through Nebraska Department of Education

**Wu-Smart, Judy** **Entomology**  
Great Plains Master Beekeeping Farmer  
Open Apiaries and Educational Training Kits  
\$453,486 .....USDA-NIFA

Great Plains Regional Training for Beginning Beekeeping Farmers  
\$393,332 .....USDA-NIFA

**Xiang, Shi-Hua** **Veterinary Medicine and Biomedical Sciences/  
Nebraska Center for Virology**

Structure-Based Design of Peptide Entry Inhibitors  
Against Ebola Virus Infection  
\$468,183 ..... NIH-NIAID

**Xu, Lisong** **Computing**

FMitF: Track 1: Flow Modeling Meets Software Verification: Redesign  
Internet Congestion Control for Performance and Verifiability  
\$766,000 ..... NSF  
Bagheri, Hamid ..... Computing

CNS Core: Small: Efficient Interoperability Testing of  
Heterogeneous Network Protocol Implementations  
\$515,998 ..... NSF  
Srisa-An, Witawas ..... Computing

**Xu, Xiaoshan** **Physics and Astronomy/  
Nebraska Center for Materials and Nanoscience**

Non-Volatile Active Control of Spin Transport  
Using Interfaces with Molecular Ferroelectrics  
\$750,000 ..... DOE

**Yang, Jinliang** **Agronomy and Horticulture**

Leveraging the Naturally Occurring Maize-Microbe  
Symbiotic Partnership to Improve Maize NUE  
\$849,000 ..... USDA-NIFA  
Schachtman, Daniel ..... Agronomy and Horticulture

Rescuing the Fixed Deleterious Alleles for Genome-Enabled  
Micronutrients Improvement in Maize  
\$500,000 ..... USDA-NIFA

**Yang, Yiqi** **Textiles, Merchandising and Fashion Design/  
Biological Systems Engineering**

Protein Fibers from Chicken Feathers for Textile Applications  
Via Engineered Pilot-Scale Production  
\$464,434 ..... USDA-NIFA

**Yates, Dustin** **Animal Science**

Abatement of Inflammation as a Means  
to Combat Heat Stress in Finishing Livestock  
\$500,000 ..... USDA-NIFA  
Petersen, Jessica ..... Animal Science  
Schmidt, Ty ..... Animal Science

Recovering Performance and Quality  
in IUGR-born Low-birthweight Livestock  
\$500,000 ..... USDA-NIFA  
Petersen, Jessica ..... Animal Science

**Yin, Yanbin** **Food Science and Technology/  
Nebraska Food for Health Center**

Bioinformatics Discovery of Anti-CRISPR Operons in  
Human Gut Microbiome  
\$400,833 ..... NIH-NIAID  
Zhou, Yuzhen ..... Statistics

Developing Genomics Resources for Tropical Perennial Crops  
Economically Important to the United States  
\$401,112 ..... USDA-ARS

**Yoder, Aaron** **Biological Systems Engineering**

Nebraska AgrAbility  
\$723,840 ..... USDA-NIFA  
Frecks, Nancy ..... West Central Research and Extension Center  
Riley, Mark ..... Biological Systems Engineering

**Yu, Bin** **Biological Sciences/  
Center for Plant Science Innovation**

Understand the Functional Mechanism of the DSP1 Complex  
in the 3' Maturation of Plant Small Nuclear RNAs  
\$682,608 ..... NSF  
Zhang, Chi ..... Biological Sciences/  
Center for Plant Science Innovation

**Yu, Hongfeng** **Computing**

\*Implicit Continuous Representations for  
Visualization of Complex Data  
\$450,000 ..... DOE

**Yu, Jiujiu** **Nutrition and Health Sciences/  
Nebraska Center for the  
Prevention of Obesity Diseases**

Dietary Exosome-Like Nanoparticles and  
Their Impact on the Gut Microbiome in Obesity  
\$500,000 ..... USDA-NIFA  
Auchtung, Jennifer ..... Food Science and Technology/  
Nebraska Center for the  
Prevention of Obesity Diseases

**Yuill, David** **Durham School of Architectural Engineering and Construction**

A Field Study to Characterize Fault Prevalence in Residential Comfort Systems

\$824,792 ..... DOE

**Zempleni, Janos** **Nutrition and Health Sciences/Nebraska Center for the Prevention of Obesity Diseases**

\*The Milk Exosome - Bacterial Vesicle - Host Health Triad

\$638,000 ..... USDA-NIFA

Biopharming: Engineering Nanoparticles in Milk for Use in Drug Delivery

\$630,000 ..... USDA-NIFA

Guo, Jiantao ..... Chemistry/Nebraska Center for the Prevention of Obesity Diseases

Kievit, Forrest ..... Biological Systems Engineering/Nebraska Center for the Prevention of Obesity Diseases

Milk Exosome-Driven Evolution of Antibiotic-Resistant Gut Pathogens

\$500,000 ..... USDA-NIFA

Auchtung, Jennifer ..... Food Science and Technology/Nebraska Center for the Prevention of Obesity Diseases

Development of an Exosome and Cargo Tracking Mouse

\$408,375 ..... DHHS-NIH

**Zeng, Lirong** **Plant Pathology**

Role of Organelle-localized Lys63-linked Ubiquitination in Plant Immunity

\$685,000 ..... NSF

**Zhu, Jinying** **Civil and Environmental Engineering**

Dual External Leak Sensing and Monitoring for Dry Storage Canister

\$800,000 ..... DOE

ALSaleem, Fadi ..... Durham School of Architectural Engineering and Construction

Nondestructive Diagnosis and Probabilistic Prognosis of Aging Plastic Pipe

\$250,000 ..... DOT-PHMSA

Jin, Congrui ..... Civil and Environmental Engineering

**Zuhlke, Craig** **Electrical and Computer Engineering**

\*Next Generation of High-power Ultrashort Pulse Laser for Transformative Surface Functionalization

\$667,240 ..... DoD-ONR-DURIP

Argyropoulos, Christos ..... Electrical and Computer Engineering

Gogos, George ..... Mechanical & Materials Engineering

Ianno, Natale ..... Electrical and Computer Engineering

Shield, Jeffrey ..... Mechanical & Materials Engineering

\*Controlling the Wetting Properties of Surfaces to Liquid Propellants Using Femtosecond Laser Surface Processing with Applications to Fuel Tanks

\$553,821 ..... NASA-EPSCoR through

University of Nebraska at Omaha

Gogos, George ..... Mechanical & Materials Engineering

Nejati, Siamak ..... Chemical and Biomolecular Engineering

Shield, Jeffrey ..... Mechanical & Materials Engineering

**Zupan, Alexander** **Mathematics**

Interactions of 3- and 4-Dimensional Topology

\$299,346 ..... NSF

## Early Career Awards

Active awards, July 1, 2022–June 30, 2023

\* Indicates new in 2022–2023

### NSF CAREER Grants

National Science Foundation CAREER grants are awarded only to untenured junior faculty. These grants recognize research and education “of the highest quality and in the broadest sense.” CAREER grants are unique in requiring a four- to five-year plan for the scientist’s development as both a researcher and an educator.



#### **Aich, Nirupam**

**Civil and Environmental Engineering**

\*CAREER: 3D Printed Carbon-Metal Nanohybrid Aerogels for Highly Efficient Adsorptive/Catalytic Removal of PFAS

\$491,627 .....NSF



#### **Alexandrov, Vitali**

**Chemical and Biomolecular Engineering**

CAREER: Advancing Mechanistic Understanding of Nanocrystal Dissolution in Aqueous Environments

\$520,244 .....NSF



#### **Bao, Wei**

**Electrical and Computer Engineering**

CAREER: Towards Room-temperature Quantum Simulators Enabled by Halide Perovskites

\$756,713 .....NSF



#### **Bavarian, Mona**

**Chemical and Biomolecular Engineering**

\*CAREER: Continuous Flow Chemistry of Microelectronics Polymers via Combined Physics-based and Machine Learning Models

\$576,802 .....NSF



#### **Bradley, Justin**

**Computing**

CAREER: Foundations for a Resource-Aware, Cyber-Physical Vehicle Autonomy

\$499,968 .....NSF



#### **Dishari, Shudipto**

**Chemical and Biomolecular Engineering**

CAREER: Confined Ionomeric Systems and Imaging of Ionic Distribution

\$609,949 .....NSF



#### **Duncan, Brittany**

**Computing**

CAREER: Drones in Public: Foundational Interaction Research

\$599,647 .....NSF



#### **Eichhorn, Catherine**

**Chemistry**

CAREER: Molecular Mechanisms of Ribonucleoprotein Assembly

\$1,048,975 .....NSF



#### **Elkins, Lynne**

**Earth and Atmospheric Sciences**

CAREER: Modeling Two-Phase Flow, Multi-Lithologic Melting, and Chemical Disequilibrium with Uranium-Series Isotopes

\$696,573 .....NSF



#### **Filina, Irina**

**Earth and Atmospheric Sciences**

\*CAREER: An Integrated Geophysical Approach to Research and Education to Solve the Tectonic Puzzle of the Northern Atlantic

\$746,284 .....NSF



#### **Ghashami, Mohammad**

**Mechanical & Materials Engineering**

\*CAREER: Understanding Nanoscale Radiative Transport in Multi-Body Systems

\$629,702 .....NSF



#### **Glowacka, Katarzyna**

**Biochemistry/Center for Plant Science Innovation**

CAREER: Understanding Non-photochemical Quenching Under Chilling in the Warm Season C4 Grasses

\$1,375,334 .....NSF



**Grifo, Eloisa****Mathematics**

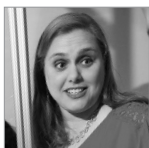
\*CAREER: Problems in Commutative and Homological Algebra  
 \$425,000 .....NSF

**Guo, Hongzhi****Computing**

\*CAREER: Long-Range Near Field Communication for Ultra-Dense Internet of Things  
 \$499,337 .....NSF

**Holland, Kathryn****Psychology**

CAREER: The Efficacy of Sexual Assault Mandatory Reporting Policies  
 \$502,113 ..... NSF

**Iverson, Nicole****Biological Systems Engineering**

CAREER: Extracellular Hydrogen Peroxide and Nitric Oxide Detection and Quantification Via Biocompatible Carbon Nanotubes  
 \$550,000 .....NSF

**Jeffries, Jack****Mathematics**

CAREER: Differential Operators and  $p$ -Derivations in Commutative Algebra  
 \$400,000 .....NSF

**Libault, Marc****Agronomy and Horticulture/  
Center for Plant Science Innovation**

CAREER: Exploring the Transcriptional Regulatory Networks Controlling the Early Stages of Legume Nodulation  
 \$573,573 .....NSF

**Louis, Joe****Entomology**

CAREER: Deciphering Sorghum Resistance Mechanisms to Phloem-Feeding Aphids  
 \$1,515,525 .....NSF

**Males, Lorraine****Teaching, Learning and Teacher Education**

CAREER: Examining Prospective Secondary Mathematics Teachers Learning to Use Curriculum Materials to Plan and Enact Instruction  
 \$628,995 .....NSF

**Moore, Keegan****Mechanical & Materials Engineering**

\*CAREER: Foundations for Understanding the Long-term Evolution and Dynamics of Nonlinearities  
 \$727,410 .....NSF

**Nejati, Siamak****Chemical and Biomolecular Engineering**

CAREER: Molecular Layer Deposition of Porous Organic Frameworks  
 \$593,240 .....NSF

**Neta, Maital****Psychology**

CAREER: Functional Brain Networks Mediating Positivity Bias in Healthy Aging  
 \$766,508 .....NSF

**Obata, Toshihiro****Biochemistry/Center for Plant Science Innovation**

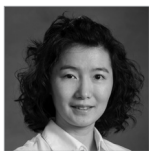
CAREER: Establishing the Roles of Multi-Enzyme Complexes in Metabolic Network Regulation  
 \$746,955 .....NSF

**Park, Jae Sung****Mechanical & Materials Engineering**

CAREER: Unraveling Predictive Dynamics and Multiscale Linkage in Turbulence for Flow Control  
 \$506,780 .....NSF

**Pedrigi, Ryan****Mechanical & Materials Engineering**

CAREER: Characterizing the Mechanobiological Response of Endothelial Cells to Ultrasound  
 \$543,020 .....NSF



**Qu, Liyan**

Electrical and Computer Engineering  
CAREER: Adjustable-Voltage-Ratio  
Magnetolectric Transformer: A New Voltage  
Conversion and Control Device for Smart Grids  
\$500,000 .....NSF



**Rojas, Clemencia**

Plant Pathology/Center for Plant Science Innovation  
\*CAREER: Dissecting the Cellular Pathways and  
Signaling Networks Orchestrating Plant Defense  
Responses and Their Interplay with Bacterial  
Virulence Factors  
\$483,089 .....NSF



**Roston, Rebecca**

Biochemistry/Center for Plant Science Innovation  
CAREER: How SFR2 Allows Chloroplast Envelope  
Membranes to Survive Freezing, from Initial Signal  
to Molecular Mechanism  
\$847,731 .....NSF



**Saha, Rajib**

Chemical and Biomolecular Engineering  
CAREER: Dissecting a Metabolically Versatile  
Non-Model Bacteriums Lignin-Derived Compound  
Catabolism  
\$747,855 .....NSF



**Sharif, Bonita**

Computing  
CAREER: Empowering Software Engineering  
with Eye Tracking  
\$257,331 .....NSF



**Shizuka, Dai**

Biological Sciences  
CAREER: Structure and Resilience of  
Social Networks under Population Turnover  
\$781,111 .....NSF



**Wachs, Rebecca**

Biological Systems Engineering  
CAREER: Alternative Non-Opioid Therapies for  
Low Back Pain  
\$510,389 .....NSF



**Yang, Ruiguo**

Mechanical & Materials Engineering  
CAREER: Characterization of the Rate-  
Dependent Mechanical Behavior of the Cell-Cell  
Adhesion Interface  
\$536,907 .....NSF



**Yesselman, Joseph**

Chemistry  
CAREER: Determining the Fundamental Rules of  
RNA Tertiary Contact Formation  
\$1,235,574 .....NSF



**Yin, Yanbin**

Nebraska Food for Health Center  
CAREER: Evolutionary Genomics of Enzymes for  
Complex Carbohydrate Metabolism  
\$656,429 .....NSF



**Yu, Hongfeng**

Computing  
CAREER: Scalable Techniques for Visualizing  
Very Large Graphs  
\$476,951 .....NSF



**Zhang, Limei**

Biochemistry/Nebraska Center for Redox Biology/  
Nebraska Center for Integrated Biomolecular  
Communication  
CAREER: Structural and Mechanistic Studies on an  
Iron-Sulfur Cluster-based Nitric Oxide Sensor  
\$600,000 .....NSF

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## Department of Energy Early Career Research Program

DOE's Early Career Research Program supports the development of individual research programs of outstanding scientists early in their careers and stimulates research careers in the disciplines supported by the DOE Office of Science.



### **Dishari, Shudipto**

**Chemical and Biomolecular Engineering**

EARLY CAREER: Porin Inspired Ionomers with Sub-NM Gated Ion Channels for High Ion Conductivity and Selectivity

\$750,000..... DOE

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## Office of Naval Research Young Investigator Program

The Office of Naval Research Young Investigator Program supports academic scientists and engineers who are in their first or second full-time tenure-track academic appointment and who show exceptional promise for doing creative research.



### **Argyropoulos, Christos**

**Electrical and Computer Engineering**

YIP: Theoretically Modeling the High Thermal Emission/Formation Dynamics of Femtosecond Laser Functionalized Surfaces to Optimize Surfaces  
\$749,910..... DoD-ONR



### **Moore, Keegan**

**Mechanical & Materials Engineering**

YIP: Digital Engineering the Test and Modeling Process: Autonomous Methods for Reconciling Test and Model Results  
\$404,621.....DoD-AFOSR

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# Arts and Humanities Awards \$250,000 or More

Active awards, July 1, 2022–June 30, 2023

\* Indicates new in 2022–2023

## Cohen, Matt

## English/Center for Digital Research in the Humanities

Walt Whitman Archive Infrastructure Revitalization

\$349,856 . . . . . NEH  
6/1/20 – 10/31/23

Barney, Brett . . . . . University Libraries/Center for Digital  
Research in the Humanities

Dalziel, Karin . . . . . Center for Digital Research in the Humanities

Price, Kenneth . . . . . English/Center for Digital  
Research in the Humanities



With a nearly \$350,000 grant from the National Endowment for the Humanities, Matt Cohen, professor of English, and Kenneth Price, Hillegass University Professor of American literature, are rebuilding the Walt Whitman Archive website, implementing a modern framework and repackaging site content for easier reuse. The long-term goal is

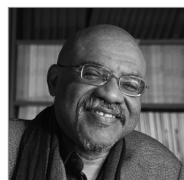
to enhance the archive’s accessibility and sustainability by making it easier for users to search and organize materials on the site, which, at nearly 25 years old, is the leading resource for Walt Whitman scholars. The team is improving the website’s digital architecture by changing the programming framework; developing a machine-readable interface for the website’s code, images and metadata; revising files to improve the metadata; and strengthening existing metadata through a new search engine. The archive is published by the Center for Digital Research in the Humanities.

## Dawes, Kwame

## English

The African Poetry Book Distribution Project

\$343,750 . . . . . Poetry Foundation  
5/15/22 – 5/31/25



Under the leadership of Kwame Dawes, George W. Holmes University Professor of English and Glenna Luschei Editor of *Prairie Schooner*, the African Poetry Book Fund is using a nearly \$350,000 grant from the Poetry Foundation to study poetry book distribution in Africa. The project team’s goal is to better understand the complexities of poetry and

poetry publishing on the African continent. The researchers are examining bookseller networks, international trade, literary venues, programming and more to develop a more comprehensive picture of Africa’s book distribution landscape. The project advances the African Poetry Book Fund’s larger goal of making its titles available to a wider audience in Africa. The fund, which Dawes established in 2012, promotes and advances the development and publication of the poetic arts.

African Poetry Digital Portal

\$750,000 . . . . . Andrew W. Mellon Foundation  
6/23/21 – 6/30/24

Dawes, Lorna . . . . . University Libraries

Professor Dawes and Lorna Dawes, associate professor of University Libraries, are leading an international team in expanding the African Poetry Digital Portal. This online tool documents the work of African poets and provides digital access to related creative and intellectual artifacts, materials and research. The team is using a \$750,000 grant from the Andrew W. Mellon Foundation to launch the portal into its next phase to expand research and scholarship related to African poetry. They also are collaborating with other institutions to create a digital collections hub that provides access to materials held by institutions worldwide. The initiative is aimed at bringing to light the rich and sophisticated poetic practices and traditions that have long existed in African societies but are not always well understood.

**Jacobs, Margaret**

**History/Center for Great Plains Studies/  
Center for Digital Research in the Humanities**

Genoa Indian School Digital Reconciliation Project  
\$449,899..... NEH  
6/1/19 - 5/31/25  
Lorang, Elizabeth..... University Libraries/Center for Digital  
Research in the Humanities



With funding from the National Endowment for the Humanities, Margaret Jacobs, Charles J. Mach Professor of history and director of the Center for Great Plains Studies, and Elizabeth Lorang, associate professor of University Libraries, are compiling, digitizing and making accessible records and other materials from the Genoa Indian Industrial School in

Nebraska, one of more than 150 boarding schools designed to assimilate Indigenous American people into Euro-American culture near the end of the 19th century. They are working closely with Nancy Carlson and the Genoa U.S. Indian School Foundation in Genoa. The university's Center for Digital Research in the Humanities hosts the Genoa Indian School Digital Reconciliation Project. In order to move the project forward with sensitivity and respect, Jacobs and Lorang are working with an advisory council that includes representatives from the Ponca, Pawnee, Omaha and Winnebago nations and UNITE, the university's Native American student group.

**Jagodinsky, Katrina**

**History/Center for Digital  
Research in the Humanities**

Petitioning for Freedom:  
Habeas Corpus and Liberty in the American West  
\$529,410..... NSF  
6/1/20 - 8/31/23



With a grant from the National Science Foundation, historian Katrina Jagodinsky is exploring how various marginalized groups – immigrants, women, and indigenous and enslaved people, for example – used habeas corpus, a longstanding legal principle enabling prisoners to challenge the legality of their detentions, to claim freedom and establish

their rights between 1812 and 1924. In collaboration with the Center for Digital Research in the Humanities, Jagodinsky, the Susan J. Rosowski Associate Professor of history, is developing a first-of-its-kind digital database archiving roughly 6,000 previously unpublished habeas petitions, which will be searchable by demographic.

**Jewell, Andrew**

**Center for Digital Research in the Humanities**

\*A Digital Library of Willa Cather's Literary Manuscripts  
\$304,207..... NEH  
2/1/23 - 1/31/26  
Dalziel, Karin..... University Libraries/Center for  
Digital Research in the Humanities  
Homestead, Melissa..... English/Center for Digital  
Research in the Humanities



Andrew Jewell, professor of University Libraries and co-director of the Center for Digital Research in the Humanities, is leading the creation of a digital library of American novelist Willa Cather's literary manuscripts. The library will include high-resolution images of each document, extensive metadata about each item and expert-authored analyses of the

manuscripts. These resources will advance scholarship on Cather because her literary manuscripts currently are distributed across a range of repositories and largely ignored by scholars and students of Cather's writing. The digital library will integrate with the thousands of items that constitute the university's Willa Cather Archive. The project is supported by the National Endowment for the Humanities.

**Thomas, William**

**History**

\*U.S. Law and Race Initiative at the University of Nebraska-Lincoln  
\$1,049,000..... Andrew W. Mellon Foundation  
1/1/23 - 6/20/26  
Jagodinsky, Katrina..... History  
Jones, Jeannette Eileen..... History/Institute for Ethnic Studies



With a \$1 million grant from the Andrew W. Mellon Foundation, historians William Thomas, Katrina Jagodinsky and Jeannette Eileen Jones, working with scholars from the College of Law, are launching a teaching, research and collaboration hub that will position Nebraska as a national leader in education and scholarship focused on the relationship

between U.S. law and race in American history. The project will help students and the public understand how marginalized groups in American history used the law to contest and advance their rights. The project features an entry-level, team-taught course – the first of its kind at the university – and an open educational repository of digital and legal research tools, developed in collaboration with the Center for Digital Research in the Humanities.

**Weakly, Laura**                      **Center for Digital Research in the Humanities**

\*Nebraska Digital Newspaper Project, Phase 5

\$275,904 ..... NEH  
9/1/22 - 8/31/24



Laura Weakly, metadata encoding specialist, is guiding the university's long-term commitment to lead the United States Newspaper Program and the National Digital Newspaper Program for the state of Nebraska. With funding from the National Endowment for the Humanities, the university's Center for Digital Research in the Humanities will select,

digitize and send to the Library of Congress approximately 100,000 pages of Nebraska newspapers published between 1854 and 1963. They will be included in *Chronicling America*, a website providing access to information about historic newspapers and select digitized newspaper pages.

**Wilkinson, Ashley**                      **Center for Great Plains Studies**

\*69 Artworks for Inclusion into the Great Plains Art Museum

\$305,100 ..... Mark and Carol Moseman  
6/1/22 - 6/30/23

Ashley Wilkinson is curator and director of the Great Plains Art Museum, part of the university's Center for Great Plains Studies. The museum received a donation of 69 pieces of artwork from the Mark and Carol Moseman collection, which is focused thematically on humankind's relationship to the land. Both Mosemans grew up in small-town Nebraska on family farms and observed over time the shift from traditional farming practices to mechanized agriculture. Their art collection is intended to help document this change, and they feel the Great Plains Art Museum is uniquely positioned to showcase many of these pieces.

**Wisnicki, Adrian**

**University Libraries/Center for Digital Research in the Humanities**

\*COVE: Collaborative Organization for Virtual Education

\$350,000 ..... NEH  
6/1/22 - 5/31/25



Adrian Wisnicki, associate professor of English, is advancing work on the Collaborative Organization for Virtual Education, or COVE, project, an open access platform that serves as a low-cost, scholar-led alternative to commercial publishing platforms. The platform, which includes texts from the Renaissance until the early 20th

century, allows educators to create customized anthologies of materials for students. With National Endowment for the Humanities funding, the team will add metadata to COVE, optimize the platform for mobile devices and accessibility, and add additional texts.

# Arts and Humanities Awards \$50,000 to \$249,999

Active awards, July 1, 2022–June 30, 2023

\* Indicates new in 2022–2023

## Cohen, Matt English/Center for Digital Research in the Humanities

\*Charles Chesnutt's Cleveland Archives: Phase One  
\$159,792 . . . . . National Historic Publications & Records Commission  
Price, Kenneth . . . . . English/Center for Digital  
Research in the Humanities

## Dalziel, Karin University Libraries/Center for Digital Research in the Humanities

Getting the Latest Scoop:  
A New Tool to Expand Access to Online Newspaper Collections  
\$115,653 . . . . . NEH through University of Oregon  
Tunink, Greg . . . . . Center for Digital Research in the Humanities  
Weakly, Laura . . . . . University Libraries/  
Center for Digital Research in the Humanities

## Dawes, Kwame English

\*Academy of American Poets Capacity-Building Grant  
\$50,000 . . . . . Academy of American Poets/  
National Book Foundation-Literary Arts  
. . . . . Emergency Fund

American Life in Poetry  
\$170,470 . . . . . Poetry Foundation

African Poetry Digital Project  
\$150,000 . . . . . Ford Foundation  
Dawes, Lorna . . . . . University Libraries

## Ducey, Carolyn International Quilt Museum

\*Black American Quiltmaking: Our Voice Our Story  
\$79,389 . . . . . Institute of Museum & Library Services  
Sanchez Arango, Camilo Andres . . . . . International Quilt Museum

## Hoff, Michael Art, Art History and Design

Antiochia ad Cragum Excavations: 2019 Season  
\$145,119 . . . . . Merops Foundation

## Homestead, Melissa English

\*Institute for Higher Education Faculty on Willa Cather:  
Place and Archive  
\$156,581 . . . . . NEH

## Jones, Jeannette Eileen History/Institute for Ethnic Studies/ Center for Digital Research in the Humanities

To Enter Africa from America:  
The United States, Africa and the New Imperialism, 1862-1919  
\$216,106 . . . . . NEH

## Mueller, Max Classics and Religious Studies

\*NEH Fellowship - Wakara's America:  
A Native and American History of the West  
\$60,000 . . . . . NEH

## Price, Kenneth English/Center for Digital Research in the Humanities

A Life in Letters: Walt Whitman's Complete Correspondence  
\$130,544 . . . . . National Historical Publications and Records Commission  
McMullen, Kevin . . . . . English/Center for Digital  
Research in the Humanities

Walt Whitman's Journalism:  
Finding the Poet in the Brooklyn Daily Times  
\$249,941 . . . . . NEH

The Complete Correspondence of Charles W. Chesnutt  
\$152,648 . . . . . National Archives and Records Administration  
Cohen, Matt . . . . . English/Center for Digital  
Research in the Humanities

Fame and Infamy: Walt Whitman's Old-Age Correspondence  
\$92,111 . . . . . National Historical Publications and Records  
Commission through University of Iowa  
McMullen, Kevin . . . . . English/Center for Digital  
Research in the Humanities

## Seger, Casey Center for Great Plains Studies

Enhancing Access and Preservation at the Great Plains Art Museum  
\$177,000 . . . . . NEH

## Arts and Humanities Awards \$5,000 to \$49,999

Active awards, July 1, 2022–June 30, 2023

\* Indicates new in 2022–2023

### Castro, Mary Alice **Textiles, Merchandising and Fashion Design**

Global Textiles Storage Assessment in University of Nebraska–  
Lincoln’s Historic Costume and Textile Collection  
\$10,000 . . . . . NEH  
Starkey, Sandra . . . . . Textiles, Merchandising and Fashion Design

### Dawes, Kwame **English**

Literary Arts Emergency Fund: APBF Publication Subvention  
\$10,000 . . . . . Andrew W. Mellon Foundation through  
Academy of American Poets/National Book  
Foundation-Literary Arts Emergency Fund

Literary Arts Emergency Fund for *Prairie Schooner* Production  
\$5,000 . . . . . Andrew W. Mellon Foundation through  
Academy of American Poets/National Book  
Foundation-Literary Arts Emergency Fund

### Dotan, Beth **Arts and Sciences**

\*NE Stories of Humanity - Nebraska Holocaust Survivor and  
WWII Veteran Web Portal  
\$5,000 . . . . . Jewish Federation of Omaha Foundation-  
Shirley & Leonard Goldstein Supporting Foundation

### Engen-Wedin, Nancy **Lied Center for Performing Arts**

\*Kinetic Light Intersections: Access, Dance, Disability and Race  
\$20,000 . . . . . NEA  
Ajjjaak on Turtle Island - Arts for ALL  
\$20,000 . . . . . NEA

### Ganser, Timothy **Johnny Carson School of Theatre and Film**

Shubert Foundation Theatre Grant  
\$15,000 . . . . . Shubert Foundation

### Heitman, Carrie **Center for Digital Research in the Humanities**

Humanities Without Walls Pass-through Grants  
\$20,000 . . . . . Andrew W. Mellon Foundation through  
University of Illinois

### Homestead, Melissa

### English/Center for Digital Research in the Humanities

Society for the Study of American Women Writers  
Digital Recovery Hub  
\$49,450 . . . . . NEH  
Dalziel, Karin . . . . . University Libraries/Center for Digital  
Research in the Humanities  
Rau, Emily . . . . . Center for Digital Research in the Humanities

### Kohen, Ari **Political Science/Center for Digital Research in the Humanities**

The Nebraska Stories of Humanity: Holocaust Survivors and  
WWII Veterans Educational Portal  
\$10,000 . . . . . Humanities Nebraska  
Dotan, Beth . . . . . Teaching, Learning and Teacher Education/  
Center for Digital Research in the Humanities

NE Stories of Humanity - Nebraska Holocaust Survivor and  
WWII Veteran Web Portal  
\$8,000 . . . . . Jewish Federation of Omaha Foundation  
Dotan, Beth . . . . . Teaching, Learning and Teacher Education/  
Center for Digital Research in the Humanities

### Le Sueur, James **History**

Four Seasons of COVID Pandemic on the Plains:  
A Feature Documentary Film  
\$5,000 . . . . . Humanities Nebraska

### Levy, Leslie **International Quilt Museum**

\*Nebraska Arts Council International Quilt Museum  
Basic Support Grant  
\$21,841 . . . . . Nebraska Arts Council

### Muchiri, Nganga **English/Center for Digital Research in the Humanities**

Recovering the Histories of Land Treaties in East and Southern Africa  
\$25,000 . . . . . American Council of Learned Societies  
Wisnicki, Adrian . . . . . English/Center for Digital  
Research in the Humanities

### Ramsay, Stephen **English/Center for Digital Research in the Humanities**

Digital Notation Across the Movement-Based Arts  
\$15,800 . . . . . NEH  
Ptylik Zillig, Brian . . . . . Center for Digital Research in the Humanities



**Riehle, Catherine** **University Libraries**  
Academic Librarian Curriculum Developers: Building Capacity to  
Integrate Information Literacy Across the University (ALCD)  
\$34,355 . . . . . Institute of Museum and Library Services through  
Purdue University

**Weller, Susan** **University of Nebraska State Museum**  
Exploring a Square Meter of Prairie Exhibit  
\$7,500 . . . . . Humanities Nebraska

**Wilkinson, Ashley** **Center for Great Plains Studies**  
\*Threads & Trails  
\$10,000.00 . . . . . Elizabeth Firestone Graham Foundation

\*Threads & Trails: Contemplations of Our Herstories  
\$5,000 . . . . . Humanities Nebraska

\*Threads & Trails  
\$5,000 . . . . . Lincoln Community Foundation

**Wisnicki, Adrian** **English/Center for Digital  
Research in the Humanities**  
Recovering BIPOC Voices from the Victorian Periodical Press  
\$15,100 . . . . . Research Society for Victorian Proposals through  
Purdue University



Pioneering Partnerships for Innovation

NUtech Ventures' mission is to facilitate the commercialization and practical use of innovations generated through the research activities at the University of Nebraska–Lincoln. NUtech does this by identifying, evaluating, protecting, marketing and licensing the university's intellectual property to promote economic development and improve the quality of life.

## Patents Issued in 2022-2023

Recognition for **faculty, other Nebraska-affiliated colleagues** and non-university personnel who received patents for their inventions  
July 1, 2022-June 30, 2023

*(patents are listed by issue date)*

**Lance Pérez, Eric Psota**, Electrical and Computer Engineering;  
**Ty Schmidt, Benny Mote**, Animal Science

**Title:** Animal Detection Based on Detection and Association of Parts

**Date:** 7/19/2022

**Number:** 11393088

**Country:** United States

**Thomas Frederick, Shane Farritor, Eric Markvicka**, Mechanical & Materials Engineering; **Dmitry Oleynikov**, Surgery

**Title:** Robotic Device with Compact Joint Design and Related Systems and Methods

**Date:** 8/9/2022

**Number:** 11406458

**Country:** United States

**Yuris Dzenis**, Mechanical & Materials Engineering

**Title:** Strong and Tough Continuous Nanofibers

**Date:** 8/16/2022

**Number:** 11414790

**Country:** United States

**Shane Farritor, Mark Reichenbach**, Mechanical & Materials Engineering

**Title:** Improved Gross Positioning Device and Related Systems and Methods

**Date:** 9/20/2022

**Number:** ZL201780082263.3

**Country:** China

**Patricia Sollars, Gary Pickard**, Veterinary Medicine and Biomedical Sciences; Ekaterina Heldwein, Gregory Smith

**Title:** Non-Neuroinvasive Viruses and Uses Thereof

**Date:** 9/20/2022

**Number:** 11447753

**Country:** United States

**Carl Nelson, Raul Gonzalo Romero**, Mechanical & Materials Engineering

**Title:** Tool Exchange System for a Surgical Robot

**Date:** 9/20/2022

**Number:** 11446046

**Country:** United States

**Melanie Simpson, Joseph Barycki**, Biochemistry

**Title:** Castration-Resistant Prostate Cancer

**Date:** 10/25/2022

**Number:** 11478457

**Country:** United States

**Paul Black, James Allen**, Biochemistry

**Title:** Biological Remediation of Groundwater Using an Algal Photobioreactor System

**Date:** 11/1/2022

**Number:** 11485657

**Country:** United States

**Thomas Frederick, Shane Farritor, Eric Markvicka, Jack Mondry, Joe Bartels**, Mechanical & Materials Engineering

*Title:* Local Control Robotic Surgical Devices and Related Methods

*Date:* 11/1/2022

*Number:* 11484374

*Country:* United States

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**Michael Sealy, Guru Madireddy, Haitham Hadidi, Cody Kanger**, Mechanical & Materials Engineering

*Title:* Hybrid Additive Manufacturing Method

*Date:* 11/8/2022

*Number:* 11491718

*Country:* United States

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**Shane Farritor, Joseph Palmowski**, Mechanical & Materials Engineering

*Title:* Single-Arm Robotic Device with Compact Joint Design and Related Systems and Methods

*Date:* 11/22/2022

*Number:* 11504196

*Country:* United States

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**Nicholas Palermo**, Computing; Laura Hansen, Sandor Lovas

*Title:* 14-3-3 Targeting Peptides for Cancer Treatment

*Date:* 12/6/2022

*Number:* 11518784

*Country:* United States

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**Wei Qiao, Liyan Qu, Jun Wang**, Electrical and Computer Engineering

*Title:* Detecting Faults in Wind Turbines

*Date:* 12/6/2022

*Number:* 11519821

*Country:* United States

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**Thomas Frederick, Shane Farritor, Eric Markvicka, Joe Bartels, Jack Mondry**, Mechanical & Materials Engineering

*Title:* Single Site Robotic Device and Related Systems and Methods

*Date:* 12/20/2022

*Number:* 11529201

*Country:* United States

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**Barry Cheung, Anuja Bhalkikar, Christopher Marin, Tamra Fisher**, Chemistry

*Title:* Ozone-Mediated Synthesis of Nanostructures

*Date:* 2/14/2023

*Number:* 11577956

*Country:* United States

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**Thomas Frederick, Shane Farritor**, Mechanical & Materials Engineering

*Title:* Quick Release End Effectors and Related Systems and Methods

*Date:* 2/14/2023

*Number:* 11576695

*Country:* United States

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**Donald Weeks**, Biochemistry; **Thomas Clemente**, Agronomy and Horticulture; Razvan Dumitru, Paul Feng, Stanislaw Flasiński

*Title:* Improved Production and Yield Capacity of Transgenic Plants Expressing a Genetically Engineered Version of the Dicamba Monooxygenase Gene (aka, oxygenase<sub>DIC</sub>)

*Date:* 2/28/2023

*Number:* AR 096405 B2

*Country:* Argentina

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**Shane Farritor, Ryan McCormick, Tyler Wortman, Eric Markvicka, Amy Lehman**, Mechanical & Materials Engineering; **Dmitry Oleynikov**, Surgery; Kyle Strabala

*Title:* Robotic Surgical Devices, Systems and Related Methods

*Date:* 2/28/2023

*Number:* 11595242

*Country:* United States

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**Shane Farritor, Jason Dumpert, Amy Lehman**, Mechanical & Materials Engineering; Mark Rentschler

*Title:* Magnetically Coupleable Robotic Devices and Related Methods

*Date:* 3/7/2023

*Number:* 3068216

*Country:* Canada

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**Jinsong Huang, Wei Wei**, Mechanical & Materials Engineering

*Title:* Monolithic Integration of Hybrid Perovskite Single Crystals with Silicon for Highly Sensitive X-ray Detectors

*Date:* 3/21/2023

*Number:* 11607870

*Country:* United States

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**Shane Farritor, Jason Dumpert**, Mechanical & Materials Engineering;  
**Yutaka Tsutano**, Computing; Erik Mumm, Philip Chu, Nishant Kumar

*Title:* Robotic Surgical Devices, Systems and Related Methods

*Date:* 4/4/2023

*Number:* 11617626

*Country:* United States

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**Azadeh Mostafavi, Carina Russell, Ali Tamayol**, Mechanical & Materials Engineering; **Tyrell Williams**, Biological Systems Engineering; Adnan Memic, Tuerdimaimaiti Abudula, Mehdi Narbat, Mohammed Abdelwahab, Asija Memic, Ammar Melaibari, Ahmed AlShahrie, Numan Salah

*Title:* 3D Printing of Polymeric Bioceramics for the Treatment of Bone Defects

*Date:* 4/18/2023

*Number:* 11628069

*Country:* United States

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**Thomas Frederick, Shane Farritor**, Mechanical & Materials Engineering

*Title:* Quick-Release Tool Coupler and Related Systems and Methods

*Date:* 4/18/2023

*Number:* ZL201780064487.1

*Country:* China

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**Ozan Ciftci**, Food Science and Technology

*Title:* Bioavailable Curcumin Nanoparticles and Methods of Making

*Date:* 5/23/2023

*Number:* 11654119

*Country:* United States

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**Peter Dowben**, Physics and Astronomy; Andrew Marshall, Nishtha Sharma, Dmitri Nikonov

*Title:* Magnetoelectric Inverter

*Date:* 5/23/2023

*Number:* 11658663

*Country:* United States

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**Kristy Kounovsky-Shafer, Cody Masters, Jocelyn Dolphin, April Maschmann**, Chemistry

*Title:* Devices and Methods for Eluting and Concentrating Large DNA Molecules

*Date:* 6/6/2023

*Number:* 11668631

*Country:* United States

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**Yongfeng Lu**, Electrical and Computer Engineering; **Michael Nastasi**, Center for Energy Sciences Research; **Bai Cui, Fei Wang**, Mechanical & Materials Engineering

*Title:* Systems for and Methods for Improving Mechanical Properties of Ceramic Material

*Date:* 6/6/2023

*Number:* 11667581

*Country:* United States

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**Thomas Frederick, Shane Farritor, Eric Markvicka**, Mechanical & Materials Engineering

*Title:* Local Control Robotic Surgical Devices and Related Methods

*Date:* 6/14/2023

*Number:* 3943255

*Countries:* France, Germany, United Kingdom

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**Nicholas Palermo**, Computing; Laura Hansen, Sandor Lovas

*Title:* 14-3-3 Targeting Peptides for Cancer Treatment

*Date:* 6/27/2023

*Number:* 11685766

*Country:* United States

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## 2022-2023 License Agreements

Recognition for **faculty** and **other Nebraska-affiliated colleagues** whose technologies formed the basis of licensing agreements with industry partners  
July 1, 2022–June 30, 2023

### **P. Stephen Baenziger, Mitchell Montgomery, Greg Dorn, Katherine Frels**

Agronomy and Horticulture

**Agreement Number:** 2022-0395A

**Technology:** Triticale

**Agreement Number:** 2022-0396A

**Technology:** Barley

**Agreement Number:** 2023-0268A

**Technology:** Triticale

**Agreement Number:** 2023-0316A

**Technology:** Wheat

### **P. Stephen Baenziger, Mitchell Montgomery, Greg Dorn, Carol Speth**

Agronomy and Horticulture

**Agreement Number:** 2023-0267A

**Technology:** Barley

### **P. Stephen Baenziger, Jerry Bohlman, Mitchell Montgomery, Greg Dorn, Richard Little, Chris Hoagland, Katherine Frels**

Agronomy and Horticulture

**Agreement Number:** 2023-0449A

**Technology:** Wheat, Triticale, Barley

### **Paul Blum**

Biological Sciences

**Agreement Number:** 2023-0225A

**Technology:** Enzyme

### **Paul Blum, Derrick White, Raghuveer Singh**

Biological Sciences

**Agreement Number:** 2023-0148A

**Technology:** Mutant Microorganism

### **Michael Burton, Kwakiutl Dreher, William Thomas**

Textiles, Merchandising and Fashion Design/English/History

**Agreement Number:** 2023-0454A

**Technology:** The Bell Affair

### **Aaron Clare**

Natural Resources

**Agreement Number:** 2023-0064A

**Technology:** Hazelnut Variety

**Agreement Number:** 2023-0065A

**Technology:** Hazelnut Variety

### **Ismail Dweikat, John Rajewski**

Agronomy and Horticulture

**Agreement Number:** 2023-0136A

**Technology:** Sorghum x Sudan Grass

### **George Graef**

Agronomy and Horticulture

**Agreement Number:** 2023-0007A

**Technology:** Soybean Varieties

**Agreement Number:** 2023-0008A

**Technology:** Soybean Variety

**Agreement Number:** 2023-0226A

**Technology:** Soybean Varieties

**Agreement Number:** 2023-0313A

**Technology:** Soybean Variety

**Agreement Number:** 2023-0373A

**Technology:** Soybean Variety

### **Ming Han, Guigen Liu**

Electrical and Computer Engineering

**Agreement Number:** 2023-0140A

**Technology:** Fiber Optics Technologies

### **Jiong Hu, Seunghee Kim, Miras Mamirov, Amin Hosseinizadeh**

Civil and Environmental Engineering

**Agreement Number:** 2022-0295A

**Technology:** Recycled Concrete Aggregate

**Srivatsan Kidambi, Stephen Hayward**

Chemical and Biomolecular Engineering

*Agreement Number:* 2023-0277A

*Technology:* Drug and Gene Delivery Substrate

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**Srivatsan Kidambi**

Chemical and Biomolecular Engineering

*Agreement Number:* 2023-0279A

*Technology:* Beasts Platform

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**James Le Sueur**

History

*Agreement Number:* 2023-0110A

*Technology:* Art of Dissent Film

*Agreement Number:* 2023-0214A

*Technology:* Art of Dissent Film

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**Joe Luck, Rodney Rohrer**

Biological Systems Engineering

*Agreement Number:* 2023-0261A

*Technology:* Nozzle Control

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**Asit Pattnaik, Fernando A. Osorio, Fangrui Ma, Hiep Vu**

Veterinary Medicine and Biomedical Sciences/Biological Sciences/  
Animal Science

*Agreement Number:* 2023-0218A

*Technology:* Porcine Vaccine

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**Santosh Pitla, Ian Tempelmeyer, Paul Jasa, Roger M. Hoy**

Biological Systems Engineering

*Agreement Number:* 2023-0192A

*Technology:* Pivoting Robotic Planter

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**Dipak Santra, Glen Frickel**

Agronomy and Horticulture/Panhandle Research and Extension  
Center

*Agreement Number:* 2022-0493A

*Technology:* Millet

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**Daniel D. Snow, Chittaranjan Ray, Arindam Malaker**

Nebraska Water Center/Civil and Environmental Engineering

*Agreement Number:* 2023-0102A

*Technology:* Soil Amendment/Additive

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**Carlos Urrea**

Agronomy and Horticulture

*Agreement Number:* 2023-0030A

*Technology:* Pinto Bean

*Agreement Number:* 2023-0211A

*Technology:* Great Northern Bean

*Agreement Number:* 2023-0212A

*Technology:* Great Northern Bean

*Agreement Number:* 2023-0342A

*Technology:* Pinto Bean

*Agreement Number:* 2023-0347A

*Technology:* Great Northern Bean

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**Anne Vidaver, James Van Etten**

Plant Pathology

*Agreement Number:* 2023-0209A

*Technology:* Material

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**Shi-Hua Xiang**

Veterinary Medicine and Biomedical Sciences

*Agreement Number:* 2023-0297A

*Technology:* HIV Vaccine Development Method

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**Changmou Xu, Rui Huang, Xiaoqing Xie**

Food Science and Technology

*Agreement Number:* 2023-0301A

*Technology:* Aronia Berry Juice

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**International Quilt Study Center**

International Quilt Museum

*Agreement Number:* 2023-0082A

*Technology:* Quilt Works

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## National Science Foundation Innovation Corps Teams

The National Science Foundation's Innovation Corps (I-Corps) Program is designed to spur translation of fundamental research to the marketplace, spark collaboration between academia and industry and train NSF-funded faculty, students and other researchers in innovation and entrepreneurship skills. NUtech Ventures, the university's intellectual property and commercialization unit, supports Husker researchers in learning about and preparing to apply for the program. I-Corps awards are worth \$50,000 and enable recipients to participate in real-world, hands-on learning focused on how to evaluate commercial opportunity around an innovation.

### **Shubhendu Bhardwaj**

Electrical and Computer Engineering

*I-Corps:* Smart Textile Charging Platform for Wearable and Portable Devices

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### **Clemencia Rojas**

Plant Pathology

*I-Corps:* Deployment of Antibacterials as Seed Treatments

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### **Daniel Schachtman**

Agronomy and Horticulture/Center for Plant Science Innovation/  
Center for Biotechnology

*I-Corps:* Combinatorial Phage Display for the Development of Specific, Single Target Biopesticides against Invasive Plant Pathogens

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### **Li Tan**

Mechanical & Materials Engineering

*I-Corps:* Room Temperature Titanium Extraction from Low-Cost Pigments

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## Creative Activity

Faculty who created, performed or produced works in the fine and performing arts and architecture, literature, television and film, or digital/software design  
July 1, 2022–June 30, 2023

Submitted by faculty, chairs/heads or deans

### Byron Anway

### Art, Art History and Design

Artist, solo painting and drawing exhibition. "Ghosts of Landscape and Memory." Osborne Family Gallery, University of Nebraska at Omaha, Omaha, NE.

### John R. Bailey

### Glenn Korff School of Music

Conductor, International Flute Orchestra. Four-concert tour of southern France. Churches and conservatories in Nice, Aix-en-Provence, Lyon, Chamonix.

Conductor, National Flute Association Past Presidents' Flute Choir. Tribute concert to founding president; closing gala concert. National Flute Association Annual National Convention, Chicago, IL.

Performer, solo flute recital and pedagogy lecture. Rutgers University, New Brunswick, NJ.

### Diane Barger

### Glenn Korff School of Music

Performer, clarinet. "Amicitia Duo Recital." International Clarinet Association ClarinetFest®, Denver, CO.

### Justin Bradley

### Computing

Cast member, documentary film. "Unknown: Killer Robots." Netflix.

### Michael H. Burton

### Textiles, Merchandising and Fashion Design

Producer, animated film. "The Bell Affair." Random Media, Los Angeles, CA.

Digital artist, invited exhibition. "Neil's Fall." Vision Seen in the Air. The National Willa Cather Center, Red Cloud, NE.

Producer, animated film. "The Bell Affair." Golden State Film Festival. TCL Chinese Theater, Los Angeles, CA.

Artist/producer, animated film. "The Diary of Michael Shiner." With Kwakiutl Dreher, director; William G. Thomas III, writer/historian. Lincoln, NE.

### Santiago Cal

### Art, Art History and Design

Artist, solo sculpture exhibition. "Incomplete and an Earlier Version." Wakeley Gallery, Illinois Wesleyan University, Bloomington, IL.

Artist, solo sculpture exhibition. "Sensitive to the Telling." Norfolk Art Center, Norfolk, NE.

Artist, solo sculpture exhibition. "Santiago Cal 1995-2023." Taxonomies Gallery (experimental space), Omaha, NE.

Artist, sculpture exhibition. "Santiago Cal." Norfolk Art Center, Norfolk, NE.

Artist, video/short film. "Portal." Post Façade, international short film series. Maple St. Construct, Omaha, NE.

### Judy Diamond

### University Libraries/ University of Nebraska State Museum

Producer, public art. "Vaccinate," exhibit featuring 46 posters promoting vaccination against COVID-19 and/or vaccine acceptance. Bennett Martin Public Library, Lincoln, NE.

### Jesse Fleming

### Johnny Carson Center for Emerging Media Arts

Artist, mixed reality performance experience. "The Wilds," featuring game engines, live performance, dance, motion capture, digital audio. Carson Theater, Lincoln, NE.

### Dana Fritz

### Art, Art History and Design

Artist, photography exhibition. "Field Guide to a Hybrid Landscape and Re: Forest." Laboratory of Tree Ring Research atrium gallery, University of Arizona, Tucson, AZ.

### Suna Gunther

### Glenn Korff School of Music

Performer, solo voice performance. "Concert of Italian Arias." Brancaloneoni International Music Festival. Palazzo Ducale, Urbino, Italy.

### Michelle Harvey

### Johnny Carson School of Theatre and Film

Lighting designer, theatrical production. "The Wilds." Carson Theatre, UNL, Lincoln, NE; Mahaney Arts Center, Middlebury College, Middlebury, VT.

Costume designer, theatrical production. "Dance Nation." Bluebarn Theatre, Omaha, NE.

### Aaron Holz

### Art, Art History and Design

Artist, painting exhibition. "Many In One." Briar Cliff Review Exhibition. Sioux City Art Center, Sioux City, IA.



**Sophie Isaak** **Art, Art History and Design**

Artist, print exhibition. "Promising Developments in the Ongoing Investigation." Metropolitan Community College Gallery of Art and Design, Elkhorn, NE.

**Jinku Kim** **Johnny Carson Center for Emerging Media Arts**

Artist, immersive audio visual installation. "Hardwired Wonderland." Kiewit Luminarium, Omaha, NE.

**Christina Kirk** **Johnny Carson School of Theatre and Film**

Performer, theatrical production. "Death of a Salesman," playing the role of Linda. Nebraska Repertory Theatre, Lincoln, NE.

**Barney R. McCoy** **Broadcasting**

Producer, television production. "Nebraska Stories: Seven Years A Correspondent." Nebraska Public Media Television and Multimedia, Lincoln, NE.

**Dan Novy** **Johnny Carson Center for Emerging Media Arts**

Artist, ongoing digital creativity software exhibition. "ReefGen - A Diffusion-based Generative Animated Coral Reef." Creative Data Visualization. Johnny Carson Center for Emerging Media Arts, Lincoln, NE.

Director, immersive theater production. "Shadow Ema - An Immersive Escape Room Experience." Open Studios. Johnny Carson Center for Emerging Media Arts, Lincoln, NE.

Producer, film. "The AI and Creative Filmmaking Design Hackathon." Johnny Carson Center for Emerging Media Arts, Lincoln, NE.

Artist, ongoing digital creativity software exhibition. "KoiGen - A Generative Model-Based Koi Pond." Creative Data Visualization. Johnny Carson Center for Emerging Media Arts, Lincoln, NE.

Director, animated music video. "Singapore" (featuring the music of Tom Waits). Johnny Carson Center for Emerging Media Arts, Lincoln, NE.

Artist, film production. "Sheroes: The Astronaut Corps of 2050." Johnny Carson Center for Emerging Media Arts, Lincoln, NE.

**Kendra L. Ordia** **Interior Design**

Designer, juried exhibition. "(re)wild." Public Interiority Exhibition and Symposium. University of Tennessee, Knoxville, TN.

**Ann Marie Pollard** **Johnny Carson School of Theatre and Film**

Director, theatrical production. "The Play That Goes Wrong." Nebraska Repertory Theatre, Lincoln, NE.

**Traci Robison** **University Libraries**

Curator, historical photos and archival documents exhibition. "Opportunity & Opposition: A Century of Women's Athletics at the University of Nebraska." University of Nebraska-Lincoln Libraries, Lincoln, NE.

**Patricia A. Simpson** **Modern Languages and Literatures**

Co-curator and digital catalog co-author with Carole Levin, visual art exhibit. "Beyond Eve and Mary: Premodern Representations of Gender, Power, and Religion." Sheldon Museum of Art, Lincoln, NE.

**Francisco Souto** **Art, Art History and Design**

Artist, drawing exhibition. State of the Art: Locate. Currier Museum of Art, Manchester, NH.

Artist, drawing exhibition. "Diaspora (triptych)." Taking Up Space. K Contemporary Gallery, Denver, CO.

**Rafael Untalan** **Johnny Carson School of Theatre and Film**

Performer, theatrical production. "Best Available" by Jonathan Spector, playing the role of Dan/Bill. Ashland New Plays Festival, Ashland, OR.

Performer, theatrical production. "The Play That Goes Wrong," playing the role of Chris/Inspector Carter. Nebraska Repertory Theatre, Lincoln, NE.

Performer, theatrical production. "Much Ado About Nothing," playing the role of Don Pedro, Prince of Aragon. Illinois Shakespeare Festival, Bloomington, IL.

Performer, theatrical production. "King Lear," playing the role of Gloucester. Illinois Shakespeare Festival, Bloomington, IL.

**Jennifer Weisbrod** **Agronomy and Horticulture**

Director, digital creativity production. "The Power of FieldWatch." YouTube, Lincoln, NE.

**Sandra Williams** **Art, Art History and Design**

Artist, solo cut paper exhibition. "Eat A Peach." The Studios of Key West, Key West, FL.

## Published Books and Chapters

Faculty who wrote or edited books or chapters in books published July 1, 2022–June 30, 2023

UNL co-authors/editors designated in red (identified by those who submitted items for inclusion)

Submitted by faculty, chairs/heads or deans

### Marco Abel

### English

Editor, with Aylin Bademsoy and Jaimey Fisher. *Christian Petzold: Interviews*. Jackson, MS: University Press of Mississippi.

### Ikuo Amano

### Modern Languages and Literatures

Author. *Financial Euphoria, Consumer Culture, and Literature of 1980s Japan: Dreams of the Bubble Economy*. London, UK: Routledge.

Chapter author. Infatuated with Il Vate: Mishima's transnational mimesis of D'Annunzio as the decadent poet, patriot, and celebrity. In Michael Subialka, Elisa Segnini (Eds.), *D'Annunzio and World Literature: Multilingualism, Translation, Reception*. Edinburgh, UK: University of Edinburgh Press.

### Özgür M. Araz

### Supply Chain Management and Analytics

Author, with David L. Olson. *Data Mining and Analytics in Healthcare Management*. Heidelberg, Germany: Springer.

### Steven M. Barlow

### Special Education and Communication Disorders/ Biological Systems Engineering/ Center for Brain, Biology and Behavior

Chapter author, with Meredith Harold, Emily Zimmerman. Leona: Oromotor entrainment therapy to develop feeding skills in the preterm infant. In Shelly S. Chabon, Ellen R. Cohn, Dorian Lee-Wilkerson (Eds.), *The Communication Disorders Casebook: Learning by Example*. San Diego, CA: Plural Publishing, Inc.

### Humberto Blanco

### Agronomy and Horticulture

Author. *Cover Crops and Soil Ecosystem Services*. Hoboken, NJ: John Wiley & Sons, Inc.

Editor, with Sandeep Kumar, Stephen Anderson. *Soil Hydrology in a Changing Climate*. Boca Raton, FL: CRC Press.

### Kelli S. Boling

### Advertising and Public Relations

Author. *Social Justice, Activism and Diversity in U.S. Media History*. New York, NY: Routledge.

### Eve M. Brank

### Psychology/Center on Children, Families and the Law

Chapter author, with Jennifer L. Groscup, Emma W. Marshall, Lori A. Hoetger. Privacy rights and the law under the Fourth Amendment. In R. Roesch (Ed.), *Psychology and Law, a Volume of Routledge Encyclopedia of Psychology in the Real World*. New York, NY: Routledge—Taylor & Francis Group.

### Scout Calvert

### University Libraries

Chapter author. Situated data: Feminist epistemology and data curation. In Yvonne Mery, Anthony Sanchez (Eds.), *The Critical Librarianship and Pedagogy Symposium: Reflections, Revisions, and New Work*. Chicago, IL: Association of College and Research Libraries.

### Joy Castro

### English/Institute for Ethnic Studies

Author. *One Brilliant Flame*. Seattle, WA: Lake Union.

### Natalie Chisam

### Marketing

Chapter author, with Joshua T. Beck, Robert W. Palmatier. Relationship marketing. In Gary Lilien, Andrew Petersen, Stefan Wuyts (Eds.), *Handbook of Business-to-Business Marketing*. Northampton, MA: Edward Elgar Publishing.

### Parks M. Coble

### History

Author. *The Collapse of Nationalist China: How Chiang Kai-shek Lost China's Civil War*. Cambridge, UK: Cambridge University Press.

### Yasar Demirel

### Chemical and Biomolecular Engineering

Chapter author. Thermodynamics and biological systems. In Munir Ozturk (Ed.), *Medicinal and Aromatic Plants of the World in the Encyclopedia of Life Support Systems*. New York, NY: UNESCO-EOLSS Publishers.

Author. *Sustainable Engineering. Process Intensification, Energy Analysis, Artificial Intelligence*. Boca Raton, FL: CRC Press.

### Bedross Der Matossian

### History

Editor. *Denial of Genocides in the Twenty-First Century*. Lincoln, NE: University of Nebraska Press.

Chapter author. The Ottoman massacres of Armenians, 1894–1896 and 1909. In Ned Backhawk, Ben Kiernan, Benjamin Madley, Rebe Taylor (Eds.), *Cambridge World History of Genocide, Vol. II*, Cambridge, UK: Cambridge University Press.

**Judy Diamond**

**University Libraries/  
University of Nebraska State Museum**

Editor, with Sherman Rosenfeld. *Amplifying Informal Science Learning: Rethinking Research, Design, and Engagement*. New York, NY: Routledge.

Author, with **Scott Gardner**, **Gabor Racz**. *Parasites: The Inside Story*. Princeton, NJ: Princeton University Press.

**Heidi A. Diefes-Dux**

**Biological Systems Engineering**

Chapter author, with **Grace Panther**. Workplace learning and adaptability frameworks for conceptualizing faculty development. In S.M. Linder, C. Lee, K. High (Eds.), *Handbook of STEM Faculty Development*. Charlotte, NC: Information Age Publishing.

**Geoffrey Friesen**

**Finance**

Chapter author. Laborem exercens and the subjective dimension of work in economics and finance. In Martin Schlag (Ed.), *Holiness Through Work*. South Bend, IN: St. Augustine Press.

**Dana Fritz**

**Art, Art History and Design**

Author, with **Katie Anania**, **Rebecca Buller**, Rose-Marie Muzika, **Salvador Lindquist**. *Field Guide to a Hybrid Landscape*. Lincoln, NE: University of Nebraska Press.

**Thomas C. Gannon**

**English/Institute for Ethnic Studies**

Author. *Birding While Indian: A Mixed-Blood Memoir*. Columbus, OH: The Ohio State University Press/Mad Creek Books.

**Crystal Garcia**

**Educational Administration**

Chapter author, with C.C. Beatty. Interrogating whiteness in sorority and fraternity life. In Z.H. Foste, T.L. Tevis (Eds.), *Critical Whiteness Praxis in Higher Education: Considerations for the Pursuit of Racial Justice on Campus*. New York, NY: Routledge.

**Scott Gardner**

**Biological Sciences**

Author. *Parasites: The Inside Story*. Princeton, NJ: Princeton University Press.

**James A. Garza**

**History/Institute for Ethnic Studies**

Editor, with J. Justin Castro. *Technocratic Visions: Engineers, Technology, and Society in Mexico*. Pittsburgh, PA: University of Pittsburgh Press.

Chapter author. Engineering the Porfirian landscape: Technology and social change in the basin of Mexico, 1890-1911. In James A. Garza, J. Justin Castro (Eds.), *Technocratic Visions: Engineers, Technology, and Society in Mexico*. Pittsburgh, PA: University of Pittsburgh Press.

**Iker González-Allende**

**Modern Languages and Literatures**

Chapter author. "La realidad es una guerra continua": La cultura de la violencia en el Medio Oeste de los Estados Unidos en *El mapa de los afectos*, de Ana Merino. In David Río (Ed.), *La expansión y revisión de un mito: el Oeste norteamericano en la literatura española*. Madrid, Spain: Iberoamericana-Vervuert.

Chapter author. Gizonak agerian: masculinitatea, patrilinealtasuna eta feminismoa Karmele Jaioren ipuinetan. In Mari Jose Olaziregi Alustiza, Amaia Elizalde Estenaga (Eds.), *Karmele Jaioren literatura, emozio gorpuztua*. Leioa, Spain: University of the Basque Country.

**Edmund 'Ted' Hamann**

**Teaching, Learning and Teacher Education/  
Global Integrative Studies (Anthropology)**

Chapter author. Policy Brief 2: Better integrating the U.S.-origin students in the Mexican education system through effective education policies. In Víctor Zúñiga, Patricia Gándara, Giovanni Peri, Silvia Giorguli Saucedo (Eds.), *Report of the 2022 Forum on Education and Migration: The Future of the United States-Mexico Human Capital: Opportunities for a Bilateral Education and Migration Agenda*. Riverside, CA: University of California-Alianza MX.

Chapter author, with Betsabé Roman, Juan Sánchez García, Víctor Zúñiga. The value of pluri-national research teams for studying education and migration. In C. Magno, J. Lew, S. Rodriguez (Eds.), *(Re) Mapping Migration and Education: Methods, Theory, and Practice*. Boston, MA: Brill.

Chapter author, with Bradley Levinson, Maria Elena Luna. Citizenship education and transnational (im)migrant groups in Mexico. In James Banks (Ed.), *Global Migration and Civic Education: Research, Policy, and Practices*. New York, NY: Routledge.

Chapter author, with Janet Eckerson, Mark Larson. The high school in the middle of everywhere: Nebraska's Lincoln High. In A. York, K. Welner, L. Molner Kelley (Eds.), *Schools of Opportunity*. New York, NY: Teachers College Press.

Chapter author, with Lesley Bartlett. School profile 1: Lincoln HS, Nebraska. In M. Bajaj, D. Walsh, L. Bartlett, G. Martínez (Eds.), *Humanizing Education for Immigrant and Refugee Youth: 20 Strategies for the Classroom and Beyond*. New York, NY: Teachers College Press.

Editor, with Víctor Zúñiga, Juan Sánchez García. *Lo que los maestros mexicanos conviene que conozcan sobre la educación en Estados Unidos*. Monterrey, Mexico: Universidad Autónoma de Nuevo León.

Chapter author. Diez cosas que maestros mexicanos deben saber de las escuelas estadounidenses. In M. Rodríguez Cruz, M. Zamora Chávez (Eds.), *Abordajes inter-disciplinarios sobre la niñez y la adolescencia migrante en América Latina*. Mexico City, Mexico: Editorial UNAM.

**Rumiko Handa**

Chapter author. The aesthetics of imperfection and architectural design for memory places: Four documentation centers on national socialism in Germany. In Peter Cheyne (Ed.), *Imperfectionist Aesthetics in Art and Everyday Life*. New York, NY: Routledge.

Chapter author. Architecture: Finality and adaptation. In Michiko Tsushima, Eriko Yamaguchi (Eds.), *The Form of the Everyday: Aesthetics, Architecture, Literature, and Food*. Tsukuba, Japan: Tsukuba University Press.

**Lindsay Hastings****Agricultural Leadership,  
Education and Communication**

Editor, with David Rosch. *Research and Assessment Methods for Leadership Development in Practice*. Hoboken, NJ: Wiley.

Chapter author. Don't be afraid to eat the whole whale! Using mixed methods to enhance what we learn in leadership research and assessment. In David Rosch, Lindsay Hastings (Eds.), *New Directions for Student Leadership: No. 175. Research and Assessment Methods for Leadership Development in Practice*. Hoboken, NJ: Wiley.

Chapter author, with Hannah Sunderman. Assessing and measuring leadership identity. In Julie Owen (Ed.), *New Directions for Student Leadership: No. 178. Deepening Leadership Identity Development*. Hoboken, NJ: Wiley.

Chapter author. How I see myself: Self-awareness. In **Gina Matkin**, Hannah Sunderman, Jason Headrick (Eds.), *Developing Human Potential: A Personal Approach to Leadership*. Lincoln, NE: Department of Agricultural Leadership, Education and Communication, UNL.

Chapter author, with Natasha Turman, Kristen Cilente Skendall. The complexities of the student learner. In Susan Komives, Julie Owen (Eds.), *A Research Agenda for Leadership Learning and Development Through Higher Education*. Northampton, MA: Edward Elgar Publishing.

**Gary L. Hein****Entomology**

Chapter author, with **A.J. McMechan**, L. Overmyer. Wheat curl mite ecology and epidemiology of its associated wheat viruses. In S. Eigenbrode, A. Rashed (Eds.), *Advances in Understanding Insect Pests Affecting Wheat and Other Cereals*. Cambridge, UK: Burleigh Dodds Science Publishing.

**Architecture****Melissa J. Homestead****English**

Chapter author. Teaching American women authorship in the American literature survey through the History Of The Book. In Emily Todd and Matteo Pangallo (Eds.), *Nineteenth-Century American Literature in Transition, Vol. III: 1851-1877*. Amherst, MA: University of Massachusetts Press.

**Qing Hui****Electrical and Computer Engineering**

Author, with Wassim M. Haddad, Junsoo Lee. *Network Information Systems: A Dynamical Systems Approach*. Philadelphia, PA: Society for Industrial and Applied Mathematics.

**Danielle C. Jefferis****Law**

Chapter author, with Nicole B. Godfrey. How the COVID-19 pandemic has hurt incarcerated people. In Claire L. Parins (Ed.), *The Legal and Social Ramifications of Pandemics on Civil Rights and Civil Liberties*. Chicago, IL: ABA Publishing.

**Wendy Jean Katz****Art, Art History and Design**

Chapter author. William Walcutt, Mazeppa, and the Know-Nothings. In Charles C. Eldredge (Ed.), *The Unforgettables: Expanding the History of American Art*. Berkeley, CA: University of California Press.

**Casey R. Kelly****Communication Studies**

Author. *Caught on Tape: White Masculinity and Obscene Enjoyment*. London, UK: Oxford University Press.

**Taeyeon Kim****Educational Administration**

Chapter author, with L. Hernandez, P.J. Kuttner, G.R. López et al. Families and educators co-designing: Critical education research as participatory public scholarship. In M. Young, S. Diem (Eds.), *Handbook of Critical Education Research: Qualitative, Quantitative, and Emerging Approaches*. New York, NY: Routledge.

**Jody Koenig Kellas****Communication Studies**

Chapter author, with Erin K. Willer. Narrative pedagogy: A practice to connect teacher and student and enhance learning. In Marian L. Houser, Angela M. Hosek (Eds.), *Handbook of Instructional Communication: Principles and Practices of Teaching Rhetorical and Relational Perspectives*. Dubuque, IA: Kendall Hunt.

**Thomas R. Kubick****Accountancy**

Author, with Sally M. Jones, Shelley C. Rhoades-Catanach, Sandra R. Callaghan. *Principles of Taxation for Business and Investment Planning*. New York, NY: McGraw-Hill.

**Jen Landis** **Art, Art History and Design**  
Author. *Skip the Bad Songs*. Lincoln, NE: GIRLBRAVE Press.

**Laurie Thomas Lee** **Broadcasting**  
Chapter author. How local TV news is surviving disruption as newspapers fail: Lessons learned. In Gus Hurwitz, **Kyle Langvardt** (Eds.), *Media and Society After Technological Disruption*. Cambridge, UK: Cambridge University Press.

**Jaime I. Lopez** **Community and Regional Planning**  
Author, with Lisa Schweitzer. *Handbook on Planning and Power*. Cheltenham, UK: Edward Elgar Publishing.

**John Dustin Loy** **Veterinary Medicine and Biomedical Sciences**  
Editor, with Jessie D. Monday, David R. Smith. *Ruminant Diagnostics and Interpretation*. Amsterdam, Netherlands: Elsevier.

Chapter author, with Michael Clawson. From genomics to MALDI-TOF MS: Diagnostic identification and typing of bacteria in veterinary clinical laboratories. In Haroun Shah, Erika Tranfield (Eds.), *Microbiological Identification Using MALDI-TOF and Tandem Mass Spectrometry: Industrial and Environmental Applications*. London, UK: Wiley.

**Suping Lu** **University Libraries**  
Author. *Japanische Greuelthaten in Nanking: Das Nanjing Massaker in deutschen diplomatischen Dokumenten*. Wiesbaden, Germany: Springer Verlag für Sozialwissenschaften (VS).

Author. *Japanese Atrocities in Nanjing: The Nanjing Massacre and Post-Massacre Social Conditions Recorded in German Diplomatic Documents*. Singapore and New York: Springer.

**Gina S. Matkin** **Agricultural Leadership, Education and Communication**  
Editor, with **Jason Headrick**, Hannah M. Sunderman. *Developing Human Potential: A Personal Approach to Leadership*. Lincoln, NE: University of Nebraska-Lincoln.

**Julia McQuillan** **Sociology**  
Chapter author. Fostering youth STEM identities through social network connections in informal science settings. In **Judy Diamond**, Sherman Rosenfeld (Eds.), *Amplifying Informal Science Learning: Rethinking Research, Design, and Engagement*. New York, NY: Routledge.

**Deepika Menon** **Teaching, Learning and Teacher Education/ Center for Science, Mathematics and Computer Education**

Chapter author, with Amy S. Bauer, **Elizabeth V. Hasseler**, **Katie L. Johnson**, **Amanda Thomas**, R. Martinez, **Guy Trainin**. Greater than the sum of its parts: Centering science within elementary STEM education. In Sulaiman M. Al-Balushi, Lisa Martin-Hansen, Youngjin Song (Eds.), *Reforming Science Teacher Education Programs in the STEM Era*. New York, NY: Palgrave Macmillan.

**Alakananda Mitra** **Nebraska Water Center**  
Chapter author, with Saraju P. Mohanty, Elias Kougiianos. GROdet: A novel framework for plant disease detection and leaf damage estimation. In Luis M. Camarinha-Matos, Luis Ribeiro, Leon Strousa (Eds.), *Internet of Things; IoT through a Multi-disciplinary Perspective*. Cham, Switzerland: Springer.

Chapter author, with Saraju P. Mohanty, Elias Kougiianos. A smart agriculture framework to automatically track the spread of plant diseases using mask region-based convolutional neural network. In Luis M. Camarinha-Matos, Luis Ribeiro, Leon Strousa (Eds.), *Internet of Things. IoT through a Multi-disciplinary Perspective*. Cham, Switzerland: Springer.

**Laura K. Muñoz** **History/Institute for Ethnic Studies**  
Chapter author. North America. In Bonnie G. Smith, Nova Robinson (Eds.), *The Routledge Global History of Feminism*. New York, NY: Routledge.

**David L. Olson** **Supply Chain Management and Analytics**  
Author, with Hsu-Shih Shih. *TOPSIS and Its Extensions: A Distance-Based MCDM Approach*. Heidelberg, Germany: Springer.

Author, with **Özgür M. Araz**. *Data Mining and Analytics in Healthcare Management*. Heidelberg, Germany: Springer.

Author, with Georg Lauhoff. *Deskriptives Data-Mining*. Heidelberg, Germany: Springer Gabler.

**Morgan E. Palmer** **Classics and Religious Studies/ Women's and Gender Studies**  
Chapter author. Inscriptions on the Capitoline: Epigraphy and cultural memory in Livy. In Martin T. Dinter, Charles Guérin (Eds.), *Cultural Memory in Republican and Augustan Rome*. Cambridge, UK: Cambridge University Press.

**Yi Qian** **Electrical and Computer Engineering**  
Author, with Shengjie Xu, Rose Qingyang Hu. *Cybersecurity in Intelligent Networking Systems*. Hoboken, NJ: IEEE Press/Wiley.

**Truyen Quach** **Agronomy and Horticulture**  
Author, with Hanh Nguyen, Olivia Meyer, Shirley J. Sato, Tom Elmo Clemente, Ming Guo. *Plant Genome Engineering: Methods and Protocols*. New York, NY: Springer.

**Brett C. Ratcliffe** **Entomology**  
Author, with Dana Price. *The Sarabaeoid Beetles of Maryland (Coleoptera)*. Lincoln, NE: University of Nebraska State Museum.

**Heather Richards-Risetto** **Global Integrative Studies (Anthropology)/Center for Digital Research in the Humanities**  
Chapter author, with Kristi Primeau, Graham Goodwin, and David Witt. Multisensory experiences and narratives in archaeological landscapes' sound, vision, and movement in GIS and virtual reality. In Giacomo Landeschi, Eleanor Betts (Eds.), *Capturing the Senses: Digital Methods for Sensory Archaeologies*. Cham, Switzerland: Springer Cham.

**Arman Roohi** **Computing**  
Chapter author. With Shaahin Angizi, Deliang Fan. Enabling edge computing using emerging memory technologies: From device to architecture. In Ali Iranmanesh (Ed.), *Frontiers of Quality Electronic Design (QED) AI, IoT and Hardware Security*. Basel, Switzerland: Springer International Publishing.

**Milad Roohi** **Durham School of Architectural Engineering and Construction**  
Chapter author. Seismic multi-hazard risk and resilience modeling of networked infrastructure systems. In Ehsan Noroozinejad Farsangi, Mohammad Noori, Tony T.Y. Yang, Paulo B. Lourenço, Paolo Gardoni, Izuru Takewaki, Eleni Chatzi, Shaofan Li (Eds.), *Automation in Construction Toward Resilience: Robotics, Smart Materials and Intelligent Systems*. Boca Raton, FL: Taylor & Francis Group.

**Loukia K. Sarroub** **Teaching, Learning and Teacher Education**  
Chapter author, with **Cassandra Schroeder**. Religious influences on the growth of literacy practice. In R.J. Tierney, F. Rizvi, K. Erkanan (Eds.), *International Encyclopedia of Education, vol. 10*. New York, NY: Elsevier.

Editor, with Mary Juzwik, Denise Davilla, Robert LeBlanc, Eric Rackley. *English Teaching: Practice and Critique*. Leeds, UK: Emerald Publishing.

**Susan Sheridan** **Educational Psychology/Nebraska Center for Research on Children, Youth, Families and Schools**  
Chapter author, with J.W. Eagle. Appreciating and promoting resilience in families. In S. Goldstein, R.B. Brooks (Eds.), *Handbook of Resilience in Children (3rd ed.)*. New York, NY: Kluwer/Plenum Press.

Chapter author, with K.E. Brown. Family engagement for early literacy: Interventions that promote family-school partnerships. In S.Q. Cabell, S.B. Neuman, N. Patton Terry (Eds.), *Handbook on the Science of Early Literacy*. New York, NY: Guilford.

Chapter author, with E.S. Brower. Teachers and Parents as Partners: A family-school partnership approach for all children. In C. Giné, J.M. Mas, A. Balcells, C. Simón (Eds.) *Working with Families: How to Promote Parental Competence and Well-Being*. Barcelona, Spain: Horsori Editorial.

Chapter author, with **A.L. Witte**, S.A. Garbacz. Preparing the school mental health workforce to engage in partnership approaches to address children's needs. In S.W. Evans, J.S. Owens, C.P. Bradshaw, M.D. Weist (Eds.) *Handbook of School Mental Health. Issues in Clinical Child Psychology*. New York, NY: Springer.

Chapter author, with R.T.M. Gomes. Parceria família-escola: A atuação do psicopedagogo na aproximação dos dois contextos [Family-school partnership: The performance of the school psychologist in bringing the two contexts together]. In C.T. Piza, E.C. Macedo (Eds.) *Intervenção na clínica psicopedagógica: Teoria e prática de relatos clínicos [Intervention in Psychopedagogical Clinic: Theory and Practice of Clinical Reports]*. Lisbon, Portugal: Editora Hogrefe.

**Jessica A. Shoemaker** **Law**  
Chapter author, with Nicole Graham. Property rights and power across rural landscapes. In Margaret Davies, Lee Godden, Nicole Graham (Eds.), *Handbook of Property, Law, and Society*. London, UK: Routledge Press.

**Patricia A. Simpson** **Modern Languages and Literatures**  
Author, with Helga Druxes, Alexandar Mihailovic. *Screening Solidarity: Neoliberalism and Transnational Cinema*. London, UK: Bloomsbury Academic.

**Jeffrey R. Stevens** **Psychology**  
Editor. *Canine Cognition and the Human Bond*. New York, NY: Springer.

**Scott F. Stoltenberg** **Psychology**  
Author. *Foundations of Behavior Genetics*. Cambridge, UK: Cambridge University Press.

**Jordan Stump** **Modern Languages and Literatures**

Translator. *The Valiant Little Tailor* (by Eric Chevillard). New Haven, CT: Yale University Press.

**Aaron Sutherlen** **Art, Art History and Design**

Editor, with Judy Diamond, Meghan Leadabrand, Julia McQuillan, St. Patrick Reid. *Vaccinate: Posters from the COVID-19 Pandemic*. Lincoln, NE: Zea Books.

**Guy Trainin** **Teaching, Learning and Teacher Education**

Chapter author, with Deepika Menon, Amy S. Bauer, Katie L. Johnson, Elizabeth F. Hassele, Amanda Thomas, Ricardo Martinez. Greater than the sum of its parts: Centering science within elementary STEM education. In S.M. Al-Balushi, L. Martin-Hansen, Y. Song (Eds.), *Reforming Science Teacher Education Programs in the STEM Era: International and Comparative Perspectives*. London, UK: Palgrave Macmillan.

**Shari R. Veil** **Advertising and Public Relations**

Chapter author. Crisis communication, public relations. In E. Ho, C. Bylund, J. van Weert (Eds.), *International Encyclopedia of Health Communication*. New York, NY: Wiley.

**Frans G. von der Dunk** **Law/Space, Cyber and Telecommunications Law**

Chapter author. Law and liberty on the Moon. In C.S. Cockell (Ed.), *The Institutions of Extraterrestrial Liberty*. Oxford, UK: Oxford University Press.

Chapter author. The Artemis Accords as a tool of cooperation. In P.J. Blount, Tanja Masson-Zwaan, Rafael Moro-Aguilar, Kai-Uwe Schrogl (Eds.), *Proceedings of the International Institute of Space Law 2021*. The Hague, Netherlands: Eleven.

Chapter author. The “law of the horse” for outer space? What “space law” is, and why it is important to educate space lawyers. In R.A. Stefanski (Ed.), *Salius Publica Suprea Lex*. Warsaw, Poland: Lazarski.

Chapter author. Italy and the implementation of international space law. In G. Ardito et al. (Eds.), *Liber Amicorum Sergio Marchisio – Il diritto della comunità internazionale tra caratteristiche strutturali e tendenze innovative*. Naples, Italy: Editoriale Scientifica.

**Ng’ang’a Wahu-Müchiri** **English**

Author. *Writing on the Soil: Land and Landscape in Literature from Eastern and Southern Africa*. Ann Arbor, MI: University of Michigan Press.

**Jennifer Weisbrod** **Agronomy and Horticulture**

Editor, with Sam Polly, Greg Puckett. *Best Management Practices*. Lincoln, NE: UNL Printing Services.

**Amanda L. Witte** **Nebraska Center for Research on Children, Youth, Families and Schools**

Chapter author, with S. Andrew Garbacz, Susan M. Sheridan. Preparing the school mental health workforce to engage in partnership approaches to address children’s needs. In S. Evans, J. Owens, C. Bradshaw, M. Weist (Eds.), *Handbook of School Mental Health: Innovations in Science and Practice (3rd Ed.)*. New York, NY: Springer.

## Recognitions and Honors

Faculty who have been elected to honor academies or who have received national or international honors or awards

July 1, 2022–June 30, 2023

Submitted by faculty, chairs/heads or deans

### Raymond Hames

National Academy of Sciences

### Anthropology

### Margaret Jacobs

American Academy of Arts and Sciences

### History

### James Van Etten

National Academy of Sciences

### Plant Pathology

### Jonis Agee

Literary Contribution Award, Mountain Plains Library Association

### English

### Katie Anania

Short-term Research Fellowship, Beinecke Rare Book and Manuscript Library, Yale University

### Art, Art History and Design

### Katherine Ankersen

2022 AIA Nebraska Architectural Design | Educator Award, American Institute of Architects Nebraska

### Architecture/Academic Affairs

### Cory Armstrong

Outstanding Woman in Journalism and Mass Communication, Association for Education in Journalism and Mass Communication

### Journalism and Mass Communications

### Sohrab Asgarpour

Midwest Section Outstanding Campus Representative Award, American Society for Engineering Education

### Electrical and Computer Engineering

### Hamid Bagheri

Best Paper Award, IEEE Technical Council on Software Engineering, Formal Methods Europe, SIGSOFT

### Computing

Distinguished Paper Award, Association for Computing Machinery, SIGSOFT

### Lindsey Bahe

Fellowship, Angelo Donghia Foundation

### Interior Design

### Shannon Bartelt-Hunt

Nebraska Champion for Engineering Award, American Council of Engineering Companies

### Civil and Environmental Engineering

### Andrea Basche

Early Career Award, American Society of Agronomy

### Agronomy and Horticulture

### Rick Bevins

Fellow, Society for Research on Nicotine and Tobacco

### Psychology

### Andréia Bianchini

Edith A. Christensen Award for Outstanding Contributions in Analytical Methodology, Cereals and Grains Association

### Food Science and Technology

### Humberto Blanco

Shirley H. Phillips Distinguished Lecture in No-Till Agriculture Award, University of Kentucky

### Agronomy and Horticulture

### Kristen Blankley

Pro Bono Honor Roll, Association of American Law Schools

### Law

Associate Fellow, American Institute of Aeronautics and Astronautics

### Chelsea Brisbin

Terri Lynne Lokoff Teacher Award, First Up Champions for Early Education

### Child, Youth and Family Studies

### Kelsy Burke

Fellow, Public Religion Research Institute

### Sociology

### Cheryl Burkhart-Kriesel

Creative Excellence Award, National Association of Community Development Extension Professionals

### Nebraska Extension/ Agricultural Economics

### Michael Burton

Best Animation (with William G. Thomas, Kwakiutl Dreher), Prince George's Film Festival

### Textiles, Merchandising and Fashion Design

### Bertrand Clarke

Fellow, International Society for Bayesian Analysis

### Statistics

### Katelyn Coburn

New Professional Paper Award, National Council on Family Relations, Family Therapy Section

### Child, Youth and Family Studies



**Nathan Conner**

**Agricultural Leadership,  
Education and Communication**

Fulbright U.S. Scholar Award, Council for International Exchange of Scholars

**S. Carolina Córdova**

**Agronomy and Horticulture/  
Natural Resources**

Early Career Award, Long-term Agroecosystem Research Network

**Aziza Cyamani**

**Interior Design/Product Design**

Young Educator Award, Industrial Designers Society of America

Carnegie African Diaspora Fellowship, Institute of International Education/Carnegie Corporation of New York

**Kwame Dawes**

**English**

Order of Distinction in the Rank of Commander, Jamaica

Winner of 14th Annual Poetry Contest, *Narrative Magazine*

**Jeffrey L. Day**

**Architecture/Landscape Architecture**

Central States Region Honor Award for Interior Architecture, American Institute of Architects

Design Build Award, Association of Collegiate Schools of Architecture

Central States Region Honor Award, American Institute of Architects

Central States Region Honor Award for Architectural Detail, American Institute of Architects

Honor Award, Annual ARCHITECT Residential Architect Design Awards, *Architect Magazine*

**Dipti Dev**

**Child, Youth and Family Studies**

Early Professional Achievement Award, Society for Nutrition Education and Behavior

**Shudipto Dishari**

**Chemical and Biomolecular Engineering**

Early Investigator Award, American Chemical Society's Division of Polymeric Materials: Science and Engineering

Accelerator Core Concept Award, Women in Engineering ProActive Network

**Kwakiutl Dreher**

**English**

WORLDING Incubator Fellow, Unity Charitable Fund, the Unity for Humanity Program, and the Co-Creation Studio at MIT Open Documentary Lab

Best Animation (with **William G. Thomas**, **Michael Burton**), Prince George's Film Festival

**Bruce Dvorak**

**Civil and Environmental Engineering**

Industrial Assessment Center of the Year (with **Robert Williams**, **Karen Stelling**), U.S. Department of Energy

**Richard Endacott**

**Johnny Carson School of Theatre and Film**

Best Short Screenplay, Snake Alley Festival of Film

Best Short Script, Copa Shorts Film Festival

**Ronald K. Faller**

**Midwest Roadside Safety Facility/  
Civil and Environmental Engineering**

Fellow, National Academy of Inventors

**Sheri Fritz**

**Earth and Atmospheric Sciences/  
Biological Sciences**

Visiting Professorship, Brazilian Ministry of Education

**Crystal Garcia**

**Educational Administration**

Dr. Charles Eberly Oracle Award, Association of Fraternity/Sorority Advisors

**Roch Gaussoin**

**Agronomy and Horticulture**

Green Section Award, United States Golf Association

**Phil Geib**

**Global Integrative Studies (Anthropology)**

Byron Cummings Award, Arizona Archaeological and Historical Society

**Troy Gilmore**

**Natural Resources**

Communication Award for Educational Video Recordings, National Association of County Agricultural Agents

**Priscilla Grew**

**Earth and Atmospheric Sciences (emerita)/  
University of Nebraska State Museum**

President's Medal, Geological Society of America

**Mark A. Griep**

**Chemistry**

The Estee Lecture in Chemical Education Research, University of South Dakota Department of Chemistry

**David Hage**

**Chemistry**

Award for Distinguished Contributions in Education, International Federation of Clinical Chemistry and Laboratory Medicine

**Lindsay J. Hastings**

**Agricultural Leadership,  
Education and Communication**

SAGE Outstanding Scholar Award, Association of Leadership Educators

Distinguished Workshop, Association of Leadership Educators

Outstanding Practice Paper Award, Association of Leadership Educators

Outstanding Research Poster Award, Association of Leadership Educators

**Holly Hatton-Bowers**

**Child, Youth and Family Studies**

Outstanding Engagement Award, Association of Public and Land-grant Universities Board on Human Sciences

Infant and Early Childhood Mental Health Emerging Leadership Award in Research, ZERO TO THREE

**Eileen Hebets**

**Biological Sciences**

Outstanding Woman in STEM Award, Nebraska Women in STEM Conference

**Gary Hein**

**Entomology**

Service to Agriculture Award, National Alliance of Independent Crop Consultants

**Terry Hejny**

**Nebraska LEAD Program**

2022 Outstanding International Leadership Program Director, International Association of Programs for Agricultural Leadership

**Mark Hoistad**

**Architecture**

TRIAD Award, Council of Educators in Landscape Architecture

**Shavonna Holman**

**Educational Administration**

Distinguished Professional Achievement Award, College of Education, Health and Human Sciences–University of Nebraska at Omaha

**George Hunt**

**Civil and Environmental Engineering**

2023 Nebraska Champion for Engineering Award, American Council of Engineering Companies

**Margaret Jacobs**

**History**

Heartland Emmy: Diversity/Equity/Inclusion Program Award, National Academy of Television Arts and Sciences' Heartland Chapter

**Anna Jaffe**

**Psychology**

APS Rising Star, Association for Psychological Science

**Amit Jhala**

**Agronomy and Horticulture/Nebraska Extension**

U.S. Herbicide Resistance Action Committee Herbicide Resistance Management Award, Weed Science Society of America

Superior Paper Award – Information Technology, Sensors and Control Systems, American Society of Agricultural and Biological Engineers

**Mary Ann Johnson**

**Nutrition and Health Sciences**

Fellow, American Society for Nutrition

**Valerie K. Jones**

**Advertising and Public Relations**

Best Article of the Year, *Journal of Advertising Education*

**Shawn Kaskie**

**Nebraska Extension**

Excellence in Teamwork Award, National Association of Community Development Extension Professionals

**Casey Kelly**

**Communication Studies**

Franklyn S. Haiman Award for Distinguished Scholarship in Freedom of Expression, National Communication Association

**Oleh Khalimonchuk**

**Biochemistry**

Fellow, American Association for the Advancement of Science

**Ciera E. Kirkpatrick**

**Advertising and Public Relations**

Emerging Scholar, Association for Education in Journalism and Mass Communication

**Srivatsan Kidambi**

**Chemical and Biomolecular Engineering**

2023 Science Outside the Lab Program, NSF-funded Nanotechnology Collaborative Infrastructure Southwest and the National Nanotechnology Coordinated Infrastructure Coordinating Office

**Stevan Z. Knezevic**

**Agronomy and Horticulture**

Fellow, North Central Weed Science Society

**Jody Koenig Kellas**

**Communication Studies**

Bernard J. Brommel Award for Outstanding Scholarship or Distinguished Service in Family Communication, National Communication Association

**Alok Kumar**

**Marketing**

Louis W. Stern Award, American Marketing Association

**Jen Landis**

**Art, Art History and Design**

Excellence in Education–Mayor's Art Awards, Lincoln Arts Council

**John Lindquist** **Agronomy and Horticulture**  
Outstanding Research Award, Weed Science Society of America

**Joe Louis** **Entomology**  
Plant-Insect Ecosystem's Recognition Award in Entomology,  
Entomological Society of America

**Joe Luck** **Biological Systems Engineering**  
Superior Paper Award – Machinery Systems, American Society of  
Agricultural and Biological Engineers

**Elsbeth Magilton** **Law/Space, Cyber, and Telecommunications Law**  
NExt Pioneer Fellowship, Nebraska Tech Collaborative

**Kristin Malek** **Nutrition and Health Sciences/  
Nebraska Extension**  
Bob Dallmeyer Educator of the Year Award, International Association  
of Exhibitions and Events  
Excellence in Teaching Award, International Council on Hotel,  
Restaurant and Institutional Education

**Martha Mamo** **Agronomy and Horticulture**  
Fellow, American Society of Agronomy

**Barney R. McCoy** **Broadcasting**  
On-Location Best of Show Award: Faculty News and Sports  
Competition, Broadcast Education Association  
On-Location Best of Show Award: Faculty Audio Competition,  
Broadcast Education Association  
Best of Competition in Radio Hard News Reporting: Faculty News  
Competition, Broadcast Education Association Festival of Media Arts  
Eric Sevareid Award, First Place: Soft Feature Medium Market Radio,  
Midwest Broadcast Journalists Association  
Edward R. Murrow Regional Award for Small Market Radio Feature  
Reporting, Radio Television and Digital News Association  
Edward R. Murrow Regional Award for Excellence in Small Market  
Radio Sound, Radio Television and Digital News Association

**Carla McCullough** **Natural Resources/Nebraska Extension**  
Communication Award for Educational Video Recordings, National  
Association of County Agricultural Agents

**L.J. McElravy** **Agricultural Leadership,  
Education and Communication**  
Distinguished Practice Paper Award, Association of Leadership  
Educators

**Deborah Minter** **English/Women's and Gender Studies**  
Kenneth Bruffee Award, Council of Writing Program Administrators

**Alakananda Mitra** **Nebraska Water Center**  
Outstanding Early Stage Doctoral Student Award, Department of  
Computer Science and Engineering, University of North Texas

**Max Perry Mueller** **Classics and Religious Studies**  
Public Scholar Fellowship, National Endowment for the Humanities

**Amy Napoli** **Child, Youth and Family Studies**  
Educational Aids Blue Ribbon Award (with Jaci Foged, Leanne  
Manning, Tiffany Messer, Sarah Roberts, Becky Schuerman, Lee  
Sherry, Jackie Steffen, Karen Wedding, LaDonna Werth), American  
Society of Agricultural and Biological Engineers

**Maital Neta** **Psychology**  
Fellow, Association for Psychological Science

**Stanislava Nikolova** **Finance**  
Excellence in Reviewing Award, *Journal of Risk and Insurance*

**Charles Chioma Nwaizu** **Food Science and Technology**  
Fellowship, the Carnegie African Diaspora Fellowship Program,  
Carnegie Corporation of New York

**Kendra L. Ordia** **Interior Design**  
Teaching Excellence Award, Interior Design Educators Council

**Katie Pekarek** **Natural Resources/Nebraska Extension**  
Communication Award for Educational Video Recordings, National  
Association of County Agricultural Agents

**Sophia Perdikaris** **Global Integrative Studies (Anthropology)**  
Alumni Achievement Award, City University of New York's Graduate  
Center

**Brent Plugge** **Nebraska Extension**  
Distinguished Service Award, National Association of County  
Agricultural Agents

**Jo Potuto** **Law**  
2023 Law and Sports Award, Association of American Law Schools  
Section on Law and Sports

**Wei Qiao** **Electrical and Computer Engineering**  
Senior Member, National Academy of Inventors

**Xin Qiao** **Biological Systems Engineering**  
Superior Paper Award – Information Technology, Sensors and Control  
Systems, American Society of Agricultural and Biological Engineers

**Mark Riley** **Engineering**  
Fellow, Institute of Biological Engineering

**Julia Schleck** **English**  
Intellectual Freedom Award, National Council of Teachers of English

**Amy Millmier Schmidt** **Biological Systems Engineering**  
Educational Aids Blue Ribbon Award (with **Rick Koelsch**), American  
Society of Agricultural and Biological Engineers

**James Schnable** **Agronomy and Horticulture**  
Fellow, German PhenoRob Cluster of Excellence

**Karina Schoengold** **Agricultural Economics/  
Nebraska Water Center**  
President, Western Agricultural Economics Association

**Bonita Sharif** **Computing**  
Best Paper Award, International Conference on Formal Methods in  
Software Engineering

**Chungwook Sim** **Civil and Environmental Engineering**  
T.Y. Lin Award (with co-authors Maher Tadros, David Gee and Michael  
Assad), American Society of Civil Engineers

**Ash Eliza Smith** **Johnny Carson Center for Emerging Media Arts/  
Art, Art History and Design**  
WORLDING Incubator Fellow, Unity Charitable Fund, the Unity  
for Humanity Program, and the Co-Creation Studio at MIT Open  
Documentary Lab

**Troy Smith** **Management**  
Top 50 Undergraduate Business Professors of 2022, *Poets&Quants*

**Jim Specht** **Agronomy and Horticulture (emeritus)**  
Larry Tonniges Research Achievement Award, Nebraska Soybean  
Board

**Shari Stenberg** **English/Women's and Gender Studies**  
Kenneth Bruffee Award, Council of Writing Program Administrators

**Ryan Sullivan** **Law**  
2022 Pro Bono Leaders (along with volunteers from Nebraska Law),  
American Bar Association Free Legal Answers

**Daniel Tannenbaum** **Economics**  
Best Paper Award, *American Economic Journal: Applied Economics*,  
American Economics Association

**William G. Thomas** **History**  
Best Animation (with **Kwakiutl Dreher**, **Michael Burton**), Prince  
George's Film Festival

**Jason Tuller** **Nebraska Extension**  
Educational Materials Award, National Association of Community  
Development Extension Professionals

**Eric Unrau** **Child, Youth and Family Studies**  
Sally Wysong Award, Lincoln Association for the Education of Young  
Children

**Mehmet Can Vuran** **Computing**  
Superior Paper Award – Information Technology, Sensors and Control  
Systems, American Society of Agricultural and Biological Engineers

**Rebecca Wachs** **Biological Systems Engineering**  
*JOR Spine* Early Career Award, Orthopaedic Research Society  
Young Innovator of Cellular and Molecular Bioengineering Award,  
Biomedical Engineering Society

**Jian Wang** **Mechanical & Materials Engineering**  
Brimacombe Medalist, Minerals, Metals and Materials Society

**Lily Wang** **Durham School of Architectural  
Engineering and Construction**  
'Women Engineers You Should Know,' *SWE Magazine*, Society of  
Women Engineers

**Kristy Weissling**

**Special Education and  
Communication Disorders**

Recognition of Service Award, Nebraska Speech-Language-Hearing Association

**Matthew Williamson**

**Civil and Environmental Engineering**

Nebraska Champion for Engineering Award, American Council of Engineering Companies

**Richard Wilson**

**Plant Pathology**

Fellow, American Association for the Advancement of Science

**Yiqi Yang**

**Textiles, Merchandising and Fashion Design**

Olney Medal for Outstanding Achievement in Textile Science, American Association of Textile Chemists and Colorists

## Publications in Scholarly Journals

Faculty who have published in peer-reviewed scholarly journals or publications considered scholarly in their field

July 1, 2022–June 30, 2023

UNL co-authors designated in red

(Co-authors identified by those who submitted articles for inclusion)

Submitted by faculty, chairs/heads or deans

### Roberto Abadie **Global Integrative Studies (Anthropology)/ Sociology**

With P. Habecker, K.G. Carrasco, K.S. Chiou, S. Fernando, S.J. Bennett et al. Employing respondent driven sampling (RDS) to recruit people who inject drugs (PWID) and other hard-to-reach populations during COVID-19: Lessons learned. *Front Psychiatry*. Oct. 13, 2022.

With M. Cano, P. Habecker, C. Gelpi-Acosta. Substance use, injection risk behaviors, and fentanyl-related overdose risk among a sample of PWID post-Hurricane Maria. *Harm Reduction Journal*. Nov. 24, 2022.

“The drug sellers were better organized than the government”: A qualitative study of participants’ views of drug markets during COVID-19 and other big events. *International Journal of Environmental Research and Public Health*. Jan. 11, 2023.

With S.J. Bennett, C.A. Davila, K.G. Carrasco, S. Fernando, K.S. Chiou et al. Immune profiling in Puerto Rican injection drug users with and without HIV-1 infection. *Journal of Leukocyte Biology*. April 13, 2023.

“I don’t want to die”: A qualitative study of coping strategies to prevent fentanyl-related overdose deaths among people who inject drugs and its implications for harm reduction policies. *Harm Reduction Journal*. June 14, 2023.

### Dena Abbott **Educational Psychology**

With Rin Nguyen, Carrie Bohmer, Millie Myers, Jessica Boyles, Caitlin Mercier. The Us in uterus: A collaborative autoethnography of psychologists advocating for reproductive justice. *Psychology of Women Quarterly*. April 19, 2023.

With Hali Santiago. Rural atheists in the United States: A critical grounded theory investigation. *Journal of Counseling Psychology*. April 27, 2023.

### Michael S. Adamowicz **Food Science and Technology**

With Ema H. Graham, Peter C. Angeletti, Jennifer L. Clarke, Samodha C. Fernando, Joshua R. Herr. Genome sequence of feline papillomavirus strain P20 assembled from metagenomic data from the skin of a house cat owner. *Microbiology Resource Announcements*. July 5, 2022.

With Taylor N. Rambo, Jennifer L. Clarke. Internal validation of MaSTR™ probabilistic genotyping software for the interpretation of 2-5 person mixed DNA profiles. *Genes*. Aug. 11, 2022.

With Ema H. Graham, Wesley A. Tom, Alison C. Neujahr, Jennifer L. Clarke, Joshua R. Herr, Samodha C. Fernando. The persistence and stabilization of auxiliary genes in the human skin virome. *Virology Journal*. March 22, 2023.

With Morgan L. Korzik, Josep De Alcaraz-Fossoul, David San Pietro. Preliminary study: DNA transfer and persistence on non-porous surfaces submerged in spring water. *Genes*. May 6, 2023.

### Sam A. Allgood **Economics**

With K. McGoldrick. Teaching before and during COVID-19: A survey. *The Journal of Economic Education*. April 1, 2023.

### Muhammad Naveed Aman **Computing**

With Ahsanullah Memon, Mohd Wazir Bin Mustafa, Zohaib Hussain Laghari et al. Internal model control (IMC)-based active and reactive power control of brushless double-fed induction generator with notch filter. *International Transactions on Electrical Energy Systems*. July 18, 2022.

With Farrukh Hafeez, Usman Ullah Sheikh, Asif Iqbal. Incoherent and online dictionary learning algorithm for motion prediction. *Electronics*. Oct. 29, 2022.

With Muhammad M. Fayyaz, Irtaza M. Syed, Yi Meng. Comprehensive predictive control model for a three-phase four-legged inverter. *Energies*. March 11, 2023.

With James Adu Ansere, Mohsin Kamal, Izaz Ahmad Khan. Dynamic resource optimization for energy-efficient 6G-IoT Ecosystems. *Sensors*. May 12, 2023.

With Xiao Wei, Biplab Sikdar. A light-weight technique to detect GPS spoofing using attenuated signal envelopes. *IEEE Open Journal of the Computer Society*. May 22, 2023

**John E. Anderson****Economics**

With Seth H. Giertz, Shafiu N. Shimul. Reducing property taxes for agriculture: Diffusion of use-value assessment policy across the United States. *Land Use Policy*. Sept. 22, 2022.

Introduction to special issue: Split-rate taxation. *Public Finance Review*. Nov. 1, 2022.

**Peter Angeletti****Biological Sciences**

With **Ema H. Graham, Michael S. Adamowicz, Jennifer L. Clarke, Samodha C. Fernando, Joshua R. Herr**. Novel feline papillomavirus isolate P20 assembled from metagenomic data isolated from human skin. *Microbiology Resource Announcements*. July 11, 2022.

**Özgür M. Araz****Supply Chain Management and Analytics**

With U.E. Arslan, H. Ozcebe, S. Uner et al. Body image dissatisfaction among school children in Turkey and its potential effect on body esteem. *The Turkish Journal of Pediatrics*. Jan. 30, 2023.

With M. Lash, **S. Sajeesh**. Predicting mobility using limited data during early stages of a pandemic. *Journal of Business Research*. March 1, 2023.

With L. Brittin, A. Ramirez, T. Huang. An agent-based simulation model for testing novel obesity interventions in school environment. *IEEE Transactions on Engineering Management*. Aug. 1, 2023.

**Cory L. Armstrong****Journalism and Mass Communications**

With Anna Grace Usery. Do you see what I see? How media choice and visual tornado cues influence individual storm preparation. *Weather, Climate, and Society*. Dec. 1, 2022.

**Audrey Atkin****Biological Sciences**

With **C. Boone, D. Gutzmann, J. Kramer, K.W. Nickerson**. Quantitative assay for farnesol and aromatic fusel alcohols from the fungus *Candida albicans*. *Applied Microbiology*. Sept. 15, 2022.

**Hamid Bagheri****Computing**

With **M. Alhanahnah, C. Stevens**, B. Chen, Q. Yan. IoTCom: Dissecting interaction threats in IoT systems. *IEEE Transactions on Software Engineering*. April 1, 2023.

**Edward Balistreri****Economics**

With F. Baquedano, J.C. Beghin. The impact of COVID-19 and associated policy responses on global food security. *Agricultural Economics*. Nov. 4, 2022.

With X. He, G.H. Kim, W. Zhang. A general equilibrium assessment of COVID-19's labor productivity impacts on China's regional economies. *Journal of Productivity Analysis*. Dec. 1, 2022.

With D. Tarr. Mathematics of generalized versions of the Melitz, Krugman, and Armington models with detailed derivations. *Journal of Global Economic Analysis*. Dec. 19, 2022.

With M. Brown. Calibrating constant elasticity of substitution technologies to bottom-up cost estimates. *Journal of Global Economic Analysis*. June 1, 2023.

**Raul G. Barletta****Veterinary Medicine and Biomedical Sciences**

With **I.T. Sakalliglu, A.S. Maroli, A. De Lima Leite, D.D. Marshall, B. Evans, D.K. Zinniel, P. Dussault, R. Powers**. Multi-omics investigation into the mechanism of action of an anti-tubercular fatty acid analogue. *Journal of the American Chemical Society*. Nov. 11, 2022.

With **J.P. Bannantine, T. Gupta, D.K. Zinniel, A. Hikal, F.D. Quinn**. Use of a ferret model to test efficacy and immunogenicity of live attenuated *Mycobacterium avium subspecies paratuberculosis* vaccines. *Methods in Molecular Biology*. Nov. 25, 2022.

With **A. Pattnaik, B.R. Sahoo, L.R. Struble, G.E.O. Borgstahl, Y. Zhou, R. Franco, F.A. Osorio, T.M. Petro**. Ferritin nanoparticle-based Zika virus vaccine candidate induces robust humoral and cellular immune responses and protects mice from lethal virus challenge. *Vaccines (Basel)*. April 10, 2023.

With **J.P. Bannantine, J.R. Stabel, E. Muthukrishnan, D.K. Anderson, E. Dutta, V. Manthena, M. Hanafy, D.K. Zinniel**. *Mycobacterium avium subsp. paratuberculosis* candidate vaccine strains are pro-apoptotic in RAW 264.7 murine macrophages. *Vaccines (Basel)*. June 10, 2023.

**Steven M. Barlow****Special Education and Communication Disorders/  
Center for Brain, Biology and Behavior/  
Biological Systems Engineering**

With C. Liao, J. Lee, S. Kim et al. Spectral features of NNS dynamics in extremely preterm infants. *Pediatric Medicine*. March 8, 2023.

**Amy Bartels****Management**

With A.C. Lennard, B.A. Scott, S.J. Peterson. Stopping surface-acting spillover: A transactional theory of stress perspective. *Journal of Applied Psychology*. March 1, 2023.

**Erin C. Bauer****Entomology**

With **Charles Murietta, Larry Barksdale**. Teaching forensic entomology with common grocery items: Decomposition and insect succession studies. *Journal of Forensic Science Education*. June 2, 2023.

**Christopher Bilder****Statistics**

Alpha seminar: A course for new graduate students in statistics. *The American Statistician*. July 1, 2022.

**Erin E. Blankenship****Statistics**

With Ella M. Burnham, **Sydney E. Brown**. Designing a large, online simulation-based introductory statistics course. *Journal of Statistics and Data Science Education*. March 8, 2023.

**Kristen M. Blankley****Law**

A muddy mess: The Supreme Court's jurisprudence on jurisdiction for arbitration matters. *University of Miami Law Review*. May 5, 2023.

**Kelli S. Boling****Advertising and Public Relations**

With D. Slakoff, E. Tadros. "I just couldn't cope with it, you know? I just couldn't believe that she was gone": The portrayal of co-victims' grief in true crime podcasts about missing (and presumed killed) women. *Journal of Family Violence*. Dec. 1, 2022.

"I'm not a journalist. I don't think that I necessarily fall under the same rules that they do": Journalistic ethics in true crime podcast production. *Ethical Space*. Dec. 5, 2022.

**Eve M. Brank****Psychology/Center on Children, Families and the Law**

With Katherine P. Hazen. Identifying and unpacking the role of social identity in moderating evaluations of police-civilian interactions. *Journal of Police and Criminal Psychology*. Jan. 14, 2023.

**Chad E. Brassil****Biological Sciences**

With George R. Wheeler, Johannes M.H. Knops. Functional traits' annual variation exceeds nitrogen-driven variation in grassland plant species. *Ecology*. Feb. 1, 2023.

**Kati Brazeal****Biological Sciences**

With D.L. Kirkwood-Watts, E.K. Bremers, E.A. Robinson, B.A. Couch. Revisiting clickers: In-class questions followed by at-home reflections are associated with higher student performance on related exam questions. *Journal of Microbiology & Biology Education*. Aug. 23, 2022.

With A.M. Upchurch, D.L. Kirkwood-Watts, L.A. Wheeler, B.A. Couch et al. Access to online formative assessments in lower-division undergraduate biology courses: Investigating barriers to student engagement. *CBE—Life Sciences Education*. Dec. 1, 2022.

**John Brunero****Philosophy**

Practical reasons, theoretical reasons, and permissive and prohibitive balancing. *Synthese*. Sept. 1, 2022.

Rationality and normativity. *International Encyclopedia of Ethics*. Sept. 1, 2022.

The extended theory of instrumental rationality and means-ends coherence. *Philosophical Inquiries*. Feb. 1, 2023.

**Anthony Bushard****Glenn Korff School of Music**

Creating interactive content for the 21st century music student: Reinvigorating text development in the foundational course and beyond. *College Music Symposium*. Nov. 15, 2022.

**Heriberto Cerutti****Biological Sciences**

With Y. Li, E.-J. Kim, A. Voshall, **E.N. Moriyama**. A novel class of small RNAs associates with Argonaute1 and is up-regulated by nutrient deprivation in the alga *Chlamydomonas*. *Plant Cell*. March 22, 2023.

**Heng Chen****Supply Chain Management and Analytics**

With J.K. Ryan. Optimal specialty crop planning policies with yield learning and forward contract. *Production and Operations Management*. Feb. 1, 2023.

**Mun Yuk Chin****Educational Psychology**

With Mindi N. Thompson. Social class concealment: A daily diary study of college students with low income. *Journal of Diversity in Higher Education*. March 27, 2023.

**Natalie Chisam****Marketing**

With Leigh McAlister, Frank Germann, Pete Hayes et al. A taxonomy of marketing organizations. *Journal of the Academy of Marketing Science*. Dec. 16, 2022.

**Alan Christensen****Biological Sciences**

With M. Rodriguez, A. Martinez-Hottovy, A.C. Christensen. Social networks in the single cell. *Invited Insight*. Sept. 12, 2022.

**S. Carolina Córdova****Agronomy and Horticulture/  
Natural Resources**

With W. Eaton, M. Burnham, T. Robertson et al. Advancing scholarship and practice of stakeholder engagement in working landscapes: A co-produced research agenda. *Socio-Ecological Practice Research*. Oct. 13, 2022.



**Brian Couch****Biological Sciences**

With D.L. Kirkwood-Watts, E.K. Bremers, E.A. Robinson, K.R. Brazeal. Revisiting clickers: In-class questions followed by at-home reflections are associated with higher student performance on related exam questions. *Journal of Microbiology and Biology Education*. July 6, 2022.

With J.D. McAlpin, J.P. Ziker, J. Skvoretz et al. Development of the cooperative adoption factors instrument to measure factors associated with instructional practice in the context of institutional change. *International Journal of STEM Education*. July 16, 2022.

With P.C. Jimenez, D. Golick, J.M. Dauer. Developing and evaluating a pollination systems knowledge assessment in a multidisciplinary course. *International Journal of STEM Education*. Aug. 2, 2022.

With A.K. Lane, B. Earl, S. Feola et al. Context and content of teaching conversations: Exploring how to promote sharing of innovative teaching knowledge between science faculty. *International Journal of STEM Education*. Aug. 4, 2022.

With A.M. Upchurch, D.L. Kirkwood-Watts, L.A. Wheeler, K.R. Brazeal et al. Access to online formative assessments in lower-division undergraduate biology courses: Investigating barriers to student engagement. *CBE-Life Sciences Education*. Dec. 21, 2022.

**Elle Covington****University Libraries**

With Liana Petruzzi, Bonnie Ewald, Walter Rosenberg et al. Exploring the efficacy of social work interventions in hospital settings: A scoping review. *Social Work in Public Health*. July 27, 2022.

With Nicole Milano, Liana Petruzzi, Barbara Jones, Patricia A. Findley. Social workers in integrated care beyond primary care: A scoping review. *Translational Behavioral Medicine*. Nov. 1, 2022.

With Lainey Sevillano, Jose Paez. Restoring Kapwa: A systematic review of colonial mentality and Pilipinx American bio-psycho-social-spiritual well-being. *Asian American Journal of Psychology*. April 27, 2023.

**Lindsey B. Crawford****Biochemistry**

Human embryonic stem cells as a model for hematopoietic stem cell differentiation and viral infection. *Current Protocols*. Dec. 15, 2022.

Hematopoietic stem cells and betaherpesvirus latency. *Frontiers in Cellular and Infection Microbiology*. June 6, 2023.

**Clay Cressler****Biological Sciences**

With A.C. Pfenning-Butterworth, D.T. Nguyen, J.L. Hite. Circadian rhythms mediate infection risk in *Daphnia dentifera*. *Ecology and Evolution*. Sept. 9, 2022.

With J.P. DeLong. Stochasticity directs adaptive evolution toward nonequilibrium evolutionary attractors. *Ecology*. Sept. 18, 2022.

With R.O. Cooper, S. Tjards, J. Rischling, D.T. Nguyen. Multiple generations of antibiotic exposure and isolation influence host fitness and the microbiome in a model zooplankton species. *FEMS Microbiology Ecology*. Sept. 19, 2022.

**Aziza Cyamani****Interior Design/Product Design**

With Charles Chioma Nwaizu. Impacts of a transdisciplinary approach to practice-based learning on students' success skills. *IDEAS 2022: Proceedings of IDEAS 2022*. April 16, 2023.

**Rochelle L. Dalla****Child, Youth, and Family Studies**

With K. Roselius, S. Erwin, J. Peter et al. Sex trafficking among the Bedia of India: Defying the dominant human trafficking discourse. *Journal of Interpersonal Violence*. Feb. 13, 2022.

With K.M. Edwards, V. Mauer, K. Roselius, E. Camp, J. Marshall, M. Ybarra. Formative research to develop an mHealth app to prevent dating and sexual violence and alcohol use among high school youth. *American Journal of Community Psychology*. Nov. 9, 2022.

**Jennifer Davidson****Economics**

With B. Walstad. Long-term analysis of a savings program in elementary school. *Citizenship, Social and Economics Education*. Dec. 1, 2022.

**Kiyomi Deards****University Libraries**

With C. Hoeve. How libraries are funded: Transparency issues in student tuition and fees among ARL libraries. *Journal of New Librarianship*. May 17, 2023.

**John DeLong****Biological Sciences**

With Y. Islam, F.M. Shah, A. Guncan, X. Zhou. Functional response of *Harmonia axyridis* on the larvae *Spodoptera litura*: The combined effect of temperature and prey size. *Frontiers in Plant Science*. July 1, 2022.

**Leslie M. Delserone**

**University Libraries**

With Megan N. O'Donnell. Simple Darwin core for non-biologists. *Data Curation Network Primers*. May 23, 2023.

**Jessica R. Deters**

**Mechanical & Materials Engineering**

With Kirsten Davis, Desen Ozkan, James Davis, Homero Murzi. Exploring the process and outcomes of leading a study abroad program using real-time perspectives. *Frontiers: The Interdisciplinary Journal of Study Abroad*. Aug. 31, 2022.

With Teirra K. Holloman, Dustin Grote, Ashley R. Taylor, David B. Knight. Critically examining the role of habitus for minoritized students in a global engineering program. *Frontiers: The Interdisciplinary Journal of Study Abroad*. Nov. 18, 2022.

With Kirsten Davis, Teirra K. Holloman, David B. Knight. Student researchers abroad: Understanding student narratives through the theoretical lens of person-environment fit. *Studies in Engineering Education*. Feb. 27, 2023.

With Teirra K. Holloman, Ashlee Pearson, David B. Knight. Understanding United States and Australian engineering education research (EER) contexts. *Australian Journal of Engineering Education*. March 7, 2023.

**Dipti A. Dev**

**Child, Youth and Family Studies**

With Irene Padasas, Carly Hillburn, Virginia C. Stage, David Dzewaltowski. Ecological approach to family-style, multilevel child care intervention: Formative evaluation using RE-AIM framework. *Journal of Nutrition Education and Behavior*. Aug. 1, 2022.

With Carly Hillburn, Jordan Luxa, Laura Lessard et al. Implementation of federal waivers for feeding children in early care and education during the COVID-19 pandemic. *Journal of Nutrition Education and Behavior*. Oct. 1, 2022.

With Saima Hasnin, Tirna Purkait, Taren Swindle et al. Systematic review of reflection spectroscopy-based skin carotenoid assessment in children. *Nutrients*. March 7, 2023.

**Angela M. Dietsch**

**Special Education and  
Communication Disorders/  
Center for Brain, Biology and Behavior**

With R. Mulheren, R. Westemeyer. The effect of taste on swallowing: A scoping and systematic review. *Critical Reviews in Food Science and Nutrition*. Aug. 29, 2022.

With R. Mocarski, D.A. Hope, N. Woodruff, M. McKelvey. Revisiting the rainbow: Culturally responsive updates to a standard clinical resource. *American Journal of Speech-Language Pathology*. Nov. 10, 2022.

With R. Westemeyer, D.H. Schultz. Taste stimulation and brain activity: A mechanism for neuroplastic change? *Brain and Behavior*. March 1, 2023.

With R. Westemeyer. Comparing taste perception across modalities: Liquids versus dissolvable taste strips. *Dysphagia*. May 27, 2023.

**Shudipto Dishari**

**Chemical and Biomolecular Engineering**

With S. Chatterjee, O.A. Obewhere, E. Zamani et al. Advancing ionomer design to boost interfacial and thin-film proton conductivity via styrene-calix[4]arene-based ionomers. *Cell Reports Physical Science*. Feb. 15, 2023.

With K.A. Cerda, G. Purohit, M. Kathol et al. Cationic lignin as an efficient and bio-renewable antimicrobial material. *ACS Sustainable Chemical Engineering*. July 3, 2023.

**Liangcheng Du**

**Chemistry**

With H. Yue. Function of a pathway-associated major facilitator superfamily gene *hsaf-orf1* in the biosynthesis of the antifungal HSAF in *Lysobacter enzymogenes*. *Tetrahedron*. Nov. 23, 2022.

With J. Luo, X. Li, H. Wang, et al. Identification and characterization of the 28-N-methyltransferase involved in HSAF analogue biosynthesis. *Biochemistry*. Dec. 9, 2022.

With W. Han, Y. Zhai, R. Zhang et al. Triciractones A-H, potent antiosteoporosis macrolides with distinctive ring skeletons from *Trichocladium crispatum*, an alpine moss-associated fungus. *Angewandte Chemie International Edition*. March 6, 2023.

With X. Li, Q. Liu, H. Zou et al. Discovery and biosynthesis of pseudoamides reveals enzymatic cyclization of the polyene precursor to 5-5 bicyclic tetramate macrolactams. *ACS Catalysis*. March 24, 2023.

With A. Miller, S. Li, C.D. Eichhorn, Y. Zheng. Identification and biosynthetic study of the siderophore lysochelin in the biocontrol agent *Lysobacter enzymogenes*. *Journal of Agricultural and Food Chemistry*. May 9, 2023.

### **Brittany Duncan**

### **Computing**

With J.M. Peschel, R.R. Murphy. Design and field evaluation of a mission specialist interface for small unmanned aerial systems. *International Journal on Social Robotics*. Sept. 15, 2022.

With P. Fletcher, A. Luther, C. Detweiler. Predicting visual differentiability for unmanned aerial vehicle gestures. *IEEE Robotics and Automation Letters*. Sept. 15, 2022.

### **Bruce Dvorak**

### **Civil and Environmental Engineering**

With M. Sherief, J.M. Asad, B. Bunker et al. In-situ desorption of hydrogen sulphide from activated carbon: Effect of temperature, pH and flowrate. *International Journal of Environmental Science and Technology*. Feb. 20, 2023.

With B. Bunker, A. Aly Hassan. Thermal regeneration of activated carbon used as an adsorbent for hydrogen sulfide (H<sub>2</sub>S). *Sustainability*. April 10, 2023.

### **Robert Dyer**

### **Computing**

With Samuel W. Flint, Jigyasa Chauhan. Pitfalls and guidelines for using time-based Git data. *Empirical Software Engineering*. Oct. 6, 2022.

With Jigyasa Chauhan. An exploratory study on the predominant programming paradigms in Python code. *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*. Nov. 16, 2022.

With Samuel W. Flint. Performing large-scale mining studies: From start to finish. *Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*. Nov. 18, 2022.

With Ali M. Keshk. Method chaining redux: An empirical study of method chaining in Java, Kotlin, and Python. *Proceedings of the 20th International Conference on Mining Software Repositories*. May 15, 2023.

### **Ronald K. Faller**

### **Midwest Roadside Safety Facility/ Civil and Environmental Engineering**

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**Elsbeth Magilton** **Law/  
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## CMS COLLABORATION:

Ken Bloom, Dan Claes,  
Frank Golf, Ilya Kravchenko et al.

Physics and Astronomy

The CMS Collaboration comprises more than 4,000 particle physicists, engineers, computer scientists, technicians and students from around 200 institutes and universities from more than 40 countries.

The collaboration operates and collects data from the Compact Muon Solenoid, one of the general-purpose particle detectors at CERN's Large Hadron Collider in Geneva, Switzerland.

In keeping with CERN's commitment to open access for high-energy physics, the scientific results from CMS are shared openly with the world. A number of faculty members in UNL's Department of Physics and Astronomy are part of the CMS Collaboration and have contributed to an impressive body of literature over the past year.

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Azimuthal anisotropy of dijet events in PbPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV. *Journal of High Energy Physics*. Oct. 15, 2022.

Proton reconstruction with the CMS-TOTEM Precision Proton Spectrometer. *Journal of Instrumentation*. Oct. 12, 2022.

Search for a heavy composite Majorana neutrino in events with dilepton signatures from proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Physics Letters B*. Oct. 6, 2022.

Search for new heavy resonances decaying to  $WW$ ,  $WZ$ ,  $ZZ$ ,  $WH$ , or  $ZH$  boson pairs in the all-jets final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Physics Letters B*. Sept. 30, 2022.

Search for pair production of vector-like quarks in leptonic final states in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. Sept. 15, 2022.

Search for exotic Higgs boson decays  $H \rightarrow AA \rightarrow 4\gamma$  with events containing two merged diphotons in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Physical Review Letters*. Sept. 13, 2022.

Search for new physics using effective field theory in 13 TeV pp collision events that contain a top quark pair and a boosted Z or Higgs boson. *Physical Review D*. Aug. 26, 2022.

Measurement of the Higgs boson inclusive and differential fiducial production cross sections in the diphoton decay channel with pp collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. Aug. 25, 2022.

Search for pair-produced vector-like leptons in final states with third-generation leptons and at least three b quark jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Physics Letters B*. Aug. 20, 2022.

Measurement of the cross section of top quark-antiquark pair production in association with a W boson in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. Aug. 12, 2022.

Measurement of the  $t\bar{t}$  charge asymmetry in events with highly Lorentz-boosted top quarks in pp collisions at  $\sqrt{s} = 13$  TeV. *Physics Letters B*. Aug. 4, 2022.

Searches for additional Higgs bosons and for vector leptoquarks in  $t\bar{t}$  final states in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. Aug. 4, 2022.

Search for CP violation in  $t\bar{t}H$  and  $tH$  production in multilepton channels in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. Aug. 4, 2022.

Search for the exotic decay of the Higgs boson into two light pseudoscalars with four photons in the final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. Aug. 2, 2022.

Measurement of inclusive and differential cross sections for single top quark production in association with a W boson in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. Aug. 1, 2022.

Search for the Higgs boson decay to a pair of electrons in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Physics Letters B*. July 30, 2022.

Measurement of the top quark pole mass using  $t\bar{t}$ -jet events in the dilepton final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. July 5, 2022.

Search for direct pair production of supersymmetric partners of  $\tau$  leptons in the final state with two hadronically decaying  $\tau$  leptons and missing transverse momentum in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Physical Review D*. July 5, 2022.

Search for a charged Higgs boson decaying into a heavy neutral Higgs boson and a W boson in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. July 4, 2022.

A portrait of the Higgs boson by the CMS experiment ten years after the discovery. *Nature*. July 4, 2022.

Search for nonresonant Higgs boson pair production in the four leptons plus two b jets final state in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. June 22, 2022.

Search for Higgs boson pairs decaying to  $WWWW$ ,  $WW\tau\tau$ , and  $\tau\tau\tau\tau$  in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. June 21, 2022.

Search for resonant and nonresonant production of pairs of dijet resonances in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *Journal of High Energy Physics*. June 21, 2022.

Measurements of the Higgs boson production cross section and couplings in the  $WW$  boson pair decay channel in proton-proton collisions at  $\sqrt{s} = 13$  TeV. *European Physical Journal C*. June 20, 2022.

## Presentations at Professional Conferences

Faculty who have presented at professional conferences  
July 1, 2022–June 30, 2023

*UNL co-presenters designated in red*

*(identified by those who submitted items for inclusion)*

*Submitted by faculty, chairs/heads or deans*

### Muhammad Naveed Aman

### Computing

Presenter/speaker, with Uzair Javaid, Zhen Li, Dongxu Shao et al. Blockchain-based secure group data collaboration in Cloud with differentially private synthetic data and trusted execution environment. International Conference on Big Data, IEEE. Osaka, Japan. Dec. 17-20, 2022.

Presenter/speaker, with Mirza Athar Baig. Hardware fingerprinting of phasor measurement units for data provenance. Power and Energy Society Innovative Smart Grid Technologies Conference, IEEE. Washington, D.C. Jan. 16-19, 2023.

### Ikuho Amano

### Modern Languages and Literatures

Presenter/speaker. Whisky from a different shore: Taketsuru Masataka's frontier spirit and Japan's cultivation of global markets. Midwest Conference on Asian Affairs, University of Kansas. Lawrence, KS. Sept. 16-18, 2022.

Presenter/speaker. An impresario of Japanese whisky: Suntory's advertisements as *mise en scène* of modern consumers. Association for Japanese Literary Studies Annual Meeting. Pittsburgh, PA. May 12-14, 2023.

### John E. Anderson

### Economics

Presenter/speaker. Render unto Caesar: Religiosity and tax morale. Association for the Study of Religion, Economics, and Culture European Conference. London, UK. Oct. 21-22, 2022.

Presenter/speaker. Confidence in the World Bank and IMF: Alignment of individual beliefs and institutional policies. European Public Choice Society Conference. Hannover, Germany. March 22-25, 2023.

### Cory L. Armstrong

### Journalism and Mass Communications

Presenter/speaker. Are you watching or warning? Effects of weather terminology comprehension on storm preparation. Association for Education in Journalism and Mass Communication Annual Conference. Detroit, MI. Aug. 5-8, 2022.

Presenter/speaker. Twisted up about potential tornados? Examining factors that amplify one's need for information. Broadcast Association Annual Conference. Las Vegas, NV. April 15-18, 2023.

### Hamid Bagheri

### Computing

Presenter/speaker, with Guolong Zheng, ThanhVu Nguyen, Simón Gutiérrez Brida et al. ATR: Template-based repair for alloy specifications. International Symposium on Software Testing and Analysis, Association for Computing Machinery's Special Interest Group on Software Engineering. Daejeon, South Korea. Virtual. July 18-22, 2022.

Presenter/speaker, with Clay Stevens. Combining solution reuse and bound tightening for efficient analysis of evolving systems. International Symposium on Software Testing and Analysis, Association for Computing Machinery's Special Interest Group on Software Engineering. Daejeon, South Korea. Virtual. July 18-22, 2022.

Presenter/speaker, with Simón Gutiérrez Brida, Germain Regis, Guolong Zheng et al. ICEBAR: Feedback-driven iterative repair of alloy specifications. International Conference on Automated Software Engineering, Institute of Electrical and Electronics Engineers/ Association for Computing Machinery. Oakland Center, MI. Oct. 10-14, 2022.

Presenter/speaker, with Clay Stevens. Parasol: Efficient parallel synthesis of large model spaces. Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Association for Computing Machinery. Singapore. Nov. 14-18, 2022.

Presenter/speaker, with N. Mansoor, E. Kang, B. Sharif. An empirical study assessing software modeling in alloy. International Conference on Formal Methods in Software Engineering, Institute of Electrical and Electronics Engineers/Association for Computing Machinery. Melbourne, Australia. May 14-18, 2023.

### Raul G. Barletta

### Veterinary Medicine and Biomedical Sciences

Presenter/speaker, with J.R. Stabel, D.K. Zinniel, E. Muthukrishnan, A. Turner, J.P. Bannantine. Development and testing of *Mycobacterium avium subsp. paratuberculosis* DIVA vaccines in ruminants. Conference of Research Workers in Animal Diseases. Chicago, IL. Jan. 22-24, 2023.

Presenter/speaker, with S. Thapa, S. Sreevatsan, J.P. Bannantine. RNA-sequencing characterization of differentially expressed genes in *Mycobacterium paratuberculosis* FUR mutant under iron stress. Conference of Research Workers in Animal Diseases. Chicago, IL. Jan. 22-24, 2023.

**Steven M. Barlow** **Special Education and Communication Disorders/  
Center for Brain, Biology and Behavior/  
Biological Systems Engineering**

Presenter/speaker. Somatosensory-modulated suck dynamics, transition to oral feeds, and gene expression in extremely preterm infants. California Association of Neonatologists, UCLA. San Diego, CA. March 3-5, 2023.

Panel discussion moderator, with Emily Zimmerman, Pamela Dodrill. The importance of tracking functional feeding outcomes in the newborn period and throughout childhood. Pediatric Academic Society Conference. San Diego, CA. March 28-30, 2023.

Presenter/speaker. Neonatal feeding club: Data pipeline, time/frequency domain analytics for NNS and transition to oral feeds in EPIs. Pediatric Academic Society Conference. Washington, D.C. April 28-30, 2023.

**Eric Berger** **Law**

Presenter/speaker. National crises and the impotent constitution. Loyola Constitutional Law Colloquium, Loyola University Chicago School of Law. Chicago, IL. Nov. 4-5, 2022.

Presenter/speaker. Is this still Scalia's court?: The evolution of conservative legal thought. Cardozo Eighth Amendment Workshop, Cardozo Law School, Yeshiva University. New York, NY. April 21, 2023.

**Nathan Bick** **Interior Design**

Presenter/speaker, with **Lindsey Bahe**. When (not) in Rome: Global collaborative curriculum development. Interior Design Educators Council. Vancouver, BC, Canada. March 8-11, 2023.

**Christopher Bilder** **Statistics**

Presenter/speaker, with Joshua Tebbs, Christopher McMahan. A mixed effects Bayesian regression model for multivariate group testing data. Eastern North American Region Spring Meeting, International Biometric Society. Nashville, TN. March 19-22, 2023.

Presenter/speaker, with Minh Nguyen, Joshua Tebbs, Christopher McMahan. Expected number of stages for hierarchical group testing algorithms. Eastern North American Region Spring Meeting, International Biometric Society. Nashville, TN. March 19-22, 2023.

Presenter/speaker, with Minh Nguyen, Joshua Tebbs, Christopher McMahan. A new metric to evaluate algorithm complexity for group testing. Western North American Region Annual Meeting, International Biometric Society and Institute of Mathematical Statistics. Anchorage, AK. June 18-21, 2023.

**Kelli S. Boling** **Advertising and Public Relations**

Presenter/speaker. "I'm not a journalist. I don't think that I necessarily fall under the same rules that they do.". Journalistic ethics in true crime podcast production. Investigating True Crime and the Media Conference. Newcastle University, UK. June 23, 2022.

Presenter/speaker, with Allison Schlosser, Roma Subramanian, **Ciera E. Kirkpatrick**, Jessica Hample, **Valerie Jones**. #NarcansavesLives: Digital assembly and the social construction of a public health intervention. Health Humanities Consortium. Cleveland, OH. March 16-19, 2023.

Presenter/speaker, with Allison Schlosser, Roma Subramanian, **Ciera E. Kirkpatrick**, Jessica Hample, **Valerie Jones**. #NarcansavesLives: Strength and solidarity in youth digital activism in an overdose crisis. Harm Reduction International Conference. Melbourne, Australia. April 16-19, 2023.

**Mia Bourek** **Bureau of Sociological Research**

Presenter/speaker. The effects of sequential incentives on response rate and sample composition. American Association for Public Opinion Research Annual Conference. Philadelphia, PA. May 10-12, 2023.

**Anita Breckbill** **University Libraries**

Presenter/speaker. A bird in Iowa, a bird in Bohemia: Dvořák and birdsong. International Association of Music Libraries, Archives and Documentation Centres Congress. Prague, Czech Republic. July 24-29, 2022.

Presenter/speaker. Communication in a library building project: In the room where it happens. Mountain-Plains Music Library Association Annual Meeting. Norman, OK. May 19-20, 2023.

**Gabriel Bruguier** **University Libraries**

Presenter/speaker, with Juan Chindoy, Melinda Yeomans. Lakota language revitalization and the meaning of life. Society for the Advancement of American Philosophy Annual Meeting. Denver, CO. March 9-11, 2023.

Presenter/speaker, with Susana Geliga, Melinda Yeomans. Lakota language revitalization and the meaning of life. Pacific Division Meeting, American Philosophical Association. San Francisco, CA. April 5-8, 2023.

**Stephen M. Buhler****English**

Presenter/speaker. Liminalities in Kit Surrey's and Bill Alexander's scenic collaborations for *Troilus and Cressida*: Washington, D.C., 1992. Virtual Conference on Representing Pasts/Envisioning Futures, Architecture Media Politics Society. Online. Dec. 1, 2022.

**Anthony Bushard****Glenn Korff School of Music**

Presenter/speaker. "What to do over the week-end": Towards an understanding of distraction, advertising, and newspaper coverage of the Kansas City jazz scene in the 1930s. National Meeting of the American Musicological Society. Chicago, IL. Online. Nov. 11-21, 2021.

**Heng Chen****Supply Chain Management and Analytics**

Presenter/speaker. Outcome-based pricing for precision agriculture services. Production and Operations Management Society Annual Meeting. Orlando, FL. May 21-26, 2023.

Presenter/speaker. Outcome-based pricing for precision agriculture services. INFORMS Manufacturing and Service Operations Management Society Conference. Montreal, Canada. June 24-26, 2023.

**Juan Cui****Computing**

Presenter/speaker, with Zeynep Hakguder, **Weiwen Chai**. Smart diet management through food image and cooking recipe analysis. International Conference on Bioinformatics and Biomedicine, Institute of Electrical and Electronics Engineers. Las Vegas, NV. Dec. 6-8, 2022.

Presenter/speaker, with Roland Madadjim, Haluk Dogan. Computational learning of small RNA regulation in pancreatic cancer progression. International Conference on Bioinformatics and Biomedicine, Institute of Electrical and Electronics Engineers. Las Vegas, NV. Dec. 6-8, 2022.

**Andrea S. Cupp****Animal Science**

Presenter/speaker, with M.A. Abedal-Majed, A.F. Summers, B.E. Rudloff et al. Randel Lecture: Androgen excess domestic livestock models - What can they tell us about the mechanisms underlying anovulation? Southern Section Annual Meeting, American Society of Animal Science. Raleigh, NC. Jan. 21-24, 2023.

**Aziza Cyamani****Interior Design/Product Design**

Presenter/speaker, with Charles Chioma Nwaizu. Adapting practice-based learning in transdisciplinary teams to enhance student success skills. Transformative Teaching: Focus on Pedagogy 2022, Architecture Media Politics Society. Virtual. Nov. 15, 2022.

**Rochelle L. Dalla****Child, Youth and Family Studies**

Presenter/speaker. Human trafficking roundtable. Journal of Human Trafficking: Overview and Special Issues, Gallaudet University. Virtual. June 1, 2022.

Presenter/speaker, with **Kaitlin Roselius**, **Victoria J. Johnson**, **Jessie Peter** et al. "It just happens in our society": A life-course perspective of sex trafficking among the Bedia caste of India. National Council on Family Relations Annual Meetings. Fort Worth, TX. Nov. 1, 2022.

Presenter/speaker, with **Wayne Babchuk**, **Dawn O. Braithwaite**, **Katie M. Edwards** et al. Best practices for undertaking and publishing qualitative scholarship. World Conference on Qualitative Research. Virtual. Jan. 26-28, 2022.

Presenter/speaker, with **Katie Edwards**, **Janella Kang**. Sex trafficking among high schoolers: A multi-informant focus group study. Society for the Scientific Study of Social Issues Annual Meetings. Denver, CO. June 1, 2023.

**Erica DeFrain****University Libraries**

Presenter/speaker, with Leslie Sult. Paving the way or still charting a path: How are we measuring the learning effectiveness of library research guides? Education and Behavioral Sciences Section Annual Research Forum, Association of College and Research Libraries. Virtual. May 3, 2023.

**Jessica R. Deters****Mechanical & Materials Engineering**

Presenter/speaker, with Maya Menon, Maggie Webb. Exploring mechanical engineering student perspectives of academic integrity during COVID-19. Australasian Association for Engineering Education Conference. Sydney, Australia. Dec. 4-7, 2022.

Presenter/speaker, with Maya Menon, Margaret Webb, Malini Josiam. Universities as living laboratories: A comparative document analysis on university priorities, values, and strategies towards SDGs. International Conference on Engineering Education for Sustainable Development. Ft. Collins, CO. June 18-21, 2023.

Presenter/speaker, with **Emily Fitzpatrick**. Work in progress: A pilot study on faculty perceptions of the impact of COVID-19 on undergraduate engineering student readiness. American Society for Engineering Education Annual Conference and Exposition. Baltimore, MD. June 25-29, 2023.

Presenter/speaker, with **Nosakhare I. Idiaqhe**, **Yashin Brijmohan**, **Ibukunoluwa E. Salami**. Exploring mechanical engineering students' perceptions of preparedness for work. American Society of Engineering Education Annual Conference and Exposition. Baltimore, MD. June 25-29, 2023.

Presenter/speaker, with **Nosakhare I. Idiaghe**. Investigating the impact of a mechanical engineering undergraduate research experience on student learning. American Society of Engineering Education Annual Conference and Exposition. Baltimore, MD. June 25-29, 2023.

Presenter/speaker, with David B. Knight, Kirsten A. Davis, Nicole P. Sanderlin et al. Reimagining international research for students in a virtual world. American Society for Engineering Education Annual Conference and Exposition. Baltimore, MD. June 25-29, 2023.

### **Dipti A. Dev** **Child, Youth and Family Studies**

Presenter/speaker, with Megan Richmond, **Carly Hillburn**. Culturally responsive care in management of pediatric feeding and swallowing disorders. American Speech-Language-Hearing Association National Conference. Virtual. March 22-April 3, 2023.

Presenter/speaker, with **Carly Hillburn**, Stephanie Salazar. The ecological approach to family style: An online program to enhance childcare providers' responsive feeding practices and mealtime environments. Child Nutrition Conference, National Child and Adult Care Food Program Sponsors Association. San Diego, CA. April 10-14, 2023.

Presenter/speaker, with **Carly Hillburn**. A call to action for policy makers: Feeding young children during COVID-19. Child Nutrition Conference, National Child and Adult Care Food Program Sponsors Association. San Diego, CA. April 10-14, 2023.

### **Angela M. Dietsch** **Special Education and Communication Disorders/ Center for Brain, Biology and Behavior**

Presenter/speaker. Clinical competency and cultural responsiveness in gender affirming communication services. Nebraska Speech-Language-Hearing Association Fall Convention. Lincoln, NE. Oct. 14-15, 2022.

Presenter/speaker, with **Debra Hope**, Richard MocarSKI, Nathan Woodruff. Centering community voices in the development of gender affirming communication services. Great Plains IDeA-CTR Annual Meeting, NIH. Omaha, NE. Oct. 16-22, 2022.

Presenter/speaker, with Rachel Mulheren, **Ross Westemeyer**. Can taste help my patients swallow? A scoping and systematic review. American Speech-Language-Hearing Association Annual Convention. New Orleans, LA. Nov. 16-20, 2022.

Presenter/speaker, with **Cassidy Krawczak-Kummrow**, Michéllé McKelvey, **Debra Hope** et al. Community/provider perspectives for enhancing communication-related gender affirmation services. American Speech-Language-Hearing Association Annual Convention. New Orleans, LA. Nov. 16-20, 2022.

Presenter/speaker, with **Rahul Krishnamurthy**. Benchmarks and reliability testing of some commercially-available expiratory muscle strength training (EMST) devices. Annual Meeting of the Dysphagia Research Society. San Diego, CA. March 9-12, 2023.

### **Shudipto Dishari** **Chemical and Biomolecular Engineering**

Presenter/speaker. Understanding and manipulating the distribution of ion conduction environment across ionomeric thin materials. Advanced Light Source User Meeting. Berkeley, CA. Aug. 17, 2022.

### **Thomas Dotzel** **Marketing**

Presenter/speaker, with Venkatesh Shankar. The differential effects of good innovations, service innovations, and software innovations on firm value and firm risk for technology firms. Institute for the Study of Business Markets Academic Conference: Advances in B-to-B Markets. Chicago, IL. Aug. 10-11, 2022.

Presenter/speaker, with **Revanth Raghupatruni**, **Sunil Singh**. DEI events and firm value. Marketing Science: Diversity, Equity, and Inclusion Conference. Dallas, TX. March 24-25, 2023.

### **Robert Dyer** **Computing**

Presenter/speaker. An exploratory study on the predominant programming paradigms in Python code. Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Association for Computing Machinery. Singapore. Nov. 14-18, 2022.

### **Ronald K. Faller** **Midwest Roadside Safety Facility/ Civil and Environmental Engineering**

Presenter/speaker. AASHTO MASH, roadside safety features, breakaway devices, and recent research. Missouri Highway Safety and Traffic Conference, Show-Me Zero: Driving Missouri Toward Safer Roads. Columbia, MO. Sept. 27-29, 2022.

Presenter/speaker, with Akrum Abu-Odeh. Heavy vehicle impacts: An overview from a safety and an infrastructure perspective. International Road Federation Global R2T Conference and Exhibition. Washington, D.C. Oct. 31-Nov. 3, 2022.

### **Yilin Flothe** **Textiles, Merchandising and Fashion Design**

Presenter/speaker. Inspired by history: Apparel design students' use of extant artifacts to inspire contemporary design. Costume Society of America National Symposium. Salt Lake City, UT. May 24-27, 2023.

**Dana Fritz****Art, Art History and Design**

Presenter/speaker. Field guide to a hybrid landscape. Homecoming, Society for Photographic Education. Denver, CO. March 16-18, 2023.

Presenter/speaker. Field guide to a hybrid landscape: Deconstructing Nebraska's hand-planted forest. Nuevas Topografías Fotográficas: De Vuelatas con el Paisaje, Centro de Iniciativas Culturales de la Universidad de Sevilla. Seville, Spain. May 24-25, 2023.

**Sue A. Gardner****University Libraries**

Invited presenter. Comparison of library publishing workflows by open access. Challenges of Contemporary Publishing Conference, Lublin Technical University. Lublin, Poland. May 25-26, 2023.

**Nirimesh Ghose****Computing**

Presenter/speaker, with Haipeng Li, Kaustubh Gupta, Chenggang Wang, Boyang Wang. RadioNet: Robust deep-learning based radio fingerprinting. Conference on Communications and Network Security, Institute of Electrical and Electronics Engineers. Austin, TX. Oct. 3-5, 2022.

Presenter/speaker, with Truc T. Duong, Anna Wisniewska. Decentralized rogue node detection in fair bio-inspired dynamic spectrum access networks. International Conference on Computational Intelligence and Communication Networks, Institute of Electrical and Electronics Engineers. Al-Khobar, Saudi Arabia. Dec. 4-6, 2022.

Presenter/speaker, with Kaustubh Gupta, Boyang Wang. RADTEC: Re-authentication of IoT devices with machine learning. Consumer Communications and Networking Conference, Institute of Electrical and Electronics Engineers. Las Vegas, NV. Jan. 8-12, 2023.

**Melissa Gomis****University Libraries**

Presenter/speaker, with Alison Lehner-Quam, Amy James, Christina Jones et al. Future proofing the framework with social justice, metacognition, and digital literacy. Association of College and Research Libraries Conference. Pittsburgh, PA. March 15-18, 2023.

**Priscilla C. Grew****Earth and Atmospheric Sciences (emerita)/  
University of Nebraska State Museum**

Keynote speaker. GSA President's Medal Lecture: Water and coal development impacts on the Navajo Nation assessed by the interdisciplinary Lake Powell research project 1971-1977. GSA Connects 2022, Geological Society of America. Denver, CO. Oct. 9-12, 2022.

**Mark A. Griep****Chemistry**

Keynote speaker. Alien biochemistry and extraterrestrial minerals in the movies. Nebraska Science Olympiad. Lincoln, NE. April 22-23, 2022.

Keynote speaker. Put some movie Wow! in your chemistry classroom. European Chemistry Society Congress. Lisbon, Portugal. Aug. 28-Sept. 1, 2022.

**Frauke Hachtmann****Advertising and Public Relations/  
Sports Media and Communication**

Presenter/speaker, with Thomas Horky. Internationalization of a professional American sports league: Examining the NFL's marketing strategy and KPIs in Germany. International Association for Communication and Sport Summit. Barcelona, Spain. March 9-11, 2023.

Presenter/speaker. When the world stood still: Crisis response advertising during the COVID-19 pandemic. American Academy of Advertising Conference. Denver, CO. March 24-26, 2023.

**Becky Haddad****Agricultural Leadership,  
Education and Communication**

Presenter/speaker, with Lavayne L. Rada, Amy R. Smith. Measuring mobility: A quantitative description of teacher mobility in Minnesota. American Association for Agricultural Education National Conference. Raleigh, NC. May 15-18, 2023.

Presenter/speaker, with Jonathan J. Velez, Haden Botkin, Josh Stewart et al. That's not in my position description: A discourse analysis of SBAE migratory context. American Association for Agricultural Education National Conference. Raleigh, NC. May 15-18, 2023.

Presenter/speaker, with Jonathan J. Velez, Haden Botkin, Josh Stewart et al. One without the other: Contextualizing mobility through discourse analysis. American Association for Agricultural Education National Conference. Raleigh, NC. May 15-18, 2023.

Presenter/speaker, with Rebecca Mott. A call to better qual: A philosophical and methodological examination to advance phenomenological research. American Association for Agricultural Education National Conference. Raleigh, NC. May 15-18, 2023.

**Ling Harris****Accountancy**

Presenter/speaker. Investors' judgments of managers' complex accounting estimation choices: The role of descriptor identicalness and investor knowledge. Hawaii Accounting Research Conference, University of Hawaii. Honolulu, HI. Jan. 1-5, 2023.



## Lindsay J. Hastings

### Agricultural Leadership, Education and Communication

Presenter/speaker, with Hannah Sunderman. Building a training and development intervention for peer leaders: Consideration vs. structure. Association of Leadership Educators Annual Conference. Kansas City, MO. June 26-29, 2022.

Presenter/speaker, with David Rosch. Avoiding the seven deadly sins of leadership education research and evaluation. Association of Leadership Educators Annual Conference. Kansas City, MO. June 26-29, 2022.

Presenter/speaker, with Hannah Sunderman. Forced innovation: Mentoring for leadership development in virtual environments. Association of Leadership Educators Annual Conference. Kansas City, MO. June 26-29, 2022.

Presenter/speaker, with Hannah Sunderman. Theory-driven approaches to targeting socially responsible leadership in emerging adults: Commitment. Association of Leadership Educators Annual Conference. Kansas City, MO. June 26-29, 2022.

Presenter/speaker, with **Mary Emery**, Dave Peters, **Jordan Grummert-Rasmussen**. Imagining future possibilities for community leadership development. Community Development Society Conference. Virtual. July 17-20, 2022.

Presenter/speaker, with Julie Owen, Susan Komives, V. Chunoo et al. A research agenda for leadership learning and development through higher education. International Leadership Association Global Annual Conference. Washington, D.C. Oct. 13-16, 2022.

Presenter/speaker, with Hannah Sunderman. Developing a psychometric measure of the Leadership Identity Development (LID) model: Item generation. International Leadership Association Global Annual Conference. Washington, D.C. Oct. 13-16, 2022.

Presenter/speaker. Managing diverse talents and perspectives both in professional and personal contexts. Women in Ag Conference, Nebraska Extension. Kearney, NE. Feb. 23-24, 2023.

Presenter/speaker, with **Justine Yeo**, **Shawn Kaskie**. Momentum shifts in community change for rural prosperity. Connecting Entrepreneurial Communities Conference, Nebraska Extension. Valentine, NE. June 8-9, 2023.

Presenter/speaker. Transfer of leadership in rural communities. Connecting Entrepreneurial Communities Conference, Nebraska Extension. Valentine, NE. June 8-9, 2023.

## Ellen Hebden

### Glenn Korff School of Music

Presenter/speaker. Innovating through beauty: Mobilities and the expansion of Tufo in Mozambique. International Council of Traditional Music World Conference. Lisbon, Portugal. July 21-27, 2022.

Presenter/speaker. Women's Tufo dancing, discourses of talent, and the gendered politics of mobility in Mozambique. Music, Migration and Mobility: An Interdisciplinary International Conference, Royal College of Music. London, UK. Online. Sept. 12-14, 2022.

Presenter/speaker. Rejuvenation through remembering: Sonic care at night clubs for the aging in northern Mozambique. American Anthropological Association Annual Meeting. Seattle, WA. Nov. 9-13, 2022.

Presenter/speaker. Women's Tufo dancing, discourses of talent, and the gendered politics of mobility in Mozambique. British Forum for Ethnomusicology Annual Conference. Edinburgh, Scotland. April 13-16, 2023.

## Mary Beth Hilbers

### Music Education

Presenter/speaker. The effect of group singing and socioeconomic status on fifth-grade students' affective well-being. Music Education Convention, Big 10 Academic Alliance. Chicago, IL. Oct. 19-21, 2022.

## Michael Hoff

### Art, Art History and Design

Presenter/speaker, with Dennis Murphy. The bath buildings of Antiochia ad Cragum. A story of Roman bathing, coin hoards, mosaics and dead bodies in Rough Cilicia. Bathing Culture in Budapest: Frontinus Society on the History of Water Management and Hydraulic Engineering International Conference. Budapest, Hungary. Sept. 8-15, 2022.

Presenter/speaker. Latrines and humor: A mosaic with altered mythological themes from Antiochia ad Cragum in Rough Cilicia, Turkey. Colloque de l'Association Internationale pour l'Étude de la Mosaïque Antique (AIEMA), La Mosaïque en Context. Lyon, France. Oct. 17-21, 2022.

Presenter/speaker. The coastal road of western Rough Cilicia during the Roman Empire. International Cilician Archaeology Symposium, Research Center for Cilician Archaeology, Mersin University. Mersin, Turkey. Online. Oct. 27-28, 2022.

Presenter/speaker. Early travelers to Antiochia. Antiochia ad Cragum in Rough Cilicia: Recent Work/Further Insights, Suna & İnan Kırac Research Institute for Mediterranean Civilizations/Koç University. Istanbul, Turkey. Online. April 8, 2023.

**Danielle C. Jefferis****Law**

Presenter/speaker. Carceral competencies. ComplianceNet 2022, University of Amsterdam, Amsterdam Law School. Amsterdam, Netherlands. July 7-8, 2022.

Presenter/speaker. Carceral competencies. Courts as an Arena of Social Change: Conference of the Research Group on Institutions for Conflict Resolution, Leiden University, Leiden Law. Leiden, Netherlands. July 8-9, 2022.

Presenter/speaker. Carceral deference. Academy for Justice Workshop, American Bar Association, Association of American Law Schools. Virtual. Dec. 2-3, 2022.

Panel discussion participant. Carceral deference. Berkeley Center on Comparative Equality and Anti-Discrimination Law Annual Conference, Utrecht University. Utrecht, Netherlands. June 28-30, 2023.

**Jennifer Johnson Jorgensen****Textiles, Merchandising  
and Fashion Design**

Presenter/speaker, with **Melisa Spilinek**. Teaching diversity and equity in merchandising the omnichannel product assortment and retail workspace. International Textile and Apparel Association Annual Conference. Denver, CO. Oct. 26-29, 2022.

Presenter/speaker, with **Melisa Spilinek**. Motivations to collect: How consumers are socialized to build product collections. International Textile and Apparel Association Annual Conference. Denver, CO. Oct. 26-29, 2022.

Presenter/speaker, with **Melisa Spilinek**. Consumption or crafting: A Disney fandom pilot netnography. International Textile and Apparel Association Annual Conference. Denver, CO. Oct. 26-29, 2022.

Presenter/speaker, with Sandra Sydnor, Virginia Zuiker, Cynthia Jasper. Wealth and well-being: Perceptions from family-owned and diverse businesses during the COVID-19 pandemic. United States Association for Small Business and Entrepreneurship Annual Conference. Tallahassee, FL. Jan. 18-22, 2023.

**Valerie K. Jones****Advertising and Public Relations**

Presenter/speaker. Voice technology: The role of intelligent agents in improving aging adults' quality of life. Mobile Me&You Conference, University of Illinois Urbana-Champaign/Northwestern University/University of Nebraska-Lincoln. Lincoln, NE. Oct. 21-22, 2022.

Presenter/speaker. The hows and whys of studying public sentiment in social media. Midwest Public Health Innovation and Research Expo, University of Nebraska Medical Center, Great Plains IDEa-CTR. Omaha, NE. Oct. 28, 2022.

Presenter/speaker, with **Jessica Fargen Walsh**. The only woman I can tell to shut up: Exploring continued personal voice assistant use among older, socially isolated adults during the pandemic. Association for Education in Journalism and Mass Communication Conference. Detroit, MI. Aug. 3-6, 2022.

**Oleh Khalimonchuk****Biochemistry**

Presenter/speaker. Redox-dependent modulation of mitochondrial sculpting. Gordon Research Conference on Thiol-based Redox Regulation and Signaling, Gordon Research Conferences and NIH. Castelldefels (Barcelona), Spain. July 10-15, 2022.

Presenter/speaker. Mechanisms linking mitochondrial membrane architecture and heme metabolism. International Symposium: Unraveling Mysteries of Heme Metabolism, NIH. Cape Town, South Africa. April 17-21, 2023.

**Dane Kiambi****Advertising and Public Relations**

Presenter/speaker. Public relations in Africa: The emerging role of social media in Kenya. International Public Relations Research Conference. Orlando, FL. March 2-4, 2023.

**Taeyeon Kim****Educational Administration**

Presenter/speaker, with A. Ishimaru. "What's your story?" Asian diasporic researcher journeys toward equity scholarship in leadership. University Council for Educational Administration Convention. Seattle, WA. Nov. 17-20, 2022.

Presenter/speaker, with S.B. Jang. Fabricating future education to survive in the unpredictable market: National curriculum revision in South Korea. Comparative International Education Society Annual Meeting. Washington, D.C. Feb. 18-22, 2023.

Presenter/speaker, with S.J. Park, M. Yang. Complicating "learning gap" discourse: Korean teachers' response during COVID-19. Comparative International Education Society Annual Meeting. Washington, D.C. Feb. 18-22, 2023.

Presenter/speaker, with S.B. Jang. Unfreezing citizens and reconstructing curriculum-making: Deliberative national curriculum revision experiment in South Korea. American Educational Research Association Annual Meeting. Chicago, IL. April 13-16, 2023.

Presenter/speaker, with S.B. Jang, J.K. Jung, M.H. Son, S.Y. Lee. Negotiating Asian-American identities: Collaborative self-study of Korean immigrant scholars' reading group on AsianCrit. American Educational Research Association Annual Meeting. Chicago, IL. April 13-16, 2023.

Presenter/speaker, with J.K. Jung, S.B. Jang, S.Y. Lee, M.H. Son. Navigating Asianization: Korean transnationals' racialized experiences in the U.S. Korean Association for Multicultural Education Conference. Seoul, South Korea. May 18-20, 2023.

### **Ciera E. Kirkpatrick** **Advertising and Public Relations**

Presenter/speaker, with **Kelli Boling**, **Patrick Habecker**, **Valerie Jones** et al. #NarcansavesLives: Digital assembly and social construction of a public health intervention. Health Humanities Consortium, Case Western Reserve University School of Medicine and Cleveland Clinic Lerner College of Medicine. Cleveland, OH. March 16-19, 2023.

Presenter/speaker, with **Kelli Boling**, **Patrick Habecker**, **Valerie Jones** et al. #NarcansavesLives: Strength and solidarity in youth digital activism in an overdose crisis. Harm Reduction International Conference. Melbourne, Australia. April 16-19, 2023.

Presenter/speaker, with Sungkyoung Lee. The effects of motherhood comparison: Social comparison orientation and self-esteem as moderators on new mothers' perceived parental competence and life satisfaction. International Communication Association Conference. Toronto, Canada. May 25-29, 2023.

Presenter/speaker, with Sisi Hu, Namyoon Lee, Yoorim Hong, Sungkyoung Lee, Amanda Hinnant. TikTok as a clinical trial recruitment tool? Effects of message source and framing on participation behavior. International Communication Association Conference. Toronto, Canada. May 25-29, 2023.

### **Alok Kumar** **Marketing**

Presenter/speaker, with **Ravi Agarwal**. Regulatory focus in key accounts: The buyer's perspective. Institute for the Study of Business Markets Academic Conference: Advances in B-to-B Markets. Chicago, IL. Aug. 10-11, 2022.

Presenter/speaker, with **Ravi Agarwal**, Abe Masato, Joseph P. Cannon. Buyer's involvement in developing supplier capabilities: The role of specialized investments. Summer Educators' Conference, American Marketing Association. Chicago, IL. Aug. 12-14, 2022.

Presenter/speaker. Engaging external stakeholders - Offshore outsourcing. Winter Educators' Conference, American Marketing Association. Nashville, TN. Feb. 10-12, 2023.

### **Yingchao Lan** **Supply Chain Management and Analytics**

Presenter/speaker. Tackling deepfakes through the torts of misappropriation and right of publicity. Media Law and Policy Scholars Conference. Online. Jan. 12-13, 2023.

Presenter/speaker. 2023 telecom update (privacy). Broadcast Education Association Conference. Las Vegas, NV. April 15-18, 2023.

Panel discussion participant. Evolving electronic media law and technology. Broadcast Education Association Conference. Las Vegas, NV. April 15-18, 2023.

Presenter/speaker. Survival of the fittest? Factors explaining the continued success of local TV news. World Media Economics and Management Conference. Seoul, South Korea. May 15-18, 2023.

Presenter/speaker. Primary care, preventive care, and healthcare delivery efficiency. Production and Operations Management Society Annual Meeting. Orlando, FL. May 21-26, 2023.

### **Lisa Lenz** **Special Education and Communication Disorders**

Presenter/speaker, with **Emma Arthur**, **Suzanne Kemp**, **Jay Jeffrie**, **Kristy Weissling**. Interprofessional practice and education: Measuring SLP and SPED student attitudes. Nebraska Speech-Language-Hearing Association Annual Convention. Lincoln, NE. Oct. 14-15, 2022.

Presenter/speaker, with **Adrienne Pitt**. Supporting speech-language pathology master's degree students with a mentorship program. American Speech-Language-Hearing Association Annual Convention. New Orleans, LA. Nov. 17-19, 2022.

Presenter/speaker, with **Suzanne Kemp**, **Kristy Weissling**. A collaborative practicum design: Interprofessional clinical teams in speech-language pathology and special education. American-Speech-Language-Hearing Association Annual Convention. New Orleans, LA. Nov. 17-19, 2022.

### **Yijia Lin** **Finance**

Presenter/speaker. Defense in competition: Multimarket and structural effects of firm-specific competition on risk transfer. Peking University College of Economics Department of Risk Management and Insurance 30th Anniversary Celebration Research Conference. Beijing, China. May 25, 2023.

## Kate Lyons

## Biological Sciences

Presenter/speaker. Changes in small mammal relative abundance distributions and energy flow following the terminal Pleistocene extinction. Gordon Conference on Unifying Ecology Across Scale, Southern New Hampshire University. Manchester, NH. July 31-Aug. 5, 2022.

Presenter/speaker. Changes in small mammal abundance distributions following the loss of large mammal ecosystem engineers at the terminal Pleistocene. Geological Society of America Annual Meeting. Denver, CO. Oct. 15, 2022.

Presenter/speaker. Schrödinger's mammoth: Ecological assembly in the age of humans. Symposium on Synthesizing Biological Scaling: Towards a Universal Theory, Santa Fe Institute. Santa Fe, NM. Nov. 15, 2022.

## Andre F. Maciel

## Marketing

Presenter/speaker, with Abigail Nappier Cherup. The places where we exist: The power of recognition in servicescapes. Consumer Culture Theory Conference. Corvallis, OR. July 7-9, 2022.

Presenter/speaker. How can firms collectively turn place into competitive advantage? The case of terroir brands. Consumer Culture Theory Conference. Lund, Sweden. June 27-30, 2023.

## Arindam Malakar

## Nebraska Water Center/Natural Resources

Presenter/speaker, with Y. Ukwishaka, M. Kaiser, D.D. Snow, D.N. Miller, C. Ray. Redox driven transformation of nitrogen species across the vadose zone: Insights from column experiments. American Chemical Society National Symposium and Expo. Indianapolis, IN. March 26-30, 2023.

## Julia McQuillan

## Sociology

Panel discussion participant, with Trish Wonch Hill. Information capital, science salience, and accuracy of COVID-19 knowledge among youth in the U.S. Midwest. American Sociological Association Annual Meeting: Bureaucracies of Displacement. Los Angeles, CA. Aug. 5-9, 2022.

Panel discussion participant, with Michelle Phillips, Betsy Barent, Meghan Leadabrand, James Blake, Trish Wonch Hill. Partnering with a school district for sociology in 6th-12th STEM education. Midwest Sociological Society Annual Meeting. Minneapolis, MN. March 23-26, 2023.

Presenter/speaker, with Trish Wonch Hill. Bringing identity and social capital theories and research to 6-12th science and math teachers: Syllabi, course plans, and positive potential. Midwest Sociological Society Annual Meeting. Minneapolis, MN. March 23-26, 2023.

Presenter/speaker, with Trish Wonch Hill, Meghan Leadabrand, Amy N. Spiegel, Ash E. Smith, Sam Bendix et al. Worlds of Connections: Spreading knowledge and excitement about network science. NIH SciEd Conference, NIH-NIGMS. Washington, D.C. May 30-June 2, 2023.

Presenter/speaker, with Trish Wonch Hill. Implicit network science knowledge and awareness of social connections for health are relevant for pandemic precautions. Central IDeA States Regional Meeting, NIH-NIGMS. Kansas City, MO. June 7-9, 2023.

## Alakananda Mitra

## Nebraska Water Center

Presenter/speaker. iLog 2.0: A novel method for food nutritional value automatic quantification in smart healthcare. International Symposium on Smart Electronic Systems, Institute of Electrical and Electronics Engineers. Warangal, India. Dec. 18-22, 2022.

## Dan Novy

## Johnny Carson Center for Emerging Media Arts

Presenter/speaker. Artificial flavors to intelligence: Experience design across the senses. Rethink Eating 2022: What's Next for Chemical Senses Research? Aarhus Institute of Advanced Studies. Aarhus, Denmark. Nov. 15-16, 2022.

## David L. Olson

## Supply Chain Management and Analytics

Presenter/speaker. Management science modeling of risk in 21st century supply chains - The role of AI/machine learning. Hainan Symposium on Green Digital Intelligence Development, Economics and Management School, Chinese Academy of Sciences. Haikou, China. Sept. 30, 2022.

Presenter/speaker, with Bongsug Chae. Business analytics for supply chain: A dynamic-capabilities framework. Information Technology and Quantitative Management Conference, *International Journal of Information Technology and Decision Making*. Beijing, China. Dec. 11, 2022.

Keynote speaker, with Özgür Araz. Supply chain risk management. Alliance of International Science Organizations – B and R International Innovation and Development Institute Network. Beijing, China. Online. March 23, 2023.

Keynote speaker. Management science modeling of risk in the platform economy supply chain. Research on Market Mechanism, Operation Financing, and Risk Decision-making of the Platform Economy, Sino-Danish College, University of Chinese Academy of Sciences. Beijing, China. April 15-16, 2023.

Keynote speaker. Knowledge management in the big data era. Data Mining and Knowledge Management Discovery, Joint Conference on Information and Communication Engineering, Chongking University. Chongking, China. June 24-26, 2023.

**Kristen Olson****Sociology**

Presenter/speaker, with **Amanda Ganshert**. Remember, you can complete this survey online! Adding a web survey URL to the mail questionnaire cover in a mixed-mode general population survey. Midwest Association for Public Opinion Research Annual Meeting. Chicago, IL. Nov. 17-19, 2022.

Presenter/speaker, with John Stevenson, Nadia Assad, **Amanda Ganshert** et al. Examining variation in survey costs across survey design features. American Association for Public Opinion Research Annual Meeting. Philadelphia, PA. May 8-13, 2023.

**Kendra L. Ordia****Interior Design**

Presenter/speaker, with Ashley Stoner. Health and equity through biophilic design. EdSpaces Conference. Portland, OR. Nov. 2-4, 2022.

Presenter/speaker. The future of nature integration in the urban interior: Education, growth, and food resiliency. Interior Design Educators Council Annual Conference. Vancouver, BC, Canada. March 8-11, 2023.

Presenter/speaker, with **Nathan Bicak**. BioMateriality and the interior built environment. Interior Design Educators Council Annual Conference. Vancouver, BC, Canada. March 8-11, 2023.

**Ciara L. Ousley****Special Education and Communication Disorders**

Presenter/speaker, with Tracy J. Raulston, Christina Gilhuber. Effects of a parent-implemented intervention using strength-based video feedback coaching during playtime. Applied Behavior Analysis International Annual Conference. Denver, CO. May 26-29, 2023.

**Morgan E. Palmer****Classics and Religious Studies/  
Women's and Gender Studies**

Presenter/speaker. Superlative adjectives on inscriptions commemorating the Vestal Virgins: Convention and innovation. International Congress of Greek and Latin Epigraphy. Bordeaux, France. Aug. 9-Sept. 2, 2022.

Presenter/speaker. Transmediality and the goddess Vesta in Ovid's *Fasti*. Transmediality and the Classics, King's College. London, United Kingdom. June 29-30, 2023.

**John Parsi****Law**

Presenter/speaker. Sex equality and discrimination in sex testing of youth sports. American Society of Law, Medicine and Ethics - Health Law Professors Conference. Baltimore, MD. June 7-9, 2023.

**Nora M. Peterson****Modern Languages and Literatures**

Presenter/speaker. Reading the body at court: Diplomacy, performance, and the body. International Conference of the Society for Interdisciplinary French Seventeenth-Century Studies. Reykjavik, Iceland. Oct. 13-15, 2022.

Presenter/speaker. Technologies of the self in early modern women's writing: The case of Marguerite de Valois. Sixteenth Century Society Conference. Minneapolis, MN. Oct. 27-30, 2022.

Presenter/speaker. Intersections of corps and corpus in Marguerite de Navarre's *Heptaméron*. Equinoxes Conference, Brown University. Providence, RI. March 10-11, 2023.

**Brian A. Petrotta****Sports Media and Communication**

Keynote speaker, with Dr. Hiba Lopez-Gonzalez. Beyond betting: Media usage, risk behaviors and problematic sports betting in the U.S. International Association of Communication and Sport Annual Summit. Barcelona, Spain. March 9-11, 2023.

**Kenneth M. Price****English/Center for Digital  
Research in the Humanities**

Presenter/speaker, with **Kevin McMullen**, Stefan Schoeberlein. Whitman's trunk: Rethinking how Whitman composed. American Literature Association Convention. Boston, MA. May 25-28, 2023.

Presenter/speaker. Plagiarism, creative reuse, and the color line: Charles Chesnut's "How Dasy Came Through" and Harry Stillwell Edwards' "How Sal Came Through." Society for Textual Scholarship. New York, NY. June 1-3, 2023.

Presenter/speaker. Serial publications of the Walt Whitman Archive. Serial Circulation: Print Cultures and Periodical Modernities, DFG, German Research Foundation. Siegen, Germany. June 15-17, 2023.

## Heather Richards-Rissetto

## Global Integrative Studies (Anthropology)/Center for Digital Research in the Humanities

Presenter/speaker, with Zachary Day. Transcending virtuality? Multi-modal and multi-media experimentation. Computer Applications and Quantitative Methods in Archaeology, CAA International. Oxford, England. Aug. 8-11, 2022.

Presenter/speaker, with A. Bain, E. Gonzalez, R. Boger, S. Perdikaris. Retire to the country: Recent research at the Highland House Site, Antigua and Barbuda. Conference on Historical and Underwater Archaeology, Society of Historical Archaeology. Lisbon, Portugal. Jan. 4-7, 2023.

Presenter/speaker, with Amy E. Thompson. Subsistence in the peripheries: Modeling ancient Maya milpa cycles in western Honduras and southern Belize. Society for American Archaeology. Portland, OR. March 28-April 2, 2023.

Presenter/speaker, with Loa Traxler, Richard Wood, Christine Wittich et al. Documenting archaeological tunnels within the Copan Acropolis: Part 1: Advances in architectural and geospatial recording for conservation. Society for American Archaeology. Portland, OR. March 28-April 2, 2023.

Presenter/speaker, with Richard Wood, Christine Wittich, Luis Tuarez, Melvin Elisandro Garza Roldan. Documenting archaeological tunnels within the Copan Acropolis, Part 2: Geospatial data and structural modeling of Temple 16. Society for American Archaeology. Portland, OR. March 28-April 2, 2023.

Presenter/speaker, with David Newton, Sanyam Agrawal, Amy E. Thompson, Keith Prufer. 3D deep learning using airborne lidar for ancient Maya sites in tropical regions. Computer Applications and Quantitative Methods in Archaeology, CAA International. Amsterdam, Netherlands. April 3-6, 2023.

## Arman Roohi

## Computing

Presenter/speaker, with Ranyang Zhou, Durga Misra, Shaahin Angizi. Flexidram: A flexible in-DRAM framework to enable parallel general-purpose computation. International Symposium on Low Power Electronics and Design, Association for Computing Machinery/Institute of Electrical and Electronics Engineers. Boston, MA. Aug. 1-3, 2022.

Presenter/speaker, with Sepehr Tabrizchi, Shaahin Angizi. Design and evaluation of a robust power-efficient ternary SRAM cell. International Midwest Symposium on Circuits and Systems, Institute of Electrical and Electronics Engineers. Fukuoka, Japan. Aug. 7-10, 2022.

Presenter/speaker, with Minhaz Abedin, Nathaniel Cady, Shaahin Angizi. Work-in-progress: A processing-in-pixel accelerator based on multi-level HfOx ReRAM. International Conference on Compilers, Architecture, and Synthesis for Embedded Systems, Institute of Electrical and Electronics Engineers. Shanghai, China. Oct. 7-14, 2022.

Presenter/speaker, with Sepehr Tabrizchi, Shaahin Angizi. TizBin: A low-power image sensor with event and object detection using efficient processing-in-pixel schemes. International Conference on Computer Design, Institute of Electrical and Electronics Engineers. Olympic Valley, CA. Oct. 23-26, 2022.

Presenter/speaker, with Emily Lattanzio, Ranyang Zhou, Abdallah Khreishah et al. Toward a behavioral-level end-to-end framework for silicon photonics accelerators. International Green and Sustainable Computing Conference, Institute of Electrical and Electronics Engineers. Pittsburgh, PA. Oct. 24-25, 2022.

Presenter/speaker, with Ranyang Zhou, Durga Misra, Shaahin Angizi. ReD-LUT: Reconfigurable in-DRAM LUTs enabling massive parallel computation. International Symposium on Low Power Electronics and Design, Association for Computing Machinery/Institute of Electrical and Electronics Engineers. San Diego, CA. Oct. 30-Nov. 3, 2022.

Presenter/speaker, with Ali Nezhadi, Shaahin Angizi. semiMUL: Floating-point free implementations for efficient and accurate neural network training. International Conference on Machine Learning and Applications, Institute of Electrical and Electronics Engineers. Nassau, Bahamas. Dec. 12-14, 2022.

Presenter/speaker, with Mehrdad Morsali, Ranyang Zhou, Sepehr Tabrizchi, Shaahin Angizi. XOR-CiM: An efficient computing-in-SOT-MRAM design for binary neural network acceleration. International Symposium on Quality Electronic Design, Institute of Electrical and Electronics Engineers. San Francisco, CA. April 5-7, 2023.

Presenter/speaker, with Ranyang Zhou, Sepehr Tabrizchi, Mehrdad Morsali, Shaahin Angizi. P-PiM: A parallel processing-in-DRAM framework enabling row hammer protection. Design, Automation and Test in Europe Conference and Exhibition, Institute of Electrical and Electronics Engineers. Antwerp, Belgium. April 17-19, 2023.

Presenter/speaker, with Sepehr Tabrizchi, Rebati Gaire, Shaahin Angizi. SenTer: A reconfigurable processing-in-sensor architecture enabling efficient ternary MLP. Great Lakes Symposium on Very Large Scale Integration, Association for Computing Machinery. Knoxville, TN. June 5-7, 2023.

## Milad Roohi

## Durham School of Architectural Engineering and Construction

Presenter/speaker, with Craig Davis, Kent Yu, Maria Koliou, Don Scott. The role of critical facility performance and functional recovery in community resilience to natural hazards. American Society of Civil Engineers Convention. Anaheim, CA. Oct. 23-26, 2022.

Presenter/speaker. Minimal sensing and model-data fusion for performance-based seismic monitoring of instrumented buildings. Round-Table Workshop on Leveraging Low-Cost Seismic Networks in Building Resilient Cities and Infrastructures, National Center for Research on Earthquake Engineering and the Taiwan Earthquake Research Center. Taipei, Taiwan. March 20-21, 2023.

Presenter/speaker, with Stefan Schauer, Laura Petersen, Rob Grace. From resilient critical infrastructures to a resilient society. Global Information Systems for Crisis Response and Management Conference, University of Nebraska at Omaha. Omaha, NE. May 28-31, 2023.

Presenter/speaker, with **Saeid Ghasemi**. Accounting for cascading failure of interdependent civil infrastructure in seismic resilience modeling of communities. Engineering Mechanics Institute Conference, American Society of Civil Engineers, Georgia Tech. Atlanta, GA. June 6-9, 2023.

Presenter/speaker. Enhancing community resilience with minimal instrumentation and performance-based seismic monitoring of buildings. Engineering Mechanics Institute Conference, American Society of Civil Engineers, Georgia Tech. Atlanta, GA. June 6-9, 2023.

## Blake Runnalls

## Marketing

Presenter/speaker, with Brian Blume, Jason Huang, Zhonghao Wang, J. Kevin Ford. Sink or swim? Antecedents and outcomes of informal field based learning. Society for Industrial and Organizational Psychology Conference. Boston, MA. April 17-22, 2023.

## Amit Saini

## Marketing

Presenter/speaker, with **Durgesh Pattanayak**. Role of risk management capability in achieving B2B NPDP resilience and NPDP success. Summer Academic Conference, American Marketing Association. Chicago, IL. Aug. 12-14, 2022.

## S. Sajeesh

## Marketing

Presenter/speaker, with Preethika Sainam. Service vs. price cues: Retailers' strategic choice in the presence of consumer heterogeneity. Marketing Dynamics Conference, Georgia State University. Atlanta, GA. Nov. 10-12, 2022.

Presenter/speaker, with Preethika Sainam. Service vs. price cues: Retailers' strategic choice in the presence of consumer heterogeneity. Winter Educators' Conference, American Marketing Association. Nashville, TN. Feb. 10-12, 2023.

Presenter/speaker, with Ece Baskol, **Özgür Araz**. Impact of obesity policy perceptions on firms' marketing outcomes. Production and Operations Management Society Annual Conference. Orlando, FL. May 21-25, 2023.

## Rachel E. Schachter

## Child, Youth and Family Studies

Presenter/speaker, with **N. Koziol, J. Bohaty, H. Yoon, A. Witte** et al. Nebraska WORDS: Improving reading achievement in rural elementary schools. Pacific Coast Research Conference. San Diego, CA. Feb. 5-7, 2023.

Presenter/speaker, with M. Hebert, **N. Koziol, J. Bohaty**, et al. Improving K-3 reading using professional development and tutoring: Project WORDS. Council for Exceptional Children Conference. Louisville, KY. March 1-5, 2023.

Presenter/speaker, with **L. Knoche**, M. Goldberg, J. Lu. The empirical research base of early childhood coaching: A mapping review. American Education Research Association Annual Conference. Chicago, IL. April 13-16, 2023.

Presenter/speaker, with Y. Joo. Interconnectedness between teachers' beliefs about curriculum, planning, and implementation. American Education Research Association Annual Conference. Chicago, IL. April 13-16, 2023.

Presenter/speaker, with **C.B. Gabas**, P. Wernick. What happens during circle time in preschool classrooms? Structure and learning content. American Education Research Association Annual Conference. Chicago, IL. April 13-16, 2023.

Presenter/speaker, with **E.S. Brower, M.C. Willis, A.L. Witte, L.A. Wheeler**. Teachers and Parents as Partners: Strengthening parent-teacher relationships through consultation. International School Psychologists Association Annual Convention. Leuven, Belgium. July 7-10, 2022.

Presenter/speaker, with **A.L. Witte, M.C. Willis, E.S. Brower**. Teachers and Parents as Partners: Increasing accessibility through technology. International School Psychologists Association Annual Convention. Leuven, Belgium. July 7-10, 2022.

Presenter/speaker, with **A.L. Witte**. Family-school partnerships: Proven strategies to promote success for students at risk. International School Psychologists Association Annual Convention. Leuven, Belgium. July 7-10, 2022.

Presenter/speaker, with **E.S. Brower, M.C. Willis, L.A. Wheeler, A.L. Witte, M.J. Gormley** et al. Enhancing teachers' relationships with Latinx parents and beliefs about involvement. American Psychological Association Annual Convention. Minneapolis, MN. Aug. 4-6, 2022.

Presenter/speaker, with **L.L. Knoche, N. Koziol, A.L. Witte** et al. Closing gaps for children in poverty: The role of play. American Psychological Association Annual Convention. Minneapolis, MN. Aug. 4-6, 2022.

Presenter/speaker, with **E.S. Brower, L.A. Wheeler, K.E. Brown, M.J. Gormley**. Unpacking perspectives on family-school partnerships from educators and Latinx families. National Association of School Psychologists Annual Convention. Denver, CO. Feb. 7-10, 2023.

Presenter/speaker, with **A.L. Witte, K. Derr**. Family-school partnerships: Targeted support for rural students. Nebraska Rural Community Schools Association Spring Conference. Kearney, NE. March 14-15, 2023.

Presenter/speaker, with **L.L. Knoche, H. Yoon, C. Boise** et al. Teacher, child and family relationships: Supporting the development of infants/toddlers. Society for Research in Child Development Biennial Meeting. Salt Lake City, UT. March 23-25, 2023.

Presenter/speaker, with **L.L. Knoche, H. Yoon**. Infant/toddler well-being in childcare: What is the role of sustained parent-teacher relationships? Society for Research in Child Development Biennial Meeting. Salt Lake City, UT. March 23-25, 2023.

Presenter/speaker, with **L.L. Knoche, N. Koziol, A.L. Witte** et al. Sustained relationships across the early elementary years: Association with children's social-behavioral skills. Society for Research in Child Development Biennial Meeting. Salt Lake City, UT. March 23-25, 2023.

Presenter/speaker, with **L.A. Wheeler, E.S. Brower, A.L. Witte** et al. Teachers and Parents as Partners: Creating meaningful connections through collaboration. Symposium on Centering Family Voice: Partnership Interventions with Marginalized Families, Society for Research in Child Development Biennial Meeting. Salt Lake City, UT. March 23-25, 2023.

Presenter/speaker. Creating meaningful engagement through relationships. Symposium on Advancing Family Engagement in Education Research to Promote Equity, Institute of Education Sciences Annual Principal Investigators Meeting. Virtual. May 16-18, 2023.

**Jessica Shoemaker****Law**

Presenter/speaker. Lessons from U.S. indigenous land relations. The Future of Aboriginal Title Workshop. Vancouver, BC, Canada. June 24, 2022.

Presenter/speaker. Calibrating attachment: Property and place. Law and Society Association Annual Meeting. Lisbon, Portugal. July 15, 2022.

Speaker/panel co-organizer/chair. Re-placing Turtle Island/North American property law: Historic problems, modern disagreements, and imagining legal solutions. Law and Society Association Annual Meeting. Lisbon, Portugal. July 15, 2022.

Panel participant. Rules and relationships: Why rural place matters. Law and Society Association Annual Meeting. Lisbon, Portugal. July 16, 2022.

Presenter/speaker. Special session: Rural America – Powerful or powerless? Rural Sociology Society Annual Meeting. Westminster, CO. Aug. 6, 2022.

Presenter/speaker. Choosing a property regime: Farmland futures. Brigham-Kanner Property Rights Conference, William and Mary Law School. Williamsburg, VA. Sept. 30, 2022.

Presenter/speaker. Rural law and policy. Law and Rurality Workshop. Lincoln, NE. Oct. 21, 2022.

Presenter/speaker. Indigenous-led land reform in the United States and Canada. University of Idaho College of Law's Hot Topics in Indian Law Symposium. Moscow, ID. Feb. 17, 2023.

Presenter/speaker. Re-placing property. Faculty Workshop Series, Washington University in St. Louis School of Law. St. Louis, MO. Feb. 22, 2023.

Presenter/speaker. Property and place: Calibrating commodification. American Association of Geographers Annual Meeting. Denver, CO. March 25-27, 2023.



## Sunil Singh

## Marketing

Presenter/speaker, with Jagdip Singh, **Ravi Sohi**, Avinash Malshe. Performance outcomes of self-promotion acts for marketing boundary spanners. Organizational Frontlines Research Conference, American Marketing Association. Nashville, TN. Feb. 9-10, 2023.

## Ash Eliza Smith

## Johnny Carson Center for Emerging Media Arts

Presenter/speaker, with Stephanie Sherman. Platform promiscuity: Edging in the industrial identity complex. Edge Play: Association for the Study of the Arts of the Present. Los Angeles, CA. Sept. 14-17, 2022.

Presenter/speaker, with **Robert Twomey**, **Jinku Kim**. Radio play: Live participatory worldbuilding with GPT-3. Society for Literature, Science and the Arts Annual Conference, Purdue University. West Lafayette, IN. Oct. 6-9, 2022.

Presenter/speaker. Storytelling and co-creation for global change: A worldbuilding methodology. Screenwriting Research Network Annual Conference: Globalizing Screenwriting, Department of Theatre, Film and Media Studies, University of Vienna. Vienna, Austria. Oct. 22-24, 2022.

Presenter/speaker. Countryside to outer space: Post-pastoral digital speculations. Exploring Design Beyond the Human, Zurich University of the Arts in Switzerland. Zurich, Switzerland. Oct. 27-28, 2022.

Presenter/speaker, with Stephanie Sherman, **Joshua Herr**, Yasaman Sheri. Flyover fictions: Extreme life. International Conference on Anticipation, Julie Ann Wrigley Global Futures Laboratory, Arizona State University. Tempe, AZ. Nov. 16-18, 2022.

Presenter/speaker, with **Robert Twomey**. Emergent narrative systems. Artist Talks: Beall Center Art + Technology Series, UCI Claire Trevor School of the Arts, Irvine, CA. March 9, 2023.

Presenter/speaker, with **Robert Twomey**, **Elsbeth Magilton**, **Santosh Pitla**, **Yufeng Gu**. Simulation and speculation for earthly survival. Water for Food Global Conference, Daugherty Water for Food Global Institute, University of Nebraska. Lincoln, NE. May 8-10, 2023.

Presenter/speaker, with **Robert Twomey**, Miller Puckette. Radio Play: Live participatory worldbuilding and co-creation with AI (episode 3). International Symposium on Electronic Art. Paris, France. May 16-21, 2023.

## Ravi Sohi

## Marketing

Presenter/speaker, with **Carissa Kim**. Customer mistreatment: A dyadic perspective. Winter Educators' Conference, American Marketing Association. Nashville, TN. Feb. 10-12, 2023.

Presenter/speaker, with **Plavini Punyatoya**. Managing time for selling effectively. Academy of Marketing Science Annual Conference. New Orleans, LA. May 17-19, 2023.

## Jason Stamm

## Sports Media and Communication

Presenter/speaker, with Erin Whiteside. Ask and you shall receive: Sedona Prince, Twitter, and the tempting promises of neoliberalism. Association for Education in Journalism and Mass Communication Annual Conference. Detroit, MI. Aug. 3-6, 2022.

Presenter/speaker. Five stars? Four stars? A uses and gratifications approach to who follows college sports recruiting websites. Association for Education in Journalism and Mass Communication Annual Conference. Detroit, MI. Aug. 3-6, 2022.

Presenter/speaker, with Sandy Alspach, Guy Harrison, Thomas Horky et al. Best practices in communication and sport pedagogy. International Association for Communication and Sport Annual Conference. Barcelona, Spain. March 9-11, 2023.

Presenter/speaker, with Kate Lavelle. COVID, NIL and mental health: How collegiate student athletes juggle increased pressures and stressors. International Association for Communication and Sport Annual Conference. Barcelona, Spain. March 9-11, 2023.

## Jay Storz

## Biological Sciences

Keynote speaker. Heme proteins in health and disease. International Conference on Oxygen Binding and Sensing Proteins. Rome, Italy. Sept. 30, 2022.

## **Guy Trainin**      **Teaching, Learning and Teacher Education**

Presenter/speaker, with Ji Guo. The use of E-textbooks in higher education. Finnish Learning Analytics and Artificial Intelligence in Education Conference, Eastern Finland University. Joensuu, Finland. Sept. 28-30, 2022.

Presenter/speaker, with Ji Guo. Exploring student engagement and self-regulation: A learning analytics approach. Finnish Learning Analytics and Artificial Intelligence in Education Conference, Eastern Finland University. Joensuu, Finland. Sept. 28-30, 2022.

Presenter/speaker, with Ji Guo. Measuring self-regulation: A learning analytics approach. Finnish Learning Analytics and Artificial Intelligence in Education Conference, Eastern Finland University. Joensuu, Finland. Sept. 28-30, 2022.

Presenter/speaker, with **Danae Peterson**. Architecture as a reparative force in the learning and development of children negatively impacted by adverse childhood experiences (ACEs): Praxis and products for 21st century learning and design. LearningScapes Conference, Association for Learning Environments. San Antonio, TX. Oct. 6-9, 2022.

Presenter/speaker, with Japhet Okuntade, M.B. Luckay. Understanding the interplay of micro-teaching skills (MTS) through technological device: A video analysis. South African Educational Research Association Conference. Capetown, West Cape, South Africa. Oct. 31-Nov. 2, 2022.

Presenter/speaker, with **Lydiah Kiramba**. Teacher preparation for immigrant background students: Teachers of African immigrant and refugee background students. Literacy Research Association Annual Meeting. Phoenix, AZ. Nov. 29-Dec. 1, 2022.

Presenter/speaker, with **Stephanie Wessels**. Learning from bilingual families to use bilingual books as an entry point to biliteracy. Literacy Research Association Annual Meeting. Phoenix, AZ. Nov. 29-Dec. 1, 2022.

Presenter/speaker, with Xianquan Liu. The impact of non-cognitive factors on TPACK self-efficacy for foreign language educators in the U.S. and China. Comparative and International Education Society Annual Meeting. Washington, D.C. Virtual. Feb. 14-22, 2023.

Presenter/speaker, with **Kimberley D'Adamo**, **Jessica Davis**, Lorinda Rice. Artistic door to project-based learning: The creative research cycle. Nebraska Educational Technology Association Meeting. Omaha, NE. March 16-17, 2023.

Presenter/speaker, with **Dwight Miller**. Impact of the pandemic on computer science education. Nebraska Educational Technology Association Meeting. Omaha, NE. March 16-17, 2023.

Presenter/speaker, with **Tamanna Kabir**, A. Jahan. Make my owl happy: Using Duolingo to learn English in Bangladesh. Nebraska Educational Technology Association Meeting. Omaha, NE. March 16-17, 2023.

Presenter/speaker, with **Lydiah Kiramba**, Qizhen Deng. Digital communication with school for immigrant and minority families. Nebraska Educational Technology Association Meeting. Omaha, NE. March 16-17, 2023.

Presenter/speaker, with **HyeonJin Yoon**, Lorinda Rice. Connecting professional development impacts to student outcomes. Creative Collaborations: Partnering through Artful Education Conference, U.S. Department of Education. Washington, D.C. March 29-31, 2023.

Presenter/speaker, with **Kimberley D'Adamo**, Lorinda Rice, **HyeonJin Yoon**, **Mackayla Kelsey**. Nurturing educators who integrate art, core subjects, and culturally responsive teaching to support students in becoming makers of change. Creative Collaborations: Partnering through Artful Education Conference, U.S. Department of Education. Washington, D.C. March 29-31, 2023.

Presenter/speaker, with **Lydiah Kiramba**. Teacher preparation positionally and agency: Teachers of African immigrant and refugee students. American Educational Research Association Virtual Meeting. Chicago, IL. May 4-6, 2023.

Presenter/speaker, with **K. D'Adamo**, L. Rice, M. Sellers. The creative research cycle: Student voice and creativity in arts integration. International Society for Technology and Education Conference. Philadelphia, PA. June 25-28, 2023.

Presenter/speaker, with **Katie Johnson**, **Deepika Menon**, **Amanda Thomas**. Preparing new teachers for equity in teaching about and through technology. International Society for Technology and Education. Philadelphia, PA. June 25-29, 2023.

## **Robert Twomey**      **Johnny Carson Center for Emerging Media Arts**

Presenter/speaker, with Marilene Oliver, Stephan Moore. Joint art papers and art gallery session. Association for Computing Machinery's Special Interest Group on Computer Graphics and Interactive Techniques. Vancouver, BC, Canada. Aug. 8-11, 2022.

Presenter/speaker. Intelligences: AI and interaction. Roundtable Session, Association for Computing Machinery's Special Interest Group on Computer Graphics and Interactive Techniques. Vancouver, BC, Canada. Aug. 8-11, 2022.

Presenter/speaker. Three stage drawing transfer. LABS Session, Association for Computing Machinery's Special Interest Group on Computer Graphics and Interactive Techniques. Vancouver, BC, Canada. Aug. 8-11, 2022.

Presenter/speaker, with **Ash Eliza Smih, Jinku Kim**. Radio play: Live participatory worldbuilding with GPT-3. Society for Literature, Science and the Arts Annual Conference, Purdue University. West Lafayette, IN. Oct. 6-9, 2022.

Presenter/speaker. Communing with creative AI. Design-at-Large Speaker Series, Design Lab, University of California, San Diego. La Jolla, CA. Feb. 8, 2023.

Presenter/speaker, with **Ash Eliza Smith**. Emergent narrative systems. Artist Talks: Beall Center Art + Technology Series, UCI Claire Trevor School of the Arts, Irvine, CA. March 9, 2023.

Presenter/speaker, with Chris Longhurst, Tiffany Amariuta-Bartell, Vincent Nijs. GPT: Implications for healthcare, business, research, and art. ChattingGPT, San Diego Supercomputer Center and Halicioğlu Data Science Institute. La Jolla, CA. April 25, 2023.

Presenter/speaker. Communion and cohabitation. Media Art and Technology (MAT) Seminar Series, University of California, Santa Barbara. Santa Barbara, CA. May 1, 2023.

Presenter/speaker, with **Ash Eliza Smith, Elsbeth Magilton, Santosh Pitla, Yufeng Gu**. Simulation and speculation for earthly survival. Water for Food Global Conference, Daugherty Water for Food Global Institute, University of Nebraska. Lincoln, NE. May 8-10, 2023.

Presenter/speaker, with **Ash Eliza Smith**, Miller Puckette. Radio Play: Live participatory worldbuilding and co-creation with AI (episode 3). International Symposium on Electronic Art. Paris, France. May 16- 21, 2023.

### **Shari R. Veil** **Advertising and Public Relations**

Presenter/speaker. Beyond “thoughts and prayers”: Incorporating memorialization and grief leadership into the crisis communication plan. Public Relations Educators Academy Summit, Public Relations Society of America. Grapevine, Texas. Nov. 12-15, 2022.

Presenter/speaker. The contextual challenges of spillover crisis. Communication and Culture Research Symposium, Erasmus Research Centre for Media. Rotterdam, Netherlands. Nov. 13-14, 2022.

Presenter/speaker. Engaging with the community: Innovative curricular initiatives. Call for Leadership, Association of Schools of Journalism and Mass Communication. Virtual. March 21, 2023.

### **Mark Vrtiska** **Natural Resources**

Presenter/speaker, with Desslegn Ejigu, **Larkin A. Powell**. Trumpeter swan fidelity and winter movements in the Nebraska Sandhills. International Swan Symposium and Swan Conference, Trumpeter Swan Society/Ricketts Conservation Foundation. Jackson, WY. Oct. 24-27, 2022.

Presenter/speaker, with Michael G. Anderson, James A. Dubovsky. The North American trumpeter swan survey – resurrection or R.I.P.? International Swan Symposium and Swan Conference, Trumpeter Swan Society/Ricketts Conservation Foundation. Jackson, WY. Oct. 24-27, 2022.

Presenter/speaker, with **Matt P. Gruntorad, Chris J. Chizinski**. Goose hunting vs. duck hunting: What satisfies the Central Flyway goose hunter? North American Arctic Goose Conference. Corpus Christi, TX. Dec. 6-9, 2022.

### **Adam Wagler** **Advertising and Public Relations**

Presenter/speaker. Teaming up with technology developers: A capstone advertising campaigns course collaborations with engineering and computer science. Association for Education in Journalism and Mass Communication Annual Conference. Detroit, MI. Aug. 7-10, 2022.

Presenter/speaker. The experience lab: Student run media platforms from day one at scale. Association for Education in Journalism and Mass Communication Annual Conference. Detroit, MI. Aug. 7-10, 2022.

Presenter/speaker. Exploring the metaverse as a new platform for owned media. University of South Carolina College of Information and Communications Speaker Series. Columbia, SC. Jan. 16-17, 2023.

### **Jessica Walsh** **Journalism and Mass Communications**

Presenter/speaker. What’s with the water: The nature of reporting on the problem of nitrates in Nebraska. Midwest Public Health Innovation and Research Expo, University of Nebraska Medical Center. Omaha, NE. Oct. 28, 2022.

Presenter/speaker, with Mildred Perreault, Gregory Perreault, Louisa Lincoln. “We don’t have a beat. We have a job.”: Epistemologies of rural journalism. Association for Education in Journalism and Mass Communication Midwinter Conference. Norman, OK. Feb. 24-25, 2023.

Presenter/speaker. How are journalists framing water stories in the Midwest? Water for Food Global Conference, Daugherty Water for Food Global Institute, University of Nebraska. Lincoln, NE. May 9, 2023.

### **Lily Wang**

### **Durham School of Architectural Engineering and Construction**

Keynote speaker. Linking indoor acoustic conditions to human well-being and performance. Inter-Noise 2022, International Institute of Noise Control Engineering. Glasgow, Scotland. Aug. 21-24, 2022.

Presenter/speaker. Broadening participation in acoustics: Personal reflections and pathways forward. Acoustical Society of America Meeting. Nashville, TN. Dec. 5-9, 2022.

Presenter/speaker. Links between indoor acoustic conditions and human well-being and performance. Healthy Buildings 2023 Europe. Aachen, Germany. June 11-14, 2023.

### **Paul Weitzel**

### **Law**

Presenter/speaker. The case against officer fiduciary duties. National Business Law Scholars, University of Tennessee. Knoxville, TN. June 16-17, 2023.

### **Sandra Williams**

### **Art, Art History and Design**

Presenter/speaker. The ravenous feminine: The unruly body in public space. Southwest Popular/American Culture Association. Albuquerque, NM. Feb. 21-26, 2023.

### **Trish Wonch Hill**

### **Center for Science, Mathematics and Computer Education**

Presenter/speaker, with **Judy Diamond, Julia McQuillan**. Using comics and art to provide accurate health and science information about viruses, pandemics, and vaccination. Virtual Health Misinformation Symposium, Network of the National Library of Medicine, NIH-NNLM. Virtual. April 4-6, 2023.

Presenter/speaker, with **Lance C. Pérez, Sohrab Asgarpoor, David Jones, Zachary George Short, Jennifer N. Rutt**. "I haven't really made those connections that maybe most would their first year": A qualitative study of the COVID-19 pandemic and student social capital among 3 cohorts of first-year engineering majors. American Society for Engineering Education Annual Conference and Exposition. Baltimore, MD. June 25-28, 2023.

### **Julie Wu**

### **Finance**

Presenter/speaker. Investor ESG tastes and asset pricing. Conference on CSR, the Economy and Financial Markets. Chicago, IL. Nov. 9-20, 2022.

Presenter/speaker. Investor ESG tastes and asset pricing. Society for Financial Studies Cavalcade Asia-Pacific. Virtual. Dec. 16-18, 2022.

Presenter/speaker. Investor ESG tastes and asset pricing. Midwestern Finance Association. Chicago, IL. March 16-18, 2023.

### **Shi-Hua Xiang**

### **Veterinary Medicine and Biomedical Sciences/ Nebraska Center for Virology**

Presenter/speaker, with Leah Liu Wang. CD4 and CD4-mimetic compounds as entry inhibitors to block filovirus infections. American Society for Virology Annual Meeting. Athens, GA. June 24-28, 2023.

## Mentorship: UCARE and FYRE Programs

The Undergraduate Creative Activities and Research Experience program and the First Year Research Experience program enable Husker undergraduate students to work one-on-one with a faculty member on a research or creative project in the mentor's field of scholarship. The following faculty members mentored students during the summer of 2022 and/or the 2022-2023 academic year. Student UCARE researchers are identified by name, major and project title. FYRE students, who are assigned to laboratories rather than specific projects, are identified by name and major.

*Compiled by the Office of Undergraduate Research and Fellowships*

### Heather Akin

#### Agricultural Leadership, Education and Communication

Emma Hoffschneider, agricultural economics/agricultural and environmental sciences communication. Economic Impact of Entrepreneurship in Rural Communities

### Fadi Alsaleem

#### Durham School of Architectural Engineering and Construction

Ian Parmley, pre-mechanical engineering. Development of Noble Helium Sensor for Nuclear Waste Management

### Amy Anderson

#### Criminal Justice

Morgan Graham, psychology. An Assessment of the Efficacy of Sex Offender Community Notification

### Byron Anway

#### Art, Art History and Design

Qiqe Martinez, art. Collage Body Portraits, Graphite on Paper

Taylor Powell, art. Pictorial Representations of Memory, Watercolor on Paper

### Stacy Asher

#### Art, Art History and Design

Maegan Ludena-Llanos, architectural studies. Design Elements and Stronger Brand Identity for the Weather Ready Farms Program

### Jennifer Auchtung

#### Food Science and Technology

Himanshu Gandhi, microbiology. Predicting Microbial Community Colonization of the Mucosal Layer

### Larry Barksdale

#### Forensic Science

Haley Fleetwood, forensic science. Response Time and Preference of Background Color of Flies and Other Insects

### Scott Barrett

#### Psychology

Clayton Christensen, biochemistry/microbiology. Investigating Temporal Delay Between Nicotine Self-Administration and Sucrose Reward Between Biological Sex

### Shannon Bartelt-Hunt

#### Civil and Environmental Engineering

Seth Caines, environmental engineering. Textiles as a Source of Microplastic Fibers to Nebraska Streams

Grace Ridgley, journalism (FYRE)

### Greg Bashford

#### Biological Systems Engineering

Olivia Farnen, biological systems engineering. Linear Models with Functional Transcranial Doppler

### Rick Bevins

#### Psychology

Chase Auman, biochemistry. A Behavioral Economics Approach to Caffeine and Methylphenidate Reward Enhancement

### Nathan Bicak

#### Interior Design

Angela Le, interior design. Analyzing and Drawing Spatial Conditions and Interior Design Strategies in Makerspaces

### Patrick Bitterman

#### Global Integrative Studies (Geography)

Juliana Amato, economics. Surveying the Structures of U.S. Water Governance

Liam Baker, environmental studies. Surveying the Structures of U.S. Water Governance

Natalia Hagen, fisheries and wildlife/pre-veterinary medicine. Surveying the Structures of U.S. Water Governance

### Constance Boehm

#### University Health Center

Emma Farson, biological sciences. UNL Wellness Assessment Trends

### Paul Blum

#### Biological Sciences

Sam Ho, biological sciences. Evaluate the Utility of an In Vitro Expression System for Making Recombinant Proteins

### Becca Brock

#### Psychology

Michelle Ebrahim, psychology. Pandemic Stress on Parents and Child Internalizing Behaviors

Mai Pham, psychology. Parental Intergenerational Influences / Parental Psychopathology

**Nicole Buan**

William Bauer, biochemistry (FYRE)

Edric Teut, biological sciences. Electron Transfer in Microorganisms: Essentiality of the E- and F-[Fe4S4] Clusters of the *Methanosarcina acetivorans* CODH Enzyme

**Michael Burton****Textiles, Merchandising and Fashion Design**

Jo Sayer, art. Animating History Lab

**Heriberto Cerutti****Biological Sciences**

Chloe Hoover, management. Sustainability in Dining at the University of Nebraska-Lincoln

Maya Tanikawa-Brown, food science and technology. Sustainability in Dining at the University of Nebraska-Lincoln

**James Checco****Chemistry**

Cole Blasing, biochemistry. Investigating if ATRP Isomerization Causes Bias in Signaling Pathway

Kashish Poore, microbiology. Single-walled Carbon Nanotubes as Biosensors

**Kathy Chiou****Psychology**

Jessica Stump, psychology. Predictors of Ongoing Problems in Victims of Intimate Partner Violence-Related Brain Injury

**Berthe Choueiry****Computing**

Kalim Dumas, computer engineering. Mixed-initiative Solvers for Managing UNL's Math Day Event

Caleb Koranda, computer science. Mixed-initiative Solvers for Managing UNL's Math Day Event

Chase Resio, computer science. Mixed-initiative Solvers for Managing UNL's Math Day Event

**Daniel Ciobanu****Animal Science**

Arabella Hodges, biochemistry. Evaluation of the Relationships between Host-Genetics and Viral Pathogens in Natural Infections

**Jessica Corman****Natural Resources**

Makena Foley, geology. Evaluating Land Use Effects on Metabolism in Nebraska Streams

Brian Onyango, civil engineering (FYRE)

Jacob Reiber, fisheries and wildlife. Factors Impacting Autotrophic and Heterotrophic Activity in Nebraska Streams

**Roberto Cortinas****Veterinary Medicine and Biomedical Sciences**

Addie Wright, pre-veterinary medicine. Tick Collection in Western Nebraska for Identification of Breed and Density

**Lindsey Crawford****Biochemistry**

Emily Hogg, biochemistry. Investigating UL6 Gene in HCMV

**Clay Cressler****Biological Sciences**

Rudra Dixit, biological sciences. Microbiome Role in Susceptibility to Disease in a Population

Erik Holmertz, microbiology. Mix and Match: Antigen Exposure and Environmental Factors Affecting Longevity of *Daphnia magna*

Fiyad Badar Saif Al Sarmi, biological sciences. Microbiota Composition of Zooplankton and the Control of Harmful Algal Blooms

**Andrea Cupp****Animal Science**

Josie Ganser, animal science. The Effects of FSH on Follicle Growth and Fibrosis on Bovine Ovarian Cortex Cultures

Gabrielle Modica, animal science. The Effect of FSH on Heifer Ovarian Cortex Fibrosis Levels In Vitro

**Jeffrey Day****Architecture**

Katherine Brashear, architectural studies. Actual FACT Books

Andy Vo, architectural studies. makeFACT

**John DeLong****Biological Sciences**

Lillie Hizer, biological sciences. Assessing the Role of Vertical Migration in Facilitating Invasive Aquatic Predator Success

**Amy Desaulniers****Veterinary Medicine and Biomedical Sciences**

Steven Faltas, biological sciences. Effects of Corn cob Bedding on Testis Morphology and Protein Expression

Carlene Nguyen, biological sciences. Effects of Early Weaning on Testicular Histology and Steroidogenic Protein Abundance

**Heidi Diefes-Dux****Biological Systems Engineering**

Emily Stratman, biological systems engineering. Impact of Weekly Reflection Prompts on First-year Engineering Students' Metacognitive Strategies across an Entire Semester

**Michael Dodd** **Psychology**

Justin Frandsen, psychology. That's Sick: Implicit Learning and the Processing of Ambiguous Stimuli

Sophia Smyth, psychology. That's Sick: Implicit Learning and the Processing of Ambiguous Stimuli

**Eddie Dominguez** **Art, Art History and Design**

Kinga Aletto, fisheries and wildlife. Creating and Documenting Two Public Art Monuments Under One Theme

Joselyn Andreasen, art. Assistant to Eddie Dominguez

Luke Keilig, art. Bryan West

**Brittany Duncan** **Computing**

Clara Perez, computer science. What It Means to Be a Proficient Unmanned Aerial Vehicle Pilot

**Patrick Dussault** **Chemistry**

Eddie Pham, chemistry. Influence of Peroxide Structure on Reactivity Towards C-O Bond Formation

**Robert Dyer** **Computing**

Dylan Kramer, software engineering (FYRE)

Kevin Tran, computer science (FYRE)

**Catherine Eichhorn** **Chemistry**

Trish Nguyen, chemical engineering (FYRE)

**Lynne Elkins** **Earth and Atmospheric Sciences**

Jessica Sorsen, geology. Kane-Atlantis

**Dennis Ferraro** **Natural Resources**

Matthew Klein, fisheries and wildlife. Occupancy Analysis and Population Estimates of Herpetofauna Species at Niobrara Valley Preserve

Nicholas Kowal, fisheries and wildlife. Nebraska's Short-horned Lizard Genetic Diversity, Landscape Occupancy, and Population Status Assessment (Year 3)

**Irina Filina** **Earth and Atmospheric Sciences**

Morgan Madsen, geology. Geophysical Mapping of Large-scale Submarine Landslides at the Southern Cascadia Margin

**Jenna Finch** **Psychology**

Isis Burks, psychology. Is Persistence Associated with Self-Regulation and Academic Skills in the Classroom?

Tracy Nguyen, psychology (FYRE)

Makenzie Starlin, biochemistry. The Moderating Effect of Parent-Teacher Communication on the Link Between Socioeconomic Status and Academic Achievement / Associations Between Parenting Styles and Children's Academic and Social-Emotional Outcomes across Middle Childhood

Madelyn Stock, psychology. Associations between Parenting Styles and Children's Academic and Social-Emotional Outcomes across Middle Childhood

Haley Witthuhn, psychology. The Moderating Effect of Parent-Teacher Communication on the Link between Socioeconomic Status and Children's Academic Achievement

**Jesse Fleming** **Johnny Carson Center for Emerging Media Arts**

Ebben Blake, emerging media arts. Sense Experience.

Trystan Nord, emerging media arts. Sense Experience

**Hernan Garcia-Ruiz** **Plant Pathology**

Katie Tran, nutritional science and dietetics. Developing Vectors for Editing RNA-dependent RNA Polymerases 3 and 4 in *Arabidopsis thaliana* Using CRISPR/Cas9 / Editing RNA-dependent RNA Polymerases in *Arabidopsis thaliana* Using CRISPR/Cas9

**Mohammad Ghashami** **Mechanical & Materials Engineering**

Bakir Al-Ameri, mechanical engineering. Modern No-emission Cooling Systems for Nebraska

Malachi Hood, mechanical engineering. Investigation of Gas-Surface Interactions at the Micro/Nanoscales

Puong-Khanh (Khanh) Le, mechanical engineering (FYRE)

**George Gogos** **Mechanical & Materials Engineering**

Jackson Taylor, mechanical engineering. Flame Weeding Research in the Combustion Lab and in Crop Fields

**Mark Griep** **Chemistry**

Clarissa Mason, biochemistry. Evaluation of the Chemistry Teaching Assistant Mentor Program

**Jason Griffiths****Architecture**

Christopher Nguyen, architectural studies. PLAIN Design-Build Eastern Redcedar Microdwelling

**Daniel Gschwentner****Natural Resources**

Grace Carey, fisheries and wildlife. Ecological Stoichiometry of Great Plains Lakes

**Jiantao Guo****Chemistry**

Serena Jentz, chemistry. Engineering the Light-switchable Fluorescent Protein, Dronpa, through Unnatural Amino Acid Incorporation for Hydrogen Peroxide Sensing

**John Guretzky****Agronomy and Horticulture**

Benjamin Janssen, plant biology. Floral Survey of the Boundary between Central Nebraska Loess Hills and Central Loess Plains in Hamilton County, Nebraska

**Andrew Hamann****Biological Systems Engineering**

Luke Skrabal, biological sciences. Engineering Exosomes for Targeted miRNA Delivery to Cardiomyocytes

**Mohammad Hasan****Electrical and Computer Engineering**

Nathan Roberts, computer engineering. Understanding the Algorithmic and Dataset Biases in Deep Learning

Thomas Walton, computer science. Understanding the Algorithmic and Dataset Biases in Deep Learning

**David Hansen****Psychology**

Darian Draft, psychology. The Relationship between Sexual Abuse History, Anxiety and Depression, and Social Problems in Youth Who Have Experienced Sexual Abuse

**Edward Harris****Biochemistry**

Reed Rohr, biochemistry. Does Heparin Bind Rodent Stabilin-2?

William Singh, biochemistry. Which Region of Stabilin-2 Binds with Heparin?

**Eileen Hebets****Biological Sciences**

Austin Herold, biological sciences. Investigating Host Preference for Phoresy across Microhabitats in the Nebraska-native Pseudoscorpion *Dactylochelifera silvestris*

**Michael Hebert****Special Education and Communication Disorders**

Abbey Dyer, speech-language pathology. Project VIEW (Visual Impairments Education in Writing)

Amy Mattern, speech-language pathology. Project VIEW (Visual Impairments Education in Writing)

La'Rae Pickens-Bonebright, elementary education and early childhood education. Project VIEW (Visual Impairments Education in Writing)

**Michael Herman****Biological Sciences**

Betty Dessie, microbiology. Understanding the Virulence Mechanisms and Factors of *Stenotrophomonas maltophilia*

Brooke Strautmann, biological sciences. Generational and Developmental Effects of Pathogenic *Stenotrophomonas* Bacteria on *Caenorhabditis elegans* Survivorship

Jesus Worth, forensic science (FYRE)

**Mark Hinchman****Interior Design**

Said Al Mahrouqi, interior design. Editing, Curating and Contributing to a Database of Architectural Photography

**David Holding****Agronomy and Horticulture**

William Anderson, plant and landscape systems. Diversifying Nebraska Agriculture and Education through Breeding Sweet Corn and Popcorn with Novel Nutritional, Taste and Aesthetic Characteristics

Cleopatra Babor, plant biology. Breeding Colored and Quality Protein Popcorn and Sweetcorn Varieties

Rachel Thomson, biochemistry. Phenotypic, Genetic and Biochemical Analysis of CRISPR-generated High-lysine Maize and Sorghum

**Cody Hollist****Child, Youth and Family Studies**

Ma'Kiya Carter, child, youth and family studies. Music and the Mind: A Look at the Influence of Popular Music and Its Effect on Adolescents' Mental Health

**Xia Hong****Physics and Astronomy**

Hailey Anderson, physics. Probing 2D Ferroelectricity in van der Waals CuInP<sub>2</sub>S<sub>6</sub> Using Piezoresponse Force Microscopy

Alyssa Simpson, physics. Application of Ferroelectricity to Photovoltaics



**Debra Hope** **Psychology**

Christie Seyl, psychology. Social Scientist Researchers' Understanding of Qualities of Inclusive Research Practices for Transgender and Gender Diverse Communities / Traits Associated with Social Scientist Researchers' Inclusivity of Transgender and Gender Diverse Communities

Josselyn Telule, psychology. Trans Collaborations Clinical Trial

**Terry Housh** **Nutrition and Health Sciences**

Calvin Smith, nutrition and health sciences. Differences in Coactivation of the Forearm Flexors and Extensors in the Ipsilateral and Contralateral Arms between Fatiguing Muscle Actions at 30 versus 80% One Rep Maximum

**Peisi Huang** **Physics and Astronomy**

Juan Silva, physics. Probing the Higgs Trilinear Coupling in Di-Higgs Production at the LHC

**Michelle Hughes** **Special Education and Communication Disorders**

Sarah Rogoz, speech-language pathology. The Relationships between Race/Ethnicity, Mental Health, Socioeconomic Status, Gender and Substance Use

**Emira Ibrahimasic** **Global Integrative Studies**

Natalie Bourne, psychology (FYRE)

Carsyn Loncke, human rights and humanitarian affairs (FYRE)

**Nicole Iverson** **Biological Systems Engineering**

Carley Conover, biological systems engineering. Synchronization of Multiple Cell and Disease Types for Quantification of Extracellular Nitric Oxide

**Katrina Jagodinsky** **History**

Samantha Byrd, history. Petitioning for Freedom: Habeas Corpus in the American West

Bethany Ham, forensic science. Petitioning for Freedom: Habeas Corpus in the American West

Grace Heath, women's and gender studies. Petitioning for Freedom: Habeas Corpus in the American West

Janana Khattak, political science. Petitioning for Freedom: Habeas Corpus in the American West

Clare Kramper, history. Petitioning for Freedom: Habeas Corpus in the American West

Ellie Russell, history. Petitioning for Freedom: Habeas Corpus in the American West

Anna Synya, criminology and criminal justice. Petitioning for Freedom: Habeas Corpus in the American West

Mimi Yu, sociology. Petitioning for Freedom: Habeas Corpus in the American West

**Uchechukwu Jarrett** **Economics**

Zack Cheek, music. The Relationship between Divorce and Female Education: A Case Study of Ireland

**Jeannette Eileen Jones** **History/Institute for Ethnic Studies**

Zainab-Marie Funnah, psychology (FYRE)

**Alice Kang** **Political Science/Institute for Ethnic Studies**

Lydia Okuku, management (FYRE)

**David Karle** **Architecture**

Elena Garcia Tapia, architectural studies. Operational Landscapes of the Great Plains

Anna Miles, architectural studies. Operational Landscapes of the Great Plains

Taylor Yakel, architectural studies. Operational Landscapes of the Great Plains

**Sarah Karle** **Landscape Architecture**

Humaid Musallam Hamed Muslem Al Hinai, landscape architecture. Prairie States Forestry Archive

Kiet Nguyen, landscape architecture. Prairie States Forestry Archive

**Srivatsan Kidambi** **Chemical and Biomolecular Engineering**

Remedan Abdulahi, pre-medicine (FYRE)

Idaly Del Rello, psychology (FYRE)

Riley Hestermann, nutritional science and dietetics. Microglial Cells and Two-dimensional Brain Tissue Mimics

Anisha Kadubandi, biological sciences. Differences in Mechanotransduction, Glycolic, YAP, and Oxidative Phosphorylation Gene Expression in Healthy versus Preeclamptic Placental Trophoblasts

Sarah Loftus, biological systems engineering. The Effects of Aging on Lipid Metabolism on Hepatic Co-Culture

**Forrest Kievit**

Madisyn Reichert, biological sciences. Synthesis of Nanoparticles for Traumatic Brain Injury Patients

**Biological Systems Engineering****Ari Kohen**

Natalie Beattie, history. Nebraska Holocaust Survivor and WWII Veteran Network and Educational Portal

**Political Science**

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## Glossary of Federal Agency Abbreviations

DHHS	Department of Health and Human Services	NASA	National Aeronautics and Space Administration
ACF	Administration for Children and Families	NCHRP	National Cooperative Highway Research Program
CDC	Centers for Disease Control and Prevention	NEA	National Endowment for the Arts
SAMHSA	Substance Abuse and Mental Health Services Administration	NEH	National Endowment for the Humanities
DOC	Department of Commerce	NIH	National Institutes of Health
EDA	Economic Development Administration	NCI	National Cancer Institute
NIST	National Institute of Standards and Technology	NHLBI	National Heart, Lung and Blood Institute
NOAA	National Oceanic and Atmospheric Administration	NIAAA	National Institute on Alcohol Abuse and Alcoholism
DoD	Department of Defense	NIAID	National Institute of Allergy and Infectious Diseases
AFOSR	Air Force Office of Scientific Research	NIAMS	National Institute of Arthritis and Musculoskeletal and Skin Diseases
ARO	Army Research Office	NIBIB	National Institute of Biomedical Imaging and Bioengineering
ARI	Aviation Restructuring Initiative	NICHD	National Institute of Child Health and Human Development
CDMRP	Congressionally Directed Medical Research Programs	NIDA	National Institute on Drug Abuse
DTRA	Defense Threat Reduction Agency	NIDCD	National Institute on Deafness and Communication Disorders
DURIP	Defense University Research Instrumentation Program	NIDCR	National Institute of Dental and Craniofacial Research
ERDC	Engineer Research and Development Center	NIDDK	National Institute of Diabetes, Digestive and Kidney Disease
MDA	Missile Defense Agency	NIGMS	National Institute of General Medical Sciences
NAVSEA	Naval Sea Systems Command	NIMH	National Institute of Mental Health
ONR	Office of Naval Research	NIMHD	National Institute on Minority Health and Health Disparities
STRATCOM	U.S. Strategic Command	NINDS	National Institute of Neurological Disorders and Stroke
DOE	Department of Energy	NSF	National Science Foundation
ARPA-E	Advanced Research Projects Agency-Energy	EPSCoR	Established Program to Stimulate Competitive Research
EERE	Energy Efficiency and Renewable Energy	USAID	United States Agency for International Development
NETL	National Energy Technology Laboratory	USDA	United States Department of Agriculture
NEUP	Nuclear Energy University Programs	AFRI	Agriculture and Food Research Initiative
DOI	Department of Interior	AMS	Agricultural Marketing Service
FWS	Fish and Wildlife Service	ARS	Agricultural Research Service
NPS	National Park Service	FNS	Food and Nutrition Service
USGS	U.S. Geological Survey	FS	Forestry Service
DOJ	Department of Justice	FSA	Farm Service Agency
BJA	Bureau of Justice Assistance	NIFA	National Institute for Food and Agriculture
NIJ	National Institute of Justice	NRCS	Natural Resources Conservation Service
DOT	Department of Transportation	OCE	Office of the Chief Economist
FHWA	Federal Highway Administration	SARE	Sustainable Agriculture Research and Education Program
PHMSA	Pipeline and Hazardous Materials Safety Administration		
FRA	Federal Railroad Administration		
ED	Department of Education		
IES	Institute of Education Sciences		
EPA	Environmental Protection Agency		



**RESEARCH**

**Published October 2023 by the University of Nebraska–Lincoln  
Office of Research and Economic Development**

**Graphic Designer: Stephanie Severin**

**Editor: Elizabeth Banset**

**Contributing Editors: Mardi Bonner, Tiffany Lee, Ashley Washburn, Rebecca Zavala**

**Thanks also to Kali Patterson, Courtney Grate, Courtney Santos, Scott Shaver and Petrina Suiter**

Every effort has been made to verify the accuracy and completeness of submissions. Faculty, department chairs and heads and the deans were invited to submit entries online regarding the faculty's published books, national and international recognitions, published journal articles, conference presentations and creative works in the fine and performing arts and architecture. Information on major sponsored program awards was gathered by the Office of Sponsored Programs. Reports on patents and license agreements were produced by NUtech Ventures. Information about UCARE/FYRE projects was provided by the Office of Undergraduate Research.

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