2009

2008 Major Sponsored Programs and Faculty Awards for Research and Creative Activity

Office of Research, University of Nebraska–Lincoln

Follow this and additional works at: http://digitalcommons.unl.edu/researchecondev

Part of the Higher Education Administration Commons


http://digitalcommons.unl.edu/researchecondev/29

This Article is brought to you for free and open access by the Research and Economic Development, Office of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Office of Research and Economic Development--Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
On the Cover: Climate change is a global concern with potential to alter the life and landscape of Nebraska and the High Plains. On the cover, a thunderstorm moves toward the Upstream Ranch along the Calamus River in Nebraska’s Sandhills, one of the fragile ecosystems that could see significant impacts of climate change. Diverse research by UNL scientists is expanding our understanding of climate change and providing tools to help preserve the region’s long-term sustainability. UNL is partnering with the U.S. Geological Survey to explore developing a regional climate change research framework.
This is the seventh annual “Major Sponsored Programs and Faculty Awards for Research and Creative Activity” report. This booklet highlights the successes of University of Nebraska–Lincoln faculty during 2008. It lists the funding sources, projects and investigators on major grants and sponsored program awards received during the year, as well as patents issued; published books and scholarship; fellowships and other recognitions; intellectual property licenses; and performances and exhibitions in the fine and performing arts. This impressive list grows each year and I am pleased to present evidence of our faculty’s accomplishments.

From climate change, water and renewable energy, to math and science education, virology and transportation safety, UNL faculty are addressing important challenges for Nebraska, our nation and the world. Our external research funding reflects their achievements, growing 115 percent since 2000 to a record $106.1 million in fiscal year 2008.

How have we achieved this success? We have worked to integrate our research priorities with our established programs of excellence, building on each success. We zealously foster interdisciplinary research and collaborations with public and private partnerships, thus expanding our economic development efforts by working with business and industry. And we celebrate our achievements and recognize that excellence attracts excellence.

These accomplishments exemplify how UNL’s emphasis on innovation, interdisciplinarity and international collaborations is propelling our research into new arenas, producing new products and technologies for the marketplace and offering our students intensive research experiences.

Thank you for your interest in and support of research at the University of Nebraska–Lincoln!

Prem S. Paul
Vice Chancellor for Research and Economic Development
**AWARDS OF $3 MILLION OR MORE**

*Active awards in 2008*

* Indicates new in 2008

---

### Allen, David  
**Engineering**

**Blast Wave Absorbing Structures: An Experimental & Modeling Program**  
DOD-Army Research Laboratory  
$7,500,000  
6/25/04 – 6/24/09

David Allen, dean of the College of Engineering and professor of engineering mechanics, with funding from the Army Research Laboratory-Weapons and Materials Research Directorate, directs a collaborative effort focused on development of new materials and technologies relevant to blast mitigation and weapons detection. The program includes 24 UNL faculty from six different departments—civil engineering, structural engineering, chemical and biomolecular engineering, electrical engineering, engineering mechanics and mechanical engineering—working on 15 multidisciplinary projects. The projects have the common objective of providing new materials and technologies for blast mitigation, mine detection and pathogen detection.

---

### Cassman, Kenneth  
**Nebraska Center for Energy Sciences Research; Agronomy and Horticulture**

**Nebraska Center for Energy Sciences Research**  
$5,000,000  
4/1/06 - 3/31/2011  
Paul, Prem

Kenneth Cassman directs the Nebraska Center for Energy Sciences Research, a collaboration between UNL and the Nebraska Public Power District. The center was established in April 2006 with NPPD’s five-year, $5 million commitment 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 UNL 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, wind and solar energy), as well as opportunities for energy conservation.
Namas Chandra, associate dean in the College of Engineering, has received a grant from the Army Research Office to create the UNL Center for Trauma Mechanics. The center will focus on the effects of blast waves on the head and brain of a fully equipped soldier in the field. The project will study wave propagation effects on the skull and brain especially under mild traumatic brain injury (TBI) pressure loading conditions. The work of the center will be instrumental in improving understanding of TBI and may lead to design of more effective protection systems that shield soldiers from the combined effects of both blast waves and impact.

Dan Cotton directs the eXtension Initiative, an Internet-based Cooperative Extension Service education and information system. UNL is the lead institution in this multi-year project, which partners with the University of Kentucky, North Carolina State University and Virginia Tech University. This is a collaborative effort of the nation’s 107 land-grant universities and the U.S. Department of Agriculture’s Cooperative State Research, Education and Extension Service to develop content and technology for the eXtension project. eXtension is a virtual educational environment that provides science-based, objective information. Users may take advantage of learning opportunities and interact with the expertise available from the land-grant university system by visiting www.extension.org.
Barbara Couture, vice chancellor for academic affairs, with funding from the National Science Foundation, directs ADVANCE-Nebraska, a program intended to significantly increase the gender and racial diversity of the UNL faculty, especially in the science, technology, engineering and mathematics (STEM) fields. The ADVANCE office, led by program director Mary Anne Holmes, professor of geosciences, will coordinate recruitment and retention-enhancing activities, disseminate information to the campus and the academic community at large, and serve as liaison for the many groups engaged in diversity-focused activities on campus. Other ADVANCE efforts include initiatives related to flexible work arrangements to accommodate work-life issues of faculty; development of a dual career partner program; training programs to minimize the influence of bias on decision-making processes; and informal networking through professional development workshops, luncheons and retreats. The five-year, $3.8 million grant is from NSF’s ADVANCE program, which aims to increase participation and advancement of women in academic science and engineering careers.
A five-year, $8.7 million grant from the U.S. Department of Health and Human Services Children’s Bureau has helped establish the Midwest Child Welfare Technical Assistance Implementation Center. The new center will provide long-term consultation and support to child service agencies and tribes in Nebraska, Iowa, Illinois, Indiana, Kansas, Michigan, Missouri, Minnesota, Ohio and Wisconsin. It will partner with state and tribal child welfare agencies to assess their inner workings and identify broad changes that could help them operate more efficiently and effectively to serve families and children; identify obstacles to helping families; build the capacity of state and tribal child welfare systems; and work toward significant changes to improve outcomes for children and families involved with these systems. The ultimate goal is to ensure all children have safe, stable and permanent homes. Co-leaders of the project are Mark Ells and Michelle Graef of the Center on Children, Families and the Law.

With more than $3 million in support from the Department of Transportation’s Federal Railroad Administration, associate professor of mechanical engineering Shane Farritor and colleagues are continuing to develop techniques to assess track stability and related high-speed wireless communication to improve the safety of railroad operations. This funding supports research in three different areas of railroad track safety: 1) real-time measurement of track modulus from a moving car, leading to preventative maintenance strategies that relate track modulus data to specific track problems; 2) study of the measurement of rail longitudinal stress, to help reduce rail failure; and 3) study of the use of electrical energy from passing trains to power an efficient warning light system at grade crossings that are not equipped with warning light systems due to the lack of electrical infrastructure, thus reducing accidents at these “passive” grade crossings.
Gladyshev, Vadim  Biochemistry
Redox Biology Center  DHHS-NIH-NCRR
$10,577,043  8/1/07 – 7/31/12

Vadim Gladyshev, Charles Bessey professor of biochemistry in the Institute of Agriculture and Natural Resources, is the director of the Redox Biology Center. Established in 2002 with a grant from the National Institutes of Health as a Center of Biomedical Research Excellence, the center received a competitive renewal grant in 2007 to support it through 2012. The center’s researchers investigate how cells maintain a reduction-oxidation balance, a process called redox homeostasis, and study links between redox homeostasis and diseases such as cancer, cardiovascular disease, Alzheimer’s disease and cataracts. The center’s research will provide important advances in the understanding of redox regulation, comprising aspects of cellular aging and controlled cell death.

Goddard, Stephen  Computer Science and Engineering
Drought Risk, Impact and Mitigation Information System  Department of Agriculture-RMA-FCIC
$6,407,473  9/1/05 – 8/31/10

Stephen Goddard, associate professor of computer science and director of UNL’s Laboratory for Advanced Research Computing, is principal investigator in a $6.4 million joint effort by climatologists and computer scientists to bring cutting-edge computer science technologies to agricultural producers’ age-old decision-making processes. The three-year partnership agreements are between the U.S. Department of Agriculture’s Risk Management Agency, UNL’s Department of Computer Science and Engineering and the UNL-based National Drought Mitigation Center. A separate $1 million cooperative agreement, directed by Donald Wilhite, professor in the School of Natural Resources and director of the National Drought Mitigation Center, will support continued work on a tool that uses satellite technology and climate information to detect vegetation stress on the ground for a much more detailed view of drought’s scope and potential impact.
Harwood, David  
Geosciences

AWARDS OF $3 MILLION OR MORE

ANDRILL: Investigating Antarctica’s Role in Cenozoic Global Environmental Change

$12,978,160  NSF
6/1/05 – 5/31/10

Levy, Richard  
Geosciences

David Harwood, professor of geosciences, leads an international team of scientists drilling beneath the Antarctic ice pack to unearth geological strata that could hold ancient clues to contemporary global warming trends. The National Science Foundation has awarded $12.9 million to a consortium of five U.S. universities headed by UNL and Northern Illinois University. Dubbed ANDRILL (ANtarctic geological DRILLing), the project is administered by the ANDRILL Science Management Office headquartered at UNL. ANDRILL is backed by more than $30 million in funding, including $9.7 million in previous and ongoing national agreements to support operations and nearly $8 million from the other countries to support scientific research. Other members of the U.S. consortium making up the American portion of the ANDRILL program are Florida State University, The Ohio State University and the University of Massachusetts Amherst. The project also includes scientists from Germany, Italy and New Zealand.

Jose, H. Douglas  
Agricultural Economics

North Central Risk Management Education Center  
Department of Agriculture-CSREES

$3,600,000
9/15/07 – 9/14/10

The North Central Risk Management Education Center provides program leadership and coordination for risk management education in the North Central Region (Kansas, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dakota and Wisconsin). It is one of four risk management education centers in the United States. They were established in 2001 to provide risk management education for agricultural producers to help them develop knowledge, skills and tools needed to make informed risk management decisions for their operations.
Lewis, Jim

Center for Science, Mathematics and Computer Education; Mathematics

* NEBRASKA MATH

$9,235,407

NSF

01/01/09 – 12/31/13

Heaton, Ruth

Teaching, Learning and Teacher Education; CSMCE

McGowan, Thomas

Teaching, Learning and Teacher Education

Stroup, Walter

Statistics

Edwards, Carolyn

Child, Youth and Family Studies; Psychology

Papick, Ira

Mathematics; CSMCE

Jacobson, Barbara

Lincoln Public Schools

Drs. Lewis, Heaton, McGowen and Jacobson are joined by Walter Stroup, professor of statistics, Ira Papick, professor of mathematics, and Carolyn Edwards, professor of psychology, in directing NEBRASKA MATH, a statewide program aimed at improving mathematics achievement for all students and narrowing the achievement gap for at-risk students in kindergarten through third grade. The program is supported by a $9.3 million grant from the National Science Foundation. NEBRASKA MATH is a partnership of UNL, public schools in Lincoln, Grand Island, and Papillion-La Vista, and 14 rural Educational Service Units. It builds on the success of UNL's Math in the Middle Institute, by initiating new programs that focus on enhancing teachers’ knowledge of mathematics and teaching methods.

Math in the Middle Institute Partnership

$5,600,000

NSF

8/1/04 – 7/31/11

Heaton, Ruth

Teaching, Learning and Teacher Education; CSMCE

McGowan, Thomas

Teaching, Learning and Teacher Education

Jacobson, Barbara

Lincoln Public Schools

Jim Lewis, professor of mathematics; Ruth Heaton, associate professor of teaching, learning and teacher education; Tom McGowan, professor of teaching, learning and teacher education; and Barbara Jacobson, curriculum director for Lincoln Public Schools, are co-leaders of a $5.6 million project titled the Math in the Middle Institute Partnership. The goal is to create the next set of leaders in middle school mathematics who will mentor peers and offer challenging courses to their students. During the five years of the project, about 120 teachers will participate in three in-residence summer sessions, four non-resident academic semesters and take 10 courses created by math and pedagogy experts. Middle school is a gateway to high school success, and efforts to improve middle school learning, especially in mathematics, show benefits at later stages in students’ academic careers.
With support from the Department of Defense, electrical engineering professor Yongfeng Lu is conducting a five-year study to investigate a new process to deposit a diamond or diamond-like coating on surfaces to create thermal barriers and increase corrosion protection. He is developing a coating technique that employs multiple laser beams to deposit the coating at room temperature in an open atmosphere—a significant improvement over conventional coating techniques that require low vacuum and high temperature. The resulting process will be more energy-efficient, improve the quality of materials on which the coating is deposited, and minimize thermal stress.

Michael Meagher, Donald F. Othmer professor of chemical and biomolecular engineering, is the director of the Biological Process Development Facility. The facility provides clients with process research and early manufacturing of new therapeutic molecules for human clinical testing. The facility is also involved in the development of vaccines against biological warfare agents and products that can be used as therapeutic countermeasures to treat people who have been exposed to biological agents. Department of Defense funding has led to the building of new laboratories that give the Biological Process Development Facility new capabilities in mammalian cell culture process research and development.

Meagher is also collaborating with DynPort Vaccine Co., the University of Colorado, and the U.S. Army Medical Research Institute of Infectious Disease to develop a vaccine that protects against botulinum neurotoxin, a lethal agent that could be used for bioterrorism. The goal is to develop vaccines that protect against five subtypes of the toxin within the next one to two years and to develop a vaccine for the other two types within five years. The new vaccines could eliminate the threat of botulism as a weapon of mass destruction.
The U.S. Department of Transportation’s Research and Innovative Technology Administration has designated UNL’s Mid-America Transportation Center as a regional university transportation center. MATC is a consortium with UNL as the lead institution with regional partners Kansas State University, University of Kansas, University of Missouri-Rolla and Lincoln University of Missouri. The Nebraska Department of Roads and the Kansas and Missouri Departments of Transportation also are key partners. Laurence Rilett, Keith W. Klaasmeyer chair in engineering and technology in UNL’s civil engineering department, directs the center. Its focus is “improving safety and minimizing risk associated with increasing multi-modal freight movement on the U.S. surface transportation system.” MATC will focus on safety research related to rural transportation. Key safety research areas include traffic control, animal crashes, safer at-grade railway crossings and work zones, and the development of more effective and economical roadside crash barriers. The university transportation center program supports transportation research, education and technology transfer that promote scientific innovations in a variety of transportation modes and disciplines. Region 7 serves Iowa, Kansas, Missouri and Nebraska. It is one of 10 regional university transportation centers in the nation.

Susan M. Sheridan, Willa Cather professor of educational psychology, and co-investigator Carolyn Edwards, Willa Cather professor of psychology and child, youth and family studies, are leading a team of researchers from UNL and UNMC in a school-readiness project funded by three federal agencies. The team will launch and evaluate a comprehensive, community-based early education program for children aged 0-5. The goal is to increase children’s readiness for school by teaching parents to build an effective relationship with their children at home and to be active participants in their children’s learning when they enter school. The program is designed to enhance children’s cognitive, behavioral and socioemotional well-being, which together set the stage for school readiness.
Evgeny Tsymbal, professor of physics and astronomy at UNL, leads the Materials Research Science and Engineering Center. The center was established in 2002 with a grant from the National Science Foundation and involves scientists from the Departments of Physics and Astronomy, Chemistry and Mechanical Engineering, and the School of Biological Sciences. MRSEC projects focus on fabricating and studying new magnetic structures and materials at the nanometer scale. The research has applications in advanced computing and data storage, handheld electronic devices, advanced sensors and future medical technologies.

Donald Umstadter, professor of physics and astronomy, will complete construction of a high-energy laser system at the UNL Extreme Light Laboratory capable of delivering a peak power of 1 petawatt. This project is critical to the development and performance of laser-driven radiation sources used for detection, inspection and non-destructive testing. The most immediate result will be a dramatic increase in the brightness and quality of the laser-driven electron beams and x-rays, with applications for detecting cracks in aging critical components and detecting special nuclear materials through large thicknesses of shielding.
Velander, William
Chemical and Biomolecular Engineering

William Velander, Donald R. Voelte Jr. and Nancy A. Keegan endowed chair in engineering, is principal investigator in a partnership funded by a $9.9 million grant from the National Institutes of Health/National Heart, Lung and Blood Institute. The goal is to develop an abundant, pure, safe and effective therapy for Hemophilia B using recombinant human coagulation proteins produced in the milk of transgenic pigs. The project builds on innovative bioengineering technologies pioneered by Velander that enable improved intravenous and novel oral delivery of hemophilic factors to patients. Hemophilia B is a congenital bleeding disorder that causes pain, crippling injuries and early death. It can be treated by Factor IX, a blood protein, but the costs are prohibitive and most patients do not receive it. Velander’s project isolates Factor IX in the milk of transgenic pigs.

Production and Purification of Fibrinogen Components for Production Fibrin Sealant of Hemostatic Dressing

Van Cott, Kevin
Chemical and Biomolecular Engineering

Velander is also leading a project, funded by the Department of Defense, to develop processes to produce recombinant fibrinogen and other blood proteins for bandages and implant devices, and to conduct research and clinical trials on their effectiveness. The fibrinogen bandage is a potentially life-saving technology for patients who lose large amounts of blood. When applied, the bandage immediately begins clotting the wound, stemming blood loss. The technology could be used in battlefield or other applications where patients are hemorrhaging. Fibrinogen technology could also play a role in helping develop implantable devices with increased biological compatibility. Fibrinogen made from human plasma is scarce and expensive; Velander has developed a process for producing it from transgenic cattle bred with a human gene that enables them to produce fibrinogen.

Whitbeck, Les
Sociology

Les Whitbeck, professor of sociology, is coordinating a seven-year project, funded by the National Institute on Drug Abuse, to investigate risk and resilience for early onset substance use and abuse among pre-teen Native children in the Upper Midwest.
Wood, Charles
Nebraska Center for Virology
$10,149,257
9/26/05 – 4/30/10

Charles Wood, Lewis Lehr/3M university professor of biological sciences, is the director of the Nebraska Center for Virology. The center, funded by the National Institutes of Health, combines the expertise and facilities of Nebraska’s leading biomedical research institutions: UNL, the University of Nebraska Medical Center and Creighton University. Center research addresses pathogenic and therapeutic aspects of some of the most devastating viral and neuroimmune disorders facing the global community, including AIDS, HIV-associated cancers, Alzheimer’s disease and chronic infections caused by herpes viruses and a new class of infectious agents called prions.

Kaposi’s Sarcoma & Human Herpesvirus in Africa
$3,580,682
9/30/03 – 6/30/09

Since the onset of the AIDS epidemic, Kaposi’s sarcoma has become the most frequently diagnosed pediatric cancer in sub-Saharan Africa. It is associated with Human Herpesvirus 8 (HHV-8) and Kaposi’s Sarcoma Herpesvirus (KSHV). The project looks to understand how these viruses are transmitted to children by studying children in Lusaka, Zambia. The goal is to establish the rates of transmission and to identify virologic, immunologic and ethnographic risk factors that predispose children to HHV-8 infection. It is anticipated that the information could be used to develop intervention strategies.

Yohe, John
International Sorghum/Millet Collaborative Research Support Program (INTSORMIL)
$9,000,000
9/30/06 – 9/29/11

John Yohe, associate professor in the Department of Agronomy and Horticulture, directs the International Sorghum/Millet (INTSORMIL) Collaborative Research Support Program. INTSORMIL is a collaborative international organization that supports research focused on improving nutrition and increasing income in developing countries and the United States. Scientists from U.S. land grant universities collaborate with scientists in host countries in the development of technology to improve production and utilization of sorghum and millet and facilitate natural resource management. Their work is done in Africa, Eurasia, Latin America and the United States.
**Interdisciplinary Team**  
Infrastructure for the Enhancement of Systems Biology Research & Development at UNL  
$4,329,877  
NSF-EPSCoR  
7/1/07 – 6/30/10

This grant supports multi-campus collaborative research between biologists and engineers for creating a strategic research niche in epigenetics—the study of heritable changes in gene functions not associated with changes in DNA sequence. Much of what comprises the complexity of multi-cellular organisms is programmed within the network of interacting molecules—protein, RNA and DNA—known collectively as chromatin. Engineers will create nano-devices for delivering molecules into cells for better understanding the role of chromatin in cell function and its response to the environment.
Awards of $1 Million to $2,999,999
Active awards in 2008
* Indicates new in 2008

Alfano, James  Center for Plant Science Innovation; Plant Pathology
Suppression of Innate Immunity by ADP Ribosyltransferase Type III Effectors
$1,779,178  DHHS-NIH-NIAID

Azizinamini, Atorod  Nebraska Transportation Center
* Bridges for Service Life Beyond 100 Years: Innovative Systems
$1,999,637  National Academy of Sciences-Transportation Research Board
Tadros, Maher  Civil Engineering

Barker, Bradley  Center on Children, Youth, Families and Schools; 4-H State Office
* Scale-UP: National Robotics in 4-H: Workforce Skills for the 21st Century
$2,498,908  NSF
Nugent, Gwen  Center on Children, Youth, Families and Schools
Adamchuk, Viacheslav  Center on Children, Youth, Families and Schools; Biological Systems Engineering

Barycki, Joseph  Biochemistry
Structural Insights into Redox Homeostasis
$1,067,922  DHHS-NIH-NIGMS

Becker, Donald  Biochemistry
* Role of Proline in Redox Homeostasis and Apoptosis
$1,097,641  DHHS-NIH-NIGMS
Mechanistic Studies of Functional Switching in the PutA Flavoprotein
$1,218,025  DHHS-NIH-NIGMS

Bellows, Laurie  Graduate Studies
McNeir Scholars Project and the University of Nebraska-Lincoln
$1,125,000  Department of Education

Blum, Paul  Biological Sciences
* Value-Added Products from Renewable Biofuels
$1,968,000  Department of Energy
Cassman, Kenneth  Nebraska Center for Energy Sciences Research

Chen, Bing  Computer and Electronics Engineering
SPIRIT^2.0 Silicon Prairie Initiative for Robotics in IT
$2,999,963  NSF

Cupp, Andrea  Animal Science
Role of VEGF in Testis Morphogenesis
$1,066,625  DHHS-NIH-NICHD
Weber, John  Animal Science
White, Brett  Animal Science
DeKraai, Mark  
Child Mental Health SIG
$2,379,313  
Nebraska Department of Health and Human Services

Diamond, Judy  
University of Nebraska State Museum
* Omaha Science Media Project: Improving Science Literacy through Media Experiences
$1,471,768  
Omaha Public Schools
Struthers, Amy  
Journalism and Mass Communications
Angeletti, Peter  
Biological Sciences

$1,266,290  
Nebraska Center for Virology
World of Viruses
Wood, Charles

Doll, Elizabeth  
Educational Psychology
Evolving Inquiry: Science Instruction Model for Teachers in Rural, Culturally Diverse Schools
$1,261,684  
Department of Education
Bruning, Roger  
Educational Psychology
Bonnstetter, Ron  
Teaching, Learning and Teacher Education
Horn, Christy  
Educational Psychology

Dzenis, Yuris  
Engineering Mechanics
NIRT: Manufacturing of Novel Continuous Nanocrystalline Ceramic Nanofibers
$1,095,200  
NSF
Zeng, Xiao Cheng  
Chemistry
Feng, Ruqiang  
Engineering Mechanics
Turner, Joseph  
Engineering Mechanics
Larsen, Gustavo  
Chemical and Biomolecular Engineering

NIRT: Nanomanufacturing and Analysis of Active Hierarchical Nanofilamentary Nanostructures
$1,000,000  
NSF
Zeng, Xiao Cheng  
Chemistry
Feng, Ruqiang  
Engineering Mechanics
Turner, Joseph  
Engineering Mechanics
Poser, Susan  
Center for the Teaching and Study of Applied Ethics
Tomkins, Alan  
Public Policy Center

Eccarius, Malinda  
Special Education and Communication Disorders
Mountain-Prairie Upgrade Partnership
$1,155,054  
Department of Education

Epstein, Michael  
Special Education and Communication Disorders
On the Way Home: A Family-Centered Academic Reintegration Intervention Model
$1,443,284  
Special Education and Communication Disorders
Espy, Kimberly
Prenatal Tobacco Exposure: Perinatal and Genetic Risks
$1,207,660
Office of Research
DHHS-NIH-NIDA

Wiebe, Sandra
Executive Function Development in Preschool Children
$1,168,281
Office of Research
DHHS-NIH-NIMH

Faller, Ronald
Evaluation & Field Installation of Steel Tube & Foam Energy Reduction (SAFER) Barrier
$1,045,913
Indianapolis Racing League
Civil Engineering

Holloway, Jim
Civil Engineering

Reid, John
Mechanical Engineering

Rohde, John
Civil Engineering

Sicking, Dean
Civil Engineering

Farrell, Michael
IPY: Engaging Antarctica
$1,246,068
University of Nebraska State Museum
NSF

Diamond, Judy
University Television

Gladyshiev, Vadim
Functions of Mammalian Thioredoxin Reductases
$1,155,459
Biochemistry
DHHS-NIH-NIGMS

Selenoprotein as a Target for Cancer Prevention
$1,334,624
DHHS-NIH-NCI

Methionine Sulfoxide Reduction, Selenium and Aging
$1,451,400
DHHS-NIH-NIA

Identity & Functions of Selenoprotein Genes
$1,114,032
DHHS-NIH-NIGMS

Goddard, Stephen
Climate & Soil Risk Information System
$1,212,056
Computer Science and Engineering
Department of Agriculture-RMA

Wilhite, Donald
School of Natural Resources

Hubbard, Kenneth
School of Natural Resources

Green, Jordan
Early Speech Motor Development
$1,754,412
Special Education and Communication Disorders
DHHS-NIH-NIDCD

Heusel, Gary
Midwest Consortium for Service-Learning in Higher Education
$1,411,709
Student Involvement
Corporation for National Service

Major, Linda
Student Involvement

Hoagland, Kyle
Ground Water Management and Protection Act Service Agreement
$1,500,000
School of Natural Resources
Nebraska Department of Natural Resources
Horn, Christy  
* Building Accepting Campus Communities  
Department of Education  
Equity, Access and Diversity Programs

Bruning, Roger  
Educational Psychology  
Equity, Access and Diversity Programs

Sydik, Jeremy  

Hubbard, Kenneth  
School of Natural Resources  
Regional Climate Services Support in the High Plains Region: The High Plains Regional Climate Center  
Department of Commerce-NOAA

Jones, David  
Biological Systems Engineering  
Strengthening Transitions into Engineering Program  
NSF

Ballard, John  
Engineering

Perez, Lance  
Electrical Engineering

Jones, Vicky  
Northeast Research & Extension Center  
Northeast Nebraska Paraprofessional Ladder Project  
Department of Education

Lopez, William  
Teaching, Learning and Teacher Education

Josiah, Scott  
Nebraska State Forest Service  
Cooperative Forestry Program  
Department of Agriculture-FS

Kamil, Alan  
Biological Sciences  
Mechanisms of Visual Search and Attention  
DHHS-NIH-NIMH

Bond, Alan  
Biological Sciences

Kirby, Roger  
Physics and Astronomy  
Track 2, GK-12: Project Fulcrum: Phase II  
NSF

Claes, Daniel  
Physics and Astronomy

Knoche, Lisa  
Center on Children, Youth, Families and Schools  
Rural Language and Literacy Connections (Rural LLC)  
Department of Education

Raikes, Helen  
Center on Children, Youth, Families and Schools; Child, Youth and Family Studies

Koszewski, Wanda  
Nutrition and Health Sciences  
Food Stamp Nutrition Education Program  
Nebraska Department of Health & Human Services

Birnstihl, Elizabeth  
IANR Cooperative Extension

Schnepf, Marilynn  
Nutritional and Health Sciences

Lee, Jaekwon  
Biochemistry  
Mechanistic Insights into Homeostatic Copper Ion Acquisition  
DHHS-NIH-NIDDK

Lou, Marjorie  
Veterinary and Biomedical Sciences  
Protein-Thiol Mixed Disulfide in Cataractogenesis  
DHHS-NIH-National Eye Institute
Mackenzie, Sally  Center for Plant Science Innovation
* TRMS: An Integrative Study of Plant Mitochondrial Biology
$1,420,753  NSF
Christensen, Alan  Biological Sciences
Elthon, Thomas  Agronomy and Horticulture
Wang, Dong  Statistics

Meagher, Michael  Chemical and Biomolecular Engineering
* USAMRAA CGMP Production Contract #1
$2,083,998  DOD-Army Medical Research
Swanson, Stephen  Chemical and Biomolecular Engineering
Van Cott, Kevin  Chemical and Biomolecular Engineering

Process Research and Development of Antibodies as Countermeasures for C. Botulinum Neurotoxin
$2,877,000  DOD-Army Space and Missile Defense Command

Therapeutic Agents & Vaccines against Biological Warfare
$2,905,899  DOD-Army Medical Research

Purification of proPRT-201 and Production of Reference Standard
$2,464,390  Proteon Therapeutics

Process Development & cGMP Production
$1,228,735  Targepeutics Inc.

Mendoza-Gorham, Joan  Student Affairs
Classic Upward Bound
$1,250,000  Department of Education

Upward Bound Math/Science Program
$1,000,000  Department of Education

Nelson, J. Ron  Special Education and Communication Disorders
Portales a Aprender Leer (PAL)
$2,687,442  Department of Education

Parkhurst, Lawrence  Chemistry
Assembly Mechanisms of TBP–Nucleated Complexes
$1,107,318  DHHS-NIH-NIGMS

Robertson Jr., Vaughn  Student Affairs
UNL Educational Talent Search
$2,091,823  Department of Education

Rutenbeck, Kathy  Student Affairs
Upward Bound-Northeast Nebraska
$1,458,320  Department of Education

Schaefer, Matthew  Law
* University of Nebraska College of Law Space & Telecommunications Law Program: Filling a National Need, Advancing the Field
$1,717,370  NASA
Willborn, Steven  Law
Leiter, Richard  Law
Scott, Stephen  Computer Science and Engineering
* An Extensible Semantic Bridge between Biodiversity and Genomics
$1,367,121  NSF
Soh, Leen-Kiat  Computer Science and Engineering
Henninger, Scott  Computer Science and Engineering
Jameson, Mary Liz  University of Nebraska State Museum
Moriyama, Etsuko  Biological Sciences; Center for Plant Science Innovation

Sheridan, Susan  Educational Psychology; Center on Children, Youth, Families and Schools
Evaluation of Efficacy of CBC for Addressing Disruptive Behaviors of Children-at-Risk for Academic Failure
$1,368,067  Department of Education
Glover, Todd  Center on Children, Youth, Families and Schools

Simpson, Melanie  Biochemistry
Role of Hyaluronan Matrix in Prostate Cancer Progression
$1,056,209  DHHS-NIH-NCI

Spreitzer, Robert  Biochemistry
Role of the Rubisco Small Subunit
$1,001,500  Department of Energy

Starace, Anthony  Physics and Astronomy
Dynamics of Few-Body Atomic Processes
$1,216,337  Department of Energy

Storz, Jay  Biological Sciences
* Mechanisms of Hemoglobin Adaptation to Hypoxia in High-Altitude Rodents
$1,323,748  DHHS-NIH-NHLBI
Moyiyama, Hideaki  Center for Biotechnology

Swanson, David  Computer Science and Engineering
US CMS Tier 2 Center
$1,973,813  University of California-Los Angeles
Bloom, Kenneth  Physics and Astronomy
Dominguez, Aaron  Physics and Astronomy

Umstadter, Donald  Physics and Astronomy
Research & Development of a High-Power-Laser-Driven Electron Accelerator Suitable for Applications
$1,250,029  DOD-DARPA
Banerjee, Sudeep  Physics and Astronomy
Tunable, Monoenergetic Gamma-Ray Source for Identification of Embedded SNM
$2,940,284  Department of Homeland Security-DNDO
Banerjee, Sudeep  Physics and Astronomy
Van Etten, James  
DNA Replication & Gene Expression of Chlorella Viruses  
$1,215,694  
Dunigan, David  
Kang, Ming  
Agarkova, Irina  
Gurnon, James  

Verma, Shashi  
Carbon Sequestration in Dryland & Irrigated Agroecosystems  
$1,950,000  
Cassman, Kenneth  
Knops, Johannes  
Hubbard, Kenneth  
Arkebauer, Timothy  
Dobermann, Achim  
Yang, Haihun  
Walters, Daniel  
Suyker, Andrew  
Ginting, Daniel  

Viljoen, Hendrik  
Chemical and Biomolecular Engineering  
A Rational Design of a Platform for de novo Gene Synthesis  
$1,315,289  
Subramanian, Anu  

Walker, Judy  
Mathematics  
EMSW21-MCTP: Nebraska Mentoring through Critical Transition Points  
$2,500,000  
Marley, Tom  

Weeks, Donald  
Biochemistry  
Development of Dicamba-Resistant Crops  
$2,500,000  

Whitbeck, Les  
Sociology  
*Resilience through the High School Years  
$2,654,155  

White, Lynn  
Sociology  
Infertility: Pathways & Psychosocial Outcomes  
$2,559,414  

Van Etten, James  
DNA Replication & Gene Expression of Chlorella Viruses  
$1,215,694  
Dunigan, David  
Kang, Ming  
Agarkova, Irina  
Gurnon, James  

Verma, Shashi  
Carbon Sequestration in Dryland & Irrigated Agroecosystems  
$1,950,000  
Cassman, Kenneth  
Knops, Johannes  
Hubbard, Kenneth  
Arkebauer, Timothy  
Dobermann, Achim  
Yang, Haihun  
Walters, Daniel  
Suyker, Andrew  
Ginting, Daniel  

Viljoen, Hendrik  
Chemical and Biomolecular Engineering  
A Rational Design of a Platform for de novo Gene Synthesis  
$1,315,289  
Subramanian, Anu  

Walker, Judy  
Mathematics  
EMSW21-MCTP: Nebraska Mentoring through Critical Transition Points  
$2,500,000  
Marley, Tom  

Weeks, Donald  
Biochemistry  
Development of Dicamba-Resistant Crops  
$2,500,000  

Whitbeck, Les  
Sociology  
*Resilience through the High School Years  
$2,654,155  

Great Plains Cultural Ways Mental Health Careers Program  
$1,120,576  
Moore, Helen  

White, Lynn  
Sociology  
Infertility: Pathways & Psychosocial Outcomes  
$2,559,414  
McQuillan, Julia  

$1 MILLION — $2,999,999
Wilcke, William  
North Central Regional Sustainable Agriculture Research & Education Program – SARE  
$2,707,719  
Department of Agriculture-CSREES

Wilcox, Brian  
Center on Children, Families and the Law  
Midwest Child Care Research Consortium  
$1,200,000  
DHHS-ACF

Torquati, Julia  
Family and Consumer Sciences

Wilhite, Donald  
School of Natural Resources  
Rangeland and Forage Geospatial Decision Support System for Drought Risk Management  
$1,023,038  
Department of Agriculture-RMA

Wood, Charles  
Biological Sciences  
Programs in HIV & AIDS Assoc Diseases/Malignancies  
$2,130,669  
DHHS-NIH-Fogarty International Center

Research Training in Comparative Viral Pathogenesis  
$1,218,789  
DHHS-NIH-NIAID

Yamamoto, Catherine  
Student Affairs  
Student Support Services Program  
$1,913,874  
Department of Education

Zempleni, Janos  
Nutrition and Health Sciences  
* Biotin Deficiency Impairs Silencing of Repeat Regions and Retrotransposons  
$1,233,088  
DHHS-NIH-NIDDK

Zhang, Luwen  
Center for Virology  
Oncogenic Properties of Interferon Regulatory Factor 7  
$1,126,847  
DHHS-NIH-NCI
Awards of $200,000 - $999,999
Active awards in 2008
* Indicates new in 2008

Adenwalla, Shireen  Center for Materials and Nanoscience
  * Development of Semiconducting Boron Carbide Neutron Detectors for Astrobiological Applications
  $299,991  NASA

Admiraal, David  Civil Engineering
  Low-Cost Energy Dissipation at Culvert Exits
  $201,856  Nebraska Department of Roads

Albrecht, Julie  Nutrition and Health Sciences
  * Food Safety for Families with Young Children
  $599,503  Department of Agriculture-NRICGP

Alexander, Dennis  Electrical Engineering
  Ultrafast Laser Interaction Processes for Libs & Other Sensing Technologies
  $600,000  University of Central Florida

Alfano, James  Center for Plant Science Innovation; Plant Pathology
  Secretion Signals & Type III Chaperones in Pseudomonas Syringae Type III Secretion System
  $440,000  NSF
  Dissecting the Function of HrpJ & HrpK – Two Type III Secreted Proteins Required for Injection of Effectors into Plant Cells
  $398,500  Department of Agriculture-NRICGP

Allen, Craig  School of Natural Resources
  Monitoring, Mapping & Risk Assessment for Non-Indigenous Invasive Species in Nebraska
  $325,081  Nebraska Environmental Trust
  Merchant, James  School of Natural Resources
  Cross-Scale Structure & Scale Breaks in Complex Systems
  $248,986  James S. McDonnell Foundation

Allen, David  Engineering
  U.S.-Brazil Dual-Degree in Infrastructure & Sustainability Engineering Program
  $208,211  Department of Education-FIPSE

  EMME: US-EU Transatlantic Degree Program in Engineering Mechanics/Materials Engineering
  $407,997  Department of Education Engineering
  Chandra, Namas  Engineering Mechanics
  Negahban, Mehrdad
Anderson, Mark  
**Geosciences**  
* Development of Northern Hemisphere Snow & Ice Climate Data Records  
$213,461  
Rutgers University  
Atmospheric Conditions Associated with Sea Ice Characteristics over Arctic Ocean during Melt Season  
$208,699  
NASA  

Asgarpour, Sohrab  
**Electrical Engineering**  
* Reliability Modeling and Maintenance Optimization of Aging Substations  
$206,082  
NSF  

Atkin, Audrey  
**Biological Sciences**  
Wild-Type PPR1 mRNA Decay by Yeast Nonsense-Mediated mRNA Decay Pathway  
$403,219  
NSF  
Moriyama, Etsuko  
Center for Plant Science Innovation  

Avramov, Luchezar  
**Mathematics**  
* Cohomology and Structure of Commutative Algebras  
$260,667  
NSF  
Homology & Cohomology over Commutative Rings  
$356,322  
NSF  

Avramova, Zoya  
**Biological Sciences**  
* Lipid-Signaling and Epigenetic Regulations in Arabidopsis: Are Myotubularins the Link?  
$450,000  
NSF  
ATX1, Epigenetic Regulator of Plant Development  
$442,500  
NSF
Azizinamini, Atorod  Civil Engineering
* Comprehensive Evaluation of Fracture Critical Bridges
  Nebraska Department of Roads
  $286,348

  Simple for Dead-Continuous for Live Load System
  with Partial Pre-Fabricated Deck System
  Nebraska Department of Roads
  $242,038

  Development of Design Tools for Steel Bridge Systems,
  Simple for Dead Loads & Continuous for
  Superimposed Dead Load & Live Loads
  Nebraska Department of Roads
  $226,306

  Steel Box System Monitoring of N-2 over I-480 Bridge
  Nebraska Department of Roads
  $292,244

  IBRC 2002 Project
  Nebraska Department of Roads
  $240,000

  Folded Plate Technology: Research, Design & Monitoring
  Nebraska Department of Roads
  $445,000

  Development of Field Data for Effective Implementation of
  Mechanistic-Empirical Pavement Design Procedure
  Nebraska Department of Roads
  $315,252

Baenziger, P. Stephen  Agronomy and Horticulture
  Developing Winter Wheat with Improved Fusarium Head Blight
  Tolerance by Conventional and Transgenic Approaches
  Department of Agriculture-ARS
  $354,437

  Mitra, Amit  Plant Pathology
  Watkins, John  Plant Pathology
  Clemente, Thomas  Agronomy and Horticulture
  Baltensperger, David  Panhandle Research and Extension Center

  Genetic Basis of Agronomic Traits
  Controlled by Chromosome 3A in Wheat
  Department of Agriculture-NRICGP
  $390,000

  Eskridge, Kent  Statistics
  Dweikat, Ismail  Agronomy and Horticulture

  Developing Small Grains Cultivars
  Optimally Suited for Organic Production
  Department of Agriculture-NRICGP
  $755,937

  Flores, Rolando  Food Science and Technology
  Weigulo, Stephen  Plant Pathology
  Russell, William  Agronomy and Horticulture
  Shapiro, Charles  Agronomy and Horticulture
  Schlegel, Vicki  Food Science and Technology
  Wehling, Randy  Food Science and Technology
  Knezevic, Stevan  Northeast Research and Extension Center
  Hein, Gary  Panhandle Research and Extension Center
  Lyon, Drew  Panhandle Research and Extension Center
<table>
<thead>
<tr>
<th>Name</th>
<th>Department/Center</th>
<th>Title</th>
<th>Funding Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balkir, Sina</td>
<td>Electrical Engineering</td>
<td>All Solid-State Wireless Sensor Network for Nuclear Proliferation Detection</td>
<td>$417,191</td>
</tr>
<tr>
<td>Hoffman, Michael</td>
<td>Department of Energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barker, Bradley</td>
<td>Center on Children, Youth, Families and Schools; 4-H State Office</td>
<td>Robotics &amp; GPS/GIS in 4-H: Workplace Skills for the 21st Century</td>
<td>$864,139</td>
</tr>
<tr>
<td>Adamchuk, Viacheslav</td>
<td>Center on Children, Youth, Families and Schools; Biological Systems Engineering</td>
<td></td>
<td>$417,191</td>
</tr>
<tr>
<td>Basolo, Alexandra</td>
<td>Biological Sciences</td>
<td>Behavioral Plasticity in Preexisting Receiver Bias</td>
<td>$378,000</td>
</tr>
<tr>
<td>Hoffman, Michael</td>
<td>Department of Energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barker, Bradley</td>
<td>Center on Children, Youth, Families and Schools; 4-H State Office</td>
<td>Robotics &amp; GPS/GIS in 4-H: Workplace Skills for the 21st Century</td>
<td>$864,139</td>
</tr>
<tr>
<td>Adamchuk, Viacheslav</td>
<td>Center on Children, Youth, Families and Schools; Biological Systems Engineering</td>
<td></td>
<td>$417,191</td>
</tr>
<tr>
<td>Basolo, Alexandra</td>
<td>Biological Sciences</td>
<td>Behavioral Plasticity in Preexisting Receiver Bias</td>
<td>$378,000</td>
</tr>
<tr>
<td>Hoffman, Michael</td>
<td>Department of Energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Becker, Donald</td>
<td>Biochemistry</td>
<td>MRI: Acquisition of Beckman XL-I Analytical Ultracentrifuge</td>
<td>$284,160</td>
</tr>
<tr>
<td>Walter, Jens</td>
<td>Food Science and Technology</td>
<td>Verbal Behaviors in Computerized Lifecourse Surveys</td>
<td>$409,889</td>
</tr>
<tr>
<td>Hutkins, Robert</td>
<td>Department of Agriculture-NRICGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belli, Robert</td>
<td>Gallup Research Center</td>
<td>Verbal Behaviors in Computerized Lifecourse Surveys</td>
<td>$409,889</td>
</tr>
<tr>
<td>Benson, Andrew</td>
<td>Food Science and Technology</td>
<td>* Pyrosequencing and Community Profiling for Risk Assessment in Leafy Greens</td>
<td>$370,927</td>
</tr>
<tr>
<td>Walter, Jens</td>
<td>Department of Agriculture-NRICGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hutkins, Robert</td>
<td>Food Science and Technology</td>
<td>Verbal Behaviors in Computerized Lifecourse Surveys</td>
<td>$409,889</td>
</tr>
<tr>
<td>Berkowitz, David</td>
<td>Chemistry</td>
<td>* Stereocontrolled Total Synthesis of (-)-Picropodophyllin Analogues</td>
<td>$500,000</td>
</tr>
<tr>
<td></td>
<td>Stockbridge Pharmaceuticals Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>New Approaches to Catalyst Screening &amp; Development</td>
<td></td>
<td>$423,000</td>
</tr>
<tr>
<td></td>
<td>Department of Agriculture-NRICGP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bevins, Rick</td>
<td>Psychology</td>
<td>* Altering Nicotine Reward through Conditioning</td>
<td>$339,446</td>
</tr>
<tr>
<td></td>
<td>DHHS-NIH-NIDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acquired Appetitive Properties of Nicotine</td>
<td></td>
<td>$881,371</td>
</tr>
<tr>
<td></td>
<td>DHHS-NIH-NIDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Department</td>
<td>Project Title</td>
<td>Grant Amount</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Bien, Mary</td>
<td>Management</td>
<td>Examining Leadership and Adaptability in the Healthcare Industry</td>
<td>$308,473</td>
</tr>
<tr>
<td>Bilder, Christopher</td>
<td>Statistics</td>
<td>Disease Detection and Prevalence Estimation through Informative Group Testing</td>
<td>$713,250</td>
</tr>
<tr>
<td>Billesbach, David</td>
<td>Biological Systems Engineering</td>
<td>Development &amp; Field Testing of a Rapidly Deployable Carbon Dioxide Flux Management System</td>
<td>$559,675</td>
</tr>
<tr>
<td>Blum, Paul</td>
<td>Biological Sciences</td>
<td>Biohydrogenesis in the Thermotogales</td>
<td>$525,000</td>
</tr>
<tr>
<td>Bobaru, Florin</td>
<td>Engineering Mechanics</td>
<td>Adaptivity in Peridynamics for Composite Plates</td>
<td>$269,880</td>
</tr>
<tr>
<td>Bond, Alan</td>
<td>Biological Sciences</td>
<td>Mechanisms of Social Cognition</td>
<td>$540,260</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand, Jennifer</td>
<td>Center for Materials and Nanoscience</td>
<td>Novel Rare-Earth Semiconductors for Solid-State Neutron Detectors</td>
<td>$449,999</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, Mary</td>
<td>School of Natural Resources</td>
<td>Advancing Tern and Plover Common Sense Conservation into the Future</td>
<td>$270,000</td>
</tr>
<tr>
<td>Bulling, Denise</td>
<td>Public Policy Center</td>
<td>Hospital Preparedness — Bioterrorism</td>
<td>$230,000</td>
</tr>
<tr>
<td>Burbach, Mark</td>
<td>School of Natural Resources</td>
<td>Integrated Real-Time Groundwater-Level Monitoring Network to Support Drought Impact Assessment and Mitigation Programs</td>
<td>$403,293</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Burson, Dennis**
Animal Science
Listeria Monocytogenes Controls in Ready to Eat Meat Products
$599,732
Department of Agriculture-CSREES
Thippareddi, Harshavardhan
Food Science and Technology

**Cady, Daniel**
Cooperative Extension
Nebraska Technology Transfer Center at UNL
$280,000
Nebraska Department of Roads

Development of Tools for Rating Bridges
& Application to State Bridges
$893,418
Azizinamini, Atorod
Civil Engineering

**Cantrell, Randolph**
Center for Applied Rural Innovation
* Marketing Rural Communities to Attract and Retain Workers
$498,558
Burkhart-Kriesel, Cheryl
Panhandle Research and Extension Center

Relocation to the Buffalo Commons: Marketing Approach to Understand Residential Decisions among Migrants
$220,387
Burkhart-Kriesel, Cheryl
Agricultural Economics

**Carr, Timothy**
Nutrition and Health Sciences
Regulation of Cholesterol Absorption by Plant Sterol & Stanol Esters
$466,915
Cassman, Kenneth
Agronomy and Horticulture

Demonstration/Validation of a Dynamic Real-Time Decision Support System for Irrigation Management with Limited Water Supply
$230,537
Dobermann, Achim
Agromony and Horticulture
Walters, Daniel
Agromony and Horticulture
Yang, Haishun
Agromony and Horticulture
Irma, Suat
Biological Systems Engineering
Kranz, William
Northeast Research and Extension Center
Shapiro, Charles
Northeast Research and Extension Center
Tarkalson, David
West Central Research and Extension Center

**Cerutti, Heriberto**
Biological Sciences; Center for Plant Science Innovation
Histone Modifications & Transcriptional Silencing in Chlamydomonas
$448,235
NSF

RNA-Mediated Silencing: Mechanisms and Biological Roles in Chlamydomonas
$994,854
DHHS-NIH-NIGMS

$200,000 — $999,999
Chen, Xun-Hong  School of Natural Resources
* Development of Groundwater Flow Model in the Lower Platte North NRD Area
$220,458  Lower Platte North NRD

Ci, Song  Computer and Electronics Engineering
* IHCS: ARMS: A Novel Adaptive Configurable Multi-Cell Battery System for Power-Aware Electronics
$299,626  NSF
Alahmad, Mahmoud  Architectural Engineering
Sharif-Kashani, Hamid  Computer and Electronics Engineering

Claes, Daniel  Physics and Astronomy
Experimental High Energy Physics
$573,000  NSF
Snow, Gregory  Physics and Astronomy

Clemente, Thomas  Biotechnology; Plant Science Initiative; Agronomy and Horticulture
* Necessary Resources to Aid in the Translation of Genomics Information into Applied Technologies
$459,396  University of Georgia
Functional Analysis of Soybean Genes through Transposon Mutagenesis
Specht, James  Agronomy and Horticulture

Comfort, Steven  School of Natural Resources
Field-Scale Demonstrations of Innovative Remediation Techniques for Contaminated Soil and Water
$994,100  Environmental Protection Agency

Costello, Don  Computer Science and Engineering
GAANN Fellowships for Computer Science & Engineering
$500,000  Department of Education

Daly, Edward  Educational Psychology
School Psychology Leadership Specialization in Response-to-Intervention Research & Systems Change
$800,000  Department of Education
McCurdy, Merilee  Educational Psychology
Sheridan, Susan  Educational Psychology
Kunz, Gina  Educational Psychology

DeKraai, Mark  Public Policy Center
* Evaluation of Public Engagement Demonstration Projects on Pandemic Influenza (E-PEDPPI)
$348,716  DHHS-Centers For Disease Control
Bulling, Denise  Public Policy Center
DiMagno, Stephen  Chemistry  Anhydrous Fluoride Salts
$420,000  NSF

Dominguez, Aaron  Physics and Astronomy  PIRE: Collaborative Research with the Paul Scherrer Institute and Eidgenoessische Technische Hochschule on Advanced Pixel Silicon Detectors for the CMS Detector
$406,500  University of Kansas Center for Research
Bloom, Kenneth  Physics and Astronomy

Dowben, Peter  Center for Materials and Nanoscience  Surface Chemistry of Adsorbates on Crystalline Polymers
$690,000  NSF

Drijber, Rhae  Agronomy and Horticulture  Developing Technologies to Improve Soil & Nutrient Management
$261,000  Department of Agriculture-ARS

Du, Liangcheng  Chemistry  Biosynthesis of Mycotoxin Fumonisins: Characterization of Enzymes for Vicinal Diol & Tricarballylic Ester Formation
$284,667  NSF

Ducharme, Stephen  Center for Materials and Nanoscience; Physics and Astronomy  * Rational Design of Molecular Ferroelectric Materials and Nanostructures
$419,054  Department of Energy-EPSCoR
Takacs, James  Chemistry
Nanostructure-Designed Dielectric Material for High-Energy-Density Capacitors
$586,000  DOD-DEPSCoR
Ferroelectric Polymer Langmuir-Blodgett Films for Nonvolatile Random-Access Memory Applications
$240,000  NSF

Duppong Hurley, Kristin  Special Education and Communication Disorders  * Treatment Implementation and Mental Health Outcomes for Youth in Residential Care
$510,300  DHHS-NIH-NIMH
Epstein, Michael  Special Education and Communication Disorders

Dussault, Patrick  Chemistry  * Detection of Emerging Classes of Explosives
$950,000  DOD-DARPA
Cerny, Ronald  Chemistry
DiMagno, Stephen  Chemistry
Hage, David  Chemistry
Harbison, Gerard  Chemistry
Redepenning, Jody  Chemistry

* Directed Reactions of Carbonyl Oxides: A New Approach to Ozonolysis
$360,000  NSF

$200,000 – $999,999
Dwyer, Matthew  
Computer Science and Engineering  
Program Analysis Techniques to Support Dependable RTSJ Applications  
$207,519  
NSF
Elbaum, Sebastian  
Computer Science and Engineering  
Goddard, Stephen  
Computer Science and Engineering  
Rothermel, Gregg  
Computer Science and Engineering  

Finite-State Verification for High-Performance Computing  
$300,000  
NSF

Elbaum, Sebastian  
Computer Science and Engineering  
Goddard, Stephen  
Computer Science and Engineering  
Dzenis, Yuris  
Engineering Mechanics  
Nanoengineered Interfaces  
$250,002  
NSF

Elbaum, Sebastian  
Computer Science and Engineering  
Goddard, Stephen  
Computer Science and Engineering  
Eccarius, Malinda  
Special Education and Communication Disorders  
Mountain Prairie Upgrade Partnership - Early Childhood  
$781,642  
Department of Education
Marvin, Chris  
Special Education and Communication Disorders  

Eckhardt, Craig  
Chemistry  
Experimental Investigation of the Role of Defects in Detonation Sensitivity of Energetic Materials  
$600,000  
DOD-Office of Naval Research

A Study of the Mechanochemistry of Carbamazepine Polymorphs  
$227,200  
Pfizer Inc./PGRD Groton Labs

Engen-Wedin, Nancy  
Teaching, Learning and Teacher Education  
Indigenous Roots Teacher Education Program  
$704,730  
Department of Education
McGowan, Thomas  
Teaching, Learning and Teacher Education  

Epstein, Michael  
Special Education and Communication and Disorders  
* Evaluation of Family Reunification Program  
$219,454  
Father Flanagan’s Boys’ Home

Leadership Training in Emotional Disturbance Disorders  
$601,733  
Department of Education
Duppong Hurley, Kristin  
Special Education and Communication and Disorders  
Torkelson-Trout, Alexandra  
Special Education and Communication and Disorders
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Project Title</th>
<th>Funding Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabrikant, Ilya</td>
<td>Physics and Astronomy</td>
<td>Collision Processes Involving Low-Energy Electrons</td>
<td>NSF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electron-Molecule Collisions in Different Environments</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$215,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$240,000</td>
</tr>
<tr>
<td>Faller, Ronald</td>
<td>Civil Engineering</td>
<td>* Dynamic Evaluation of Box Beam End Terminal</td>
<td>Nebraska Department of Roads</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using the MASH 2008 Guidelines</td>
<td>Midwest Roadside Safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of a New Precast Concrete Bridge Railing System</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$204,533</td>
</tr>
<tr>
<td>Sicking, Dean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reid, John</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bielenberg, Robert</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reid, John</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tadros, Maher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of an Economical Guardrail System for Use on Gabion Walls</td>
<td>Nebraska Department of Roads</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Midwest Roadside Safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$229,820</td>
</tr>
<tr>
<td>Bielenberg, Robert</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reid, John</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tadros, Maher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$400,000</td>
</tr>
<tr>
<td>Sicking, Dean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rohde, John</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reid, John</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flores, Rolando</td>
<td>Food Science and Technology</td>
<td>Midwest Advanced Food Manufacturing Alliance</td>
<td>Department of Agriculture-CSREES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$340,764</td>
</tr>
<tr>
<td>Foley, Brett</td>
<td>Educational Psychology</td>
<td>Consulting Services/Assist Oklahoma Commission for Teacher Preparation</td>
<td>Oklahoma Office of Public Affairs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$452,064</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conducting Validity Studies for South Dakota</td>
<td>South Dakota Department of Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$372,435</td>
</tr>
<tr>
<td>Geisinger, Kurt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fromm, Michael</td>
<td>Center for Biotechnology</td>
<td>* MRI: Acquisition of High Capacity DNA Sequencing System</td>
<td>NSF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$714,750</td>
</tr>
<tr>
<td>Gardner, Scott</td>
<td>University of Nebraska State Museum; Biological Sciences</td>
<td>Mongolia Vertebrate Parasite Project</td>
<td>NSF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$619,991</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enabling Access to Priority Taxa for Biodiversity Studies in the Manter Laboratory of Parasitology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$507,397</td>
</tr>
<tr>
<td>Jimenez-Ruiz, Francisco</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Gay, Timothy  
**Physics and Astronomy**  
* MRI: Development of a Rubidium Spin Filter as a Source of Polarized Electrons  
$285,000  
Batelaan, Herman  
Uiterwaal, Kees  
**Physics and Astronomy**  
Polarized Electron and Photon Physics  
$375,000  

Geisinger, Kurt  
**Educational Psychology**  
* Technical Review of the 2006 Grade 3 Florida Comprehensive Assessment Test Results and Related Tasks  
$200,000  

Giesler, Loren  
**Plant Pathology**  
* Improving Management of Soybean Cyst Nematode through Extension Demonstration and Outreach  
$205,000  

Gibson, Robert  
**Biological Sciences**  
GAANN Fellowship for Ecology, Evolution & Behavior at UNL  
$625,000  

Gitelson, Anatoly  
**School of Natural Resources**  
* Improving Management of Soybean Cyst Nematode through Extension Demonstration and Outreach  
$496,124  
Verma, Shashi  
Suyker, Andrew  
**School of Natural Resources**  
*Responses of Coastal Waters to Terrestrial Inputs of Elemental CNP in Urbanizing Coastal Regions  
$264,990  
Rundquist, Donald  
**School of Natural Resources**  
Land Cover Land Use Change Effects on Surface Water Quality: Integrated MODIS & SeaWiFS Assessment of Dnieper & Don River Basins  
$598,130  

Glover, Todd  
**Center on Children, Youth, Families and Schools**  
Establish a State-Wide Response-to-Intervention Consortium for Training & Evaluation  
$499,936  
Daly, Edward  
**Center on Children, Youth, Families and Schools; Educational Psychology**  
McCurdy, Merilee  
**Center on Children, Youth, Families and Schools; Educational Psychology**  

Goddard, Stephen  
**Computer Science and Engineering**  
CRI: IAD: Towards Cyber-Physical Computing at Scale: A Life-Size Experimental Facility for Applied Sensor Networks Research  
$200,000  
Ci, Song  
Peng, Dongming  
Sharif-Kashani, Hamid  
Perez, Lance  
**Computer and Electronics Engineering**  
**Electrical Engineering**
Goedert, James  Construction Systems  
Rebuilding New Orleans  
$293,660  Department of Housing and Urban Development
Bernstein, Stuart  Construction Systems  
Holmes, William  Construction Systems  
Morcous, George  Construction Systems  
Schwer, Avery  Construction Systems  

Goodman, Richard  Food Science and Technology  
Assessing the Potential Allergenicity of Proteins Introduced by Genetic Engineering  
$450,000  Environmental Protection Agency
Schlegel, Vicki  Food Science and Technology  
Taylor, Stephen  Food Science and Technology

Gosselin, David  School of Natural Resources  
Earth Science Institute for Elementary Educators  
$356,094  NASA
Bonnstetter, Ronald  Teaching, Learning and Teacher Education  

Graef, George  Agronomy and Horticulture  
* Quality Traits Regional Tests  
$225,535  United Soybean Board/Smith/Bucklin
* Soybean Breeding and Genetic Studies for Nebraska  
$203,443  Nebraska Soybean Board
Specht, James  Agronomy and Horticulture  

Greve, Vickie  Northeast Research and Extension Center  
Communities Together Can  
$657,000  Department of Agriculture-CSREES
Swanson, Douglas  Cooperative Extension

Hage, David  Chemistry  
Chromatographic Automation of Immunoassays  
$946,982  DHHS-NIH-NIGMS
Chromatographic Studies of Functional Proteomics  
$756,640  DHHS-NIH-NIDDK

Harris, Steven  Center for Plant Science Innovation; Plant Pathology  
Autophagy in Fungal Hyphae: Functional Genomic & Mechanical Strength Studies  
$417,852  University of Maryland-Baltimore

$200,000 – $999,999
<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Department</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harshman, Lawrence</td>
<td>Biological Sciences</td>
<td>Comparative Functional Genomics of Drosophila Obesity $516,548 Cornell University</td>
</tr>
<tr>
<td>Moriyama, Etsuko</td>
<td>Center for Plant Science Innovation</td>
<td>Genome Biology of Innate Immunity: Genetic Dissection of D. melanogaster Responses to Bacillus Infection $452,163 NSF</td>
</tr>
<tr>
<td>Benson, Andrew</td>
<td>Food Science and Technology</td>
<td>Molecular Evolution of Genes Expressed in D. melanogaster Sperm Storage Structures $289,213 NSF</td>
</tr>
<tr>
<td>Harvey, F. Edwin</td>
<td>School of Natural Resources</td>
<td>Investigation of the Role of Rainwater Basin Wetlands in Contributing to the Functions of Groundwater Recharge, Water Quality Improvement, and the Wildlife Habitat, including an Assessment of the Impact of Sediment on these Functions $386,520 Nebraska Game and Parks Commission</td>
</tr>
<tr>
<td>Hay, DeLynn</td>
<td>IANR-Cooperative Extension</td>
<td>North Central Region Sustainable Agriculture Professional Development Program—FY 2005 $910,283 Department of Agriculture-CSREES</td>
</tr>
<tr>
<td>Hayes, Michael</td>
<td>School of Natural Resources</td>
<td>Drought Mitigation, Nebraska Project $347,246 Department of Agriculture-CSREES</td>
</tr>
<tr>
<td>Hebets, Eileen</td>
<td>Biological Sciences</td>
<td>Searle Scholar: Exploring Neural Basis of Complex Behavior in Amblypygids $240,000 Chicago Community Trust/Searle Scholar</td>
</tr>
</tbody>
</table>
Henry, Christopher  Biological Systems Engineering  Livestock Producer Environmental Assistance Project  $600,000  Nebraska Environmental Trust

Development of Alternative Technologies for Small Livestock Producers  
Gross, Jason  Biological Systems Engineering  $221,881  Nebraska Department of Environmental Quality

Hergert, Gary  Panhandle Research and Extension Center  Enhancing Irrigation Management Tools & Developing a Decision Support System for Managing Limited Irrigation Supplies for the High Plains  
Burgener, Paul  Lyon, Drew  Martin, Derrel  Pavlista, Alexander  Supalla, Raymond  Urrea Florez, Carlos  Yonts, C. Dean  Biological Systems Engineering  Panhandle Research and Extension Center  $885,093  Department of Agriculture-RMA-FCIC

Demonstrate & Adapt Remote Sensing Technology to Produce Consumptive Water Use Maps for the Nebraska Panhandle  
Baltensperger, David  Berger, Aaron  DeBoer, Karen  Hla, Aung  Lyon, Drew  Pavlista, Alexander  Yonts, C. Dean  Panhandle Research and Extension Center  $239,951  Department of Agriculture-NRCS

Hibbing, John  Political Science  * DHB: Identifying the Biological Underpinnings of Political Temperaments  
Espy, Kimberly  Smith, Kevin  Dodd, Michael  Wiebe, Sandra  Office of Research; Psychology  Political Science  Psychology  Psychology  $587,068  NSF

Hoagland, Kyle  School of Natural Resources  Solving Complex Issues in Nebraska: Modeling the Western Platte River Valley-Phase II  
Fritz, Sherilyn  Geosciences  $347,200  Environmental Protection Agency

Hoffman, Lesa  Psychology  * Visual Attention in Aging: Bridging Experimental and Psychometric Approaches  
$322,745  DHHS-NIH-NIA

Hogan, Tiffany  Special Education and Communication Disorders  * The Lexicon and Phoneme Awareness  
$430,591  DHHS-NIH-NIDCD
Holmes, Mary Anne  
Geosciences  
Building a Community of Women Geoscience Leaders  
$228,774  
NSF  

Holz, John  
School of Natural Resources  
Fremont Lake #20 Alum Treatment Evaluation Project  
$201,700  
Nebraska Department of Environmental Quality  
Barrow, Tadd  
Hoagland, Kyle  
Holz, Aris  

Hu, Qi (Steve)  
School of Natural Resources  
Transition of Weather & Climate Forecasts into Effective Decision-Making Tools  
$293,732  
Department of Commerce-NOAA  
Hubbard, Kenneth  
Lynne, Gary  
Pytlík Zillig, Lisa  
Bruning, Roger  

Hudgins, Jerry  
Electrical Engineering  
Development of System Level Modeling & Simulation Capability for SiC Power Semiconductor Devices  
$246,935  
University of South Carolina  

Hunt, Robert  
University of Nebraska State Museum  
Renovation & Computerization of University of Nebraska Vertebrate Paleontology Collection  
$498,368  
NSF  
Voorhies, Michael  
University of Nebraska State Museum  

Hygnstrom, Scott  
School of Natural Resources  
Development of Spatially Explicit Models of Wildlife Diseases  
$588,945  
Department of Agriculture-APHIS  

Irmak, Suat  
Biological Systems Engineering  
*Quantifying Evaporation, Crop Evapotranspiration, and the Water Balance for Tilled and Untilled Fields  
$679,160  
Nebraska Department of Natural Resources  
Irmak, Ayse  
Rundquist, Donald  
Eisenhauer, Dean  
Van Donk, Simon  
Zoubek, Gary  
Rees, Jennifer  
Siekman, Darrel  
VanDeWalle, Brandy  
Yoder, Ronald  
Southeast Research and Extension Center  
Southeast Research and Extension Center  
Southeast Research and Extension Center  
Southeast Research and Extension Center  

Measurement of Growing Season Actual Crop Evapotranspiration and Crop Coefficients, and Dormant Season Evaporative Losses for Key Vegetation Surfaces in the Central Platte Natural Resources District  
$492,564  
Central Platte NRD  
Irmak, Ayse  
Martin, Derrel  
van Donk, Simon  
Verma, Shashi  
Biological Systems Engineering  
Biological Systems Engineering  
Biological Systems Engineering  
School of Natural Resources
### Jameson, Mary Liz  
**University of Nebraska State Museum**  
Monography & Phylogeny of New World Scarabaeoid Beetles  
$755,300  
Entomology  
NSF  

### Jiang, Hong  
**Computer Science and Engineering**  
SAM*2 Toolkit: Scalable & Adaptive Metadata Management for High-End Computing  
$602,326  
NSF  

### Jones, Clinton  
**Veterinary and Biomedical Sciences**  
Functional Analysis of biCPO  
$375,000  
Department of Agriculture-NRICGP  

**Functional Analysis of Proteins Encoded by the Bovine Herpesvirus 1 Latency Related Gene**  
$374,475  
Department of Agriculture-CSREES  

Does HSV-1 Latency Associated Transcript (LAT) Encode a Protein?  
$402,122  
DHHS-NIH-NIAID  

### Jones, Erick  
**Industrial and Management Systems Engineering**  
* RFID License Plate System Feasibility Study for Commercial Vehicle Operators  
$250,000  
Nebraska Department of Roads  

### Jose, H. Douglas  
**Agricultural Economics**  
Trade Adjustment Assistance Program  
$705,000  
Department of Agriculture-RMA  

### Josiah, Scott  
**Nebraska State Forest Service**  
Community Enhancement Program  
$500,000  
Nebraska Department of Roads  

NRCS-Technical Service Provider Project  
$323,778  
Department of Agriculture-NRCS  

Hazardous Fuels Reduction: Pine Ridge  
$582,380  
Department of Agriculture-FS  

### Kennedy, Patricia  
**Marketing**  
Socially Constituted Food Consumption of Adolescents  
$350,000  
Department of Agriculture-CSREES  
Economics  

McGarvey, Mary  
Stanek-Krogstrand, Kaye  
Nutrition and Health Sciences  

### Kim, Yong Rak  
**Civil Engineering**  
Asphalt Research Consortium  
$350,000  
Texas A & M Research Foundation  
Engineering Mechanics  

Layer Moduli of Nebraska Pavements for the New Mechanistic-Empirical Pavement Design Guide (MEPDG)  
$255,367  
Nebraska Department of Roads  

---

$200,000 – $999,999
Knutson, Cody  School of Natural Resources
Development of a Drought Decision Support Portal for the Republican River Basin of Colorado, Nebraska & Kansas
$223,524  Department of Commerce-NOAA
Svoboda, Mark  School of Natural Resources
Ryu, Jae  School of Natural Resources

Koelsch, Richard  Biological Systems Engineering
Heartland Integrated Water Quality Coordination Initiative
$338,650  Iowa State University
Wortmann, Charles  Agronomy and Horticulture

Kostelnik, Marjorie  Education and Human Sciences
Osher Lifelong Learning Institute
$450,000  Bernard Osher Foundation
Eversoll, Deanna  Education and Human Sciences
Aguilar, Deanna  Education and Human Sciences

Krull, Dean  Agronomy and Horticulture
Managing Irrigation Systems Today & Tomorrow
$621,816  Central Platte NRD
Benham, Brian  Agronomy and Horticulture
Ferguson, Richard  Agronomy and Horticulture

Lackey, Susan  School of Natural Resources
Eastern Nebraska Water Resources Assessment LPNRD
$459,588  Lower Platte North NRD
Ayers, Jerry  School of Natural Resources
Hanson, Paul  School of Natural Resources
Joeckel, Robert  School of Natural Resources

Developing Hydrogeologic Databases to Assist in Water Resources Management — UENRD
$459,600  Upper Elkhorn NRD

Ledder, Glenn  Mathematics
UBM: Research for Undergraduates in Theoretical Ecology (RUTE)
$905,000  NSF
Deng, Bo  Mathematics
Gibson, Robert  Biological Sciences
Loladze, Irakli  Mathematics
Louda, Svata  Biological Sciences

Lee, Kevin  Physics and Astronomy
ClassAction: Model Rapid-Feedback & Dynam Formative Assess System
$359,768  NSF
Schmidt, Edward  Physics and Astronomy

Lenters, John  School of Natural Resources
* Riparian Vegetation Impacts on Water Quantity, Quality, and Stream Ecology
$433,960  Nebraska Department of Natural Resources
Istanbulluoglu, Erkan  Geosciences
Scott, Durelle  Geosciences
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Project Title</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis, Charlotte</td>
<td>Center on Children, Families and the Law</td>
<td>* Answers4Families/NRRS Database</td>
<td>$217,718</td>
</tr>
<tr>
<td>Li, Ming</td>
<td>Psychology</td>
<td>* Anxiolytic Property of Atypical Antipsychotics</td>
<td>$345,699</td>
</tr>
<tr>
<td>Lindquist, John</td>
<td>Agronomy and Horticulture</td>
<td>Contribution of Fusarium lateritium to Weed</td>
<td>$366,186</td>
</tr>
<tr>
<td>Drijber, Rhae</td>
<td>Agronomy and Horticulture</td>
<td>Suppressive Soils &amp; Weed Abundance</td>
<td></td>
</tr>
<tr>
<td>Yuen, Gary</td>
<td>Plant Pathology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liou, Sy-Hwang</td>
<td>Physics and Astronomy</td>
<td>* Advanced Probes for Characterizations of Magnetic Nanostructures</td>
<td>$539,998</td>
</tr>
<tr>
<td>Sellmyer, David</td>
<td>Center for Materials and Nanoscience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skomski, Ralph</td>
<td>Physics and Astronomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liu, Mingsheng</td>
<td>Architectural Engineering</td>
<td>* CC Implementation of VA Medical Center at Omaha</td>
<td>$414,963</td>
</tr>
<tr>
<td>Lodl, Kathleen</td>
<td>4-H State Office</td>
<td>Health Rocks-Healthy Life Curricula Development</td>
<td>$250,700</td>
</tr>
<tr>
<td>Birnstihl, Elizabeth</td>
<td></td>
<td>National 4-H Council</td>
<td></td>
</tr>
<tr>
<td>Fox, Marilyn</td>
<td>Southeast Research and Extension Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louda, Svata</td>
<td>Biological Sciences</td>
<td>Single vs. Multiple Insect Herbivore Guild</td>
<td>$408,760</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interactions in Canada Thistle Dynamics</td>
<td></td>
</tr>
</tbody>
</table>

$200,000 — $999,999
Lu, Yongfeng  Electrical Engineering
* Coating and Patterning Diamond Films by Laser Resonant Bond Breaking in Polymer Precursors
$259,384  NSF

Laser-Assisted Fabrication of Large-Scale 3-D Photonic Bandgap Structures
$350,000  DOD-DEPSCoR

Self-Integration of Carbon-Nanotube Sensors in Functional Integrated Circuits
$240,000  NSF

MRI: Development of Multifunctional Nanoscale Measurement System
$220,000  NSF

Alexander, Dennis  Electrical Engineering
Ducharme, Stephen  Physics and Astronomy

Tunable Photonic Bandgap Crystals with Integrated Functionalities
$330,000  DOD-Air Force Office of Scientific Research

Near-Field-Controlled Nanoscale Coating of Functional Thin Films for Nanodevices
$240,000  NSF

Mackenzie, Sally  Center for Plant Science Innovation
* Nuclear Mechanisms that Influence Mitochondrial Genome Stability
$450,000  NSF

Christensen, Alan  Biological Sciences

Nuclear-Organellar Interactions Involving AtMSH1 in Arabidopsis
$650,000  Department of Energy

Mamo, Martha  Agronomy and Horticulture
Pollution & Economic Decision Support Tool for Impaired Watershed Management Plans in Eastern Nebraska
$335,000  Department of Agriculture-CSREES

Helmers, Glenn  Agricultural Economics
Ginting, Daniel  Agronomy and Horticulture
Wortman, Charles  Agronomy and Horticulture

Martin, Derrel  Biological Systems Engineering
Modeling and Field Experimentation to Determine Effects of Land Terracing-Republican River Basin (CESU)
$477,267  Department of Interior-BR

McQuillan, Julia  Sociology
Infertility: Pathways & Psychosocial Outcomes
$637,373  Pennsylvania State University

$200,000 — $999,999
Meagher, Michael  Chemical and Biomolecular Engineering
  * Manufacture of a cGMP Lot of a Recombinant Next Generation PA Vaccine for Phase I Clinical Trial and Toxicity Testing
  $428,325  Emergent Product Development, Gaithersburg Inc.

Swanson, Stephen  Chemical and Biomolecular Engineering
Van Cott, Kevin  Chemical and Biomolecular Engineering

Melvin, Steven  West Central Research and Extension Center
  Irrigation Management with Limited Water: A Farm Education Program
  $287,080  Department of Interior-BR

Martin, Derrel  Biological Systems Engineering
Corr, Alan  West Central Research and Extension Center
van Donk, Simon  West Central Research and Extension Center

Merchant, James  School of Natural Resources
  * Initial Design and Implementation of the Nebraska Geospatial Data Sharing and Web Services Network
  $260,870  Nebraska Office of the Chief Information Officer

Miller, Nancy  Textiles, Clothing and Design
  Collaborative Research on Small Business Network Creation and Outcomes for Change and Innovation
  $230,011  NSF

Mitra, Amit  Plant Pathology
  Functional Map of Tomato Genome using Direct Repeat Induced Gene Silencing
  $301,000  Department of Agriculture-NRICGP

Moore, Raymond  Engineering
  * Students United in Classes, Community, Engineering, Service and Study Abroad
  $591,995  NSF

Moriyama, Etsuko  Center for Plant Science Innovation; Biological Sciences
  Efficient and Sensitive Mining System for G-Protein Coupled Receptors
  $577,014  DHHS-NIH-NLM
  Large-Scale Simultaneous Multiple Alignment & Phylogeny Estimation
  $223,215  NSF

Morris, T. Jack  Biological Sciences
  The Role of a Host Protein (TIP) in the Resistance Response of Arabidopsis to Turnip Crinkle Virus Infection
  $360,000  Department of Energy

Qu, Feng  Biological Sciences

Moxley, Rodney  Veterinary and Biomedical Sciences
  Influence of Enterotoxins on Virulence and Colonization of Porcine Intestine by E.coli
  $270,000  Department of Agriculture-NRICGP

$200,000 – $999,999
<table>
<thead>
<tr>
<th>Name</th>
<th>Department/Program</th>
<th>Description</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelson, J. Ron</td>
<td>Special Education and Communication Disorders</td>
<td>Effects of a Supplementary Vocabulary Intervention for Students with Limited English Proficiency</td>
<td>$694,884</td>
</tr>
<tr>
<td>Nickerson, H. Doak</td>
<td>Nebraska State Forest Service</td>
<td>Restoring the Pine Ridge Forest Ecosystem</td>
<td>$300,000</td>
</tr>
<tr>
<td>Nguyen, Lim</td>
<td>Computer and Electronics Engineering</td>
<td>* Self-Encoded Spread Spectrum Modulation for Robust Anti-Jamming Communication</td>
<td>$379,767</td>
</tr>
<tr>
<td>Norton, Will</td>
<td>Journalism and Mass Communications</td>
<td>* Carnegie-Knight Initiative on the Future of Journalism Education</td>
<td>$250,000</td>
</tr>
<tr>
<td>Noureddini, Hossein</td>
<td>Chemical and Biomolecular Engineering</td>
<td>Reduction of Phosphorus from Ethanol By-Product used as Livestock Feed</td>
<td>$210,781</td>
</tr>
<tr>
<td>Oglesby, Robert</td>
<td>Geosciences</td>
<td>Evaluating the Role of Global Snow Cover on Seasonal to Interannual Predictability of Temperature &amp; Precipitation</td>
<td>$598,216</td>
</tr>
<tr>
<td>Orti, Guillermo</td>
<td>Biological Sciences</td>
<td>RCN: DeepFin Will Advance the Phylogeny of “Fishes”</td>
<td>$500,000</td>
</tr>
<tr>
<td>Osorio, Fernando</td>
<td>Veterinary and Biomedical Sciences</td>
<td>* Porcine Reproductive and Respiratory Virus: Role of Viral Genes in Virulence/Attenuation</td>
<td>$375,000</td>
</tr>
<tr>
<td>Pattnaik, Asit</td>
<td>Veterinary and Biomedical Sciences</td>
<td>VSV RNA Transcription and Replication</td>
<td>$996,128</td>
</tr>
<tr>
<td>Pegg, Mark</td>
<td>School of Natural Resources</td>
<td>* Sturgeon Management in the Platte River</td>
<td>$801,000</td>
</tr>
</tbody>
</table>
Perez, Lance  Electrical Engineering
Self-Configuration & Localization in Ad Hoc Wireless Sensor Networks
$548,807  DOD-DEPSCoR
Goddard, Stephen  Computer Science and Engineering

GAANN in Engineering & Assistive Technology
$384,390  Department of Education
Goddard, Stephen  Computer Science and Engineering

Pilson, Diana  Biological Sciences
Transgenic Virus Resistant Squash: Ecological Effect
$314,877  Department of Agriculture-CSREES
Morris, T. Jack  Biological Sciences

Platt, Stephen  Mechanical Engineering
In Vivo Robotic Camera System for Laparoscopic Surgery
$389,358  DHHS-NIH-NIBIB
Farritor, Shane  Mechanical Engineering

Pope, Kevin  School of Natural Resources
Recruitment of Walleye and White Bass in Irrigation Reservoirs
$484,448  Nebraska Game and Parks Commission

Powell, Larkin  School of Natural Resources
Assessing Local & Regional Variability in Productivity & Fidelity of Grassland Birds on National Park Service Units in the Great Plains
$212,122  Dept of Interior-GS
Allen, Craig  School of Natural Resources

Rajca, Andrzej  Chemistry
* High-Spin Nitroxide Diradical for Biomedical Imaging Applications
$421,174  DHHS-NIH-NIBIB
Rajca, Suchada  Chemistry

Stable High-Spin Polyradicals & Chiral Pi-Conjugated Systems
$570,715  NSF

Rajurkar, Kamlakar  Industrial and Management Systems Engineering
Analysis & Gap Monitoring for Improving Micro EDM Performance-Supplement
$202,500  NSF

Modeling and Analysis of Material Removal and Tool Wear in Micro Ultrasonic Machining
$247,760  NSF

Ratcliffe, Brett  University of Nebraska State Museum; Entomology
Faunistic Survey of Dynastinae of Mexico, Guatemala, & Belize
$481,493  NSF

$200,000 – $999,999
Redepenning, Jody  
Center for Materials and Nanoscience  
Chemically Modified Nano-Electrodes for Magnetoelectronics Applications  
$390,000  
Binek, Christian  
Physics and Astronomy  
Sokolov, Andrei  
Physics and Astronomy

Reichenbach, Stephen  
Computer Science and Engineering  
SEI: Information Modeling for Comparative Visualizations & Analyses  
$389,228  

Reid, John  
Mechanical Engineering  
Midwest States Regional Pooled Fund Program  
$590,000  
Sicking, Dean  
Midwest Roadside Safety  
Faller, Ron  
Midwest Roadside Safety

Reid, Robert  
Special Education and Communication Disorders  
Leadership Training in Attention Deficit Hyperactivity Disorder  
$620,006  

Rilett, Laurence  
Civil Engineering  
* Nebraska Transportation Center Seed Funding  
$300,000  
Jones, Elizabeth  
Civil Engineering  
Development of State of the Art Traffic Micro-Simulation Model for Nebraska  
$222,896  
Jones, Elizabeth  
Civil Engineering  
Khattak, Aemal  
Civil Engineering

Robertson, Brian  
Center for Materials and Nanoscience  
Spintronic Devices Enabled by Semiconducting Boron Carbide  
$299,998  
Adenwalla, Shireen  
Center for Materials and Nanoscience  
Dowben, Peter  
Center for Materials and Nanoscience

Rothermel, Gregg  
Computer Science and Engineering  
CRI: Community Resource to Support Controlled Experimentation with Program Analysis and Testing Techniques  
$874,636  
Elbaum, Sebastian  
Computer Science and Engineering  
Dwyer, Matthew  
Computer Science and Engineering  
ITR: Dependable End-User Software  
$439,593  
Oregon State University
Ryu, Jae  School of Natural Resources
* Developing Seasonal Predictive Capability for Drought Mitigation Decision Support System
$311,000  University of Illinois, Urbana-Champaign

Svoboda, Mark  School of Natural Resources
Knutson, Cody  School of Natural Resources
Sittler, Megan  School of Natural Resources

Samal, Ashok  Computer Science and Engineering
Building Knowledge Discovery & Information Fusion Tools for Collaborative Systems to Adaptively Manage Uncertain Hydrological Resources
$601,816  NSF
Chen, Xun-Hong  School of Natural Resources
Soh, Leen-Kiat  Computer Science and Engineering
Tomkins, Alan  Public Policy Center
Zellmer, Sandra  College of Law

Saraf, Ravi  Chemical and Biomolecular Engineering
* Nanodevice for Digital Imaging of Palpable Structure at Human-Finger Resolution for Clinical Breast Examination
$377,552  DHHS-NIH-NIBIB

Schacht, Walter  Agronomy and Horticulture
Grasslands Ecological Monitoring System
$608,880  Department of Agriculture-RMA-FCIC

Scheel, Joan  Food Science and Technology
Development, Coordination & Delivery of Information on Food Defense to Small & Medium Food Manufacturers
$291,123  Department of Commerce-NIST

$200,000 – $999,999
Scheffler, Marilyn  
Special Education and Communication Disorders  
* Project RTI: Building Capacity Together to Implement Response to Intervention  
$800,000  
Department of Education  
Sanger, Dixie  
Special Education and Communication Disorders  

Project PROMOTE  
$797,184  
Department of Education  
Sanger, Dixie  
Special Education and Communication Disorders  

Project Support: Speech-Language Pathologists Supporting Literacy Instruction  
$800,000  
Department of Education  
Sanger, Dixie  
Special Education and Communication Disorders  

Project Re-entry: Preparing Speech-Language Pathologists to Serve Students with Traumatic Brain Injury  
$800,000  
Department of Education  
Hux, Karen  
Special Education and Communication Disorders  

Project NETS: Nebraska Educational Transition Specialists  
$798,624  
Department of Education  

Sellmyer, David  
Physics and Astronomy; Center for Materials and Nanoscience  
Studies of Artificially Structured Composite Magnets  
$492,000  
Department of Energy  

Materials Research Science & Engineering Center: Quantum and Spin Phenomena in Nanomagnetic Structures  
$200,000  
NanoElectronics Research Corporation  
Belaschenko, Kirill  
Physics and Astronomy  
Tsymbal, Evgeny  
Physics and Astronomy  

Shadwick, Bradley  
Physics and Astronomy  
* Wavebreaking and Particle Trapping in Collisionless Plasmas  
$561,840  
Department of Energy  

Shank, Nancy  
Public Policy Center  
HIT Regional Health Records Implementation & Evaluation  
$402,186  
Rural Nebraska Healthcare Network  

Shapiro, Charles  
Northeast Research and Extension Center  
Improving Organic Farming Systems across Nebraska Agroecosystems  
$762,949  
Department of Agriculture-CSREES  
Baltenesperger, David  
Panhandle Research and Extension Center  
Brandes, James  
School of Natural Resources  
Francis, Charles  
Agronomy and Horticulture  
Knezevic, Stevan  
Northeast Research and Extension Center  
Wright, Robert  
Entomology  
Johnson, Ron  
School of Natural Resources  

$200,000 — $999,999
Shea, Patrick  
School of Natural Resources  
Targeting Watershed Vulnerability & Behaviors Leading to Adoption of Conservation Management Practices  
$570,000  
Department of Agriculture-CSREES

Burbach, Mark  
School of Natural Resources  
Lynne, Gary  
Agricultural Economics  
Martin, Alexander  
Agronomy and Horticulture  
Milner, Maribeth  
Agronomy and Horticulture

Sheridan, Susan  
Center on Children, Youth, Families and Schools; Educational Psychology  
* Consultation Based Interventions for Students with Social and Behavioral Concerns  
$599,694  
Department of Education

Glover, Todd  
Center on Children, Youth, Families and Schools  
Bovaird, James  
Center on Children, Youth, Families and Schools; Educational Psychology

Leadership Training in Interdisciplinary Collaboration  
$800,000  
Department of Education

Shield, Jeffrey  
Mechanical Engineering  
* Novel Nanostructures for High-Energy Nanocomposite Permanent Magnets  
$251,819  
NSF

The Effect of Long-Range Dumbbell Ordering on the Properties & Microstructures of Rare Earth Permanent Magnets  
$340,000  
NSF

Sicking, Dean  
Civil Engineering  
* Enhancement of Research Infrastructure at the Midwest Roadside Safety Facility  
$346,000  
Nebraska Department of Roads

Identification of Vehicular Impact Conditions Associated with Serious Run-Off-Road Crashes  
$634,521  
National Cooperative Highway Research Program

Khattak, Aemal  
Civil Engineering

Jones, Elizabeth  
Civil Engineering

Improved Procedures for Safety Performance Evaluation of Roadside Features  
$833,940  
National Cooperative Highway Research Program

Reid, John  
Mechanical Engineering

Rohde, John  
Civil Engineering

Faller, Ronald  
Civil Engineering

Siegfried, Blair  
Entomology  
Quantifying Risk Factors for Evolution of European Corn Borer Resistance to Cry1F Expressing Corn Hybrids  
$346,845  
Department of Agriculture-CSREES

Evaluating Bioactivity of Insecticidal Proteins against European Corn Borer (Lepidoptera: Crambidae)  
$220,000  
Pioneer Hi-Bred
Smith, Andrew  University of Nebraska State Museum  Scarab Biodiversity of Southern South America  $300,000  NSF  Ocampa, Federico  University of Nebraska State Museum

Snow, Daniel  School of Natural Resources  Effects of Cattle Manure Handling & Management  Strategies on Fate & Transport of Hormones  $699,607  Environmental Protection Agency  Bartelt-Hunt, Shannon  Civil Engineering  Zhang, Tian  Civil Engineering  Kranz, William  Northeast Research and Extension Center  Mader, Terry  Northeast Research and Extension Center  Shapiro, Charles  Northeast Research and Extension Center  Shelton, David  Northeast Research and Extension Center

Snow, Gregory  Physics and Astronomy  * The Luminosity Measurement for the DZERO Experiment at Fermilab  $395,352  Department of Energy-EPSCoR  Bloom, Kenneth  Physics and Astronomy  Claes, Daniel  Physics and Astronomy  Dominguez, Aaron  Physics and Astronomy

Soh, Leen-Kiat  Computer Science and Engineering  iLOG: Embedding & Validating Empirical Usage Intelligence in Learning Objects  $409,705  NSF  Samal, Ashok  Computer Science and Engineering  Nugent, Gwen  Center on Children, Youth, Families and Schools

Somerville, Greg  Veterinary and Biomedical Sciences  Environmental Regulation of Staphylococcus epidermidis PIA Synthesis  $361,679  DHHS-NIH-NIGMS

Soukup, Rodney  Electrical Engineering  A Novel Variable Wide Bandgap Material for High Power, High Frequency Devices  $368,008  DOD-DEPSCoR  Hudgins, Jerry  Electrical Engineering  Ianno, Natale  Electrical Engineering

Spalding, Roy  Agronomy and Horticulture  Effectiveness of Irrigated Crop Management Practices in Reducing Groundwater Nitrate Contamination  $630,768  Department of Agriculture-CSREES  Ferguson, Richard  Agronomy and Horticulture  Marx, David  Statistics  Spaulding, Mary  School of Natural Resources

Spaulding, William  Psychology  Decision Science in Rehabilitation  $860,775  DHHS-NIH-NIMH  Garbin, Calvin  Psychology
Specht, James  Agronomy and Horticulture  
Genetic Mapping & Application of SNP DNA Markers in Soybean  
$389,391  
Department of Agriculture-ARS

Spreitzer, Robert  Biochemistry  
Rubisco Phylogenetic Engineering  
$202,383  
Department of Agriculture-NRICGP

Sriss-an, Witawas  Computer Science and Engineering  
Building Scalable & Adaptive Garbage Collector for Server Systems  
$281,000  
Elbaum, Sebastian  Computer Science and Engineering  
CSR-PDOS: Memory Efficient Garbage Collection Framework for Java Server Applications  
$300,000  
NSF

Stansbury, John  Civil Engineering  
* Feasibility of Integrating Natural and Constructed Wetlands in Roadway Drainage System Design  
$255,562  
Moussavi, Massoum  Civil Engineering  
Zhang, Tian  Civil Engineering

Starace, Anthony  Physics and Astronomy  
Strong Field & Ultrafast Atomic and Molecular Processes  
$250,000  
NSF

Staswick, Paul  Agronomy and Horticulture  
* Deciphering Novel Signaling Roles for Amino Acid Conjugates of Jasmonic Acid  
$249,969  
NSF

Steadman, James  Plant Pathology  
Resistance Improvement of Bean thru Multi-Site Screening & Pathogen Characterization  
$204,650  
Department of Agriculture-ARS

Steffen, David  Veterinary and Biomedical Sciences  
* Avian Influenza (AI) - High Path Surveillance  
$224,052  
Kelling, Clayton  Veterinary and Biomedical Sciences

Stentz, Terry  Construction Management  
Human Factors in Railway Operation  
$344,575  
Jones, Elizabeth  Civil Engineering  
Rilett, Laurence  Civil Engineering  
Khattak, Aemal  Civil Engineering  
Riley, Michael  Industrial and Management Systems Engineering  
Jones, Erick  Industrial and Management Systems Engineering  
Analytic Study of Acute Extremity Lacerations in Meat Packing  
$593,333  
Harvard School of Public Health

$200,000 — $999,999
Stockton, Matthew  West Central Research and Extension Center
Whole-Farm Economic Biological Stochastic Simulation Model of Small to Medium Cow-calf Firms with Research, Teaching and Extension Modules
$499,740  Department of Agriculture-NRICGP

Stone, Julie  Center for Plant Science Innovation; Biochemistry
Role of Transcriptional Regulator in Programmed Cell Death & Plant Development
$354,000  Department of Energy

Storz, Jay  Biological Sciences
Test of Adaptive Divergence across Altitudinal Gradients: Population Genomics of Deer Mice
$492,000  NSF

Stowell, Richard  Biological Systems Engineering
Air Quality Extension & Education: Enhanced Learning Opportunities for Addressing Air Quality Issues in Animal Agriculture
$498,562  Department of Agriculture-NRICGP

Stubbendieck, James  Great Plains Studies
Farm Viability, Farmland Preservation and Smart Growth
$308,000  Department of Agriculture-NRICGP

Subbiah, Jeyamkondan  Biological Systems Engineering; Food Science and Technology
* Improving the Safety of Prepared, But Not Ready-To-Eat Microwavable Foods through Heat Transfer and Pathogen Destruction Modeling
$599,985  Department of Agriculture-CSREES

Subramanian, Anu  Chemical and Biomolecular Engineering
Biomimetic Nanofibrillar Scaffolds for Tissue Engineering
$390,720  DHHS-NIH-NIBIB

Svoboda, Mark  School of Natural Resources
* Development of a “Drought Ready Communities” Program
$288,670  Department of Commerce-NOAA

* Integrating Enhanced GRACE Water Storage Data into the U.S. and North American Drought Monitors
$224,991  NASA-Goddard Space Flight Center
Swanson, David  
Computer Science and Engineering  
MRI: Acquisition of Affordable Shared-Memory Computing & Scalable Storage for Scientists & Engineers  
$300,000  
NSF

Tadros, Maher  
Civil Engineering  
Class C Fly Ash in Concrete Pavement  
$321,379  
Nebraska Department of Roads

Evaluation & Repair Procedures for Precast/Prestressed Concrete Girders w/Longitudinal Cracking in the Web  
$300,000  
National Cooperative Highway Research Program  
Civil Engineering

Tuan, Christopher  
Impact of Large 0.7 inch Strand on NU-I Girder and NUDeck  
$244,408  
Nebraska Department of Roads  
Construction Systems

Takacs, James  
Chemistry  
* Ligand Scaffold Optimization for Catalytic Asymmetric Hydroboration  
$420,000  
NSF

Tan, Li  
Engineering Mechanics  
* Self-Organized Nanolayers for Organic Thin-Film Transistors  
$387,463  
NSF  
Chemistry

Zeng, Xiao Cheng  
* Bi-Functional Pentacene Monolayer for Organic Field-Effect Transistors  
$299,410  
DOD-DEPSCoR  
Chemistry

Taylor, Steve  
Food Science and Technology  
Food Allergen Database  
$617,846  
Various Industries

Goodman, Richard  
Food Science and Technology  
Allergenicity Evaluation of Isinglass  
$555,035  
Various Industries
Thippareddi, Harshavardhan
Food Science and Technology
Understanding and Controlling Listeria Monocytogenes Transmission through Ready-to-Eat Meat Products
$222,270 Colorado State University

HACCP Assistance for Small & Very Small Processors with Development & Validation of Safe Meat Chilling Processes
$599,916 Department of Agriculture-CSREES
Wang, Lijun Biological Systems Engineering
Weller, Curtis Biological Systems Engineering
Burson, Dennis Animal Science

Improving Safety of Shell Eggs & Egg Products by Addressing Critical Research Needs for Salmonella Enteritidis & Salmonella spp
$599,951 Department of Agriculture-NRICGP
Froning, Glenn Food Science and Technology
Subbiah, Jeyamkondan Biological Systems Engineering

Thomas, Steven
School of Natural Resources
FIBR: Linking Genes to Ecosystems
$307,189 University of California-Riverside

Torquati, Julia
Child, Youth and Family Studies
Evaluation of Promising Models and Delivery Approaches to Child Care Provider Training
$484,658 Iowa State University
Wilcox, Brian Center on Children, Families and the Law
Raikes, Helen Center on Children, Families and the Law

Trainin, Guy
Teaching, Learning and Teacher Education
$261,674 Arts Linc
Lake Elsinore USD

Turner, Joseph
Engineering Mechanics
Development of Improved Product Performance through Optimization & Modeling of Engineering Materials Processing & Function
$588,028 Brenco/Amsted Industries
Cole, Kevin Mechanical Engineering

Tyler, Kimberly
Sociology
Social Networks, HIV Risk Behaviors & Homeless Youth
$356,771 DHHS-NIH-NIDA

Uiterwaal, Kees
Physics and Astronomy
Inside a Focused Laser Beam: Molecular Dynamics
$477,001 NSF

Umstadter, Donald
Physics and Astronomy
Laser Produced Coherent X-Ray Sources
$570,000 Department of Energy

Van Etten, James
Plant Pathology
Center for Innovation in Membrane Protein Production
$553,105 University of California-San Francisco
Dunigan, David Plant Pathology
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Project Title</th>
<th>Amount</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variyam, Vinod</td>
<td>Computer Science and Engineering</td>
<td>Studies in Computational Complexity Theory</td>
<td>$200,000</td>
<td>NSF</td>
</tr>
<tr>
<td>Velipasalar, Senem</td>
<td>Electrical Engineering</td>
<td>* CSR-DMSS, SM: Cooperative Activity Analysis in Wireless Smart-Camera Networks (Wi-SCaNs)</td>
<td>$300,000</td>
<td>NSF</td>
</tr>
<tr>
<td>Gursoy, Mustafa</td>
<td></td>
<td></td>
<td></td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>Wagner, William</td>
<td>Biological Sciences</td>
<td>* Effects of Predation by a Phonotactic Parasitoid on Male and Female Reproductive Behavior in a Field Cricket</td>
<td>$499,414</td>
<td>NSF</td>
</tr>
<tr>
<td>Communication of Direct Mating Benefits to Females</td>
<td>$313,283</td>
<td>NSF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waldren, Vernon</td>
<td>Southeast Research and Extension Center</td>
<td>HUD Omaha Lead Site Department of Housing and Urban Development</td>
<td>$300,000</td>
<td>Department of Housing and Urban Development</td>
</tr>
<tr>
<td>Waller, Steven</td>
<td>Agricultural Sciences and Natural Resources</td>
<td>* Agriculture in the Classroom Nebraska Foundation for Agricultural Awareness</td>
<td>$236,742</td>
<td>NSF</td>
</tr>
<tr>
<td>Waldstad, William</td>
<td>Economics</td>
<td>Interactive Teaching in Undergraduate Economic Courses</td>
<td>$674,928</td>
<td>NSF</td>
</tr>
<tr>
<td>Wang, Jun</td>
<td>Geosciences</td>
<td>* Regional Air Quality and Climate Impact of Biomass-Burning Aerosols from Central America: An Analysis with EOS Data and Numerical Models</td>
<td>$300,676</td>
<td>NASA</td>
</tr>
<tr>
<td>Weisz, Victoria</td>
<td>Center on Children, Families and the Law</td>
<td>Nebraska State Court Improvement Supreme Court of Nebraska</td>
<td>$236,714</td>
<td>Department of Housing and Urban Development</td>
</tr>
<tr>
<td>Weller, Curtis</td>
<td>Biological Systems Engineering</td>
<td>Purification Process Influences on Structural &amp; Nutritional Function of Grain Sorghum</td>
<td>$338,000</td>
<td>Department of Agriculture-NRICGP</td>
</tr>
<tr>
<td>Carr, Timothy</td>
<td>Nutrition and Health Sciences</td>
<td></td>
<td></td>
<td>Food Science and Technology</td>
</tr>
<tr>
<td>Schlegel, Vicki</td>
<td>Food Science and Technology</td>
<td></td>
<td></td>
<td>Food Science and Technology</td>
</tr>
<tr>
<td>Cuppett, Susan</td>
<td>Food Science and Technology</td>
<td></td>
<td></td>
<td>Industrial Ag Products Center</td>
</tr>
<tr>
<td>Hwang, Keum Taek</td>
<td>Industrial Ag Products Center</td>
<td></td>
<td></td>
<td>Biological Systems Engineering</td>
</tr>
<tr>
<td>Wang, Lijun</td>
<td>Biological Systems Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wiegand, Roger</td>
<td>Mathematics</td>
<td>GAANN Fellowship Program: Mathematics at UNL</td>
<td>$638,635</td>
<td>Department of Education</td>
</tr>
<tr>
<td>Pitts, David</td>
<td>Mathematics</td>
<td></td>
<td></td>
<td>Mathematics</td>
</tr>
<tr>
<td>Walker, Judy</td>
<td>Mathematics</td>
<td></td>
<td></td>
<td>Mathematics</td>
</tr>
<tr>
<td>Walker, Mark</td>
<td>Mathematics</td>
<td></td>
<td></td>
<td>Graduate Studies</td>
</tr>
<tr>
<td>Bellows, Laurie</td>
<td>Graduate Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$200,000 – $999,999
Wiener, Richard  Psychology  
REU Site: Psychology and Law  
$200,000 — $999,999  
Jury Bias in Criminal Cases: Sexual Assault, Homicide and Generic Prejudice  
$233,883 — $302,364  
Self-referencing, Social Identity & Judgments of Sexual Harassment  

Wilson Jr., Robert  Panhandle Research and Extension Center  
Assessing the Long Term Viability of Roundup Ready Technology as a Foundation for Cropping Systems  
$880,000 — $235,839  
Monsanto Co.

Woldt, Wayne  Biological Systems Engineering  
Advancing Onsite Wastewater Treatment in Nebraska  
$259,742 — $383,601  
Nebraska Department of Environmental Quality — George Washington University  
Research and Training on HIV/AIDS Neuropathogenesis in Zambia  
$273,363 — $506,753  
DHHS-NIH-NIMH — Dana-Farber Cancer Institute

Woodward, Gordon  Mathematics  
Increasing Participation in Computer Science, Engineering, & Mathematics through NSF Scholarships at UNL  
$400,000 — $251,823  
NSF — Nebraska REU in Applied Mathematics  
Ballard, John — Rebarber, Richard  
Engineering — Mathematics  
Ramamurthy, Byrav — Goddard, Steve — Lee, Kevin  
Computer Science and Engineering — Computer Science and Engineering — Arts & Sciences

Wortmann, Charles  Agronomy and Horticulture  
Integrated Approach to Reduced Risk of Phosphorus Pollution of Surface Waters in Crop-Livestock Based Managed Ecosystems of the Midwest  
$235,839 — $506,753  
Nebraska Corn Board — Dana-Farber Cancer Institute  
Erickson, Galen — Schulte, Dennis — Jose, H. Douglas  
Animal Science — Biological Systems Engineering — Agricultural Economics  
Franti, Tom — Biological Systems Engineering
Yang, Yiqi  
Textiles, Clothing and Design  
Resistance of Sulfur Dyed Fabrics to Oxidative Bleaching & Acidic Tendering: Improvement & Application  
$300,618  
Procter & Gamble

Yoder, Ronald  
Biological Systems Engineering  
* Enhancing the Value of Water through Management Education  
$225,000  
Nebraska Department of Natural Resources

$800,000  
Department of Agriculture-CSREES  
Baquet, Alan  
Agricultural Economics

Yohe, John  
IANR-International Programs  
Transfer of Sorghum & Millet Production, Processing & Marketing Technologies Program in Mali  
$750,000  
U.S. Agency for International Development

Zempleni, Janos  
Nutrition and Health Sciences  
Biotin Affects Cytokine Metabolism  
$409,586  
Department of Agriculture-NRICGP  
Epigenetic Effects of Biotin on Activation of Endogenous Viral Sequences  
$395,601  
DHHS-NIH-NIEHS

Zeng, Xiao Cheng  
Chemistry  
ITR: Multiscale Treatment of Systems with Strong Heterogeneities  
$715,121  
NSF  
Diestler, Dennis  
Agronomy and Horticulture  
Feng, Ruqiang  
Engineering Mechanics

Zera, Anthony  
Biological Sciences  
Enzymatic and Molecular Bases of Trade-Offs in Lipid Metabolism that Underlie Life History Trade-Off  
$435,682  
NSF  
Harshman, Lawrence  
Biological Sciences

Zhang, Luwen  
Center for Virology  
Interferon Regulatory Factor 7 and NPC  
$393,855  
DHHS-NIH-NIAID

Zlotnik, Vitaly  
Geosciences  
Mechanisms Producing Variation in Lake Salinity in Dune Environments: Nebraska Sand Hills  
$219,958  
NSF  
Fritz, Sherilyn  
Geosciences  
Swinehart, James  
School of Natural Resources

$200,000 — $999,999
Early Career Awards

Active awards in 2008
* Indicates new in 2008

NSF CAREER Grants

National Science Foundation CAREER grants are awarded only to untenured junior faculty. NSF emphasizes that the 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.

Adams, Stephanie
Industrial and Management Systems Engineering
Designing Effective Teams in the Engineering Classroom for the Enhancement of Learning
$643,418 NSF

Binek, Christian
Physics and Astronomy
Education & Research on Nanoscale Spintronic Systems & Heterostructures
$500,000 NSF

Bloom, Kenneth
Physics and Astronomy
Top-Quark Physics, Computing & Software at Large Hadron Collider
$550,000 NSF

Choueiry, Berthe
Computer Science and Engineering
Detecting Interchangeability Relations in Constraint Satisfaction Problems and Exploiting them in Problem Solving and Interactions with Users
$600,000 NSF

Cohen, Myra
Computer Science and Engineering
* Configuration-Aware Testing Through Intelligent Sampling to Improve Software Dependability
$400,000 NSF

Dominguez, Aaron
Physics and Astronomy
Superior Silicon Tracking & Discovery as CMS & D0
$550,000 NSF

Elbaum, Sebastian
Computer Science and Engineering
Leveraging Field Data to Test Pervasive Systems
$412,594 NSF
**Enders, Axel**  
Physics and Astronomy  
* Self-Assembled Magnetic Nanostructures  
$400,000  
NSF

**Frank, Tracy**  
Geosciences  
Exploring the Geologic Record of Major Climate Transitions: Causes, Consequences, & Impacts on the Evolution of Earth Systems  
$583,816  
NSF

**Gursoy, Mustafa**  
Electrical Engineering  
CAREER: Energy-Efficient Wireless Communications under Channel Uncertainty  
$400,000  
NSF

**Hebets, Eileen**  
Biological Sciences  
Evolution and Function of Complex Signaling in Wolf Spider Genus Schizocosa  
$680,351  
NSF

**Kim, Yong Rak**  
Civil Engineering  
Research & Education on Advanced Multiscale Modeling-Analysis of Roadway Materials, Mixtures, & Infrastructure Systems  
$402,044  
NSF

**Wang, Lily**  
Architectural Engineering  
Integrating Time-Variant Source Directivity into Architectural Acoustic Auralizations  
$406,376  
NSF

**Xu, Lisong**  
Computer Science and Engineering  
Stochastic TCP Friendliness: Exploring the Design Space of TCP-Friendly Traffic Control in Best-Effort Internet  
$400,000  
NSF
K Awards

National Institutes of Health K Awards provide support for intensive development experiences in one of the biomedical, behavioral or clinical sciences leading to research independence. Candidates for these awards normally must have a research or health-professional doctorate and postdoctoral research experience at the time of application. The proposed career-development experience must be in a research area new to the applicant and/or one in which an additional supervised research experience will substantially add to the applicant’s research capabilities. Candidates must provide a plan for achieving independent research support by the end of the award, and must be willing to spend a minimum of .75 FTE conducting research and career development during the award three-, four-, or five-year project period.

<table>
<thead>
<tr>
<th>Name</th>
<th>Field</th>
<th>Project Description</th>
<th>Award Amount</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angeletti, Peter</td>
<td>Biological Sciences</td>
<td>Maintenance of Human Papilloma Virus Genes</td>
<td>$613,512</td>
<td>DHHS-NIH-NCI</td>
</tr>
<tr>
<td>DiLillo, David</td>
<td>Psychology</td>
<td>Family Functioning of Adults Maltreated as Children</td>
<td>$670,286</td>
<td>DHHS-NIH-NIMH</td>
</tr>
<tr>
<td>Peterson, Daniel</td>
<td>Food Science and Technology</td>
<td>* Adaptive Immune Response to Symbiotic Bacteria as a Mediator of Gut Homeostasis</td>
<td>$379,890</td>
<td>DHHS-NIH-NIAID</td>
</tr>
<tr>
<td>Sayood, Khalid</td>
<td>Electrical Engineering</td>
<td>Identification of Biological Materials of Unknown Origin</td>
<td>$764,005</td>
<td>DHHS-NIH-NIAID</td>
</tr>
<tr>
<td>Tyler, Kimberly</td>
<td>Sociology</td>
<td>Neglect and Abuse Histories Among Homeless Young Adults</td>
<td>$659,525</td>
<td>DHHS-NIH-NIMH</td>
</tr>
</tbody>
</table>
The Department of Defense-Air Force Office of Scientific Research bestows its Young Investigator Research Program (YIP) award on scientists and engineers at research institutions across the United States who have received Ph.D. or equivalent degrees in the last five years and show exceptional ability and promise for conducting basic research. The objective of the program is to foster creative basic research in science and engineering, enhance early career development of outstanding young investigators and increase opportunities for the young investigators to recognize the Air Force mission and the related challenges in science and engineering. Those selected receive the grants over a three-year period.

**Cohen, Myra**  
Computer Science and Engineering  
$316,551  
DOD-Air Force Office of Scientific Research
Arts and Humanities Awards
$50,000 or more
Active awards in 2008
* Indicates new in 2008

Awakuni-Swetland, Mark
Anthropology

* Omaha and Ponca Digital Dictionary
$348,800
National Endowment for the Humanities
09/01/08 – 08/31/11
Walter, Katherine
Center for Digital Research in the Humanities/Libraries

Mark Awakuni-Swetland, assistant professor of anthropology, and colleagues are creating a comprehensive Omaha and Ponca digital dictionary that will be available online for native communities, students, researchers and the public. The National Endowment for the Humanities funds this work through a joint NEH-National Science Foundation-Smithsonian Institution “Documenting Endangered Languages” initiative. It’s also a “We the People” project, a special NEH recognition for model projects advancing the study, teaching and understanding of American history and culture. This project will provide extensive information on the Omaha and Ponca language and will be far more robust and usable than existing resources.

Kooser, Ted
English

American Life in Poetry Project
$141,800
Poetry Foundation
1/1/05 – 6/30/09

The Poetry Foundation, in partnership with the Library of Congress, supports the American Life in Poetry project, an initiative of Ted Kooser, the 2004-2006 Poet Laureate Consultant in Poetry to the Library of Congress. American Life in Poetry is a free weekly column for newspapers and online publications featuring a poem written by a contemporary American poet, chosen by Kooser, with a brief introduction written by Kooser. The sole mission of this project is to promote poetry. The Poetry Foundation funds the project, with administrative support provided by the UNL English Department, where the project office is located.
Ken Price, professor of English and Hillegass chair of 19th Century American Literature, is principal investigator for a $500,000 We the People Challenge Grant from the National Endowment for the Humanities. The award is contingent on UNL acquiring a 3-1 match of $1.5 million in the next four years. When fundraising is completed, the $2 million establishes an endowment at the University of Nebraska Foundation, the proceeds of which provide permanent annual operating funding for the Walt Whitman Archive. The Whitman Archive is an electronic research and teaching tool that makes Whitman’s huge body of work easily and conveniently accessible. Whitman amassed a huge volume of work during his life. Some 70,000 manuscripts are housed in about 80 locations, although the bulk is known to be in just five libraries. But the logistics of finding these various documents, let alone assessing and comparing their relevance and content, are daunting. The Archive allows scholars to search the entire body of Whitman’s writings and scholarship on those works and offers scholarly analysis.

* Walt Whitman’s Civil War Writings
  $300,000 National Endowment for the Humanities
  07/01/08 – 06/30/11

* Walt Whitman’s Civil War Writings
  $80,000 American Council of Learned Societies
  07/01/08 – 12/31/09

* Walt Whitman and the Civil War
  $75,000 National Historical Publications and Records Commission
  10/01/08 – 09/30/09

With grants from the National Endowment for the Humanities, the American Council of Learned Societies and the National Historical Publications and Records Commission, the Walt Whitman Archive will create a comprehensive edition of the Civil War writings of Walt Whitman. The War profoundly shaped *Leaves of Grass*, the first masterpiece of American poetry, and Whitman extensively depicted and analyzed the Civil War in journals, notebooks, letters, essays, journals, memoirs and manuscript drafts. The hundreds of documents that give voice to Whitman’s experience of the war will be electronically edited, arranged and published. In addition to making these documents freely available, this work will help to model for other scholars best practices in creating, publishing and sustaining electronic editions. The project will provide scholars and students—of the Civil War, of Whitman and of American history in general—a site where they can read, evaluate and experience a set of texts that provide unique insight into the American experience of the Civil War.
Katherine Walter, chair of special collections and preservation and professor of libraries, is principal investigator on a team hoping to develop guidelines that will serve as a model for the integration of standards used by scholarly digital projects and could influence future development. Metadata integration is an important but yet unattained goal for digital thematic research collections, which employ standards for transcriptions, digital images, finding aids and administrative records. These standards have been developed by different communities. The Metadata Encoding and Transmission Standard (METS) shows promise as a means of integrating various standards, but no testing of METS has been done using digital thematic research as a model; thus ad hoc and idiosyncratic solutions have sprung up, with various unreliable results. UNL will create a METS profile to test its reliability and also submit the package to two digital library systems at Brown University and the University of Virginia.

Walter, who co-directs UNL’s Center for Digital Research in the Humanities, leads the Nebraska Digital Newspapers Project, through which about 100,000 pages of Nebraska newspapers from 1880 through 1910 will be digitized for inclusion in the Library of Congress’ national “Chronicling America” Web site. UNL’s University Libraries is partnering with the College of Journalism and Mass Communications and the Nebraska State Historical Society on the two-year, “We the People” grant. Nebraska is one of nine states selected in the early phases of this project, which eventually will include all 50 states. “We the People” grants recognize model projects that advance the study, teaching and understanding of American history and culture.
## Arts and Humanities Awards
### $5,000 - $49,999

**Active awards in 2008**

* Indicates new in 2008

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Field</th>
<th>Title</th>
<th>Amount</th>
<th>Funders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleed, Peter</td>
<td>Anthropology and Geography</td>
<td>Archaeological Investigation of the Battle of El Viso, July 1, 1898</td>
<td>National Geographic Society</td>
<td>$30,220</td>
<td></td>
</tr>
<tr>
<td>Engen-Wedin, Nancy</td>
<td>Lied Center for Performing Arts</td>
<td>* Nebraska’s Rural Arts Education Initiative</td>
<td>National Endowment for the Arts</td>
<td>$25,000</td>
<td>ArtsReach</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nebraskans for the Arts</td>
<td>$50,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Umo’ho’ Cultural Arts Program</td>
<td>$23,250</td>
<td></td>
</tr>
<tr>
<td>Handa, Rumiko</td>
<td>Architecture</td>
<td>Spirit of Design: Multidisciplinary, Multimedia Database and Website</td>
<td>Graham Foundation</td>
<td>$12,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Architecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potter, James</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanson, Marin</td>
<td>Textiles, Clothing and Design</td>
<td>International Quilt Study Center New Building Opening Exhibition</td>
<td>Cooper Foundation</td>
<td>$21,274</td>
<td>International Quilt Study Center &amp; Museum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewell, Andrew</td>
<td>Center for Digital Research in the Humanities</td>
<td>* The Crowded Page</td>
<td>National Endowment for the Humanities</td>
<td>$49,577</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mapping a Writer’s World: A Geographic Chronology of Willa Cather’s Life</td>
<td>$7,800</td>
<td>Nebraska Humanities Council</td>
</tr>
<tr>
<td>Kendall, Laura</td>
<td>Lied Center for Performing Arts</td>
<td>* Loop Divers by Troika Ranch</td>
<td>Woods Charitable Fund/Lincoln Community Foundation</td>
<td>$35,000</td>
<td></td>
</tr>
<tr>
<td>Lundine, Heather</td>
<td>University Press</td>
<td>* Literary Publishing at the University of Nebraska Press</td>
<td>National Endowment for the Arts</td>
<td>$20,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Access to Artistic Excellence: International Translations</td>
<td>$25,000</td>
<td></td>
</tr>
<tr>
<td>Price, Kenneth</td>
<td>English</td>
<td>Walt Whitman Archive</td>
<td>Cooper Foundation</td>
<td>$14,000</td>
<td></td>
</tr>
</tbody>
</table>
Richmond, John  
School of Music  
$10,000  
2009 Honors Jazz Weekend & Summer Camp  
Berman Music Foundation  
Haar, Ora  
School of Music

Stubbendieck, James  
Great Plains Studies  
* Celebrating Darwin’s Legacy  
$8,960  
Nebraska Humanities Council

Walter, Katherine  
University Libraries  
Quilt Index National Leadership Project  
$20,000  
Michigan State University  
Crews, Patricia  
Textiles, Clothing and Design

Weiss, Wendy  
Textiles, Clothing and Design  
Hillestad Textiles Gallery  
$9,000  
Friends of the Hillestad Textiles Gallery
Divya Jaroni, Veterinary and Biomedical Sciences; Mindy Brashears
Title: Lactic Acid Bacteria Cultures that Inhibit Food-Borne Pathogens
Date: 1/29/2008
Number: 7,323,166
Country: United States of America

Stephen Robert Platt, Mechanical Engineering; Shane Farritor, Mechanical Engineering; Dmitry Oleynikov; Adnan Hadzialic
Title: Surgical Camera Robot
Date: 3/4/2008
Number: 7,339,341
Country: United States of America

Bernard Doudin, Physics & Astronomy; Christian Binek, Physics & Astronomy
Title: Magnetic Spin Valve With a Magnetoelectric Element
Date: 4/15/2008
Number: 7,358,846
Country: United States of America

Raul Barletta, Veterinary and Biomedical Sciences; Ofelia Barletta-Chacon, Veterinary and Biomedical Sciences
Title: Recombinant Mycobacteria Overexpressing D-alanine Ligase Gene and Uses Therefore
Date: 5/13/2008
Number: 7,371,571
Country: United States of America

Alan Christensen, Biological Sciences; Douglas Dorer
Title: Nucleic Acid Sequences Found in Drosophila Melanogaster That Encode Proteins Essential for Viability and Method of Use
Date: 6/10/2008
Number: 7,384,745
Country: United States of America

Jody Redepenning, Chemistry
Title: Electrolytic Deposition of Coatings for Prosthetic Metals and Alloys
Date: 6/17/2008
Number: 7,387,846
Country: United States of America
Richard Arnold, Engineering Research Centers; Shane Farritor, Mechanical Engineering; Chris Norman
Title: Method and Apparatus for Noncontact Relative Rail Displacement, Track Modulus and Stiffness Measurement by a Moving Rail Vehicle
Date: 7/22/2008
Number: 7,403,296
Country: United States of America

Dean Sicking, Civil Engineering; Jim C. Holloway, Midwest Roadside Safety Program; John D. Reid, Mechanical Engineering; John R. Rohde, Civil Engineering; Karla Polivka, Midwest Roadside Safety Program; Robert W. Bielenberg, Midwest Roadside Safety Program; Ronald Faller, Midwest Roadside Safety Program; Eric Keller; Kenneth Addink
Title: High-Impact, Energy-Absorbing Vehicle Barrier System
Date: 8/12/2008
Number: 7,410,320 B2
Country: United States of America
George Graef, Agronomy and Horticulture; Leslie Korte, Agronomy and Horticulture; Dennis White, Agronomy and Horticulture
Technology: Soybean variety NE3001
Two licensees: Grain Place Foods, Inc.; Hendrick Seeds

Shane Farritor, Mechanical Engineering; Dmitry Oleynikov
Technology: Devices for surgical applications
Licensee: Virtual Incision Corp.

J. Ron Nelson, Educational Psychology
Technology: Online vocabulary: Progress monitoring assessment
Licensee: Cambium Learning, Inc.

Vadim Gladyshev, Biochemistry
Technology: A system for efficient expression of selenoproteins in mammalian cells
Licensee: R&D Systems, Inc.

Maher Tadros, Civil Engineering
Technology: Pre-cast post-tensioned segmental concrete pole system
Licensee: Superior Concrete Products

Milford Hanna, Biological Systems Engineering; Robert Weber, Industrial Ag Products Center
Technology: Bio-based polymer and method for making the same (packing peanuts made mostly of starch with physical properties superior to all starch peanuts)
Licensee: StarchTech, Inc.

Stefan Newbold, Facilities Management; Lalit Agarwal, Facilities Management; Jim Hines, Facilities Management; and others
Technology: Campus energy management & control system
Licensee: DTL Controls, LLC

Donald Rundquist, School of Natural Resources; Bryan Leavitt, School of Natural Resources
Technology: CALMIT (Center for Advanced Land Management Information Technologies) data acquisition program software for hyperspectral, photographic and DPS data collection and management
Licensee: South Dakota State University
Subramaniam Srikumaran, Veterinary & Biomedical Sciences; Martha Gentry-Nielsen
Technology: Hybridoma cell lines for the production of antibodies against *P. haemolytica* A1 leukotoxin
Licensee: Boehringer Ingelheim Vetmedica, P. (BIVI)

Peter Stephen Baenziger, Agronomy and Horticulture
Technology: Wheat variety NE01643
Three licensees: North Dakota Crop Improvement and Seed Association (NDCISA, dba Dakota Select Seed); Albert Lea Seed House; James Stewart II
CREATIVE WORKS IN FINE AND PERFORMING ARTS
Faculty who created, performed or produced creative works in fine and performing arts, nationally or internationally

Scott Anderson School of Music
Soloist, trombone, Johan De Meij’s T-Bone Concerto, Twin Ports Wind Orchestra, University of Minnesota-Duluth, Duluth, MN

John Bailey School of Music
Soloist, piccolo and piano, Chutzpah! Florida Flute Fair, Orlando, FL
Conductor and featured soloist (with Christian Bohnenstengel), Venezuelan National Flute Choir, South American flute orchestra concert tour, Caracas, Venezuela
Conductor, International Flute Orchestra (35 professional flutists from around the U.S. and Canada), South American flute orchestra concert tour, Valparaíso, Concepción and Santiago, Chile
Conductor, High Winds Flute Orchestra (150 flutists) opening concert; International Flute Orchestra showcase concert, National Flute Association’s annual national convention, Kansas City, MO

Carolyn Barber School of Music
Conductor, Dorian Festival Honor Band, Luther College, Decorah, IA
Conductor, Maryland Music Educators Association Junior All-State Band, Baltimore, MD
Conductor, with U.S. Air Force Heartland of America Band, Percy Grainger’s The Merry King, 2008 College Band Directors National Association Conference

Paul Barnes School of Music
Artist in residence, 2008 Oxbridge International C.S. Lewis Conference, Oxford and Cambridge, England

Peter Bouffard School of Music
Director of jazz and featured performer, University of Maine Summer Youth Music Camp, Orono, ME

Kate Butler School of Music
Artist in residence, 2008 Oxbridge International C.S. Lewis Conference, Oxford and Cambridge, England
Alto soloist, Honegger’s King David, Tulsa Oratorio Chorus and Orchestra, Tulsa, OK
Soloist, Music for a Summer Afternoon, Redlands, CA

Mark Clinton School of Music
Featured artist, piano, Seattle International Piano Festival and Competition, Seattle, WA

Chris Ford Architecture
Artist, residential architecture, TAIMEN, H&R Block Artspace Exhibit: “The Design Flatfile,” Kansas City, MO
Dana Fritz  
**Art and Art History**  
Artist, photography, *The Culture of Nature*, Kansas City Artists Coalition, Kansas City, MO

Therees Hibbard  
**School of Music**  
Workshop leader and guest conductor, St. Olaf Choir, Chapel Choir and Viking Chorus, St. Olaf College, Northfield, MN  
Conductor, presenter and workshop leader, Conference on Worship, Theology and the Arts, St. Olaf College, Northfield, MN

Michael James  
**Textiles, Clothing and Design**  
Artist, wall quilts, *The Life in a Day: New Work*, Modern Arts Midwest, Lincoln, NE  
Artist, *Structure, Surface and Expression: Quilt Directions Today*, Southeastern Center for Contemporary Art, Winston-Salem, NC  
Artist, *Interference Effect: (Betrayed) Lover’s Knot #2*, Craft in America touring exhibit, Little Rock, AR; Portland, OR; San Diego, CA; Houston, TX; Bloomfield Hills, MI; Oklahoma City, OK; Brockton, MA

Karen Kunc  
**Art and Art History**  
Artist, prints, *Visualizing the Urban/Rural Divide*, Malaspina Print Gallery, Vancouver, British Columbia, Canada  

Christopher Marks  
**School of Music**  
Featured recitalist, organ, 2008 National Convention of the Organ Historical Society, Seattle, WA

Jeffrey McCray  
**School of Music**  
Performer, bassoon, Samuel Adler’s *Canto XII for solo bassoon*, 2008 Conference of the International Double Reed Society, Brigham Young University, Provo, UT

William McMullen  
**School of Music**  
Recitalist (accompanied by Donna Harler-Smith, UNL School of Music, Charles (Chip) Smith and pianist Christopher Koelzer), oboe, Randall Snyder’s *Lag Obo (Song of the Oboe)* with poetry by Goenawan Mohamad; Paul Reade’s *Aspects of a Landscape* with poetry by Rosemary Bergstrom; and Benjamin Britten’s *Two Insect Pieces* with poetry by Abraham Cowley and Daryl Hine, 2008 Conference of the International Double Reed, Brigham Young University, Provo, UT

Eric Richards  
**School of Music**  
Composer, premiere, *Fantasia on Kang Ding Love Song*, Shanghai Conservatory of Music Jazz Orchestra, Shanghai, China  
Composer, *Three Scenes for American Trombone and Brass Orchestra*, Holland Center for the Performing Arts, Omaha, NE
Francisco Souto
Artist, prints on paper, 7th Kochi International Triennial of Prints, Ino-Cho Paper Museum, Kochi, Japan
Artist, prints on paper, 2008 New York International Print Fair, The Park Avenue Armory, New York City, New York
Artist, prints on paper, Subject(s) to Change: American Art from the Permanent Collection, Sheldon Museum of Art, Lincoln, NE

Sandra Williams
Artist, mixed media, Dark Sky Preserve, The Arts Mission, Binghamton, New York
Artist, mixed media, 30 Years of Clay, Borelli Edwards Gallery, Pittsburgh, PA

The Moran Woodwind Quintet
Jeffrey McCray, bassoon
Diane Barger, clarinet
John Bailey, flute
Alan Mattingly, horn
William McMullen, oboe
Performers, University of Kansas at Lawrence, William Jewell College, the University of Missouri-Columbia and Washburn University, Topeka

UNL Faculty Brass Quintet
Darrell White and Craig Bircher, trumpets
Alan Mattingly, horn
Scott Anderson, trombone
Craig Fuller, tuba
Guest artists, Season opener, Black Hills Chamber Music Society, Rapid City, SD
Performers, International Brass Chamber Music Festival, University of Louisville, Louisville, KY
Performers, University of Missouri-Kansas City Conservatory of Music, Washburn University and Kansas State University
Douglas A. Abbott  Child, Youth and Family Studies

Katherine S. Ankerson  Architecture

Mark J. Awakuni-Sweetland  Anthropology;
Institute for Ethnic Studies
Author. Dance Lodges of the Omaha People. Lincoln, NE: University of Nebraska Press.

Stephen C. Behrendt  English

Susan Belasco  English

Mark Bernards  Agronomy and Horticulture
Co-author, with Roch E. Gaussoin, Agronomy and Horticulture; Robert N. Klein, West Central Research and Extension Center; Stevan Z. Knezevic, Northeast Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Robert G. Wilson, Panhandle Research and Extension Center; Patrick J. Shea, School of Natural Resources; Clyde L. Ogg, Agronomy and Horticulture. Guide for Weed Management in Nebraska. Lincoln, NE: University of Nebraska–Lincoln.

John E. Bernthal  Special Education and Communication Disorders

David R. Beukelman  Special Education and Communication Disorders
Co-author, with Dr. Pat Mirenda. Augmentative and Alternative Communication (Korean Translation). Seoul, Korea: Hakjisa Publisher.

Brian H. Bornstein  Psychology
Thomas Borstelmann  History

C. Stephen Bradford  College of Law

Dawn O. Braithwaite  Communication Studies

David O. Carter  Entomology
Co-editor, with Mark Tibbett. Soil Analysis in Forensic Taphonomy: Chemical and Biological Effects of Buried Human Remains. Boca Raton, FL: CRC Press.

Brent Cejda  Educational Administration

Enrique Martínez Celaya  Art and Art History
Author. Nomad. Lincoln, NE: University of Nebraska Press.

John Comer  Political Science

Sidnie W. Crawford  Classics and Religious Studies

John W. Creswell  Educational Psychology

Rochelle L. Dalla  Child, Youth and Family Studies


Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; LaDonna A. Werth, Northeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Ruth E. Vonderohe, Northeast Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center. Fun to Play, Ready to Learn. Lincoln, NE: University of Nebraska-Lincoln.


Patricia Fairchild
4-H State Office

Christopher R. Fielding
Geosciences
Co-editor, with Tracy D. Frank, Geosciences; John Isbell. *Resolving the Late Paleozoic Ice Age in Time and Space*. Boulder, CO: The Geological Society of America, Inc.

Gwendolyn A. Foster
English

Tracy D. Frank
Geosciences

Patricia W. Freeman
School of Natural Resources; University of Nebraska State Museum
Co-author, with Hugh H. Genoways, University of Nebraska State Museum; Justin D. Hoffman, School of Natural Resources; Keith Geluso; Russell A. Benedict; Jeffrey J. Huebschman. *Mammals of Nebraska: Checklist, Key, and Bibliography*. Lincoln, NE: University of Nebraska State Museum.

Chris Gallagher
English

James A. Garza
History; Institute for Ethnic Studies

Roch E. Gaussoin
Extension; Agronomy and Horticulture
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Robert N. Klein; West Central Research and Extension Center; Stevan Z. Knezevic, Northeast Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Robert G. Wilson, Panhandle Research and Extension Center; Patrick J. Shea, School of Natural Resources; Clyde L. Ogg, Agronomy and Horticulture. *Guide for Weed Management in Nebraska*. Lincoln, NE: University of Nebraska–Lincoln.

Marilyn L. Grady
Educational Administration
Co-author with D. Gosmire. *DIAL’s Interactive Learning Campus: Connecting, Learning and Sharing*. Platte, SD: Mid-Central Coop and Lincoln, NE: University of Nebraska–Lincoln.

William M. Grange
Johnny Carson School of Theatre and Film
John Gruhl  Political Science

Janet S. Hanna  Northeast Research and Extension Center
Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; LaDonna A. Werth, Northeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Ruth E. Vonderohe, Northeast Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; John D. DeFrain, Family and Consumer Sciences. *Fun to Play, Ready to Learn*. Lincoln, NE: University of Nebraska–Lincoln.

Steven A. Hardy  Architecture

Terry Housh  Nutrition and Health Sciences

Karen O. Janovy  Sheldon Museum of Art
Editor. *The Unknown Blakelock*. Lincoln, NE: University of Nebraska Press.

Paul A. Johnsgard  School of Biological Sciences, emeritus

Glen Johnson  Nutrition and Health Sciences

Julie Johnson  Child, Youth and Family Studies

Wendy J. Katz  Art History
Robert N. Klein  West Central Research and Extension Center
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Roch E. Gaussoin, Agronomy and Horticulture; Stevan Z. Knezevic, Northeast Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Robert G. Wilson, Panhandle Research and Extension Center; Patrick J. Shea, School of Natural Resources; Clyde L. Ogg, Agronomy and Horticulture. Guide for Weed Management in Nebraska. Lincoln, NE: University of Nebraska–Lincoln.

Stevan Z. Knezevic  Northeast Research and Extension Center
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Roch E. Gaussoin, Agronomy and Horticulture; Robert N. Klein; West Central Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Robert G. Wilson, Panhandle Research and Extension Center; Patrick J. Shea, School of Natural Resources; Clyde L. Ogg, Agronomy and Horticulture. Guide for Weed Management in Nebraska. Lincoln, NE: University of Nebraska–Lincoln.

Ted Kooser  English
Author, with illustrations by Robert Hanna. Valentines. Lincoln, NE: University of Nebraska Press.

Marjorie Kostelnik  Child, Youth and Family Studies

Eileen Krumbach  Southeast Research and Extension Center
Co-author, with LaDonna A. Werth, Northeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Ruth E. Vonderohe, Northeast Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center; John D. DeFrain, Family and Consumer Sciences. Fun to Play, Ready to Learn. Lincoln, NE: University of Nebraska–Lincoln.

Thomas Larson  School of Music

Carole Levin  History; Medieval & Renaissance Studies

Suping Lu  Libraries-Books
Tom Lynch

Drew J. Lyon
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Roch E. Gaussoin, Agronomy and Horticulture; Robert N. Klein; West Central Research and Extension Center; Stevan Z. Knezevic, Northeast Research and Extension Center; Robert G. Wilson, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Patrick J. Shea, School of Natural Resources; Clyde L. Ogg, Agronomy and Horticulture. *Guide for Weed Management in Nebraska*. Lincoln, NE: University of Nebraska-Lincoln.

Timothy R. Mahoney

Ann Mari May

Joseph Mendola

Dona-Gene Mitchell

Nancy A. Mitchell

J. Ron Nelson

Mary E. Nelson
Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; LaDonna A. Werth, Northeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Ruth E. Venderohe, Northeast Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center; John D. DeFrain, Family and Consumer Sciences. *Fun to Play, Ready to Learn*. Lincoln, NE: University of Nebraska-Lincoln.
Clyde L. Ogg Extension; Agronomy and Horticulture
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Roch E. Gaussoin, Agronomy and Horticulture; Robert N. Klein; West Central Research and Extension Center; Stevan Z. Knezevic, Northeast Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Patrick J. Shea, School of Natural Resources; Robert G. Wilson, Panhandle Research and Extension Center. Guide for Weed Management in Nebraska. Lincoln, NE: University of Nebraska–Lincoln.

Marshall C. Olds Modern Languages and Literature

David L. Olson Management


Paul A. Olson English, emeritus
Author. Beyond a Common Joy: An Introduction to Shakespearean Comedy. Lincoln, NE: University of Nebraska Press.

Michael R. Page English
Editor. The Man with the Strange Head and Other Early Science Fiction Stories by Miles J. Breuer. Lincoln, NE: University of Nebraska Press.

M.J. Paulsen University of Nebraska State Museum
Co-author, with Brett C. Ratcliffe, University of Nebraska State Museum and Entomology. The Scarabaeoid Beetles of Nebraska. Lincoln, NE: University of Nebraska State Museum.

Vicki L. Plano Clark Educational Psychology

Sarah Effken Purcell South Central Research and Extension Center
Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; LaDonna A. Werth, Northeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Ruth E. Vanderhohe, Northeast Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center; John D. DeFrain, Family and Consumer Sciences. Fun to Play, Ready to Learn. Lincoln, NE: University of Nebraska–Lincoln.
Mary Kay Quinlan  

Brett C. Ratcliffe  
University of Nebraska State Museum; Entomology  
First author, with M.J. Paulsen, University of Nebraska State Museum. *The Scarabaeoid Beetles of Nebraska.* Lincoln, NE: University of Nebraska State Museum.

Hilda Raz  
English; Women’s and Gender Studies  
Author. *All Odd and Splendid.* Middletown, CT: Wesleyan University Press. 
Editor. *Loren Eiseley: Commentary, Biography, and Remembrance.* Lincoln, NE: University of Nebraska Press.

George E. Rejda  
Finance  

Guy J. Reynolds  
English  

Lowell D. Sandell  
Extension; Agronomy and Horticulture  
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Roch E. Gaussoin, Agronomy and Horticulture; Robert N. Klein; West Central Research and Extension Center; Stevan Z. Knezevic, Northeast Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Robert G. Wilson, Panhandle Research and Extension Center; Patrick J. Shea, School of Natural Resources; Clyde L. Ogg, Agronomy and Horticulture. *Guide for Weed Management in Nebraska.* Lincoln, NE: University of Nebraska–Lincoln.

Robert F. Schopp  
College of Law  
Co-editor, with Steven L. Willborn, College of Law; Richard L. Wiener, Psychology; Brian H. Bornstein, Psychology. *Mental Disorder and Criminal Law.* New York, NY: Springer.

Debra E. Schroeder  
Northeast Research and Extension Center  
Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; LaDonna A. Werth, Northeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Ruth E. Vonderohe, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center; John D. Defrain, Family and Consumer Sciences. *Fun to Play, Ready to Learn.* Lincoln, NE: University of Nebraska–Lincoln.

Mathias M. Schubert  
Electrical Engineering  
Editor, with Uwe Beck; Hans Arwin. *4th International Conference on Spectroscopic Ellipsometry.* Berlin, Germany: Wiley.
Alan T. Seagren  Educational Administration

Patrick J. Shea  Extension; School of Natural Resources
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Roch E. Gaussoin, Agronomy and Horticulture; Robert N. Klein; West Central Research and Extension Center; Stevan Z. Knezevic, Northeast Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Robert G. Wilson, Panhandle Research and Extension Center; Clyde L. Ogg, Agronomy and Horticulture. Guide for Weed Management in Nebraska. Lincoln, NE: University of Nebraska–Lincoln.

Keng Siau  Management

Ralph Skomski  Nebraska Center for Materials and Nanoscience; Physics and Astronomy

Jolene D. Smyth  Sociology; Survey Research and Methods Program

Stephen M. Spomer  Entomology
Author, with Mathew L. Brust; Douglas C. Backlund; Scott Weins. Tiger Beetles of South Dakota and Nebraska. Lincoln, NE: University of Nebraska–Lincoln Entomology.

Joseph Starita  News - Editorial

Alison G. Stewart  Art and Art History

Zhenghong Tang  Community and Regional Planning

Steven Taylor  Food Science and Technology
Eric Thompson  Bureau of Business Research; Economics  
Co-author, with William Walstad, Center for Economic Education.  
*Entrepreneurship in Nebraska: Conditions, Attitudes, and Actions.*  

Diane Vigna  Extension; Textiles, Clothing and Design  
Co-author, with Patricia Fairchild, 4-H State Office.  
*Entrepreneurship Investigation ESI: Leader’s Guide; Unit 1: Discover the E-Scene;  
Unit 2: The Case of Me; Unit 3: Your Business Inspection.*  
Lincoln, NE: University of Nebraska–Lincoln.

Franz von der Dunk  College of Law  
Series editor.  

Ruth E. Vonderohe  Northeast Research and Extension Center  
Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; LaDonna A. Werth, Northeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center; John D. DeFrain, Family and Consumer Sciences.  
*Fun to Play, Ready to Learn.*  
Lincoln, NE: University of Nebraska–Lincoln.

William B. Walstad  Economics  
Co-author, with Eric C. Thompson, Economics.  
*Entrepreneurship in Nebraska: Condition, Attitudes, and Actions.*  

LuAnn Wandsnider  Anthropology  
Co-editor, with Simon J. Holdaway.  
*Time in Archaeology.*  
Salt Lake City, UT: University of Utah Press.

Mary K. Warner  West Central Research and Extension Center  
Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; LaDonna A. Werth, Northeast Research and Extension Center; Ruth E. Vonderohe, Northeast Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center; John D. DeFrain, Family and Consumer Sciences.  
*Fun to Play, Ready to Learn.*  
Lincoln, NE: University of Nebraska–Lincoln.
LaDonna A. Werth  Northeast Research and Extension Center
Co-author, with Eileen M. Krumbach, Southeast Research and Extension Center; Mary K. Warner, West Central Research and Extension Center; Ruth E. Vonderohe, Northeast Research and Extension Center; Debra E. Schroeder, Northeast Research and Extension Center; Sarah Effken Purcell, South Central Research and Extension Center; Mary E. Nelson, Southeast Research and Extension Center; Janet S. Hanna, Northeast Research and Extension Center; John D. DeFrain, Family and Consumer Sciences. Fun to Play, Ready to Learn. Lincoln, NE: University of Nebraska–Lincoln.

Daniel W. Wheeler  Agricultural Leadership, Education and Communication

Richard L. Wiener  Psychology; College of Law
Co-editor, with Brian H. Bornstein, Psychology; Robert F. Schopp, College of Law; Steven L. Willborn, College of Law. Civil Juries and Civil Justice: Psychological and Legal Perspectives. New York, NY: Springer.

Steven L. Willborn  College of Law

Robert G. Wilson  Panhandle Research and Extension Center
Co-author, with Mark L. Bernards, Agronomy and Horticulture; Roch E. Gaussoin, Agronomy and Horticulture; Robert N. Klein; West Central Research and Extension Center; Stevan Z. Knezevic, Northeast Research and Extension Center; Drew J. Lyon, Panhandle Research and Extension Center; Lowell D. Sandell, Agronomy and Horticulture; Patrick J. Shea, School of Natural Resources; Clyde L. Ogg, Agronomy and Horticulture. Guide for Weed Management in Nebraska. Lincoln, NE: University of Nebraska–Lincoln.

Rachelle Winkle-Wagner  Educational Administration

Simon Wood  Classics and Religious Studies

Robert J. Wright  Entomology
Co-author, with Mathew L. Brust; W.W. Hoback. The Grasshoppers (Orthoptera: Acrididae and Romaleidae) of Nebraska. Lincoln, NE: UNL Extension.
John Wunder  History; College of Journalism and Mass Communications
Lincoln, NE: University of Nebraska Press.

Janos Zempleni  Nutrition and Health Sciences
2008 RECOGNITIONS AND HONORS
Faculty who have been elected to honor academies or who have received national or international honors or awards

Brian Larkins  Office of Research; Agronomy and Horticulture
National Academy of Science membership

William Splinter  Larsen Tractor Test and Power Museum; Biological Systems Engineering, Emeritus
National Academy of Engineers

James Van Etten  Plant Pathology
National Academy of Science

Elton Aberle  Animal Science
Fellow, American Meat Science Association
R.C. Pollock Award, American Meat Science Association

Viacheslav Adamchuk  Biological Systems Engineering
Pierre C. Robert Precision Agriculture Young Scientist Award, Ninth International Conference on Precision Agriculture

David Allen  Engineering
Michael P. Malone International Leadership Award, National Association of State Universities and Land-Grant Colleges
International TTH Pian Medal, International Congress of Computational Engineering Sciences

Jane Armstrong  Northeast Research and Extension Center
National Family Strengthening Award, National 4-H Council/Annie E. Casey Foundation

Diane Barger  School of Music
Treasurer, International Clarinet Association

Herman Batelaan  Physics and Astronomy
Fellow, Division of Atomic, Molecular, and Optical Physics of the American Physical Society

Frederick Baxendale  Entomology
2008 Distinguished Achievement Award in Extension, Entomological Society of America

Don Beermann  Animal Science
Fellow, American Meat Science Association

Kirill Belashchenko  Physics and Astronomy
Cottrell Scholar Award, Research Corporation

David Berkowitz  Chemistry
Promotion of Science Fellowship, Japan Society
Bruce W. Brodersen  Veterinary and Biomedical Sciences
Outstanding Service Award, Nebraska Veterinary Medical Association

David Brooks  Teaching, Learning and Teacher Education
Fellow, American Education Research Association

Amy Burnett  History
Gerald Straus Book Prize for Teaching the Reformation: Ministers and Their Message in Basel, 1529-1629 (Oxford University Press, 2007), Sixteenth Century Society & Conference

Chris Calkins  Animal Science
Fellow, American Meat Science Association

Gustavo Carlo  Psychology
Visiting Scholar Fellowship, University of Valencia, Spain

Ann Chang-Barnes  Lied Center for Performing Arts
Fulbright Scholar Award for 2009, Royal Conservatory of Music, Brussels, Belgium, U.S. Fulbright Commission

Xun-Hong Chen  School of Natural Resources
Chang Jiang Scholars Professor, Ministry of Education, People’s Republic of China

Dennis Conley  Agricultural Economics; Marketing
Outstanding Contribution as Co-Chair of the 18th Annual IAMA Forum, International Food and Agribusiness Management Association

John W. Creswell  Educational Psychology
2008 Senior Fulbright Fellowship to South Africa, U.S. Fulbright Commission

Elbert Dickey  Cooperative Extension
Inductee, U.S. Agriculture Hall of Fame

Lester Digman  Management
Fellow, Midwest Decision Sciences Institute

Liangcheng Du  Chemistry
Invited lecturer, SINO-US Round-table Conference on Chemical Biology and New Drug Discovery, Changsha, China

Sarah Effken Purcell  Southeast Research and Extension Center
National Family Strengthening Award, National 4-H Council/Annie E. Casey Foundation

Dean Eisenhauer  Biological Systems Engineering
2008 Award for the Advancement of Surface Irrigation, American Society of Agricultural and Biological Engineers (ASABE)

Marion Ellis  Entomology
Award of Excellence, American Association of Professional Apiculturists
Ece Erdogmus  Architectural Engineering
Journal of Architectural Engineering Best Paper Award, 2008, American Society of Civil Engineers (ASCE)
2008 Architectural Engineering Conference Best Structures Paper Award, Architectural Engineering Institute (AEI)

John Foster  Entomology
John V. Osmun Alumni Professional Achievement Award for Entomology, Purdue University

Roch Gaussoin  Extension; Agronomy and Horticulture
Fred V. Grau Turfgrass Science Award, Crop Science Society of America

Kurt Geisinger  Educational Psychology
2008 Jacob Cohen Award for Distinguished Teaching and Mentoring, American Psychological Association

Marilyn L. Grady  Educational Administration
2008 Living Legends Award, National Council of Professors of Educational Administration

Mark Griep  Chemistry
Officer Grant, Alfred P. Sloan Foundation

David Hage  Chemistry
Top 20 Most Cited Review Author from 2002 to 2007, Journal of Chromatography B
Fellow, National Academy of Clinical Biochemistry

Ronald Hampton  Marketing
2008 International Scholar of the Year Award, Phi Beta Delta

Janet Harkness  Survey, Research and Methodology Program/Gallup Research Center; English
Invited member of the Special Survey Research Statistics “Committee of Visitors,” NSF Advisory Committee for the Social, Behavioral and Economic Sciences

Jeff Hart  Southeast Research and Extension Center
National Family Strengthening Award, National 4-H Council/Annie E. Casey Foundation

Edwin Harvey  School of Natural Resources
Distinguished Service Award, Geological Society of America Hydrogeology Division

Tiffany Heng-Moss  Entomology
Distinguished Achievement Award in Teaching, National Entomological Society of America

Alice Henneman  Southeast Research and Extension Center
Food Safety Award (1st Place) – Team Award, National Extension Association of Family and Consumer Sciences
Mary Anne Holmes  Geosciences
Fellow, Association for Women in Science

Melissa J. Homestead  English; Women’s and Gender Studies
Knopf Fellowship, Harry Ransom Center, University of Texas at Austin
Everett Helm Visiting Fellowship, Lilly Library, Indiana University

Roger Hoy  Biological Systems Engineering
Next Generation Award, American National Standards Institute (ANSI)

Suat Irmak  Biological Systems Engineering
Educational Aids Competition Blue Ribbon Award in the Educational Publications Category, American Society of Agricultural and Biological Engineers (ASABE)
2008 New Holland Young Researcher Award, American Society of Agricultural and Biological Engineers (ASABE)

Rodger Johnson  Animal Science
Research Fellow Award, American Society of Animal Science

Clinton J. Jones  Veterinary and Biomedical Sciences
Honorary Cell Death Editorial Board Member, International Cell Death Society

Jeannette Eileen Jones  History; Institute for Ethnic Studies
Deutsche Bank Junior Scholar-in-Residence Fellowship, Heidelberg Center for American Studies, Universitat Heidelberg, Germany

Wendy Katz  Art and Art History
Jay T. Last Fellowship, American Antiquarian Society

Karen Kunc  Art and Art History
Visiting Artist Residency, Malaspina Printmakers Society, Vancouver, Canada

Sang Lee  Management
Distinguished Global Leadership Award, Pan-Pacific Business Association

Carole Levin  History; Medieval & Renaissance Studies

Donald Levis  Northeast Research and Extension Center
ASAS Fellow Award – Extension Category, American Society of Animal Science

Nancy Lewis  Nutrition and Health Sciences
Distinguished Alumni Award, New Mexico State University
Marjorie F. Lou  Veterinary and Biomedical Sciences; Redox Biology
International Honorary University Professorship, Xian Jiaotong University

Yongfeng Lu  Electrical Engineering
Fellow, Society of Photo-optical Instrumentation Engineers (SPIE)

Fred Luthans  Management
Distinguished Global Leadership Award, Pan-Pacific Business Association

Craig MacPhee  Economics
2008 International Scholar of the Year Award, Phi Beta Delta

Terry Mader  Animal Science
Honorary Professor, School of Animal Studies at the University of Queensland, Australia
Contributor to the United Nations’ Intergovernmental Panel on Climate Change (IPCC), co-recipient (with Al Gore) of the 2007 Nobel Peace Prize, Nobel Foundation

Roger Mandigo  Animal Science
Fellow, American Meat Science Association

Leanne Manning  Southeast Research and Extension Center
National Family Strengthening Award, National 4-H Council/Annie E. Casey Foundation

Stephen Mason  Agronomy and Horticulture
Crop Science Outstanding Teaching Award, Crop Science Society of America

Martin Massengale  Center for Grassland Studies
Distinguished Achievement in Agriculture, Gamma Sigma Delta

George Meyer  Biological Systems Engineering
BAE Division Best Paper Award for 2008, American Society for Engineering Education (ASEE)

Nancy Miller  Textiles, Clothing and Design
Best Research Paper in Merchandising, Marketing, Retailing, International Textiles and Apparel Association

Rodney A. Moxley  Veterinary and Biomedical Sciences
National Research Council Member and President, Conference of Research Workers in Animal Diseases

Glenn Nierman  School of Music
President, North Central Division, MENC, The National Association for Music Education

Giacomo Oliva  Fine and Performing Arts
2008 Distinguished Alumni Achievement Award, New York University’s Steinhardt School of Culture, Education and Human Development

RECOGNITIONS AND HONORS
Dongming Peng  Computer and Electronics Engineering
Best Paper Award for 2008 IEEE Wireless Communications and Networking Conference, IEEE

Amy Peterson  Southeast Research and Extension Center
2008 Distinguished Achievement Award in Teaching, National Extension Association of Family and Consumer Sciences

Reece Peterson  Special Education and Communication Disorders
Outstanding Leadership Award, Midwest Symposium for Leadership in Behavioral Disorders

Larkin Powell  School of Natural Resources
Fulbright Scholar Fellowship, Council for International Exchange of Scholars

M. Kathleen Prochaska-Cue  Child, Youth and Family Studies
Communication – Education Publication Award, National Extension Association of Family and Consumer Science

Rick Rasby  Animal Science
Excellence in Extension Award, National Association of State Universities and Land-Grant Colleges

Brett Ratcliffe  Entomology
Selection of the rhinoceros beetle, *Megaceras briannsaltini*, as one of the top ten species described in 2007 (the only insect so designated), International Institute for Species Exploration, Arizona State University

David Rosenbaum  Economics
Nebraska Professor of the Year, CASE - Carnegie Foundation for the Advancement of Teaching

John Rupnow  Food Science and Technology
Fellow of the Institute of Food Technologists, Institute of Food Technologists

Hamid Sharif  Computer and Electronics Engineering
Best Paper Award for 2008 IEEE Wireless Communications and Networking Conference, IEEE

Lee Sherry  Northeast Research and Extension Center
National Family Strengthening Award, National 4-H Council/Annie E. Casey Foundation

Keng Siau  Management
Outstanding Leader Award, Information Resource Management Association
IBM Faculty Award, IBM

Richard Sincovec  Computer Science and Engineering
Coleman-Richardson Distinguished Chaired Professorship for 2008-09, U.S. Air Force Academy
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Recognition/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>David R. Smith</td>
<td>Veterinary and Biomedical Sciences</td>
<td>Wendall Burgher Beef Industry Award, University of Nebraska Foundation</td>
</tr>
<tr>
<td>Rodney Soukup</td>
<td>Electrical Engineering</td>
<td>Education Society Finance Committee, IEEE</td>
</tr>
<tr>
<td>Walter Stroup</td>
<td>Statistics</td>
<td>Fellow, American Statistical Association</td>
</tr>
<tr>
<td>William G. Thomas</td>
<td>History</td>
<td>Digital Innovation Fellowship, American Council of Learned Societies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Visiting Professor of North American Studies, British Association of American Studies</td>
</tr>
<tr>
<td>Eric Thompson</td>
<td>Bureau of Business Research; Economics</td>
<td>President, Association for University Business and Economic Research</td>
</tr>
<tr>
<td>Evgeny Tsymbal</td>
<td>Physics and Astronomy</td>
<td>Fellow, American Physical Society</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fellow, Institute of Physics, UK</td>
</tr>
<tr>
<td>Harriet Turner</td>
<td>International Affairs; Modern Languages and Literature</td>
<td>Membership, The Royal Academy of Fine Arts and Historical Sciences of Toledo (Spain)</td>
</tr>
<tr>
<td>Hamid Vakilzadian</td>
<td>Electrical Engineering</td>
<td>Associate Editor of <em>Simulation</em>, Transactions of the Society for Modeling and Simulation International (SCS)</td>
</tr>
<tr>
<td>Anne Vidaver</td>
<td>Plant Pathology</td>
<td>ASM Founders Distinguished Service Award, American Society for Microbiology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pioneering Women in Plant Pathology, American Phytopathological Society</td>
</tr>
<tr>
<td>Jerry Volesky</td>
<td>West Central Research and Extension Center; Agronomy and Horticulture</td>
<td>Outstanding Achievement Award - Research/Academia, Society for Range Management</td>
</tr>
<tr>
<td>Brian Wilcox</td>
<td>Center on Children, Families and the Law; Psychology</td>
<td>Public Service Award, Society for Prevention Research</td>
</tr>
<tr>
<td>Mary S. Willis</td>
<td>Anthropology</td>
<td>Interview and research synopsis featured in “Current Applications,” 2008, Volume 49(4), of the journal <em>Current Anthropology</em></td>
</tr>
<tr>
<td>Robert Wilson</td>
<td>Panhandle Research and Extension Center</td>
<td>Fellow Award, Weed Science Society of America</td>
</tr>
</tbody>
</table>

RECOGNITIONS AND HONORS
John R. Wunder  History; College of Journalism and Mass Communications

President-elect, 2008-09, Western History Association

Ronald Yoder  Biological Systems Engineering

PEI Professional Engineer of the Year for 2008, American Society of Agricultural and Biological Engineers (ASABE)
Glossary of Federal Agency Abbreviations

USAID  United States Agency for International Development
CNS   Corporation for National Service
USDA  United States Department of Agriculture
ARSB  Agricultural Research Service
BRDC  Biotechnology Research and Development Corporation
CSREES Cooperative State Research, Education & Extension Service
ERS   Extension Research Service
FAS   Foreign Agriculture Service
FS    Forestry Service
NRCS  Natural Resources Conservation Service
NRI GP National Research Initiative Competitive Grant Program
RMA   Risk Management Agency
SARE  Sustainable Agricultural Research and Education Program

DOC   Department of Commerce
EDA   Economic Development Administration
NOAA  National Oceanic & Atmospheric Administration

DOD   Department of Defense
ARO   Army Research Office
DEPSCoR Defense Experimental Program to Stimulate Cooperative Research
ONR   Office of Naval Research

DEd   Department of Education
FIPSE Fund for the Improvement of Postsecondary Education
GAANN Graduate Assistance in Areas of National Need

DOE   Department of Energy
EPSCoR Experimental Program to Stimulate Cooperative Research
NIGEC National Institute for Global Environmental Change
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHHS</td>
<td>Department of Health and Human Services</td>
</tr>
<tr>
<td>ACF</td>
<td>Administration for Children and Families</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control</td>
</tr>
<tr>
<td>NIH</td>
<td>National Institutes of Health</td>
</tr>
<tr>
<td>FIC</td>
<td>Fogarty International Center</td>
</tr>
<tr>
<td>NCI</td>
<td>National Cancer Institute</td>
</tr>
<tr>
<td>NCRR</td>
<td>National Center for Research Resources</td>
</tr>
<tr>
<td>NEI</td>
<td>National Eye Institute</td>
</tr>
<tr>
<td>NHLBI</td>
<td>National Heart, Lung and Blood Institute</td>
</tr>
<tr>
<td>NIA</td>
<td>National Institute on Aging</td>
</tr>
<tr>
<td>NIAID</td>
<td>National Institute on Allergy &amp; Infectious Diseases</td>
</tr>
<tr>
<td>NICHD</td>
<td>National Institute of Child Health and Human Development</td>
</tr>
<tr>
<td>NIDCD</td>
<td>National Institute on Deafness &amp; Communication Disorders</td>
</tr>
<tr>
<td>NIDDK</td>
<td>National Institute of Diabetes, Digestive &amp; Kidney Disease</td>
</tr>
<tr>
<td>NIDA</td>
<td>National Institute on Drug Abuse</td>
</tr>
<tr>
<td>NIGMS</td>
<td>National Institute on General Medical Sciences</td>
</tr>
<tr>
<td>NIMH</td>
<td>National Institute of Mental Health</td>
</tr>
<tr>
<td>HUD</td>
<td>Department of Housing and Urban Development</td>
</tr>
<tr>
<td>DoI</td>
<td>Department of Interior</td>
</tr>
<tr>
<td>BR</td>
<td>Bureau of Reclamation</td>
</tr>
<tr>
<td>FWS</td>
<td>Fish &amp; Wildlife Service</td>
</tr>
<tr>
<td>GS</td>
<td>Geological Survey</td>
</tr>
<tr>
<td>NPS</td>
<td>National Park Service</td>
</tr>
<tr>
<td>DoT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>FRA</td>
<td>Federal Railroad Administration</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>IMLS</td>
<td>Institute of Museum &amp; Library Services</td>
</tr>
<tr>
<td>NASA</td>
<td>National Aeronautics and Space Administration</td>
</tr>
<tr>
<td>NCHRP</td>
<td>National Cooperative Highway Research Program</td>
</tr>
<tr>
<td>NEA</td>
<td>National Endowment for the Arts</td>
</tr>
<tr>
<td>NEH</td>
<td>National Endowment for the Humanities</td>
</tr>
<tr>
<td>NSF</td>
<td>National Science Foundation</td>
</tr>
<tr>
<td>EPSCoR</td>
<td>Experimental Program to Stimulate Cooperative Research</td>
</tr>
<tr>
<td>NSA</td>
<td>National Security Agency</td>
</tr>
</tbody>
</table>
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 published books, national and international recognitions, and creative works in fine and performing arts. Information on major sponsored program awards was gathered by the Office of Sponsored Programs. Reports on patents and intellectual property licenses were produced by the Office of Technology Development. We apologize for any omissions or errors in this report.

The University of Nebraska–Lincoln does not discriminate based on gender, age, disability, race, color, religion, marital status, veteran’s status, national or ethnic origin, or sexual orientation. © 2009, The Board of Regents of the University of Nebraska. All rights reserved.