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

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| 3 | Awards of \$3 million or more |
|----|---|
| 16 | Awards of \$1 million to \$2,999,999 |
| 24 | Awards of \$200,000 to \$999,999 |
| 58 | Early Career Awards |
| 62 | Arts and Humanities Awards of \$50,000 or more |
| 65 | Arts and Humanities Awards of \$5,000 to \$49,999 |
| 67 | Patents Issued |
| 69 | Intellectual Property Licences |
| 71 | Creative Works in Fine and Performing Arts |
| 74 | Books |
| 87 | Recognitions and Honors |
| 95 | Glossary of Federal Agency Abbreviations |

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.



Chancellor Harvey Perlman and Vice Chancellor Prem Paul

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!

(Frem St

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 \$7,500,000 DOD-Army Research Laboratory 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 Nebraska Public Power District \$5.000.000 4/1/06 - 3/31/2011 Paul, Prem

Office of Research



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.

Chandra, Namas

Engineering

* Army-UNL Center for Trauma Mechanics \$3,261,250 DOD-Army Research Office 10/01/08 – 09/30/09



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.

Cotton, Dan

eXtension

\$8,870,000 10/1/04 - 12/31/11 National eXtension Project
National Association of State
Universities and Land-Grant Colleges

eXtension: The Transformation of Cooperative Extension \$5,702,400 Department of Agriculture-CSREES 8/15/07 - 8/14/11



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.

Couture, Barbara

Academic Affairs

NSF

 * ADVANCE-Nebraska: An Institutional Approach to Hiring, Retaining, and Promoting Women STEM Faculty at the University of Nebraska-Lincoln

\$3,801,443 09/01/08 – 08/31/13 Holmes, Mary Anne McQuillan, Julia Manderscheid, David Allen, David Fritz, Susan Chandra, Namas

Geosciences Sociology Arts and Sciences Engineering IANR Engineering



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.

Ells, Mark

Center on Children, Families and the Law

* Midwest Child Welfare

Technical Assistance Implementation Center DHHS-Administration for Children & Families \$8.695.645 09/01/08 - 08/31/13 Graef. Michelle

Center on Children, Families and the Law

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 system. 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.

Sharif, Hamid

Mechanical Engineering

Farritor, Shane

* Track Stability Assessment & Data Transmission \$3,034,439 Department of Transportation-FRA 9/17/04 - 12/31/10 Turner, Joseph Engineering Mechanics Nelson, Carl Mechanical Engineering



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

Computer and Electronics Engineering

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

\$10,577,043 8/1/07 - 7/31/12 DHHS-NIH-NCRR



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 \$6,407,473 Department of Agriculture-RMA-FCIC 9/1/05 - 8/31/10 Wilhite, Donald School of Natural Resources



Stephen Goddard

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

Stephen Goddard, associate professor of computer science and director of UNL's



Donald Wilhite

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

Geosciences

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

\$12,978,160 6/1/05 - 5/31/10 Levy, Richard NSF



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 \$3,600,000 Department of Agriculture-CSREES 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 01/01/09 - 12/31/13 Heaton, Ruth

McGowan, Thomas Stroup, Walter Edwards, Carolyn

Papick, Ira Jacobson, Barbara Teaching, Learning and Teacher Education; Teaching, Learning and Teacher Education **Statistics** Child, Youth and Family Studies;

Psychology Mathematics; CSMCE Lincoln Public Schools

NSF



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 8/1/04 - 7/31/11

Heaton, Ruth

Teaching, Learning and Teacher Education;

McGowan, Thomas Jacobson, Barbara

Teaching, Learning and Teacher Education 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.

NSF

Lu, Yongfeng

Electrical Engineering

* Multi-Laser-Beam Open-Atmosphere Surface Coating Techniques Based on Precursor Excitation, Photodissociation and Controlled Cooling DOD-Office of Naval Research-MURI

\$4,014,962 3/15/050 - 7/31/10 Zeng, Xiao Cheng

Chemistry



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.

Meagher, Michael Chemical and Biomolecular Engineering

Process Research & Development of Antibodies as
Countermeasures for C. Botulinum Neurotoxin
\$10,627,000 DOD-Army Medical Research
3/1/02 - 2/28/09



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.

Fast-Track Production of a Heptavalent Botulinum Vaccine \$6,857,345 DynPort Vaccine Company 9/1/03 – 11/29/08

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.

Rilett, Laurence

Civil Engineering

Region 7 University Transportation Center \$6,225,000 Department of Transportation-Research and 10/1/06 - 9/30/11 Innovative Technology Administration



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.

Sheridan, Susan

Educational Psychology; Center on Children, Youth, Families and Schools

Parent Engagement and Learning Birth to Five \$5.077.441 DHHS-NIH-NICHD 9/26/03 - 7/31/09 Edwards, Carolyn



Psychology; Child, Youth and Family Studies

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.

Tsymbal, Evgeny

Nebraska Center for Materials and Nanoscience

* Materials Research Science & Engineering Center: Quantum Spin

\$6,321,899 9/1/08 - 8/31/14 NSF



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.

Umstadter, Donald

Physics and Astronomy

* High-Energy Laser for Detection, Inspection, & Non-Destructive Testing DOD-Air Force Office of Scientific Research

\$4,759,860 5/15/08 – 5/14/10 Banerjee, Sudeep Shadwick, Bradley

Physics and Astronomy Physics and Astronomy



With support from the Department of Defense Air Force Office of Scientific Research, 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

cGMP Recombinant FIX and Oral Hemophilia B Therapy \$9,587,071 DHHS-NIH-NHLBI 9/6/05 = 8/31/10

9/6/05 - 8/31/10 Van Cott, Kevin

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 \$5,398,990 DOD-Army Medical Research

8/1/05 - 10/31/09 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

Ojibwe Pathways Through the High School Years \$3,121,678 DHHS-NIH-NIDA 9/3/05 - 6/30/12 Johnson, Kurt 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

Biological Sciences

Nebraska Center for Virology

\$10,149,257 9/26/05 - 4/30/10 DHHS-NIH-NCRR



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 DHHS-NIH-National Cancer Institute 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

IANR-International Programs

International Sorghum/Millet Collaborative
Research Support Program (INTSORMIL)
\$9,000,000
U.S. Agency for International Development
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 7/1/07 - 6/30/10 NSF-EPSCoR

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

McNair 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 Public Policy Center

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

World of Viruses

\$1,266,290 DHHS-NIH-NCRR
Wood, Charles Nebraska Center for Virology

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
Feng, Ruqiang
Turner, Joseph
Larsen, Gustavo
NSF
Chemistry
Engineering Mechanics
Engineering Mechanics
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

Eccarius, Malinda Special Education and Communication Disorders

Mountain-Prairie Upgrade Partnership
Department of Education

\$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 Department of Education Torkelson-Trout, Alexandra Special Education and

Communication Disorders

Office of Research Espy, Kimberly

Prenatal Tobacco Exposure: Perinatal and Genetic Risks \$1,207,660 DHHS-NIH-NIDA

Wiebe, Sandra Office of Research

Executive Function Development in Preschool Children

\$1,168,281 DHHS-NIH-NIMH Wiebe, Sandra Office of Research

Civil Engineering Faller, Ronald

> Evaluation & Field Installation of Steel Tube & Foam Energy Reduction (SAFER) Barrier

\$1,045,913 Indianapolis Racing League Holloway, Jim Civil Engineering Reid, John Mechanical Engineering Rohde, John Civil Engineering Sicking, Dean Civil Engineering

University Television Farrell, Michael IPY: Engaging Antarctica

\$1,246,068 NSF

Diamond, Judy University of Nebraska State Museum

Gladyshev, Vadim Biochemistry

Functions of Mammalian Thioredoxin Reductases \$1,155,459 **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 Computer Science and Engineering

Climate & Soil Risk Information System \$1,212,056

Department of Agriculture-RMA Wilhite, Donald School of Natural Resources Hubbard, Kenneth School of Natural Resources

Green, Jordan **Communication Disorders**

Early Speech Motor Development DHHS-NIH-NIDCD \$1,754,412

Special Education and

Student Involvement Heusel, Gary

Midwest Consortium for Service-Learning in Higher Education \$1,411,709 Corporation for National Service Major, Linda Student Involvement

School of Natural Resources Hoagland, Kyle

DNR Ground Water Management and Protection Act Service Agreement

Nebraska Department of Natural Resources \$1,500,000

Equity, Access and Diversity Programs Horn, Christy

Building Accepting Campus Communities

\$1,003,691 Department of Education 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

\$1,200,000 Department of Commerce-NOAA

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

\$1,648,354 NSF Ballard, John Engineering Perez, Lance **Electrical Engineering**

Northeast Research & Extension Center Jones, Vicky

Northeast Nebraska Paraprofessional Ladder Project \$1,976,095 Department of Education Lopez, William Teaching, Learning and Teacher Education

Nebraska State Forest Service Josiah, Scott

Cooperative Forestry Program \$2,594,613 Department of Agriculture-FS

Kamil, Alan **Biological Sciences**

Mechanisms of Visual Search and Attention

\$1,029,062 DHHS-NIH-NIMH Bond, Alan **Biological Sciences**

Kirby, Roger **Physics and Astronomy**

Track 2, GK-12: Project Fulcrum: Phase II

\$1.987.732 NSF Claes, Daniel Physics and Astronomy

Knoche, Lisa Center on Children, Youth, **Families and Schools**

Rural Language and Literacy Connections (Rural LLC) \$2,741,563 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 \$1,362,934 Birnstihl, Elizabeth IANR Cooperative Extension Schnepf, Marilynn Nutritional and Health Sciences

Lee, Jaekwon Biochemistry

Mechanistic Insights into Homeostatic Copper Ion Acquisition DHHS-NIH-NIDDK \$1,058,638

Lou. Mariorie **Veterinary and Biomedical Sciences**

Protein-Thiol Mixed Disulfide in Cataractogenesis DHHS-NIH-National Eye Institute \$2,116,675

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 Soh, Leen-Kiat Henninger, Scott Jameson, Mary Liz Moriyama, Etsuko NSF Computer Science and Engineering Computer Science and Engineering University of Nebraska State Museum 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

Department of Energy

Starace, Anthony

Physics and Astronomy

Dynamics of Few-Body Atomic Processes \$1,216,337 Department of Energy

Storz, Jay

\$1,001,500

Biological Sciences

* Mechanisms of Hemoglobin Adaption to Hypoxia in High-Altitude Rodents

\$1,323,748 Moyiyama, Hideaki DHHS-NIH-NHLBI 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 Plant Pathology

DNA Replication & Gene Expression of Chlorella Viruses

\$1,215,694 DHHS-NIH-NIGMS
Dunigan, David Plant Pathology
Kang, Ming Plant Pathology
Agarkova, Irina Plant Pathology
Gurnon, James Plant Pathology

Verma, Shashi School of Natural Resources

Carbon Sequestration in Dryland & Irrigated Agroecosystems \$1,950,000 Department of Energy Cassman, Kenneth Agronomy and Horticulture Knops, Johannes **Biological Sciences** Hubbard, Kenneth School of Natural Resources Arkebauer, Timothy Agronomy and Horticulture Dobermann, Achim Agronomy and Horticulture Yang, Haishun Agronomy and Horticulture Walters, Daniel Agronomy and Horticulture School of Natural Resources Suyker, Andrew Ginting, Daniel Agronomy and Horticulture

Viljoen, Hendrik Chemical and Biomolecular Engineering

A Rational Design of a Platform for de novo Gene Synthesis \$1,315,289 DHHS-NIH-NCRR Subramanian, Anu Chemical and Biomolecular Engineering

Vortex-Tube Based Thermocycler w/Intelligent Software \$1,068,925 DHHS-NIH-NCRR Gogos, George Mechanical Engineering

Walker, Judy Mathematics

EMSW21-MCTP: Nebraska Mentoring through Critical Transition Points

\$2,500,000 NSF Marley, Tom Mathematics

Weeks, Donald Biochemistry

Development of Dicamba-Resistant Crops \$2,500,000 Monsanto Co.

Whitbeck, Les Sociology

*Resilience through the High School Years \$2,654,155 DHHS-NIH-NIMH

\$2,654,155 DHH5-NIMF

Great Plains Cultural Ways Mental Health Careers Program \$1,120,576 DHHS-NIH-NIMH Moore, Helen Sociology

White, Lynn Sociology

Infertility: Pathways & Psychosocial Outcomes \$2,559,414 DHHS-NIH-NICHD McQuillan, Julia Sociology Wilcke, William IANR-Research

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
Chandra, Namas Engineering
Negahban, Mehrdad Engineering Mechanics

Anderson, Mark

* Development of Northern Hemisphere

Snow & Ice Climate Data Records Rutgers University

Atmospheric Conditions Associated with Sea Ice Characteristics over Arctic Ocean during Melt Season \$208,699 NASA

Asgarpoor, Sohrab Electrical Engineering

* Reliability Modeling and Maintenance Optimization of Aging Substations \$206,082

\$213.461

\$206,082 NSF

Atkin, Audrey

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

* 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 \$286,348 Nebraska Department of Roads

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

Development of Design Tools for Steel Bridge Systems,
Simple for Dead Loads & Continuous for
Superimposed Dead Load & Live Loads
306

\$226,306 Nebraska Department of Roads

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

IBRC 2002 Project

\$240,000 Nebraska Department of Roads

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

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

Baenziger, P. Stephen

Agronomy and Horticulture

Developing Winter Wheat with Improved Fusarium Head Blight
Tolerance by Conventional and Transgenic Approaches
\$354,437 Department of Agriculture-ARS
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

\$390,000 Department of Agriculture-NRICGP
Eskridge, Kent Statistics
Dweikat, Ismail Agronomy and Horticulture

Developing Small Grains Cultivars Optimally Suited for Organic Production

\$755,937 Department of Agriculture-NRICGP Flores, Rolando Food Science and Technology Wegulo, 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 Northeast Research and Extension Center Knezevic, Stevan Panhandle Research and Extension Center Hein, Gary Lyon, Drew Panhandle Research and Extension Center

Balkir, Sina **Electrical Engineering**

All Solid-State Wireless Sensor Network for Nuclear Proliferation Detection

\$417,191 Department of Energy Hoffman, Michael **Electrical Engineering**

Center on Children, Youth, Families Barker, Bradley and Schools; 4-H State Office

Robotics & GPS/GIS in 4-H: Workplace Skills for the 21st Century NSF \$864,139

Adamchuk, Viacheslav Center on Children, Youth, Families and Schools; Biological Systems Engineering

Basolo, Alexandra **Biological Sciences**

Behavioral Plasticity in Preexisting Receiver Bias \$378,000 NSF

Batelaan, Herman **Physics and Astronomy**

Matter Optics with Intense Laser Light \$462,590 NSF

Becker, Donald Biochemistry

MRI: Acquisition of Beckman XL-I Analytical Ultracentrifuge \$284,160 NSF

Belli, Robert **Gallup Research Center**

Verbal Behaviors in Computerized Lifecourse Surveys DHHS-National Institute on Aging \$409,889

Benson, Andrew **Food Science and Technology**

* Pyrosequencing and Community Profiling for

Risk Assessment in Leafy Greens Department of Agriculture-NRICGP

\$370,927 Food Science and Technology Walter, Jens Hutkins, Robert Food Science and Technology

Berkowitz, David Chemistry

* Stereocontrolled Total Synthesis of (-)-Picropodophyllin Analogues

\$423,000

\$500,000 Stockbridge Pharmaceuticals Inc.

New Approaches to Catalyst Screening & Development

Beukelman, David **Special Education and**

Communication Disorders

Rehabilitation Engineering Research Center on Communication Enhancement

\$392,328 **Duke University Medical Center**

Bevins, Rick **Psychology**

* Altering Nicotine Reward through Conditioning \$339,446 DHHS-NIH-NIDA

Acquired Appetitive Properties of Nicotine

\$881,371 DHHS-NIH-NIDA

NSF

Bien, Mary Management

* Examining Leadership and Adaptability in the Healthcare Industry

\$308.473 Booz Allen Hamilton

Bilder, Christopher Statistics

Disease Detection and Prevalence Estimation through Informative Group Testing

\$713,250 DHHS-NIH-NIAID

Billesbach, David Biological Systems Engineering

Development & Field Testing of a Rapidly Deployable Carbon Dioxide Flux Management System

\$559,675 Department of Energy-Berkeley National Lab

Blum, Paul Biological Sciences

* Biohydrogenesis in the Thermotogales

\$525,000 North Carolina State University

Bobaru, Florin Engineering Mechanics

Adaptivity in Peridynamics for Composite Plates \$269,880 Department of Energy–Sandia National Laboratories

Bond, Alan Biological Sciences

Mechanisms of Social Cognition

\$540,260 DHHS-NIH-NIMH Kamil, Alan Biological Sciences

Brand, Jennifer Center for Materials and Nanoscience

Novel Rare-Earth Semiconductors for Solid-State Neutron Detectors

\$449,999 DOD-Defense Threat Reduction Agency

Belashchenko, Kirill Physics and Astronomy
Dowben, Peter Physics and Astronomy

Thyolog and Alexionomy

Direct Energy Conversion with
Heteroisomeric Boron Carbide Diode Devices

\$238,398 Central Intelligence Agency

Brown, Mary School of Natural Resources

* Advancing Tern and Plover Common Sense Conservation into the Future

\$270,000 Nebraska Environmental Trust

Bulling, Denise Public Policy Center

Hospital Preparedness — Bioterrorism

\$230,000 Nebraska Department of Health and Human Services

Critical Incidence Stress Management Program Coordination \$309,812 Nebraska Department of Health and Human Services

Burbach, Mark School of Natural Resources

Integrated Real-Time Groundwater-Level Monitoring Network to Support Drought Impact Assessment and Mitigation Programs \$403,293 Department of Agriculture-RMA

Ramamurthy, Byrav Computer Science and Engineering

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 Nebraska Department of Roads Azizinamini, Atorod Civil Engineering

Cantrell, Randolph **Center for Applied Rural Innovation**

* Marketing Rural Communities to Attract and Retain Workers \$498,558 Department of Agriculture-NRICGP Burkhart-Kriesel, Cheryl Panhandle Research and Extension Center

Relocation to the Buffalo Commons: Marketing Approach to Understand Residential Decisions among Migrants \$220.387 Department of Agriculture-NRICGP Burkhart-Kriesel, Cheryl Panhandle Research

and Extension Center Agricultural Economics Johnson, Bruce

Carr, Timothy **Nutrition and Health Sciences**

Regulation of Cholesterol Absorption by Plant Sterol & Stanol Esters \$466,915 Department of Agriculture-NRICGP

Cassman, Kenneth Agronomy and Horticulture

> Demonstration/Validation of a Dynamic Real-Time Decision Support System for

Irrigation Management with Limited Water Supply

\$230,537 Nebraska Corn Board Dobermann, Achim Agronomy and Horticulture Walters, Daniel Agronomy and Horticulture Yang, Haishun Agronomy and Horticulture Irmak, Suat Biological Systems Engineering Kranz, William Northeast Research and Extension Center Northeast Research and Extension Center Shapiro, Charles 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**

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

\$262,268 United Soybean Board/Smith/Bucklin Specht, James Agronomy and Horticulture

Enhancing Disease Resistance in Soybean through Biotechnology \$456,000 North Central Soybean Research Program Alfano, James Center for Plant Science Innovation; Plant Pathology

Morris, T. Jack Biological Sciences

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 Department of Agriculture-ARS \$261,000

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

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

Goddard, Stephen Computer Science and Engineering
Rothermel, Gregg Computer Science and Engineering

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

CSR-EHS Predictable Adaptive Residual Monitoring for Real-time Embedded Systems

\$500,000 NSF
Goddard, Stephen Computer Science and Engineering
Elbaum, Sebastian Computer Science and Engineering

Dzenis, Yuris Engineering Mechanics

Nanoengineered Interfaces

\$250,002 NSF

Modeling-Based Control of Electrospinning Process \$275,000

Eccarius, Malinda Special Education and Communication Disorders

NSF

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

Elbaum, Sebastian Computer Science and Engineering

ITR: Dependable End-User Software

\$253,573 NSF

Engen-Wedin, Nancy Teaching, Learning and Teacher Education

Indigenous Roots Teacher Education Program 5704,730 Department of Education

\$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

Fabrikant, Ilya Physics and Astronomy

Collision Processes Involving Low-Energy Electrons \$215,000 NSF

Electron-Molecule Collisions in Different Environments \$240,000 NSF

Faller, Ronald Civil Engineering

* Dynamic Evaluation of Box Beam End Terminal Using the MASH 2008 Guidelines

\$204,533 Nebraska Department of Roads
Sicking, Dean Midwest Roadside Safety
Reid, John Mechanical Engineering

Development of a New Precast Concrete Bridge Railing System

\$229,820 Nebraska Department of Roads
Bielenberg, Robert Civil Engineering
Reid, John Mechanical Engineering
Tadros, Maher Civil Engineering

Development of an Economical Guardrail System for Use on Gabion Walls

\$400,000 Department of Transportation-FHWA
Sicking, Dean Midwest Roadside Safety
Rohde, John Midwest Roadside Safety
Reid, John Mechanical Engineering

Flores, Rolando Food Science and Technology

Midwest Advanced Food Manufacturing Alliance \$340,764 Department of Agriculture-CSREES

Foley, Brett Educational Psychology

Consulting Services/Assist Oklahoma Commission for Teacher Preparation

\$452,064 Oklahoma Office of Public Affairs

Conducting Validity Studies for South Dakota Department of Education

\$372,435 South Dakota Department of Education Geisinger, Kurt Educational Psychology

Fromm, Michael Center for Biotechnology

* MRI: Acquisition of High Capacity DNA Sequencing System \$714,750 NSF

Gardner, Scott University of Nebraska State Museum; Biological Sciences

Mongolia Vertebrate Parasite Project

\$619,991 NSF

Enabling Access to Priority Taxa for Biodiversity Studies in the Manter Laboratory of Parasitology

\$507,397 NSF Jimenez-Ruiz, Francisco University of Nebraska State Museum

Gay, Timothy Physics and Astronomy

* MRI: Development of a Rubidium Spin Filter as a Source of Polarized Electrons

\$285,000 NSF

Batelaan, Herman Physics and Astronomy Uiterwaal, Kees Physics and Astronomy

Polarized Electron and Photon Physics

\$375,000 NSF

Geisinger, Kurt Educational Psychology

* Technical Review of the 2006 Grade 3 Florida Comprehensive
Assessment Test Results and Related Tasks
\$200,000 Florida Department of Education

Giesler, Loren Plant Pathology

* Improving Management of Soybean Cyst Nematode through Extension Demonstration and Outreach

\$205,000 North Central Soybean Research Program

Gibson, Robert Biological Sciences

GAANN Fellowship for Ecology, Evolution & Behavior at UNL \$625,000 Department of Education

Gitelson, Anatoly School of Natural Resources

* Improving Management of Soybean Cyst Nematode through Extension Demonstration and Outreach

\$496,124 NASA
Verma, Shashi School of Natural Resources

Suyker, Andrew School of Natural Resources

*Responses of Coastal Waters to Terrestrial Inputs of Elemental CNP in Urbanizing Coastal Regions

\$264,990 University of Maryland 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 NASA

Glover, Todd Center on Children, Youth, Families and Schools

Establish a State-Wide Response-to-Intervention

Consortium for Training & Evaluation \$499,936 Nebraska Department of Education

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 NSF
Ci, Song Computer and Electronics Engineering

Peng, Dongming
Sharif-Kashani, Hamid
Computer and Electronics Engineering
Computer and Electronics Engineering

Perez, Lance 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

School of Natural Resources Gosselin, David

Earth Science Institute for Elementary Educators \$356,094 NASA Teaching, Learning and Teacher Education Bonnstetter, Ronald

Online Master's Degree in Applied Science Education

Bonnstetter, Ronald Teaching, Learning and Teacher Education Strand, Billie Extended Education and Outreach

Toyota USA Foundation

\$540.345

Graef, George **Agronomy and Horticulture**

* Quality Traits Regional Tests \$225,535 United Soybean Board/Smith/Bucklin

* Soybean Breeding and Genetic Studies for Nebraska Nebraska Soybean Board \$203,443 Agronomy and Horticulture Specht, James

> Sclerotinia Resistance Enhanced by Accumulation of QTL Transgenic Approaches

\$371,120 Department of Agriculture-ARS Clemente, Thomas Agronomy and Horticulture Steadman, James Plant Pathology

Northeast Research and Extension Center Greve, Vickie

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

Harshman, Lawrence

Biological Sciences

Comparative Functional Genomics of Drosophila Obesity \$516,548 Cornell University

> Molecular Evolution of Genes Expressed in D. melanogaster Sperm Storage Structures

\$289,213 NSF Center for Plant Science Innovation

Moriyama, Etsuko

Genome Biology of Innate Immunity: Genetic Dissection of Drosophila melanogaster Responses to Bacillus Infection

\$452,163 DOD-DEPSCoR Benson, Andrew Food Science and Technology

Kachman, Stephen Statistics

Harvey, F. Edwin **School of Natural Resources**

* 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 Nebraska Game and Parks Commission \$386,520

Habitat Conservation Plan for the Salt Creek Tiger Beetle and the Eastern Saline Wetlands of Nebraska Nebraska Game and Parks Commission \$380,000

Hay, DeLynn IANR-Cooperative Extension

North Central Region Sustainable Agriculture Professional Development Program—FY 2005 Department of Agriculture-CSREES \$910,283

Hayes, Michael **School of Natural Resources**

* Drought Mitigation, Nebraska Project

\$347.246 Department of Agriculture-CSREES School of Natural Resources Svoboda, Mark School of Natural Resources Knutson, Cody Wardlow, Brian School of Natural Resources

> Transitioning the Drought Impact Reporter into an Operational System Department of Commerce-NOAA-NCTP

Estimating the Impacts of Complex Climatic Events: Drought in Colorado, Nebraska & New Mexico \$300,000 Department of Commerce-NOAA

Developing a Drought Preparedness Framework for Tribal Governments: Moving from Crisis to Risk-Based Management Department of Interior-BIA \$609.539 Knutson, Cody School of Natural Resources Svoboda, Mark School of Natural Resources

Hebets, Eileen **Biological Sciences**

Searle Scholar: Exploring Neural Basis of Complex Behavior in Amblypygids

Chicago Community Trust/Searle Scholar \$240,000

\$445,257

Henry, Christopher

Biological Systems Engineering

Livestock Producer Environmental Assistance Project \$600,000 Nebraska Environmental Trust

> Development of Alternative Technologies for Small Livestock Producers

\$221,881 Nebraska Department of Environmental Quality Gross, Jason Biological Systems Engineering

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

\$885,093 Department of Agriculture-RMA-FCIC Burgener, Paul Panhandle Research and Extension Center Lyon, Drew Panhandle Research and Extension Center Martin, Derrel Biological Systems Engineering Pavlista, Alexander Panhandle Research and Extension Center Supalla, Raymond Agricultural Economics Panhandle Research and Extension Center Urrea Florez, Carlos Yonts, C. Dean Panhandle Research and Extension Center

Demonstrate & Adapt Remote Sensing Technology to Produce Consumptive Water Use Maps for the Nebraska Panhandle

\$239,951 Department of Agriculture-NRCS Baltensperger, David Panhandle Research and Extension Center Panhandle Research and Extension Center Berger, Agron DeBoer, Karen Panhandle Research and Extension Center Hla, Aung Panhandle Research and Extension Center Panhandle Research and Extension Center Lyon, Drew Pavlista, Alexander Panhandle Research and Extension Center Yonts, C. Dean Panhandle Research and Extension Center

Hibbing, John Political Science

* DHB: Identifying the Biological Underpinnings of Political Temperaments

\$587,068 NSF
Espy, Kimberly Office of Research; Psychology
Smith, Kevin Political Science
Dodd, Michael Psychology
Wiebe, Sandra Psychology

Hoagland, Kyle School of Natural Resources

Solving Complex Issues in Nebraska:

Modeling the Western Platte River Valley-Phase II

\$347,200 Environmental Protection Agency Fritz, Sherilyn Geosciences

Hoffman, Lesa Psychology

* Visual Attention in Aging: Bridging Experimental and Psychometric Approaches

\$322,745 DHHS-NIH-NIA

Hogan, Tiffany Special Education and

\$430,591

Communication Disorders

* The Lexicon and Phoneme Awareness

* The Lexicon and Phoneme Awareness
DHHS-NIH-NIDCD

Holmes, Mary Anne

Geosciences

NSF

Building a Community of Women Geoscience Leaders \$228,774

Holz, John School of Natural Resources

Fremont Lake #20 Alum Treatment Evaluation Project

\$201,700 Nebraska Department of Environmental Quality
Barrow, Tadd School of Natural Resources
Hoagland, Kyle School of Natural Resources
Holz, Aris School of Natural Resources

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 Agricultural Economics
Pytlik Zillig, Lisa Educational Psychology
Bruning, Roger Educational Psychology

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

Nebraska Department of Natural Resources \$679,160 School of Natural Resources Irmak, Ayse Rundquist, Donald School of Natural Resources Eisenhauer, Dean Biological Systems Engineering Biological Systems Engineering Van Donk, Simon Southeast Research and Extension Center Zoubek, Gary Southeast Research and Extension Center Rees, Jennifer Siekman, Darrel Southeast Research and Extension Center VanDeWalle, Brandy Southeast Research and Extension Center Yoder, Ronald **Biological Systems Engineering**

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 Biological Systems Engineering
Martin, Derrel Biological Systems Engineering
van Donk, Simon Biological Systems Engineering
Verma, Shashi School of Natural Resources

University of Nebraska State Museum Jameson, Mary Liz

Monography & Phylogeny of New World Scarabaeoid Beetles \$755,300 NSF Ratcliffe, Brett Entomology

Computer Science and Engineering Jiang, Hong

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

Industrial and Management Jones, Erick

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

Nebraska State Forest Service Josiah, Scott

Community Enhancement Program

\$500,000 Nebraska Department of Roads

NRCS-Technical Service Provider Project

Department of Agriculture-NRCS \$323,778

Hazardous Fuels Reduction: Pine Ridge

Department of Agriculture-FS \$582,380

Kennedy, Patricia Marketing

Socially Constituted Food Consumption of Adolescents \$350,000 Department of Agriculture-CSREES McGarvey, Mary Economics

Nutrition and Health Sciences Stanek-Krogstrand, Kaye

Civil Engineering Kim, Yong Rak

Asphalt Research Consortium

\$350,000 Texas A & M Research Foundation Allen, David

Engineering Mechanics

Layer Moduli of Nebraska Pavements for the New Mechanistic-Empirical Pavement Design Guide (MEPDG)

\$255,367 Nebraska Department of Roads

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

Lewis, Charlotte Center on Children, Families and the Law

* Answers4Families/NRRS Database

\$217,718 Nebraska Department of Health and Human Services

Li, Ming Psychology

* Anxiolytic Property of Atypical Antipsychotics

\$345,699 DHHS-NIH-NIMH

Lindquist, John Agronomy and Horticulture

Contribution of Fusarium lateritium to Weed Suppressive Soils & Weed Abundance

\$366,186 Department of Agriculture-NRICGP
Drijber, Rhae Agronomy and Horticulture

Yuen, Gary Plant Pathology

Liou, Sy-Hwang Physics and Astronomy

* Advanced Probes for Characterizations of Magnetic Nanostructures

\$539,998 DOD-DEPSCoR
Sellmyer, David Center for Materials and Nanoscience

Skomski, Ralph Physics and Astronomy

Liu, Mingsheng Architectural Engineering

* CC Implementation of VA Medical Center at Omaha \$414,963 Omaha Public Power District

Lodl, Kathleen 4-H State Office

Health Rocks-Healthy Life Curricula Development \$250,700 National 4-H Council

Birnstihl, Elizabeth Cooperative Extension

Fox, Marilyn Southeast Research and Extension Center

Louda, Svata Biological Sciences

Single vs. Multiple Insect Herbivore Guild Interactions in Canada Thistle Dynamics

\$408,760 Department of Agriculture-NRICGP

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

DOD-Air Force Office of Scientific Research \$330,000

> 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

Training Graduate Students in Plant Breeding Using

Crop Drought Tolerance Improvement as a Model Department of Agriculture-NRICGP \$599,999 Center for Plant Science Innovation Fromm, Michael

Mamo, Martha **Agronomy and Horticulture**

Pollution & Economic Decision Support Tool for Impaired Watershed Management Plans in Eastern Nebraska

Department of Agriculture-CSREES \$335,000 Helmers, Glenn Agricultural Economics Agronomy and Horticulture Ginting, Daniel 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

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

Nelson, J. Ron

Special Education and Communication Disorders

Effects of a Supplementary Vocabulary Intervention for Students with Limited English Proficiency Department of Education \$694.884

Nebraska State Forest Service Nickerson, H. Doak

Restoring the Pine Ridge Forest Ecosystem Nebraska Environmental Trust \$300,000

Nguyen, Lim **Computer and Electronics Engineering**

* Self-Encoded Spread Spectrum Modulation for Robust Anti-Jamming Communication

\$379,767 DOD-DEPSCoR

Jang, Won Computer and Electronics Engineering

Norton, Will **Journalism and Mass Communications** * Carnegie-Knight Initiative on the Future of Journalism Education

\$250,000 Carnegie Corporation of New York

Noureddini, Hossein **Chemical and Biomolecular Engineering**

Reduction of Phosphorus from Ethanol By-Product used as Livestock Feed

\$210,781 Nebraska Corn Board

Oglesby, Robert Geosciences

Evaluating the Role of Global Snow Cover on Seasonal to Interannual Predictability of Temperature & Precipitation \$598,216 NASA

Biological Sciences Orti. Guillermo

RCN: DeepFin Will Advance the Phylogeny of "Fishes" \$500,000 NSF

Assembling the Euteleost Tree of Life - Addressing the

Major Unresolved Problem in Vertebrate Phylogeny \$602,956 NSF Li, Chenhong **Biological Sciences**

University of Nebraska State Museum

Osorio. Fernando **Veterinary and Biomedical Sciences**

> * Porcine Reproductive and Respiratory Virus: Role of Viral Genes in Virulence/Attenuation

\$375,000 Department of Agriculture-NRICGP

Pattnaik, Asit Veterinary and Biomedical Sciences

Pattnaik, Asit **Veterinary and Biomedical Sciences**

VSV RNA Transcription and Replication

\$996,128 DHHS-NIH-NIAID

Pegg, Mark School of Natural Resources

* Sturgeon Management in the Platte River

Nebraska Game and Parks Commission \$801,000

Diamond, Judy

Perez, Lance

Electrical Engineering

Self-Configuration & Localization in Ad Hoc Wireless Sensor Networks

\$548,807 Goddard, Stephen DOD-DEPSCoR 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

Redepenning, Jody Center for Materials and Nanoscience

Chemically Modified Nano-Electrodes for Magnetoelectronics Applications

\$390,000 NSF Binek, Christian Physics and Astronomy Sokolov, Andrei Physics and Astronomy

Deishanback Otanban Osmantan Osianas and Fusinassian

Reichenbach, Stephen Computer Science and Engineering

SEI: Information Modeling for Comparative Visualizations & Analyses

\$389,228 NSF

Reid, John Mechanical Engineering

Midwest States Regional Pooled Fund Program
\$590,000 Nebraska Department of Roads
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 Department of Education

Rilett, Laurence Civil Engineering

* Nebraska Transportation Center Seed Funding \$300,000 Nebraska Department of Roads

> Development of State of the Art Traffic Micro-Simulation Model for Nebraska

\$222,896 Nebraska Department of Roads Jones, Elizabeth Civil Engineering

Intelligent Transportation System Deployment Project

\$831,942 Nebraska Department of Roads
Jones, Elizabeth Civil Engineering
Khattak, Aemal Civil Engineering

Robertson, Brian Center for Materials and Nanoscience

Spintronic Devices Enabled by Semiconducting Boron Carbide \$299,998 NSF

Adenwalla, Shireen

Dowben, Peter

Center for Materials and Nanoscience
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 NSF
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

Nanodevice for Imaging Normal Stress Distribution with Application in Sensing Texture and Feel by Touching \$332,156 NSF

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

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
Belashchenko, 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
Baltensperger, David
Brandle, James School of Natural Resources
Francis, Charles Agronomy and Horticulture
Knezevic, Stevan Wright, Robert Entomology

Johnson, Ron School of Natural Resources

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 Deptartment 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 Ran-Off-Road Crashes

\$634,521 National Cooperative Highway Research Program
Khattak, Aemal
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

Ocampo, 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

Physics and Astronomy Snow, Gregory

* The Luminosity Measurement for the DZERO Experiment at Fermilab

Department of Energy-EPSCoR \$395,352 Bloom, Kenneth Physics and Astronomy Claes, Daniel Physics and Astronomy Dominguez, Aaron Physics and Astronomy

GAANN Fellowships for Physics at UNL

Department of Education \$383,181

Computer Science and Engineering Soh, Leen-Kiat

iLOG: Embedding & Validating Empirical Usage Intelligence in Learning Objects

\$409.705 Samal, Ashok Computer Science and Engineering

Center on Children, Youth, Families and Schools Nugent, Gwen

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 **Electrical Engineering** Hudgins, Jerry 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

School of Natural Resources Spalding, Mary

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

Srisa-an, Witawas Computer Science and Engineering

Building Scalable & Adaptive Garbage Collector for Server Systems

\$281,000 NSF 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 Nebraska Department of Roads
Moussavi, Massoum
Zhang, Tian Civil Engineering
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 Nebraska Department of Agriculture Kelling, Clayton Veterinary and Biomedical Sciences

Stentz, Terry Construction Management

Human Factors in Railway Operation

\$344,575 Department of Transportation-FRA
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

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 Esseks, J. Dixon Great Plains Studies

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
Jones, David Biological Systems Engineering
Thippareddi, Harshavardhan Food Science and Technology

Subramanian, Anu Chemical and Biomolecular Engineering

Biomimetic Nanofibrillar Scaffolds for Tissue Engineering \$390,720 DHHS-NIH-NIBIB Larsen, Gustavo Chemical and Biomolecular Engineering

Svoboda, Mark School of Natural Resources

* Development of a "Drought Ready Communities" Program

\$288,670 Department of Commerce-NOAA

Sittler, Meghan School of Natural Resources
Smith, Kelly School of Natural Resources
Knutson, Cody School of Natural Resources
Woudenberg, Donna School of Natural Resources

* Integrating Enhanced GRACE Water Storage Data into the U.S. and North American Drought Monitors

\$224,991 NASA-Goddard Space Flight Center
Wardlow, Brian School of Natural Resources
Fuchs, Brian School of Natural Resources
Scott, Soren School of Natural Resources

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
Tuan, Christopher Civil Engineering

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

Takacs, James

Chemistry

NSF

* Ligand Scaffold Optimization for Catalytic Asymmetric Hydroboration

\$420,000

Tan, Li Engineering Mechanics

* Self-Organized Nanolayers for Organic Thin-Film Transistors \$387,463 NSF Zeng, Xiao Cheng Chemistry

> * Bi-Functional Pentacene Monolayer for Organic Field-Effect Transistors

\$299,410 DOD-DEPSCoR Zeng, Xiao Cheng 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
2.270
Colorado State University

\$222,270 Colorado State Universit

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 lowa 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 Arts Linc

Arts Linc

\$261,674 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

Variyam, Vinod Computer Science and Engineering

Studies in Computational Complexity Theory \$200.000

NSF

Velipasalar, Senem Electrical Engineering

* CSR-DMSS, SM: Cooperative Activity Analysis in Wireless Smart-Camera Networks (Wi-SCaNs)

\$300,000 NSF Gursoy, Mustafa Electrical Engineering

Wagner, William Biological Sciences

* Effects of Predation by a Phonotactic Parasitoid on Male and Female Reproductive Behavior in a Field Cricket \$499,414 NSF

Communication of Direct Mating Benefits to Females \$313,283 NSF

Waldren, Vernon Southeast Research and Extension Center

HUD Omaha Lead Site

\$300,000 Department of Housing and Urban Development

Waller, Steven Agricultural Sciences and Natural Resources

* Agriculture in the Classroom

\$236,742 Nebraska Foundation for Agricultural Awareness

Walstad, William Economics

Interactive Teaching in Undergraduate Economic Courses \$674,928 NSF

Wang, Jun Geosciences

* Regional Air Quality and Climate Impact of Biomass-Burning Aerosols from Central America: An Analysis with EOS Data and Numerical Models

\$300,676 NASA

Weisz, Victoria Center on Children, Families and the Law

Nebraska State Court Improvement

\$236,714 Supreme Court of Nebraska

Weller, Curtis Biological Systems Engineering

Purification Process Influences on Structural & Nutritional Function of Grain Sorghum

\$338,000 Department of Agriculture-NRICGP
Carr, Timothy Nutrition and Health Sciences
Schlegel, Vicki Food Science and Technology
Cuppett, Susan Food Science and Technology
Hwang, Keum Taek Industrial Ag Products Center
Wang, Lijun Biological Systems Engineering

Wiegand, Roger Mathematics

GAANN Fellowship Program: Mathematics at UNL

\$638,635 Department of Education
Pitts, David Mathematics
Walker, Judy Mathematics
Walker, Mark Mathematics
Bellows, Laurie Graduate Studies

Wiener, Richard Psychology

REU Site: Psychology and Law

\$200,000 NSF

Jury Bias in Criminal Cases: Sexual Assault, Homicide and Generic Prejudice

\$233,883 NSF

Self-referencing, Social Identity & Judgments of Sexual Harassment

\$302,364 NSF

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 Monsanto Co.

Woldt, Wayne Biological Systems Engineering

Advancing Onsite Wastewater Treatment in Nebraska \$259,742 Nebraska Department of Environmental Quality Skipton, Sharon Southeast Research and Extension Center

Wood, Charles Biological Sciences

AIDS and Cancer Specimen Bank \$383,601 George Washington University

> Research and Training on HIV/AIDS Neuropathogenesis in Zambia

\$273,363 DHHS-NIH-NIMH

Vaccination against Mucosal HIV Clade C Transmission \$506,753 Dana-Farber Cancer Institute

Woodward, Gordon

Mathematics

Increasing Participation in Computer Science, Engineering, & Mathematics through NSF Scholarships at UNL

\$400,000 NSF
Ballard, John Engineering
Ramamurthy, Byrav Computer Science and Engineering
Goddard, Steve Computer Science and Engineering
Lee, Kevin Arts & Sciences

Nebraska REU in Applied Mathematics

\$251,823 NSF Rebarber, Richard Mathematics

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

Managed Ecosystems of the Midwest \$235,839 Nebraska Corn Board

Erickson, Galen
Schulte, Dennis
Franti, Tom
Jose, H. Douglas
Animal Science
Biological Systems Engineering
Biological Systems Engineering
Agricultural Economics

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

Nebraska AgrAbility

\$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

\$409.586

Nutrition and Health Sciences

Biotin Affects Cytokine Metabolism

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, Rugiang Engineering Mechanics

Zera, Anthony

Biological Sciences

Enzymatic and Molecular Bases of Trade-Offs in Lipid Metabolism that Underlie Life History Trade-Off \$435,682

Harshman, Lawrence

NSF 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

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



Cohen, Myra

\$600,000

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

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 BestEffort 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.



Angeletti, Peter
Biological Sciences
Maintenance of Human Papilloma Virus Genes
\$613,512
DHHS-NIH-NCI



DiLillo, David
Psychology
Family Functioning of Adults Maltreated as
Children
\$670,286
DHHS-NIH-NIMH



Peterson, Daniel
Food Science and Technology
* Adaptive Immune Response to Symbiotic
Bacteria as a Mediator of Gut Homeostasis
\$379,890
DHHS-NIH-NIAID



Sayood, Khalid
Electrical Engineering
Identification of Biological Materials of Unknown
Origin
\$764,005
DHHS-NIH-NIAID



Tyler, Kimberly
Sociology
Neglect and Abuse Histories Among Homeless
Young Adults
\$659,525
DHHS-NIH-NIMH

Young Investigator Research Program (YIP)

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 * Just-Enough-Testing: Adaptive Targeted Testing of Software Product Lines \$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 * Omaha and Ponca Digital Dictionary

Anthropology

\$348,800 09/01/08 – 08/31/11 Walter, Katherine National Endowment for the Humanities

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 1/1/05 - 6/30/09 Poetry Foundation



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.

Price, Kenneth

Center for Digital Research in the Humanities; English

\$500,000 8/1/05 - 3/31/09 Walt Whitman Archive
National Endowment for the Humanities



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.

Walter, Katherine

Libraries

Interoperability of Metadata Standards for Digital Thematic Research Collections

Institute of Museum and Library Services

\$169,651 11/1/05 - 4/30/08 Price, Kenneth Bolin, Mary Barney, Brett

English Libraries Libraries



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.

National Digital Newspaper Program: Nebraska \$271,016 National Endowment for the Humanities

7/1/07 – 6/30/09 Wunder, John Mering, Margaret Pytlik Zillig, Brian

Journalism and Mass Communications Center for Digital Research in the Humanities Center for Digital Research in the Humanities

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

Bleed, Peter Anthropology and Geography

Archaeological Investigation of the Battle of El Viso, July 1, 1898 \$30,220 National Geographic Society

Engen-Wedin, Nancy Lied Center for Performing Arts

* Nebraska's Rural Arts Education Initiative

\$25,000 National Endowment for the Arts

ArtsReach

\$50,000 Nebraskans for the Arts

Umonhon Cultural Arts Program

\$23,250 Kennedy Center for Performing Arts

Handa, Rumiko Architecture

Spirit of Design: Multidisciplinary, Multimedia Database and Website

\$12,000 Graham Foundation
Potter, James Architecture

Hanson, Marin Textiles, Clothing and Design

International Quilt Study Center New Building Opening Exhibition \$21,274 Cooper Foundation Ducey, Carolyn International Quilt Study Center & Museum

Jewell, Andrew Center for Digital Research in the Humanities

* The Crowded Page

\$49,577 National Endowment for the Humanities

Mapping a Writer's World: A Geographic Chronology of Willa Cather's Life

\$7,800 Nebraska Humanities Council

Kendall, Laura Lied Center for Performing Arts

* Loop Divers by Troika Ranch

\$35,000 Woods Charitable Fund/ Lincoln Community Foundation

Lundine, Heather University Press

* Literary Publishing at the University of Nebraska Press \$20,000 National Endowment for the Arts

Access to Artistic Excellence: International Translations \$25.000 National Endowment for the Arts

Price, Kenneth English

Walt Whitman Archive

\$14,000 Cooper Foundation

Richmond, John School of Music

*2009 Honors Jazz Weekend & Summer Camp

\$10,000 Berman Music Foundation Haar, Ora School of Music

Chubbandiack James Chudia

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

PATENTS ISSUED IN 2008

Recognition for faculty who received patents
UNL faculty indicated in red

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 Drosophilia 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

2008 INTELLECTUAL PROPERTY LICENSES

Recognition for faculty who licensed intellectual property
UNL faculty indicated in red

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, Valparaiso, 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

Artist, prints, IMPRINT 2008, Clashes Between Civilizations, Kulisiewicz International Graphics Triennial, Palace of Culture and Science, Warsaw, Poland

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 Lagu 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

Art and Art History

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

Art and Art History

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

School of Music

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

School of Music

Darryl White and Craig Bircher, trumpets Alan Mattingly, horn Scott Anderson, trombone Craia 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

BOOKS

Recognition for faculty who wrote or edited books in 2008.

Douglas A. Abbott Child, Youth and Family Studies

Co-editor, with Rochelle L. Dalla, Child, Youth and Family Studies; John DeFrain, Child, Youth and Family Studies; Julie Johnson, Child, Youth and Family Studies. Strengths and Challenges of New Immigrant Families: Implications for Research, Education, Policy, and Service. Lanham, MD: Lexington Books.

Katherine S. Ankerson Architecture

Co-author, with Jill Pable. Interior Design: Practical Strategies for Teaching and Learning. New York, NY: Fairchild Books, Inc.

Mark J. Awakuni-Swetland

Anthropology; Institute for Ethnic Studies

Author. Dance Lodges of the Omaha People. Lincoln, NE: University of Nebraska Press.

Stephen C. Behrendt

English

Author. British Women Poets and the Romantic Writing Community. Baltimore, MD/London: Johns Hopkins University Press.

Susan Belasco English

Editor, with Linck Johnson. *The Bedford Anthology of American Literature Vol. 2, 1865-Present*. Boston, MA/New York, NY: Bedford/St Martin's Press.

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

Co-editor/author, with Nicholas Bankson; Peter Flipsen. *Articulation* and *Phonological Disorders*, 6th ed. Upper Saddle River, NJ: Pearson Education.

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

Co-editor, with Richard L. Wiener, Psychology and College of Law; 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.

Thomas Borstelmann

History

Co-author, with Jacqueline Jones; Peter H. Wood; Elaine Tyler May; Vicki Ruiz. Created Equal: A Social and Political History of the United States, 3rd ed. New York, NY: Pearson Longman.

C. Stephen Bradford

College of Law

Co-author, with Gary Ames. Basic Accounting Principles for Lawyers, 2nd ed. LexisNexis.

Dawn O. Braithwaite

Communication Studies

Co-editor and author, with Leslie A. Baxter. Engaging Theories in Interpersonal Communication: Multiple Perspectives. Thousand Oaks, CA: Sage Publications.

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

Co-editor, with J. H. Johnson. *Community College Exemplary Initiatives*. Lincoln, NE: National Council of Instructional Administrators.

Enrique Martínez Celaya

Art and Art History

Author. Nomad. Lincoln, NE: University of Nebraska Press.

John Comer

Political Science

Co-author, with John Gruhl, Political Science; Susan Rigdon; Susan Welch. *Understanding American Government*. Belmont, CA: Thomson Wadsworth.

Sidnie W. Crawford

Classics and Religious Studies

Author. Rewriting Scripture in Second Temple Times. Grand Rapids, MI: Eerdmans.

Iohn W. Creswell

Educational Psychology

Co-editor, with Vicki L. Plano Clark, Educational Psychology. *The Mixed Methods Reader.* Thousand Oaks, CA: Sage Publications.

Rochelle L. Dalla

Child, Youth and Family Studies

Primary editor, with John DeFrain, Child, Youth and Family Studies; Julie Johnson, Child, Youth and Family Studies; Douglas A. Abbott, Child, Youth and Family Studies. Strengths and Challenges of New Immigrant Families: Implications for Research, Education, Policy, and Service. Lanham, MD: Lexington Books.

John D. DeFrain

Child, Youth and Family Studies

Co-author, with David H. Olson; Linda Skogrand. *Marriages and Families: Intimacy, Diversity, and Strengths, 6th ed.* New York, NY: McGraw-Hill Higher Education.

Co-editor, with Rochelle L. Dalla, Child, Youth and Family Studies; Julie Johnson, Child, Youth and Family Studies; Douglas A. Abbott, Child, Youth and Family Studies. Strengths and Challenges of New Immigrant Families: Implications for Research, Education, Policy, and Service. Lanham, MD: Lexington Books.

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.

Judy Diamond University of Nebraska State Museum

Primary editor for revision, with Judy Scotchmoor. Animal Coloration: Activities on the Evolution of Concealing Coloration in Animals. Arlington, VA: National Science Teachers Association Press.

Lester A. Digman

Management

Author. Strategic Management: Competing in the Global Information Age, 9th ed. Mason, OH: Cengage Learning.

Wheeler Winston Dixon

English

Co-author, with Gwendolyn A. Foster, English. A Short History of Film. New Brunswick, NJ: Rutgers University Press.

Richard Dooling

College of Law

Author. Rapture for the Geeks: When AI Outsmarts IQ. New York, NY: Harmony Books.

Kwakiutl L. Dreher English; Institute for Ethnic Studies

Author. Dancing on the White Page: Black Women Entertainers Writing Autobiography. Albany, NY: State University of New York Press.

Judy A. Driskell

Nutrition and Health Sciences

Co-editor, with Ira Wolinksy. Sports Nutrition: Energy Metabolism and Exercise. Boca Raton, FL: CRC Press, Taylor and Francis Group.

Carolyn P. Edwards

Psychology; Child, Youth and Family Studies

First editor, with Carlina Rinaldi. The Diary of Laura: Perspectives on a Reggio Emilia Diary. St. Paul, MN: Redleaf Press.

Michael Epstein

Special Education and Communication Disorders

Co-author, with Marc Atkins; Douglas Cullinan; Krista Kutash; Robin Weaver. Reducing Behavior Problems in the Elementary School Classroom: A Practice Guide. Washington, DC: National Center for Education Evaluation and Regional Assistance.

Patricia Fairchild

4-H State Office

Co-author, with Diane Vigna, Textiles, Clothing and Design.
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.

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

Co-author, with Wheeler Winston Dixon, English. A Short History of Film. New Brunswick, NJ: Rutgers University Press.

Tracy D. Frank

Geosciences

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

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

Co-author, with Amy Lee. *Teaching Writing That Matters*. New York, NY: Scholastic.

James A. Garza

History; Institute for Ethnic Studies

Author. El Lado Oscuro del Porfiriato: Sexo, crimenes, y vicios en la Ciudad de Mexico (The Imagined Underworld: Sex, Crime, and Vice in Porfirian Mexico City). Mexico City, D.F., Mexico: Editorial Aquilar.

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

Author. Cultural Chronicle of the Weimar Republic. Lanham, MD: Scarecrow Press.

John Gruhl Political Science

Co-author, with John Comer, Political Science; Susan Rigdon; Susan Welch. *Understanding American Government*. Belmont, CA: Thomson Wadsworth.

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

Editor and co-author. *Environmental Tectonics: Forming Climatic Change*. London, England: AA Publications.

Terry Housh Nutrition and Health Sciences

Co-author, with Glen Johnson, Nutrition and Health Sciences; Joel Cramer; Joseph Weir; Travis Beck. *Physical Fitness Laboratories on a Budget*. Scottsdale, AZ: Holcomb Hathaway Publishers.

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

Author. The Platte: Channels in Time. Lincoln, NE: University of Nebraska Press.

Glen Johnson

Nutrition and Health Sciences

Co-author, with Terry Housh, Nutrition and Health Sciences; Joel Cramer; Joseph Weir; Travis Beck. *Physical Fitness Laboratories on a Budget*. Scottsdale, AZ: Holcomb Hathaway Publishers.

Julie Johnson Child, Youth and Family Studies

Co-editor, with Rochelle L. Dalla, Child, Youth and Family Studies; John DeFrain, Child, Youth and Family Studies; Douglas A. Abbott, Child, Youth and Family Studies. Strengths and Challenges of New Immigrant Families: Implications for Research, Education, Policy, and Service. Lanham, MD: Lexington Books.

Wendy J. Katz Art History

Co-editor, with Timothy R. Mahoney, History. *Regionalism and the Humanities*. Lincoln, NE: University of Nebraska Press.

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

Co-author, with Alice Whiren; Anne Soderman; Kara Gregory. Guiding Children's Social Development & Learning, 6th ed. Clifton Park, NY: Delmar Cengage Learning.

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 Cente; 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

Author. Modern Sounds: The Artistry of Contemporary Jazz. Dubuque, IA: Kendall/Hunt.

Author. The History and Tradition of Jazz, 3rd ed. Dubuque, IA: Kendall/Hunt.

Carole Levin History; Medieval & Renaissance Studies

Author. Dreaming the English Renaissance: Politics and Desire in Court and Culture. New York, NY: Palgrave Macmillan.

Suping Lu Libraries-Books

Editor. Terror in Minnie Vautrin's Nanjing: Diaries and Correspondence, 1937-38. Urbana, IL: University of Illinois Press.

Tom Lynch English

Author. Xerophilia: Ecocritical Explorations in Southwestern Literature. Lubbock, TX: Texas Tech University Press.

Drew J. Lyon

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; 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

History

Co-editor, with Wendy J. Katz, Art History. *Regionalism and the Humanities*. Lincoln, NE: University of Nebraska Press.

Ann Mari May Economics

Editor and contributor. The 'Woman Question' and Higher Education: Perspectives on Gender and Knowledge Production in America. Cheltenham, UK: Edward Elgar.

Joseph Mendola

Philosophy

Author. Anti-Externalism. Oxford, UK: Oxford University Press.

Dona-Gene Mitchell

Political Science

Co-editor, with Jeffery J. Mondak. *Fault Lines: Why the Republicans Lost Congress.* New York, NY: Routledge.

Nancy A. Mitchell

Advertising; Undergraduate Studies

Co-author, with Sandra Moriarty; William Wells. Advertising Principles and Practice, 8th ed. Upper Saddle River, NJ: Pearson/ Prentice Hall.

J. Ron Nelson

Special Education and Communication Disorders

Co-author, with Gregory J. Benner, Paul Mooney. Scientifically Based Instructional Practices for Teaching Students with Serious Behavioral Disorders: Strategies for Reading, Writing and Math. New York, NY: Guilford Press.

Mary E. Nelson

Southeast 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; 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

Editor of critical edition. *Le Nègre et la Créole, ou Mémoires d'Eulalie D****. Paris, France: L'Harmattan.

David L. Olson Management

Co-author, with Desheng Wu. Enterprise Risk Management. Singapore: WorldScientific.

Co-author, with Dursun Delen. Advanced Data Mining Techniques. Heidelberg, Germany: Springer.

Co-editor, with Desheng Wu. *New Frontiers in Risk Management*. Heidelberg, Germany: Springer.

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

First editor, with John W. Creswell, Educational Psychology. *The Mixed Methods Reader.* Thousand Oaks, CA: Sage Publications.

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. Vonderohe, 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-

Mary Kay Quinlan

News-Editorial

Co-author, with Charles E. Trimble; Barbara W. Sommer. The American Indian Oral History Manual: Making Many Voices Heard. Walnut Creek. CA: Left Coast Press.

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

Author. Principles of Risk Management and Insurance. Boston, MA: Pearson Education, Inc.

Guy J. Reynolds

English

Author. Apostles of Modernity: American Writers in the Age of Development. Lincoln, NE: Nebraska.

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

Co-author, with Daniel Wheeler, Agricultural Leadership, Education and Communication; Linda Wysong Becker; Edward R. Kinley; Dara D. Mlinek; Kenneth J. Robson. *The Academic Chair's Handbook, 2nd ed.* San Francisco, CA: John Wiley & Sons, Inc.

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

Editor. Advanced Principles for Improving Database Design, Systems Modeling, and Software Development. Hershey, NY: IGI Global.

Ralph Skomski

Nebraska Center for Materials and Nanoscience; Physics and Astronomy

Author. Simple Models of Magnetism. New York, NY: Oxford University Press, Inc.

Jolene D. Smyth

Sociology; Survey Research and Methods Program

Co-author, with Don A. Dillman; Leah M. Christian. *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method.* Hoboken, NJ: John Wiley & Sons.

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

Author. I Am a Man: Standing Bear's Journey for Justice. New York, NY: St. Martin's Press

Alison G. Stewart

Art and Art History

Author. Before Bruegel. Sebald Beham and the Origins of Peasant Festival Imagery. Aldershot, UK, and Burlington, VT: Ashgate.

Zhenghong Tang

Community and Regional Planning

Author. Integrate Strategic Environmental Assessment in Local Land Use Planning: Thinking Globally, Acting Locally. Saarbruken, Germany: VDM Verlag.

Steven Taylor

Food Science and Technology

Editor. Advances in Food and Nutrition Research, 54 and 55. San Diego, CA: Academic Press.

Eric Thompson Bureau of Business Research; Economics

Co-author, with William Walstad, Center for Economic Education. Entrepreneurship in Nebraska: Conditions, Attitudes, and Actions. New York, NY: Gallup Press.

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. Studies in Space Law Series: Lotta Viikari, The Environmental Element in Space Law. Leiden, The Netherlands, and Boston, MA: Martinus Nijhoff Publishers.

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. New York, NY: Gallup Press.

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-

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

Co-author, with Alan T. Seagren, Educational Administration; Linda Wysong Becker; Edward R. Kinley; Dara D. Mlinek; Kenneth J. Robson. *The Academic Chair's Handbook, 2nd ed.* San Francisco, CA: John Wiley & Sons, Inc.

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

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

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

Co-editor, with Mary F. Howard-Hamilton; Carla L. Morelon-Quainoo; Susan D. Johnson; Lilia Santiague. Standing on the Outside Looking in: Underrepresented Students' Experiences in Advanced Degree Programs. Hendon, VA: Stylus Publishing.

Simon Wood

Classics and Religious Studies

Author. Christian Criticisms, Islamic Proofs: Rashid Rida's Modernist Defence of Islam. Oxford, UK: Oneworld.

Robert I. 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

Co-editor, with Joann M. Ross. *The Nebraska-Kansas Act of 1854*. Lincoln, NE: University of Nebraska Press.

Janos Zempleni

Nutrition and Health Sciences

Co-editor, with Carolyn Berdanier. *Advanced Nutrition*. Boca Raton, FL: Taylor and Francis.

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. Pollack 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 Strauss 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

leff 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

Karon 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

2008 Roland Bainton Prize for Best Reference Work published in 2007, Sixteenth Century Studies and Conference

Best Collaborative Project published in 2007, Society for the Study of Early Modern Women

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 Mever

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

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 briansaltini, 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

David R. Smtih Veterinary and Biomedical Sciences

Wendall Burgher Beef Industry Award, University of Nebraska Foundation

Rodney Soukup Electrical Engineering

Education Society Finance Committee, IEEE

Walter Stroup Statistics

Fellow, American Statistical Association

William G. Thomas History

Digital Innovation Fellowship, American Council of Learned Societies

Visiting Professor of North American Studies, British Association of American Studies

Eric Thompson Bureau of Business Research; Economics

President, Association for University Business and Economic Research

Evgeny Tsymbal Physics and Astronomy

Fellow, American Physical Society

Fellow, Institute of Physics, UK

Harriet Turner International Affairs; Modern Languages and Literature

Membership, The Royal Academy of Fine Arts and Historical Sciences of Toledo (Spain)

Hamid Vakilzadian Electrical Engineering

Associate Editor of *Simulation*, Transactions of the Society for Modeling and Simulation International (SCS)

Anne Vidaver Plant Pathology

ASM Founders Distinguished Service Award, American Society for Microbiology

Pioneering Women in Plant Pathology, American Phytopathological Society

Jerry Volesky West Central Research and Extension Center; Agronomy and Horticulture

Outstanding Achievement Award - Research/Academia, Society for Range Management

Brian Wilcox Center on Children, Families and the Law; Psychology

Public Service Award, Society for Prevention Research

Mary S. Willis Anthropology

Interview and research synopsis featured in "Current Applications," 2008, Volume 49(4), of the journal Current Anthropology

Robert Wilson Panhandle Research and Extension Center

Fellow Award, Weed Science Society of America

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

ARS 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
NRICGP 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

DHHS Department of Health and Human Services

ACF Administration for Children and Families

CDC Centers for Disease Control NIH National Institutes of Health

FIC Fogarty International Center NCI National Cancer Institute

NCRR National Center for Research Resources

NEI National Eye Institute

NHLBI National Heart, Lung and Blood Institute

NIA National Institute on Aging
NIAID National Institute on Allergy &
Infectious Diseases

NICHD National Institute of Child Health and

Human Development

NIDCD National Institute on Deafness &

Communication Disorders

NIDDK National Institute of Diabetes, Digestive & Kidney Disease

NIDA National Institute on Drug Abuse NIGMS National Institute on General

Medical Sciences

NIMH National Institute of Mental Health

HUD Department of Housing and Urban Development

Dol Department of Interior

BR Bureau of Reclamation
FWS Fish & Wildlife Service
GS Geological Survey
NPS National Park Service

DoT Department of Transportation

FRA Federal Railroad Administration

EPA Environmental Protection Agency

IMLS Institute of Museum & Library Services

NASA National Aeronautics and Space Administration

NCHRP National Cooperative Highway

Research Program

NEA National Endowment for the Arts

NEH National Endowment for the Humanities

NSF National Science Foundation

EPSCoR Experimental Program to

Stimulate Cooperative Research

NSA National Security Agency

Published March 2009 by the UNL Office of Research

Graphic Designer: Stephanie Severin Contributing Editors: Elizabeth Banset, Mardi Bonner, Karen Underwood

Printed by UNL Printing Services

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.

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