

RESEARCH & CREATIVE ACTIVITY

2006 MAJOR SPONSORED PROGRAM
AND FACULTY AWARDS
FOR RESEARCH & CREATIVE ACTIVITY

OFFICE OF RESEARCH & GRADUATE STUDIES
AT THE UNIVERSITY OF NEBRASKA-LINCOLN



3	Awards of \$3 million or more
13	Awards of \$1 million to \$2,999,999
19	Awards of \$200,000 to \$999,999
47	CAREER and K Awards
50	Arts and Humanities Awards of \$50,000 or more
53	Arts and Humanities Awards of \$5,000 to \$49,999
54	Patents Issued
56	Intellectual Property Licences
59	Creative Works in Fine and Performing Arts
63	Books
69	Recognitions and Honors
75	Glossary of Federal Agency Abbreviations

On the Cover: A photo illustration of UNL's Diocles Laser, a 100-terawatt, ultra-fast laser with the highest combination of peak and average power of any laser in the United States.



Chancellor Harvey Perlman and Vice Chancellor Prem Paul

This is the fifth annual “Major Sponsored Program and Faculty Awards for Research and Creative Activity” report. This booklet highlights the successes of University of Nebraska–Lincoln faculty during 2006. The funding sources, projects and investigators on major grants and sponsored program awards received during the year are listed, 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 faculties’ accomplishments.

During FY2005-06, we achieved a funding milestone – UNL faculty attracted \$104.6 million in external funding to the institution. This is the first time we exceeded \$100 million and this in fact tripled the comparable figure achieved ten years ago.

How have we reached this success? We have worked to closely 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.

This booklet reports only the largest dollar amounts as reported through our Office of Sponsored Programs. However, the majority of our research and creative activity is conducted by single investigators and scholars who are pioneering new frontiers across all fields. Many faculty obtain funding at levels below the significantly high thresholds set for inclusion in this report. This in no way diminishes their scholarly contributions and we are proud of all faculty achievement.

Thank you for your interest and support of research at UNL. We are on the move!

A handwritten signature in black ink, reading "Prem S. Paul". The signature is fluid and cursive, with a long horizontal stroke at the end.

Prem S. Paul
Vice Chancellor for Research and
Dean of Graduate Studies

AWARDS OF \$3 MILLION OR MORE

Active awards in 2006

* Indicates new in 2006

Allen, David

Engineering

Blast Wave Absorbing Structures: an Experimental & Modeling Program

\$7,500,000
6/25/04 - 6/24/09

DOD-Army Research Laboratory



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.

Banerjee, Ruma

Biochemistry

Redox Biology Center

\$10,190,697
9/30/02 - 8/31/07

DHHS-NIH-NCRR



Ruma Banerjee, George Holmes University professor of biochemistry in the Institute of Agriculture and Natural Resources, is the director of the Redox Biology Center. The center was established in 2002 with a grant from the National Institutes of Health as a Center of Biomedical Research Excellence. 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.

Cassman, Kenneth

Nebraska Center for Energy Sciences, Agronomy and Horticulture

* Nebraska Center for Energy Sciences

\$5,000,000
Paul, Prem
4/1/06 - 3/31/2011

Nebraska Public Power District
Vice Chancellor for Research and
Dean of Graduate Studies



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.

Cotton, Dan

Cooperative Extension

eXtension—The Transformation of Cooperative Extension

\$6,800,000 (through 12/31/07) National Association of State Universities and Land-Grant Colleges

10/1/04 - 12/31/09



Dan Cotton directs the eXtension Initiative, an Internet-based land-grant university education and information system. UNL is the lead institution in this multi-year project, which partners with the University of Kentucky and North Carolina State 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.

Epstein, Michael

Special Education and Communication Disorders

Center for Behavior and Reading

Dept. of Education

\$4,498,231

10/1/01 - 9/30/07



Michael Epstein, William Barkley Professor of special education and communication disorders, and co-investigator Ron Nelson, associate research professor of special education and communication disorders, have established the Center for Behavior and Reading in the Center for At-Risk Children's

Services to focus on implementing and evaluating reading and behavior intervention programs for school-aged children. The aim of their research is to assess the overall and intervention-specific effects of various programs on school, staff, child and family levels. The project is funded by the U.S. Department of Education and involves seven participating schools in Lincoln's public school system.

Fromm, Michael

Center for Biotechnology

A Protein Interaction Database for Rice Protein Kinases

\$6,057,747

NSF

9/1/02 - 8/31/07



Michael Fromm, director of the Center for Biotechnology and a professor of agronomy and horticulture in the Institute of Agriculture and Natural Resources, is the Plant Genome Research Center's principal investigator.

The center was established in 2002 with a grant from the National Science Foundation and involves scientists from six universities. Research at the center focuses on protein kinases of plants, in particular those of cereal crops. Protein kinases are enzymes that affect the way plants react to their environments. Manipulating kinases could provide a means of regulating the tolerance of plants to disease and environmental stresses, such as drought and temperature extremes.

Metabolite Signaling Center

\$4,057,419

NSF-EPSCoR

2/1/04 - 1/31/07

Metabolite Signaling Center scientists examine the influence of dietary molecules on human biology. They study the molecular response to metabolites using primarily genomic technologies to better understand the influence of chemicals in food on human and animal growth and development, an emerging area of critical importance for Nebraska's economy. One goal of the research is development of agricultural products with value-added compositional changes that have beneficial effects on human health. It is among the first centers in the country to focus on effects of plant metabolites on gene expression and development in the consuming organism. Researchers use genomics technologies such as microarrays, genome sequences, cell-based bioassays and whole animal physiological studies.

Goddard, Stephen

Computer Science and Engineering

Drought Risk, Impact and Mitigation Information System

\$6,407,473

Dept. of Agriculture-RMA-FCIC

Wilhite, Donald

School of Natural Resources

9/1/05 - 9/30/08



Stephen Goddard

Stephen Goddard, associate professor of computer science and director of UNL's Laboratory for Advanced Research Computing, is principal investigator in a \$6.4 million joint effort by climatologists and computer scientists to bring cutting-edge computer science technologies to agricultural producers' age-old decision-making processes. The three-year



Donald Wilhite

partnership agreements are between the U.S. Department of Agriculture's Risk Management Agency, UNL's Department of Computer Science and Engineering and the UNL-based National Drought Mitigation Center. A separate \$1 million cooperative agreement, directed by Donald Wilhite, professor in the School of Natural Resources and director of the

National Drought Mitigation Center, will support continued work on a tool that uses satellite technology and climate information to detect vegetation stress on the ground for a much more detailed view of drought's scope and potential impact.

Harwood, David

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

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

Geosciences

NSF
Geosciences



David Harwood, professor of geosciences, leads an international team of scientists drilling beneath the Antarctic ice pack to unearth geological strata that could hold ancient clues to contemporary global warming trends. The National Science Foundation has awarded \$12.9 million to a consortium of five U.S. universities headed by UNL and Northern Illinois University. Dubbed ANDRILL (ANtartic 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, Ohio State University and the University of Massachusetts Amherst. The project also includes scientists from Germany, Italy and New Zealand.

Jose, H. Douglas

North Central Risk Management Education Center

\$3,600,000
9/15/04 - 9/14/08

Agricultural Economics

Dept. of Agriculture-CSREES



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

Math in the Middle Institute Partnership

\$5,000,000
Ruth Heaton
Thomas McGowan
Barbara Jacobson
8/1/04 - 7/31/09

Mathematics

NSF
Teaching, Learning and Teacher Education
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 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.

Meagher, Michael

Chemical and Biomolecular Engineering

Process Research & Development of Antibodies as Countermeasures for C. Botulinum Neurotoxin

\$10,627,000
3/1/02 - 2/10/07

DOD-Army Medical Research



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

\$6,799,173
9/1/03 - 2/28/08

DynPort Vaccine Company

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.

Laurence Rilett**Civil Engineering**

* Region 7 University Transportation Center

\$6,225,000

Department of Transportation—Research and Innovative Technology Administration

2007 – 2010



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 centers 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.

Sellmyer, David**Center for Materials Research**

Materials Research Science & Engineering Center; Nanomagnetic Structures

\$5,491,000

NSF

9/1/02 – 8/31/08



David Sellmyer, George Holmes Distinguished Professor in the department 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.

Sheridan, Susan**Educational Psychology**

Parent Engagement and Learning Birth to Five

\$5,087,110

DHHS-NIH-NICHD Psychology

Edwards, Carolyn
9/26/03 – 9/30/08

Susan M. Sheridan, Willa Cather professor of educational psychology, and co-investigator Carolyn Edwards, Willa Cather professor of psychology and family and consumer sciences, 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.

Tomkins, Alan**Public Policy Center**

Community-Based & Faith-Based Organization Partners in an Integrated System of Behavioral Health Care in Nebraska

\$3,504,226

DHHS-Admin for Children & Families

9/30/02 – 3/31/06



Alan Tomkins, director of the Public Policy Center and professor of psychology and law, is leading a project funded by the U.S. Department of Health and Human Services. The goal is to enhance and expand the capacity of community- and faith-based organizations to provide high-quality services

as part of an integrated system of behavioral health care to rural and urban communities. Among the hoped-for outcomes is to address the problem of insufficient resources by tapping into the extensive network of community- and faith-based organizations who offer behavioral health care services. The project will be a model for other states to emulate in coordinating and integrating these groups into an effective delivery system.

Velander, William**Chemical and Biomolecular Engineering**

cGMP Recombinant FIX and Oral Hemophilia B Therapy

\$9,794,346

DHHS-NIH-NHLBI

Meagher, Michael
Van Cott, KevinChemical and Biomolecular Engineering
Chemical and Biomolecular Engineering

9/6/05 – 8/31/10



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
 Meagher, Michael Chemical and Biomolecular Engineering
 Van Cott, Kevin Chemical and Biomolecular Engineering
 Inan, Mehmet Chemical and Biomolecular Engineering
 8/1/05 - 10/31/08

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

Cultural Resilience of Rural & Remote Ojibwe Families

\$3,138,960 DHHS-NIH-NIMH
 Hoyt, Dan Sociology
 7/1/02 - 6/30/07

Ojibwe Pathways Through the High School Years

\$3,262,793 DHHS-NIH-NIDA
 Johnson, Kurt Sociology
 Park, Mingue Sociology
 Hoyt, Dan Sociology
 9/3/05 - 6/30/12



Les Whitbeck, professor of sociology, is coordinating two major projects. The National Institute of Mental Health is funding a five-year project to identify precursors of mental disorders and to evaluate cultural risks and protective factors among a population of pre-teen Native children in the Upper Midwest area. A second project, funded by the National Institute on Drug Abuse, is a five-year project to investigate risk and resilience for early onset substance use and abuse among pre-teen Native children in the same region.

Wood, Charles

Biological Sciences

Nebraska Center for Virology

\$10,354,057
 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

\$3,036,741 DHHS-NIH-Nat Cancer Institute
 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-Intl Programs

International Sorghum/Millet Collaborative Research Support Program (INTSORMIL)

\$36,990,000
 7/1/96 - 6/30/06
 \$9,000,000
 * 9/30/06 - 9/29/11

U.S. Agency for International Development



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.

Awards of \$1 Million to \$2,999,999

Active awards in 2006

* Indicates new in 2006

Banerjee, Ruma	Biochemistry
\$1,177,264	Cystathionine Beta Synthase & Hyperhomocysteinemia DHHS-NIH-NHLBI
\$1,023,449	Mechanism of Methylmalonyl-CoAMutase: A Radical Enzyme DHHS-NIH-NIDDK
\$1,531,581	Regulation of Homocysteine-dependent Redox Homeostasis DHHS-NIH-NIDDK
Barycki, Joseph	Biochemistry
\$1,093,775	* Structural Insights into Redox Homeostasis DHHS-NIH-NIGMS
Buckendahl, Chad	Educational Psychology
\$2,398,258	Evaluation of the National Assessment of Educational Progress Dept. of Education
Davis, Susan	Educational Psychology
Caldwell, Robert	School of Natural Resources
\$1,025,000	Thematic Soil Mapping for Site-Specific Management Dept. of Agriculture-IFAFS
Dobermann, Achim	Agronomy and Horticulture
Adamchuk, Viacheslav	Biological Systems Engineering
Ferguson, Richard	Agronomy and Horticulture
Cerutti, Heriberto	Plant Science Initiative
\$1,042,852	RNA-Mediated Silencing: Mechanisms and Biological Roles in Chlamydomonas DHHS-NIH-NIGMS
Chen, Bing	School of Engineering Technology
\$1,170,488	SPiRiT: Silicon Prairie Initiative on Robotics in IT NSF
Cotton, Dan	Cooperative Extension
\$1,425,600	* New Technologies for Ag Extension (eXtension) Department of Agriculture-CSREES
DeKraai, Mark	Public Policy Center
\$1,629,313	Child Mental Health SIG Nebraska Dept. Health and Human Services
Diamond, Judy	University of Nebraska State Museum
\$2,851,409	Explore Evolution NSF
Doll, Elizabeth	Educational Psychology
\$1,261,684	Inspiring Inquiry: Science Instruction Model for Teachers in Rural, Culturally Diverse Schools Dept. of Education
Bruning, Roger	Educational Psychology
Bonnstetter, Ron	Teaching, Learning and Teacher Education
Horn, Christy	Educational Psychology

Dzenis, Yuris **Engineering Mechanics**
NIRT: Manufacturing of Novel Continuous Nanocrystalline Ceramic Nanofibers

\$1,095,200 NSF
 Zeng, Xiao Cheng Chemistry
 Feng, Ruqiang Engineering Mechanics
 Turner, Joseph Engineering Mechanics
 Larsen, Gustavo Chemical and Biomolecular Engineering

Eccarius, Malinda **Special Education and Communication Disorders**
Mountain-Prairie Upgrade Partnership

\$1,155,054 Dept. of Education

Espy, Kimberly **Associate Vice Chancellor for Research and Graduate Studies**

* Prenatal Tobacco Exposure: Perinatal and Genetic Risks
 \$1,242,130 DHHS-NIH-NIDA
 Wiebe, Sandra Office of Research

Faller, Ronald **Civil Engineering**
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

Farrell, Michael **University Television**
 * IPY: Engaging Antarctica

\$1,168,014 NSF
 Diamond, Judy University of Nebraska State Museum

Farritor, Shane **Mechanical Engineering**
Track Stability Assessment & Data Transmission

\$1,681,506 Dept. of Transportation-FRA
 Turner, Joseph Engineering Mechanics
 Nelson, Carl Mechanical Engineering
 Jones, Elizabeth Civil Engineering
 Khattak, Aemal Civil Engineering
 Sharif, Hamid School of Engineering Technology
 Rilett, Laurence Civil Engineering

Gladyshev, Vadim **Biochemistry**
Functions of Mammalian Thioredoxin Reductases

\$1,181,148 DHHS-NIH-NIGMS

Selenoprotein as a Target for Cancer Prevention

\$1,356,161 DHHS-NIH-NCI

Methionine Sulfoxide Reduction, Selenium and Aging

\$1,256,826 DHHS-NIH-NIA

* **Identity & Functions of Selenoprotein Genes**

\$1,138,800 DHHS-NIH-NIGMS

Goddard, Stephen **Computer Science and Engineering**
Climate & Soil Risk Information System

\$1,212,056 Dept. of Agriculture-RMA
 Wilhite, Donald School of Natural Resources
 Hubbard, Kenneth School of Natural Resources

Green, Jordan **Special Education and Communication Disorders**
Early Speech Motor Development

\$1,779,288 DHHS-NIH-NIDCD

Hoagland, Kyle **School of Natural Resources**
DNR Ground Water Management and Protection Act Service Agreement

\$1,500,000 Dept. of Natural Resources

Hubbard, Kenneth **School of Natural Resources**
Services of the NOAA Regional Climate Centers

\$2,065,032 Dept. of Commerce-NOAA

Jones, Vicky **Northeast Research & Extension Center**
Northeast Nebraska Paraprofessional Ladder Project

\$1,976,095 Dept. of Education
 Lopez, William Teaching, Learning and Teacher Education

Josiah, Scott **NE State Forest Service**
Cooperative Forestry Program

\$1,342,785 Dept. of Agriculture-FS

Kamil, Alan **Biological Sciences**
Landmarks, Bearings and Way-Finding

\$1,338,934 DHHS-NIH-NIMH

Mechanisms of Visual Search and Attention

\$1,029,062 DHHS-NIH-NIMH

Bond, Alan Biological Sciences

Koszewski, Wanda **Nutrition and Health Sciences**
Building Nebraska Families

\$2,226,983 Ne Dept. of Health & Human Serv
 Birnstihl, Elizabeth IANR-Cooperative Ext
 Schnepf, Marilyn Nutrition and Health Sciences

Nutrition Education Program

\$1,280,914 Ne Dept. of Health & Human Serv
 Birnstihl, Elizabeth IANR Cooperative Extension
 Schnepf, Marilyn Nutritional and Health Sciences

Leslie-Pelecky, Diandra **Physics and Astronomy**
GK-12: Project FULCRUM-Building Partnerships

\$1,572,817 NSF
 Dussault, Patrick Chemistry
 Kirby, Roger Physics and Astronomy

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

\$1,987,732 NSF
 Kirby, Roger Physics and Astronomy

Lou, Marjorie **Veterinary and Biomedical Sciences**
 Protein-Thiol Mixed Disulfide in Cataractogenesis
 \$1,721,697 DHHS-NIH-Natl Eye Institute

Lu, Yongfeng **Electrical Engineering**
 Multi-Laser-Beam Open-Atmosphere Surface
 Coating Techniques Based on Precursor Excitation,
 Photodissociation and Controlled Cooling
 \$2,999,970 DOD-Office of Naval Research-MURI
 Wang, Xinwei Mechanical Engineering

Meagher, Michael **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
 Schlegel, Vicki Food Science and Technology
 Zhang, Wenhui Chemical and Biomolecular Engineering
 Wu, Joey Chemical and Biomolecular Engineering
 * Purification of proPRT-201 and Production of Reference Standard
 \$1,126,678 Proteon Therapeutics

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

Parkhurst, Lawrence **Chemistry**
 Assembly Mechanisms of TBP-Nucleated Complexes
 \$1,115,504 DHHS-NIH-NIGMS

Perez, Lance **Electrical Engineering**
 * Strengthening Transitions into Engineering Program
 \$1,648,354 NSF
 Ballard, John Engineering

Ragsdale, Stephen **Biochemistry**
 Enzymology of Reductive Acetyl-CoA Pathway
 \$1,235,700 DHHS-NIH-NIGMS

Robertson Jr., Vaughn **Student Affairs**
 * UNL Educational Talent Search
 \$2,042,795 Dept. of Education

Sheridan, Susan **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 Dept. of Education
 Glover, Todd Center on Children, Youth, Families and Schools

Simpson, Melanie **Biochemistry**
 Role of Hyaluronan Matrix in Prostate Cancer Progression
 \$1,074,629 DHHS-NIH-Nat Cancer Institute

Snow, Greg **Physics and Astronomy**
 The Cosmic Ray Observatory Project
 \$1,374,005 NSF
 Claes, Daniel 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

Van Etten, James **Plant Pathology**
 DNA Replication & Gene Expression of Chlorella Viruses
 \$1,233,472 DHHS-NIH-NIGMS
 Dunigan, David Plant Pathology
 Kang, Ming Plant Pathology
 Zhang, Yuanzheng Plant Pathology
 Agarkova, Irina Plant Pathology
 Gurnon, James Plant Pathology

Verma, Shashi **School of Natural Resources**
 Great Plains Regional Center for Global Environmental Change
 \$2,214,769 Dept. of Energy/NIGEC
 Carbon Sequestration in Agriculture
 \$1,139,462 Kansas State University
 Knops, Johannes Biological Sciences
 Arkebauer, Timothy Agronomy and Horticulture
 Carbon Sequestration in Dryland & Irrigated Agroecosystems
 \$1,250,000 Dept. 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
 Suyker, Andrew School of Natural Resources
 Ginting, Daniel Agronomy and Horticulture

Viljoen, Hendrik **Chemical and Biomolecular Engineering**
 * A Rational Design of a Platform for de novo Gene Synthesis
 \$1,369,548 DHHS-NIH-NCRR
 Subramanian, Anu Chemical and Biomolecular Engineering

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

Wedin, David **School of Natural Resources**
 Sand Hills Biocomplexity: Integrating
 Biogeophysical Processes Across Space and Time
 \$1,794,730 NSF
 Loope, David Geosciences

Weeks, Donald **Biochemistry**
Development of Dicamba-Resistant Crops
\$2,500,000 Monsanto Co.

Whitbeck, Les **Sociology**
Great Plains Cultural Ways Mental Health Careers Program
\$1,514,284 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 Dept. of Agriculture-CSREES

Wilcox, Brian **Center on Children, Families and the Law**
Midwest Child Care Research Consortium
\$1,200,000 DHHS-Admin for Child & Families
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 Dept. of Agriculture-RMA

Wood, Charles **Biological Sciences**
Programs in HIV & AIDS Assoc Diseases/Malignancies
\$2,130,669 DHHS-NIH-Fogarty Intl Center
Evolution of Clade C HIV-1 in Infected Children
\$1,586,250 DHHS-NIH-NICHD
Research Training in Comparative Viral Pathogenesis
\$1,223,242 DHHS-NIH-NIAID
Vaccination against Intrapartum HIV Clade C Transmission
\$959,278 Dana-Farber Cancer Institute

Yamamoto, Catherine **Student Affairs**
Upward Bound Program–Northeast Nebraska
\$1,338,496 Dept. of Education
Student Support Services Program
\$1,889,008 Dept. of Education

Zempleni, Janos **Nutrition and Health Sciences**
Vitamin-Dependent Modifications of Histones
\$1,000,877 DHHS-NIH-NIDDK

Zhang, Luwen **Center for Virology**
* Oncogenic Properties of Interferon Regulatory Factor 7
\$1,145,961 DHHS-NIH-Nat Cancer Institute

Awards of \$200,000 - \$999,999

Active awards in 2006

* Indicates new in 2006

Admiraal, David **Civil Engineering**
Low-Cost Energy Dissipation at Culvert Exits
\$201,856 Ne Dept. of Roads

Albrecht, Julie **Nutrition and Health Sciences**
Entrepreneurial Center Development for
Food & Textile Small Scale Business in Tajikistan
\$256,000 Dept. of State-BECA
Prochaska-Cue, Kathy Family and Consumer Sciences

Alfano, James **Plant Pathology**
Isolation & Characterization of Pseudomonas Type III Effectors
that Suppress Programmed Cell Death in Eukaryotes
\$375,000 NSF

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

Alfano, James **Plant Science Initiative/Plant Pathology**
* Secretion Signals & Type III Chaperones in
Pseudomonas Syringae Type III Secretion System
\$430,000 NSF
* Suppression of Innate Immunity by
ADP Ribosyltransferase Type III Effectors
\$360,106 DHHS-NIH-NIAID

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 Mechanics**
* U.S.-Brazil Dual-Degree in Infrastructure &
Sustainability Engineering Program
\$208,211 Dept. of Education-FIPSE
Inter-University Program for Human Resources Training in
Computational Mechanics
\$203,904 Dept. of Education-FIPSE

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

Asard, Han **Biochemistry**
Physiological Functions & Biochemical
Properties of Plant Cytochromes b561
\$386,084 NSF

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

Avramov, Luchezar **Mathematics**
 Homology & Cohomology over Commutative Rings
 \$356,322 NSF

Avramova, Zoya **Biological Sciences**
 ATX1, Epigenetic Regulator of Plant Development
 \$442,500 NSF

Azizinamini, Atorod **Civil Engineering**
 Simple for Dead-Continuous for Live Load System
 with Partial Pre-Fabricated Deck System
 \$242,038 Ne Dept. of Roads
 Development of Design Tools for Steel Bridge Systems,
 Simple for Dead Loads & Continuous for
 Superimposed Dead Load & Live Loads
 \$226,306 Ne Dept. of Roads
 Steel Box System Monitoring of N-2 over I-480 Bridge
 \$292,244 Ne Dept. of Roads
 IBRC 2002 Project
 \$240,000 Ne Dept. of Roads

Baenziger, P. Stephen **Agronomy and Horticulture**
 Developing Winter Wheat with Improved Fusarium Head Blight
 Tolerance by Conventional and Transgenic Approaches
 \$260,603 Dept. 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 Dept. of Agriculture-NRICGP
 Eskridge, Kent Statistics
 Dweikat, Ismail Agronomy and Horticulture

Balkir, Sina **Electrical Engineering**
 * All Solid-State Wireless Sensor Network for
 Nuclear Proliferation Detection
 \$417,191 Dept. of Energy
 Hoffman, Michael Electrical Engineering

Barletta, Raul **Veterinary and Biomedical Sciences**
 Molecular Analysis of Mycobacterium Paratuberculosis
 Colony-Morphology Attenuated Mutant
 \$270,000 Dept. of Agriculture-NRICGP

Barker, Bradley **Center on Children, Youth, Families
 and Schools/4-H State Office**
 * Robotics & GPS/GIS in 4-H: Workplace Skills for the 21st Century
 \$864,139 NSF
 Adamchuk, Viacheslav Center on Children, Youth, Families
 and Schools/Biol Syst Engr

Basolo, Alexandra **Biological Sciences**
 Behavioral Plasticity in Preexisting Receiver Bias
 \$366,000 NSF
 Effects of Sexual Selection & Predation on a
 Genetic Polymorphism for Body Size
 \$519,721 NSF

Batelaan, Herman **Physics and Astronomy**
 Matter Optics with Intense Laser Light
 \$424,997 NSF

Becker, Donald **Biochemistry**
 Spectroelectrochemistry of the Novel PutA Flavoprotein
 \$785,540 DHHS-NIH-NIGMS
 * MRI: Acquisition of Beckman XL-I Analytical Ultracentrifuge
 \$284,160 NSF

Belli, Robert **Gallup Research Center**
 Verbal Behaviors in Computerized Lifecourse Surveys
 \$414,430 DHHS-NIH-Nat Inst Aging

Bellows, Laurie **Graduate Studies**
 Ronald E. McNair Post-baccalaureate Achievement Program
 \$960,172 Dept. of Education

Belot, John **Chemistry**
 GOALI: Chemical Factors Affecting Metal-Organic
 Chemical Vapor Deposition Precursors
 \$365,000 NSF

Benson, Andrew **Food Science and Technology**
 Functional Consequences of Genome
 Evolution in Listeria Monocytogenes
 \$261,515 Dept. of Agriculture-NRICGP
 Genome Biology of Francisella Tularensis Populations
 \$391,459 DHHS-NIH-NIAID

Berkowitz, David **Chemistry**
 New Approaches to Catalyst Screening & Development
 \$423,000 NSF
 Development of Cystathionine Beta-Synthase Inhibitors
 \$214,500 American Heart Association

Beukelman, David **Special Education and
 Communication Disorders**
 Rehabilitation Engineering Research
 Center on Communication Enhancement
 \$379,992 Duke University Medical Center

Bevins, Rick **Psychology**
 Acquired Appetitive Properties of Nicotine
 \$902,065 DHHS-NIH-NIDA

Billesbach, David **Biological Systems Engineering**
 Development & Field Testing of a Rapidly Deployable
 Carbon Dioxide Flux Management System
 \$443,594 Dept. of Energy-Berkeley Nat Lab

Blum, Paul	Biological Sciences	Center for Applied Rural Innovation
Gene Silencing & Catabolite Repression in the Archaeon <i>Sulfolobus Solfataricus</i>		* Relocation to the Buffalo Commons: Marketing Approach to Understand Residential Decisions among Migrants
\$413,380	NSF	Dept. of Agriculture-NRICGP
Bobaru, Florin	Engineering Mechanics	Panhandle Research and Extension Center
* Adaptivity in Peridynamics for Composite Plates		Agricultural Economics
\$203,965	Dept. of Energy-Sandia National Laboratories	
Bond, Alan	Biological Sciences	Psychology
Mechanisms of Social Cognition		Parenting & Sociocognitive Correlates of Prosocial Behaviors in Mexican American & European American Children
\$540,260	DHHS-NIH-NIMH	NSF
Kamil, Alan	Biological Sciences	
Virtual Ecology: Experimental Tests of Evolution in Predator-Prey Systems		
\$461,000	NSF	
Kamil, Alan	Biological Sciences	
Brand, Jennifer	Center for Materials Research	Nutrition and Health Sciences
Boron Carbide Semiconductor Films		* Method for Enhancing the Cholesterol-Lowering Property of Plant Sterol & Stanol Esters
\$347,826	DOD-Battelle	Beef Products Inc
* Novel Rare-Earth Semiconductors for Solid-State Neutron Detectors		
\$450,000	DOD-Defense Threat Reduction Agency	
Belashchenko, Kirill	Physics and Astronomy	
Dowben, Peter	Physics and Astronomy	
Buckendahl, Chad	Educational Psychology	Biochemistry
Consulting Services/Assist Oklahoma Commission for Teacher Preparation		Molecular/Biochemical Investigations of PEPC (and its novel ser/thr-Kinase) and SuSy (Nodulin-100), 2 Phosphorylated Metabolic Enzymes in Plants
\$367,160	Oklahoma Office of Public Affairs	NSF
Bulling, Denise	Public Policy Center	Physics and Astronomy
Hospital Preparedness – Bioterrorism		Experimental High Energy Physics
\$250,000	Ne Dept. of Health and Human Services	NSF
Burbach, Mark	School of Natural Resources	Biotechnology/Plant Science Initiative/Agronomy and Horticulture
Integrated Real-Time Groundwater-Level Monitoring Network to Support Drought Impact Assessment and Mitigation Programs		Agrobacterium-Mediated Genetic Transformation of Wheat & Soybeans
\$403,293	Dept. of Agriculture-RMA	Dept. of Agriculture-ARS-BRDC
Ramamurthy, Byrav	Computer Science and Engineering	From Proplastid to Chloroplast: Understanding Plastid Differentiation in Maize by Microarray & Proteome Analysis
Burson, Dennis	Animal Science	\$389,225
<i>Listeria Monocytogenes</i> Controls in Ready to Eat Meat Products		Cornell University
\$599,732	Dept. of Agriculture-CSREES	Research in Nebraska on Improved Soybean Oil for Biodiesel Fuel
Thippareddi, Harshavardhan	Food Science and Technology	Dept. of Energy
Cady, Daniel	Cooperative Extension	\$491,000
Nebraska Technology Transfer Center at UNL		* Functional Analysis of Soybean Genes through Transposon Mutagenesis
\$377,100	Ne Dept. of Roads	\$328,000
* Development of Tools for Rating Bridges & Application to State Bridges		United Soybean Board/Smith/Bucklin
\$414,421	Ne Dept. of Roads	Specht, James
Azizinamini, Atorod	Civil Engineering	Agronomy and Horticulture
		Comfort, Steven
		School of Natural Resources
		Field-Scale Demonstrations of Innovative Remediation Techniques for Contaminated Soil and Water
		\$994,100
		Environmental Protection Agency

Costello, Don **Computer Science and Engineering**
GAANN Fellowships for Computer Science & Engineering
\$500,000 Dept. of Education

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

DiMagno, Stephen **Chemistry**
Hydrogen for Fuel Cells
\$966,000 DOD-Office of Naval Research
Takacs, James Chemistry
Berkowitz, David Chemistry
Hydrogenase and Alkane Functionalization Catalysts
\$599,748 DOD-Office of Naval Research
Redepenning, Jody Chemistry

Dowben, Peter **Center for Materials Research**
Surface Chemistry of Adsorbates on Crystalline Polymers
\$690,000 NSF

Drummond, Wayne **Architecture**
Neighborhoods in Transition: Community Outreach Partnerships
\$388,914 Dept. of Housing & Urban Development
Parsons, Gerald Agricultural Leadership/Education
Carranza, Miguel Sociology
Cantarero, Rodrigo Community and Regional Planning
Waite, Michelle Chancellor's Office
Larrick, Steven Architecture
Fritz, Susan Agricultural Leadership/Education

Du, Liangcheng **Chemistry**
* Biosynthesis of Mycotoxin Fumonisin: Characterization of
Enzymes for Vicinal Diol & Tricarballic Ester Formation
\$284,667 NSF

Ducharme, Stephen **Center for Materials and
Nanoscience/Physics and Astronomy**
* 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

Dwyer, Matthew **Computer Science and Engineering**
Software Model Checking for Embedded Systems
\$239,560 Kansas State University
Program Analysis Techniques to Support
Dependable RTSJ Applications
\$207,519 NSF
Elbaum, Sebastian Computer Science and Engineering
Goddard, Stephen Computer Science and Engineering
Rothermel, Gregg Computer Science and Engineering
* Finite-State Verification for High-Performance Computing
\$300,000 NSF

Dzenis, Yuris **Engineering Mechanics**
Fundamentals of Fabrication of
Nanofiber Assemblies by Electrospinning
\$372,000 NSF
Farritor, Shane Mechanical Engineering
Novel Continuous Carbon Nanofibers for the
Next Generation Lightweight Structural Nanocomposites
\$258,543 DOD-Air Force Office of Scientific Research
* Next Generation Super Carbon Fiber
\$317,127 Hexcel Corporation
* Nanoengineered Interfaces
\$250,000 NSF
* Modeling-Based Control of Electrospinning Process
\$275,000 NSF

Eccarius, Malinda **Special Education and
Communication Disorders**
Mountain Prairie Upgrade Partnership - Early Childhood
\$781,642 Dept. 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/SW: Collaborative Research: A New Generation of
Scalable, Cost-Effective Regression Testing Techniques
\$251,018 NSF
ITR: Dependable End-User Software
\$211,294 NSF

Engen-Wedin, Nancy **Teaching, Learning
and Teacher Education**
Indigenous Roots Teacher Education Program
\$704,730 Dept. of Education
McGowan, Thomas Teaching, Learning and Teacher Education

Epstein, Michael	Special Education and Communication and Disorders	
Leadership Training in Emotional Disturbance Disorders		
\$590,854	Dept. of Education	
Postdoctoral Training in Emotional & Behavioral Disorders		
\$471,512	Dept. of Education	
Randomized Clinical Trial of Wraparound Services for Elementary School Students in School Settings		
\$538,266	Dept. of Education	
Espy, Kimberly	Vice Chancellor for Research and Graduate Studies	
* Executive Function Development in Preschool Children		
\$962,343	DHHS-NIH-NIMH	
Wiebe, Sandra	Office of Research	
Fabrikant, Ilya	Physics and Astronomy	
Collision Processes Involving Low-Energy Electrons		
\$215,000	NSF	
Faller, Ronald	Civil Engineering	
* Development of a New Precast Concrete Bridge Railing System (2006-2008)		
\$229,820	Ne Dept. of Roads	
Bielenberg, Robert	Civil Engineering	
Reid, John	Mechanical Engineering	
Tadros, Maher	Civil Engineering	
Franco, Juan	Vice Chancellor for Student Affairs	
NU Directions: Program to Reduce High-Risk Drinking		
\$468,000	Robert Wood Johnson Foundation	
Major, Linda	Student Affairs	
Fritz, Sherilyn	Geosciences	
Lake Titicaca Drilling Project		
\$314,167	NSF	
Gardner, Scott	School of Biological Sciences	
Worm-Web: Georeferencing Computerized Data & Linking Databases in the Manter Laboratory of Parasitology		
\$420,107	NSF	
Hosier, Aaron	Information Services	
Gaskell, C. Martin	Physics and Astronomy	
Variability of Active Galactic Nuclei		
\$435,611	NSF	
Gay, Timothy	Physics and Astronomy	
Polarized Electron Physics		
\$662,002	NSF	
Gibson, Robert	Biological Sciences	
GAANN		
Fellowship for Ecology, Evolution & Behavior at UNL		
\$625,000	Dept. of Education	
Gitelson, Anatoly	School of Natural Resources	
* Land Cover Land Use Change Effects on Surface Water Quality: Integrated MODIS & SeaWiFS Assessment of Dnieper & Don River Basins		
\$597,799	NASA	
Gladyshev, Vadim	Biochemistry	
Identity of Terminator & Selenocysteine UGA Codons		
\$789,237	DHHS-NIH-NIGMS	
Glover, Todd	Center on Children, Youth, Families and Schools	
* Establish a State-Wide Response-to-Intervention Consortium for Training & Evaluation		
\$253,864	Ne Dept. 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	
Energy-Aware CPU & I/O Scheduling for Embedded, Real-Time Systems		
\$200,000	NSF	
Goedert, James	Construction Systems	
* Rebuilding New Orleans		
\$293,660	Dept. 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	
Chen, LingYun	Food Science and Technology	
Schlegel, Vicki	Food Science and Technology	
Taylor, Stephen	Food Science and Technology	
Gosselin, David	School of Natural Resources	
* Earth Science Institute for Elementary Educators		
\$233,606	NASA	
Bonnstetter, Ronald	Teaching, Learning and Teacher Education	
Graef, George	Agronomy and Horticulture	
Sclerotinia Resistance Enhanced by Accumulation of QTL Transgenic Approaches		
\$301,142	Dept. of Agriculture-ARS	
Clemente, Thomas	Agronomy and Horticulture	
Steadman, James	Plant Pathology	
Greve, Vickie	Northeast Research and Extension Center	
Communities Together Can		
\$523,000	Dept. of Agriculture-CSREES	
Swanson, Douglas	Cooperative Extension	

Hage, David **Chemistry**
 Chromatographic Automation of Immunoassays
 \$959,749 DHHS-NIH-NIGMS
 * Chromatographic Studies of Functional Proteomics
 \$779,787 DHHS-NIH-NIDDK

Harbison, Gerard **Chemistry**
 Structure & Dynamics of DNA Hairpins
 \$845,363 DHHS-NIH-NIGMS

Harnisch, Delwyn **Teaching, Learning and Teacher Education**
 Nebraska Assessment Cohorts (NAC05/06) & Nebraska
 Leadership for Learning Cohorts (NLL05/06)
 \$200,000 Ne Dept. of Education

Harris, Steven **Plant Science Initiative/Plant Pathology**
 * Autophagy in Fungal Hyphae: Functional
 Genomic & Mechanical Strength Studies
 \$201,907 University of Maryland-Baltimore

Harshman, Lawrence **Biological Sciences**
 Identification of Genes & Proteins that Regulate Stress Resistance
 \$505,985 DOD-DEPSCoR
 * Comparative Functional Genomics of Drosophila Obesity
 \$516,548 Cornell University
 * Molecular Evolution of Genes Expressed in
 D. melanogaster Sperm Storage Structures
 \$283,213 NSF
 Moriyama, Etsuko Plant Science Initiative
 * Quantitative Genomics of Sexual Dimorphism
 \$212,434 University of California-Davis

Hay, DeLynn **IANR-Cooperative Ext**
 North Central Region Sustainable Agriculture
 Professional Development Program—FY 2005
 \$910,283 Dept. of Agriculture-CSREES

Hebets, Eileen **Biological Sciences**
 Searle Scholar: Exploring Neural Basis of
 Complex Behavior in Amblypygids
 \$240,000 Chicago Community Trust/Searle Scholar

Hein, Gary **Panhandle Research and Extension Center**
 Biologically Intensive Area-wide IPM of
 Russian Wheat Aphid & Greenbug
 \$516,594 Dept. of Agriculture-ARS

Henry, Christopher **Biological Systems Engineering**
 Livestock Producer Environmental Assistance Project
 \$600,000 Ne Environmental Trust
 * Development of Alternative Technologies
 for Small Livestock Producers
 \$221,881 Ne Dept. 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 Dept. 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
 Urrea Florez, Carlos Panhandle Research and Extension Center
 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 Dept. of Agriculture-NRCS
 Baltensperger, David Panhandle Research and Extension Center
 Berger, Aaron Panhandle Research and Extension Center
 DeBoer, Karen Panhandle Research and Extension Center
 Hla, Aung Panhandle Research and Extension Center
 Lyon, Drew Panhandle Research and Extension Center
 Pavlista, Alexander Panhandle Research and Extension Center
 Yonts, C. Dean Panhandle Research and Extension Center

Heusel, Gary **Student Involvement**
 Midwest Consortium for Service-Learning in Higher Education
 \$469,903 Corporation for National Service

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

Holmes, Mary Anne **Geosciences**
 * Building a Community of Women Geoscience Leaders
 \$228,774 NSF

Holz, John **School of Natural Resources**
 Classification of Nebraska Streams and Rivers:
 Phase I Data Assessment, Collection and Analysis
 \$287,853 Nebraska Dept. of Environmental Quality
 Hoagland, Kyle School of Natural Resources

Horn, Christy **Educational Psychology**
 Building Accepting Campus Communities
 \$945,171 Dept. of Education

Hu, Qi (Steve) **School of Natural Resources**
 Engaging Agricultural Communities in Great Plains of US with
 Applications & Development of Climate Prediction & Information
 \$436,424 Dept. of Commerce-NOAA

Hunt, Robert **University of Nebraska State Museum**
 * Renovation & Computerization of University of Nebraska
 Vertebrate Paleontology Collection
 \$315,839 NSF
 Voorhies, Michael University of Nebraska State Museum

Hutkins, Robert **Food Science and Technology**
Food Safety: Life-Long Learning through Teacher Training
\$400,000 Dept. of Agriculture-NRICGP
Durso, Lisa Food Science and Technology
Rupnow, John Food Science and Technology
Thippareddi, Harshavardhan Food Science and Technology
Whipple, Georgianna Food Science and Technology

Hygstrom, Scott **School of Natural Resources**
Development of Spatially Explicit Models of Wildlife Diseases
\$330,930 Dept. of Agriculture-APHIS

Ianno, Natale **Electrical Engineering**
* **Nano-Material Science**
\$531,500 NSF-EPSCoR
Turner, Joseph Engineering Mechanics

Inan, Mehmet **Chemical and Biomolecular Engineering**
Expression of Chimeric Antibody in Pichia pastoris
\$297,562 Research Corporation

Inderbitzen-Nolan, Heidi **Psychology**
Etiological Factors in Adolescent Social Phobia
\$614,387 DHHS-NIH-NIMH

Jaacks, Duane **Physics and Astronomy**
Mass Dependent Effects in Correlated Motion of Massive Coulomb Interacting Particles
\$717,500 NSF

Jameson, Mary Liz **University of Nebraska State Museum**
Monography & Phylogeny of New World Scarabaeoid Beetles
\$755,300 NSF
Ratcliffe, Brett Entomology

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

Johnson, Ron **School of Natural Resources**
Common Sense Conservation of Endangered Species-Tern and Plover
\$222,513 Nebraska Environmental Trust

Jones, Clinton **Veterinary and Biomedical Sciences**
Functional Analysis of biCPO
\$349,500 Dept. of Agriculture-NRICGP
Zhang, Yange Veterinary and Biomedical Sciences
Regulation of the Latency-Reactivation Cycle by the Bovine Herpesvirus 1 (BHV-1) Latency Related (LR) Gene
\$319,600 Dept. of Agriculture-CSREES
* **Functional Analysis of Proteins Encoded by the Bovine Herpesvirus 1 Latency Related Gene**
\$374,475 Dept. of Agriculture-CSREES

Jones, Elizabeth **Civil Engineering**
ITS Resource, Research & Educational Activities at Peter Kiewit Institute
\$921,414 Ne Dept. of Roads

Jones, Erick **Industrial and Management Systems Engineering**
Center for Engineering Logistics and Distribution at UNL
\$256,000 NSF

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

Josiah, Scott **NE State Forest Service**
Community Enhancement Program
\$350,000 Ne Dept. of Roads
* **NRCS-Technical Service Provider Project**
\$334,304 Dept. of Agriculture-NRCS

Kelling, Clayton **Veterinary and Biomedical Sciences**
Role of Nonstructural Proteins in Pestivirus Virion Assembly
\$289,116 DHHS-NIH-NIAID

Kennedy, Patricia **Marketing**
Socially Constituted Food Consumption of Adolescents
\$350,000 Dept. of Agriculture-CSREES
McGarvey, Mary Economics
Stanek-Krogstrand, Kaye Nutrition and Health Sciences

Keown, Jeff **Animal Science**
Trilateral Curriculum Modification & Rural Community Information Delivery
\$209,157 Dept. of Education-FIPSE

Kim, Yong Rak **Civil Engineering**
Restricted-Zone Requirements for Superpave Mixes Made with Local Aggregate Sources in Nebraska
\$269,350 Ne Dept. of Roads
Azizinamini, Atorod Civil Engineering
Material Selection & Design Consideration for Moisture Damage of Asphalt Pavement
\$225,527 Ne Dept. of Roads
Azizinamini, Atorod Civil Engineering

Koelsch, Richard **Biological Systems Engineering**
* **Heartland Integrated Water Quality Coordination Initiative**
\$250,470 Iowa State University
Wortmann, Charles Agronomy and Horticulture

Kostelnik, Marjorie **Education and Human Sciences**
Osher Lifelong Learning Institute
\$300,000 Bernard Osher Foundation
Eversoll, Deanna Education and Human Sciences
Aguiar, Deanna Education and Human Sciences

Krull, Dean	Agronomy and Horticulture	Loepe, David	Geosciences
* Managing Irrigation Systems Today & Tomorrow	Central Platte NRD	Paleometeorological Records from Sand Dunes & Eolian Sand Stones	
\$501,671		\$262,570	NSF
Benham, Brian	Agronomy and Horticulture		
Ferguson, Richard	Agronomy and Horticulture		
Langell, Marjorie	Chemistry	Louda, Svata	Biological Sciences
Surface Chemistry of Rock Salt & Spinel 3D Transition		Single vs. Multiple Insect Herbivore Guild Interactions in Canada Thistle Dynamics	
Metal Oxides Tailored by Structural & Compositional Methods		Dept. of Agriculture-NRICGP	
\$425,000	NSF	Insect Herbivore Guild Interactions & Tall Thistle Population Dynamics	
		\$369,999	NSF
Ledder, Glenn	Mathematics	Lu, Yongfeng	Electrical Engineering
* UBM: Research for Undergraduates in Theoretical Ecology (RUTE)		Laser-Assisted Fabrication of Large-Scale 3-D Photonic Bandgap Structures	
\$905,000	NSF	\$350,000	DOD-DEPSCoR
Deng, Bo	Mathematics	Wang, Xinwei	Mechanical Engineering
Gibson, Robert	Biological Sciences		
Loladze, Irakli	Mathematics	Fabrication of Photonic Bandgap Structures in Si & Ge Substrates Using Laser-Assisted Nanoimprinting of Self-Assembled Nanoparticles	
Louda, Svata	Biological Sciences	\$210,238	DOD-Air Force Off of Sci Rsch
		Magnetic Confinement of Plasmas in Laser-Induced Breakdown Spectroscopy for Improved Sensitivity & Accuracy	Dept. of Energy
Lee, Kevin	Physics and Astronomy	\$249,306	
ClassAction: Model Rapid-Feedback & Dynam Formative Assess System		* Self-Integration of Carbon-Nanotube Sensors in Functional Integrated Circuits	
\$359,768	NSF	\$240,000	NSF
Schmidt, Edward	Physics and Astronomy	* MRI: Development of Multifunctional Nanoscale Measurement System	
Development of Interactive Simulation Environments for Inquiry Astronomy Teaching		\$220,000	NSF
\$336,572	NSF	Alexander, Dennis	Electrical Engineering
Schmidt, Edward	Physics and Astronomy	Ducharme, Stephen	Physics and Astronomy
		Wang, Xinwei	Mechanical Engineering
Leslie-Pelecky, Diandra	Physics and Astronomy	Mackenzie, Sally	Plant Science Initiative
Magnetic Properties of Disordered Rare-Earth Nanostructures		Machinery of Mitochondrial Recombination in Higher Plants	
\$420,000	NSF	\$494,080	NSF
Shield, Jeff	Mechanical Engineering	Christensen, Alan	Biological Sciences
* Magnetic Cluster States in Nanostructured Materials		Mitochondrial Sorting & Inheritance in Arabidopsis	
\$450,000	Dept. of Energy-EPSCoR	\$303,000	NSF
		Nuclear-Organellar Interactions Involving AtMSH1 in Arabidopsis	
Li, Jianguy	Engineering Mechanics	\$360,000	Dept. of Energy
* Ferroelectric Polymer Nanocomposite Film/Langmuir-Blodgett		Strategy for the Transgenic Induction of Cytoplasmic Male Sterility in Crop Plants	
\$267,335	NSF	\$404,858	Dept. of Agriculture-BRDC
Ducharme, Stephen	Physics and Astronomy	* Training Graduate Students in Plant Breeding using Crop Drought Tolerance Improvement as a Model	
		\$200,000	Dept. of Agriculture-NRICGP
Lindquist, John	Agronomy and Horticulture	Fromm, Michael	Plant Science Initiative
* Contribution of Fusarium lateritium to Weed Suppressive Soils & Weed Abundance			
\$366,186	Dept. of Agriculture-NRICGP		
Drijber, Rhae	Agronomy and Horticulture		
Yuen, Gary	Plant Pathology		
Liou, Sy-Hwang	Physics and Astronomy		
Nanometer-Size Magnetic Devices			
\$236,000	DOD-DEPSCoR		
Liu, Mingsheng	Architectural Engineering		
* CC at Mutual of Omaha - Phase III			
\$210,319	Omaha Public Power District		

Mamo, Martha	Agronomy and Horticulture	NE State Forest Service
Pollution & Economic Decision Support Tool for Impaired Watershed Management Plans in Eastern Nebraska		* Restoring the Pine Ridge Forest Ecosystem
\$335,000	Dept. of Agriculture-CSREES	Ne Environmental Trust
Helmers, Glenn	Agricultural Economics	
Ginting, Daniel	Agronomy and Horticulture	
Wortman, Charles	Agronomy and Horticulture	
Martin, Alex	Agronomy and Horticulture	Geosciences
IWM Implementation: A Regional Approach		* Evaluating the Role of Global Snow Cover on Seasonal to Interannual Predictability of Temperature & Precipitation
\$766,718	Dept. of Agriculture-CSREES	NASA
Martin, Derrel	Biological Systems Engineering	Mathematics
Modeling and Field Experimentation to Determine Effects of Land Terracing-Republican River Basin (CESU)		Evolution of Advanced Electronic Educational Support Material
\$359,800	Dept. of Interior-BR	Brownstone Research Group
Food & Agricultural Sciences National Needs Graduate Fellowship Grants Program		
\$276,000	Dept. of Agriculture-CSREES	
McQuillan, Julia	Sociology	Biological Sciences
* Infertility: Pathways & Psychosocial Outcomes		RCN: DeepFin Will Advance the Phylogeny of "Fishes"
\$229,420	Pennsylvania State University	NSF
Meagher, Michael	Chemical and Biomolecular Engineering	Veterinary and Biomedical Sciences
Recombinant Type E Botulinum Neurotoxin Vaccine		Analyses of Virulence & Attenuation
\$345,756	DynPort Vaccine Company	Determinants of PRRSV using Reverse Genetics
Swanson, Todd	Chemical and Biomolecular Engineering	Dept. of Agriculture-NRICGP
* Optimization of Phytase Production in Pichia Pastoris		Osorio, Fernando
\$372,874	Syngenta	Veterinary and Biomedical Sciences
Inan, Mehmet	Chemical and Biomolecular Engineering	VSV RNA Transcription and Replication
* Proteon Fermentation Protocol Selection		DHHS-NIH-NIAID
\$351,091	Proteon Therapeutics	
Miller, Nancy	Textiles, Clothing and Design	Electrical Engineering
Collaborative Research on Small Business Network Creation and Outcomes for Change and Innovation		* Self-Configuration & Localization in Ad Hoc Wireless Sensor Networks
\$230,011	NSF	\$548,807
		DOD-DEPSCoR
		Goddard, Stephen
		Computer Science and Engineering
Mitra, Amit	Plant Pathology	School of Natural Resources
Efficient Gene Silencing by Intrinsic Direct Repeats: Mechanism & Utilization		Nebraska Statewide Stream Inventory
\$390,000	NSF	Ne Game & Parks Commission
Morris, T. Jack	Biological Sciences	Biological Sciences
The Role of a Host Protein (TIP) in the Resistance Response of Arabidopsis to Turnip Crinkle Virus Infection		Transgenic Virus Resistant Squash: Ecological Effect
\$360,000	Dept. of Energy	Dept. of Agriculture-CSREES
Qu, Feng	Biological Sciences	Biological Sciences
Moxley, Rodney	Veterinary and Biomedical Sciences	Mechanical Engineering
Influence of Enterotoxins on Virulence and Colonization of Porcine Intestine by E.coli		* In Vivo Robotic Camera System for Laparoscopic Surgery
\$270,000	Dept. of Agriculture-NRICGP	DHHS-NIH-NIBIB
Role of A/E Proteins in E.Coli:0157:H7 in Intestinal Colonization of Adult Cattle		Mechanical Engineering
\$370,000	Dept. of Agriculture-NRICGP	
Nickerson, H. Doak		School of Natural Resources
		* Productivity and Biology of Ducks Nesting in the Sandhills of Nebraska
\$300,000		Ne Game & Parks Commission
Noureddini, Hossein	Chemical and Biomolecular Engineering	
\$210,781		
Oglesby, Robert		
\$598,216		
Orr, John		
\$408,752		
Orti, Guillermo		
\$500,000		
Pattnaik, Asit		
\$320,000		
Osorio, Fernando		
\$996,128		
Perez, Lance		
\$548,807		
Goddard, Stephen		
\$329,967		
Pilson, Diana		
\$314,877		
Morris, T. Jack		
\$394,550		
Farritor, Shane		
\$824,969		

Ragsdale, Stephen **Biochemistry**
 Enzymology of Methanogenesis: Mechanism of Methyl-Coenzyme M Reductase
 \$420,000 Dept. of Energy
 Biochemistry of the Anaerobic Dehalogenation of Chlorinated Aromatics
 \$435,000 NSF

Rajca, Andrzej **Chemistry**
 Organic Polymers with Magneto-Dielectric Properties
 \$308,608 DOD-Air Force Off of Sci Rsch
 Ducharme, Stephen Physics & Astronomy
 Very High-Spin Polyradicals & Chiral Pi-Conjugated Systems
 \$555,000 NSF

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

Ramamurthy, Byrav **Computer Science and Engineering**
 Secure Group Communication over Wired & Wireless Networks
 \$349,990 NSF
 Variyam, Vinod Computer Science and Engineering

Ratcliffe, Brett **Entomology**
 A Faunistic Survey of the Dynastinae of Honduras, Nicaragua & El Salvador
 \$342,842 NSF

Redepenning, Jody **Center for Materials Research**
 Chemically Modified Nano-Electrodes for Magneto-electronics Applications
 \$390,000 NSF
 Binek, Christian Physics and Astronomy
 Sokolov, Andrei Physics and Astronomy

Reichenbach, Stephen **Computer Science and Engineering**
 SEI: Information Modeling for Comparative Visualizations & Analyses
 \$351,428 NSF

Reid, John **Mechanical Engineering**
 Investigating the Use of Small Diameter Softwood as Guardrail Posts
 \$280,000 Dept. of Agriculture-FS
 Faller, Ronald Civil Engineering

Reid, Robert **Special Education and Communication Disorders**
 * Leadership Training in Attention Deficit Hyperactivity Disorder
 \$620,006 Dept. of Education

Rilett, Laurence **Civil Engineering**
 Development of State of the Art Traffic Micro-Simulation Model for Nebraska
 \$222,896 Ne Dept. of Roads
 Jones, Elizabeth Civil Engineering
 * Intelligent Transportation System Deployment Project
 \$831,942 Ne Dept. of Roads
 Jones, Elizabeth Civil Engineering
 Khattak, Aemal Civil Engineering

Robertson, Brian **Mechanical Engineering**
 Development of a Novel Inorganic Dielectric Barrier Layer for Magneto-Resistive Junctions
 \$400,000 NSF
 Doudin, Bernard Physics and Astronomy
 Dowben, Peter Physics and Astronomy

Rohde, John **Civil Engineering**
 Midwest States Regional Pooled Fund Program-Yr 16
 \$535,000 Ne Dept. of Roads
 Sicking, Dean Civil Engineering
 Reid, John Mechanical Engineering
 Faller, Ron Civil Engineering

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
 \$345,933 Oregon State University

Rupp, Gary **Veterinary and Biomedical Sciences**
 * Biosecurity Practices/Wholesome Food
 \$249,792 Dept. of Agriculture-CSREES
 Griffin, Dee Veterinary and Biomedical Sciences
 Smith, David R Veterinary and Biomedical Sciences

Samal, Ashok **Computer Science and Engineering**
 * Building Knowledge Discovery & Information Fusion Tools for Collaborative Systems to Adaptively Manage Uncertain Hydrological Resources
 \$552,100 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 Imaging Normal Stress Distribution with Application in Sensing Texture and Feel by Touching
 \$272,156 NSF

Schacht, Walter **Agronomy and Horticulture**
 Grasslands Ecological Monitoring System
 \$608,880 Dept. of Agriculture-RMA-FCIC

Scheffler, Marilyn **Special Education and Communication Disorders**

Project PROMOTE

\$797,184 Dept. of Education
Sanger, Dixie Special Education and Communication Disorders

Project Support: Speech-Language

Pathologists Supporting Literacy Instruction

\$800,000 Dept. 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 Dept. of Education
Hux, Karen Special Education and Communication Disorders

Sellmyer, David **Physics and Astronomy**

* Fundamental & Magnetic-Hardening Studies of

Advanced Nanocomposite Magnets

\$270,000 Dept. of Energy

Shank, Nancy **Public Policy Center**

Bridging the Gap: Information &

Referral Database Interoperability

\$600,000 Dept. of Commerce-NTIA

Shapiro, Charles **Northeast Research and Extension Center**

Improving Organic Farming Systems

across Nebraska Agroecosystems

\$762,949 Dept. of Agriculture-CSREES

Baltensperger, David Panhandle Research and Extension Center

Brandle, James School of Natural Resources

Francis, Charles Agronomy/Horticulture

Knezevic, Stevan Northeast Research and Extension Center

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 Dept. 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 **Educational Psychology**

Leadership Training in Interdisciplinary Collaboration

\$800,000 Dept. of Education

Shield, Jeffrey **Mechanical Engineering**

The Effect of Long-Range Dumbbell Ordering on the Properties &

Microstructures of Rare Earth Permanent Magnets

\$340,000 NSF

Sicking, Dean **Civil Engineering**

Identification of Vehicular Impact Conditions

Associated with Serious Ran-Off-Road Crashes

\$634,521 Natl Coop Hwy Rsch Prog

Khattak, Aemal Civil Engineering

Jones, Elizabeth Civil Engineering

Improved Procedures for Safety Performance

Evaluation of Roadside Features

\$833,940 Natl Coop Hwy Rsch Prog

Reid, John Mechanical Engineering

Rohde, John Civil Engineering

Faller, Ronald Civil Engineering

Siegfried, Blair **Entomology**

A Site Specific Field Corn IPM Program that

Incorporates Transgenic Technology

\$283,913 Pennsylvania State University

* Quantifying Risk Factors for Evolution of European

Corn Borer Resistance to Cry1F Expressing Corn Hybrids

\$346,845 Dept. of Agriculture-CSREES

Simpson, Melanie **Biochemistry**

Role of Hyaluronan in Prostate Cancer Progression

\$326,250 DOD-Army Medical Research

Sincovec, Richard **Computer Science and Engineering**

MRI: Acquisition of High Performance Computing &

Data Visualization for Scientists & Engineers

\$500,000 NSF

Jiang, Hong Computer Science and Engineering

Ramamurthy, Byrav Computer Science and Engineering

Seth, Sharad Computer Science and Engineering

Swanson, David Computer Science and Engineering

Smith, Andrew **University of Nebraska State Museum**

Scarab Biodiversity of Southern South America

\$300,000 NSF

Ocampo, Federico University of Nebraska State Museum

Smith, David R. **Veterinary and Biomedical Sciences**

Intervention Strategies to Reduce

Escherichia Coli O157:H7 in Beef Feedyards

\$500,000 Dept. of Agriculture-NRICGP

Erickson, Galen Animal Science

Hinkley, Susanne Veterinary and Biomedical Sciences

Klopfenstein, Terry Animal Science

Moxley, Rodney Veterinary and Biomedical Sciences

Snow, Gregory **Physics and Astronomy**

* GAANN Fellowships for Physics at UNL

\$380,016 Dept. of Education

Somerville, Greg **Veterinary and Biomedical Sciences**

* Environmental Regulation of

Staphylococcus epidermidis PIA Synthesis

\$367,000 DHHS-NIH-NIGMS

Soukup, Rodney **Electrical Engineering**
 Electronic Devices of Germanium Carbide
 \$270,000 NSF
 Ianno, Natale Electrical Engineering

Specht, James **Agronomy and Horticulture**
 Elevating Protein Content in the North Central
 USA Soybean-Growing States
 \$642,199 Iowa State University-NCSRP
 Graef, George Agronomy and Horticulture
 * Genetic Mapping & Application of SNP DNA Markers in Soybean
 \$291,391 Dept. of Agriculture-ARS

Spreitzer, Robert **Biochemistry**
 Role of the Rubisco Small Subunit
 \$748,000 Dept. of Energy
 * Rubisco Phylogenetic Engineering
 \$202,383 Dept. 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

Starace, Anthony **Physics and Astronomy**
 Dynamics of Few-Body Atomic Processes
 \$996,337 Dept. of Energy
 * Strong Field & Ultrafast Atomic and Molecular Processes
 \$210,000 NSF

Steadman, James **Plant Pathology**
 Bean/Cowpea Collaborative Research Support Program
 \$394,481 Michigan State University
 * Resistance Improvement of Bean thru Multi-Site
 Screening & Pathogen Characterization
 \$204,650 Dept. of Agriculture-ARS

Steffen, David **Veterinary and Biomedical Sciences**
 * Johne's Disease Testing
 \$208,000 Ne Dept. of Agriculture

Stentz, Terry **Construction Management**
 Human Factors in Railway Operation
 \$301,250 Dept. 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
 \$293,690 Harvard School of Public Health

Stone, Julie **Plant Science Initiative/Biochemistry**
 * Role of Transcriptional Regulator in
 Programmed Cell Death & Plant Development
 \$240,000 Dept. of Energy

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

Stubbendieck, James **Great Plains Studies**
 Farm Viability, Farmland Preservation and Smart Growth
 \$308,000 Dept. of Agriculture-NRICGP
 Esseks, J. Dixon Great Plains Studies

Subramanian, Anu **Chemical and Biomolecular Engineering**
 Prep Zirconia Aggregates/Adsorbents in Bioseparations
 \$270,131 NSF

Swanson, David **Computer Science and Engineering**
 US CMS Tier 2 Center
 \$761,000 University of California-Los Angeles
 Bloom, Kenneth Physics and Astronomy
 Dominguez, Aaron Physics and Astronomy
 * 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 Ne Dept. of Roads

Takacs, James **Chemistry**
 Novel Cyclization Reactions for Organic Synthesis
 \$422,500 NSF

Taylor, Steve **Food Science and Technology**
 * Food Allergen Database
 \$346,406 Various Industries
 Midwest Advanced Food Manufacturing Alliance
 \$462,110 Dept. of Agriculture-CSREES
 Allergenicity Evaluation of Isinglass
 \$417,610 Various Industries

Thippareddi, Harshavardhan **Food Science and Technology**
 Understanding and Controlling Listeria Monocytogenes
 Transmission through Ready-to-Eat Meat Products
 \$222,270 Colorado State University
 HACCP Assistance for Small & Very Small Processors with
 Development & Validation of Safe Meat Chilling Processes
 \$599,916 Dept. of Agriculture-CSREES
 Wang, Lijun Biological Systems Engineering
 Weller, Curtis Biological Systems Engineering
 Burson, Dennis Animal Science
 HACCP Training & Research to Assist Meat Processors with
 Process Deviations for Lethality & Stabilization
 \$495,640 Dept. of Agriculture-CSREES
 * Improving Safety of Shell Eggs & Egg Products by
 Addressing Critical Research Needs for Salmonella
 Enteritidis & Salmonella spp
 \$599,951 Dept. 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

Tiller, Dale **School of Engineering Technology**
 Converging Redundant Sensor Network
 Information for Improved Building Control
 \$327,000 Dept. of Energy-Natl Energy Tech
 Henze, Gregor School of Engineering Technology

Torquati, Julia **Family and Consumer Sciences**
 Evaluation of Promising Models and Delivery
 Approaches to Child Care Provider Training
 \$305,393 Iowa State University
 Wilcox, Brian Center on Children, Families and the Law
 Raikes, Helen Center on Children, Families and the Law

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

Tsymbal, Evgeny **Physics and Astronomy**
 Theory of Electronic Magnetic & Transport
 Properties of Nanoscale Magnetic Junctions
 \$300,000 NSF
 Jaswal, Sitaram Physics and Astronomy

* Multiscale Modeling of Magnetic Nanocontacts
 \$200,751 Seagate Technology

Uiterwaal, Kees **Physics and Astronomy**
 Inside a Focused Laser Beam: Molecular Dynamics
 \$442,001 NSF

Umstadter, Donald **Physics and Astronomy**
 Ion Acceleration with High Intensity Lasers
 \$401,277 NSF
 * Laser Produced Coherent X-Ray Sources
 \$270,000 Dept. of Energy

Van Etten, James **Plant Pathology**
 Center for Innovation in Membrane Protein Production
 \$428,684 Univ of California-San Francisco
 Dunigan, David Plant Pathology

Variyam, Vinod **Computer Science and Engineering**
 Studies in Computational Complexity Theory
 \$200,000 NSF

Vasa, Stanley **Special Education and Communication Disorders**
 Project NETS: Nebraska Educational Transition Specialists
 \$798,624 Dept. of Education
 Scheffler, Marilyn Special Education and Communication Disorders

Verma, Shashi **School of Natural Resources**
 * Carbon Sequestration and Global Climate Change
 \$941,161 Dept. of Energy-EPSCoR
 Knops, Johannes Biological Sciences
 Cassman, Kenneth Agronomy and Horticulture

Vidaver, Anne **Plant Pathology**
 Molecular Characterization of
 Clavibacter iranicus & Related Species
 \$318,742 Dept. of Agriculture-ARS

Viljoen, Hendrik **Chemical and Biomolecular Engineering**
 Vortex-Tube Based Thermocycler w/Intelligent Software
 \$350,636 DHHS-NIH-Nat Ctr Rsch Resources
 Gogos, George Mechanical Engineering

Wagner, William **Biological Sciences**
 Communication of Direct Mating Benefits to Females
 \$301,283 NSF

Waldren, Vernon **Southeast Research and Extension Center**
 * HUD Omaha Lead Site
 \$300,000 Dept. of Housing and Urban Development

Walstad, William **Economics**
 Interactive Teaching in Undergraduate Economic Courses
 \$674,928 NSF

Wang, Jun **Computer Science and Engineering**
 CSR-PDOS: Energy-Efficient,
 High-Performance Storage Array Systems
 \$260,000 NSF

Wang, Xinwei **Mechanical Engineering**
 Sub-Surface Structural Damages
 in Laser-Assisted Surface Nanostructuring
 \$249,999 NSF
 Lu, Yongfeng Electrical Engineering

Weeks, Donald **Biochemistry**
 Development of Herbicide-Resistant Plants for
 Environmentally-Safe Production Energy & Biomass Crops
 \$232,000 Consortium for Plant Biotechnology Research

Weisz, Victoria **Center on Children, Families and the Law**
 Nebraska State Court Improvement
 \$861,502 Supreme Court of Nebraska

Weldon, Robert **Biological Sciences**
 Intracellular Targeting of HIV Gag Proteins
 \$393,825 DHHS-NIH-NIAID

Weller, Curtis **Biological Systems Engineering**
Purification Process Influences on Structural & Nutritional Function of Grain Sorghum
\$338,000 Dept. of Agriculture-NRICGP
Carr, Timothy Nutrition and Health Sciences
Schlegel, Vicki Food Science and Technology
Cuppert, Susan Food Science and Technology
Hwang, Keum Taek Industrial Ag Products Center
Wang, Lijun Biological Systems Engineering

Whitbeck, Les **Sociology**
Shonga Ska: Sacred Horse Society Drug Prevention Program
\$433,944 DHHS-NIH-Nat Inst Drug Abuse

White, Brett **Animal Science**
Transcriptional Regulation/Porcine GnRH Receptor Gene
\$287,193 Dept. of Agriculture-CSREES

White, Joseph **Sociology**
Developing an Alcohol Prevention Program with the Dakota
\$384,059 DHHS-NIH-NIAAA
Hoyt, Dan Sociology
Whitbeck, Les Sociology
Godfrey, Joyzelle Sociology

Wiegand, Roger **Mathematics**
GAANN Fellowship Program: Mathematics at UNL
\$633,360 Dept. of Education
Pitts, David Mathematics
Walker, Judy Mathematics
Walker, Mark Mathematics
Bellows, Laurie Graduate Studies

Wiener, Richard **Psychology**
REU Site: Psychology and Law
\$269,280 NSF
Jury Bias in Criminal Cases: Sexual Assault, Homicide and Generic Prejudice
\$233,883 NSF

Wilhite, Donald **School of Natural Resources**
Drought Monitoring, Planning & Mitigation
\$495,371 Dept. of Agriculture-CSREES
Mitigation & Preparedness Technologies for the US
\$589,996 Dept. of Agriculture-CSREES
* Estimating the Impacts of Complex Climatic Events: Drought in Colorado, Nebraska & New Mexico
\$300,000 Dept. of Commerce-NOAA

Willis, Mary **Anthropology and Geography**
Anterior Dentition and Restoration Among Nuer and Dinka Refugees from Sudan
\$227,459 The Jacob and Valeria Langeloth Foundation

Wilson, Brent **Mechanical Engineering**
Development of Improved Product Performance through Optimization & Modeling of Engineering Materials Processing & Function
\$341,179 Brenco/Amsted Industries

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.

Witkowski, John **Northeast Research and Extension Center**
Integrated Network for Tribal College Community Watershed Natural Resources Education
\$237,105 Iowa State University

Woldt, Wayne **Biological Systems Engineering**
* Advancing Onsite Wastewater Treatment in Nebraska
\$259,742 Ne Dept. of Environmental Quality
Skipton, Sharon Southeast Research and Extension Center

Wood, Charles **Biological Sciences**
* AIDS and Cancer Specimen Bank
\$320,442 George Washington University

Woodward, Gordon **Mathematics**
Increasing Participation in Computer Science, Engineering, & Mathematics through NSF Scholarships at UNL
\$400,000 NSF
Ballard, John Engineering & Technology
Ramamurthy, Byrav Computer Science and Engineering
Goddard, Steve Computer Science and Engineering
Lee, Kevin Arts & Sciences
Nebraska REU in Applied Mathematics
\$223,987 NSF
Rebarber, Richard Mathematics

Wortmann, Charles **Agronomy/Horticulture**
Integrated Approach to Reduced Risk of Phosphorus Pollution of Surface Waters in Crop-Livestock Based Managed Ecosystems of the Midwest
\$235,839 Nebraska Corn Board
Erickson, Galen Animal Science
Schulte, Dennis Biological Systems Engineering
Franti, Tom Biological Systems Engineering
Jose, H. Douglas Agricultural Economics

Yamamoto, Catherine **Student Affairs**
Upward Bound-Lincoln
\$938,496 Dept. of Education
Upward Bound Math/Science Project
\$891,664 Dept. of Education

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**
 Nebraska AgrAbility
 \$800,000 Dept. of Agriculture-CSREES
 Baquet, Alan Agricultural Economics

Zempleni, Janos **Nutrition and Health Sciences**
 * Biotin Affects Cytokine Metabolism
 \$409,586 Dept. of Agriculture-NRICGP
 * Epigenetic Effects of Biotin on Activation of
 Endogenous Viral Sequences
 \$401,959 DHHS-NIH-NIEHS

Zeng, Xiao Cheng **Chemistry**
 Crystallization and Interfacial Properties of Silicon
 \$235,000 Dept. of Energy
 ITR: Multiscale Treatment of Systems with Strong Heterogeneities
 \$715,121 NSF
 Diestler, Dennis Agronomy and Horticulture
 Feng, Ruqiang Engineering Mechanics

Zera, Anthony **Biological Sciences**
 Enzymatic and Molecular Bases of Trade-Offs in
 Lipid Metabolism that Underlie Life History Trade-Off
 \$423,682 NSF
 Harshman, Lawrence Biological Sciences
 Morph-Dependent Cyclic JH Titer in a Wing-Polymorphic
 Insect: Adaptive Significance & Underlying Causes
 \$321,626 NSF
 Harshman, Lawrence Biological Sciences
 Physiological & Molecular Causes of Genetic
 Variation/Covariation in Endocrine Regulation
 \$372,000 NSF

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

Career and K Awards

Active awards in 2006
 * Indicates new in 2006

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
 \$623,918 NSF



Becker, Donald
 Biochemistry
 Spectrochemical Studies of Novel PutA
 Flavoprotein
 \$314,250 NSF



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



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



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



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

**Gursoy, Mustafa**

Electrical Engineering

CAREER: Energy-Efficient Wireless Communications under Channel Uncertainty

\$400,000

NSF

**Orti, Guillermo**

Biological Sciences

Molecular Systematics of Ray-Finned Fishes

\$533,295

NSF

**Perez, Lance**

Electrical Engineering

Channel Coding for Satellite and Mobile Communications

\$269,880

NSF

**Scott, Stephen**

Computer Science and Engineering

Making Exponential-Time Learning Algorithms Efficient

\$299,952

NSF

**Wang, Lily**

School of Engineering Technology

Integrating Time-Variant Source Directivity into Architectural Acoustic Auralizations

\$401,376

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

\$670,826

DHHS-NIH-NIMH

**Kiviniemi, Marc**

Psychology

Affect & Decision Making for Cancer-Related Behaviors

\$535,692

DHHS-NIH-NCI

**Sayood, Khalid**

Electrical Engineering

Identification of Biological Materials of Unknown Origin

\$764,005

DHHS-NIH-NIBIB

**Tyler, Kimberly**

Sociology

Neglect and Abuse Histories Among Homeless Young Adults

\$659,525

DHHS-NIH-NIMH

Arts and Humanities Awards \$50,000 or more

Active awards in 2006
* Indicates new in 2006

Cahan, David

A Biography of Hermann von Helmholtz

\$102,868
1/1/05 – 12/31/07



David Cahan, Charles Bessey Professor and professor of history, is writing a full-scale, definitive biography of Hermann von Helmholtz (1821-1894), one of the major figures of modern science. The biography will provide a fresh account of Helmholtz's personal life within the context of his family, schooling and friends, and portray and analyze his working life as a scientist—principally as a physiologist and physicist, but also as a leader in other fields (chemistry, mathematics, psychology and meteorology), all within the context of German science. It will show how he represented the aims, results and image of science to the educated but otherwise non-scientific classes of Europe and America. It also will show the implications of contemporary science that he drew for the fine arts, medicine, industry and society at large. The extensive use of correspondence means the work will be the first new modern biography of Helmholtz as well as one of the most detailed biographies of a scientist ever published.

History

NSF

Kooser, Ted

American Life in Poetry Project

\$125,000
1/1/05 – 12/31/07



The Poetry Foundation, in partnership with the Library of Congress, supports the American Life in Poetry project, an initiative of Ted Kooser, the 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.

English

Poetry Foundation

Price, Kenneth

Walt Whitman Archive

\$500,000
8/1/05 – 3/31/09



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

English

National Endowment for the Humanities

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.

The Walt Whitman Hypertext Archive

\$200,000
5/1/03 – 4/30/06

National Endowment for the Humanities

Price is also part of a project to produce The Walt Whitman Hypertext Archive, which will build on, enhance and contextualize the 22-volume Collected Writings of Walt Whitman by publishing a comprehensive on-line Walt Whitman archive website. The project involves encoding all materials in the Collected Writings and editing, encoding, linking and annotating all remaining materials, including the vast archive of Whitman's poetry manuscripts.

Walter, Katherine

Interoperability of Metadata Standards for Digital Thematic Research Collections

\$169,651
11/1/05 – 10/31/07

Institute of Museum and Library Services

Price, Kenneth
Bolin, Mary
Barney, Brett

Libraries

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.

Benjamin A. Botkin Collection-Preservation/Access

\$97,435
7/1/01 – 6/30/06

National Endowment for the Humanities

Walter is also using a National Endowment for the Humanities grant to preserve a vast collection of materials from the Benjamin A. Botkin Collection of Applied American Folklore and microfilming it to improve its accessibility to scholars and the public. Botkin was national folklore editor of the Federal Writers Project and

chief of the Library of Congress Archive of American Folk Song. The collection adds to the understanding of this discipline in development and it consists of 8,000 books, 447 linear feet of archival materials and 700 recordings. The project preserves 291 linear feet on microfilm and also preserves 200 sound recordings made by Botkin himself.

**Implementation Grants for Special Projects—
Journals of Lewis and Clark Online Edition**

\$222,177 National Endowment for the Humanities
Dunham, Gary University Press
9/1/03–8/31/05

Walter and Gary Dunham, University of Nebraska Press director, are using a National Endowment for the Humanities grant to create an on-line edition of the Journals of the Lewis and Clark Expedition, edited by Gary E. Moulton, UNL professor emeritus of history. The interdisciplinary team is drawn from the UNL Libraries, the University of Nebraska Press, and the Center for Great Plains Studies. The site will also feature supplementary texts relating to Euro-American and Native perspectives on the Lewis and Clark expedition, images, and audio files of poet William Kloefer reading selected passages. Online searchability will make the website a useful resource for scholars and the general public. The project is timed to coincide with the bicentennial commemoration of Lewis and Clark's expedition.

Arts and Humanities Awards

\$5,000-\$49,999

Active awards in 2006

* Indicates new in 2006

Brooke, Robert **English**

Voices from Young Citizens: Writing from Rural Nebraska
Youth Involved in Place Conscious Education

\$8,100 Nebraska Humanities Council

Dunham, Gary **University Press**

Moravian Springplace Mission among the Cherokees

\$20,000 National Historic Publications and Records

Publication of "Beaver Steals Fire"

\$6,000 Montana Committee for Humanities

Engen-Wedin, Nancy **Lied Center for Performing Arts**

* ArtsReach

\$41,500 Nebraskans for the Arts

* Umo'ho Cultural Arts Program

\$11,250 Kennedy Center for Performing Arts

Handa, Rumiko **Architecture**

Spirit of Design: Multidisciplinary,
Multimedia Database and Website

\$12,000 Graham Foundation

Potter, James Architecture

Randolph, Ladette **University Press**

* Access to Artistic Excellence: International Translations

\$25,000 National Endowment for the Arts

Steger, Paul **Johnny Carson School of Theatre and Film**

* Nebraska Repertory Theatre Statewide

\$7,210 Nebraska Arts Council

Walter, Katherine **University Libraries**

Quilt Index National Leadership Project

\$20,000 Michigan State University

Crews, Patricia Textiles, Clothing and Design

Homestead – Broken Bow Microfilming Project (CESU)

\$20,000 Dept. of Interior-NPS

Edwards, Rick Economics

Weiss, Wendy **Textiles, Clothing and Design**

* Hillestad Textiles Gallery

\$5,285 Friends of the Hillestad Textiles Gallery

PATENTS ISSUED IN 2006

Recognition for faculty who received patents

UNL faculty indicated in red

Alfano, James

Biological Sciences

Title: DNA Molecules and Polypeptides of Pseudomonas Syringae

HRP Pathogenicity Island and Their Uses

Description: Novel pharmaceutical targets

Date: September 5, 2006

No. 7,102,059

Country: United States

Jorgensen, James

Electrical Engineering

Title: Sound Generating Apparatus for Use with Gloves and Similar

Articles

Description: Cheer gloves

Date: May 2, 2006

No. 7,038,575

Country: United States

Klopfenstein, Terry J.

Animal Science

Title: Rumen Inert Oil

Description: Ruminant feed

Date: 1/3/2006

No. PI9609476-1

Country: Brazil

Oleynikov, Dmitry; **Farritor, Shane Michael**; Hadzialic, Adnan;

Platt, Stephen

Mechanical Engineering

Title: Microrobot for Surgical Applications

Description: Miniature surgical robot

Date: May 9, 2006

No. 7,042,184

Country: United States

Redepinning, Jody

Chemistry

Title: Electrolytic Deposition of Coatings for Prosthetic Metals and

Alloys

Description: Bone-like coating for prosthetics

Date: 3/21/2006

No. 7,014,749

Country: United States

Weeks, Donald

Biochemistry

Title: Methods and Materials for Making and Using Transgenic

Dicamba-Degrading Organisms

Description: Dicamba resistant crops

Date: March 2, 2006

No. 558,838

Country: Republic of Korea

Date: March 9, 2006

No. 528,010

Country: New Zealand

Date: April 4, 2006

No. 7,022,896

Country: United States

Date: September 12, 2006

No. 7,105,724

Country: United States

2006 INTELLECTUAL PROPERTY LICENSES

UNL faculty indicated in red

Licensee: Apath

Description: Influenza plasmids

Inventor: **Donis, Rueben**

Department: Veterinary and Biomedical Sciences

Licensee: Arrow Seed Co. Inc.

Description: Beefmaker variety of intermediate wheatgrass

Inventors: **Baltensperger, David D.**; Nicholson, R.A.; **Reece, Patrick**; Schuman, G.; **Vogel, Kenneth**

Department: Agronomy and Horticulture

Licensee: Arrow Seed Co. Inc.

Description: Bonanza variety of big bluestem grass

Inventors: **Anderson, Bruce; Klopfenstein, Terry; Mitchell, Robert; Vogel, Kenneth**

Department: Agronomy and Horticulture, Animal Science

Licensee: Bauer, Dennis

Description: Beefmaker variety of intermediate wheatgrass

Inventors: **Baltensperger, David D.**; **Reece, Patrick; Vogel, Kenneth**; Schuman, G.; Nicholson, R.A.

Department: Agronomy and Horticulture

Licensee: Biotechnology Research and Development Corporation

Description: Technology related to male sterility in plants

Inventors: Abdelnoor, Ricardo Vilela; **Mackenzie, Sally**

Department: NRI Center for Biotechnology

Licensee: Blooms of Bressingham

Description: Sweet Joanne penstemon hybrid

Inventors: **Lindgren, Dale Tennis; Todd, Kim**

Department: Agronomy and Horticulture

Licensee: Cereplast Inc.

Description: Water resistant degradable foam, biodegradable polymers

Inventors: Biby, Gerald D.; Chinnaswamy, Rangaswamy; **Fang, Qi; Hanna, Milford A.**

Department: Biological Systems Engineering, Industrial Ag Products Center

Licensee: DTL Controls, LLC

Description: Air flow conductors

Inventor: **Liu, Mingsheng**

Department: Architecture

Licensee: E-Tech

Description: Conductive concrete overlay for bridge deck de-icing

Inventors: **Chen, Bing; Nguyen, Lim; Tuan, Christopher**

Department: Civil Engineering, Computer and Electronics Engineering

Licensee: Gayland Ward Seed Co. Inc.

Description: Atlas brm-12 variety of forage sorghum

Inventors: **Funnell, Deanna**; Grant, Richard; Oliver, Amanda; **Pedersen, Jeffrey; Toy, John**

Department: Agronomy and Horticulture, Plant Pathology

Licensee: GC Image

Description: Software for processing data from comprehensive two-dimensional gas chromatography

Inventor: **Reichenbach, Stephen**

Department: Computer Science

Licensee: Intellectual Ventures

Description: Communications, memory and circuitry technologies

Inventors: Algrain, Marcello C.; Bandyopadhyay, Supriyo; Ehlers, Doug; Hardt, Stephen L.; **Hoffman, Michael; Nguyen, Lim; Sayood, Khalid**; Zhu, Quiming

Department: Computer and Electronics Engineering, Computer Science, Electrical Engineering

Licensee: Laursen, Daniel

Description: Beefmaker variety of intermediate wheatgrass

Inventors: **Baltensperger, David D.**; Nicholson, R.A.; **Reece, Patrick**; Schuman, G.; **Vogel, Kenneth**

Department: Agronomy and Horticulture

Licensee: Nebraska Surgical Solutions, Inc.

Description: Surgical miniature robotic device

Inventors: Oleynikov, Dmitry; **Farritor, Shane Michael**; Hadzialic, Adnan; **Platt, Stephen**

Department: Mechanical Engineering

Licensee: The Seed Company

Description: Varieties of high protein soybeans, high sucrose soybeans, and high yield soybeans

Inventor: **Graef, George**

Department: Agronomy and Horticulture

Licensee: Star Seed Inc.

Description: Bonanza variety of big bluestem grass

Inventors: **Anderson, Bruce; Klopfenstein, Terry; Mitchell, Robert; Vogel, Kenneth**

Department: Agronomy and Horticulture, Animal Science

Licensee: Star Seed Inc.

Description: Goldmine variety of big bluestem

Inventors: **Anderson, Bruce; Klopfenstein, Terry; Mitchell, Robert; Vogel, Kenneth**

Department: Agronomy and Horticulture, Animal Science

Licensee: Stock Seed Farm

Description: Bonanza variety of big bluestem grass

Inventors: **Anderson, Bruce; Klopfenstein, Terry; Mitchell, Robert; Vogel, Kenneth**

Department: Agronomy and Horticulture, Animal Science

Licensee: Todd Valley Farms

Description: NE-KYB-05-001 variety of Kentucky bluegrass

Inventors: **Riordan, Terrance P.; Shearman, Robert C.; Wit Jr., Leonard A.**

Department: Agronomy and Horticulture

CREATIVE WORKS IN FINE AND PERFORMING ARTS

Faculty who created, performed or produced creative works
in fine and performing arts, nationally or internationally

Bailey, John R.

School of Music

Performer, invited recital for the National Flute Association national convention, *Flute and Piano Works of Theodor Blumer*, Pittsburgh, Pa., with Laura Silverman, pianist, University of Akron. Conductor, The American Flute Orchestra tour in Russia, Latvia, and Estonia.

Barnes, Paul E.

School of Music

Performer, recording of *American Piano Concertos*, Albany, N.Y. Performer, recording of *Philip Glass Piano Concerto No. 2 (After Lewis and Clark)*, New York, N.Y. Author, sheet music, *Orphee Suite for Piano*, London, U.K.

Brown, Joann

Teaching, Learning & Teacher Education

Artist, mixed media image, *The Interconnectness Of All*, Ink People Gallery, Eureka, Calif.

Bybee, Ariel

School of Music

Soloist, Thirteenth American Music Festival, Chinese government.

Chang-Barnes, Ann

School of Music

Performer, piano, world premiere concert, St. Petersburg, Russia, of newly arranged works of Astor Piazzolla for piano and cello quartet, with the Rastrelli Cello Quartet. Performer, piano, International Fortepiano Forum, Poeke, Belgium.

Clinton, Mark K.

School of Music

Performer, piano, guest soloist with the Prince George's Philharmonic, College Park, Md. Performer, piano, 2006 Ameropa International Chamber Music Festival, Prague, Czech Republic, with Min Kwon, piano; John Lindsey, violin; Karen Becker, cello; and French mezzo-soprano Anne Donnadieu. Performer, piano, guest artist at the 2006 Illinois Chamber Music Festival, with Julieta Mihai, violin; John Lindsey, violin; Lisa Nelson, viola; Nina Gordon, cello; Amy Flores, cello.

Eklund, Peter A.

School of Music

Conductor, 200-voice honor choir with performances in Italy, France, Germany, Austria. Conductor, international convention in Kuala Lumpur, Malaysia.

Fritz, Dana

Art & Art History

Artist, photography, *Garden Views: the Culture of Nature*, University Gallery, Pittsburg State University, Pittsburg, Kan. Artist, photography, *Back to Nature*, Contemporary Artists Center, North Adams, Mass.

Fuelberth, Rhonda J.

School of Music

Performer, peer-reviewed performance, University Women's Chorale appearance, MENC National Convention, Salt Lake City, Utah.

Hanrahan, Kevin**School of Music**

Performer, guest artist voice recital, Pune, India, with Priya Palekar, soprano; Roberta Swedien, piano.

Performer, voice recital, *Die Schöne Müllerin*, Mumbai, India, with Robert Swedien, piano.

Horvay, Martha**Textiles, Clothing & Design**

Artist, collage, *Washing Dishes and Gazing West*, A.I.R. Gallery, New York, N.Y.

James, Michael F.**Textiles, Clothing & Design**

Artist, quilts, *Night Sky 1*, Fuller Craft Museum, Brockton, Mass.; *Material Things*, The Sawmill Gallery, James Madison University, Harrisonburg, Va., with Frankie Flood, Denise Pelletier, Laura Strand; *Smoke Signals*, Indianapolis Museum of Art; *Material Difference: Soft Sculpture and Wall Works* from Midwest Collections, Chicago Cultural Center, *Hanging in the Balance* and *At or Near the Surface*, Fifth International Fiber Biennial, Snyderman-Works Galleries, Philadelphia, Pa.; *At or Near the Surface*, Explorations II: Quilts by the Faculty of the Quilt Surface Design Symposium, Ohio Craft Museum, Columbus, Ohio; *Sky/Wind Variations 2*, Studio Art Quilt Associates: The Creative Force, Fall International Quilt Market and International Quilt Festival, Houston, Texas; *The Nature of Truth (The Truth of Nature)*, *Tied Together: Textile Art in the 21st Century*, Chandler Center for the Arts, Chandler, Ariz.; exhibited quilts using various techniques, *Michael James Studio Quilts*, La Linguella Cultural Arts Center, Portoferrario, Italy; *Quilts from the Collection of Penny Nii*, Gualala Arts, Gualala, Calif.; *Abstraction No. 6: Afterimage*, Embassy of the United States of America, Seoul, South Korea; *Recent Work in Digital Textiles*, Festival of Quilts, National Exposition Center, Birmingham, U.K.

Solo exhibit, Racine Art Museum, Racine, Wis., included five new works and loaned works from the International Quilt Study Center collection. The exhibition was featured in the June/July 2006 issue of *American Craft Magazine*. *Home Economics*, entered into the permanent collection of the Racine Art Museum.

Kendall, Gail M.**Art & Art History**

Artist, ceramics, Woodfire Conference Invitational Exhibition, University of Northern Arizona, Flagstaff, Ariz.

Artist, ceramics, Art School At Old Church, pottery exhibition, Demarest, N.J.

Shomos, William H.**School of Music**

Artist, stage director for Nevada Opera's *Die Zauberflaute* by Wolfgang Amadeus Mozart.

Stage director for Nevada Opera's Summer Festival production of *Così fan tutte* by Wolfgang Amadeus Mozart.

Artist, stage director for La Musica Lirica's production of *Il Campanello* by Gaetano Donizetti, Novafeltria, Italy.

Trout, Barbara L.**Textiles, Clothing & Design**

Artist, silk dress, *In the Spirit of the Deertailed Dress*, Russell Hill Rogers Galley, Southwest School of Art, San Antonio, Texas.

Artist, exhibited headpiece in multimedia, *Empress Bonnet*, Creative Grand Crossings, Grand Rapids, Mich.

Artist, multi-component neckpiece, *Priestess Collar*, Celebration: Spiritual Exhibit, Grand Rapids, Mich.

Weiss, Wendy R.**Textiles, Clothing & Design**

Artist, set for an outdoor performance, *Curlers*, Smoky Hill River Festival, Salina, Kan.

Artist, handwoven naturally dyed silk fabric mounted on wood, *Invitation, The Space of Change*, District of Columbia Art Center, Washington, D.C., with Jay Kreimer.

Artist, textile, sound and movement installation, *Ground Shift*, Washington D.C., with Jay Kreimer.

White, Darryl A.**School of Music**

Artist, panelist adjudicator, National Foundation for Advancement in the Arts, Miami, Fla.

Performer and lecturer, director of the Clifford Brown/Stan Getz All-Stars, Annual Monterey Jazz Festival, Monterey, Calif.

Featured artist in a jazz performance, American Jazz Museum, Blue Room, Kansas City, Missouri.

Performer and lecturer, performances at Lincoln Center and the Conference Main Stage, International Association for Jazz Educators Conference, New York, N.Y.

Williams, Sandra M.**Art & Art History**

Artist, *The Seven Mysteries*, solo exhibition of mixed media, Crystal Lake, Ill. and Ashland, Ore.

BOOKS

Recognition for faculty who have written books
UNL faculty indicated in red

Andrews, Larry

Language Exploration and Awareness 3rd Ed.; Mahwah, N.J., Lawrence Erlbaum, 2006. (Teaching, Learning & Teacher Education)

Archer, J. Clark; Lavin, Stephen J.; Martis, Kenneth C.; Shelley, Fred M.

Historical Atlas of US Presidential Elections, 1788-2004; Washington, D.C., Congressional Quarterly Press, 2006. (Anthropology & Geography)

Avolio, Bruce J.; Luthans, Fred

The High Impact Leader; New York, N.Y., McGraw Hill, 2006. (Management)

Bauer, Grace; Kane, Julie, eds.

Umpteen Ways of Looking at a Possum: Critical and Creative Responses to Everette Maddox; New Orleans, La., Xavier Review Press, 2006. (English)

Bauer, Grace

Beholding Eye; Cincinnati, Ohio, Custom Words, 2006. (English)

Beaver, Gregory L.

PEAR Installer Manifesto; London, U.K., Packt Publishing, 2006. (School of Music)

Berens, Charlyne

Chuck Hagel: Moving Forward; Lincoln, Neb., University of Nebraska Press, 2006. (Journalism & Mass Communications)

Bicknell-Holmes, Tracy; Logan-Peters, Kay

External Review for Promotion and Tenure; Washington, D.C., Association of Research Libraries, 2006. (University Libraries)

Bryant, Miles

Horse Smiling and Other Moments Recollected in Nebraska; Lincoln, Neb., B Street Press, 2006. (Educational Administration)

Burnett, Amy N.

Teaching the Reformation: Ministers and Their Message in Basel, 1529-1629; New York, N.Y., Oxford University Press, 2006. (History)

Burnett, Amy N.; Goodburn, Amy; Savory, Paul; Bernstein, Daniel

Making Teaching and Learning Visible: Course Portfolios and the Peer Review of Teaching; Bolton, Mass., Anker, 2006. (History, English, Industrial and Management Systems Engineering)

Burnett, Stephen G; Bell, Dean Phillip, eds.

Jews, Judaism and the Reformation in Sixteenth Century Germany; Leiden, Netherlands, Brill, 2006. (Classics & Religious Studies, History)

Carr, Thomas M.

Voix des abbesses du Grand Siècle: la prédication au féminin à Port-Royal; Tubingen, Germany, Gunter Narr Verlag, 2006. (Modern Languages & Literatures)

Dalla, Rochelle L.

Exposing the "Pretty Woman" Myth: A Qualitative Investigation of Street-Level Prostituted Women; Lanham, Md., Lexington Publishers, Inc., 2006. (Family & Consumer Sciences)

DeFrain, John D.; Olson, David H.

Marriages and Families: Intimacy, Diversity, and Strengths, 5th Ed.; New York, N.Y., McGraw-Hill, 2006. (Family & Consumer Sciences)

DeFrain, John D.; Dahl, Susan; Campbell, John S.

We Cry Out: Living with Developmental Disabilities; Lincoln, Neb., iUniverse, 2006. (Family & Consumer Sciences)

DeFrain, John D.; Lodi, Kathleen A.; Brand, Gail L.; Fenton, Ann M.; Friesen, Jeanette L.; Hanna, Janet S.

Family Treasures: Creating Strong Families; Lincoln, Neb., University of Nebraska-Lincoln Extension, 2006. (Family & Consumer Sciences)

Digman, Lester A.

Strategic Management: Competing in the Global Information Age, 8th Ed.; Mason, Ohio, Thomson Custom Solutions, 2006. (Management)

Dixon, Wheeler Winston, ed.

American Cinema of the 1940s; New Brunswick, N.J., Rutgers University Press, 2006. (English)

Dixon, Wheeler Winston

Visions of Paradise; New Brunswick, N.J., Rutgers University Press, 2006. (English)

Driskell, Judy A.; Wolinsky, Ira, eds.

Sports Nutrition: Vitamins and Trace Elements, 2nd Ed.; Boca Raton, Fla., CRC Press, 2006. (Nutrition & Health Sciences)

Edwards, Richard, ed.

Nebraska 1875: Its Advantages, Resources, and Drawbacks; Lincoln, Neb., University of Nebraska Press, 2006. (Economics)

Gladyshev, Vadim N.; Hatfield, Dolph L.; Berry, Marla J., eds.

Selenium: Its Molecular Biology and Role in Human Health; New York, N.Y., Springer, 2006. (Biochemistry)

Grady, Marilyn L.; Brock, Barbara

Developing a Teacher Induction Plan; A Guide for School Leaders; Thousand Oaks, Calif., Corwin Press, 2006. (Educational Administration)

Grady, Marilyn L.; Brock, Barbara

From First Year to First Rate, 3rd Ed.; Thousand Oaks, Calif., Corwin Press, 2006. (Educational Administration)

Grady, Marilyn L.

194 High-Impact Letters for Busy Principals: A Guide for Handling Difficult Correspondence, 2nd Ed.; Thousand Oaks, Calif., Corwin Press, 2006. (Educational Administration)

Grange, William

Historical Dictionary of German Theater; Lanham, Md., The Scarecrow Press, 2006. (Johnny Carson School of Theatre and Film)

Gruhl, John; Welch, Susan; Comer, John; Rigdon, Susan M.

American Government, 10th Ed.; Belmont, Calif., Thomson Wadsworth, 2006. (Political Science)

Hamann, Ted; Meltzer, Julie

Multi-Party Mobilization for Adolescent Literacy in a Rural Area: A Case Study of Policy Development and Collaboration; Providence, R.I., Education Alliance at Brown University, 2006. (Teaching, Learning & Teacher Education)

Hamann, Ted; Meltzer, Julie

Meeting the Needs of Adolescent English Language Learners for Literacy Development and Content Area Learning, Part Two: Focus on Classroom Teaching and Learning Strategies; Providence, R.I., Education Alliance at Brown University, 2006. (Teaching, Learning & Teacher Education)

Harnisch, Delwyn L.; Kimpton, P.

Scale Your Way to Musical Assessment: The Ultimate Guide to Creating a Quality Music Program; Downers Grove, Ill., Music Performance Assessment Experts Inc., 2006. (Teaching, Learning & Teacher Education)

Hefle, Susan L.; Koppelman, Stef J., eds.

Detecting Allergens in Foods; Cambridge, U.K., Woodhead Publishing Ltd, 2006. (Food Science & Technology) Dr. Hefle died in August of 2006.

Honey, Maureen

Shadowed Dreams: Women's Poetry of the Harlem Renaissance, 2nd Ed., revised and expanded; New Brunswick, N.J., Rutgers University Press, 2006. (English)

Hope, Debra A.; Heimberg, Richard G.; Turk, Cynthia L.

Therapist Guide for Managing Social Anxiety: A Cognitive-Behavioral Therapy Approach; New York, N.Y., Oxford, 2006. (Psychology)

Housh, Terry J.; Housh, D. J.; deVries, H.A.

Applied Exercise and Sport Physiology, 2nd Ed.; Scottsdale, Ariz., Holcomb Hathaway Publishers, 2006. (Nutrition & Health Sciences)

Hutkins, Robert W.

Microbiology and Technology of Fermented Foods; Ames, Iowa, Blackwell-IFT Press, 2006. (Food Science & Technology)

Isernhagen, Jody C.

Portraits of Excellence Year Five Report, Comprehensive Evaluation of Nebraska School Based Teacher-Led Assessment and Reporting System (STARS); Lincoln, Neb., Nebraska Department of Education, 2006. (Educational Administration)

Jameson, Mary Liz; Ratcliffe, Brett C., eds.

Scarabaeoidea in the 21st Century: a Festschrift Honoring Henry F. Howden; Athens, Ga., Coleopterists Society, 2006. (Museum, Entomology)

Kaul, Robert B.; Sutherland, David M.; Rolfsmeier, Steven R.

The Flora of Nebraska; Lincoln, Neb., School of Natural Resources, UNL, 2006. (Museum)

Kooser, Ted; Cox, Steve

Writing Brave and Free; Lincoln, Neb., University of Nebraska Press, 2006. (English)

Krone, Kathleen J.; Putnam, Linda L., eds.

Organizational Communication; London, U.K., SAGE Publications, 2006. (Communication Studies)

Lee, Sang M.; Olson, David L.

Introduction to Management Science, 3rd Ed.; Cincinnati, Ohio, Thomson Publishers, 2006. (Management)

Lepard, Brian

Section 482 Allocations: Judicial Decisions and IRS Practices; Washington, D.C., Bureau of National Affairs, 2006. (Law)

Luthans, Fred; Youssef, Carolyn M.; Avolio, Bruce J.

Psychological Capital; New York, N.Y., Oxford University Press, 2006. (Management)

Moshman, David

The Daughters of the Plaza de Mayo; New York, N.Y., iUniverse, 2006. (Educational Psychology)

Murphy, Linda L.; Spies, Robert A.; Plake, Barbara S., eds.

Tests in Print VII; Lincoln, Neb., Buros Institute of Mental Measurements, 2006. (Educational Psychology)

Olson, David L.; Shi, Yong

Introduction to Business Data Mining; New York, N.Y., McGraw-Hill/Irwin, 2006. (Management)

Rack, Frank R.; Rothwell, R. Guy; Ribes, Alfonso; Tsintzouras, George; Damaskinos, Savas; Dixon, A.E.; Freifeld, Barry; Kneafsey, T.J.; Chen, Q.; Balcom, Bruce

New Techniques in Sediment Core Analysis; London, U.K., Geological Society Publishing House, 2006. (Geosciences)

Rader, Benjamin G.

American Ways: A History of American Cultures, 2nd Ed.; Belmont, Calif.; Thomson Wadsworth, 2006. (History)

Raikes, Helen H.; Whitmer, Jane M.

Beautiful Beginnings: A Developmental Curriculum for Infants and Toddlers.; Baltimore, Md., Brookes Publishing Company, 2006. (Family & Consumer Sciences)

Ratcliffe, Brett C.; Cave, Ronald D.

The Dynastine Scarabs of Honduras, Nicaragua, and El Salvador (Coleoptera: Scarabaeidae); Lincoln, Neb., University of Nebraska State Museum, 2006. (Museum, Entomology)

Reid, Robert; Lienemann, Torri

Strategy Instruction for Students with Learning Disabilities; New York, N.Y., Guilford, 2006. (Special Education & Communication Disorders)

Ritchie, Joy S.; Ronald, Kate

Teaching Rhetorica: Theory, Pedagogy, Practice; Portsmouth, N.H., Boynton/Heinemann, 2006. (English)

Ruser, Kevin; Lubken, Deanna

Nebraska Chapter 7 Consumer Bankruptcy Manual; Lincoln, Neb., Law College Education Services, 2006. (Law)

Sayood, Khalid

Introduction to Data Compression 3rd Ed.; New York, N.Y., Elsevier, 2006. (Electrical Engineering)

Schniederjans, Marc J.; Schniederjans, Ashlyn M.; Schniederjans, Dara G.

Outsourcing Management Information Systems; Hershey, Pa., Idea Group Publishing, 2006. (Management)

Seefeldt, Douglas; Hantman, Jeffrey L.; Onuf, Peter S., eds.

Across the Continent: Jefferson, Lewis and Clark and the Making of America; Charlottesville, Va., University of Virginia Press, 2006. (History)

Sellmyer, David J.; Skomski, Ralph, eds.

Advanced Magnetic Nanostructures; Berlin, Germany, Springer, 2006. (Physics & Astronomy)

Sellmyer, David J.; Liu, Yi; Shindo, D., eds.

Handbook of Advanced Magnetic Materials; Berlin, Germany, Springer, 2006. (Physics & Astronomy)

Siau, Keng L., ed.

Advanced Topics in Database Research Vol. 5; Hershey, Pa., Idea Group Publishing, 2006. (Management)

Spencer, Nicholas

After Utopia: The Rise of Critical Space in Twentieth Century American Fiction; Lincoln, Neb., University of Nebraska Press, 2006. (English)

Steinweis, Alan E.

Studying the Jew: Scholarly Antisemitism in Nazi Germany; Cambridge, Mass., Harvard University Press, 2006. (History)

Steinweis, Alan E.; Gassert, Philipp, eds.

Coping with the Nazi Past: West German Debates About Nazism and Generational Conflict, 1955-1975; New York, N.Y., Berghahn Books, 2006. (History)

Taylor, Stephen L., ed.

Advances in Food and Nutrition Research, Volume 51; San Diego, Calif., Academic Press, 2006. (Food Science & Technology)

Woody, Robert H.; Lehmann, Andreas C.; Sloboda, John A.

Psychology for Musicians: Understanding and Acquiring the Skills; New York, N.Y., Oxford University Press, 2006. (School of Music)

Zellmer, Sandra B.; Laitos, Jan; Wood, Mary; Cole, Daniel

Natural Resources Law; St. Paul, Minn., Thomson/West, 2006. (Law)

2006 RECOGNITIONS AND HONORS

Faculty who have been elected to or who have received national or international honors

Braake, Myron **Plant Pathology (Emeritus)**
National Academy of Science Membership

Kooser, Ted **English**
U.S. Poet Laureate Consultant in Poetry to the Library of Congress

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

Van Etten, James **Plant Pathology**
National Academy of Science Membership

Abbott, Douglas A. **Family & Consumer Sciences**
Fulbright Scholar, U.S. Fulbright Foundation

Albrecht, Julie **Nutrition & Health Sciences**
President's Volunteer Service Award, President's Council on Service and Civic Participation

Anderson, John **Economics**
Contributor to the *Economic Report of the President*, President's Council of Economic Advisers

Archer, J. Clark **Anthropology & Geography**
Lavin, Stephen J. **Anthropology & Geography**
Best Single Volume Reference in Humanities and Social Sciences for 2006 for the *Historical Atlas of U.S. Presidential Elections 1788-2004*, CQ Press

Banerjee, Ruma **Biochemistry**
Vice-Chair, Gordon Research Conference, Thiol-based Redox Regulation and Signaling

Barnes, Paul E. **School of Music**
Best Performance Production for the world premier television production of Phillip Glass *Piano Concerto No. 2 (After Lewis and Clark)*, National Educational Telecommunications Association

Behrendt, Stephen C. **English**
Senior Fellowship, American Council of Learned Societies

Bevins, Rick A. **Psychology**
Fellow, American Psychological Association

Braithwaite, Dawn O. **Communication Studies**
Brommel Award for Family Communication Scholarship, National Communication Association

Bryant, Miles **Educational Administration**
2006 Outstanding Reviewer Award, *Journal of Research in Leadership Education*

Carr Jr., Thomas M. **Modern Languages & Literatures**
Chevalier, Ordre des Palmes academiques, French government

Cassman, Kenneth G. **Agronomy & Horticulture**
2006 Agronomic Research Award, American Society of Agronomy

Coble, Parks M. **History**
Andrew Mellon Fellowship for Senior Scholars, Institute for Advanced Study, Princeton

Crawford, Sidnie W. **Classics & Religious Studies**
W.F. Albright Service Award, The American Schools of Oriental Research

Cupp, Andrea S. **Animal Science**
2006 New Investigator Award, Society for the Study of Reproduction

DeFrain, John D. **Family & Consumer Sciences**
Research Scientist, Shanghai Academy of Social Sciences, Peoples Republic of China

Digman, Lester A. **Management**
Paisitanand, Sineenead **Management**
Lee, Sang M. **Management**
2006 Best Paper Award, Managing Knowledge Capabilities for Strategy Implementation Effectiveness, 2006 Western Decision Sciences Annual Meeting

Ducey, Mary Ellen **Libraries**
Price, Kenneth M. **English**
Walter, Katherine L. **Libraries**
Barney, Brett **Libraries**
Pytlik Zillig, Brian L. **Libraries**
Jewell, Andrew W. **Libraries**
C.F.W. Coker Award, Society of American Archivists

Eckhardt, Craig J. **Chemistry, Physics & Astronomy**
Fulbright Senior Fellow, U.S. Fulbright Commission

Eversoll, Duane **Natural Resource Sciences**
Fellow, Geological Society of America

Gentry, James **Marketing**
Baker, Stacey **Marketing**
Rittenberg, Terri **Marketing**
2006 Charles C. Slater Memorial Award for Best Article, *Journal of Macromarketing*

Gladyshev, Vadim **Biochemistry**
Chair, Gordon Research Conference, Thiol-based Redox Regulation and Signaling

Graybill, Andrew R. **History**
Vernon Carstensen Award, Agricultural History Society
James H. Bradley Fellowship, Montana Historical Society

Harveson, Robert M. **Plant Pathology**
Blue Ribbon Award, American Society of Agricultural Engineers

Harvey, F. Edwin **Natural Resource Sciences**
Fellow, Geological Society of America

Hayden-Roy, Priscilla A. **Modern Languages & Literatures**
Humboldt Fellowship - Continuation Grant, Alexander von Humboldt Foundation

Hefle, Susan L. **Food Science & Technology**
Special Achievement, Food Allergy and Anaphylaxis Network
Dr. Hefle died in August of 2006.

Hoagland, Kyle D. **Natural Resource Sciences**
President-Elect, National Institutes for Water Resources

Housh, Terry **Nutrition & Health Sciences**
Educator of the Year, National Strength and Conditioning Association

Hoy, Roger M. **Biological Systems Engineering**
President's Leadership Citation, American Society of Agricultural and Biological Engineering

Hudgins, Jerry L. **Electrical Engineering**
William M. Portnoy Award, Institute of Electrical and Electronics Engineers Industry Applications Society

Jacobs, Margaret D. **History**
Arrell Morgan Gibson Prize, Western History Association

Joekel, Ronald G. **Educational Administration**
International Exemplary Leader, International Chair Academy
Phi Delta Kappa International; 20th Century Exemplary Leader, Phi Delta Kappa International

Koelsch, Richard K. **Biological Systems Engineering, Animal Science**
Presidential Citation, American Society of Agricultural and Biological Engineering
Blue Ribbon Award, American Society of Agricultural and Biological Engineering

Kunc, Karen **Art & Art History**
Printmaker Emeritus Award, The Southern Graphics Council

Levin, Carole **History**
NEH Fellowship at the Folger Shakespeare Library, National Endowment for the Humanities

Lyons, William H. **Law**
Regent, American College of Tax Counsel
Managing Editor, *The Tax Lawyer*

Mayo, ZB **Agricultural Research Division, Entomology**
Honorary Member, Entomological Society of America

Moeller, Aleidine **Teaching, Learning & Teacher Education**
Florence Steiner Award for Leadership in Foreign Language Education, American Council for the Teaching of Foreign Languages

Niemeyer, Shirley **Textiles, Clothing & Design**
Distinguished Service Award, Housing Education and Research Association

Nierman, Glenn E. **School of Music**
Elected President of North Central MENC and Member of the MENC National Executive Board, MENC--The National Association for Music Education

Olson, David L. **Management**
Best Enterprise Information Systems Educator Award, International Federation of Information Processing TC8 International Conference on Research and Practical Issues of Enterprise Information Systems

Patterson, Dean J. **Electrical Engineering**
Fellow, Institute of Electrical and Electronics Engineers

Prochaska-Cue, M. Kathleen **Family & Consumer Sciences**
President's Volunteer Service Award, President's Council on Service and Civic Participation

Ragsdale, Stephen W. **Biochemistry**
Paper of the Week, *Journal of Biological Chemistry*
Elected Member, American Academy of Microbiology, American Society of Microbiology

Rajurkar, Kamlakar **Industrial & Management Systems Engineering**
Charles F. Carter Jr. Advancing Manufacturing Award, Association of Manufacturing Technology

Ratcliffe, Brett C. **Museum, Entomology**
Outstanding Paper of the Year Award, Coleopterists Society

Schneiderjans, Marc J. **Management**
Fellow, Institute of Decision Sciences

Schubert, Mathias M. **Electrical Engineering**
Chair, International Conference Series on Low Energy ElectroDynamics in Solids
Ludwig-Genzel-Award, International Conference series on Low Energy ElectroDynamics in Solids

Shepard, Neil T. **Special Education & Communication Disorders**
Honors of the Association, American Speech-Language-Hearing Association

Siau, Keng L. **Management**
Ranked as one of the top e-commerce researchers, *Business Research Yearbook, Vol. 13*
Outstanding Service Award, International Federation for Information Processing
Faculty Award, IBM

Smith, Victoria **History, Ethnic Studies**
Book Award for *No One Ever Asked Me: The World War II Memories of an Omaha Indian Soldier*, Army Historical Foundation

Soukup, Rodney J. **Electrical Engineering**
Elected to the Administrative Committee, Institute of Electrical and Electronic Engineers Education Society

Souto, Francisco **Art & Art History**
International Award, 6th British International Print Exhibition, Gracefield Arts Centre, United Kingdom
Selected Prize, 12th International Biennial Print and Drawing Exhibition, R.O.C. National Taiwan Museum of Fine Arts
Honorable Mention, 7eme Mondial de L'Estampe et de la Gravure Originale Triennale de Chamalieres, France
Ex aequo Prize, 5-a Bienala Internationala de Grafica Mica, Cluj, Romania

Steinweis, Alan E. **History**
Finalist, National Jewish Book Awards, Jewish Book Council

Stump, Jordan M. **Modern Languages & Literatures**
Chevalier de l'Ordre des Arts et des Lettres, the French government

Trout, Barbara **Textiles, Clothing & Design**
Honorable Mention, Handweavers Guild of America

Van Vleck, L. Dale **Animal Science**
Distinguished Achievement in Agriculture Award, International Gamma Sigma Delta

Verma, Shashi B. **Natural Resource Sciences**
Award for Outstanding Achievement in Biometeorology, American Meteorological Society

Vigna, Diane **Textiles, Clothing & Design**
Achievement in Service Award, National Association of Extension 4-H Agents

Wang, Lijun **Biological Systems Engineering**
Superior Paper Award, American Society of Agricultural and Biological Engineering

Weller, Curtis L. **Biological Systems Engineering**
Superior Paper Award, American Society of Agricultural and Biological Engineering

White, Tyler G. **School of Music**
Honorable Mention, Rudolf Nissim Prize Competition, ASCAP Foundation

Willborn, Steven L.**Law**

Chair, U.S. Branch, International Society for Labor and Social Security Law

Winkle, Kenneth J.**History**

Distinguished Lecturer, 2005-08, Organization of American Historians
Distinguished Book Award for *Atlas of the Civil War*, Society for Military History

Woollam, John A.**Electrical Engineering**

Fellow, American Vacuum Society

Center for Digital Research in the Humanities**English**

Invited to display information about the *Journals of Lewis and Clark Expedition Online* and the *Walt Whitman Archive for Humanities Advocacy Day*, National Humanities Alliance

Zellmer, Sandra**Law**

Senior Specialist, Fulbright Foreign Scholar
Member, World Conservation Union Commission on Environmental Law

Zlotnik, Vitaly A.**Geosciences**

Fellow, Geological Society of America

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
	Army Corps of Engineers
	Army Research Office
	DEPSCoR Defense Experimental Program to Stimulate Cooperative Research
	Naval Research Laboratory
	Office of Naval Research
	U.S. Army Medical Research Acquisition Activity
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 Inst for Global Environmental Change Sandia National Laboratories

- DHHS Department of Health and Human Services
 ACF Administration for Children and Families
 CDC Centers for Disease Control
 NIH National Institutes of Health
 Fogarty International Center
 NCI National Cancer Institute
 NCRR National Center for Research Resources
 National Eye Institute
 NHLBI National Heart, Lung and Blood Institute
 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
- DoI Department of Interior
 BR Bureau of Reclamation
 FWS Fish & Wildlife Service
 GS Geological Survey
 NPS National Park Service
- DoT Department of Transportation
 Federal Highway Administration
- EPA Environmental Protection Agency
- IMLS Institute of Museum & Library Services
- NASA National Aeronautics and Space Administration
 Ames Research Center
 Goddard Space Flight Center
 Jet Propulsion Laboratory
 John Stennis Space Center
 Lewis Research Center
 Wallops Flight Facility
- 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

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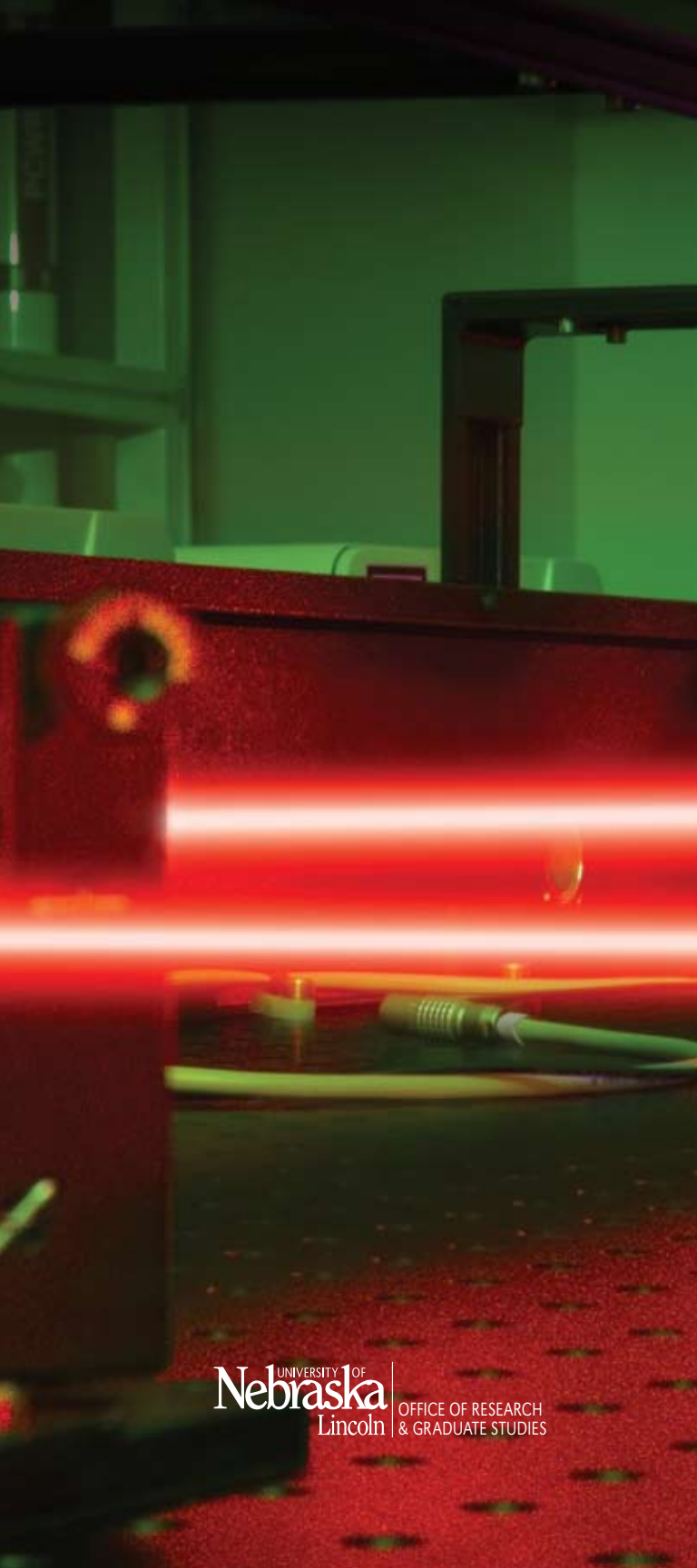
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