1-1-2008

Major Sponsored Programs and Faculty Awards for Research and Creative Activity 2007

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This is the sixth annual “Major Sponsored Programs and Faculty Awards for Research and Creative Activity” report. This booklet highlights the successes of University of Nebraska–Lincoln faculty during 2007. It lists the funding sources, projects and investigators on major grants and sponsored program awards received during the year, as well as patents issued; published books and scholarship; fellowships and other recognitions; intellectual property licenses; and performances and exhibitions in the fine and performing arts. This impressive list grows each year and I am pleased to present evidence of our faculty’s accomplishments.

Researchers at the University of Nebraska–Lincoln have pushed the frontiers in their disciplines in the past year, setting new drilling records in Antarctica, winning the nation’s highest honor for technology and building an ultra-fast, high-intensity laser that has the highest combination of peak power and repetition rate of any U.S. laser. Our sponsored funding continues to grow, with awards of $171.9 million last year alone.

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

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

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

Prem S. Paul
Vice Chancellor for Research and Economic Development
AWARDS OF $3 MILLION OR MORE
Active awards in 2007
* Indicates new in 2007

Allen, David
Engineering
Blast Wave Absorbing Structures: an Experimental & Modeling Program
$7,500,000 DOD-Army Research Laboratory
6/25/04 – 6/24/09
David Allen, dean of the College of Engineering and professor of engineering mechanics, with funding from the Army Research Laboratory-Weapons and Materials Research Directorate, directs a collaborative effort focused on development of new materials and technologies relevant to blast mitigation and weapons detection. The program includes 24 UNL faculty from six different departments—civil engineering, structural engineering, chemical and biomolecular engineering, electrical engineering, engineering mechanics and mechanical engineering—working on 15 multidisciplinary projects. The projects have the common objective of providing new materials and technologies for blast mitigation, mine detection and pathogen detection.

Cassman, Kenneth
Nebraska Center for Energy Sciences Research, Agronomy and Horticulture
Nebraska Center for Energy Sciences Research
$5,000,000 Nebraska Public Power District
Paul, Prem Office of Research
4/1/06 - 3/31/2011
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.

AWARDS OF $3 MILLION OR MORE
Cotton, Dan  
National E — Extension Project  
$6,800,000  
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  
$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  
9/1/02 – 12/31/07

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.

Gladyshev, Vadim
Biochemistry

Redox Biology Center

$10,889,947 DHHS-NIH-NCRR
8/1/07 – 7/31/12
Vadim Gladyshev, Charles Bessey professor of biochemistry in the Institute of Agriculture and Natural Resources, is the director of the Redox Biology Center. Established in 2002 with a grant from the National Institutes of Health as a Center of Biomedical Research Excellence, the center received a competitive renewal grant in 2007 to support it through 2012. The center’s researchers investigate how cells maintain a reduction-oxidation balance, a process called redox homeostasis, and study links between redox homeostasis and diseases such as cancer, cardiovascular disease, Alzheimer’s disease and cataracts. The center’s research will provide important advances in the understanding of redox regulation, comprising aspects of cellular aging and controlled cell death.
Stephen Goddard, associate professor of computer science and director of UNL’s Laboratory for Advanced Research Computing, is principal investigator in a $6.4 million joint effort by climatologists and computer scientists to bring cutting-edge computer science technologies to agricultural producers’ age-old decision-making processes. The three-year partnership agreements are between the U.S. Department of Agriculture’s Risk Management Agency, UNL’s Department of Computer Science and Engineering and the UNL-based National Drought Mitigation Center. A separate $1 million cooperative agreement, directed by Donald Wilhite, professor in the School of Natural Resources and director of the National Drought Mitigation Center, will support continued work on a tool that uses satellite technology and climate information to detect vegetation stress on the ground for a much more detailed view of drought’s scope and potential impact.

David Harwood, professor of geosciences, leads an international team of scientists drilling beneath the Antarctic ice pack to unearth geological strata that could hold ancient clues to contemporary global warming trends. The National Science Foundation has awarded $12.9 million to a consortium of five U.S. universities headed by UNL and Northern Illinois University. Dubbed ANDRILL (ANtarctic geological DRILLing), the project is administered by the ANDRILL Science Management Office headquartered at UNL. ANDRILL is backed by more than $30 million in funding, including $9.7 million in previous and ongoing national agreements to support operations and nearly $8 million from the other countries to support scientific research. Other members of the U.S. consortium making up the American portion of the ANDRILL program are Florida State University, Ohio State University and the University of Massachusetts Amherst. The project also includes scientists from Germany, Italy and New Zealand.
Jose, H. Douglas  
Agricultural Economics  
North Central Risk Management Education Center  
$3,600,000  
Dept. of Agriculture-CSREES  
9/15/07 – 9/14/10  
The North Central Risk Management Education Center provides program leadership and coordination for risk management education in the North Central Region (Kansas, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dakota and Wisconsin). It is one of four risk management education centers in the United States. They were established in 2001 to provide risk management education for agricultural producers to help them develop knowledge, skills and tools needed to make informed risk management decisions for their operations.

Lewis, Jim  
Mathematics  
Math in the Middle Institute Partnership  
$5,000,000  
NSF  
Ruth Heaton  
Teaching, Learning and Teacher Education  
Thomas McGowan  
Teaching, Learning and Teacher Education  
Barbara Jacobson  
Lincoln Public Schools  
8/1/04 – 7/31/09  
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.
AWARDS OF $3 MILLION OR MORE

Meagher, Michael  
Chemical and Biomolecular Engineering  
Process Research & Development of Antibodies as Countermeasures for C. Botulinum Neurotoxin  
$10,627,000  
DOD-Army Medical Research  
3/1/02 – 2/28/09

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

Fast-Track Production of a Heptavalent Botulinum Vaccine  
$6,799,173  
DynPort Vaccine Company  
9/1/03 – 2/28/08

Meagher is also collaborating with DynPort Vaccine Co., the University of Colorado, and the U.S. Army Medical Research Institute of Infectious Disease to develop a vaccine that protects against botulinum neurotoxin, a lethal agent that could be used for bioterrorism. The goal is to develop vaccines that protect against five subtypes of the toxin within the next one to two years and to develop a vaccine for the other two types within five years. The new vaccines could eliminate the threat of botulism as a weapon of mass destruction.

Laurence Rilett  
Civil Engineering  
Region 7 University Transportation Center  
$6,225,000  
Department of Transportation—Research and Innovative Technology Administration  
10/1/06 – 9/30/11

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.

### Sheridan, Susan
#### Educational Psychology
- **Parent Engagement and Learning Birth to Five**
- **$5,077,441**
- **DHHS-NIH-NICHD**
- **Psychology**
- **9/26/03 – 7/31/08**

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.

### Tsymbal, Evgeny
#### Nebraska Center for Materials and Nanoscience
- **Materials Research Science & Engineering Center; Nanomagnetic Structures**
- **$5,491,000**
- **NSF**
- **9/1/02 – 8/31/08**

Evgeny Tsymbal, professor of physics and astronomy at UNL, leads the Materials Research Science and Engineering Center. The center was established in 2002 with a grant from the National Science Foundation and involves scientists from the Departments of Physics and Astronomy, Chemistry and Mechanical Engineering, and the School of Biological Sciences. MRSEC projects focus on fabricating and studying new magnetic structures and materials at the nanometer scale. The research has applications in advanced computing and data storage, handheld electronic devices, advanced sensors and future medical technologies.
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.

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.
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.

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.

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

International Sorghum/Millet Collaborative Research Support Program (INTSORMIL)

$36,990,000  
U.S. Agency for International Development

7/1/96 – 9/30/07  
$9,000,000  
9/30/06 – 9/29/11  

John Yohe, associate professor in the Department of Agronomy and Horticulture, directs the International Sorghum/Millet (INTSORMIL) Collaborative Research Support Program. INTSORMIL is a collaborative international organization that supports research focused on improving nutrition and increasing income in developing countries and the United States. Scientists from U.S. land grant universities collaborate with scientists in host countries in the development of technology to improve production and utilization of sorghum and millet and facilitate natural resource management. Their work is done in Africa, Eurasia, Latin America and the United States.

**Interdisciplinary Team**

* Infrastructure for the Enhancement of Systems Biology Research & Development at UNL

$4,329,877  
NSF-EPSCoR

7/1/07 – 6/30/10

This grant supports multi-campus collaborative research between biologists and engineers for creating a strategic research niche in epigenetics – the study of heritable changes in gene functions not associated with changes in DNA sequence. Much of what comprises the complexity of multi-cellular organisms is programmed within the network of interacting molecules – protein, RNA and DNA – known collectively as chromatin. Engineers will create nano-devices for delivering molecules into cells for better understanding the role of chromatin in cell function and its response to the environment.
Awards of $1 Million to $2,999,999
Active awards in 2007
* Indicates new in 2007

Adams, Stephanie
Industrial and Management Systems Engineering
Strengthening Transitions into Engineering Program
$1,648,354 NSF
Ballard, John Engineering
Perez, Lance Electrical Engineering

Alfano, James
Plant Science Initiative/Plant Pathology
Suppression of Innate Immunity by ADP Ribosyltransferase Type III Effectors
$1,815,504 DHHS-NIH-NIAID

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

Becker, Donald
Biochemistry
Mechanistic Studies of Functional Switching in the PutA Flavoprotein
$1,218,025 DHHS-NIH-NIGMS

Bellows, Laurie
Graduate Studies
McNair Scholars Project and the University of Nebraska–Lincoln
$1,125,000 Dept. of Education

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

Cotton, Dan
Cooperative Extension
New Technologies for Ag Extension (eXtension)
$1,425,600 Department of Agriculture-CSREES

Cupp, Andrea
Animal Science
* Role of VEGF in Testis Morphogenesis
$1,083,239 DHHS-NIH-NICHD
Weber, John Animal Science
White, Brett Animal Science

DeKraai, Mark
Public Policy Center
Child Mental Health SIG
$1,629,313 Nebraska Dept. Health and Human Services

Diamond, Judy
University of Nebraska State Museum
Explore Evolution
$2,851,409 NSF
* World of Viruses
$1,286,811 DHHS-NIH-NCRR
Wood, Charles Nebraska Center for Virology
Doll, Elizabeth  
Evolving Inquiry: Science Instruction Model for Teachers in Rural, Culturally Diverse Schools  
$1,261,684  
Bruning, Roger  
Teaching, Learning and Teacher Education  
Horn, Christy  
Educational Psychology

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

Eccarius, Malinda  
Mountain-Prairie Upgrade Partnership  
$1,155,054  
Epstein, Michael  
On the Way Home: A Family-Centered Academic Reintegration Intervention Model  
$1,443,284  
Espy, Kimberly  
Prenatal Tobacco Exposure: Perinatal and Genetic Risks  
$1,207,660  
Wiebe, Sandra

Faller, Ronald  
Evaluation & Field Installation of Steel Tube & Foam Energy Reduction (SAFER) Barrier  
$1,045,913  
Holloway, Jim  
Civil Engineering  
Reid, John  
Mechanical Engineering  
Rohde, John  
Civil Engineering  
Sicking, Dean  
Civil Engineering

Zeng, Xiao Cheng  
Chemistry  
Feng, Ruqiang  
Engineering Mechanics  
Turner, Joseph  
Engineering Mechanics  
Poser, Susan  
Center for the Teaching and Study of Applied Ethics  
Tomkins, Alan  
Public Policy Center

$1,000,000 NSF

Epstein, Michael  
Special Education and Communication Disorders  
$1,155,054  
Wiebe, Sandra

Torkelson-Trout, Alexandra  
Special Education and Communication Disorder

Eccarius, Malinda  
Special Education and Communication Disorders  
$1,155,054  
Epstein, Michael  
Special Education and Communication Disorders  
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Espy, Kimberly  
Office of Research  
$1,207,660  
Wiebe, Sandra

$1,168,281  
Wiebe, Sandra

Faller, Ronald  
Civil Engineering  
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Civil Engineering  
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Civil Engineering  
Rohde, John  
Civil Engineering  
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Civil Engineering

Wiebe, Sandra  
Office of Research  
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$1,207,660  
Wiebe, Sandra

Wiebe, Sandra  
Office of Research  
$1,168,281
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<td>Identity &amp; Functions of Selenoprotein Genes</td>
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<td>Goddard, Stephen</td>
<td>Computer Science and Engineering</td>
<td>Climate &amp; Soil Risk Information System</td>
<td>Dept. of Agriculture-RMA School of Natural Resources School of Natural Resources</td>
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<td>Wilhite, Donald</td>
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<td>Early Speech Motor Development</td>
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<td>DNR Ground Water Management and Protection Act Service Agreement</td>
<td>Nebraska Dept. of Natural Resources</td>
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<td>* Regional Climate Services Support in the High Plains Region: The High Plains Regional Climate Center</td>
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<td>Dept. of Education Teaching, Learning and Teacher Education</td>
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<td>Cooperative Forestry Program</td>
<td>Dept. of Agriculture-FS</td>
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$1 MILLION — $2,999,999
Kamil, Alan  Biological Sciences  
Mechanisms of Visual Search and Attention  
$1,029,062  DHHS-NIH-NIMH  
Bond, Alan  Biological Sciences  

Knoche, Lisa  Center on Children, Youth, Families and Schools  
Rural Language and Literacy Connections (Rural LLC)  
$2,741,563  Dept. of Education  
Raikes, Helen  Center on Children, Youth, Families  
and Schools/Child, Youth and Family Studies  

Koszewski, Wanda  Nutrition and Health Sciences  
Building Nebraska Families  
$2,226,983  Nebraska Dept. of Health & Human Services  
Birnstihl, Elizabeth  IANR-Cooperative Extension  
Schnepf, Marilynn  Nutrition and Health Sciences  

Lee, Jaekwon  Biochemistry  
Mechanistic Insights into Homeostatic Copper Ion Acquisition  
$1,075,850  DHHS-NIH-NIDDK  

Leslie-Pelecky, Diandra  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-National 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  

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  
$2,001,355  Proteon Therapeutics  

* Process Development & cGMP Production  
$1,228,735  Targepeutics Inc.
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<td>Chemistry</td>
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Awards of $200,000 - $999,999
Active awards in 2007
* Indicates new in 2007

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

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

* Dissecting the Function of HrpJ & HrpK – Two Type III Secreted Proteins Required for Injection of Effectors into Plant Cells
$398,500 Dept. of Agriculture-NRICGP

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

Allen, David Engineering 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

* EMME: US-EU Transatlantic Degree Program in Engineering Mechanics/Materials Engineering
$407,997 Dept. of Education
Chandra, Namas Engineering Negahban, Mehrdad Engineering Mechanics

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  
Nebraska Dept. of Roads

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

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

IBRC 2002 Project  
$240,000  
Nebraska Dept. of Roads

* Folded Plate Technology: Research, Design & Monitoring  
$445,000  
Nebraska Dept. of Roads

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

Negahban, Mehrdad  
**Engineering Mechanics**
Baenziger, P. Stephen  Agronomy and Horticulture
Developing Winter Wheat with Improved Fusarium Head Blight Tolerance by Conventional and Transgenic Approaches
$306,981  Dept. of Agriculture-ARS
Mitra, Amit  Plant Pathology
Watkins, John  Plant Pathology
Clemente, Thomas  Agronomy and Horticulture
Baltensperger, David  Panhandle Research and Extension Center

Developing Winter Wheat with Improved Fusarium Head Blight Tolerance by Conventional and Transgenic Approaches
$306,981  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

Eskridge, Kent  Statistics
Dweikat, Ismail  Agronomy and Horticulture

* Developing Small Grains Cultivars Optimally Suited for Organic Production
$755,937  Dept. of Agriculture-NRICGP
Flores, Rolando  Food Science and Technology
Wegulo, Stephen  Plant Pathology
Russell, William  Agronomy and Horticulture
Shapiro, Charles  Agronomy and Horticulture
Schlegel, Vicki  Food Science and Technology
Wehling, Randy  Food Science and Technology
Knezevic, Stevan  Northeast Research and Extension Center
Hein, Gary  Panhandle Research and Extension Center
Lyon, Drew  Panhandle Research and Extension Center

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

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

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/Biological Systems Engineering

Basolo, Alexandra  Biological Sciences
Behavioral Plasticity in Preexisting Receiver Bias
$372,000  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
$462,590  NSF

Batelaan, Herman  Physics and Astronomy
Matter Optics with Intense Laser Light
$462,590  NSF

Becker, Donald  Biochemistry
MRI: Acquisition of Beckman XL-I Analytical Ultracentrifuge
$284,160  NSF

Becker, Donald  Biochemistry
MRI: Acquisition of Beckman XL-I Analytical Ultracentrifuge
$284,160  NSF
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<td>Verbal Behaviors in Computerized Lifecourse Surveys</td>
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<td>Method for Enhancing the Cholesterol-Lowering Property of Plant Sterol &amp; Stanol Esters</td>
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Cassman, Kenneth  Agronomy and Horticulture
Demonstration/Validation of a Dynamic Real-Time Decision Support System for Irrigation Management with Limited Water Supply
$230,537  Nebraska Corn Board

Dobermann, Achim  Agronomy and Horticulture
Walters, Daniel  Agronomy and Horticulture
Yang, Haishun  Agronomy and Horticulture
Irmak, Suat  Biological Systems Engineering
Kranz, William  Northeast Research and Extension Center
Shapiro, Charles  Northeast Research and Extension Center
Tarkalson, David  West Central Research and Extension Center

Cerutti, Heriberto  Biological Sciences/Plant Science Initiative
Histone Modifications & Transcriptional Silencing in Chlamydomonas
$448,235  NSF

RNA-Mediated Silencing: Mechanisms and Biological Roles in Chlamydomonas
$969,539  DHHS-NIH-NIGMS

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

Clemente, Thomas  Biotechnology/Plant Science Initiative/Agronomy and Horticulture
From Proplastid to Chloroplast: Understanding Plastid Differentiation in Maize by Microarray & Proteome Analysis
$389,225  Cornell University

Research in Nebraska on Improved Soybean Oil for Biodiesel Fuel
$491,000  Dept. of Energy

Functional Analysis of Soybean Genes through Transposon Mutagenesis
$586,600  United Soybean Board/Smith/Bucklin
Specht, James  Agronomy and Horticulture

* Enhancing Disease Resistance in Soybean through Biotechnology
$303,000  North Central Soybean Research Program
Alfano, James  Plant Science Initiative/Plant Pathology
Morris, T. Jack  Biological Sciences

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

Costello, Don  Computer Science and Engineering
GAANN Fellowships for Computer Science & Engineering
$500,000  Dept. of Education
Daly, Edward  
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  
Hydrogen for Fuel Cells

$966,000  
DOD-Office of Naval Research

Takacs, James  
Chemistry

Berkowitz, David  
Chemistry

* Anhydrous Fluoride Salts

$420,000  
NSF

Dominguez, Aaron  
* PIRE: Collaborative Research with the Paul Scherrer Institute and 
Eidgenoessische Technische Hochschule on Advanced Pixel Silicon 
Detectors for the CMS Detector

$406,500  
University of Kansas Center for Research

Bloom, Kenneth  
Physics and Astronomy

Dowben, Peter  
Surface Chemistry of Adsorbates on Crystalline Polymers

$690,000  
NSF

Drijber, Rhae  
* Developing Technologies to Improve Soil & Nutrient Management

$211,000  
Dept. of Agriculture-ARS

Du, Liangcheng  
Biosynthesis of Mycotoxin Fumonisins: Characterization of 
Enzymes for Vicinal Diol & Tricarballylic Ester Formation

$284,667  
NSF

Ducharme, Stephen  
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  
Program Analysis Techniques to Support Dependable RTSJ Applications  
$207,519  NSF  
Elbaum, Sebastian  Computer Science and Engineering  
Goddard, Stephen  Computer Science and Engineering  
Rothermel, Gregg  Computer Science and Engineering  

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

Elbaum, Sebastian  Computer Science and Engineering  
Goddard, Stephen  Computer Science and Engineering  

*CSR-EHS Predictable Adaptive Residual Monitoring for Real-time Embedded Systems  
$500,000  NSF  

Dzenis, Yuris  Engineering Mechanics  
Fundamentals of Fabrication of Nanofiber Assemblies by Electrospinning  
$372,000  NSF  
Farritor, Shane  Mechanical Engineering  
Next Generation Super Carbon Fiber  
$317,127  Hexcel Corporation  

Nanoengineered Interfaces  
$250,002  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: Dependable End-User Software  
$253,573  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  

$200,000 — $999,999
Epstein, Michael  Special Education and Communication and Disorders  
Leadership Training in Emotional Disturbance Disorders  
$590,854  Dept. of Education  

Randomized Clinical Trial of Wraparound Services for Elementary School Students in School Settings  
$538,266  Dept. of Education  

Fabrikant, Ilya  Physics and Astronomy  
Collision Processes Involving Low-Energy Electrons  
$215,000  NSF  
* Electron-Molecule Collisions in Different Environments  
$240,000  NSF  

Faller, Ronald  Civil Engineering  
Development of a New Precast Concrete Bridge Railing System (2006-2008)  
$229,820  Nebraska Dept. of Roads  
Bielenberg, Robert  Civil Engineering  
Reid, John  Mechanical Engineering  
Tadros, Maher  Civil Engineering  
* Development of an Economical Guardrail System for Use on Gabion Walls  
$250,000  Dept. of Transportation-FHWA  
Sicking, Dean  Midwest Roadside Safety  
Rohde, John  Mechanical Engineering  
Reid, John  Mechanical Engineering  

Foley, Brett  Educational Psychology  
Consulting Services/Assist Oklahoma Commission for Teacher Preparation  
$452,064  Oklahoma Office of Public Affairs  
* Conducting Validity Studies for South Dakota Department of Education  
$327,630  South Dakota Dept. of Education  
Geisinger, Kurt  Educational Psychology  

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  

Gardner, Scott  University of Nebraska State Museum/ Biological Sciences  
* Mongolia Vertebrate Parasite Project  
$619,991  NSF  
* Enabling Access to Priority Taxa for Biodiversity Studies in the Manter Laboratory of Parasitology  
$484,647  NSF  
Jimenez-Ruiz, Francisco  University of Nebraska State Museum
Gay, Timothy  Physics and Astronomy
* Polarized Electron and Photon Physics
$370,000  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

Glover, Todd  Center on Children, Youth, Families and Schools
Establish a State-Wide Response-to-Intervention Consortium for Training & Evaluation
$309,500  Nebraska 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
* CRI: IAD: Towards Cyber-Physical Computing at Scale: A Life-Size Experimental Facility for Applied Sensor Networks Research
$200,000  NSF
Ci, Song  Computer and Electronics Engineering
Peng, Dongming  Computer and Electronics Engineering
Sharif-Kashani, Hamid  Computer and Electronics Engineering
Perez, Lance  Electrical Engineering

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
$356,094  NASA
Bonnstetter, Ronald  Teaching, Learning and Teacher Education
* Online Master’s Degree in Applied Science Education
$540,345  Toyota USA Foundation
Bonnstetter, Ronald  Teaching, Learning and Teacher Education
Strand, Billie  Extended Education and Outreach

$200,000 – $999,999
Graef, George  Agronomy and Horticulture  Sclerotinia Resistance Enhanced by Accumulation of QTL Transgenic Approaches  $371,120  Dept. of Agriculture-ARS
Clemente, Thomas  Agronomy and Horticulture  Steadman, James  Plant Pathology

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

Hage, David  Chemistry  Chromatographic Automation of Immunoassays  $946,982  DHHS-NIH-NIGMS

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

Harris, Steven  Plant Science Initiative/Plant Pathology  Autophagy in Fungal Hyphae: Functional Genomic & Mechanical Strength Studies  $308,035  University of Maryland-Baltimore

Harshman, Lawrence  Biological Sciences  Comparative Functional Genomics of Drosophila Obesity  $516,548  Cornell University

Harvey, F. Edwin  School of Natural Resources  * Habitat Conservation Plan for the Salt Creek Tiger Beetle and the Eastern Saline Wetlands of Nebraska  $380,000  Nebraska Game and Parks Commission

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

Hayes, Michael  School of Natural Resources  * Transitioning the Drought Impact Reporter into an Operational System  $310,137  Dept. of Commerce-NOAA-NCTP

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

Henry, Christopher  Biological Systems Engineering
Henry, Christopher: Livestock Producer Environmental Assistance Project
$600,000  Nebraska Environmental Trust
Development of Alternative Technologies for Small Livestock Producers
$221,881  Nebraska Dept. of Environmental Quality

Gross, Jason  Biological Systems Engineering
Hergert, Gary  Panhandle Research and Extension Center
Hergert, Gary: 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
Heusel, Gary: Midwest Consortium for Service-Learning in Higher Education
$939,806  Corporation for National Service

Hoagland, Kyle  School of Natural Resources
Hoagland, Kyle: 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
Holmes, Mary Anne: Building a Community of Women Geoscience Leaders
$228,774  NSF

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

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

$200,000 – $999,999
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  

* Transition of Weather & Climate Forecasts into Effective Decision-Making Tools  
$293,732  
Dept. of Commerce-NOAA  
Hubbard, Kenneth  
School of Natural Resources  
Lyne, Gary  
Agricultural Economics  
Pytlik Zillig, Lisa  
Educational Psychology  
Bruning, Roger  
Educational Psychology  

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

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

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  

Hygnstrom, Scott  
School of Natural Resources  
Development of Spatially Explicit Models of Wildlife Diseases  
$450,930  
Dept. of Agriculture-APHIS  

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

Irmak, Suat  
Biological Systems Engineering  
* Measurement of Growing Season Actual Crop Evapotranspiration and Crop Coefficients, and Dormant Season Evaporative Losses for Key Vegetation Surfaces in the Central Platte Natural Resources District  
$492,564  
Central Platte NRD  
Irmak, Ayse  
Biological Systems Engineering  
Martin, Derrel  
Biological Systems Engineering  
van Donk, Simon  
Biological Systems Engineering  
Verma, Shashi  
School of Natural Resources  

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

$200,000 — $999,999  
32
Jiang, Hong  
Computer Science and Engineering  
SAM*2 Toolkit: Scalable & Adaptive Metadata Management for High-End Computing  
$602,326  
Wang, Jun  
Computer Science and Engineering

Jones, Clinton  
Veterinary and Biomedical Sciences  
Functional Analysis of biCPO  
$349,500  
Zhang, Yange  
Veterinary and Biomedical Sciences  
Functional Analysis of Proteins Encoded by the Bovine Herpesvirus 1 Latency Related Gene  
$374,475  
* Does HSV-1 Latency Associated Transcript (LAT) Encode a Protein?

$405,625  
DHHS-NIH-NIAID

Jones, Elizabeth  
Civil Engineering  
ITS Resource, Research & Educational Activities at Peter Kiewit Institute  
$921,414  
Nebraska 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  
Nebraska State Forest Service  
Community Enhancement Program  
$350,000  
Nebraska Dept. of Roads

$403,694  
Dept. of Agriculture-NRCS

Hazardous Fuels Reduction: Pine Ridge Adjacent Landowners 2007  
$250,000  
Dept. of Agriculture-FS

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  
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

$200,000 — $999,999
Kim, Yong Rak  Civil Engineering
Material Selection & Design Consideration for Moisture Damage of Asphalt Pavement
$225,527  Nebraska Dept. of Roads
Azizinamini, Atorod  Civil Engineering

* Asphalt Research Consortium
$350,000  Texas A & M Research Foundation
Allen, David  Engineering Mechanics

* Layer Moduli of Nebraska Pavements for the New Mechanistic-Empirical Pavement Design Guide (MEPDG)
$226,106  Nebraska Dept. of Roads

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

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

Kostelnik, Marjorie  Education and Human Sciences
Osher Lifelong Learning Institute
$400,000  Bernard Osher Foundation
Eversoll, Deanna  Education and Human Sciences
Aguilar, Deanna  Education and Human Sciences

Krull, Dean  Agronomy and Horticulture
Managing Irrigation Systems Today & Tomorrow
$594,226  Central Platte NRD
Benham, Brian  Agronomy and Horticulture
Ferguson, Richard  Agronomy and Horticulture

Lackey, Susan  School of Natural Resources
* Eastern Nebraska Water Resources Assessment LPNRD
$416,000  Lower Platte North NRD
Ayers, Jerry  School of Natural Resources
Hanson, Paul  School of Natural Resources
Joeckel, Robert  School of Natural Resources

* Developing Hydrogeologic Databases to Assist in Water Resources Management — UENRD
$203,353  Upper Elkhorn NRD

Ledder, Glenn  Mathematics
UBM: Research for Undergraduates in Theoretical Ecology (RUTE)
$905,000  NSF
Deng, Bo  Mathematics
Gibson, Robert  Biological Sciences
Loladze, Irakli  Mathematics
Louda, Svata  Biological Sciences
Lee, Kevin  Physics and Astronomy  
ClassAction: Model Rapid-Feedback & Dynam Formative Assess System  
$359,768  NSF  

Schmidt, Edward  Physics and Astronomy  
Development of Interactive Simulation Environments for Inquiry Astronomy Teaching  
$336,572  NSF  

Leslie-Pelecky, Diandra  Physics and Astronomy  
Magnetic Properties of Disordered Rare-Earth Nanostructures  
$420,000  NSF  
Shield, Jeff  Mechanical Engineering  
Magnetic Cluster States in Nanostructured Materials  
$450,000  Dept. of Energy-EPSCoR  

Lindquist, John  Agronomy and Horticulture  
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  

Lodl, Kathleen  4-H State Office  
* Health Rocks-Healthy Life Curricula Development  
$250,700  National 4-H Council  
Birnstihl, Elizabeth  Cooperative Extension  
Fox, Marilyn  Southeast Research and Extension Center  

Louda, Svata  Biological Sciences  
Single vs. Multiple Insect Herbivore Guild Interactions in Canada Thistle Dynamics  
$408,760  Dept. of Agriculture-NRICGP  
Insect Herbivore Guild Interactions & Tall Thistle Population Dynamics  
$369,999  NSF
Lu, Yongfeng  Electrical Engineering
Laser-Assisted Fabrication of Large-Scale 3-D Photonic Bandgap Structures
$350,000  DOD-DEPSCoR

Magnetic Confinement of Plasmas in Laser-Induced Breakdown Spectroscopy for Improved Sensitivity & Accuracy
$249,306  Dept. of Energy

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

Magnetic Confinement of Plasmas in Laser-Induced Breakdown Spectroscopy for Improved Sensitivity & Accuracy
$240,000  NSF

Alexander, Dennis  Electrical Engineering
Ducharme, Stephen  Physics and Astronomy

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

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

* Wavelength-Tunable Laser for Resonant Energy Coupling in Multi-Energy Processing
$223,566  DOD-Office of Naval Research-DURIP

Mackenzie, Sally  Plant Science Initiative
Machinery of Mitochondrial Recombination in Higher Plants
$494,080  NSF

Christensen, Alan  Biological Sciences

Nuclear-Organellar Interactions Involving AtMSH1 in Arabidopsis
$500,000  Dept. of Energy

Strategy for the Transgenic Induction of Cytoplasmic Male Sterility in Crop Plants
$466,608  Dept. of Agriculture-BRDC

Training Graduate Students in Plant Breeding using Crop Drought Tolerance Improvement as a Model
$599,999  Dept. of Agriculture-NRICGP

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

Helmers, Glenn  Agricultural Economics
Ginting, Daniel  Agronomy and Horticulture
Wortman, Charles  Agronomy and Horticulture
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<th>Name</th>
<th>Department and College</th>
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<td>Martin, Derrel</td>
<td>Biological Systems Engineering</td>
<td>Modeling and Field Experimentation to Determine Effects of Land Terracing-Republican River Basin (CESU)</td>
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<td>Infertility: Pathways &amp; Psychosocial Outcomes</td>
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<td>Irrigation Management with Limited Water: A Farm Education Program</td>
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<td>Collaborative Research on Small Business Network Creation and Outcomes for Change and Innovation</td>
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<td>Plant Pathology</td>
<td>Efficient Gene Silencing by Intrinsic Direct Repeats: Mechanism &amp; Utilization</td>
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<td>The Role of a Host Protein (TIP) in the Resistance Response of Arabidopsis to Turnip Crinkle Virus Infection</td>
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Moxley, Rodney  Veterinary and Biomedical Sciences  
Influence of Enterotoxins on Virulence and Colonization of Porcine Intestine by E.coli  
$270,000  Dept. of Agriculture-NRICGP

Nelson, J. Ron  Special Education and Communication Disorders  
*Effects of a Supplementary Vocabulary Intervention for Students with Limited English Proficiency  
$694,884  Dept. of Education

Nickerson, H. Doak  Nebraska State Forest Service  
Restoring the Pine Ridge Forest Ecosystem  
$300,000  Nebraska Environmental Trust

Noureddini, Hossein  Chemical and Biomolecular Engineering  
Reduction of Phosphorus from Ethanol By-Product used as Livestock Feed  
$210,781  Nebraska Corn Board

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

Orti, Guillermo  Biological Sciences  
RCN: DeepFin Will Advance the Phylogeny of “Fishes”  
$500,000  NSF  
*Assembling the Euteleost Tree of Life - Addressing the Major Unresolved Problem in Vertebrate Phylogeny  
$602,956  NSF  
Li, Chenhong  Biological Sciences  
Diamond, Judy  University of Nebraska State Museum

Pattnaik, Asit  Veterinary and Biomedical Sciences  
Analyses of Virulence & Attenuation Determinants of PRRSV using Reverse Genetics  
$320,000  Dept. of Agriculture-NRICGP  
Osorio, Fernando  Veterinary and Biomedical Sciences  
VSV RNA Transcription and Replication  
$996,128  DHHS-NIH-NIAID

Perez, Lance  Electrical Engineering  
Self-Configuration & Localization in Ad Hoc Wireless Sensor Networks  
$548,807  DOD-DEPSCoR  
Goddard, Stephen  Computer Science and Engineering  
* GAANN in Engineering & Assistive Technology  
$383,643  Dept. of Education  
Adams, Stephanie  Industrial and Management Systems Engineering  
Henze, Gregor  Architectural Engineering  
Goddard, Stephen  Computer Science and Engineering
Pilson, Diana  
Transgenic Virus Resistant Squash: Ecological Effect  
$314,877  
Morris, T. Jack  
Biological Sciences  
Dept. of Agriculture-CSREES  

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

Pope, Kevin  
Recruitment of Walleye and White Bass in Irrigation Reservoirs  
$397,628  
Nebraska Game and Parks Commission  

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

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

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

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

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

Redepenning, Jody  
Chemically Modified Nano-Electrodes for Magnetoelectronics Applications  
$390,000  
Binek, Christian  
Center for Materials and Nanoscience  
Physics and Astronomy  
NSF  

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

Midwest States Regional Pooled Fund Program
$545,000  Nebraska Dept. of Roads
Sicking, Dean  Midwest Roadside Safety
Rhode, John  Midwest Roadside Safety
Faller, Ron  Midwest Roadside Safety

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  Nebraska Dept. of Roads
Jones, Elizabeth  Civil Engineering

Intelligent Transportation System Deployment Project
$831,942  Nebraska Dept. of Roads
Jones, Elizabeth  Civil Engineering
Khattak, Aemal  Civil Engineering

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

Rothermel, Gregg  Computer Science and Engineering
CRI: Community Resource to Support Controlled Experimentation with Program Analysis and Testing Techniques
$874,636  NSF
Elbaum, Sebastian  Computer Science and Engineering
Dwyer, Matthew  Computer Science and Engineering

ITR: Dependable End-User Software
$439,593  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
$601,816  NSF
Chen, Xun-Hong  School of Natural Resources
Soh, Leen-Kiat  Computer Science and Engineering
Tomkins, Alan  Public Policy Center
Zellmer, Sandra  College of Law

$200,000 — $999,999
Saraf, Ravi  Chemical and Biomolecular Engineering
Nanodevice for Imaging Normal Stress Distribution with Application in Sensing Texture and Feel by Touching
$332,156  NSF

Scalora, Mario  Psychology
* Threat Assessment
$509,111  ManTech International Corporation
Bulling, Denise  ManTech International Corporation
Public Policy Center

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

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

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/Center for Materials and Nanoscience
* Studies of Artificially Structured Composite Magnets
$381,000  Dept. of Energy
* Materials Research Science & Engineering Center: Quantum and Spin Phenomena in Nanomagnetic Structures
$200,000  NanoElectronics Research Corporation
Belashchenko, Kirill  Physics and Astronomy
Tsymbal, Evgeny  Physics and Astronomy

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

$200,000 – $999,999
Shapiro, Charles  Northeast Research and Extension Center  
Improve Organic Farming Systems across Nebraska Agroecosystems  
$762,949  Dept. of Agriculture-CSREES  
Baltenesperger, 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 Run-Off-Road Crashes  
$634,521  National Cooperative Highway Research Program  
Khattak, Aemal  Civil Engineering  
Jones, Elizabeth  Civil Engineering  
Faller, Ronald  Civil Engineering

Siegfried, Blair  Entomology  
Quantifying Risk Factors for Evolution of European Corn Borer Resistance to Cry1F Expressing Corn Hybrids  
$346,845  Dept. of Agriculture-CSREES  
* Evaluating Bioactivity of Insecticidal Proteins against European Corn Borer (Lepidoptera: Crambidae)  
$220,000  Pioneer Hi-Bred

Simpson, Melanie  Biochemistry  
Role of Hyaluronan in Prostate Cancer Progression  
$326,250  DOD-Army Medical Research

$200,000 — $999,999
Smith, Andrew  University of Nebraska State Museum
Scarab Biodiversity of Southern South America  NSF
Ocampo, Federico  University of Nebraska State Museum

Smith, David R.  Veterinary and Biomedical Sciences
Intervention Strategies to Reduce Escherichia Coli 0157:H7 in Beef Feedyards  Dept. of Agriculture-NRICGP
Erickson, Galen  Animal Science
Hinkley, Susanne  Veterinary and Biomedical Sciences
Klopfenstein, Terry  Animal Science
Moxley, Rodney  Veterinary and Biomedical Sciences

Efficacy of Two & Three Doses of an Experimental Escherichia coli Bacterial Extract  Bioniche Life Sciences
Erickson, Galen  Animal Science
Klopfenstein, Terry  Animal Science
Moxley, Rodney  Veterinary and Biomedical Sciences

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

Snow, Gregory  Physics and Astronomy
GAANN Fellowships for Physics at UNL  Dept. of Education

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

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

Soukup, Rodney  Electrical Engineering
* A Novel Variable Wide Bandgap Material for High Power, High Frequency Devices  DOD-DEPSCoR
Hudgins, Jerry  Electrical Engineering
Ianno, Natale  Electrical Engineering
Spalding, Roy  Agronomy and Horticulture  
* Effectiveness of Irrigated Crop Management Practices in Reducing Groundwater Nitrate Contamination  
$630,768  Dept. of Agriculture-CSREES  
Ferguson, Richard  Agronomy and Horticulture  
Marx, David  Statistics  
Spalding, Mary  School of Natural Resources  

Spaulding, William  Psychology  
* Decision Science in Rehabilitation  
$877,652  DHHS-NIH-NIMH  
Garbin, Calvin  Psychology  

Specht, James  Agronomy and Horticulture  
Genetic Mapping & Application of SNP DNA Markers in Soybean  
$329,391  Dept. of Agriculture-ARS  

Spreitzer, Robert  Biochemistry  
Role of the Rubisco Small Subunit  
$871,500  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  
* CSR-PDOS: Memory Efficient Garbage Collection Framework for Java Server Applications  
$300,000  NSF  

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

Steadman, James  Plant Pathology  
Bean/Cowpea Collaborative Research Support Program  
$427,468  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  Nebraska Dept. of Agriculture  

$200,000 — $999,999
Stentz, Terry Construction Management Human Factors in Railway Operation $301,250 Dept. of Transportation-FRA
Jones, Elizabeth Civil Engineering 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

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

Stone, Julie Plant Science Initiative/Biochemistry Role of Transcriptional Regulator in Programmed Cell Death & Plant Development $354,000 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
* Biomimetic Nanofibrillar Scaffolds for Tissue Engineering $394,370 DHHS-NIH-NIBIB
Larsen, Gustavo Chemical and Biomolecular Engineering

$200,000 — $999,999
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>University/Program</th>
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<td><strong>Swanson, David</strong></td>
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<td>MRI: Acquisition of Affordable Shared-Memory Computing &amp; Scalable Storage for Scientists &amp; Engineers</td>
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<td>* US CMS Operations at the LHC</td>
<td>University of California-Los Angeles</td>
<td>$508,000</td>
<td>NSF</td>
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<td>Bloom, Kenneth</td>
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<td>Tadros, Maher</td>
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<td>Class C Fly Ash in Concrete Pavement</td>
<td>$321,379</td>
<td>Nebraska Dept. of Roads</td>
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<td>* Evaluation &amp; Repair Procedures for Precast/Prestressed Concrete Girders w/Longitudinal Cracking in the Web</td>
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<td>$300,000</td>
<td>National Cooperative Highway Research Program</td>
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<td>Tuan, Christopher</td>
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<td>* Impact of Large 0.7 inch Strand on NU-I Girder and NUDeck</td>
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<td>$244,408</td>
<td>Nebraska Dept. of Roads</td>
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<td>Chemistry</td>
<td>Novel Cyclization Reactions for Organic Synthesis</td>
<td>$422,500</td>
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<td>Food Allergen Database</td>
<td>$617,846</td>
<td>Various Industries</td>
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<td>Midwest Advanced Food Manufacturing Alliance</td>
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<td>$462,110</td>
<td>Dept. of Agriculture-CSREES</td>
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<td>Allergenicity Evaluation of Isinglass</td>
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<td>$555,035</td>
<td>Various Industries</td>
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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  
Wang, Lijun  
Biological Systems Engineering  
Weller, Curtis  
Biological Systems Engineering  
Burson, Dennis  
Animal Science  

Improving Safety of Shell Eggs & Egg Products by Addressing Critical Research Needs for Salmonella Enteritidis & Salmonella spp  
$599,951  
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  
Architectural Engineering  
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  
Child, Youth and Family Studies  
Evaluation of Promising Models and Delivery Approaches to Child Care Provider Training  
$484,658  
Iowa State University  
Wilcox, Brian  
Center on Children, Families and the Law  
Raikes, Helen  
Center on Children, Families and the Law  

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

Tsymbal, Evgeny  
Physics and Astronomy  
Multiscale Modeling of Magnetic Nanocontacts  
$200,751  
Seagate Technology  

Tyler, Kimberly  
Sociology  
* Social Networks, HIV Risk Behaviors & Homeless Youth  
$358,763  
DHHS-NIH-NIDA  

Uiterwaal, Kees  
Physics and Astronomy  
Inside a Focused Laser Beam: Molecular Dynamics  
$447,001  
NSF  

Umstadter, Donald  
Physics and Astronomy  
Ion Acceleration with High Intensity Lasers  
$401,277  
NSF  
Laser Produced Coherent X-Ray Sources  
$420,000  
Dept. of Energy
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<th>Name</th>
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<td>Van Etten, James</td>
<td>Plant Pathology</td>
<td>Center for Innovation in Membrane Protein Production</td>
<td>Univ of California-San Francisco</td>
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<td>Dunigan, David</td>
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<td>Varyiam, Vinod</td>
<td>Computer Science and Engineering</td>
<td>Studies in Computational Complexity Theory</td>
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<td>Vasa, Stanley</td>
<td>Special Education and Communication Disorders</td>
<td>Project NETS: Nebraska Educational Transition Specialists</td>
<td>Dept. of Education</td>
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<td>Scheffler, Marilyn</td>
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<td>Verma, Shashi</td>
<td>School of Natural Resources</td>
<td>Carbon Sequestration and Global Climate Change</td>
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<td>Viljoen, Hendrik</td>
<td>Chemical and Biomolecular Engineering</td>
<td>Vortex-Tube Based Thermocycler w/ Intelligent Software</td>
<td>DHHS-NIH-Nat Ctr Rsch Resources</td>
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<td>Mechanical Engineering</td>
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<td>Wagner, William</td>
<td>Biological Sciences</td>
<td>Communication of Direct Mating Benefits to Females</td>
<td>NSF</td>
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<td>Waldren, Vernon</td>
<td>Southeast Research and Extension Center</td>
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<td>Walstad, William</td>
<td>Economics</td>
<td>Interactive Teaching in Undergraduate Economic Courses</td>
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<td>Weeks, Donald</td>
<td>Biochemistry</td>
<td>Development of Herbicide-Resistant Plants for Environmentally-Safe Production Energy &amp; Biomass Crops</td>
<td>Consortium for Plant Biotechnology Research</td>
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<td>Supreme Court of Nebraska</td>
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<td>Weldon, Robert</td>
<td>Biological Sciences</td>
<td>Intracellular Targeting of HIV Gag Proteins</td>
<td>DHHS-NIH-NIAID</td>
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Weller, Curtis  Biological Systems Engineering
Purification Process Influences on Structural & Nutritional Function of Grain Sorghum
$338,000  Dept. of Agriculture-NRICGP
Carr, Timothy  Food Science and Technology
Schlegel, Vicki  Food Science and Technology
Cuppett, Susan  Industrial Ag Products Center
Hwang, Keum Taek  Biological Systems Engineering
Wang, Lijun

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

Wiegand, Roger  Mathematics
GAANN Fellowship Program: Mathematics at UNL
$635,375  Dept. of Education
Pitts, David  Mathematics
Walker, Judy  Mathematics
Walker, Mark  Graduate Studies
Bellows, Laurie

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
* Self-referencing, Social Identity & Judgments of Sexual Harassment
$302,364  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
* Developing a Drought Preparedness Framework for Tribal Governments: Moving from Crisis to Risk-Based Management
$609,539  Dept. of Interior-BIA

$200,000 — $999,999
Wilson, Brent  
Mechanical Engineering  
Development of Improved Product Performance through Optimization & Modeling of Engineering Materials Processing & Function  
$588,028  
Brenco/Amsted Industries  
Turner, Joseph  
Engineering Mechanics

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

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

Wood, Charles  
Biological Sciences  
AIDS and Cancer Specimen Bank  
$383,601  
George Washington University  
* Research and Training on HIV/AIDS Neuropathogenesis in Zambia  
$273,363  
DHHS-NIH-NIMH  
* Vaccination against Mucosal HIV Clade C Transmission  
$251,710  
Dana-Farber Cancer Institute

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

Wortmann, Charles  
Agronomy/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

Yang, Yiqi  
Textiles, Clothing and Design  
Resistance of Sulfur Dyed Fabrics to Oxidative Bleaching & Acidic Tendering: Improvement & Application  
$300,618  
Procter & Gamble

$200,000 – $999,999
Yoder, Ronald  Biological Systems Engineering  Nebraska AgrAbility  $800,000  Dept. of Agriculture-CSREES  Baquet, Alan  Agricultural Economics

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

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

Zeng, Xiao Cheng  Chemistry  Crystallization and Interfacial Properties of Silicon  $235,000  Dept. of Energy

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  $429,682  NSF  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 2007
* Indicates new in 2007

NSF CAREER Grants
National Science Foundation CAREER grants are awarded only to untenured junior faculty. NSF emphasizes that the grants recognize research and education “of the highest quality and in the broadest sense.” CAREER grants are unique in requiring a four- to five-year plan for the scientist’s development as both a researcher and an educator.

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

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

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

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

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

Frank, Tracy
Geosciences
* Exploring the Geologic Record of Major Climate Transitions: Causes, Consequences, & Impacts on the Evolution of Earth Systems
$583,816  NSF
Gursoy, Mustafa
Electrical Engineering
CAREER: Energy-Efficient Wireless Communications under Channel Uncertainty
$400,000  NSF

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

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

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

Xu, Lisong
Computer Science and Engineering
* Stochastic TCP Friendliness: Exploring the Design Space of TCP-Friendly Traffic Control in Best-Effort Internet
$400,000  NSF
K Awards
National Institutes of Health K Awards provide support for intensive development experiences in one of the biomedical, behavioral or clinical sciences leading to research independence. Candidates for these awards normally must have a research or health-professional doctorate and postdoctoral research experience at the time of application. The proposed career-development experience must be in a research area new to the applicant and/or one in which an additional supervised research experience will substantially add to the applicant’s research capabilities. Candidates must provide a plan for achieving independent research support by the end of the award, and must be willing to spend a minimum of .75 FTE conducting research and career development during the award three-, four-, or five-year project period.

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

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

Tyler, Kimberly
Sociology
Neglect and Abuse Histories Among Homeless Young Adults
$659,525  DHHS-NIH-NIMH
Cahan, David  History
A Biography of Hermann von Helmholtz
$102,868 NSF
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.

Kooser, Ted  English
American Life in Poetry Project
$125,000 Poetry Foundation
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.
Ken Price, professor of English and Hillegass chair of 19th Century American Literature, is principal investigator for a $500,000 We the People Challenge Grant from the National Endowment for the Humanities. The award is contingent on UNL acquiring a 3-1 match of $1.5 million in the next four years. When fundraising is completed, the $2 million establishes an endowment at the University of Nebraska Foundation, the proceeds of which provide permanent annual operating funding for the Walt Whitman Archive. The Whitman Archive is an electronic research and teaching tool that makes Whitman’s huge body of work easily and conveniently accessible. Whitman amassed a huge volume of work during his life. Some 70,000 manuscripts are housed in about 80 locations, although the bulk is known to be in just five libraries. But the logistics of finding these various documents, let alone assessing and comparing their relevance and content, are daunting. The Archive allows scholars to search the entire body of Whitman’s writings and scholarship on those works and offers scholarly analysis.

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.
Implementation Grants for Special Projects—
Journals of Lewis and Clark Online Edition
$222,177  National Endowment for the Humanities
9/1/03–8/31/07
Walter is 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 Kloefkorn reading selected passages. Online searchability will make the Web site a useful resource for scholars and the general public.

* National Digital Newspaper Program: Nebraska
$271,016  National Endowment for the Humanities
Wunder, John  Journalism and Mass Communications
Mering, Margaret  Center for Digital Research in the Humanities
Pytlík Zillig, Brian  Center for Digital Research in the Humanities
Walter, who co-directs UNL's Center for Digital Research in the Humanities, leads the Nebraska Digital Newspapers Project, through which about 100,000 pages of Nebraska newspapers from 1880 through 1910 will be digitized for inclusion in the Library of Congress' national "Chronicling America" Web site. UNL's University Libraries is partnering with the College of Journalism and Mass Communications and the Nebraska State Historical Society on the two-year, "We the People" grant. Nebraska is one of nine states selected in the early phases of this project, which eventually will include all 50 states. "We the People" grants recognize model projects that advance the study, teaching and understanding of American history and culture.
<table>
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<tr>
<th>Name</th>
<th>Institution</th>
<th>Amount</th>
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<td>*Spirit of Design:</td>
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Terry J. Klopfenstein
Animal Science
Title: Ruminant Feed and Method of Making
Date: November 28, 2007
No. 840554 (European)
Country: Ireland

Yiqi Yang
Textiles, Clothing and Design
Title: Sulfur Dye Protection Systems and Compositions and Methods Employing Same
Date: October 8, 2007
No. 210789
Country: India

Adnan Hadzialic; Stephen Robert Platt; Dmitry Oleynikov; Shane Farritor
Mechanical Engineering
Title: Robot for Surgical Applications
Date: April 3, 2007
No. 7,199,545
Country: United States

Dean Sicking; Keith Kurz; Ronald Faller
Civil Engineering; Midwest Roadside Safety Program
Title: Traffic Noise Barrier System
Date: May 22, 2007
No. 7,220,077
Country: United States

Sally Mackenzie; Zarir Vaghchhipawala
Plant Pathology
Title: Soybean FGAM Synthase Promoters Useful in Parasite Control
Date: May 29, 2007
No. 7,223,901
Country: United States

Stephen M. Goddard
Computer Science and Engineering
Title: Fault Tolerant Firewall Sandwiches
Date: August 7, 2007
No. 7,254,834
Country: United States
Licensee: Perennial Plant Products, Inc. (dba Blooms of Bressingham of North America)
Descriptions: Chrysanthemum: 95003a, 94019, Orange Spider, Big Purple, Blush, Sunsatation, 80108, 81126, 84112
Clematis groundcover
Dianthus: Rosish One, Prairie Pink, Sweetheart, 24025, Pixie, Hearts Desire
Penstemon: Prairie Star, Prairie Flame, Prairie Twilight, Lady Husker, Norma
Schizachrium: scoparium 1, scoparium 2
Veronica
Inventors: Dale Lindgren, Daniel Schaaf
Department: West Central Research and Extension Center

Licensee: Neogen Corporation
Description: Immunoassay technology for use in detection of allergens in food
Inventors: Stephen L. Taylor, Susan Hefle
Department: Food Science and Technology
Dr. Hefle died in August of 2006.

Licensee: Sharp Bros. Seed Co.
Description: Goldmine variety of big bluestem
Inventor: Terrance P. Riordan
Department: Agronomy and Horticulture

Licensee: Nebraska Surgical Solutions, Inc.
Descriptions: In vivo robot
Method and robotic device for drug delivery
A display for surgical visualization
Imaging robot
Inventors: Shane Farritor, Dmitry Oleynikov
Department: Mechanical Engineering

Licensee: Channel Bio Corp.
Description: Roundup-ready soybean varieties with increased tolerance to glyphosate
Inventor: George Graef
Department: Agronomy and Horticulture

Licensees: University of North Dakota, University of New Orleans, Purdue University
Description: CALMUT Data Acquisition Program (CDAP), software for the collection of spectral data using dual field ratiometers
Inventors: Bryan Leavitt, Donald Rundquist
Department: Conservation and Survey Division

Licensee: The Grain Place, Inc.
Description: Yellow hilum, high protein soybeans
Inventor: George Graef
Department: Agronomy and Horticulture
Licensee: CYRO Industries
Description: Crashworthy protection system for roadside sound barriers (PARAGLAS Barrier)
Inventor: Ron Faller
Department: Midwest Roadside Safety Program

Licensee: Terra Nova Nurseries
Description: Penstemon: Dark Towers
Inventor: Dale Lindgren
Department: West Central Research and Extension Center

Licensee: Chrysantis, Inc.
Description: New gene that intensifies purple plant color in pearl millet
Inventor: David Andrews
Department: Agronomy and Horticulture

Licensee: South Dakota Crop Improvement
Description: Husker Genetics Brand Overland NE01643 (wheat)
Inventor: Stephen Baenziger
Department: Agronomy and Horticulture

Licensee: Sementes Adriana
Description: Pearl millet parent lines NM, hybrids, and other germplasms to include any seeds that are increased or directly produced using NM, NPM, NE or NFPM lines
Inventor: David Andrews
Department: Agronomy and Horticulture
START UP COMPANIES IN 2007
Recognition for faculty who started companies
UNL faculty indicated in red

Shane Farritor; Dmitry Oleynikov
Mechanical Engineering
Company: Nebraska Surgical Solutions, Inc.
Start Date: April 20, 2007

Hendrick Viljoen; Joel TerMaat
Chemical and Biomolecular Engineering
Company: Philisa Technology Corporation
Start Date: August 13, 2007
John R. Bailey
Mark Clinton

Diane C. Barger
Mark Clinton
Susan Levine
Soloists, performance, Into the Monster’s Lair, clarinet with piano and dancer. International Clarinet Association’s ClarinetFest, Vancouver, Canada.

Anthony J. Bushard

Dana Fritz
Artist, exhibit, Villandry et les Jardins du Monde, photography. Chateau de Villandry, France.

Michael F. James
Artist, exhibit, Interference Effect: Betrayed Lover’s Knot #2, fabric construction quilt. Touring exhibition co-sponsored by Craft in America Inc., and Curatorial Assistance Traveling exhibitions (CATE) and complementing the PBS production Craft in America that aired nationally in May 2007.
Artist, exhibit, Flights of Fantasy, multiple works, fabric constructions and quilts. Museum of Art, Seoul, South Korea. Invitational exhibit organized by the U.S. State Department’s Art-in-Embassies Program, the U.S. Embassy, Seoul, and Seoul National University.
Artist, exhibit, solo exhibition. Galerie Jonas, Petit-Cortaillod, Neuchâtel, Switzerland.

Gail M. Kendall
Artist, exhibit, 32nd Pottery Exhibition. Art School at Old Church, Demarest, New Jersey.
Artist, exhibit, ceramics invitation. Red Lodge Ceramic Center, Red Lodge, Montana.
Artist, exhibit, St. Croix Pottery Tour. Mayron Cowles Studio, Shaffer, Minnesota.
Karen S. Kunc  Art and Art History
Artist, exhibit, solo exhibition, prints. Gallery Piano Nobile, Krakow, Poland.
Artist, exhibit, Lyrical Legacy, prints & artist’s books. Leedy-Voulkos Art Center, Kansas City, Missouri.
Artist, exhibit, solo exhibition, prints. Huntington Museum of Art, Huntington, West Virginia.

Barbara Trout  Textiles, Clothing and Design
Artist, exhibit, Trappings Two, juried exhibition. International Textile and Apparel Association, California State University Art Gallery, Northridge, California.

Wendy R. Weiss  Textiles, Clothing and Design
Artist, exhibit, Polka Dot Clouds, textile art. 2007 International exhibition of Natural Dye for I, Daegu Culture and Arts Center, Korea and Ulsan Culture and Arts Center, Korea.
Artist, exhibit, Striped Trees, textile art. 2007 International exhibition of Natural Dye for I, Daegu Culture and Arts Center, Korea and Ulsan Culture and Arts Center, Korea.

Sandra Williams  Art and Art History
Artist, exhibit, The History of Zero, solo exhibition, mixed media. The Arts Center in Orange, Orange, Virginia.
BOOKS
Recognition for faculty who have written books
UNL faculty indicated in red

Marco Abel

Jonis Agee

Bruce J. Avolio

Grace Bauer

Donald F. Becker

Susan Belasco

David Beukelman

Brian H. Bornstein

Kathy R. Bosch

James Bovaird
Amy N. Burnett  History

Enrique Martinez Celaya  Art and Art History

Frankie M. Condon  English

Sidnie White Crawford  Classics and Religious Studies

John Creswell  Educational Psychology


T. Newell Decker  Special Education and Communication Disorders

Yasar Demirel  Chemical and Biomolecular Engineering
Martin Despang Architecture

Lester A. Digman Management

Wheeler Winston Dixon English

Beth Doll Educational Psychology

Judy A. Driskell Nutrition and Health Sciences; Food Science and Technology

David P. Forsythe Political Science

Chris W. Gallagher English

James Alex Garza History; Ethnic Studies

Norman Geske Art and Art History

Joan R. Giesecke Libraries

Vadim N. Gladyshev Biochemistry

Amy M. Goodburn English

Andrew R. Graybill History
Janet S. Hanna  Extension; Child, Youth and Family Studies

Glenn J. Hoffman  Biological Systems Engineering

Srikanth B. Iyengar  Mathematics

Douglas M. Jackson  Architecture

Evelyn M. Jacobson  Modern Languages and Literatures

Manfred R. Jacobson  Modern Languages and Literatures; Judaic Studies

Paul A. Johnsgard  Biological Sciences

Frances W. Kaye  History and Ethnic Studies; English

Ari Kohen  Political Science; Judaic Studies

Marjorie J. Kolstelnik  College of Education and Human Sciences


Ted Kooser  English
Eileen M. Krumbach  
Extension; Child, Youth and Family Studies  

Carole Levin  
History  

Frederick M. Link  
English  

Kathleen A. Lodl  
4-H Youth Development  

Fred Luthans  
Management  

Derrel L. Martin  
Biological Systems Engineering  

Jennifer McKitrick  
Philosophy  

Patrice C. McMahon  
Political Science  

Colleen Medill  
College of Law  

Mary E. Nelson  
Extension; Child, Youth and Family Studies  

David L. Olson  
Management  

Vicki Plano Clark  
Psychology  
<table>
<thead>
<tr>
<th>Name</th>
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</table>


Steven L. Willborn  
College of Law  


David J. Wishart  
Anthropology and Geography  

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


Susan A. Wunder  
Teaching, Learning and Teacher Education  

Janos Zempleni  
Nutrition and Health Sciences  
Myron Braake  
Plant Pathology (Emeritus)  
National Academy of Science membership  
*Dr. Braake died June 15, 2007.*

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

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

James Van Etten  
Plant Pathology  
National Academy of Science membership

Sam Allgood  
Economics  
Member, American Economic Committee on Economic Education

Diane C. Barger  
School of Music  
Buffet Crampon Artist/Clinician, Buffet Crampon USA, Inc.  
Treasurer, International Clarinet Association

Fred P. Baxendale  
Entomology  
Award for Excellence in Extension, National Association of State Universities and Land-Grant Colleges

Mary M. Beck  
Animal Science  
Fellow Award, Poultry Science Association

Christopher R. Bilder  
Statistics  
CAUSEWeb Resource of the Year Award, Consortium for the Advancement of Undergraduate Statistics Education

Dawn O. Braithwaite  
Communication Studies  
Distinguished Service Award, Western States Communication Association  
Second vice president, National Communication Association

Chris R. Calkins  
Animal Science  
K.C. Wong Education Foundation invited lecturer, Nanjing Agricultural University, Nanjing, China  
Invited presentation at China Congress, International Congress of Meat Science and Technology

Gwendolyn M. Combs  
Management  
Elected to executive committee, Gender and Diversity in Organizations Division, Academy of Management  
Vice president, president elect, Management Faculty of Color Association, Inc.
Rochelle Dalla, Child, Youth and Family Studies
Distinguished Publication Award, Association of Women in Psychology

Mary Jo Deegan, Sociology
Award for Significant Contributions to the Study and History of Early Women Sociologists, Harriet Martineau Sociological Society

John DeFrain, Child, Youth and Family Studies
Honorary appointment, Conjoint Professor of Family Studies, University of Newcastle, New South Wales, Australia

Martin Despang, Architecture
Social Motion paper presented at the Urban Transport Conference, Coimbra, Portugal
Top nominee, INDEX Award
Second place, Im Zentrum zu Hause, Berlin, Germany
Top nominee, NIKE BDA Award

Lester A. Digman, Management
2007 Distinguished Paper, Decision Sciences Institute

Matthew B. Dwyer, Computer Science & Engineering
Distinguished Scientist, Association for Computing Machinery

Calvin L. Ferrell, Animal Science
Research Fellow Award, American Society of Animal Science

James Ford, English
Ariel Bybee, School of Music
International Trophy Grand Prize, Waterford International Festival of Light Opera

David P. Forsythe, Political Science
Human Rights Scholar of the Year, American Political Science Association, Human Rights Section
Senior Fulbright Research Chair, United States and Danish Fulbright Committees

John E. Foster, Entomology
International Plant Protection Award of Distinction 2007, International Association for the Plant Protection Sciences

Scott M. Fuess, Jr., Economics
Fellowship, Institute for the Study of Labor (IZA) Bonn, Germany

Russell Ganim, Modern Languages and Literatures
Thomas Carr, Modern Languages and Literatures
Co-organizers, North American Society for Seventeenth Century French Literature Conference

James A. Garza, History and Ethnic Studies
Journal of the West Award for Best Article of the Year, Journal of the West

James A. Gosey, Animal Science
Pioneer Award, Beef Improvement Federation
David S. Hage  Chemistry
Top 20 Most Cited Review Articles (2002-2007), Journal of Chromatography

David J. Hansen  Psychology
Fellow, American Psychological Association

Janet A. Harkness  Gallup Research Center
Member, German Youth Institute Advisory Taskforce
Member, Social Behavioral and Economic Sciences Advisory Board, National Science Foundation

Jeff G. Hart  Extension
National Award for Diversity 2007, USDA/CSREES/ECOP

Leon G. Higley  Entomology
2007 Foundation Memorial Award, Entomological Society of America

Terry Housh  Nutrition and Health Sciences
Fellow, National Strength and Conditioning Association

Srikanth B. Iyengar  Mathematics
Friedrich Wilhelm Bessel Research Award, Alexander von Humboldt Foundation, Germany

Margaret D. Jacobs  History
Visiting fellowship, Centre for Indigenous Studies, Australian National University

Michael James  Textiles, Clothing & Design
Silver Star Award, Quilts, Inc. and International Quilt Festival

Paul J. Jasa  Biological Systems Engineering
Outstanding Presentation Award, 2007 National No-Tillage Conference

Jay T. Johnson  Anthropology and Geography
Chair, Indigenous Peoples’ Knowledges and Rights Commission, International Geographical Union

David D. Jones  Biological Systems Engineering
2007 Best Paper Award, Biological and Agricultural Division of the American Society for Engineering Education

Jeannette E. Jones  History and Ethnic Studies
Deutsche Bank Junior Scholar-in-Residence Fellowship, Heidelberg Center for American Studies

Alan C. Kamil  Biological Sciences, Psychology
Quest Award for Research Contributions, Animal Behavior Society

Gordon V. Karels  Finance
Visiting scholar, Federal Reserve Bank of Atlanta

Karen S. Kunc  Art and Art History
2007 Printmaker Emeritus Award, Southern Graphics Council

RECOGNITIONS AND HONORS
Stephen Lahey, Classics and Religious Studies
John Nicholas Brown Prize for Best First Book, Medieval Academy of America

Gail F. Latta, Libraries
Bobby Knight Dissertation of the Year Award finalist, Association for the Study of Higher Education

Sang M. Lee, Management
Keynote speaker, International Conference on Strategic Innovation in Bandung, Indonesia
Distinguished Global Leadership Award, Pan-Pacific Business Association

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

Donald G. Levis, Animal Science
Master of the Pork Industry, National Hog Farmer magazine

Yijia Lin, Finance
Ernst Meyer Prize, Geneva Association

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

Ann Mari May, Economics
Member, American Association of University Professors Committee on the Economic Status of the Profession

Allan L. McCutcheon, Gallup Research Center; Statistics
Senior statistical director, Exit Polls for the National Election Pool
Fellow, Royal Statistical Society

George E. Meyer, Biological Systems Engineering
2007 Best Paper Award, Biological and Agricultural Division of the American Society for Engineering Education

Nancy Miller, Textiles, Clothing & Design
Best Paper Award, Journal of Small Business Management and the Office Depot

Helen A. Moore, Sociology
President, Midwest Sociological Society

Sucheta Nadkarni, Management
Outstanding Service Award, Managerial and Organizational Cognition Division of the Academy of Management

Fiona Nah, Management
Extra-Outstanding Associate Editor, International Conference on Information Systems

Glenn E. Nierman, School of Music
Outstanding Service to the National Association for Music Education, Nebraska Music Educators Association
Andrezej Nowak  Civil Engineering
Award of National Professorship, Leach Kaczynski, President of Poland

Edward Nowlin  Marketing
Co-winner, American Marketing Association’s Sales SIG
Dissertation Proposal, American Marketing Association

Alexander D. Pavlista  Agronomy and Horticulture
President, Potato Association of America

Allan C. Peterson  Mathematics
Euler Prize for Research in Time Scales, Technical University, Munich

Byrav Ramamurthy  Computer Science & Engineering
Vice chair, Optical Networking Technical Committee, IEEE Communications Society

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

Peter Revesz  Computer Science & Engineering
Fulbright Senior U.S. Scholar, Fulbright Foundation, Greece

Sheila E. Scheideler  Animal Science
Helene Cecil Leadership Award, Poultry Science Association

Marc Schneiderjans  Management
Fellow, Decision Sciences Institute

Keng Siau  Management
Keynote speaker, Second AIS SIGSAND European Symposium on Systems Analysis and Design, Gdansk, Poland
Editor in chief, Journal of Database Management
Co-editor-in-chief, Advances in Database Research Series
Outstanding Service Award, International Federation for Information Processing

Dean Sicking  Civil Engineering; Midwest Roadside Safety Facility
National Medal of Technology, President George W. Bush

Robert G. Simon  Marketing
Outstanding Faculty Adviser, International Collegiate American Marketing Association

Ravipreet S. Sohi  Marketing
Track co-chair, American Marketing Association’s Winter Educators’ Conference
Associate editor, International Journal of Applied Decision Sciences

Robert J. Spreitzer  Biochemistry
Chair, North-Central Regional Project NC-1168, Regulation of Photosynthetic Processes, NC-1168 Membership
Alan E. Steinweis  History
Finalist, National Jewish Book Award for Studying the Jew, Holocaust Category, Jewish Book Council

William G. Thomas III  History
Distinguished Lecturer, Organization of American Historians
Digital Innovation Fellowship, American Council of Learned Societies

Harriet S. Turner  International Affairs; Modern Languages and Literatures
Encomienda de la Orden de Isabel la Católica, His Majesty D. Juan Carlos I, King of Spain

Mary Uhl-Bien  Management
Best Reviewer Award, Leadership Quarterly

L. Dale Van Vleck  Animal Science
Pioneer Award, National Dairy Shrine

Lily M. Wang  Architectural Engineering
Fellowship, Acoustical Society of America

Clarence E. Waters  Architectural Engineering
Elected to the Board of Governors, Architectural Engineering Institute

Les B. Whitbeck  Sociology
Community, Culture, and Prevention Science Award, Society for Prevention Research

Brian L. Wilcox  Center on Children, Families and the Law; Psychology
Nicholas Hobbs Award for Distinguished Contributions to Research on Child Policy and Advocacy, American Psychological Association

Ronald E. Yoder  Biological Systems Engineering
President’s Citation, American Society for Agricultural and Biological Engineers

Xiao Cheng Zeng  Chemistry; Physics & Astronomy
Fellow, American Association for the Advancement of Science
## Glossary of Federal Agency Abbreviations

<table>
<thead>
<tr>
<th>Agency Abbreviation</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>CNS</td>
<td>Corporation for National Service</td>
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<td>USDA</td>
<td>United States Department of Agriculture</td>
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<tr>
<td>ARS</td>
<td>Agricultural Research Service</td>
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<tr>
<td>BRDC</td>
<td>Biotechnology Research and Development Corporation</td>
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<td>CSREES</td>
<td>Cooperative State Research, Education &amp; Extension Service</td>
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<tr>
<td>ERS</td>
<td>Extension Research Service</td>
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<tr>
<td>FAS</td>
<td>Foreign Agriculture Service</td>
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<td>FS</td>
<td>Forestry Service</td>
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<tr>
<td>NRCS</td>
<td>Natural Resources Conservation Service</td>
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<tr>
<td>NRICGP</td>
<td>National Research Initiative Competitive Grant Program</td>
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<td>RMA</td>
<td>Risk Management Agency</td>
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<tr>
<td>SARE</td>
<td>Sustainable Agricultural Research and Education Program</td>
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<tr>
<td>DOC</td>
<td>Department of Commerce</td>
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<tr>
<td>EDA</td>
<td>Economic Development Administration</td>
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<tr>
<td>NOAA</td>
<td>National Oceanic &amp; Atmospheric Administration</td>
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<tr>
<td>DOD</td>
<td>Department of Defense</td>
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<td>Army Corps of Engineers</td>
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<td>Army Research Office</td>
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<tr>
<td>DEPSCoR</td>
<td>Defense Experimental Program to Stimulate Cooperative Research</td>
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<tr>
<td>Naval Research Laboratory</td>
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<tr>
<td>Office of Naval Research</td>
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<tr>
<td>U.S. Army Medical Research Acquisition Activity</td>
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<tr>
<td>DEd</td>
<td>Department of Education</td>
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<tr>
<td>FIPSE</td>
<td>Fund for the Improvement of Postsecondary Education</td>
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<tr>
<td>GAANN</td>
<td>Graduate Assistance in Areas of National Need</td>
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<tr>
<td>DOE</td>
<td>Department of Energy</td>
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<tr>
<td>EPSCoR</td>
<td>Experimental Program to Stimulate Cooperative Research</td>
</tr>
<tr>
<td>NIGEC</td>
<td>National Inst for Global Environmental Change Sandia National Laboratories</td>
</tr>
</tbody>
</table>
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
NICHDI  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