I am pleased to present the fourth annual "Major Sponsored Program and Faculty Awards for Research and Creative Activity" report. This booklet highlights the successes of University of Nebraska–Lincoln faculty during 2005. The funding sources, projects and investigators on major sponsored program awards received during the year are listed, as well as patents issued, published books and scholarship, fellowships and other recognitions. New this year are intellectual property licenses and performances and exhibitions in the fine and performing arts. The list is impressive and continues to grow each year—further evidence the University of Nebraska–Lincoln is on the move!

We work to closely integrate our research priorities with our established programs of excellence. We are dedicated to fostering interdisciplinary research and collaborations with public and private partnerships, expanding our economic development efforts by working with business and industry.

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

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

Prem S. Paul
Vice Chancellor for Research and Dean of Graduate Studies
AWARDS OF $3 MILLION OR MORE
Active awards in 2005
* Indicates new in 2005

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.

Banerjee, Ruma Biochemistry

**Redox Biology Center**

$10,190,697 DHHS-NIH-NCRR
9/30/02 – 8/31/07

Ruma Banerjee, George Holmes University Professor of Biochemistry in the Institute of Agriculture and Natural Resources, is the director of the Redox Biology Center. The center was established in 2002 with a grant from the National Institutes of Health as a Center of Biomedical Research Excellence. The center’s researchers investigate how cells maintain a reduction-oxidation balance, a process called redox homeostasis, and study links between redox homeostasis and diseases such as cancer, cardiovascular disease, Alzheimer’s disease and cataracts. The center’s research will provide important advances in the understanding of redox regulation, comprising aspects of cellular aging and controlled cell death.

Epstein, Michael Special Education and Communication Disorders

**Center for Behavior and Reading**

$4,498,231 Dept. of Education
10/1/01 – 9/30/06

Michael Epstein, William Barkley Professor of special education and communication disorders, and co-investigator Ron Nelson, associate research professor of special education and communicaton 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 – 8/31/06

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.

**Goddard, Stephen**
Computer Science and Engineering
*D Drought Risk, Impact and Mitigation Information System
$6,407,473
9/1/05 – 8/31/08

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.

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 10 take 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.
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.

David Sellmyer, George Holmes Distinguished professor in the department of physics and astronomy at UNL, leads the Materials Research Science and Engineering Center. The center was established in 2002 with a grant from the National Science Foundation and involves scientists from the departments of physics and astronomy, chemistry and mechanical engineering, and the School of Biological Sciences. MRSEC projects focus on fabricating and studying new magnetic structures and materials at the nanometer scale. The research has applications in advanced computing and data storage, handheld electronic devices, advanced sensors and future medical technologies.
Sheridan, Susan  
**Parent Engagement and Learning Birth to Five**

$5,068,518

9/26/03 – 9/30/08

**Educational Psychology**

Susan M. Sheridan, Willa Cather professor of educational psychology, and co-investigator Carolyn Edwards, Willa Cather professor of psychology and family and consumer sciences, are leading a team of researchers from UNL and UNMC in a school-readiness project funded by three federal agencies.

The team will launch and evaluate a comprehensive, community-based early education program for children aged 0-5. The goal is to increase children’s readiness for school by teaching parents to build an effective relationship with their children at home and to be active participants in their children’s learning when they enter school. The program is designed to enhance children’s cognitive, behavioral and socioemotional well-being, which together set the stage for school readiness.

Tomkins, Alan  
**Public Policy Center**

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

$3,504,226

9/30/02 – 3/31/06

**Public Policy Center**

Alan Tomkins, director of the Public Policy Center and professor of psychology and law, is leading a project funded by the U.S. Department of Health and Human Services. The goal is to enhance and expand the capacity of community- and faith-based organizations to provide high-quality services as part of an integrated system of behavioral health care to rural and urban communities. Among the hoped-for outcomes is to address the problem of insufficient resources by tapping into the extensive network of community- and faith-based organizations who offer behavioral health care services. The project will be a model for other states to emulate in coordinating and integrating these groups into an effective delivery system.

Velander, William  
**Chemical and Biomolecular Engineering**

* cGMP Recombinant FIX and Oral Hemophilia B Therapy

$9,981,870

Meagher, Michael

Van Cott, Kevin

9/6/05 – 8/31/10

**Chemical and Biomolecular Engineering**

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

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

$3,044,606 DOD-Army Medical Research
Meagher, Michael Chemical and Biomolecular Engineering
Van Cott, Kevin Chemical and Biomolecular Engineering
Inan, Mehmet Chemical and Biomolecular Engineering
8/1/05 – 2/1/07

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

Whitbeck, Les Sociology

Cultural Resilience of Rural & Remote Ojibwe Families
$3,138,960 DHHS-NIH-NIMH
7/1/02 – 6/30/07
Hayt, Dan Sociology

Ojibwe Pathways Through the High School Years
$3,262,793 DHHS-NIH-NIDA
9/3/05 – 6/30/12
Johnson, Kurt Sociology
Park, Mingue Sociology
Hayt, Dan Sociology

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 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.

John Yohe, associate professor in the department of agronomy and horticulture, directs the International Sorghum/Millet (INTSORMIL) Collaborative Research Support Program. INTSORMIL is a collaborative international organization that supports research focused on improving nutrition and increasing income in developing countries and the United States. Scientists from U.S. land grant universities collaborate with scientists in host countries in the development of technology to improve production and utilization of sorghum and millet and facilitate natural resource management. Their work is done in Africa, Eurasia, Latin America and the United States.
Awards of $1 Million to $2,999,999
Active awards in 2005
* Indicates new in 2005

Banerjee, Ruma  Biochemistry
Cystathionine Beta Synthase & Hyperhomocysteinemia
$1,177,264 DHHS-NIH-NHLBI
Mechanism of Methylmalonyl-CoA Mutase: A Radical Enzyme
$1,023,449 DHHS-NIH-NIDDK
Regulation of Homocysteine-dependent Redox Homeostasis
$1,531,581 DHHS-NIH-NIDDK

Buckendahl, Chad  Educational Psychology
Evaluation of the National Assessment of Educational Progress
$2,398,258 Dept. of Education
Davis, Susan  Educational Psychology

Caldwell, Robert  School of Natural Resources
Thematic Soil Mapping for Site-Specific Management
$1,025,000 Dept. of Agriculture-IFAFS
Dobermann, Achim  Agronomy and Horticulture
Adamchuk, Viacheslav  Biological Systems Engineering
Ferguson, Richard  Agronomy and Horticulture

Cerutti, Heriberto  Plant Science Initiative
* RNA-Mediated Silencing: Mechanisms and Biological Roles in Chlamydomonas
$1,042,852 DHHS-NIH-NIGMS

Chen, Bing  School of Engineering Technology
* SPIRIT: Silicon Prairie Initiative on Robotics in IT
$1,170,488 NSF

Cotton, Dan  Communications and Information Technology
National E-Extension Project
$2,570,000 National Association of State Universities and Land Grant Colleges

Diamond, Judy  University of Nebraska State Museum
Explore Evolution
$2,851,409 NSF

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


$1,031,914  
NSF

Hayes, Michael  
School of Natural Resources

Deogun, Jitender  
Computer Science and Engineering

Hubbard, Kenneth  
School of Natural Resources

Wilhite, Donald  
School of Natural Resources

Waltman, William  
Computer Science and Engineering

Reichenbach, Stephen  
Computer Science and Engineering

Revesz, Peter  
Computer Science and Engineering

Climate & Soil Risk Information System

$1,212,056  
Dept. of Agriculture-RMA

Wilhite, Donald  
School of Natural Resources

Hubbard, Kenneth  
School of Natural Resources

Green, Jordan  
Special Education and Communication Disorders

Early Speech Motor Development

$1,804,739  
DHHS-NIH-NIDCD

Hoagland, Kyle  
School of Natural Resources

* DNR Ground Water Management and Protection Act Service Agreement

$1,500,000  
Nebraska Dept. Natural Resources

Hubbard, Kenneth  
School of Natural Resources

Services of the NOAA Regional Climate Centers

$1,824,032  
Dept. of Commerce-NOAA

Jones, Vicky  
Northeast Research & Extension Center

Northeast Nebraska Paraprofessional Ladder Project

$1,976,000  
Dept. of Education

Lopez, William  
Teaching, Learning and Teacher Education

Jose, H. Douglas  
Agricultural Economics

North Central Risk Management Education Center

$2,400,000  
Dept. of Agriculture-CSREES

Josiah, Scott  
NE State Forest Service

Cooperative Forestry Program

$1,322,016  
Dept. of Agriculture-FS

Kamil, Alan  
Biological Sciences

Landmarks, Bearings and Way-Finding

$1,338,934  
DHHS-NIH-NIMH

Mechanisms of Visual Search and Attention

$1,029,062  
DHHS-NIH-NIMH

Bond, Alan  
Biological Sciences

Lopez, William  
Teaching, Learning and Teacher Education
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Paul, Prem  
For the Department of Chemistry 
Establishment of Functional Genomics for Medicinal Chemistry Facility II  
$2,000,000  
Establishment of Functional Genomics for Medicinal Chemistry Facility II  
$1,991,060  

Ragsdale, Stephen  
Biochemistry  
Enzymology of Reductive Acetyl-CoA Pathway  
$1,235,700  

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

Simpson, Melanie  
Biochemistry  
* Role of Hyaluronan Matrix in Prostate Cancer Progression  
$1,084,090  

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

Van Etten, James  
Plant Pathology  
DNA Replication & Gene Expression of Chlorella Viruses  
$1,255,600  
Dunigan, David  
Kang, Ming  
Zhang, Yuanzheng  
Agarkova, Irina  
Gurnon, James  

Verma, Shashi  
School of Natural Resources  
Great Plains Regional Center for Global Environmental Change  
$2,214,769  
Carbon Sequestration in Agriculture  
$1,139,462  
Knops, Johannes  

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

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

$1 MILLION — $2,999,999
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<tr>
<th>Name</th>
<th>Department/Field</th>
<th>Project Title</th>
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<tr>
<td>Weeks, Donald</td>
<td>Biochemistry</td>
<td>Development of Dicamba-Resistant Crops</td>
<td>$2,500,000</td>
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<td>Whitbeck, Les</td>
<td>Sociology</td>
<td>Great Plains Cultural Ways Mental Health Careers Program</td>
<td>$1,514,284</td>
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<td>Moore, Helen</td>
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<td>White, Lynn</td>
<td>Sociology</td>
<td>Infertility: Pathways &amp; Psychosocial Outcomes</td>
<td>$2,559,414</td>
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<td>McQuillan, Julia</td>
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<td>Wilcke, William</td>
<td>IANR-Research</td>
<td>North Central Regional Sustainable Agriculture Research &amp; Education Program – SARE</td>
<td>$2,707,719</td>
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<td>Wilhite, Donald</td>
<td>School of Natural Resources</td>
<td>* Rangeland and Forage Geospatial Decision Support System for Drought Risk Management</td>
<td>$1,023,038</td>
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<td>Wilson, Brent</td>
<td>Mechanical Engineering</td>
<td>Development of Improved Product Performance through Optimization &amp; Modeling of Engineering Materials Processing &amp; Function</td>
<td>$1,351,226</td>
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<td>Wood, Charles</td>
<td>Biological Sciences</td>
<td>Kaposi's Sarcoma &amp; Human Herpesvirus in Africa</td>
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<td>Programs in HIV &amp; AIDS Assoc Diseases/Malignancies</td>
<td>DHHS-NIH-Nat Cancer Institute</td>
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<td>Evolution of Clade C HIV-1 in Infected Children</td>
<td>DHHS-NIH-Fogarty Intl Center</td>
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<td>Research Training in Comparative Viral Pathogenesis</td>
<td>DHHS-NIH-NICHD</td>
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<td>Vaccination against Intrapartum HIV Clade C Transmission</td>
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<td>Dana-Farber Cancer Institute</td>
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<td>Yamamoto, Catherine</td>
<td>Student Affairs</td>
<td>Talent Search Program</td>
<td>$1,626,225</td>
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<td>Upward Bound Program–Northeast Nebraska</td>
<td>Dept. of Education</td>
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<td>Student Support Services Program</td>
<td>Dept. of Education</td>
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<td>Yohe, John</td>
<td>IANR-Intl Programs</td>
<td>Post Graduate Training and Collaborative Research to Strengthen INIA of Mozambique</td>
<td>$1,199,985</td>
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**Total Funding:** $1,023,038 - $2,999,999
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<th>Name</th>
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<tr>
<td>Zempleni, Janos</td>
<td>Nutrition and Health Sciences</td>
<td>Vitamin-Dependent Modifications of Histones</td>
<td>$1,014,269</td>
<td>DHHS-NIH-NIDDK</td>
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<tr>
<td>Zhang, Luwen</td>
<td>Center for Virology</td>
<td>* Oncogenic Properties of Interferon Regulatory Factor 7</td>
<td>$1,145,961</td>
<td>DHHS-NIH-Nat Cancer Institute</td>
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</table>
Awards of $200,000 - $999,999
Active awards in 2005
* Indicates new in 2005

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

Adenwalla, Shireen  Physics and Astronomy
Nanoscale Structural Engineering of Ferroelectric Polymers
$283,641  Dept. of Energy-EPSCoR
Ducharme, Stephen  Physics and Astronomy

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

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

Alexander, Dennis  Electrical Engineering
Ultra-Short Laser Pulse Propagation
$300,943  DOD-DEPSCoR

Alfano, James  Plant Pathology
Functional Genomics of the Interactions of Tomato & Pseudomonas Syringae
$392,500  Cornell University
Isolation & Characterization of Pseudomonas Type III Effectors that Suppress Programmed Cell Death in Eukaryotes
$375,000  NSF
Chaperones of the Type III Protein Secretion System of Pseudomonas Syringae Tomato DC 300
$200,000  Dept. of Agriculture-CSREES

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

$200,000 – $999,999
Avramov, Luchezar  Mathematics  
Homology & Cohomology over Commutative Rings  
$356,322  NSF

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

Ayers, Jerry  School of Natural Resources  
* Management and Preservation of Saline Wetlands in Eastern Nebraska  
$314,260  Environmental Protection Agency
Harvey, Ed  School of Natural Resources
Gosselin, David  School of Natural Resources

Azizinamini, Atorod  Civil Engineering  
* Simple for Dead-Continuous for Live Load System with Partial Pre-Fabricated Deck System  
$242,038  Ne Dept. of Roads
$290,000  Civil Engineering
Rizos, Dimitri  Development of Design Tools for Steel Bridge Systems, Simple for Dead Loads & Continuous for Superimposed Dead Load & Live Loads  
$226,306  Ne Dept. Roads
Steel Box System Monitoring of N-2 over I-480 Bridge  
$292,244  Ne Dept. Roads
$240,000  IBRC 2002 Project

Baenziger, P. Stephen  Agronomy and Horticulture  
* Developing Winter Wheat with Improved Fusarium Head Blight Tolerance by Conventional and Transgenic Approaches  
$218,531  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  Agronomy and Horticulture
Eskridge, Kent  Statistics
Dweikat, Ismail  Agronomy and Horticulture

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

Basolo, Alexandra  Biological Sciences  
* Behavioral Plasticity in Preexisting Receiver Bias  
$360,000  NSF
Effects of Sexual Selection & Predation on a Genetic Polymorphism for Body Size  
$519,721  NSF
<table>
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<tr>
<th>Name</th>
<th>Department</th>
<th>Project Description</th>
<th>Funding Agency</th>
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<tr>
<td>Batelaan, Herman</td>
<td>Physics and Astronomy</td>
<td>Matter Optics with Intense Laser Light</td>
<td>NSF</td>
<td>$424,997</td>
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<td>Becker, Donald</td>
<td>Biochemistry</td>
<td>Spectroelectrochemistry of the Novel PutA Flavoprotein</td>
<td>DHHS-NIH-NIGMS</td>
<td>$693,134</td>
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<td>Belli, Robert</td>
<td>Gallup Research Center</td>
<td>Verbal Behaviors in Computerized Lifecourse Surveys</td>
<td>DHHS-NIH-Nat Inst Aging</td>
<td>$414,430</td>
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<td>Belot, John</td>
<td>Chemistry</td>
<td>GOALI: Chemical Factors Affecting Metal-Organic Chemical Vapor Deposition Precursors</td>
<td>NSF</td>
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<td>Benson, Andrew</td>
<td>Food Science and Technology</td>
<td>* Functional Consequences of Genome Evolution in Listeria Monocytogenes</td>
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<td>Genome Biology of Francisella tularensis Populations</td>
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<td>Population Genomes of Listeria Monocytogenes</td>
<td>Dept. of Agriculture-NRICGP</td>
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<td>Berkowitz, David</td>
<td>Chemistry</td>
<td>New Approaches to Catalyst Screening &amp; Development</td>
<td>NSF</td>
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<td>Development of Cystathionine Beta-Synthase Inhibitors</td>
<td>American Heart Association</td>
<td>$214,500</td>
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<td>Beukelman, David</td>
<td>Special Education and Communication Disorders</td>
<td>* Rehabilitation Engineering Research Center on Communication Enhancement</td>
<td>Duke University Medical Center</td>
<td>$284,994</td>
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<td>Bevins, Rick</td>
<td>Psychology</td>
<td>Acquired Appetitive Properties of Nicotine</td>
<td>DHHS-NIH-NIDA</td>
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<td>Bi, Xin</td>
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<td>Heterochromatin Domains &amp; Boundary Elements</td>
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<td>Chiu, Ya-Hui</td>
<td>Biochemistry</td>
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<td>Billesbach, David</td>
<td>Biological Systems Engineering</td>
<td>Development &amp; Field Testing of a Rapidly Deployable Carbon Dioxide Flux Management System</td>
<td>Dept. of Energy-Berkeley Nat Lab</td>
<td>$380,376</td>
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<td>Blum, Paul</td>
<td>Biological Sciences</td>
<td>Gene Silencing &amp; Catabolite Repression in the Archaeon Sulfolobus Solfataricus</td>
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Total: $200,000 – $999,999
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<td>Bond, Alan</td>
<td>Biological Sciences</td>
<td>Mechanisms of Social Cognition</td>
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<td>Kamil, Alan</td>
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<td>Virtual Ecology: Experimental Tests of Evolution in Predator-Prey Systems</td>
<td>NSF</td>
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<td>Brand, Jennifer</td>
<td>Center for Materials Research</td>
<td>Boron Carbide Semiconductor Films</td>
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<td>Buhler, Stephen</td>
<td>English</td>
<td>Leadership for Institutional Change</td>
<td>W. K. Kellogg Foundation</td>
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<td>Bulling, Denise</td>
<td>Public Policy Center</td>
<td>* Hospital Preparedness</td>
<td>Ne Dept. Health and Human Services</td>
<td>$281,520</td>
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<td>Burbach, Mark</td>
<td>School of Natural Resources</td>
<td>* Integrated Real-Time Groundwater-Level Monitoring Network to Support Drought Impact Assessment and Mitigation Programs</td>
<td>Dept. of Agriculture-RMA</td>
<td>$403,293</td>
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<td>Computer Science and Engineering</td>
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<td>Burson, Dennis</td>
<td>Animal Science</td>
<td>Listeria Monocytogenes Controls in Ready to Eat Meat Products</td>
<td>Dept. of Agriculture-CSREES</td>
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<td>Cady, Daniel</td>
<td>Cooperative Extension</td>
<td>* Nebraska Technology Transfer Center at UNL</td>
<td>Nebraska Dept. Roads</td>
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<td>Caldwell, Robert</td>
<td>School of Natural Resources</td>
<td>Manure &amp; Nutrient Management Practices to Protect Human Health &amp; the Environment</td>
<td>Dept. of Agriculture-ARS</td>
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<td>Carlo, Gustavo</td>
<td>Psychology</td>
<td>Parenting &amp; Sociocognitive Correlates of Prosocial Behaviors in Mexican American &amp; European American Children</td>
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<td>Cerutti, Heriberto</td>
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<td>Transcriptional Gene Silencing in Chlamydomonas &amp; Arabidopsis</td>
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<td>Chollet, Raymond</td>
<td>Biochemistry</td>
<td>Molecular/Biochemical Investigations of PEPC (and its novel ser/thr-Kinase) and SuSy (Nodulin-100), 2 phosphorylated Metabolic Enzymes in Plants</td>
<td>NSF</td>
<td>$749,024</td>
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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  Agrobacterium-Mediated Genetic Transformation of Wheat & Soybeans  $345,537  Dept. of Agriculture-ARS-BRDC From Proplastid to Chloroplast; Understanding Plastid Differentiation in Maize by Microarray & Proteome Analysis  
Snow, Gregory  Physics and Astronomy  

$389,225  Cornell University  Research in Nebraska on Improved Soybean Oil for Biodiesel Fuel  

$491,000  Dept. of Energy  

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  $498,132  Dept. of Education  

Crockett, Lisa  Psychology  Ethnicity, Parenting and Adolescent Adjustment  $387,748  DHHS-NIH-NICHD  

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

DeKraai, Mark  Public Policy Center  * Child Mental Health SIG  $650,000  Nebraska Dept. Health and Human Services  

DiMagno, Stephen  Chemistry  * Hydrogen for Fuel Cells  
Takacs, James  Chemistry  
Berkowitz, David  Chemistry  

Hydrogenase and Alkane Functionalization Catalysts  
Redepenning, Jody  DOD-Office of Naval Research  

$599,748  Chemistry  

Dobermann, Achim  Agronomy and Horticulture  Harnessing Breakthroughs in Nutrient Management & Information Technology for Greater Profitability in Corn, Soybeans & Dry Beans  $300,000  Ne Dept. Agriculture  

$200,000 — $999,999
Dowben, Peter  Center for Materials Research  
Development of Semiconducting Boron Carbide for Solid State Neutron Detectors  
$905,000  DOD-Office of Naval Research 
Adenwalla, Shireen  Center for Materials Research  
Balkir, Sina  Electrical Engineering  
Brand, Jennifer  Center for Materials Research  
Doudin, Bernard  Center for Materials Research  
Hallbeck, Susan  Center for Materials Research  
Robertson, Brian  Center for Materials Research  
Paul, Prem  Vice Chancellor for Research  
Surface Chemistry of Adsorbates on Crystalline Polymers  
$380,000  NSF  

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

Dwyer, Matthew  Computer Science and Engineering  
* Software Model Checking for Embedded Systems  
$212,534  Kansas State University  
Parallel Analysis of Models for Distributed Real-Time Embedded Systems  
$309,613  Kansas State University  
Program Analysis Techniques to Support Dependable RTSJ Applications  
$207,519  NSF  
Elbaum, Sebastian  Computer Science and Engineering  
Goddard, Stephen  Computer Science and Engineering  

Dzenis, Yuris  Engineering Mechanics  
Fundamentals of Fabrication of Nanofiber Assemblies by Electrospinning  
$372,000  NSF  
Farritor, Shane  Mechanical Engineering  
Novel Continuous Carbon Nanofibers for the Next Generation Lightweight Structural Nanocomposites  
$252,362  DOD-Air Force Off of Sci Rsch  
Ultra High Speed Digital Imaging System  
$330,746  DOD-Army Rsch Office –DURIP  

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  

$200,000 – $999,999
Elbaum, Sebastian  
Computer Science and Engineering  
ITR/SW: Collaborative Research: A New Generation of Scalable, Cost-Effective Regression Testing Techniques  
$251,018  
NSF  
ITR: Dependable End-User Software  
$211,294  
NSF

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

Epstein, Michael  
Special Education and Communication Disorders  
Leadership Training in Emotional Disturbance Disorders  
$590,854  
Dept. of Education  
Postdoctoral Training in Emotional & Behavioral Disorders  
$471,512  
Dept. of Education  
Early Childhood Mental Health Project  
$716,290  
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  
$210,000  
NSF

Farritor, Shane  
Mechanical Engineering  
Track Stability Assessment  
$461,944  
Dept. of Transportation-FRA  
Palmer, Robert  
Electrical Engineering

Fritz, Sherilyn  
Geosciences  
Lake Titicaca Drilling Project  
$314,167  
NSF

Fuller, Robert  
Physics and Astronomy  
Algebra-Based Physics with Human Applications  
$378,798  
NSF  
Spiegel, Amy  
Educational Psychology  
Plano-Clark, Vicki  
Physics and Astronomy

Ganow, Marcella  
Civil Engineering  
* Nebraska ITS Program Support and ITS Architecture Maintenance  
$207,488  
Ne Dept. Roads  
Glenn, Kathleen  
Civil Engineering

Gardner, Scott  
School of Biological Sciences  
Worm-Web: Georeferencing Computerized Data & Linking Databases in the Manter Laboratory of Parasitology  
$420,107  
NSF  
Hosier, Aaron  
Information Services

$200,000 — $999,999
Gaskell, C. Martin  
Physics and Astronomy  
Variability of Active Galactic Nuclei  
$435,611  
NSF

Gay, Timothy  
Physics and Astronomy  
Polarized Electron Physics  
$652,002  
NSF

Gibson, Robert  
Biological Sciences  
Graduate Assistance in Areas of National Need: Integrating Ecology, Evolution, Geosciences, & Sustainable Natural Resource Management/Agriculture  
$452,850  
Dept. of Education
Graduate Assistance in Areas of National Need Fellowship for Ecology, Evolution & Behavior at UNL  
$622,665  
Dept. of Education

Ginting, Daniel  
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  
Mamo, Martha  
Agronomy and Horticulture  
Wortman, Charles  
Agronomy and Horticulture

Gitelson, Anatoly  
School of Natural Resources  
Consequences of Institutional Change: Land-Cover Dynamics in Kazakhstan 1960-2000  
$538,780  
NASA

Gladyshev, Vadim  
Biochemistry  
Identity of Terminator & Selenocysteine UGA Codons  
$789,237  
DHHS-NIH-NIGMS

Goddard, Stephen  
Computer Science and Engineering  
Energy-Aware CPU & I/O Scheduling for Embedded, Real-Time Systems  
$200,000  
NSF

Graef, George  
Agronomy and Horticulture  
* Sclerotinia Resistance Enhanced by Accumulation of QTL Transgenic Approaches  
$223,142  
Dept. of Agriculture-ARS
Clemente, Thomas  
Agronomy and Horticulture  
Steadman, James  
Plant Pathology

Greve, Vickie  
Northeast Research and Extension Center  
Communities Together Can  
$389,000  
Dept. of Agriculture-CSREES
Swanson, Douglas  
Cooperative Extension

Griesen, James  
Vice Chancellor for Student Affairs  
NU Directions: Program to Reduce High-Risk Drinking  
$468,000  
Robert Wood Johnson Foundation
Major, Linda  
Student Affairs
Hage, David  Chemistry  Chromatographic Automation of Immunoassays  $938,559  DHHS-NIH-NIGMS

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

Hardy, John  Physics and Astronomy  Studies on Novel Ferroelectrics for Microwave Optics  $240,000  DOD-Army Research Office

Harshman, Lawrence  Biological Sciences  Identification of Genes & Proteins that Regulate Stress Resistance  $505,985  DOD-DEPSCoR

Harwood, David  Geosciences  Acquisition of a Drilling Rig to Recover Geological Records from the Antarctic Margin for the ANDRILL Consortium  $482,361  NSF

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  Improved Drought Monitoring Through the Integration of Climate & Satellite-based Data  $241,094  Dept. of Interior-GS
Hubbard, Kenneth  School of Natural Resources
Wilhite, Donald  School of Natural Resources

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

Hefle, Sue  Food Science and Technology  Allergenicity Evaluation of Isinglass  $417,610  Various Industries
Taylor, Steve  Food Science and Technology

Hein, Gary  Panhandle Research and Extension Center  Biologically Intensive Areawide IPM of Russian Wheat Aphid & Greenbug  $425,823  Dept. of Agriculture-ARS

Henry, Chris  Biological Systems Engineering  Livestock Producer Environmental Assistance Project  $567,750  Ne Environmental Trust

Henze, Gregor  School of Engineering Technology  Predictive Optimal Control of Active & Passive Building Thermal Storage Inventory  $357,781  Dept. of Energy-Natl Energy Tech

$200,000 — $999,999
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<td>* Classification of Nebraska Streams and Rivers: Phase I Data Assessment, Collection</td>
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<td>* Development of Spatially Explicit Models of Wildlife Diseases</td>
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Jameson, Mary Liz  University of Nebraska State Museum
Monography & Phylogeny of New World Scarabaeoid Beetles
$750,000  NSF
Ratlcliffe, Brett  Entomology

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

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

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

Jones, Erick  Industrial and Management Systems Engineering
* Center for Engineering Logistics and Distribution at UNL
$250,000  NSF

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

Josiah, Scott  NE State Forest Service
Community Enhancement Program
$350,000  Ne Dept. Roads

Kamble, Shripat  Entomology
Nebraska Pesticide Information Network: Crop-Livestock Profiles & Pest Management Strategic Plan
$209,479  Michigan State University

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

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

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

$200,000 – $999,999
Khattak, Aemal  
Civil Engineering  
Driver Information System at At-Grade Railroad Highway Crossings  
$293,762  
Ne Dept. Roads  
Pesti, Geza  
Civil Engineering

Kostelnik, Marjorie  
Education and Human Sciences  
* Planning Project for SAGE Lifelong Learning  
$200,000  
Bernard Osher Foundation  
Eversoll, Deanna  
Education and Human Sciences

Langell, Marjorie  
Chemistry  
Surface Chemistry of Rock Salt & Spinel 3D Transition Metal Oxides Tailored by Structural & Compositional Methods  
$425,000  
NSF

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  
Schmidt, Edward  
Physics and Astronomy

Leslie-Pelecky, Diandra  
Physics and Astronomy  
* Magnetic Properties of Disordered Rare-Earth Nanostructures  
$420,000  
NSF  
Shield, Jeff  
Mechanical Engineering

Liou, Sy-Hwang  
Physics and Astronomy  
Nanometer-Size Magnetic Devices  
$236,000  
DOD-DEPSCoR

Loope, David  
Geosciences  
Paleometeorological Records from Sand Dunes & Eolian Sand Stones  
$262,570  
NSF

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
Wang, Xinwei  Mechanical Engineering
Fabrication of Photonic Bandgap Structured in Si & Ge Substrates Using Laser-Assisted Nanoimprinting of Self-Assembled Nanoparticles
$210,238  DOD-Air Force Off of Sci Rsch
Magnetic Confinement of Plasmas in Laser-Induced Breakdown Spectroscopy for Improved Sensitivity & Accuracy
$249,306  Dept. of Energy

Mackenzie, Sally  Plant Science Initiative
Machinery of Mitochondrial Recombination in Higher Plants
$494,080  NSF
Christensen, Alan  Biological Sciences
Mitochondrial Sorting & Inheritance in Arabidopsis
$303,000  NSF
Nuclear-Organellar Interactions Involving AtMSH1 in Arabidopsis
$240,000  Dept. of Energy
Strategy for the Transgenic Induction of Cytoplasmic Male Sterility in Crop Plants
$343,108  Dept. of Agriculture-BRDC

Martin, Alex  Agronomy and Horticulture
IWM Implementation: A Regional Approach
$766,718  Dept. of Agriculture-CSREES

Martin, Derrel  Biological Systems Engineering
* Modeling and Field Experimentation to Determine Effects of Land Terracing-Republican River Basin (CESU)
$380,000  Dept. of Interior-BR
Food & Agricultural Sciences National Needs Graduate Fellowship Grants Program
$276,000  Dept. of Agriculture-CSREES

Meagher, Michael  Chemical and Biomolecular Engineering
* Recombinant Type E Botulinum Neurotoxin Vaccine
$345,756  DynPort Vaccine Company
Swanson, Todd  Chemical and Biomolecular Engineering
cGMP Clinical Research Product/IFN-t/500 L-scale
$819,466  Pepgen Corporation

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

Mitra, Amit  Plant Pathology
Efficient Gene Silencing by Intrinsic Direct Repeats: Mechanism & Utilization
$390,000  NSF
Utilization of Direct Repeat Induced Gene Silencing in Plant Functional Genomics
$200,000  Dept. of Agriculture-NRICGP

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Civil Engineering
* Development of State of the Art Traffic Micro-Simulation Model for Nebraska
$222,896  
Jones, Elizabeth
Ne Dept. Roads
Civil Engineering

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

Rohde, John  
Civil Engineering
Midwest States Regional Pooled Fund Program-Yr 15
$545,000  
Sicking, Dean
Reid, John
Faller, Ron
Midwest Roadside Safety Facility

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

Samal, Ashok  
Computer Science and Engineering
Intelligent Joint Evolution of Data & Information: An Integrated Framework for Drought Monitoring & Mitigation
$214,000  
Hayes, Michael
Hubbard, Kenneth
Soh, Leen-Kiat
Svoboda, Mark
Waltman, William
Wilhite, Donald
School of Natural Resources
School of Natural Resources
Computer Science and Engineering
School of Natural Resources
Computer Science and Engineering
School of Natural Resources

Saraf, Ravi  
Chemical and Biomolecular Engineering
* Nanodevice for Imaging Normal Stress Distribution with Application in Sensing Texture and Feel by Touching
$217,156  
Schacht, Walter  
Agronomy and Horticulture
Grasslands Ecological Monitoring System
$608,880  
Dept. of Agriculture-RMA-FCIC

* ITR: Dependable End-User Software
Scheffler, Marilyn  Special Education and Communication Disorders
  Project PROMOTE  Dept. of Education
$797,184
Sanger, Dixie  Special Education and Communication Disorders
  Project Support: Speech-Language Pathologists Supporting Literacy Instruction  Dept. of Education
$800,000
Selley, Roger  Agricultural Economics  Nebraska AgrAbility
$597,720
Sellmyer, David  Physics and Astronomy
  Acquisition of an X-Ray Diffractometer for Nanoscale Materials Research & Education  NSF
$252,000
Shank, Nancy  Public Policy Center
  Bridging the Gap: Information & Referral Database Interoperability  Dept. of Commerce-NTIA
$600,000
Shapiro, Charles  Northeast Research and Extension Center
  * Improving Organic Farming Systems across Nebraska Agroecosystems  Dept. of Agriculture-CSREES
$762,949
Baltenesperger, David  Brandle, James  Francis, Charles  Knezovic, Stevan  Wright, Robert  Johnson, Ron
  Panhandle Research and Extension Center  School of Natural Resources  Agronomy/Horticulture  Northeast Research and Extension Center  Entomology  School of Natural Resources
Sheridan, Susan  Educational Psychology
  Leadership Training in Interdisciplinary Collaboration  Dept. of Education
$800,000
Shield, Jeffrey  Mechanical Engineering
  The Effect of Long-Range Dumbbell Ordering on the Properties & Microstructures of Rare Earth Permanent Magnets  NSF
$340,000
Sicking, Dean  Civil Engineering
  Identification of Vehicular Impact Conditions Associated with Serious Ran-Off-Road Crashes  Natl Coop Hwy Rsch Prog
$634,521
Khattak, Aemal  Jones, Elizabeth
  Civil Engineering
  Civil Engineering
Reid, John  Rohde, John  Faller, Ronald
  Mechanical Engineering  Civil Engineering  Civil Engineering

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Siegfried, Blair  
Entomology  
Population Genetics & Molecular Mechanisms of Resistant Western Corn Rootworms  
$264,000  
Wright, Robert  
Entomology  
Meinke, Lance  
Entomology  
A Site Specific Field Corn IPM Program that Incorporates Transgenic Technology  
$283,913  
Pennsylvania State University

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

Sincovec, Richard  
Computer Science and Engineering  
Great Plains Software Technology Initiative for the New Economy  
$800,000  
Dept. of Education-FIPSE  
MRI: Acquisition of High Performance Computing & Data Visualization for Scientists & Engineers  
$500,000  
NSF  
Jiang, Hong  
Computer Science and Engineering  
Ramamurthy, Byrav  
Computer Science and Engineering  
Seth, Sharad  
Computer Science and Engineering  
Swanson, David  
Computer Science and Engineering

Smith, Andrew  
University of Nebraska State Museum  
Scarab Biodiversity of Southern South America  
$300,000  
NSF  
Ocampo, Federico  
University of Nebraska State Museum

Smith, David R.  
Veterinary and Biomedical Sciences  
Intervention Strategies to Reduce Escherichia Coli 0157:H7 in Beef Feedyards  
$500,000  
Dept. of Agriculture-NRICGP  
Erickson, Galen  
Veterinary and Biomedical Sciences  
Hinkley, Susanne  
Animal Science  
Klopfenstein, Terry  
Veterinary and Biomedical Sciences  
Moxley, Rodney  
Veterinary and Biomedical Sciences

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

Specht, James  
Agronomy and Horticulture  
Elevating Protein Content in the North Central USA Soybean-Growing States  
$642,199  
Iowa State University-NCSRP  
Graef, George  
Agronomy and Horticulture

Spreitzer, Robert  
Biochemistry  
Role of the Rubisco Small Subunit  
$618,000  
Dept. of Energy
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<td>* Human Factors in Railway Operation</td>
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<td>Bloom, Kenneth</td>
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<td>Dominguez, Aaron</td>
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<td>Takacs, James</td>
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<td>Novel Cyclization Reactions for Organic Synthesis</td>
<td>$422,500 NSF</td>
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<td>Taylor, Steve</td>
<td>Food Science and Technology</td>
<td>* Food Allergen Database</td>
<td>Various Industries</td>
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<td>Midwest Advanced Food Manufacturing Alliance</td>
<td>$488,921 Dept. of Agriculture-CSREES</td>
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<td>Principal Investigator(s)</td>
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<td>Understanding and Controlling Listeria Monocytogenes Transmission through Ready-to-Eat Meat Products</td>
<td>Thippareddi, Harshavardhan</td>
<td>Food Science and Technology</td>
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<td>HACCP Assistance for Small &amp; Very Small Processors with Development &amp; Validation of Safe Meat Chilling Processes</td>
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<td>Burson, Dennis</td>
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<td>HACCP Training &amp; Research to Assist Meat Processors with Process Deviations for Lethality &amp; Stabilization</td>
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<td>Converging Redundant Sensor Network Information for Improved Building Control</td>
<td>Tiller, Dale</td>
<td>School of Engineering Technology</td>
<td>$327,000</td>
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<td>Henze, Gregor</td>
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<td>Tonn, Steven</td>
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<td>Theory of Electronic Magnetic &amp; Transport Properties of Nanoscale Magnetic Junctions</td>
<td>Tsymbal, Evgeny</td>
<td>Physics and Astronomy</td>
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<td>Uiterwaal, Kees</td>
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<td>Inside a Focused Laser Beam: Molecular Dynamics</td>
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<td>* Ion Acceleration with High Intensity Lasers</td>
<td>Umstadter, Donald</td>
<td>Physics and Astronomy</td>
<td>$401,277</td>
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<td>* Center for Innovation in Membrane Protein Production</td>
<td>Van Etten, James</td>
<td>Plant Pathology</td>
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<td>Studies in Computational Complexity Theory</td>
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$200,000 — $999,999

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

Verma, Shashi
School of Natural Resources
Carbon Sequestration in Dryland & Irrigated Agroecosystems
$900,000 Dept. of Energy
Cassman, Kenneth
Agronomy and Horticulture
Knops, Johannes
Biological Sciences
Hubbard, Kenneth
School of Natural Resources
Arkebauer, Timothy
Agronomy and Horticulture
Dobermann, Achim
Agronomy and Horticulture
Yang, Haishun
Agronomy and Horticulture
Walters, Daniel
Agronomy and Horticulture

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

Viljoen, Hendrik
Chemical and Biomolecular Engineering
Multi-Scale Study of Solid Phase Reactions
$275,030 NSF
Vortex-Tube Based Thermocycler w/Intelligent Software
$346,758 DHHS-NIH-Nat Ctr Rsch Resources
Gogos, George
Mechanical Engineering

Wagner, William
Biological Sciences
* Communication of Direct Mating Benefits to Females
$295,283 NSF

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

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

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

Weber, John
Animal Science
Phenotype Screens for Bone Marrow Failure
$208,050 Baylor College of Medicine
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<td>Weeks, Donald</td>
<td>Biochemistry Development of Herbicide-Resistant Plants for Environmentally-Safe Production Energy &amp; Biomass Crops $232,000 Consortium for Plant Biotechnology Research Role of the Cia 5 Gene in the Carbon Concentrating Mechanism in Chlamydomonas Reinhardtii $387,000</td>
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<td>Weissinger, Ellen</td>
<td>Graduate Studies Ronald E. McNair Graduate Program $960,172 Dept. of Education</td>
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<td>Biological Sciences Intracellular Targeting of HIV Gag Proteins $393,825 DHHS-NIH-NIAID</td>
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<td>White, Brett</td>
<td>Animal Science Transcriptional Regulation/Porcine GnRH Receptor Gene $287,193 Dept. of Agriculture-CSREES</td>
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<td>White, Joseph</td>
<td>Sociology * Developing an Alcohol Prevention Program with the Dakota $388,953 DHHS-NIH-NIAAA Hoyt, Dan Whitbeck, Les Godfrey, Joyzelle</td>
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<td>Wiegand, Roger</td>
<td>Mathematics Graduate Assistance in Areas of National Need Fellowship Program: Mathematics at the University of Nebraska–Lincoln $428,412 Dept. of Education Lewis, Jim Walker, Judy Walker, Mark</td>
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<td>Wiener, Richard</td>
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<td>Workman, Tom</td>
<td>Student Affairs</td>
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* $200,000 – $999,999
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  
Animal Science

Erickson, Galen  
Schulte, Dennis  
Franti, Tom  
Jose, H. Douglas

Wunder, Susan  
Teaching, Learning and Teacher Education

Nebraska Partnership for American History Education

$684,815  
Educational Service Unit #7

Yamamoto, Catherine  
Student Affairs

Upward Bound–Lincoln

$938,496  
Dept. of Education  
Upward Bound Math/Science Project

$891,664  
Dept. of Education

Yang, Yiqi  
Textiles, Clothing and Design

Resistance of Sulfur Dyed Fabrics to Oxidative Bleaching & Acidic Tendering: Improvement & Application

$300,618  
Procter & Gamble

Zeng, Xiao Cheng  
Chemistry

Crystallization and Interfacial Properties of Silicon

$235,000  
Dept. of Energy  
ITR: Multiscale Treatment of Solid-Fluid Interfaces

$400,000  
NSF

Diestler, Dennis  
Feng, Ruqiang

Diestler, Dennis  
Feng, Ruqiang

Zera, Anthony  
Biological Sciences

* Enzymatic and Molecular Bases of Trade-Offs in Lipid Metabolism that Underlie Life History Trade-Off

$417,682  
NSF

Harshman, Lawrence

$321,626  
NSF

Harshman, Lawrence

$372,000  
NSF

Zhang, Luwen  
Center for Virology

* Interferon Regulatory Factor 7 and NPC

$398,109  
DHHS-NIH-NIAID
CAREER AND K AWARDS

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 as an educator.

Adams, Stephanie
Industrial and Management Systems Engineering
Designing Effective Teams in the Engineering Classroom for the Enhancement of Learning
$623,918 NSF

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

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

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

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

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

Elbaum, Sebastian
Computer Science and Engineering
Leveraging Field Data to Test Pervasive Systems
$407,494 NSF
Ortí, Guillermo  
Biological Sciences  
Molecular Systematics of Ray-Finned Fishes  
$533,295  NSF

Perez, Lance  
Electrical Engineering  
Channel Coding for Satellite and Mobile Communications  
$269,880  NSF

Scott, Stephen  
Computer Science and Engineering  
Making Exponential-Time Learning Algorithms Efficient  
$299,952  NSF

Wang, Lily  
School of Engineering Technology  
Integrating Time-Variant Source Directivity into Architectural Acoustic Auralizations  
$389,376  NSF

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

Angeletti, Peter  
Biological Sciences  
Maintenance of Human Papilloma Virus Genes  
$649,726  DHHS-NIH-NCI

DiLillo, David  
Psychology  
Family Functioning of Adults Maltreated as Children  
$670,826  DHHS-NIH-NIMH

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

Genre, Dialogue, and Community in British Romantic Fiction

$124,822  National Endowment for the Humanities

10/01/2004 – 9/30/2005

Stephen Behrendt, George Holmes, Distinguished Professor of English, received a major award from the National Endowment for the Humanities to continue support of a summer seminar for university and college professors whose scholarship focuses on individual writers of the British Romantic Era (c. 1780-1840). The University Libraries has extremely strong primary and secondary holdings, including the Corvey Collection of Romantic era belles lettres. The seminar allows scholars access to the collection and enriches sustained dialogue about inter-genre connections, helps remap the landscape of the British Romantic era and advances future scholarship for applied curricular and pedagogical design.

Cahan, David  History

*A Biography of Hermann von Helmholtz

$80,625  NSF


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  
**American Life in Poetry Project**  
$50,000  
Poetry Foundation  
1/1/2005 – 1/31/2006

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.

Myers, Thomas  
**University of Nebraska State Museum**  
Omaha Indian Cultural Artifacts & Images:  
Online Inventory & Web Site  
$218,688  
Institute of Museum & Library Services Libraries  
12/1/01 – 11/30/05

Thomas Myers, curator of anthropology and professor of museum studies and anthropology, and Dee Ann Allison, chair of the Automated Systems Office and professor of libraries, are using a grant from the Institute of Museum & Library Services in a collaborative project to locate and catalog artifacts and photographic images of the Omaha tribe that are scattered in museums, libraries and private collections worldwide. The key program is development of a Website to make the resulting database of Omaha artifacts and an on-line gallery of images accessible to tribal members, educators, students and the general public. The Nebraska State Historical Society and members of the Omaha Tribe are partners with the NU State Museum and UNL Libraries in this project.

Price, Kenneth  
**Germanic Studies**  
$500,000  
National Endowment for the Humanities  

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

The Walt Whitman Hypertext Archive
$200,000 National Endowment for the Humanities
5/1/03 – 4/30/05

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

Walter, Katherine Libraries

* Interoperability of Metadata Standards for Digital Thematic Research Collections

$169,651 Institute of Museum and Library Services

Price, Kenneth English
Bolin, Mary Libraries
Barney, Brett Libraries

Katherine Walter, chair of special collections and preservation and professor of libraries, is principal investigator on a team hoping to develop guidelines that will serve as a model for the integration of standards used by scholarly digital projects and could influence future development. Metadata integration is an important but yet unattained goal for digital thematic research collections, which employ standards for transcriptions, digital images, finding aids and administrative records. These standards have been developed by different communities. The Metadata Encoding and Transmission Standard (METS) shows promise as a means of integrating various standards but no testing of METS has been done using digital thematic research as a model, thus ad hoc an idiosyncratic solutions have sprung up, with various unreliable results. UNL will create a METS profile to test its reliability and also submit the package to two digital library systems at Brown University and the University of Virginia.

Benjamin A. Botkin Collection-Preservation/Access

$97,435 National Endowment for the Humanities
7/1/01 – 6/30/06

Walter is also using a National Endowment for the Humanities grant to preserve a vast collection of materials from the Benjamin A. Botkin Collection of Applied American Folklore and microfilming it to improve its accessibility to scholars and the public. Botkin was national folklore editor of the Federal Writers Project and chief of the Library of Congress Archive of American Folk Song. The collection adds to the understanding of this discipline in development and it consists 8,000 books, 447 linear feet of archival materials and 700 recordings. The project preserves 291
linear feet on microfilm and also preserves 200 sound recordings made by Botkin himself.

Virtual Archive of Whitman’s Manuscripts

$245,723  Institute of Museum & Library Services
Kenneth Price  English
11/1/01 – 10/31/05
Walter and Kenneth Price, professor of English and Hillegass Chair in 19th Century American Literature, are working with partner institution the University of Virginia to create a Virtual Archive of Walt Whitman’s Manuscripts. This project, funded by the Institute of Museum & Library Services, will create a uniform web-based guide to Whitman’s manuscripts (estimated at 70,000 items) with special scholarly enhancements of 4,300 poetry manuscripts at more than 60 institutions. The project is developing a technically innovative response to the complex scholarly problem of archival management, building a searchable database specific to the nature of Whitman materials and serving as a model for future scholar-archivist collaborations.

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

$222,177  National Endowment for the Humanities
Dunham, Gary  University Press
9/1/03–8/31/05
Walter and Gary Dunham, University of Nebraska Press director, are using a National Endowment for the Humanities grant to create an on-line edition of the Journals of the Lewis and Clark Expedition, edited by Gary E. Moulton, UNL professor emeritus of History. The interdisciplinary team is drawn from the UNL Libraries, the University of Nebraska Press, and the Center for Great Plains Studies. The site will also feature supplementary texts relating to Euro-American and Native perspectives on the Lewis and Clark expedition, images, and audio files of poet William Kloefkorn reading selected passages. Online searchability will make the website a useful resource for scholars and the general public. The project is timed to coincide with the bicentennial commemoration of Lewis and Clark’s expedition.
## Arts and Humanities Awards

### $5,000 - $49,999

**Active awards in 2005**

*Indicates new in 2005*

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<th>Name</th>
<th>Field</th>
<th>Project Description</th>
<th>Organization</th>
<th>Amount</th>
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<td>Becker, Karen</td>
<td>Music</td>
<td>UNL String Project</td>
<td>American String Teachers Assn</td>
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<td>Bleed, Peter</td>
<td>Anthropology and Geography</td>
<td>Archaeological Reconnaissance of San Juan Hill Battlefield</td>
<td>National Geographic Society</td>
<td>$5,185</td>
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<td>Brooke, Robert</td>
<td>English</td>
<td>* Voices from Young Citizens: Writing from Rural Nebraska Youth Involved in Place Conscious Education</td>
<td>Nebraska Humanities Council</td>
<td>$8,100</td>
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<td>Dunham, Gary</td>
<td>University Press</td>
<td>Moravian Springplace Mission among the Cherokees</td>
<td>National Historic Publications and Records</td>
<td>$10,000</td>
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<td>Publication of “Beaver Steals Fire”</td>
<td>Montana Committee for Humanities</td>
<td>$6,000</td>
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<td>The Salish People &amp; the Lewis &amp; Clark Expedition</td>
<td>Montana Committee for Humanities</td>
<td>$6,000</td>
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<td>Friends of Lied</td>
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<td>Handa, Rumiko</td>
<td>Architecture</td>
<td>* Spirit of Design: Multidisciplinary, Multimedia Database and Website</td>
<td>Graham Foundation Architecture</td>
<td>$12,000</td>
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<td>Reynolds, Guy</td>
<td>English</td>
<td>* 10th International Cather Seminar, “Violence, the Arts, and Cather”</td>
<td>Nebraska Humanities Council</td>
<td>$8,600</td>
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<td>Ritchie, George</td>
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<td>Organ Scholar, Saint Cecilia Scholastica Cantorum</td>
<td>Saint Cecilia Schola Cantorum</td>
<td>$11,175</td>
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<td>Tomkins, Alan</td>
<td>Public Policy Center</td>
<td>By the People: America in the World</td>
<td>MacNeil/Lehrer Productions; Community Foundation for Greater New Haven; Cooper Foundation</td>
<td>$42,232</td>
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<td>Walter, Katherine</td>
<td>University Libraries</td>
<td>* Quilt Index National Leadership Project</td>
<td>Michigan State University Textiles, Clothing and Design</td>
<td>$20,000</td>
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<td>Homestead - Broken Bow Microfilming Project (CESU)</td>
<td>Dept. of Interior-NPS Economics</td>
<td>$20,000</td>
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Alexander, Dennis
Electrical Engineering
Title: Laser Machining of Materials
Description: Nanomachining Using Femtosecond/Attosecond Lasers
Date: March 8, 2005
No. 6,864,457
Country: United States

Alfano, James
Biological Sciences
Title/Description: DNA Molecules and Polypeptides of Pseudomonas Syringae HRP Pathogenicity Island and their Uses
Date: February 8, 2005
No. 6,852,835
Country: United States

Azizinamini, Atorod
Civil Engineering
Title: Composite Action System and Method
Description: HBS Composite Action System
Date: March 29, 2005
No. 6,871,462
Country: United States

Balkir, Sina; Leon-Salas, Walter D.; Perez, Lance; Hoffman, Michael
Electrical Engineering
Title: System and Method for Generating Pseudo-Noise Sequences
Description: Chaos Based Pseudo-Noise (PN) Sequence Generation
Date: December 27, 2005
No. 6,981,010
Country: United States

Berkowitz, David
Chemistry
Title/Description: In Situ Screening to Optimize Variables in Organic Reactions
Date: December 13, 2005
No. 6,974,665
Country: United States

Chacon, Ofelia; Barletta, Raul
Veterinary & Biomedical Sciences
Title: D-Alanine Racemase Mutants of Mycobacteria and Uses Therefore
Description: D-alanine Biosynthetic Enzymes as Targets for Development of Anti-Mycobacterial Drugs and Vaccines
Date: August 16, 2005
No. 6,929,799
Country: United States
Liu, Mingsheng
Architechture
Title: Fume Hood Exhaust Stack System
Description: Advanced Stack Systems
Date: May 10, 2005
No. 6,890,252
Country: United States

Sayood, Khalid; Hoffman, Michael
Electrical Engineering
Title: System and Method for Joint Source-Channel Encoding, with Symbol Decoding and Error Correction
Description: Self-Correcting Arithmetic Codes for Noisy Communication Channels
Date: May 10, 2005
No. 6,892,343
Country: United States

Sicking, Dean L.
Civil Engineering
Title/Description: High-Impact, Energy-Absorbing Vehicle Barrier System
Date: August 9, 2005
No. 6,926,461
Country: United States

Tadros, Maher; Foster, Edward Terence; Yehia, Sherif
Civil Engineering, Constructions Systems Technology, Civil Engineering
Title/Description: Pre-cast Post-Tensioned Segmental Pole System
Date: February 8, 2005
No. 6,851,231
Country: United States

Weeks, Donald
Biochemistry
Title: Methods and Materials for Making and Using Transgenic Dicamba-Degrading Organisms
Description: Development of Crops Tolerant to Treatment with Dicamba
Date: February 19, 2005
No. 42194
Country: North Korea

Date: August 18, 2005
No. 781125
Country: Australia

Date: December 16, 2005
No. 10-1999-7009092
Country: South Korea
Licensee: Kansas Organic Producers
Description: NE99495 plant variety.
Inventor: Baenziger, Stephen
Department: Agronomy and Horticulture

Licensee: BASF Plant Science, L.L.C.
Description: Infinity Hard Red Winter Wheat, formerly NH01046.
Inventors: Baenziger, Stephen; Martin, Alexander; Shipman, Mary; Lyon, Drew
Department: Agronomy and Horticulture

Licensee: Baker Hughes Inteq
Description: Neutron detector for oil well drilling, 10 years from date of execution.
Inventor: Brand, Jennifer I.
Department: Chemical and Biomolecular Engineering

Licensee: i-Diverse, Inc.
Description: Fragment from animal anti-apoptotic gene confers stress resistance to transgenic plants.
Inventor: Dickman, Martin
Department: Plant Pathology

Licensee: Garst Seed Company
Description: Soybean variety NEX8903
Inventors: Graef, George; Korte, Leslie; White, Dennis
Department: Agronomy and Horticulture

Licensee: Stonebridge, Inc.
Description: A large-seeded soybean lines with higher protein and sucrose content and a yellow hilum variety U00-429042 and U00-429048.
Inventor: Graef, George
Department: Agronomy and Horticulture

Licensee: Ramaeker Organic Farms
Description: U96-2831LS soybean variety.
Description: A large-seeded, yellow hilum, high protein soybean variety.
Inventor: Graef, George
Department: Agronomy and Horticulture

Licensee: Seedwest
Description: Seeded variety of Buffalo grass SWI-2000.
Inventor: Riordan, Terrance P.
Department: Agronomy and Horticulture

Licensee: USDA ARS, APTRU, Delaware State University, Morgan State University, UNL Agronomy and Horticulture Department
Description: Licensed CALMIT Software.
Inventor: Rundquist, Don
Department: Conservation and Survey Division
Licensee: Big Sky Wholesale Seed Inc.
Licensee: Heritage Seed Co. Inc.
Description: Beefmaker plant variety.
Inventor: Vogel, Kenneth P.
Department: USDA-ARS

Licensee: Monsanto
Description: Germplasm comprising a dicamba-resistance gene.
Inventor: Weeks, Don
Department: Biochemistry

Licensee: Upstate
Description: Antibody(ies) developed and characterized at UNL, which is specific to monoclonal antibody(ies) against biotinylated Histone H4.
Inventors: Zempleni, Janos; Sarath, Gautam
Department: Nutritional Science and Dietetics, Biochemistry
Faculty Chamber Music Recital Series  
Anderson, Scott L.  
Haar, Paul  
Neely, David  
Potter, Clark  
Chamber Music Recital in Ames, Iowa, a collaborative performance with the faculty at Iowa State University, featured two works for Saxophone and Trombone Quartet by UNL composer Randall Snyder.

Moran Quintet  
Bailey, John  
McMullen, William  
Barger, Diane C.  
Micklich, Albie  
French, Allen  
Performance/Lecture, Quebec City, Canada, College Music Society National Conference and Alcalá de Heneras, Spain; College Music Society International Conference. Wind Chamber Music of Theodor Blumer.

University of Nebraska Brass Quintet  
Anderson, Scott L.  
White, Darryl  
Bircher, K. Craig  
French, Allen  
Fuller, Craig  
Chamber Music Recital featuring original brass quintet music at Central Presbyterian Church, Denver, Colo., and Colorado State University, Fort Collins, Colo.

Bailey, John R.  
Performance, American Flute Orchestra, Beijing, Shanghai, Xi’an, China, flute orchestra concert tour. Conducted the American Flute Orchestra, a professional ensemble of 35 flutists (contrabass, bass, alto, and concert flutes) assembled from around the U.S. and Canada on tour in China.

Barger, Diane C.  
Performance, TAMA-Tokyo, Japan, International Clarinet Association Performance.
Bartels, Ron H.  
Art and Art History  
New Generations 2005 International Exhibition, SangMyung University, Republic of Korea  
Bartels’s lenticular video print work and digital motion video art.  
September 1 – December 1, 2005.  
Digital Universe, Caladan Gallery, Boston, Mass: Ron Bartels Contemporary Icons online exhibition July – October, Inside Out, From Here In Time, Surprise Again, Another Viewpoint, lenticular prints and QuickTime video motion work.  
7th International Abstraction, Upstream People Gallery, Larry Bradshaw, juror  

Fritz, Dana  
Art & Art History  
Artist Residency, Alfred and Trafford Klots Artist Residency Program, Chateau de Rochefort-en-Terre, Brittany, France.  
Curator’s Choice Award, 2005 HCP Juried Membership Exhibition, Houston Center for Photography, Houston, Texas.

Holz, Aaron  
Art & Art History  
Artist, Another Place, A Different Garden: RARE Art Gallery. New York, N.Y.  
Artist, Power, Passion & Humiliation: MPG Contemporary, Boston, Mass.  
Artist, Ivan Fortushniak and Aaron Holz: Lake George Arts Project, Lake George, N.Y.  
Artist, Cool & Collected-Consummate Works from Local Collectors: Bemis Center For Contemporary Arts, Omaha, Neb.

James, Michael F.  
Textiles, Clothing & Design  
Questioning Convention: The Studio Quilts of Michael James.  
30 year retrospective exhibition, Fuller Craft Museum, Brockton, Mass.

Mond, Robert A.  
Johnny Carson School of Theatre and Film  
Lighting design, The Merchant of Venice, by William Shakespeare, Pennsylvania Shakespeare Festival; Center Valley, Pa.  
Lighting design for children’s theatre, The Little Mermaid, by Linda Daugherty, Pennsylvania Shakespeare Festival; Center Valley, Pa.
Shomos, William H.  School of Music
Author/Creator, War Horse 101, Opera Omaha, staged in Omaha and throughout Nebraska.

Performance, The Mystic Trumpeter, Lincoln, Neb. Collaborated with the composer/conductor Tyler White.

Stage director, Des Moines Metro Opera Apprentice Artist Program, Des Moines, Iowa.

Smith, Virginia L.  Johnny Carson School of Theatre and Film
Director, Voice of the Prairie, Moscow, Russia.

Souto, Francisco  Art & Art History
Artist, Francisco Souto Solo Exhibition, Brookhaven College School of the Arts, Dallas, Texas.

Artist, 6th Kochi International Triennial of Prints, Kochi, Japan.

Artist, 2005 Pacific Rim International Print Exhibition, Hilo, Hawaii.

Artist, IV Novosibirsk Biennial of Contemporary Graphic Art, Novosibirsk State Art Museum, Russia.


Artist, Open Expressions: Contemporary American Printmaking, American University, Cairo, Egypt.

Artist, 6th British International Miniature Print Exhibition, Dumfries, U.K.

Artist, 18th Parkside National Small Print Exhibition, Kenosha, Wis.

Teo, Sharon M.  Johnny Carson School of Theatre and Film
Author, creator, producer and motion picture editor, Almost Normal, full-length feature film, shown in Long Island, N.Y.; Dallas, Texas; Asheville, N.C.; Washington, D.C.; Breckenridge, Colo.; Little Rock, Ark.; Honolulu, Hawaii; Lincoln, Neb.; and Munich, Frankfurt, Cologne and Berlin, Germany.

Trout, Barbara L.  Textiles, Clothing & Design
Artist, Fiber Art, Burning Bush in Shuttle, Spindle and Dyepot, Handweavers Guild of America, Suwanee, Ga.

Weiss, Wendy  
**Textiles, Clothing & Design**  
Artist, HOME AGAIN: University of Kansas Textiles: Past and Present, Farm Gallery, Kansas City, Kan.; Design Gallery, University of Kansas.  
Artist, Art of Fine Craft: Nebraska Invitational, Lincoln, Neb., Elder Gallery, Nebraska Wesleyan University.  
Artist, At the Fence #2, RED, A Juried Show on the Color Red, Rapid City, SD.  
Artist, textile and sound environment. Traveler’s Field, Design Gallery, University of Wisconsin and University Place Gallery, Lincoln, Neb. Collaborator: Jay Kreimer.

Williams, Sandra M.  
**Art and Art History**  
Artist, The Seven Mysteries, McHenry County College, Crystal Lake, Ill., Stevenson Gallery, Southern Oregon University, Ashland, Ore.

**Quilt Quest**  
**4-H Youth Development**  
Akers, Donna L.

Asato, Noriko

Beatty, Millard, F.; Hayes, Michael, eds.

Behrendt, Stephen C.
History; Minneapolis, Minn., Mid-List Press, 2005. (English)

Borstelmann, Thomas; Jones, Jacqueline; Wood, Peter H.; Tyler May, Elaine; Ruiz, Vicki L.

Braithwaite, Dawn O.; Baxter, Leslie A., eds.

Carlo, Gustavo; Pope Edwards, Carolyn, eds.
Nebraska Symposium on Motivation, Volume 52. Moral Motivation through the Life Span; Lincoln, Neb., University of Nebraska Press, 2005. (Psychology)

Cejda, Brent D., ed.

Couture, Barbara; Kent, Thomas eds.

DeFrain, John D., Olson, David H.

Denicola, Robert C.
Copyright; New York, N.Y., Foundation Press, 2005. (Law)

Dunham, Gary; Ellis, Clyde; Lassiter, Luke Eric, eds.
Powwow; Lincoln, Neb., University of Nebraska Press, 2005. (University of Nebraska Press)
Diamond, Judy, ed.

Digman, Lester A.; Laipply, Harold
*Strategic Management: Competing in the Global Information Age*; Mason, Ohio, Thomson Custom Solutions, 2005. (Management)

Dixon, Wheeler W.

American Cinema of the 1940s: Themes and Variations; New Brunswick, N.J., Rutgers University Press, 2005. (English)

Edwards, Richard; Bowles, Samuel; Roosevelt, Frank

Forsythe, David

Foster, Gwendolyn, A.
*Class-Passing: Social Mobility in Film and Popular Culture*; Carbondale, Ill., Southern Illinois University Press, 2005. (English)

Giesecke, Joan R.; McNeil, Beth

Gorman, Robert
*The Socratic Method in the Dialogues of Cicero*; Stuttgart, Germany, Franz Steiner Verlag, 2005. (Classics/Religious Studies)

Grady, Marilyn L.; Brock, Barbara

Grange, William M.
*Hitler Laughing: Comedy in the Third Reich*; Baltimore, Md., Rowman and Littlefield, 2005. (Johnny Carson School of Theatre and Film)

Hage, David S., ed.
*Handbook of Affinity Chromatography, 2nd Ed*; New York, N.Y., Taylor and Francis, 2005. (Chemistry)

Harbourne, Brian; Cilberto, Ciro; Geramita, Anthony; Miro-Roig, Rosa Maria; Ranestad, Kristian, eds.
*Projective Varieties with Unexpected Properties*; Berlin, Germany, Walter de Gruyter, 2005. (Mathematics)
Harter, Lynn M.; Japp, Phyllis M.; Beck, Christina S., eds.

Hayden, F. Gregory

Homestead, Melissa J.
American Women Authors and Literary Property, 1822-1869; New York, N.Y., Cambridge University Press, 2005. (English)

Janovy, Karen O.
Sculpture from the Sheldon Memorial Art Gallery; Lincoln, Neb., University of Nebraska Press, 2005. (Sheldon Memorial Art Gallery and Sculpture Garden)

Japp, Phyllis M.; Meister, Mark; Japp, Debra M., eds.

Johnsgard, Paul A.
Prairie Dog Empire: A Saga of the Shortgrass Prairie; Lincoln, Neb., University of Nebraska Press, 2005. (Biological Sciences)

Kiewra, Kenneth
Learn How to Study and SOAR to Success; Upper Saddle River, N.J., Pearson Prentice Hall, 2005. (Educational Psychology)

Kooser, Ted
The Poetry Home Repair Manual: Practical Advice for Beginning Poets; Lincoln, Neb., University of Nebraska Press, 2005. (English)

Kostelnik, Marjorie J.; Whiren, Alice Phipps; Soderman, Anne K.; Stein, Laura C.; Gregory, Kara
Guiding Children’s Social Development: Theory to Practice; Singapore, Thomson Learning Asia, 2005. (Education and Human Sciences)

Lee, Sang M.; Olson, David L.
Introduction to Management Science, 2nd Edition; Cincinnati, Ohio, Thomson Learning, 2005. (Management)

Lepard, Brian

Luebke, Frederick C.
Nebraska: An Illustrated History, 2nd Edition; Lincoln, Neb., University of Nebraska Press, 2005. (History)

Luthans, Fred
Lynch, Thomas P., ed.  
*El Lobo: Readings on the Mexican Gray Wolf*; Salt Lake City, Utah, University of Utah Press, 2005. (English)

MacPhee, Craig  

Moshman, Dave  

Nisse, Ruth  
*Defining Acts: Drama and the Politics of Interpretation in Late Medieval England*; Notre Dame, Ind., University of Notre Dame Press, 2005. (English)

Olson, David L.; Evans, James R.  

Owomoyela, Oyekan  
*Yoruba Proverbs*; Lincoln, Neb., University of Nebraska Press, 2005. (English)

Price, Kenneth M.; Folsom, Ed  
*Re-Scripting Walt Whitman: An Introduction to His Life and Work*; Oxford, U.K., Blackwell, 2005. (English)

Pytlik Zillig, Lisa; Bodarsson, M.; Bruning, Roger, eds.  
*Technology-Based Education: Bringing Researchers and Practitioners Together*; Greenwich, Conn., Information Age Publishing, 2005. (Educational Psychology)

Rawley, James A.  

Randolph, Ladette  
*This is Not the Tropics*; Madison, Wis., University of Wisconsin Press, 2005. (University of Nebraska Press)

Sarroub, Loukia K.  

Sayood, Khalid  

Schlegel, Vicki L., ed.
*Process Improvement: A Tool Kit for Healthcare*; Lincoln, Neb., Leston Quality Engineering LLC, 2005. (Food Science & Technology)

Schniederjans, Marc J.; Schniederjans, Ashlyn M.; Schniederjans, Dara G.
*Outsourcing and Insourcing in an International Context*; Amonk, N.Y., M.E. Sharpe, 2005. (Management)

Scholl, Philip J.; Colwell, D.; Hall, M. J.R., eds.

Seefeldt, Douglas; Hantman, Jeffrey L.; Onuf, Peter S., eds.
*Across the Continent: Jefferson, Lewis and Clark and the Making of America*; Charlottesville, Va., University of Virginia Press, 2005. (History)

Siau, Keng, ed.

Smith, Victoria A. ed.; Stabler, Hollis D.

Smith, Kevin
*Governing States and Localities*; Washington, D.C., CQ Press, 2005. (Political Science)

Taylor, Stephen L., ed.

Waldren, Richard P.; Martin, John H.; Stamp, David L.

Walstad, William B.; Brue, Stanley L.; McConnell, Campbell R.

Wilhite, Donald A.; Botterill, Linda Courtenay, eds.

Wilhite, Donald A., ed.
*Drought and Water Crises: Science, Technology, and Management Issues*; Boca Raton, Fla., CRC Press, 2005. (School of Natural Resources)
Yang, Jiashi

Zempleni, Janos; Dakshinamurti, Krishnamurti, eds.
Nutrients and Cell Signaling; New York, N.Y., Marcel Dekker, 2005. (Nutritional Science & Dietetics)
2005 RECOGNITIONS AND HONORS
Faculty who have been elected to or who have received national or international honors.

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

Kooser, Ted  
English  
2005 Pulitzer Prize for Poetry for *Delights and Shadows*, Copper Canyon, 2004  
U.S. Poet Laureate Consultant in Poetry to the Library of Congress

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

Van Etten, James  
Plant Pathology  
National Academy of Science Membership

Abbott, Douglas, A.  
Family & Consumer Sciences  
Fulbright Scholar, Israel

Adams, Stephanie  
Industrial and Management Systems Engineering  
American Association for the Advancement of Science/National Science Foundation, Science and Engineering Policy Fellow

Alfano, James R.  
Plant Pathology  
American Phytopathological Society, Syngenta Award

Anderson, John  
Economics  
President’s Council of Economic Advisers, Senior Economist

Ball, A. Dwayne  
Marketing  
Fulbright Senior Specialist, Portugal

Ballard, John  
Industrial and Management Systems Engineering  
American Society for Engineering Education, Vice President, National Board

Barger, Diane C.  
School of Music  
International Clarinet Association, Treasurer

Behrendt, Stephen C.  
English  
Keats-Shelley Association of America, Distinguished Scholar Award in the Field of Romanticism for 2005

Bell, Lloyd  
Agricultural Leadership, Education and Communication  
American Association for Agricultural Education - North Central Region, Outstanding Educator

Berryman, Chuck  
Construction Management  
National Association of Home Builders, National Educator of the Year
Brumm, Michael C. Animal Science
National Hog Farmer, one of the Top 50 Men and Women Who Truly Made A Difference in the U.S. Pork Industry in the Last 50 Years

Burnett, Amy History
TIAA-CREF Institute, Theodore M. Hesburgh Award Certificate of Excellence

Cahan, David History
Dibner Institute for the History of Science and Technology, Massachusetts Institute of Technology, Senior Fellowship National Science Foundation, Fellowship

Cassman, Kenneth, G. Agronomy and Horticulture
American Association for the Advancement of Science, Fellow

Christenson, Ron Animal Science
American Society of Animal Science, Research Fellow

Coble, Parks History
University of Nebraska Outstanding Research and Creative Activity Award

Crawford, Sidnie W. Classics and Religious Studies
Center of Theological Inquiry, Member

Creswell, John Educational Psychology
Sage Publications Outstanding Sales Award, Research Design: Qualitative, Quantitative, and Mixed Methods, 2nd ed.

Crews, Patricia, C. Textiles, Clothing & Design
International Textiles and Apparel Association, Distinguished Scholar Award

Dahab, Mohamed Civil Engineering
Water Environment Federation, President-Elect

Daly, Ed Educational Psychology
American Psychological Association Division 16 Fellow

Day, Jeffrey Architecture
American Institute of Architects Nebraska—Citation, Design Award for Burt Pool House and Office Research American Institute of Architects Nebraska, Design Award for Art Farm Red Barn

DeFrain, John D. Family and Consumer Sciences
Phi Beta Delta Honor Society for International Scholars, Installation Certificate

Dixon, Wheeler W. English
Peter C. Rollins Annual Book Award for Lost in the Fifties: Recovering Phantom Hollywood, Southern Illinois Press, 2005

Dowben, Peter A. Physics and Astronomy
American Physical Society, Fellow
Ellis, Marion D.  
Entomology  
American Association of Professional Apiculturists, President  
Eastern Apiculture Society of North America, Roger A. Morse  
Outstanding Teaching and Extension Award

Engen-Wedin, Nancy G.  
Lied Center for Performing Arts  
Teaching, Learning and Teacher Education  
John F. Kennedy Center for the Performing Arts, National Advisory Committee Partners in Education Program

Espy, Kimberly Andrews  
Psychology  
Associate Vice Chancellor for Research  
American Psychological Association, Division 40, Early Career Award  
American Psychological Association, Fellow

Ferguson, Richard B.  
Agronomy and Horticulture  
Soil Science Society of America Nutrient Management and Soil and Plant Analysis Division, Chair-elect

Fielding, Christopher  
Geosciences  
Geological Society of Australia, Dorothy Hill Medal

Fischer, Bruce  
Construction Management  
Associated Schools of Construction, National Teaching Award

Ford, Chris  
Architecture  
American Institute of Architects Western Mountain Region and Southern Arizona, Design Award Citation for Barrio Metalico  
American Institute of Architects Western Mountain Region and Southern Arizona, Design Award Merit and Honor for Ice House Lofts

Foster, Edward Terence  
Construction Systems  
National Society of Professional Engineers for Practice Divisions, National Vice President

Fox, Marilyn; Team Leader  
Extension  
Florence T. Hall Award for the Building Nebraska Families Program, National Extension Association of Family and Consumer Sciences

Francis, Charles, A.  
Agronomy and Horticulture  
American Association for the Advancement of Science, Fellow

Franti, Tom  
Biological Systems Engineering  
American Society of Agricultural Engineers, Educational Aids Competition Blue Ribbon, Planning Your Riparian Buffer: Design and Plant Selection and Installing Your Riparian Buffer: Tree and Grass Planting, Postplanting Care and Maintenance

Fuess, Scott M.  
Economics  
Institute For The Study of Labor, Bonn, Germany, Research Fellow
Gaussoin, Roch E.  
**Agronomy and Horticulture**  
American Society of Agronomy, Fellow  
Crop Science Society of America Turfgrass Science Division, Elected Chair-Elect

Goodburn, Amy  
**English**  
TIAA-CREF Institute, Theodore M. Hesburgh Award Certificate of Excellence

Graybill, Andrew R.  
**History**  
Western History Association, Bolton-Kinnaird Award

Harkness, Janet A.  
**English, Gallup Research Center**  
European Union, Descartes Prize

Heemstra, Jill  
**Biological Systems Engineering**

Koelsch, Richard  
American Society of Agricultural Engineers, Educational Aids Competition Blue Ribbon, Poultry EMS Project

Henneman, Alice C.  
**Extension**  
Tufts University, “Among the Best” rating from Tufts University, Nutrition Navigator-A Rating Guide to Nutrition Web Sites

Houser, Kevin W.  
**Architectural Engineering**  
Leon Gaster Award, Chartered Institution of Building Services Engineers  
Taylor Technical Talent Award, Illuminating Engineering Society of North America

Klein, Robert N.  
**Agronomy and Horticulture**  
American Society of Agronomy, Elected Representative, Board of Directors, Extension Education Division

Klopfenstein, Terry  
**Animal Science**  
American Society of Animal Science, Distinguished Teaching Award

Koelsch, Richard K.  
**Animal Science, Biological Systems Engineering**  
American Society of Agricultural Engineers, G.B. Gunlogson Countryside Engineering Award

Kranz, Bill  
**Biological Systems Engineering**

Watts, Darrell  
**Biological Systems Engineering**

Yonts, Dean  
American Society of Agricultural Engineers, Educational Aids Competition Blue Ribbon, Assuring Efficient Center Pivot Irrigation

Leung, Kam  
**Physics and Astronomy**  
Academia Sinica, Republic of China, Institute of Astronomy and Astrophysics, Visiting Fellow

Levin, Carole  
**History**  
Rare Books and Manuscripts Section, Association of College and Research Libraries, Katharine Kyes Leab and Daniel J. Leab Exhibition Catalogue Award, Elizabeth I: Ruler and Legend
Levis, Donald G. Animal Science
National Hog Farmer, one of the Top 50 Men and Women Who Truly Made A Difference in the U.S. Pork Industry in the Last 50 Years

Lindgren, Dale T. Agronomy and Horticulture
American Penstemon Society, The Glenn Viehmeyer Award

Lou, Marjorie F. Veterinary and Biomedical Sciences
International Society for Eye Research, Elected Committee Chair
National Foundation for Eye Research, Board of Trustees
Zhejiang University, Hangzhou, China, Kwan-Biao Zhao Distinguished Professor

Lyon, Drew J. Agronomy and Horticulture
American Society of Agronomy, Fellow

Mahoney, Timothy R. History
Fulbright Scholar, Poland

Martin, Derrel Biological Systems Engineering
Irmak, Suat
Yonts, Dean
Payero, Jose
Bureau of Reclamation Commissioner’s Water Conservation Award

McLaughlin, William Chemistry
University of Nebraska Outstanding Teaching and Instructional Creativity Award

Medill, Colleen E. Law
American Law Institute, Elected Member

Morris, Jack Biological Sciences
American Phytopathological Society, Ruth Allen Award

Nelson, Darrell W. Agronomy and Horticulture
American Society of Agronomy, Agronomic Service Award

Newman, Ian Educational Psychology
U.S. Department of Education Office of Safe and Drug-Free Schools and Communities, National Programs/Drug and Alcohol Models on College Campuses

Niemeyer, Shirley M. Textiles, Clothing & Design
National Extension Association of Family & Consumer Sciences, National Extension Housing Outreach Award

Nisse, Ruth English
National Humanities Center, Fellow

Nowak, Andrzej, S. Civil Engineering
Warsaw University of Technology, Warsaw, Poland, Medal Politechniki Warszawskiej

Olds, Marshall Modern Languages and Literatures
Academicques Palmes de France, Knight
Osorio, Fernando A.  
Veterinary and Biomedical Sciences
Pig Improvement Corporation, Ensminger International School on Swine Diseases, International Veterinary Advisory Board
Porcine Reproductive & Respiratory Syndrome Virus Eradication Campaign Adviser

Poser, Susan  
Law
American Law Institute, Elected Member

Rajurkar, Kamlakar  
Industrial and Management Systems Engineering
American Society of Mechanical Engineering, Vice President

Ramamurthy, Byravamurthy  
Computer Science and Engineering
Institute of Electrical and Electronics Engineers, Secretary, Optical Networking Technical Committee

Reichenbach, Stephen  
Computer Science and Engineering
Applied Information Management Institute, Technology Professor of the Year

Revesz, Peter Z.  
Computer Science and Engineering
Alexander von Humboldt Foundation, Alexander von Humboldt Research Fellowship

Rieke, Reuben  
Chemistry
University of Minnesota, Outstanding Achievement Award

Rush, Ivan  
Animal Science
American Society of Animal Science, Extension Award

Sarroub, Loukia K.  
Teaching, Learning and Teacher Education
National Reading Conference, 2005 Edward B. Fry Book Award For Outstanding Contributions to Literacy Research and Practice

Saskova-Pierce, Mila  
Modern Languages and Literatures
President of the Czech Republic, Gratias Agit Award, Czech Komensky Club

Savory, Paul A.  
Industrial and Management Systems Engineering
TIAA-CREF Institute, Theodore M. Hesburgh Award Certificate of Excellence

Seefeldt, Douglas  
History
Huntington Library, Los Angeles Corral of Westerners Research Fellowship

Shapiro, Charles A.  
Agronomy and Horticulture
American Society of Agronomy, Fellow

Shearman, Robert C.  
Agronomy and Horticulture
United States Golf Association, Green Section Award
Sheridan, Susan  
Educational Psychology, Nebraska Center for Research on Children, Youth, Families and Schools  
National Association of School Psychologists Presidential Award

Siau, Keng  
Management  
Association for Information Systems Special Interest Group on Systems Analysis and Design, Advisory Board Member  
Information Resources Management Association, Outstanding Leader Award

Snow, Gregory  
Physics and Astronomy  
American Physical Society, Fellow

Soukup, Rodney J.  
Electrical Engineering  
Institute of Electrical and Electronic Engineers, Meritorious Service Award

Starace, Anthony  
Physics and Astronomy  
University of Nebraska Outstanding Research and Creative Activity Award

Steadman, James R.  
Plant Pathology  
Alpha Phi chapter of the Phi Delta Honor Society for International Scholars  
American Phytopathological Society, International Service Award  
Caribbean Division of the American Phytopathological Society Frederick L. Wellman Award

Tadros, Maher  
Civil Engineering  
Prestressed Concrete Institute, Titan of the Industry

Teo, Sharon M.  
Johnny Carson School of Theatre and Film  
Endacott, Richard  
Oliva, Giacomo  
Fairfield, Terry  
Andersen, Kathe  
Buntain Comine, Lucy  
Rodriguez, Sarah W.  
Council for Advancement and Support of Education, Grand Gold Medal and Gold Medal Award for Overall Excellence In Fundraising Programs: Technology Applications

Turner, Harriet, S.  
Modern Languages and Literatures  
Martinez, Adelaida  
Choice magazine, Outstanding Academic Title, The Cambridge Companion to the Spanish Novel from 1600 to the Present

UNL for Families Extension Team  
Extension  
Annie E. Casey Foundation, 4-H Families Count: Annie E. Casey Family Strengthening Award

Van Vleck, L. Dale  
Animal Science  
American Society of Animal Science, Morrison Award
Velander, William H.  Chemical and Biomolecular Engineering  
Society of Vascular Surgery, Resident Research Prize

Walker, Judy L.  Mathematics  
Mathematical Association of America, Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics

Wang, Lily M.  Architectural Engineering  
Acoustical Society of America, R. Bruce Lindsay Award

Wedeman, Andrew H.  Political Science  
China Quarterly, Gordon White Prize

Weiss, Wendy  Textiles, Clothing and Design  
Kreimer, Jay  
Fiber 2005, Honorable Mention, Textile and Sound Environment

Wentz, Timothy  Construction Management  
Mechanical Contractors Association of America, National Educator of the Year

Wishart, David  Anthropology and Geography  
Choice magazine, Outstanding Academic Title, Encyclopedia of the Great Plains

Wristen, Brenda, G.  School of Music  
American Institute of Physics and Human Factors Society, Discovery Breakthroughs In Science Award

Yiannaka, Amalia  Agricultural Economics  
Australian Agricultural and Resource Economics Society and the American Agricultural Economics Association, Young Professionals Heading South Award

Yonts, Dean  Biological Systems Engineering  
Smith, John  
American Society of Agricultural Engineers, Educational Aids Competition Blue Ribbon, Dry Bean Production and Pest Management

Zempleni, Janos  Nutrition and Health Sciences  
American Society for Nutrition, Mead Johnson Award 2006

Zeng, Xiao, C.  Chemistry  
American Physical Society, Fellow
## Glossary of Federal Agency Abbreviations

<table>
<thead>
<tr>
<th>Agency Abbreviation</th>
<th>Description</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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<tr>
<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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<tr>
<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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<tr>
<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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<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>DOE</td>
<td>Department of Energy</td>
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<tr>
<td>EPSCoR</td>
<td>Experimental Program to Stimulate Cooperative Research</td>
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<tr>
<td>NIGEC</td>
<td>National Inst for Global Environmental Change</td>
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<tr>
<td>Sandia National Laboratories</td>
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<tr>
<td>DHHS</td>
<td>Department of Health and Human Services</td>
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<tr>
<td>ACF</td>
<td>Administration for Children and Families</td>
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<tr>
<td>CDC</td>
<td>Centers for Disease Control</td>
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<tr>
<td>NIH</td>
<td>National Institutes of Health</td>
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<td>Fogarty International Center</td>
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<tr>
<td>NCI</td>
<td>National Cancer Institute</td>
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<tr>
<td>NCRRR</td>
<td>National Center for Research Resources</td>
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<td>National Eye Institute</td>
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<tr>
<td>NHLBI</td>
<td>National Heart, Lung and Blood Institute</td>
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<td>National Institute on Aging</td>
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<tr>
<td>NIAID</td>
<td>National Institute on Allergy &amp; Infectious Diseases</td>
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</tbody>
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NICHD  National Institute of Child Health and Human Development
NIDCD  National Institute on Deafness & Communication Disorders
NIDDK  National Institute of Diabetes, Digestive & Kidney Disease
NIDA  National Institute on Drug Abuse
NIGMS  National Institute on General Medical Sciences
NIMH  National Institute of Mental Health
HUD  Department of Housing and Urban Development
DoI  Department of Interior
BR  Bureau of Reclamation
FWS  Fish & Wildlife Service
GS  Geological Survey
NPS  National Park Service
DoT  Department of Transportation
Federal Highway Administration
EPA  Environmental Protection Agency
IMLS  Institute of Museum & Library Services
NASA  National Aeronautics and Space Administration
Ames Research Center
Goddard Space Flight Center
Jet Propulsion Laboratory
John Stennis Space Center
Lewis Research Center
Wallops Flight Facility
NCHRP  National Cooperative Highway Research Program
NEA  National Endowment for the Arts
NEH  National Endowment for the Humanities
NSF  National Science Foundation
EPSCoR  Experimental Program to Stimulate Cooperative Research
NSA  National Security Agency