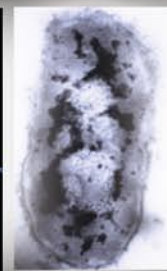
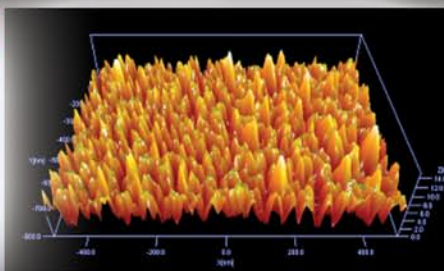
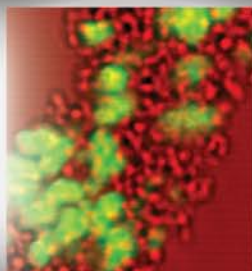
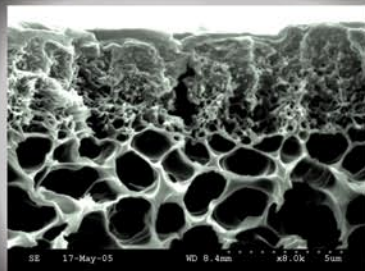


RESEARCH 2006

Kansas State University

A Report of Research
and Sponsored Programs
for Fiscal Year 2006

Nanoscience and Technology Research



Cover design by Bob Holcombe

About the cover:

Images derived from nanoscience and technology research are described on page 3.



January 2007

**Vice Provost for Research
Dean of Graduate School**

108 Anderson Hall
Manhattan, KS 66506-0113
785-532-5110
Fax: 785-532-6507

Dear Colleagues,

Given that an annual report is not in and of itself “a great read,” we nevertheless invite you to take a few minutes to consider the tremendous variety of research and creative activity represented in “Research 2006.”

Listed are the more than 1,000 research projects that received extramural funding in fiscal year 2006 exceeding \$108 million. The university’s overall research funding base reached nearly \$203 million.

Each project that was funded got high marks from the funding agency for originality, innovation and its potential to contribute to the greater good.

As you know, KSU has earned a national reputation for its strong research programs in many fields. The university is well known as a strong contributor to multi-state projects, and the faculty members are sought-after partners on large projects of national interest.

We focus this year on work in one of today’s “hot” fields of research, the nanosciences and technology. It’s worth noting that more than two dozen KSU faculty are actively conducting nanoscience and technology research.

One team of physics and chemistry researchers and a former KSU graduate student who’s now at Argonne National Laboratory received a \$1.2 million grant from the National Science Foundation.

The work of the group is a catalytic collaboration—chemists making unusual particles and physicists manipulating the particles to form entirely new structures. Products and processes of the future will depend on research like theirs.

All research progress requires years of effort supported by extramural funding. During fiscal year 2006, other research teams took major steps in the direction of commercialization.

The researchers sought and received patents to protect their novel ideas and inventions. Such inventions can move beyond the lab and be developed into marketable products and processes. Among other things, the recent patents advance laser technology and expand the enormous usefulness of an adsorbent nanoparticle technology invented at Kansas State University.

We hope you will agree that even a slow read like an annual report can contain some very elegant and unexpected material.

Again, congratulations to the KSU faculty for another outstanding year.

R.W. Trewyn
Vice Provost and Dean
President, KSU Research Foundation

K-State research team receives \$1.2 million grant to conduct curiosity-based nanoscience and technology research

Science is a never-ending quest to understand how nature works, and it is curiosity that can drive scientist to spend long hours in their labs or at their desks in calculations.

Chris Sorensen is a firm believer in curiosity-based research.

Sorensen, a Kansas State University distinguished professor of physics and adjunct professor of chemistry, will put his belief in curiosity-based research to work with a four-year, \$1.2 million grant he and an interdisciplinary team of researchers have received from the National Science Foundation's Nanoscale Interdisciplinary Research Team Award program. They will conduct curiosity-based nanoscience and technology research.

Other team members include **Amit Chakrabarti**, professor and interim head of the department of physics; **Bruce Law**, professor of physics; **Ken Klabunde**, university distinguished professor of chemistry; **Christer Aakeroy**, professor of chemistry; and **Xiaomin Lin**, a scientist at Argonne National Lab. Lin earned his master's, under Klabunde, and his doctorate, under Sorensen, from K-State.

"This is an attempt to get a team of people with different talents together to do research in nanoscience and technology," Sorensen said.

According to Sorensen, the research team has developed a chemical method where they can make particles of nanometer dimensions—or one-billionth of a meter in size.

"The particles are so small their properties are different than bulk macroscopic pieces of the same material," Sorensen said. "For example, we can make five nanometer particles of gold that are purple in color instead of golden. In fact, we can change the properties of nearly any material by changing its size at the nano-level."

Another important aspect of the team's method is that the particles they make are nearly all the same size. According to Sorensen, when these particles come together they can form an ordered array of particles in a system called a "superlattice." That lattice resembles pennies placed in "hexagonal arrays on a tabletop," he said.

"Nature makes lattices all the time," Sorensen said. "We call them crystals, which are lattices of atoms. Our grand goal is to mimic all the crystalline materials that nature has given us with superlattices of particles, where the particles act like superatoms."

Sorensen said these particles open up a world of "what ifs"—a new way of doing things, possibly creating a whole new world of materials based not on atoms and molecules, but on particles sitting in "nice crystal superlattices."

"The cool thing is that nature comes with about 92 different atoms in the periodic table and it's a beautiful thing," Sorensen said. "It's this magic workshop where we can take this atom and that atom and make nearly anything we want. But now with our particles, we have a new, expanded periodic table because we can vary not only the material of the particles, but the size of the particles to get different properties."

The research has a long way to go, Sorensen said.

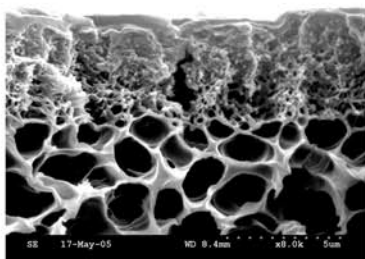
"This is where you start. You start with dreams and crazy ideas, but you can see some of them are definitely materializing here," he said. "That's what this grant is about: chemists who can make unusual particles and physicists who should be able, once these things are made, to manipulate them to form various structures."

"Everybody is foreseeing a very bright future in all kinds of different perspectives for nanoscience and technology," Sorensen said. "The two together, coordinated in a good fashion, will reshape our world."

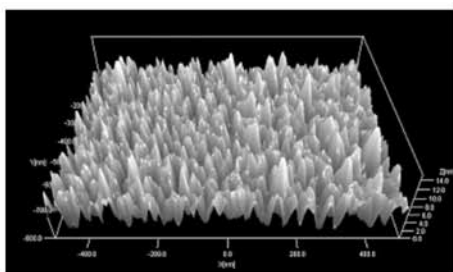
By Keener A. Tippin II



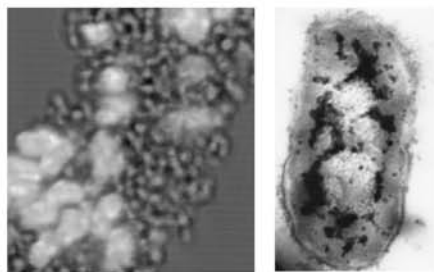
A.



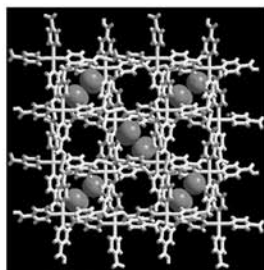
B.



C.



D.



E.



F.

- A. From the physics lab of Chris Sorensen: **WATER DROPLET ON A HYDROPHOBIC SURFACE.** A nearly round water droplet rests atop “frozen smoke,” a carbon-coated silica aerosol gel. The Sorensen lab is the only one in the world to successfully cause an aerosol to gel. In this case, a cloud of dense smoke is frozen in space into a very light, diaphanous solid. The droplet’s roundness indicates that this carbon-coated silica aerosol gel is super-hydrophobic, an alluring property to scientists.
- B. From the chemical engineering lab of Mary Rezac: A Scanning Electrograph image of an **INTEGRALLY-SKINNED ASYMMETRIC POLYMERIC MEMBRANE.** Such membranes are used for separating chemical components present in gas mixtures and for the controlled addition of gases to mixtures. Rezac uses the membrane to selectively hydrogenate soybean oil. The research goal is to achieve the benefits of hydrogenation – that is, improve shelf life and convert liquid oil to a semi-solid compound – without forming Trans Fatty Acids. Research results are promising.
- C. From the chemistry lab of Ryszard Jankowiak: A 1000 nm x 1000 nm 3D atomic force microscopy profile image of the **CYANOBACTERIAL PHOTOSYSTEM I (PSI)** complexes immobilized **ON A GOLD SURFACE.** Seen here is the highly dense and regularly ordered network of oriented PSI complexes, which are being tested for application in photovoltaic devices. Jankowiak’s may be the only lab in the world capable of doing high-resolution laser-based spectroscopic experiments at low temperatures using bulky PSI complexes in glasses; single PSI complexes on various surfaces; and very thin PSI crystals to shed more light on the electronic structure and dynamics of Photosystem I.
- D. From the labs of microbiologist George Marchin and chemist Kenneth Klabunde: **NANOPARTICLES AS SAFER BIOCIDES.** Shown are E coli bacteria treated with destructive nanoparticles. The particles extensively damage the bacteria membrane and penetrate inside the cells. A new family of safer biocides, especially ones to treat particularly dangerous organisms, may emerge from such research.
- E. From the chemistry labs of Christer Aakeroy: **A LATTICE LAIR.** A synthetic porous material with close-packed channels, akin to a molecular-size coffee filter in which the pore size can be adjusted and tailored to a suitable guest. The research goal is to create such lattices to remove and destroy toxins and environmentally undesirable substances.
- F. From the chemistry labs of Daniel Higgins and Takashi Ito: **THE WORLD’S THINNEST POWERCAT:** An atomic force microscopy image fabricated in polymer film 470 nm thick using multiphoton photolithography.

**KANSAS STATE
UNIVERSITY**
**RESEARCH/SCHOLARLY ACTIVITY
FUNDING BASE**

Fiscal Year 2006

The research funding base at Kansas State University consists of funds appropriated from federal and state sources, gifts from alumni and friends, and awards of extramural funds from federal and state agencies, foundations, and various private and industrial organizations, mainly through the competitive grants process.

| | | |
|---|--|-----------------------------|
| I. | <u>SPONSORED</u> | <u>\$108,317,049</u> |
| II. | <u>APPROPRIATED</u> | |
| | Main Campus State Appropriation | \$3,524,146 |
| | Experiment Station Programs and Extension Services | |
| | Federal Appropriation | \$8,248,874 |
| | State Appropriation | \$49,266,005 |
| | Veterinary Medical Center State Appropriation | \$526,570 |
| | <u>SUBTOTAL</u> | <u>\$61,565,595</u> |
| III. | <u>DONATED*</u> | <u>\$32,996,745</u> |
| RESEARCH/SCHOLARLY ACTIVITY BASE GRAND TOTAL | | <u>\$202,879,389</u> |

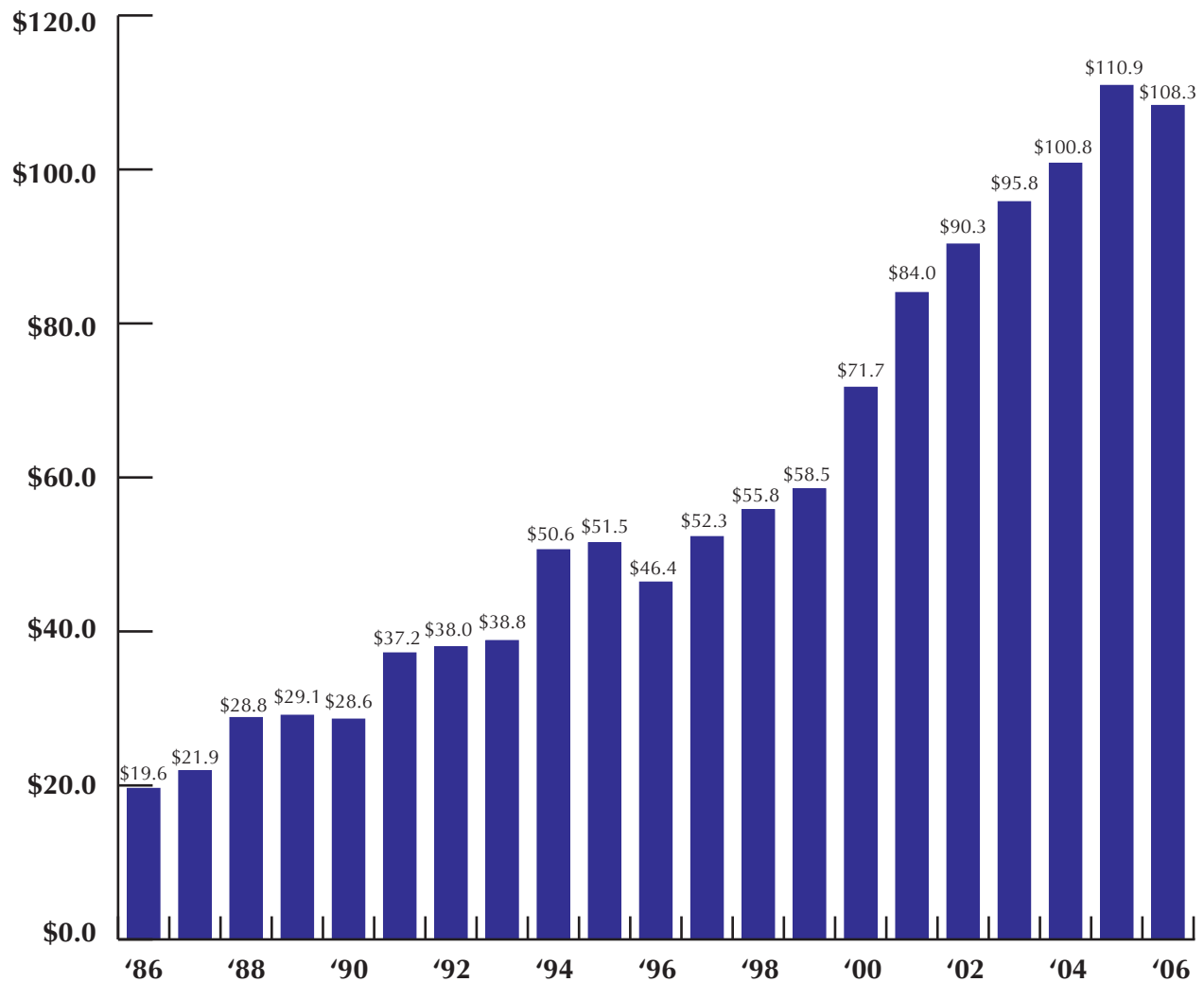
KSU Foundation funds transferred to KSU in support of research/scholarly activity
(excludes transfers to Athletics).

SECTION 1: AWARDS

**KANSAS STATE
UNIVERSITY**

SPONSORED RESEARCH FUNDING

Fiscal Years 1986–2006



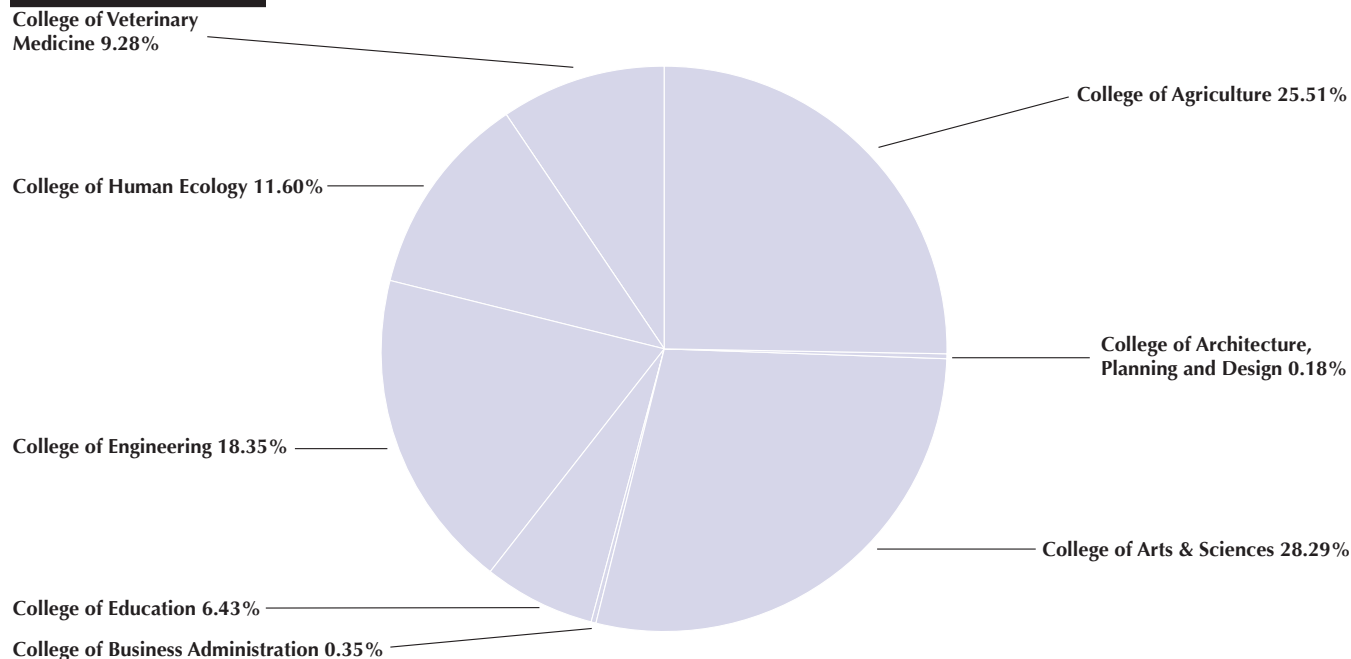
DISTRIBUTION OF NEW AWARDS AMONG COLLEGES AND OFFICES OF THE UNIVERSITY

Fiscal Year 2006

| College/Office | Number of Awards | Dollar Value |
|---|---------------------|-----------------|
| College of Agriculture | 326 | 26,724,793 |
| College of Architecture, Planning and Design | 2 | 183,520 |
| College of Arts and Sciences | 212 | 29,641,129 |
| College of Business Administration | 6 | 364,450 |
| College of Education | 28 | 6,738,456 |
| College of Engineering | 206 | 19,221,512 |
| College of Human Ecology | 71 | 12,148,749 |
| College of Technology and Aviation | 2 | 10,190 |
| College of Veterinary Medicine | 94 | 9,725,875 |
| Office of the President | 6 | 129,234 |
| Office of the Provost | 13 | 1,078,213 |
| Vice President for Administration and Finance | 1 | 49,866 |
| Vice President for Institutional Advancement | 17 | 1,432,961 |
| Vice Provost for Academic Services and Technology | 2 | 51,942 |
| Vice Provost for Research and Dean of Graduate School | 19 | 816,161 |
| UNIVERSITY TOTALS | 1005 | 108,317,049 |

AWARDS BY COLLEGE

Fiscal Year 2006



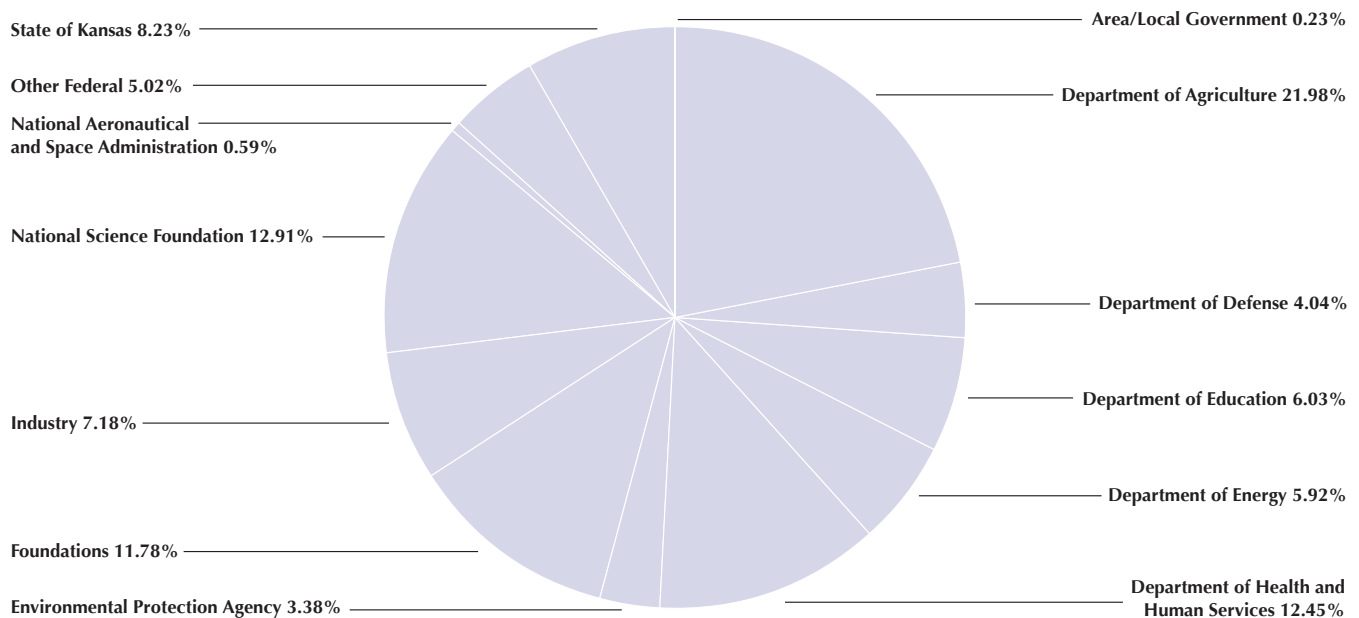
KANSAS STATE UNIVERSITY SOURCES OF AWARDS

Fiscal Year 2006

| College/Office | Number of Awards | Dollar Value |
|---|---------------------|----------------------|
| Area/Local Government | 14 | \$252,508 |
| Department of Agriculture | 141 | \$23,805,810 |
| Department of Defense | 34 | \$4,379,563 |
| Department of Education | 27 | \$6,821,163 |
| Department of Energy | 33 | \$6,407,169 |
| Department of Health and Human Services | 74 | \$13,484,768 |
| Environmental Protection Agency | 36 | \$3,662,830 |
| Foundations | 236 | \$12,758,227 |
| Industry | 192 | \$7,772,607 |
| National Science Foundation | 79 | \$13,988,173 |
| National Aeronautics and Space Administration | 10 | \$634,816 |
| Other Federal | 61 | \$5,435,404 |
| State of Kansas | 68 | \$8,914,011 |
| TOTAL | 1005 | \$108,317,049 |

SOURCES OF AWARDS

Fiscal Year 2006



EXTRAMURAL AWARDS

Fiscal Year 2006 (July 1, 2005–June 30, 2006)

COLLEGE OF AGRICULTURE AND K-STATE RESEARCH AND EXTENSION

AGRICULTURAL ECONOMICS

Amanor-Boadu, Vincent R., and Pfromm, Peter H. (Chemical Engineering), Kansas Soybean Commission, \$15,000, "Effective Commercialization of Soybean Technologies."

Amanor-Boadu, Vincent R., (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

Amanor-Boadu, Vincent R., (see **Woolverton, Michael W.**, Agricultural Economics).

Barkley, Andrew P., (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

Barton, David G., Multisponsor, \$80,740, "Arthur Capper Cooperative Center."

Boland, Michael A., US Department of Agriculture, \$9,516, "Economic Analysis of Supply Chains."

Boland, Michael A., US Department of Agriculture, \$237,500, "Evaluation of Value Added Producer Grant and Agricultural Innovation Center Programs."

Boland, Michael A., US Department of Agriculture, \$195,275, "USDA Agricultural Marketing Resource Center."

Crespi, John M., (see **Fox, John A.**, Agricultural Economics).

Dhuyvetter, Kevin C., (see **Blasi, Dale A.**, Animal Sciences and Industry).

Dhuyvetter, Kevin C., (see **Fox, John A.**, Agricultural Economics).

Dhuyvetter, Kevin C., (see **Mengel, David B.**, Agronomy).

Dhuyvetter, Kevin C., (see **Staggenborg, Scott A.**, Agronomy).

Featherstone, Allen M., US Department of Agriculture, \$99,917, "Global Awareness of the International Dimensions of Agriculture."

Fox, John A., Crespi, John M., Holloway, Zelia Z. (Agricultural Experiment Station), and **Schroeder, Ted C.**, US Department of Agriculture, \$128,000, "Minority Fellows in the Economics of Food Safety and Biosecurity."

Fox, John A., Dhuyvetter, Kevin C., Kastens, Terry, Mintert, James R., and Nelson, Richard G. (Kansas Industrial Extension Services), Kansas Corporation Commission, \$75,000, "Energy Use in Kansas Agriculture."

Fox, John A., and Mintert, James R., Kansas Corn Commission, \$12,600, "Grain Marketing Research and Education in Support of Kansas Corn Producers."

Fox, John A., and Mintert, James R., Kansas Soybean Commission, \$13,440, "Grain Marketing Research and Education in Support of Kansas Soybean Producers."

Fox, John A., and Mintert, James R., Kansas Wheat Commission, \$34,440, "Grain Marketing Research and Education in Support of Kansas Wheat Producers."

Kastens, Terry, (see **Fox, John A.**, Agricultural Economics).

Kastens, Terry, (see **Mintert, James R.**, Agricultural Economics).

Langemeier, Michael R., and Schrock, Mark D. (Biological and Agricultural Engineering), US Department of Agriculture, \$34,656, "Global Tracing and Recall System for US Grains: Proof-of-Concept."

Langemeier, Michael R., (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

Langemeier, Michael R., (see **Devlin, Daniel L.**, Agronomy).

Leatherman, John C., Kansas Water Office, \$44,304, "Regional Economic Impact of Kansas Conservation Reserve Enhancement Program."

Leatherman, John C., US Department of Health and Human Services, \$41,798, "Kansas Rural Health Works Community Engagement."

Leatherman, John C., US Environmental Protection Agency, \$42,600, "Milford Lake Watershed Watershed Restoration and Protection Strategy Development."

Leatherman, John C., US Environmental Protection Agency, \$142,850, "Pollution Trading."

Leatherman, John C., US Environmental Protection Agency, \$42,600, "Tuttle Creek Lake Watershed Watershed Restoration and Protection Strategy Development."

Leatherman, John C., Hargrove, William L. (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), and **Mankin, Kyle R.** (Biological and Agricultural Engineering), Kansas Department of Health and Environment, \$31,041, "Big Hill Creek/Big Hill Lake Watershed Restoration and Protection Strategy Development."

Leatherman, John C., Hargrove, William L. (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), and **Mankin, Kyle R.** (Biological and Agricultural Engineering), Kansas Department of Health and Environment, \$31,041, "Elk City Lake Watershed Restoration and Protection Strategy Development."

Leatherman, John C., Hargrove, William L. (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), and **Mankin, Kyle R.** (Biological and Agricultural Engineering), Kansas Department of Health and Environment, \$31,041, "Upper Verdigris/Toronto Lake Watershed Restoration and Protection Strategy Development."

Leatherman, John C., (see **Mintert, James R.**, Agricultural Economics).

Mintert, James R., Kastens, Terry, Leatherman, John C., and Woolverton, Michael W., Kansas Inc., \$25,000, "Agricultural Commodities Future: Assess Competitive Threats to the Kansas Economy."

Mintert, James R., (see **Fox, John A.**, Agricultural Economics).

Norman, David W., Food and Agriculture Organization of United Nations, \$10,749, "Project TCP/SOI/3001 Solomon Islands."

Pendell, Dustin L., (see **Schroeder, Ted C.**, Agricultural Economics).

Peterson, Hikaru H., US Department of Agriculture, \$334,473, "Value of the 'U.S.A.' Label on Retail Agricultural Products in Japan."

Peterson, Jeffrey M., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Peterson, Jeffrey M., (see **Lamm, Freddie R.**, Northwest Research Extension Center).

Schroeder, Ted C., Blasi, Dale A. (Animal Sciences and Industry), and **Pendell, Dustin L.**, US Department of Agriculture, \$151,791, "Value of Animal Traceability Systems in Managing Contagious Animal Diseases."

Schroeder, Ted C., (see **Blasi, Dale A.**, Animal Sciences and Industry).

Schroeder, Ted C., (see **Fox, John A.**, Agricultural Economics).

Williams, Jeffery R., (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

Woolverton, Michael W., Amanor-Boadu, Vincent R., and Madl, Ronald L. (Grain Science and Industry), Kansas Soybean Commission, \$15,000, "Soybean Export Trade Enhancement Program."

Woolverton, Michael W., (see **Mintert, James R.,** Agricultural Economics).

AGRICULTURAL RESEARCH CENTER-HAYS

Coyne, Patrick J., (see **Ham, Jay M.,** Agronomy).

Geier, Patrick W., (see **Regehr, David L.,** Agronomy).

Kofoid, Kenneth D., Kansas Grain Sorghum Commission, \$15,000, "Sorghum Research - Plot Combine."

Kofoid, Kenneth D., (see **Prasad, P. V. Vara,** Agronomy).

Kofoid, Kenneth D., (see **Tuinstra, Mitchell R.,** Agronomy).

Martin, Terry J., Bockus, William W. (Plant Pathology), **Schaffer, Vernon A.** (Agronomy), and **Seifers, Dallas L.,** Kansas Crop Improvement Association, \$19,000, "Effect of Wheat Streak Mosaic Virus and Barley Yellow Dwarf Mosaic Virus Infection on the Production of Certified Seed Wheat in Kansas."

Martin, Terry J., Harvey, Tom L. (Entomology), and **Seifers, Dallas L.,** Kansas Wheat Commission, \$183,450, "Kansas Dual Purpose Pest Resistant White Wheats."

Martin, Terry J., (see **Fritz, Allan K.,** Agronomy).

Martin, Terry J., (see **Prasad, P. V. Vara,** Agronomy).

Martin, Terry J., (see **Seifers, Dallas L.,** Agricultural Research Center-Hays).

Martin, Terry J., (see **Stahlman, Phillip W.,** Agricultural Research Center-Hays).

Martin, Victor L., (see **Chumley, Forrest G.,** Agricultural Experiment Station).

Seifers, Dallas L., and **Martin, Terry J.,** Kansas Wheat Commission, \$25,000, "Replacement of Growth Chambers."

Seifers, Dallas L., (see **Martin, Terry J.,** Agricultural Research Center-Hays).

Stahlman, Phillip W., Multisponsor, \$192,260, "Weed Research."

Stahlman, Phillip W., US Department of Agriculture, \$21,392, "Clearfield Winter Wheat Risk Assessment."

Stahlman, Phillip W., US Department of Agriculture, \$62,900, "National Jointed Goatgrass Research Program Extension Coordinator."

Stahlman, Phillip W., Martin, Terry J., and **Martin, Victor L.** (Agronomy), Kansas Wheat Commission, \$22,000, "Risk and Management of Clearfield Winter Wheat."

Stahlman, Phillip W., (see **Michaud, John P.,** Entomology).

Stahlman, Phillip W., (see **Regehr, David L.,** Agronomy).

Stamm, Michael J., (see **Chumley, Forrest G.,** Agricultural Experiment Station).

AGRONOMY

Al-Khatib, Kassim, and **Kadir, Sorkel M.** (Horticulture, Forestry and Recreation Resources), National Institute for Strategic Technology Acquisition and Commercialization, \$11,640, "Field Trials V-10216."

Brown-Guedira, Gina L., (see **Fritz, Allan K.,** Agronomy).

Claassen, Mark M., (see **Olson, Brian L.,** Northwest Area Office).

Claassen, Mark M., (see **Tuinstra, Mitchell R.,** Agronomy).

Devlin, Daniel L., and **Barden, Charles J.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$105,345, "Heartland Integrated Water Quality Coordination Initiative."

Devlin, Daniel L., Barnes, Philip L. (Biological and Agricultural Engineering), **Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), **Langemeier, Michael R.** (Agricultural Economics), and **Mankin, Kyle R.** (Biological and Agricultural Engineering), US Department of Agriculture, \$585,000, "Measuring Success of a Total Maximum Daily Load Implementation Plan: Land, Stream, and Economic Responses to Targeted Stakeholder Actions."

Devlin, Daniel L., Hargrove, William L. (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), and **Mankin, Kyle R.** (Biological and Agricultural Engineering), US Environmental Protection Agency, \$159,184, "Smoky Hill/Kanopolis Lake Watershed Restoration and Protection Strategy Implementation."

Devlin, Daniel L., (see **Hargrove, William L.,** Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Eberle, William M., Kansas Department of Health and Environment, \$14,998, "Compost Site Development and Operation and Compost Operator Educational and Technical Assistance."

Fick, Walter H., Multisponsor, \$10,600, "Range and Pasture Brush and Weed Control."

Fjell, Dale L., Kansas Soybean Commission, \$4,000, "Soybean Production in Kansas: Extension and Applied Research."

Fjell, Dale L., (see **Gordon, Walter B.,** Agronomy).

Fritz, Allan K., Kansas Crop Improvement Association, \$8,000, "Development of Hard Winter Wheats with Tolerance to Heat and Drought."

Fritz, Allan K., US Department of Agriculture, \$12,195, "Breeding for Resistance to Karnal Bunt in Kansas."

Fritz, Allan K., Brown-Guedira, Gina L., and **Fellers, John P.** (Plant Pathology), Kansas Wheat Commission, \$24,000, "Developing Multiple Pest Resistant Wheat Germplasm."

Fritz, Allan K., and **Martin, Terry J.** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$219,000, "Improvement of Hard Red Winter Wheat for Kansas."

Fritz, Allan K., and **Paulsen, Gary M.,** Kansas Wheat Commission, \$106,000, "Development of Hard White Winter Wheat for Kansas."

Fritz, Allan K., (see **Bockus, William W.,** Plant Pathology).

Fritz, Allan K., (see **Prasad, P. V. Vara,** Agronomy).

Fritz, Allan K., (see **Smith, C. M.,** Entomology).

Fritz, Allan K., (see **Trick, Harold N.,** Plant Pathology).

Gordon, Walter B., and **Duncan, Stewart R.** (Northeast Area Office), Kansas Soybean Commission, \$5,200, "Manganese Nutrition of Glyphosate-Resistant and Conventional Soybean."

Gordon, Walter B., Duncan, Stewart R. (Northeast Area Office), and **Fjell, Dale L.,** Kansas Grain Sorghum Commission, \$6,500, "Management Systems for Grain Sorghum Production under Dryland and Limited Irrigated Conditions."

Gordon, Walter B., Maddux, Larry D., Marsh, Brian H., and **Pierzynski, Gary M.,** Multisponsor, \$81,938, "Soil Fertility and Soil Management Investigations."

Gordon, Walter B., (see **Olson, Brian L.,** Northwest Area Office).

Gordon, Walter B., (see **Tuinstra, Mitchell R.,** Agronomy).

Ham, Jay M., Coyne, Patrick J. (Agricultural Research Center-Hays), and **Owensby, Clenton E.,** US Department of Energy, \$75,000, "Net Ecosystem Carbon and Water Vapor Exchange of Tallgrass Prairie: Component Fluxes and Spatial Heterogeneity."

Ham, Jay M., (see **Schinstock, Dale E.**, Mechanical and Nuclear Engineering).

Heer, William F., (see **Chumley, Forrest G.**, Agricultural Experiment Station).

Janssen, Keith A., and **Kilgore, Gary L.** (Southeast Area Office), Kansas Grain Sorghum Commission, \$4,200, "Evaluation of Strip-Tillage for Grain Sorghum in Kansas."

Janssen, Keith A., (see **Peterson, Dallas E.**, Agronomy).

Janssen, Keith A., (see **Regehr, David L.**, Agronomy).

Kulakow, Peter A., (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

Kulakow, Peter A., (see **Leven, Blase A.**, Center for Hazardous Substance Research).

Kulakow, Peter A., (see **Reddi, Lakshmi N.**, Civil Engineering).

Leikam, Dale F., (see **Mengel, David B.**, Agronomy).

Maddux, Larry D., (see **Gordon, Walter B.**, Agronomy).

Marsh, Brian H., (see **Gordon, Walter B.**, Agronomy).

Martin, Victor L., (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

Mengel, David B., Kansas Grain Sorghum Commission, \$26,500, "Enhancing Sorghum Yield and Profitability through Nitrogen Management."

Mengel, David B., US Department of Agriculture, \$6,000, "National Canola Cultivar Development Program to Identify Adapted Canola Cultivars to Improve Efficiency and Grower Profitability."

Mengel, David B., US Department of Agriculture, \$79,680, "Wind Erosion Prediction System User Documentation, Tutorials and Training Materials."

Mengel, David B., **Dhuyvetter, Kevin C.** (Agricultural Economics), **Leikam, Dale F.**, and **Staggenborg, Scott A.**, Kansas Wheat Commission, \$40,000, "Nitrogen Fertilizer Management of Winter Wheat."

Mengel, David B., (see **Chumley, Forrest G.**, Dean of Agriculture and Director of AES).

Owensby, Clenton E., (see **Ham, Jay M.**, Agronomy).

Paulsen, Gary M., (see **Fritz, Allan K.**, Agronomy).

Peterson, Dallas E., **Janssen, Keith A.**, and **Kilgore, Gary L.** (Southeast Area Office), Kansas Soybean Commission, \$7,000, "Residual Weed Control with Conventional Herbicides in Roundup Ready Soybeans."

Pierzynski, Gary M., Electric Power Research Institute, \$23,877, "Evaluation of Flue Gas Desulfurization By-Products and Flue Gas Desulfurization By-Product Mixtures as Plant Growth Media."

Pierzynski, Gary M., US Department of Agriculture, \$90,000, "Facilitate Development of Abiotic Stress Resistant Wheat Germplasm."

Pierzynski, Gary M., (see **Gordon, Walter B.**, Agronomy).

Pierzynski, Gary M., (see **Reddi, Lakshmi N.**, Civil Engineering).

Prasad, P. V. Vara, Aiken, Robert M. (Northwest Research Extension Center), **Kofoed, Kenneth D.** (Agricultural Research Center-Hays), and **Tuinstra, Mitchell R.**, Kansas Grain Sorghum Commission, \$23,000, "Screening Sorghum Germplasm for Drought and Heat Tolerance."

Prasad, P. V. Vara, Fritz, Allan K., and **Martin, Terry J.** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$10,000, "Sprout Resistance in Hard White Wheat."

Prasad, P. V. Vara. (see **Tuinstra, Mitchell R.**, Agronomy).

Ransom, Michel D., US Department of Agriculture, \$10,000, "Soil Laboratory Analysis to Support Soil Properties for Use in Determining How Soils Interpret for Various Uses."

Regehr, David L., **Geier, Patrick W.** (Agricultural Research Center-Hays), **Olson, Brian L.** (Northwest Research Extension Center), and **Stahlman, Phillip W.** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$7,500, "Evaluating Herbicides for Crop Tolerance and Grass Control in Grain Sorghum in Kansas."

Regehr, David L., and **Janssen, Keith A.**, Multisponsor, \$235,650, "Field Herbicidal Evaluations."

Rice, Charles W., US Department of Agriculture, \$5,000, "Third USDA Symposium on Greenhouse Gases and Carbon Sequestration in Agriculture and Forestry: Preparation of Manuscripts."

Rice, Charles W., **Todd, Timothy C.** (Plant Pathology), and **Wilson, Gail T.** (Biology), National Science Foundation, \$12,000, "Grazer-Mycorrhizal Interactions in Tallgrass Prairie: Effects on Carbon and Nitrogen Partitioning and Sequestration."

Rice, Charles W., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Rice, Charles W., (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

Roe, Judith L., (see **Welch, Stephen M.**, Agronomy).

Roozeboom, Kraig L., Multisponsor, \$385,303, "Crop Performance."

Schaffer, Vernon A., Multisponsor, \$5,661, "Foundation Seed Maintenance."

Schaffer, Vernon A., (see **Martin, Terry J.**, Agricultural Research Center-Hays).

Schapaugh, Jr., William T., Kansas Crop Improvement Association, \$6,100, "Soybean Variety Development."

Schapaugh, Jr., William T., **Long Jr., James H.** (Southeast Agricultural Research Center), **Todd, Timothy C.** (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$226,590, "Soybean Variety and Germplasm Improvement."

Schapaugh, Jr., William T., (see **Higgins, Randall A.**, Entomology).

Schapaugh, Jr., William T., (see **Reese, John C.**, Entomology).

Schapaugh, Jr., William T., (see **Trick, Harold N.**, Plant Pathology).

Shroyer, James P., Kansas Wheat Commission, \$7,500, "Wheat Production in Kansas: Extension and Applied Research."

Shroyer, James P., (see **Staggenborg, Scott A.**, Agronomy).

Staggenborg, Scott A., Kansas Water Office, \$12,000, "Technical Assistance to Water Users: ET/Weather Station Rehabilitation and Placement."

Staggenborg, Scott A., **Dhuyvetter, Kevin C.** (Agricultural Economics), **Schlegel, Alan J.** (Southwest Research Extension Center), **Shroyer, James P.**, and **Stack, James P.** (Plant Pathology), Kansas Wheat Commission, \$29,500, "Developing Recommendations for No-Till Wheat After Wheat."

Staggenborg, Scott A., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Staggenborg, Scott A., (see **Mengel, David B.**, Agronomy).

Staggenborg, Scott A., (see **Olson, Brian L.**, Northwest Area Office).

Stone, Loyd R., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Stone, Loyd R., (see **Lamm, Freddie R.**, Northwest Research Extension Center).

Stone, Loyd R., (see **Schlegel, Alan J.**, Southwest Research Extension Center).

Tuinstra, Mitchell R., US Department of Agriculture, \$20,677, "Increased Sorghum Cold Tolerance."

Tuinstra, Mitchell R., and **Chumley, Forrest G.** (Agricultural Experiment Station), US Department of Agriculture, \$680,226, "Great Plains Sorghum Improvement and Utilization Center."

Tuinstra, Mitchell R., **Claassen, Mark M.**, **Gordon, Walter B.**, **Kofoid, Kenneth D.** (Agricultural Research Center-Hays), and **Prasad, P. V. Vara**, Kansas Grain Sorghum Commission, \$67,500, "Breeding Grain Sorghum for Improved Dryland Production."

Tuinstra, Mitchell R., and **Hancock, Joe D.** (Animal Sciences and Industry), US Agency for International Development, \$141,965, "Enhancing the Utilization of Grain Sorghum and Pearl Millet through the Improvement of Grain Quality via Genetic and Nutrition Research."

Tuinstra, Mitchell R., (see **Prasad, P. V. Vara**, Agronomy).

Welch, Stephen M., **Das, Sanjoy** (Electrical and Computer Engineering), **Hsu, William H.** (Computing and Information Sciences), **Knapp, Mary C.** (Dean of Agriculture and Director of AES), and **Roe, Judith L.**, National Science Foundation, \$270,231, "Molecular Evolutionary Ecology of Developmental Signaling Pathways in Complex Environments."

ANIMAL SCIENCES AND INDUSTRY

Aramouni, Fadi M., US Department of Agriculture, \$10,900, "Value-Added Food Product Development Laboratory."

Aramouni, Fadi M., and **Herald, Thomas J.**, Kansas Department of Commerce, \$70,000, "Food and Feed Value Added Program."

Blasi, Dale A., **Dhuyvetter, Kevin C.** (Agricultural Economics), and **Schroeder, Ted C.** (Agricultural Economics), US Department of Agriculture, \$441,430, "Impact of Environmental Interferences and Performance Variation on Radio-Frequency Identification Transponder and Transceiver Reliability and Economic Assessment of Radio-Frequency Identification Technology Implementation in Animal Production Environments."

Blasi, Dale A., and **Spire, Mark F.** (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$30,749, "Animal Transport: Use of Mobile Technologies to Link Premise Identification, Animal Location and Individual Animal Identification to Semi-Loads of Cattle or Swine during Commercial Transport."

Blasi, Dale A., (see **Schroeder, Ted C.**, Agricultural Economics).

Bormann, Jennifer M., (see **Moser, Daniel W.**, Animal Sciences and Industry).

Boyle, Elizabeth, Kansas Department of Commerce, \$12,705, "Value Added Meats Program for Kansas Companies and Entrepreneurs."

Boyle, Elizabeth, US Department of Agriculture, \$32,164, "Exploring Small Plant Variation in the Application of Standardized Pathogen Control Used in Beef Slaughter and Processing Food Safety Consortium for Small and Very Small Meat Processors."

Boyle, Elizabeth, US Department of Agriculture, \$97,091, "Understanding and Controlling *Listeria Monocytogenes* Transmission through Ready-to-Eat Meat Products from Processing Plant to Consumer."

Brouk, Michael J., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

DeRouchey, Joel M., (see **Dritz, Steven S.**, Diagnostic Medicine/Pathobiology).

DeRouchey, Joel M., (see **Tokach, Michael D.**, Animal Sciences and Industry).

Dikeman, Michael E., Kansas Beef Council, \$38,174, "Determining Slaughter Cattle Age Using Lens Weight and/or Nitrogen versus Skeletal Maturity and/or Dentition."

Dikeman, Michael E., Kansas Beef Council, \$36,601, "Effects of Packaging Atmospheres and Injection Enhancement on Beef Instrumental Tenderness, Sensory Traits, and Display Color."

Dikeman, Michael E., National Cattlemen's Beef Association, \$36,601, "Effects Packaging Atmosphere and Injection Enhancement on Beef Instrumental Tenderness, Sensory Traits, and Display Color."

Drouillard, James S., and **Broce, Alberto B.** (Entomology), New Generation Feeds, \$11,680, "Efficacy of Methoprene-Containing Cooked Molasses Blocks in Controlling Development of Face Fly and Horn Fly Larvae in Cattle Manure."

Drouillard, James S., and **Thomson, Daniel U.** (Clinical Sciences), North Dakota Oilseed Council, \$43,525, "Flaxseed as a Component of Receiving Diets for Stressed Feedlot Calves."

Drouillard, James S., (see **Nagaraja, Tiruvor G.**, Diagnostic Medicine/Pathobiology).

Drouillard, James S., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Fung, Daniel Y. C., (see **Getty, Kelly J. K.**, Food Science Institute).

Fung, Daniel Y. C., (see **Kastner, Curtis L.**, Food Science Institute).

Goodband, Robert D., (see **Dritz, Steven S.**, Diagnostic Medicine/Pathobiology).

Goodband, Robert D., (see **Tokach, Michael D.**, Animal Sciences and Industry).

Hancock, Joe D., (see **Tuinstra, Mitchell R.**, Agronomy).

Herald, Thomas J., (see **Alavi, Sajid**, Grain Science and Industry).

Herald, Thomas J., (see **Aramouni, Fadi M.**, Animal Sciences and Industry).

Hunt, Melvin C., PURAC America, Inc., \$20,440, "Future Research Potential for Lactate in Meat Applications."

Hunt, Melvin C., and **Unruh, John A.**, National Cattlemen's Beef Association, \$57,070, "Color Stability, Fatty Acid Profile, and Shelf Life of Ground Chuck and Round Muscles of Fed Beef Steers, Beef Cull Cows and Dairy Cull Cows."

Johnson, Bradley J., US Department of Agriculture, \$114,645, "Defining the Mechanisms of Steroid-Enhanced Muscle Growth in Steers: Individual Roles of Trenbolone Acetate, Estradiol and IGF-I."

Johnson, Bradley J., (see **Minton, J. Ernest**, Animal Sciences and Industry).

Kropf, Donald H., (see **Kastner, Curtis L.**, Food Science Institute).

Lee, Charles D., Kansas Department of Wildlife and Parks, \$34,001, "Extension Education Position Support."

Lee, Charles D., US Department of Agriculture, \$1,000, "North Central Regional Aquaculture Center Extension Project."

Minton, J. Ernest, **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), and **Johnson, Bradley J.**, SAF Agri USA/Lesaffre Feed Additives, \$10,000, "Studies with Lesaffre Yeast Products in Swine."

Minton, J. Ernest, (see **Erickson, Howard H.**, Anatomy and Physiology).

Moser, Daniel W., and **Bormann, Jennifer M.**, US Department of Agriculture, \$15,827, "National Beef Cattle Evaluation Consortium."

Nelssen, Jim L., (see **Dritz, Steven S.**, Diagnostic Medicine/Pathobiology).

Nelssen, Jim L., (see **Tokach, Michael D.**, Animal Sciences and Industry).

Nutsch, Abbey L., (see **Kastner, Curtis L.**, Food Science Institute).

Nutsch, Abbey L., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Phebus, Randall K., (see **Getty, Kelly J. K.**, Food Science Institute).

Smith, J. Scott, (see **Kastner, Curtis L.**, Food Science Institute).

Swanson, Janice C., Kansas Beef Council, \$316,684, "Support of Regents Distinguished Professorship in Animal Sciences."

Tokach, Michael D., **DeRouchey, Joel M.**, **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, **Gottlob, Russell O.** (Diagnostic Medicine/Pathobiology), and **Nelssen, Jim L.**, Novus International, \$15,000, "Evaluating the Replacement of Organic Acid Blends Activate WD, DA, Starter L, Multimax L and the Combination of Activate DA Plus Mintrex P to a Water Medication and In-Feed Antibiotic Program."

Tokach, Michael D., **DeRouchey, Joel M.**, **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Nelssen, Jim L.**, Eli Lilly & Company, \$44,100, "Influence of Pulmotil, Tylan, and Paylean on Pig Growth and Variation."

Tokach, Michael D., **DeRouchey, Joel M.**, **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Nelssen, Jim L.**, Lonza, Inc., \$18,980, "Effects of Butyrobetaine and L-Carnitine on L-Carnitine Levels in Various Muscle Tissues of Finishing Pigs."

Tokach, Michael D., (see **Dritz, Steven S.**, Diagnostic Medicine/Pathobiology).

Unruh, John A., (see **Hunt, Melvin C.**, Animal Sciences and Industry).

COLLEGE OF AGRICULTURE AND AGRICULTURAL EXPERIMENT STATION

Boggs, Donald L., and **Maes, Sue C.** (Regents' Educational Communications Center), US Department of Agriculture, \$580,729 (includes \$59,030 from Iowa State University, \$80,293 from University of Missouri, and \$64,594 from University of Nebraska), "Collaborative Agricultural and Food Science Distance Education Programs in the Heartland."

Chumley, Forrest G., Five awards from US Department of Agriculture, totaling \$239,577, for "USDA/ARS Research Support Agreement."

Chumley, Forrest G., and **Mengel, David B.** (Agronomy), Oklahoma State University, \$112,107, "Memorandum of Understanding between Kansas State University and the Oklahoma Agricultural Experiment Station for Salary Support: Joint Canola Breeding and Management Program."

Chumley, Forrest G., **Heer, William F.** (Agronomy), **Martin, Victor L.** (Agricultural Research Center-Hays), and **Stamm, Michael J.** (Agricultural Research Center-Hays), US Department of Agriculture, \$120,160, "Development and Management of Canola in the Great Plains Region."

Chumley, Forrest G., (see **Smail, Virgil**, Grain Science and Industry).

Chumley, Forrest G., (see **Tuinstra, Mitchell R.**, Agronomy).

Holloway, Zelia Z., (see **Fox, John A.**, Agricultural Economics).

Knapp, Mary C., (see **Welch, Stephen M.**, Agronomy).

Wilson, Ron J., Kansas Agriculture and Rural Leadership, Inc., \$18,323, "Secretarial Support - Huck Boyd National Institute for Rural Development."

COMMUNICATIONS

Baldwin, Will G., (see **Stack, James P.**, Plant Pathology).

Boone, Kristina M., US Department of Agriculture, \$43,001, "Workshop to Produce Biosecurity Risk and Crisis Communications Plans."

Terry, Roger V., US Department of Agriculture, \$2,000, "CYFERNet Technology."

Terry, Roger V., University of Nebraska, \$156,222, "Provide Leadership for the Communication and Technology Unit."

ENTOMOLOGY

Broce, Alberto B., and **Zurek, Ludek**, Multisponsor, \$45,665, "Methods for Control of Livestock Insects."

Broce, Alberto B., (see **Drouillard, James S.**, Animal Sciences and Industry).

Broce, Alberto B., (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

Broce, Alberto B., (see **Zurek, Ludek**, Entomology).

Buschman, Larry L., Multisponsor, \$13,850, "Insecticide Management of Field Crop Insects in Southwestern Kansas."

Buschman, Larry L., Syngenta Corporation, \$26,000, "Lepidopteran Insect Control."

Chen, Ming-Shun, (see **Brown, Susan J.**, Biology).

Dobesh, Sharon, and **Nechols, James R.**, BASF Corporation, \$6,000, "Efficacy of Termidor (Fipronil 0.06%) for Subterranean Termite Control in Kansas When Applied as an Exterior Perimeter/Localized Interior Treatment."

Dobesh, Sharon, (see **Ramaswamy, Sonny B.**, Entomology).

Harvey, Tom L., (see **Martin, Terry J.**, Agricultural Research Center-Hays).

Higgins, Randall A., **Buschman, Larry L.** (Southwest Research Extension Center), **Schapaugh, Jr., William T.** (Agronomy), **Sloderbeck, Phillip E.** (Southwest Area Office), **Smith, C. M.**, and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$30,000, "Development of Soybean Host Plant Resistance and Other Management Options for the Soybean Stem Borer."

Higgins, Randall A., (see **Jardine, Douglas J.**, Plant Pathology).

Higgins, Randall A., (see **Reese, John C.**, Entomology).

Margolies, David C., **Nachappa, Punya B.**, and **Nechols, James R.**, US Department of Agriculture, \$77,028, "Can Increased Predator Foraging Efficiency Contribute to More Effective and Cost-Competitive Biological Control Program in Greenhouses?"

Michaud, John P., US Department of Agriculture, \$4,058, "Early Detection of Invasive Plant Pests: Development of Targeted Survey Techniques and Improved Sampling Protocols."

Michaud, John P., and **Stahlman, Phillip W.** (Agricultural Research Center-Hays), US Department of Agriculture, \$56,619, "Integrated Management of Weeds and Stalk-Boring Insects in Sunflower."

Nachappa, Punya B., (see **Margolies, David C.**, Entomology).

Nechols, James R., US Department of Agriculture, \$58,537, "Development of Monoclonal Antibody Based Diagnostic Kits for Early Stage Larvae of the Tobacco Budworm, *Heliothis virescens*, and the Bollworm, *Helicoverpa zea*."

Nechols, James R., US Department of Agriculture, \$45,000, "Facilitate Multiple Pest Resistant Wheat Germplasm Research."

Nechols, James R., and **Bhadriraju, Subramanyam** (Grain Science and Industry), US Department of Agriculture, \$1,800,000, "CIMSPiP: Integrated Management of Storage Pests from the Farm to the Table."

Nechols, James R., (see **Dobesh, Sharon**, Entomology).

Nechols, James R., (see **Margolies, David C.**, Entomology).

Park, Yoonseong, US Department of Agriculture, \$19,228, "Development of Conditional Lethal Pink Bollworms."

Ramaswamy, Sonny B., US Department of Agriculture, \$13,100, "PI Awardee Workshop on Biologically Based Pest Management at Entomological Society of America Meeting in Ft. Lauderdale."

Ramaswamy, Sonny B., and **Dobesh, Sharon**, US Department of Agriculture, \$5,000, "Developing Standardized Measurement Tools for Program Evaluation."

Ramaswamy, Sonny B., and **Dobesh, Sharon**, US Department of Agriculture, \$169,356, "Integrated Pest Management (Formula Funds)."

Ramaswamy, Sonny B., and **Dobesh, Sharon**, US Department of Agriculture, \$24,947, "Pesticide Safety Education Program."

Reese, John C., **Higgins, Randall A.**, **Schapaugh, Jr., William T.** (Agronomy), **Sloderbeck, Phillip E.** (Southwest Area Office), **Smith, C. M.**, and **Whitworth, Jeff**, Kansas Soybean Commission, \$52,000, "Integrated Pest Management of the Soybean Aphid in Kansas."

Reese, John C., (see **Wilde, Gerald E.**, Entomology).

Sloderbeck, Phillip E., (see **Wilde, Gerald E.**, Entomology).

Smith, C. M., and **Fritz, Allan K.** (Agronomy), Kansas Crop Improvement Association, \$5,000, "Fine Mapping the Gbz Gene on Wheat Chromosome 7D: The Next Step Toward Cloning a Greenbug Resistance Gene."

Smith, C. M., (see **Brown, Susan J.**, Biology).

Smith, C. M., (see **Higgins, Randall A.**, Entomology).

Smith, C. M., (see **Reese, John C.**, Entomology).

Smith, C. M., (see **Wilde, Gerald E.**, Entomology).

Whitworth, Jeff, (see **Reese, John C.**, Entomology).

Whitworth, Jeff, (see **Wilde, Gerald E.**, Entomology).

Wilde, Gerald E., US Department of Agriculture, \$31,689, "Biologically Intensive Areawide IPM of the Russian Wheat Aphid and Greenbug."

Wilde, Gerald E., **Reese, John C.**, and **Whitworth, Jeff**, Multisponsor, \$94,250, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

Wilde, Gerald E., **Sloderbeck, Phillip E.**, and **Smith, C. M.**, US Department of Agriculture, \$15,383, "Areawide Pest Management Program for Russian Wheat Aphid and Greenbug: Kansas."

Zhu, Kun Yan, US Department of Health and Human Services, \$41,600, "Characterization of Two Distinct Chitin Syntheses in Mosquitoes."

Zolnerowich, Gregory, US Department of Agriculture, \$27,618, "Systematics of Native and Exotic Species of Eretmocerus."

Zurek, Ludek, US Department of Agriculture, \$285,000, "Reduced-Risk IPM Strategies for Sustainable Livestock Production."

Zurek, Ludek, and **Broce, Alberto B.**, US Department of Health and Human Services, \$130,000, "West Nile Surveillance in the State of Kansas (ELC Program: West Nile Virus)."

Zurek, Ludek, and **Hirt, Helmut** (Biology), US Department of Agriculture, \$208,000, "Microbial Ecology and Medical Significance of House Flies."

Zurek, Ludek, (see **Broce, Alberto B.**, Entomology).

FOOD SCIENCE INSTITUTE

Getty, Kelly J. K., **Fung, Daniel Y. C.** (Animal Sciences and Industry), **Kastner, Curtis L.**, **Phebus, Randall K.** (Animal Sciences and Industry), and **Retzlaff, Deanna D.** (Dean of Continuing Education), US Department of Education, \$58,129, "North American Food Safety/Seguridad Alimentaria de Norte America (SANA)."

Kastner, Curtis L., **Fung, Daniel Y. C.** (Animal Sciences and Industry), **Kropf, Donald H.** (Animal Sciences and Industry), and **Smith, J. Scott** (Animal Sciences and Industry), US Department of Agriculture, \$306,095, "Animal Science Food Safety Consortium - Kansas State University."

Kastner, Curtis L., **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), and **Nutsch, Abbey L.** (Animal Sciences and Industry), US Department of Agriculture, \$5,000, "Further Defining and Validating an Interdisciplinary Model for University Food Safety and Security Initiatives."

Kastner, Curtis L., (see **Getty, Kelly J. K.**, Food Science Institute).

GRAIN SCIENCE AND INDUSTRY

Alavi, Sajid, **Herald, Thomas J.** (Animal Sciences and Industry), and **Madl, Ronald L.**, Kansas Wheat Commission, \$28,836, "Wheat-Based Pre-Cooked Flours Using Low Shear Twin-Screw Extrusion Processing."

Bhadriraju, Subramanyam, Kansas Wheat Commission, \$15,000, "Development of a Video on the Benefits of Spinosad as a Grain Protectant."

Bhadriraju, Subramanyam, Multisponsor, \$55,000, "Grain Science."

Bhadriraju, Subramanyam, US Department of Agriculture, \$60,000, "Demonstration Trial of Food Grains Ozonation - A New Chemical-Free Stored Product Pest Control Technology."

Bhadriraju, Subramanyam, US Department of Agriculture, \$25,000, "Ozonation of Corn, Wheat, Barley Stored in Commercial Grain Storage Structures for Management of Pest Insects and Mold Removal of Off-Odors."

Bhadriraju, Subramanyam, **Langemeier, Michael R.** (Agricultural Economics), and **Mahroof, Rizana M.**, US Department of Agriculture, \$201,124, "Optimizing and Gauging Effectiveness of Heat Treatments for Managing Insects in Food and Feed Processing Facilities."

Bhadriraju, Subramanyam, (see **Nechols, James R.**, Entomology).

Chen, Yuanhong (Richard), (see **Faubion, Jon M.**, Grain Science and Industry).

Faubion, Jon M., **Chen, Yuanhong** (Richard), and **Lingenfelter, Jane E.**, Kansas Wheat Commission, \$194,930, "Kansas Wheat Quality Laboratory: Quality Evaluation from KAES Wheat Breeding Programs and Protein/Hardness Screening of Early Progeny Wheat."

Gwirtz, Jeffrey A., US Department of Energy, \$18,810, "ORISE Fellow Sponsorship."

Howard, John E., Kansas Corn Commission, \$50,000, "Market Development Grant - International Grains Program."

Howard, John E., Kansas Soybean Commission, \$92,000, "Market Development Grant - International Grains Program."

Howard, John E., Kansas Wheat Commission, \$200,000, "International Grains Program Support Project."

Howard, John E., Nebraska Wheat Board, \$15,000, "International Grains Program Advisory Board."

Howard, John E., Oklahoma Wheat Commission, \$15,000, "International Grains Program Wheat Advisory Board."

Krishock, David A., (see **Smail, Virgil**, Grain Science and Industry).

Lingenfelter, Jane E., (see **Faubion, Jon M.**, Grain Science and Industry).

Lingenfelter, Jane E., (see **Smail, Virgil**, Grain Science and Industry).

Lookhart, George L., (see **Culbertson, Christopher T.**, Chemistry).

MacRitchie, Finlay I., Kellogg USA, Inc., \$15,753, "Gluten Functionality in a Breakfast Cereal."

Madl, Ronald L., Kansas Department of Commerce, \$33,587, "BioProcessing and Industrial Value Added Program Services Agreement with Kansas Department of Commerce."

Madl, Ronald L., McFall, Kendal, and McKinney, Leland, Sustain, \$750, "Memorandum of Agreement."

Madl, Ronald L., and Nelson, Richard G. (Kansas Industrial Extension Services), Kansas Department of Commerce, \$20,000, "Kansas Bioproduct Roadmap: An Inventory and Plan for Bioproduct Development and Commercialization."

Madl, Ronald L., and Wetzel, David L., Agvantage IP, \$15,000, "Rapid Analysis to Facilitate Development and Marketing of Wheat with High Antioxidant Activity."

Madl, Ronald L., and Wetzel, David L., ConAgra Grain Processing Companies, \$5,000, "Rapid Analysis to Facilitate Development and Marketing of Wheat with High Antioxidant Activity."

Madl, Ronald L., and Wetzel, David L., Kansas Wheat Commission, \$15,000, "Rapid Analysis to Facilitate Development and Marketing of Wheat with High Antioxidant Activity."

Madl, Ronald L., and Wetzel, David L., US Department of Agriculture, \$50,000, "Rapid Analysis to Facilitate Development and Marketing of Wheat with High Antioxidant Activity."

Madl, Ronald L., (see **Alavi, Sajid**, Grain Science and Industry).

Madl, Ronald L., (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

Madl, Ronald L., (see **Woolverton, Michael W.**, Agricultural Economics).

Mahroof, Rizana M., (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

McFall, Kendal, (see **Madl, Ronald L.**, Grain Science and Industry).

McKinney, Leland, (see **Madl, Ronald L.**, Grain Science and Industry).

Seib, Paul A., Kansas Wheat Commission, \$26,175, "Bright-White Wheat: Origin and Food Products."

Seib, Paul A., US Department of Agriculture, \$49,000, "Development of Prediction Models for Wheat Quality Parameters."

Smail, Virgil, US Department of Agriculture, \$22,918, "Development of Rapid and Objective Methods for Hard Winter Wheat Quality Testing."

Smail, Virgil, and Chumley, Forrest G. (Agricultural Experiment Station), Specialty Enzyme and Biochemicals Company, \$500,000, "Joint Specialty Enzyme Research and Teaching Program."

Smail, Virgil, and Krishock, David A., US Department of Agriculture, \$8,152, "Norman Borlaug Fellow."

Smail, Virgil, and Lingenfelter, Jane E., Pioneer Hi-Bred International, Inc., \$1,200, "Contract for Services."

Smail, Virgil, (see **Faubion, Jon M.**, Grain Science and Industry).

Sun, X. Susan, US Department of Defense, \$36,354, "Scale-Up Processing of Soy Adhesives for Low Density Chemical Free Biodegradable Fiber Cardboard."

Sun, X. Susan, Wang, Donghai (Biological and Agricultural Engineering), and **Zhong, Zhikai**, US Department of Defense, \$70,000, "Biodegradable Lightweight Fiberboard for Packaging Applications."

Wetzel, David L., (see **Madl, Ronald L.**, Grain Science and Industry).

Zhong, Zhikai, (see **Sun, X. Susan**, Grain Science and Industry).

HORTICULTURE, FORESTRY AND RECREATION RESOURCES

Barden, Charles J., (see **Devlin, Daniel L.**, Agronomy).

Bremer, Dale J., (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

Cable, Ted T., Quail Unlimited, Inc., \$3,500, "Cimarron National Grassland Project."

Carey, Edward E., Organic Center, \$5,000, "Proposal Preparation Grant from The Organic Center."

Carey, Edward E., Organic Center, \$5,000, "State of Science Review Preparation Grant."

Carey, Edward E., US Department of Agriculture, \$105,027, "Growing Growers for Greater Kansas City: Establishing a Permanent Program to Train Farmers in Sustainable, Local Food Production and Marketing."

Carey, Edward E., and Knewton, Sharon B., US Department of Agriculture, \$10,000, "Soil and Crop Quality Under High Tunnels."

Fagerness, Matthew J., (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

Fry, Jack D., Bremer, Dale J., Fagerness, Matthew J., Griffin, Jason, and Keeley, Steven J., Multisponsor, \$100,700, "Turfgrass Investigations."

Fry, Jack D., Fagerness, Matthew J., and Keeley, Steven J., National Turfgrass Federation, \$11,000, "Turfgrass Testing."

Griffin, Jason, J. Frank Schmidt Family Charitable Foundation, \$3,000, "Evaluation of Ornamental Species for the Great Plains."

Griffin, Jason, (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

Janke, Rhonda R., and Powell, G. Morgan (Biological and Agricultural Engineering), US Environmental Protection Agency, \$83,376, "Volunteer Soil and Water Testing for Enhanced Natural Resource Stewardship for Meeting Kansas Total Maximum Daily Load Goals -- Part 3."

Kadir, Sorkel M., (see **Al-Khatib, Kassim**, Agronomy).

Keeley, Steven J., (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

Knewton, Sharon B., (see **Carey, Edward E.**, Horticulture, Forestry and Recreation Resources).

Mattson, Richard H., Harvest Greenhouse and Garden Center, \$10,750, "Graduate Research Fellowship."

Reid, William R., Kansas Nut Growers Association, \$1,000, "Pecan Cultivar Evaluation."

Reid, William R., University of Missouri, \$7,900, "Missouri Pecan Growers."

Schroeder, Kenneth R., J. Frank Schmidt Family Charitable Foundation, \$3,000, "Micropropagation of Paperbark and Shantung Maples."

Williams, Kimberly A., Fred C. Gloeckner Foundation, Inc., \$10,000, "Phosphorus Retention of Clay-Type Amendments in Soilless Media for Greenhouse Crop Production: Is There a Performance Advantage?"

KANSAS CENTER FOR AGRICULTURE RESOURCES AND THE ENVIRONMENT/ KANSAS WATER RESOURCES RESEARCH INSTITUTE

Beckman, Jana J., (see **Murphy, James P.**, Agriculture and Natural Resources).

Hargrove, William L., US Department of the Interior, \$201,601 (includes \$109,266 from University of Kansas), "Kansas Water Resources Research Institute."

Hargrove, William L., US Environmental Protection Agency, \$126,500 (includes \$26,500 from Sedgwick County Extension Council), "EARTH Program -- Part 5."

Hargrove, William L., **Aiken, Robert M.** (Northwest Research Extension Center), **Brouk, Michael J.** (Animal Sciences and Industry), **Clark, Gary A.** (Biological and Agricultural Engineering), **Klocke, Norman L.** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Peterson, Jeffrey M.** (Agricultural Economics), **Rogers, Danny H.** (Biological and Agricultural Engineering), **Schlegel, Alan J.** (Southwest Research Extension Center), **Staggenborg, Scott A.** (Agronomy), **Steward, David R.** (Civil Engineering), and **Stone, Loyd R.** (Agronomy), US Department of Agriculture, \$353,377, "Sustaining Rural Economies through New Water Management Technologies - KSU."

Hargrove, William L., and **Devlin, Daniel L.** (Agronomy), US Environmental Protection Agency, \$513,203, "Abatement of Fecal Coliform Bacteria - Part 5B."

Hargrove, William L., (see **Devlin, Daniel L.**, Agronomy).

Hargrove, William L., (see **Kahl, Daniel W.**, Agriculture and Natural Resources).

Hargrove, William L., (see **Leatherman, John C.**, Agricultural Economics).

Hargrove, William L., (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

Hargrove, William L., (see **Willson, Thomas C.**, Southwest Research Extension Center).

NORTHWEST AREA OFFICE

Olson, Brian L., and **Aiken, Robert M.** (Northwest Research Extension Center), Kansas Wheat Commission, \$6,500, "Evaluation of Intensive Wheat Production in Northwest Kansas."

NORTHWEST RESEARCH EXTENSION CENTER

Aiken, Robert M., Multisponsor, \$8,000, "Sunflower Investigations."

Aiken, Robert M., National Sunflower Association, \$5,200, "Identifying Sunflower Resistance to Stem Weevil and Sunflower Moth."

Lamm, Freddie R., and **Aiken, Robert M.**, Kansas Corn Commission, \$15,000, "Effect of Tillage Practices and Limited Irrigation on Corn Production."

Aiken, Robert M., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Aiken, Robert M., (see **Lamm, Freddie R.**, Northwest Research Extension Center).

Aiken, Robert M., (see **Olson, Brian L.**, Northwest Area Office).

Aiken, Robert M., (see **Prasad, P. V. Vara**, Agronomy).

Lamm, Freddie R., **Klocke, Norman L.** (Southwest Research Extension Center), **Peterson, Jeffrey M.** (Agricultural Economics), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Stone, Loyd R.** (Agronomy), US Department of Agriculture, \$68,393, "Water Conservation - Increased Efficiency in Usage."

Lamm, Freddie R., **Klocke, Norman L.** (Southwest Research Extension Center), and **Stone, Loyd R.** (Agronomy), US Department of Agriculture, \$250,000, "Deficit Irrigation Management to Conserve Ogallala Aquifer Water."

Lamm, Freddie R., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Olson, Brian L., (see **Regehr, David L.**, Agronomy).

PLANT PATHOLOGY

Bockus, William W., Kansas Crop Improvement Association, \$4,000, "Validation and Continued Production of Wheat Germplasm with Improved Resistance to Barley Yellow Dwarf."

Bockus, William W., Kansas Wheat Commission, \$70,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Bockus, William W., Multisponsor, \$2,480, "Seed Treatment."

Bockus, William W., US Department of Agriculture, \$26,167, "Development of Scab Resistant Wheat Cultivars for Kansas."

Bockus, William W., US Department of Agriculture, \$73,776, "Marker-Assisted Characterization and Selection of Wheat Cultivars for Scab Resistance."

Bockus, William W., and **Fritz, Allan K.** (Agronomy), US Department of Agriculture, \$25,818, "Development of Scab Resistant Wheat Cultivars for Kansas."

Bockus, William W., (see **Martin, Terry J.**, Agricultural Research Center-Hays).

Bowden, Robert L., (see **Leslie, John F.**, Plant Pathology).

Fellers, John P., (see **Fritz, Allan K.**, Agronomy).

Garrett, Karen A., Land Institute, \$6,500, "Natural Patterns of 'Deployment' of Disease Resistance Genes in the Dominant Tallgrass Prairie Grass - Matthew Rouse."

Garrett, Karen A., US Agency for International Development, \$29,725, "Adapting to Change in the Andean Highlands: Practices and Strategies to Address Climate and Market Risks in Vulnerable Agro-Ecosystems."

Garrett, Karen A., US Agency for International Development, \$4,536, "Ecologically-Based Participatory IPM for Southeast Asia."

Garrett, Karen A., National Science Foundation, \$110,657, "Distance- and Phylogeny-Based Pathogen Transmission in Forest Communities."

Garrett, Karen A., US Department of Agriculture, \$7,317, "Karnal Bunt Pest Risk Assessment Research."

Garrett, Karen A., **Stack, James P.**, and **With, Kimberly A.** (Biology), National Science Foundation, \$363,000, "Collaborative Research: Epidemic Waves, Landscape Heterogeneity, and Spatial Scale."

Gill, Bikram S., Kansas Wheat Commission, \$190,000, "Wheat Genetics Resource Center and Its Contribution to the Kansas Wheat Industry."

Gill, Bikram S., National Science Foundation, \$102,496, "Haplotype Polymorphism in Polyploid Wheats and Their Diploid Ancestors."

Gill, Bikram S., US Department of Agriculture, \$7,317, "Karnal Bunt Pest Risk Assessment Research."

Gill, Bikram S., US Department of Agriculture, \$317,933, "Wheat Genetics Resource Center at Kansas State University."

Gill, Bikram S., (see **Trick, Harold N.**, Plant Pathology).

Hulbert, Scot H., US Department of Agriculture, \$30,211, "Molecular Characterization of Rearrangement and Recombination Hotspots in Maize, Sorghum, and Pearl Millet."

Hulbert, Scot H., Leach, Jan E., and Nelson, James, US Department of Agriculture, \$59,144, "Coordinated Research, Education, and Extension Project for the Application of Genomic Discoveries to Improve Rice in the United States."

Hulbert, Scot H., Leach, Jan E., and Zeigler, Robert S., US Agency for International Development, \$26,334, "Identification and Functional Validation of Genes Conditioning Broad-Spectrum Disease Resistance in Rice and Pearl Millet."

Hulbert, Scot H., and Zeigler, Robert S., US Agency for International Development, \$427,500, "Cereals Comparative Genomics Initiative Grants Program."

Hulbert, Scot H., (see **Leslie, John F.**, Plant Pathology).

Hulbert, Scot H., (see **Singh, Sukhwinder**, Plant Pathology).

Hulbert, Scot H., (see **Welti, Ruth**, Biology).

Jardine, Douglas J., Multisponsor, \$20,920, "Soybean Foliar Fungicide and Seed Treatment Tests."

Jardine, Douglas J., North Central Soybean Research Program, \$3,000, "Limiting Losses to Phytophthora sojae in the North Central Region."

Jardine, Douglas J., North Central Soybean Research Program, \$31,875, "Sentinel Plots to Monitor the Spread of Soybean Rust in the US Soybean Production Regions."

Jardine, Douglas J., US Department of Agriculture, \$6,000, "Managing Frogeye Leaf Spot, Charcoal Rot and Foliar Diseases in the North Central Region."

Jardine, Douglas J., and Higgins, Randall A. (Entomology), US Department of Agriculture, \$13,245, "National Legume Risk Management Tool Development Project."

Jardine, Douglas J., and O'Mara, Judith A., Kansas Soybean Commission, \$10,250, "Asian Soybean Rust Detection and Monitoring."

Jardine, Douglas J., and Webb, Craig, US Department of Agriculture, \$25,000, "Soybean Rust Early Detection Project Work Plan."

Leach, Jan E., (see **Hulbert, Scot H.**, Plant Pathology).

Leslie, John F., American Society for Microbiology, \$11,000, "Editor Position for Applied and Environmental Microbiology."

Leslie, John F., Multisponsor, \$8,114, "Fusarium Research."

Leslie, John F., Pathogen Control Associates Inc., \$63,626, "Development of Novel Technologies for Detection and Analysis of Microorganisms Species in Environmental Samples and Pathological Specimens."

Leslie, John F., US Agency for International Development, \$52,500, "Agroecology and Biotechnology of Fungal Pathogens of Sorghum and Millet."

Leslie, John F., US Agency for International Development, \$24,000, "Diversity in Fusarium Species Causing Stalk and Ear Rot of Maize and Sorghum in West Africa."

Leslie, John F., US Department of Agriculture, \$130,000, "Molecular Genetics of Virulence and Resistance to Wheat Diseases."

Leslie, John F., and Bowden, Robert L., US Department of Agriculture, \$51,220, "Diversity of North and South American and Korean Populations of Gibberella zeae."

Leslie, John F., and Bowden, Robert L., US Department of Agriculture, \$49,812, "Genetic Diversity and Genetic Mapping of Gibberella Zeae."

Leslie, John F., and Bowden, Robert L., US Department of Agriculture, \$46,143, "Genetic Mapping of Aggressiveness and Fertility Barriers in Gibberella Zeae."

Nelson, James, (see **Hulbert, Scot H.**, Plant Pathology).

O'Mara, Judith A., (see **Jardine, Douglas J.**, Plant Pathology).

Singh, Sukhwinder, and Hulbert, Scot H., Kansas Wheat Commission, \$35,000, "Developing DNA Markers for Breeding Karnal Bunt Resistant Bread Wheat."

Stack, James P., European Commission, \$5,421, "Crop and Food Biosecurity, and Provision of the Means to Anticipate and Tackle Crop Bioterrorism."

Stack, James P., Multisponsor, \$1,000, "Winter Wheat Seed Treatment Tests."

Stack, James P., Five awards from US Department of Agriculture, totalling \$223,000, for "Plant Diagnostic Laboratories for Plant Disease and Pest Diagnosis and Surveillance."

Stack, James P., and Baldwin, Will G. (Communications), US Department of Agriculture, \$995,078, "Plant Diagnostic Center Laboratories for Plant Disease and Pest Diagnosis and Surveillance (Great Plains Diagnostic Network: Protecting Agriculture in America's Heartland)."

Stack, James P., (see **Garrett, Karen A.**, Plant Pathology).

Stack, James P., (see **Staggenborg, Scott A.**, Agronomy).

Tisserat, Ned A., Multisponsor, \$3,800, "Evaluation and Testing of Fungicides and Nematicides on Horticultural Crops."

Todd, Timothy C., (see **Rice, Charles W.**, Agronomy).

Todd, Timothy C., (see **Schapaugh, Jr., William T.**, Agronomy).

Todd, Timothy C., (see **Trick, Harold N.**, Plant Pathology).

Trick, Harold N., Fritz, Allan K. (Agronomy), **Gill, Bikram S.**, and **Muthukrishnan, Subbarat** (Biochemistry), Kansas Wheat Commission, \$100,650, "Wheat Improvement through Genetic Engineering."

Trick, Harold N., Schapaugh, Jr., William T. (Agronomy), and **Todd, Timothy C.**, Two awards from Kansas Soybean Commission, totalling \$113,964, for "Enhancement of Soybean through Genetic Engineering."

Trick, Harold N., (see **Higgins, Randall A.**, Entomology).

Trick, Harold N., (see **Schapaugh, Jr., William T.**, Agronomy).

Trick, Harold N., (see **Shah, Jyoti**, Biology).

Valent, Barbara S., National Science Foundation, \$140,000, "Molecular and Cellular Biology of Biotrophic Interactions in Rice Blast Disease."

Valent, Barbara S., (see **Welti, Ruth**, Biology).

Webb, Craig, (see **Jardine, Douglas J.**, Plant Pathology).

White, Frank F., and Yang, Bing, Kansas State University, \$70,000, "International Biosecurity Network for Plant Pathogenic Bacteria."

White, Frank F., (see **Yang, Bing**, Plant Pathology).

Yang, Bing, and White, Frank F., National Science Foundation, \$149,999, "Molecular Basis of Disease: The Role of the Type III Effector PthXo6 during Bacterial Colonization of Rice."

Yang, Bing, (see **White, Frank F.**, Plant Pathology).

Zeigler, Robert S., (see **Hulbert, Scot H.**, Plant Pathology).

Zeigler, Robert S., (see **Stack, James P.**, Plant Pathology).

SOUTHEAST AGRICULTURAL RESEARCH CENTER

Long, Jr., James H., (see **Schapaugh, Jr., William T.**, Agronomy).

Moyer, Joseph L., Multisponsor, \$14,750, "Southeast Kansas Crop Performance Testing Program."

Moyer, Joseph L., (see **Sweeney, Daniel W.**, Southeast Agricultural Research Center).

Sweeney, Daniel W., and **Moyer, Joseph L.**, Multisponsor, \$2,000, "Soil Fertility and Management Investigations in Southeastern Kansas."

SOUTHWEST RESEARCH EXTENSION CENTER

Buschman, Larry L., (see **Higgins, Randall A.**, Entomology).

Currie, Randall S., Multisponsor, \$24,750, "Weed Control Research in Southwest Kansas."

Klocke, Norman L., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Klocke, Norman L., (see **Lamm, Freddie R.**, Northwest Research Extension Center).

Schlegel, Alan J., Multisponsor, \$11,400, "Soil Fertility and Soil Management Research for Western Kansas."

Schlegel, Alan J., **Dumler, Troy** (Southwest Area Office), and **Stone, Loyd R.** (Agronomy), Kansas Corn Commission, \$12,000, "Irrigated Cropping Systems to Reduce Groundwater Depletion While Sustaining Profitability."

Schlegel, Alan J., **Dumler, Troy** (Southwest Area Office), and **Stone, Loyd R.** (Agronomy), Kansas Grain Sorghum Commission, \$6,500, "Irrigated Cropping Systems to Reduce Irrigation Water Use and Groundwater Depletion While Sustaining Profitability."

Schlegel, Alan J., **Dumler, Troy** (Southwest Area Office), and **Stone, Loyd R.** (Agronomy), Kansas Soybean Commission, \$8,000, "Irrigated Cropping Systems to Reduce Groundwater Depletion While Sustaining Profitability."

Schlegel, Alan J., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Schlegel, Alan J., (see **Olson, Brian L.**, Northwest Area Office).

Schlegel, Alan J., (see **Staggenborg, Scott A.**, Agronomy).

Willson, Thomas C., and **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Department of the Interior, \$3,540, "Fate of Nitrate Beneath Fields Irrigated with Treated Wastewater in Ford County, Kansas Using Field Data and Preferential Flow Modeling."

KANSAS COOPERATIVE EXTENSION SERVICE

AGRICULTURE AND NATURAL RESOURCES

Buchholz, Daryl D., Kansas Farm Service Agency, \$645, "Memorandum of Understanding between Kansas Agricultural Mediation Service (KAMS) and Kansas Farm Service Agency (FSA)."

Buchholz, Daryl D., US Department of Agriculture, \$38, "Memorandum of Understanding between Kansas Agricultural Mediation Services (KAMS) and Kansas Natural Resources Conservation Service (NRCS)."

Buchholz, Daryl D., (see **Murphy, James P.**, Agriculture and Natural Resources).

Kahl, Daniel W., and **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$126,617 (includes \$15,000 from Community Project Minigrants), "Healthy Ecosystems, Healthy Communities: PRIDE Initiated Community Water Quality Action Plans."

Murphy, James P., US Department of Agriculture, \$420,224, "Kansas Agricultural Mediation Service."

Murphy, James P., US Department of Agriculture, \$87,244, "NCR SARE Professional Development Program Coordinator."

Murphy, James P., US Department of Agriculture, \$92,700, "Renewable Resources Extension Act Program."

Murphy, James P., and **Beckman, Jana J.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Department of Agriculture, \$50,000, "Kansas SARE Professional Development Program."

Murphy, James P., (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

COMMUNITY HEALTH INSTITUTE

Dzewaltowski, David A., US Department of Health and Human Services, \$22,707, "Individual and Environmental Mechanisms of PA Change."

Trost, Stewart G., US Department of Health and Human Services, \$19,861, "Predictors of Adolescent Girls' Physical Activity."

DIRECTOR OF COOPERATIVE EXTENSION

Lindquist, Jack W., Kansas Agriculture and Rural Leadership, Inc., \$80,475, "Kansas Agriculture and Rural Leadership, Inc.."

EXTENSION FAMILY AND CONSUMER SCIENCES

Peters, Paula, **Fitzgerald, Karen D.** (Human Nutrition), and **Hudson, Karen S.** (Human Nutrition), US Department of Agriculture, \$3,175,681 (includes \$825,046 from Kansas Counties), "Kansas Food Stamp Nutrition Education Plan."

FOUR-H YOUTH DEVELOPMENT

Fink, Carol J., (see **Johannes, Elaine M.**, Four-H Youth Development).

Johannes, Elaine M., and **Bradshaw, Michael H.** (School of Family Studies and Human Services), Sunflower Foundation, \$33,560 (includes \$18,560 from Kansas 4-H Foundation, Inc.), "Powerful Youth on 4-H Trails (Walking Trail Development)."

Johannes, Elaine M., and **Fink, Carol J.**, US Department of Agriculture, \$134,000, "New Communities Project - Kansas Teen Leadership for Physically Active Lifestyles."

Johannes, Elaine M., (see **Fink, Carol J.**, Human Nutrition).

KANSAS FOREST SERVICE

Aslin, Raymond G., US Department of the Interior, \$26,500 (includes \$2,650 from Rural Fire Departments), "Assistance to Rural Firefighters."

Aslin, Raymond G., US Department of Agriculture, \$2,356,062 (includes \$240,210 from Fire Districts, \$8,731 from In-Kind, \$20,000 from Kansas Department of Agriculture, and \$646,104 from State Fire Assistance), "Consolidated Payment Grant 2005."

Aslin, Raymond G., US Department of Agriculture, \$2,259,492 (includes \$253,967 from Fire Districts, \$20,000 from Kansas Department of Agriculture, and \$604,064 from State Fire Assistance), "Consolidated Payment Grant 2006."

Aslin, Raymond G., US Department of Agriculture, \$64,434, "Forest Inventory Analysis - Kansas Forest Inventory."

Aslin, Raymond G., US Department of Agriculture, \$17,023, "Forest Land Enhancement Program 2006."

Aslin, Raymond G., US Department of Agriculture, \$50,000, "Forest Land Enhancement Program 2005."

Aslin, Raymond G., US Department of Agriculture, \$40,000, "NRCS Technical Service Provider."

Aslin, Raymond G., US Environmental Protection Agency, \$64,350, "Implementing Riparian Forestry for Abatement of Fecal Coliform Bacteria."

Aslin, Raymond G., Two awards from US Environmental Protection Agency, \$61,450, for "Marais des Cygnes Basin Watershed Restoration and Protection Strategy Implementation Riparian Forestry."

NORTHEAST AREA OFFICE

Duncan, Stewart R., (see **Gordon, Walter B.**, Agronomy).

Duncan, Stewart R., Multisponsor, \$4,000, "Crop and Soils Multisponsor Programs."

Mack, Diane D., and **Johannes, Elaine M.** (School of Family Studies and Human Services), US Department of Agriculture, \$50,000, "Kansas - Operation Military Kids."

Staggenborg, Scott A., (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

NORTHWEST AREA OFFICE

Falk, Jeanne S., (see **Olson, Brian L.**, Northwest Area Office).

O'Brien, Daniel M., (see **Olson, Brian L.**, Northwest Area Office).

Olson, Brian L., **Aiken, Robert M.** (Northwest Research Extension Center), **Claassen, Mark M.** (Agronomy), **Falk, Jeanne S.**, **Gordon, Walter B.** (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Crop Improvement Association, \$13,390, "Certified vs. Bin-Run Seed: A Field Perspective."

Olson, Brian L., **Falk, Jeanne S.**, and **O'Brien, Daniel M.**, Kansas Wheat Commission, \$6,500, "No-Till Wheat Production in County Variety Trials."

Olson, Brian L., and **Staggenborg, Scott A.** (Agronomy), US Department of Agriculture, \$26,000, "Characterization of Teff Accession Lines for the High Plains."

SOUTHEAST AREA OFFICE

Allen, Ben W., Kansas Department of Commerce, \$2,500, "Agri Tourism."

Fogleman, Sarah L., (see **Griffin, Charles L.**, School of Family Studies and Human Services).

Fogleman, Sarah L., (see **Kilgore, Gary L.**, Southeast Area Office).

Kilgore, Gary L., and **Fogleman, Sarah L.**, Kansas Corn Commission, \$3,950, "Short Season Corn Educational Program in Southeast Kansas."

Kilgore, Gary L., and **Fogleman, Sarah L.**, Kansas Soybean Commission, \$11,180, "Soybean Educational Program in Southeast Kansas."

Kilgore, Gary L., (see **Janssen, Keith A.**, Agronomy).

Kilgore, Gary L., (see **Peterson, Dallas E.**, Agronomy).

Kilgore, Gary L., (see **Robbins, Benny S.**, Southeast Area Office).

Robbins, Benny S., and **Kilgore, Gary L.**, Multisponsor, \$850, "Double-Crop Soybean Performance Tests - Extension Area Offices."

SOUTHWEST AREA OFFICE

Alam, Mahbub U., (see **Rogers, Danny H.**, Biological and Agricultural Engineering).

Dumler, Troy, (see **Schlegel, Alan J.**, Southwest Research Extension Center).

Sloderbeck, Phillip E., (see **Higgins, Randall A.**, Entomology).

Sloderbeck, Phillip E., (see **Reese, John C.**, Entomology).

Thompson, Curtis R., Multisponsor, \$59,350, "Chemical Evaluation."

COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN

LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING

Keane, Timothy D., (see **Hutchinson, Stacy L.**, Biological and Agricultural Engineering).

Keane, Timothy D., (see **Devlin, Daniel L.**, Agronomy).

Lawhon, Larry L., US Department of Housing and Urban Development, \$90,000, "Community Development Work Study Program 2005-2007."

Rolley, Stephanie A., 3-Trails Community Improvement District, \$5,500, "3-Trails Studio Project."

COLLEGE OF ARTS AND SCIENCES

BIOCHEMISTRY

Davis, Lawrence C., (see **Erickson, Larry E.**, Chemical Engineering).

Kanost, Michael R., US Department of Health and Human Services, \$281,320, "Proteinase Systems in Insect Hemolymph."

Kanost, Michael R., US Department of Health and Human Services, \$26,000, "Recruitment Start-Up for Rachel Zufferey."

Kanost, Michael R., **Maatta, Eric A.** (Chemistry), and **Prakash, Om**, National Science Foundation, \$173,804, "Upgrade of 400 and 500 MHz NMR Systems."

Kanost, Michael R., (see **Brown, Susan J.**, Biology).

Kanost, Michael R., (see **Welti, Ruth**, Biology).

Muthukrishnan, Subbarat, (see **Trick, Harold N.**, Plant Pathology).

Prakash, Om, (see **Kanost, Michael R.**, Biochemistry).

Prakash, Om, (see **Welti, Ruth**, Biology).

Roche, Thomas E., American Heart Association, Heartland Affiliate, \$71,500, "Regulation of Cardiac Pyruvate Dehydrogenase by Pyruvate Dehydrogenase Phosphatase 1."

Takemoto, Dolores J., and **Boyle, Daniel L.** (Biology), US Department of Health and Human Services, \$320,781, "Protein Kinase C Gamma in the Lens."

Takemoto, Dolores J., **Graves, Harriet J.** (Clinical Sciences), and **Takemoto, Larry J.** (Biology), US Department of Health and Human Services, \$142,569, "Expression of Therapeutic Proteins in the Whole Lens."

Tomich, John M., and **Schultz, Bruce D.** (Anatomy and Physiology), US Department of Health and Human Services, \$256,624, "Model Synthetic Channel Assemblies."

Tomich, John M., (see **Welti, Ruth**, Biology).

Wei, Qize, US Department of Health and Human Services, \$178,308, "Identification of Downstream Signals for Pitx2a."

Wei, Qize, US Department of Health and Human Services, \$52,560, "Roles of MyoGEF and its Interacting Partners in Cell Division and Cell Signaling."

Zolkiewska, Anna, US Department of Health and Human Services, \$10,000, "Biomedical Excellence Faculty Scholar Award."

Zolkiewska, Anna, US Department of Health and Human Services, \$213,854, "Molecular Analysis of Metalloprotease Disintegrin ADAM12."

Zolkiewski, Michal, Dystonia Medical Research Foundation, \$66,307, "Activity and Interactions of Human TorsinA."

Zolkiewski, Michal, US Department of Health and Human Services, \$45,500, "Molecular Switches: A Novel Sub-Family of AAA+ ATPases."

Zufferey, Rachel, American Heart Association, Inc., \$65,000, "Ether Phospholipid Biosynthesis and Virulence in the Human Parasite Leishmania."

Zufferey, Rachel, US Department of Health and Human Services, \$45,500, "Role of Secreted Lipases in the Pathogenesis of the Human Parasite Leishmania."

BIOLOGY

Althoff, Donald P., (see **Gipson, Philip S.**, Biology).

Asano, Katsura, US Department of Health and Human Services, \$45,500, "Studies on Human eIF5 and its AAV-Interacting Ortholog."

Asano, Katsura, US Department of Health and Human Services, \$223,859, "Studies on Start Codon Selection by Eukaryotic Ribosomes."

Blair, John M., National Science Foundation, \$40,000, "Convergence and Contingencies in Savanna Grasslands."

Blair, John M., National Science Foundation, \$879,999, "Konza Prairie LTER V: Long-Term Research on Grassland Dynamics and Global Change."

Blair, John M., National Science Foundation, \$202,065, "LTREB - Long-Term Ecosystem Response to More Extreme Precipitation Patterns and Warming."

Blair, John M., Two awards from US Department of Energy, totalling \$269,337, for "Effects of Altered Rainfall Timing and Warming on Soil Processes and Plant Responses in a Grassland Ecosystem."

Blair, John M., (see **Dodds, Walter K.**, Biology).

Blair, John M., (see **Johnson, Loretta C.**, Biology).

Boyle, Daniel L., (see **Takemoto, Dolores J.**, Biochemistry).

Brown, Susan J., US Department of Health and Human Services, \$331,854, "KSU Bioinformatics Core."

Brown, Susan J., Chen, Ming-Shun (Entomology), **Clem, Rollie J., Ganta, Roman Reddy R.** (Diagnostic Medicine/Pathobiology), **Kanost, Michael R.** (Biochemistry), and **Smith, C. M.** (Entomology), Kansas State University, \$2,000,000, "Center for Genomic Studies on Arthropods Affecting Human, Animal and Plant Health."

Brown, Susan J., and Welti, Ruth, US Department of Health and Human Services, \$29,666, "LipidomeDB and Associated Data Mining Tools."

Brown, Susan J., (see **Welti, Ruth**, Biology).

Chapes, Stephen K., National Aeronautics and Space Administration, \$83,335, "Differentiation of Bone Marrow Macrophages in Space."

Chapes, Stephen K., US Department of Health and Human Services, \$11,700, "K-INBRE Summer Scholarship - Maier, Wiltz, Isayama."

Chapes, Stephen K., US Department of Health and Human Services, \$245,285, "KSU Undergraduate Support Core."

Chapes, Stephen K., US Department of Health and Human Services, \$13,000, "Star Trainee Scholarship - John Anderson."

Chapes, Stephen K., US Department of Health and Human Services, \$26,000, "Star Trainees: Hutfless, Madgwick."

Chapes, Stephen K., US Department of Health and Human Services, \$11,700, "Three Summer Scholars."

Chapes, Stephen K., Clem, Rollie J., and Passarelli, A. Lorena, US Department of Health and Human Services, \$248,642, "Analysis of CD81-PGRL Complex on T Cells."

Chapes, Stephen K., (see **Ganta, Roman Reddy R.**, Diagnostic Medicine/Pathobiology).

Clem, Rollie J., Kansas State University, \$70,175, "Role of Apoptosis in Mosquito Defenses Against Arbovirus Infection."

Clem, Rollie J., Two awards from US Department of Health and Human Services, totalling \$228,000, for "Apoptosis as an Anti-Viral Response in Mosquito Midgut."

Clem, Rollie J., (see **Brown, Susan J.**, Biology).

Clem, Rollie J., (see **Chapes, Stephen K.**, Biology).

Conrad, Gary W., US Department of Health and Human Services, \$356,423, "Fibroblast Differentiation During Eye Development."

Conrad, Gary W., (see **Welti, Ruth**, Biology).

Cully, Jr., Jack F., National Science Foundation, \$53,531, "Landscape Effects on Disease Dynamics in Prairie Dogs."

Cully, Jr., Jack F., US Department of Agriculture, \$3,500, "Active Black-Tailed Prairie Dog Towns on the Kiowa and Rita Blanca National Grasslands."

Cully, Jr., Jack F., US Department of Agriculture, \$1,500, "Challenge Cost-Share Agreement."

Deng, Youping, (see **Wang, Weiqun**, Human Nutrition).

Dodds, Walter K., Blair, John M., Harrington, Jr., John A. (Geography), and **Steward, David R.** (Civil Engineering), National Science Foundation, \$1,216,579, "Understanding and Forecasting Ecological Change: Causes, Trajectories and Consequences of Environmental Change in the Central Plains."

Dodds, Walter K., Gido, Keith B., Koelliker, James K. (Biological and Agricultural Engineering), and **With, Kimberly A.**, US Environmental Protection Agency, \$299,566, "Ecosystem Thresholds and Alternate States in Great Plains Rivers and Streams: Cascading Effects of Anthropogenic Hydrologic Disturbance."

Dodds, Walter K., (see **Gido, Keith B.**, Biology).

Ferguson, Carolyn J., and Mayfield, Mark H., National Science Foundation, \$137,614, "Computerization of the Kansas State University Herbarium: Digitizing a Critical Biodiversity Collection for the Great Plains."

Fleming, Sherry D., US Department of Defense, \$86,840, "Targeted Complement Inhibition of Hemorrhage Induced Damage and Inflammation."

Gido, Keith B., New Mexico Department of Game and Fish, \$18,000, "Trophic Relations of Colorado Pike Minnow in the San Juan River, New Mexico."

Gido, Keith B., US Department of the Interior, \$13,752, "Development of Aquatic Gap Analysis for Kansas."

Gido, Keith B., and Dodds, Walter K., National Science Foundation, \$6,000, "Interactive Effects of Disturbance Frequency and Species Composition on Ecosystem Functioning of Intermittent Streams: A Test of Future Climate Change Scenarios."

Gido, Keith B., (see **Dodds, Walter K.**, Biology).

Gipson, Philip S., Kansas Department of Wildlife and Parks, \$40,000, "Establishment and Operation of the Kansas Cooperative Fish and Wildlife Research Unit."

Gipson, Philip S., and Althoff, Donald P., US Department of the Interior, \$5,300, "Deer Survey Study."

Gipson, Philip S., Althoff, Donald P., and Pontius, Jeffrey S. (Statistics), US Department of the Interior, \$184,906, "Land Condition Trend Analysis on Fort Riley."

Gipson, Philip S., Althoff, Donald P., and Pontius, Jeffrey S. (Statistics), US Department of the Interior, \$75,472, "Range and Training Lands Assessment on Fort Riley."

Hancock, Lynn E., American Heart Association, Heartland Affiliate, \$71,500, "Role of Proteases in the Pathogenesis of Enterococcus Faecalis Endocarditis."

Hancock, Lynn E., US Department of Health and Human Services, \$73,000, "Genetics of Capsule Synthesis in Enterococcus faecalis."

Hartnett, David C., Kansas State University Foundation, \$300,000, "Building Renovation for New Meeting Facility at Konza Prairie Biological Station."

Hartnett, David C., National Science Foundation, \$550,000 (includes \$300,000 from KSU Foundation - pp#19251), "Building Renovation for New Meeting Facility at Konza Prairie Biological Station."

Hartnett, David C., Nature Conservancy, \$16,000, "Konza Prairie Biological Station Tractor Purchase."

Hartnett, David C., and Wilson, Gail T., National Science Foundation, \$13,000, "Belowground Meristem Populations as Regulators of Grassland Dynamics."

Hartnett, David C., (see **Nafziger, Wayne**, Economics).

Herman, Michael A., US Department of Health and Human Services, \$247,065, "Control of Cell Polarity in *C. elegans*."

Herman, Michael A., (see **Johnson, Loretta C.**, Biology).

Hirt, Helmut, (see **Zurek, Ludek**, Entomology).

Joern, Anthony, Ecological Society of America, Inc., \$1,000, "SEEDS Program Mentoring Fellowship - Chris McLaughlin."

Joern, Anthony, Two awards from US Department of Energy, totalling \$68,405, for "Effect of Global Climate Change on Grassland Pests: Impact on Interactions between Rangeland, Grasshoppers and Spider Predators."

Johnson, Loretta C., US Environmental Protection Agency, \$115,200, "Determination of Ecological Thresholds in Rivers Through a Historical Perspective of Trophic Dynamics."

Johnson, Loretta C., Winona State University, \$10,200, "Isotope Lab Analysis."

Johnson, Loretta C., Blair, John M., Herman, Michael A., and Shah, Jyoti, National Science Foundation, \$150,000, "Functional Genomic Approaches to Study Organismal Response to Global Environmental Change."

Jumpponen, Ari M., National Science Foundation, \$12,000, "Functional Significance of 'Dark Septate' Endophytes in Grassland and Meadow Ecosystems of Western North America."

Jumpponen, Ari M., and Walker, John F., National Science Foundation, \$89,177, "Building Concepts for Succession: Identifying Mechanisms for Ectomycorrhizal Fungus Succession and Developing Undergraduate Education/ Research Opportunities."

Mayfield, Mark H., (see **Ferguson, Carolyn J.**, Biology).

Mora Fayos, Silvia, American Diabetes Association, \$138,000, "Regulation of ACRP30 Traffic and Secretion in Adipocytes."

Mora Fayos, Silvia, US Department of Health and Human Services, \$45,500, "Insulin Regulation of IRAP Trafficking."

Mora Fayos, Silvia, US Department of Health and Human Services, \$23,700, "Multi-User Facility Support Application."

Mora Fayos, Silvia, US Department of Health and Human Services, \$81,030, "Protein Interactions that Regulate Leptin Secretion."

Passarelli, A. Lorena, US Department of Health and Human Services, \$10,000, "Biomedical Excellence Faculty Scholar Award."

Passarelli, A. Lorena, (see **Chapes, Stephen K.**, Biology).

Paukert, Craig, US Department of the Interior, \$163,976, "Distribution and Abundance of Fishes in the Kansas River."

Paukert, Craig, US Department of the Interior, \$28,124, "Evaluation of Sampling Protocols Used to Determine the Status and Trends of Rare and Endangered Missouri River Fishes."

Paukert, Craig, US Department of the Interior, \$10,000, "Evaluation of Standardized Techniques for the Measurement of Fish Community Structure and Abundance of Wadeable Streams in the Great Plains."

Paukert, Craig, and Whittier, Joanna B., US Department of the Interior, \$92,610, "Development of Conservation Priorities to Protect Biodiversity of Fishes in the Lower Colorado River Basin."

Paukert, Craig, and Whittier, Joanna B., US Department of the Interior, \$30,001, "Identification of Data Gaps in Published and Unpublished Literature on Fishes in the Lower Colorado River."

Sandercock, Brett K., National Science Foundation, \$11,967, "Dissertation Research: Testosterone-Mediated Life History Tradeoffs in a Lek-Mating Bird: An Integrated Approach using Path Analysis and Experimental Implants - Jacqueline K. Nooker."

Sandercock, Brett K., US Department of the Interior, \$118,000, "Assessment of Buff-Breasted Sandpiper (Tryngites Subruficollis) Toxicology Levels During Migration."

Sandercock, Brett K., US Department of the Interior, \$230,164 (includes \$7,728 from Asociacion Guyra Paraguay, \$56,177 from Southern Illinois University, \$64,954 from Texas Tech University, \$25,862 from University of Nevada, and \$1,200 from Wetlands International), "Exotoxicology of Migratory Shorebirds."

Sandercock, Brett K., US Department of the Interior, \$20,580, "Kansas Pre- and Post-Breeding Shorebird Study."

Sandercock, Brett K., US Department of the Interior, \$21,600, "Resorting Rock Ptarmigan in the Aleutian Islands, Alaska - Year 2."

Sandercock, Brett K., and Wisely, Samantha, Kansas Department of Wildlife and Parks, \$120,000, "Effects of Wind Power on the Demography and Population Genetics of Greater Prairie Chicken."

Sandercock, Brett K., (see **Wilson, Gail T.**, Biology).

Shah, Jyoti, US Department of Agriculture, \$68,172, "Enhancing Resistance to Scab in Wheat by Overexpressing the Wheat and Arabidopsis NPR1 Gene."

Shah, Jyoti, US Department of Health and Human Services, \$10,000, "Biomedical Excellence Faculty Scholar Award."

Shah, Jyoti, and Trick, Harold N. (Plant Pathology), US Department of Agriculture, \$122,966, "Engineering Fusarium Head Blight Resistance and Plant Defense Signaling."

Shah, Jyoti, (see **Johnson, Loretta C.**, Biology).

Shah, Jyoti, (see **Welti, Ruth**, Biology).

Spooner, Brian S., Howard Hughes Medical Institute, \$3,500, "Exceptional Research Opportunity Program - Cameron Anderson."

Spooner, Brian S., Kansas State University Foundation, \$77,558, "Cancer Center Core."

Spooner, Brian S., US Department of Health and Human Services, \$26,000, "Recruitment Package - Chris Thorpe."

Takemoto, Larry J., Fight for Sight, Inc., \$2,100, "Passage of Albumin Through A Lens Epithelial Cell Monolayer - A Transwell Study - Zachary Brown."

Takemoto, Larry J., Sigma Xi Scientific Research Society, \$2,500, "Mechanisms of Entry of Albumin into the Lens - Zachary W. Brown."

Takemoto, Larry J., US Department of Health and Human Services, \$319,682, "Lens Membrane in Relation to Human Cataractogenesis."

Takemoto, Larry J., US Department of Health and Human Services, \$45,500, "Passage of Ocular Proteins into the Lens."

Takemoto, Larry J., (see **Takemoto, Dolores J.**, Biochemistry).

Tomoyasu, Yoshinori, Japan Society for the Promotion of Science, \$44,000, "Postdoctoral Fellowship: Diverged Function of the HOX Protein Ubx in the Evolution of Insect Wings."

Von Ohlen, Tonia L., US Department of Health and Human Services, \$204,059, "Mechanisms of Dorsoventral Patterning During Neural Development."

Walker, John F., (see **Jumpponen, Ari M.**, Biology).

Welti, Ruth, Boehringer Ingelheim, \$9,616, "Tissue Project."

Welti, Ruth, National Science Foundation, \$84,402, "Metabolomics: A Functional Genomics Tool for Deciphering Functions of Arabidopsis Genes in the Context of Metabolic and Regulatory Networks."

Welti, Ruth, US Department of Health and Human Services, \$45,500, "Comprehensive Analysis of Human Plasma Lipids as Potential Markers of Disease."

Welti, Ruth, US Department of Health and Human Services, \$45,500, "Institutional Core Facility Support: Kansas Lipidomics Research Center Analytical Laboratory at Kansas State University."

Welti, Ruth, Blecha, Frank (Anatomy and Physiology), **Hulbert, Scot H.** (Plant Pathology), **Kanost, Michael R.** (Biochemistry), and **Tomich, John M.** (Biochemistry), National Science Foundation, \$1,539,360, "Acquisition of Mass Spectrometers for the Kansas State University Functional Genomics Laboratories."

Welti, Ruth, Brown, Susan J., Conrad, Gary W., Kanost, Michael R. (Biochemistry), **Maatta, Eric A.** (Chemistry), **Prakash, Om** (Biochemistry), **Shah, Jyoti**, and **Tomich, John M.** (Biochemistry), Kansas State University, \$1,998,945, "Functional Genomics Consortium: Building Research Productivity Through Education, Interaction, and Full Utilization of the Functional Genomics Laboratories at Kansas State University."

Welti, Ruth, Schermerhorn, Thomas (Clinical Sciences), **Shah, Jyoti, Valent, Barbara S.** (Plant Pathology), and **Wang, Weiqun** (Dean of Human Ecology), Kansas Technology Enterprise Corporation, \$319,999, "Kansas NSF EPSCoR Multi-User Equipment: Acquisition of a Mass Spectrometer for Lipidomics."

Welti, Ruth, and **Shah, Jyoti**, National Science Foundation, \$118,316, "Metabolomic Profiling of Lipids and Their Compositional Dynamics in Plant Stress Responses."

Welti, Ruth, (see **Brown, Susan J.**, Biology).

Whittier, Joanna B., (see **Paukert, Craig**, Biology).

Wilson, Gail T., and **Sandercock, Brett K.**, National Science Foundation, \$65,969, "REU Site: Ecology and Evolutionary Biology of a Temperate Grassland."

Wilson, Gail T., (see **Hartnett, David C.**, Biology).

Wilson, Gail T., (see **Rice, Charles W.**, Agronomy).

Wisely, Samantha, US Department of Agriculture, \$60,090, "Origin, Phylogeography, and Historical Population Structure of Red Fox (*Vulpes Vulpes*) in North America."

Wisely, Samantha, US Department of the Interior, \$96,236 (includes \$2,500 from Arizona Game and Fish, \$34,225 from University of Wyoming, \$2,500 from Utah Department of Natural Resources, and \$2,500 from Wyoming Game and Fish), "Biomedical Survey of Wild Black-Footed Ferrets."

Wisely, Samantha, (see **Sandercock, Brett K.**, Biology).

With, Kimberly A., (see **Dodds, Walter K.**, Biology).

With, Kimberly A., (see **Garrett, Karen A.**, Plant Pathology).

CHEMISTRY

Aakeroy, Christer B., Two awards from Kansas State University Foundation, totalling \$27,000, for "Supramolecular Synthesis of Molecular Co-Crystals: A Versatile Approach to Controlling Bioavailability, Formulation, and Processing of Solid Pharmaceuticals."

Aakeroy, Christer B., US Department of Defense, \$270,400, "Acquisition of a Single-Crystal X-Ray Diffractometer with Low-Temperature Attachment."

Bossmann, Stefan, Kansas State University Foundation, \$19,479, "MspA from *M. smegmaticus* as Transmembrane Photodynamic Anticancer Agents."

Culbertson, Christopher T., National Science Foundation, \$530,000, "Development of a Sensitive, 'Universal' Surface Plasmon Resonance Detector for Protein Separations on Microfluidic Devices."

Culbertson, Christopher T., US Department of Health and Human Services, \$87,169, "High Throughput Measurement of Cellular Signaling."

Culbertson, Christopher T., and **Lookhart, George L.** (Grain Science and Industry), Kansas Wheat Commission, \$97,580, "Development and Use of 'Lab on a Chip' Technology to Provide Varietal Identification for Quality Prediction in Less than 90 Seconds."

Hollingsworth, Mark D., American Chemical Society, \$80,000, "Crystal Growth, Polar Ordering and Domain Switching in Ferroelastoelectric Inclusion Compounds."

Hua, Duy H., Kansas State University Foundation, \$16,000, "Graduate Student Summer Stipend/Innovative Research Award."

Hua, Duy H., National Science Foundation, \$145,000, "Nanotubes: Synthesis and Applications."

Jankowiak, Ryszard J., Kansas State University Foundation, \$40,000, "Novel Concept for Protein Crystallization."

Jankowiak, Ryszard J., US Department of Health and Human Services, \$80,385, "Advanced Biomonitoring Techniques for Carcinogenesis."

Jankowiak, Ryszard J., US Department of Health and Human Services, \$72,006, "Detection of Biomarkers of Estrogen-Initiated Cancers."

Klabunde, Kenneth J., US Department of Defense, \$136,694, "Enzyme, Antibody, and Photocatalytically Active Nanoscale Scavengers and Sensors for Chemical Warfare and Biological Agents."

Klabunde, Kenneth J., US Department of Defense, \$30,000, "New Generation Nanocrystalline Materials for CB Protection."

Klabunde, Kenneth J., US Department of Defense, \$15,000, "Precipitation and Neutralization of Clouds of Chemical Warfare Agents and Biological Warfare Agents."

Maatta, Eric A., (see **Kanost, Michael R.**, Biochemistry).

Maatta, Eric A., (see **Welti, Ruth**, Biology).

Ortiz, J. Vincent, National Science Foundation, \$276,000, "Electron Propagator Theory and Electronic Structure of Nucleotides, Double Rydberg Anions, Metal-Oxide Clusters and Metal-Base Complexes."

Rayat, Sundeep, Kansas State University Foundation, \$29,479, "Synthesis and Biological Evaluation of DNA Cleaving Agents: Enyne-Carbodiimide Based Prodrugs for Cancer Therapy."

Smith, Paul E., US Civilian Research and Development Foundation, \$6,000, "Molecular Simulations of Biologically Active Molecules at the Biomembrane-Water Interface."

DEAN OF ARTS AND SCIENCES

Montelone, Beth A., Douglas, Kimberly D. (Dean of Engineering), **Dyer, Ruth A.** (Office of the Provost), **Freeman, Lisa C.** (Anatomy and Physiology), and **Spears, Jacqueline D.** (Secondary Education), Kansas State University, \$404,324, "Center for Engagement and Outreach in STEM (CORES): GROWing Diversity in STEM at a Student-Centered Land Grant University."

Montelone, Beth A., (see **Dyer, Ruth A.**, Office of the Provost).

Montelone, Beth A., (see **Shanklin, Carol W.**, Office of the Vice Provost for Research and Dean of Graduate School).

White, Stephen E., (see **Dyer, Ruth A.**, Office of the Provost).

White, Stephen E., (see **Harrington, Jr., John A.**, Geography).

ECONOMICS

Babcock, Michael W., (see **Landman, E. Dean**, Civil Engineering).

Nafziger, Wayne, Hartnett, David C. (Biology), and **Kisangani, Emizet N.** (Political Science), Kansas State University, \$253,826, "Africa in the Global Context: The Political Economy of Agriculture, the Environment, and Human Health."

GEOGRAPHY

Goodin, Douglas G., University of Kansas Center for Research, Inc., \$2,000, "Mapping Burns in Tallgrass Prairie Using Remote Sensing."

Goodin, Douglas G., and **Hutchinson, J. M. Shawn**, US Department of Health and Human Services, \$102,923, "Impact of Rapid Anthropogenic Land Cover Change in the Chaco and Interior Atlantic Forest in Paraguay on Hantavirus Ecology."

Goodin, Douglas G., (see **Harrington, Jr., John A.**, Geography).

Goodin, Douglas G., (see **Schinstock, Dale E.**, Mechanical and Nuclear Engineering).

Harrington, Jr., John A., US Department of the Interior, \$40,000, "NPS LIDAR Map Production."

Harrington, Jr., John A., Goodin, Douglas G., Harrington, Lisa M., Lu, Max, and **White, Stephen E.** (Dean of Arts and Sciences), National Science Foundation, \$4,930, "Infrastructure to Develop a Human-Environment Regional Observation Network."

Harrington, Jr., John A., (see **Dodds, Walter K.**, Biology).

Harrington, Lisa M., (see **Harrington, Jr., John A.**, Geography).

Harrington, Lisa M., (see **Paul, Bimal K.**, Geography).

Hutchinson, J. M. Shawn, Kansas Water Office, \$25,000, "High Resolution National Hydrography Dataset Update."

Hutchinson, J. M. Shawn, (see **Goodin, Douglas G.**, Geography).

Hutchinson, J. M. Shawn, (see **Hutchinson, Stacy L.**, Biological and Agricultural Engineering).

Lu, Max, (see **Harrington, Jr., John A.**, Geography).

Paul, Bimal K., Gordon, Joye C. (A. Q. Miller School of Journalism and Mass Communications), and **Harrington, Lisa M.**, National Science Foundation, \$28,000, "Factors Associated with Compliance to Katrina Mandatory Hurricane Evacuation Orders in Seven Coastal Louisiana Parishes."

GEOLOGY

Cullers, Robert L., (see **Gao, Stephen S.**, Geology).

Gao, Stephen S., Cullers, Robert L., and Liu, Kelly, National Science Foundation, \$53,441, "Continental Crustal Composition and Evolution: Constraints from Receiver Function Analysis."

Gao, Stephen S., (see **Liu, Kelly**, Geology).

Gao, Stephen S., (see **Nicolaysen, Kirsten E.**, Geology).

Hubbard, Mary S., (see **Nicolaysen, Kirsten E.**, Geology).

Liu, Kelly, and **Gao, Stephen S.**, Kansas Technology Enterprise Corporation, \$16,896, "Geophysical Test Site on the KSU Campus."

Liu, Kelly, Gao, Stephen S., and Oviatt, Charles G., National Science Foundation, \$74,996, "Establishing a Geophysical Test Site."

Liu, Kelly, (see **Gao, Stephen S.**, Geology).

Liu, Kelly, (see **Nicolaysen, Kirsten E.**, Geology).

Nicolaysen, Kirsten E., Gao, Stephen S., Hubbard, Mary S., Liu, Kelly, and **Totten, Iris M.**, National Science Foundation, \$96,799, "Interactive Computer Tutorial to Investigate the Link between Mineral Preferred Orientation and Seismic Anisotropy."

Oviatt, Charles G., US Department of the Interior, \$20,000, "Field Studies in the Lake Manix Basin, California."

Oviatt, Charles G., (see **Liu, Kelly**, Geology).

Totten, Iris M., (see **Nicolaysen, Kirsten E.**, Geology).

HISTORY

Graff, David A., (see **Holland, Kenneth M.**, International Programs).

Mrozek, Donald J., (see **Parillo, Mark P.**, History).

Mulready-Stone, Kristin, (see **Parillo, Mark P.**, History).

Parillo, Mark P., Kansas State University Foundation, \$20,000, "Institute for Military History and 20th Century Studies."

Parillo, Mark P., Mrozek, Donald J., and Mulready-Stone, Kristin, National Foundation on the Arts and the Humanities, \$375,000 (includes \$275,000 from Frank and Elizabeth Burke), "Institute for Military History and 20th Century Studies: Humanities Research and Outreach at Kansas State University."

MATHEMATICS

Auckly, David R., National Science Foundation, \$81,348, "Brainstorming and Barnstorming: An REU Site at KSU."

Auckly, David R., (see **Ryabogin, Dmitry**, Mathematics).

Bennett, Andrew G., Rebello, N. Sanjay (Physics), and **Warren, Steven** (Electrical and Computer Engineering), Kansas State University, \$100,000, "Center for Quantitative Education."

Bennett, Andrew G., (see **Bay-Williams, Jennifer M.**, Elementary Education).

Bennett, Andrew G., (see **Shroyer, Margaret G.**, Elementary Education).

Bergner, Julia E., (see **Lin, Zongzhu**, Mathematics).

Fang, Xiang, National Science Foundation, \$26,642, "Commutative Algebraic Methods in Operator Theory."

Hansen, Soren, National Science Foundation, \$101,998, "Geometry and Topology of Quantum Invariants of Knots and 3-Manifolds."

Korten, Marianne, and **Moore, Charles N.**, National Science Foundation, \$9,580, "Prairie Analysis Seminar 2005."

Lin, Zongzhu, and **Bergner, Julia E.**, National Science Foundation, \$3,000, "Graduate Student Research Conference on Algebra and Representation Theory."

Moore, Charles N., (see **Korten, Marianne**, Mathematics).

Ryabogin, Dmitry, and **Auckly, David R.**, National Science Foundation, \$33,000, "NSF/CBMS Regional Conference in the Mathematical Sciences: The Interplay between Convex Geometry and Harmonic Analysis, July 29 - August 2, 2006."

Soibelman, Yan S., National Science Foundation, \$113,000, "Affine Structures, Non-Archimedean Analytic Geometry and Mirror Symmetry."

MUSIC

Fallin, Jana R., R. L. and Elsa Helvering Trust and Guise-Weber Foundation, \$12,000, "Music Education Study of Music and Arts Events in Small Towns."

Walker, Rodney G., Master Teacher, Inc., \$16,113, "Summer Choral Institute."

PHYSICS

Bolton, Timothy A., US Department of Energy, \$60,374, "Compact Muon Solenoid - Sensors."

Bolton, Timothy A., **Horton-Smith, Glenn A.**, **Ratra, Bharat**, **Sidwell, Ronald A.**, **Stanton, Noel R.**, and **Von Toerne, Eckhard**, US Department of Energy, \$520,000, "Heavy Quark and Neutrino Physics."

Bolton, Timothy A., **Horton-Smith, Glenn A.**, **Ratra, Bharat**, **Sidwell, Ronald A.**, **Stanton, Noel R.**, and **Von Toerne, Eckhard**, US Department of Energy, \$678,545 (includes \$147,545 from the University of Kansas), "Kansas Advanced Semiconductor Project."

Bolton, Timothy A., **Ratra, Bharat**, **Sidwell, Ronald A.**, **Stanton, Noel R.**, and **Von Toerne, Eckhard**, Kansas Technology Enterprise Corporation, \$133,315, "Kansas Advanced Semiconductor Project."

Bolton, Timothy A., (see **Von Toerne, Eckhard**, Physics).

Chakrabarti, Amitabha, (see **Sorensen, Christopher M.**, Physics).

Chang, Zenghu, National Science Foundation, \$130,000, "High Order Harmonic Generation in Aligned Molecules."

Chang, Zenghu, (see **Sorensen, Christopher M.**, Physics).

Cocke, Charles L., US Department of Energy, \$2,599,000, "Structure and Dynamics of Atoms, Ions, Molecules, and Surfaces."

Corwin, Kristan L., US Department of Commerce, \$6,570, "NIST Summer Undergraduate Research Fellowship Program (Gaithersburg, Maryland) - Aaron Pung."

Corwin, Kristan L., US Department of Defense, \$110,000, "Novel Wavelength Standards in the Near Infrared."

Corwin, Kristan L., (see **Weaver, Oliver L.**, Physics).

DePaola, Brett D., (see **Sorensen, Christopher M.**, Physics).

Esry, Brett D., National Science Foundation, \$70,000, "Theoretical Investigations of Ultracold Few-Body Collisions."

Fan, Zhaoyang, **Jiang, Hongxing**, and **Lin, Jingyu**, Kansas Technology Enterprise Corporation, \$55,996, "Rare Earth Doped III-Nitrides for Optical Communications."

Fan, Zhaoyang, **Jiang, Hongxing**, and **Lin, Jingyu**, US Department of Defense, \$440,000, "Rare Earth Doped III-Nitrides for Optical Communications."

Horton-Smith, Glenn A., US Department of Energy, \$155,000, "Toward New Discoveries at Low Energy Neutrino Experiments."

Horton-Smith, Glenn A., (see **Bolton, Timothy A.**, Physics).

Jiang, Hongxing, National Aeronautics and Space Administration, \$30,127, "AIN Based Extreme Ultraviolet (EUV) Detectors."

Jiang, Hongxing, and **Lin, Jingyu**, National Science Foundation, \$17,000, "Index Switchable III-Nitride Planar Lightwave Circuits for Optical Communications."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Defense, \$66,000, "III-Nitrides for Hydrogen Fuel Cell and Thermopower Technologies."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Energy, \$151,000, "Optical and Electrical Properties of III-V Nitride Wide Bandgap Semiconductors."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Defense, \$70,743, "Wide Bandgap III-Nitride Micro- and Nano-Photonics."

Jiang, Hongxing, (see **Fan, Zhaoyang**, Physics).

Jiang, Hongxing, (see **Lin, Jingyu**, Physics).

Law, Bruce M., National Science Foundation, \$135,000, "Materials World Network: Electric Field Induced Microfluidic Manipulation."

Law, Bruce M., (see **Sorensen, Christopher M.**, Physics).

Lin, Chii-Dong, National Science Foundation, \$50,000, "Quantum Physics of Helium Near the Double Ionization Threshold - Quantum Chaos and Wannier Threshold Law."

Lin, Jingyu, and **Jiang, Hongxing**, National Science Foundation, \$99,568, "III-Nitride Deep Ultraviolet Photonic Materials and Structures - Growth, Optical Studies and Applications."

Lin, Jingyu, (see **Fan, Zhaoyang**, Physics).

Lin, Jingyu, (see **Jiang, Hongxing**, Physics).

Rahman, Talat S., National Science Foundation, \$125,000, "Theoretical Studies of Chemisorption and Reactions at Catalyst Surfaces."

Rahman, Talat S., US Department of Energy, \$100,000, "Theoretical and Computational Studies of Characteristics of Metallic Nanostructures."

Ratra, Bharat, (see **Bolton, Timothy A.**, Physics).

Rebello, N. Sanjay, National Science Foundation, \$15,483, "CoMPASS: Integrating Digital Text in Design-Based Science Classes."

Rebello, N. Sanjay, National Science Foundation, \$96,423, "Research on Students' Mental Models, Learning and Transfer as a Guide to Application-Based Curriculum Development and Instruction in Physics."

Rebello, N. Sanjay, (see **Bennett, Andrew G.**, Mathematics).

Rebello, N. Sanjay, (see **Sorensen, Christopher M.**, Physics).

Sidwell, Ronald A., (see **Bolton, Timothy A.**, Physics).

Sorensen, Christopher M., Multisponsor, \$3,000, "Support for Physicists to Attend Nanoaerosol Characterization Symposium."

Sorensen, Christopher M., National Science Foundation, \$6,000, "Support for Students to Attend Nanoaerosol Characterization Symposium."

Sorensen, Christopher M., and **Chakrabarti, Amitabha**, National Aeronautics and Space Administration, \$87,748, "Aggregation in Dense Systems: Crossover from Cluster-Cluster-Aggregation to Percolation."

Sorensen, Christopher M., Chang, Zenghu, DePaola, Brett D., Law, Bruce M., and Rebello, N. Sanjay, National Science Foundation, \$98,985, "Implementation of the Interactive Studio Concept to an Upper Level Physics Course: Studio Optics."

Stanton, Noel R., (see **Bolton, Timothy A.**, Physics).

Von Toerne, Eckhard, and **Bolton, Timothy A.**, US Department of Energy, \$18,000, "Calorimeter-Based Tracking for Particle Flow and Reconstruction of Long-Lived Particles with the SiD Detector."

Von Toerne, Eckhard, (see **Bolton, Timothy A.**, Physics).

Weaver, Oliver L., and **Corwin, Kristan L.**, National Science Foundation, \$93,997, "REU Site: Laser-Matter Interactions on Atomic and Nanoscales."

POLITICAL SCIENCE

Kisangani, Emizet N., and **Pickering, Jeffrey J.**, National Science Foundation, \$87,069, "Consequences of Foreign Military Intervention in Developing Countries, 1960-2005."

Kisangani, Emizet N., (see **Nafziger, Wayne**, Economics).

Pickering, Jeffrey J., (see **Kisangani, Emizet N.**, Political Science).

PSYCHOLOGY

Downey, Ronald G., (see **Slick, Renee**, Psychology).

Frieman, Jerome, and **Monaco, Gregory E.**, Great Plains Network Consortium, \$158,130, "Funding for Director of Research - Great Plains Network."

Monaco, Gregory E., and **Hsu, William H.** (Computing and Information Sciences), National Science Foundation, \$38,520, "US - Morocco Workshop: Language Technology Research and Education Program: Project Startup and Team-Building, March 2006 Rabat, Morocco."

Monaco, Gregory E., (see **Frieman, Jerome**, Psychology).

Shanteau, James C., US Department of Defense, \$82,981, "Performance Evaluation of Expert Teams in Technological Environments."

Slick, Renee, and **Downey, Ronald G.**, DriveSafety Inc., \$120,000, "Simulation Training and Assessment Research Lab - STAR Lab Project."

Uhlarik, John J., US Department of Transportation, \$100,000, "Validating the Certification Assessment Tool (CAT) and Developing the Menu Structure Assessment Tool."

SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS

Gordon, Joye C., (see **Paul, Bimal K.**, Geography).

SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

Britton, Dana M., Sociologists for Women in Society, \$85,000, "Gender and Society Editorship."

Logan, Brad R., US Department of the Interior, \$43,203 (includes \$8,240 from private donations), "National Register of Historic Places Evaluation in Stranger Creek Drainage, Leavenworth County, Kansas."

Logan, Brad R., and **Ritterbush, Lauren W.**, US Department of the Interior, \$19,958, "Archaeological Survey of Little Stranger Creek Valley, Leavenworth County, Kansas."

Logan, Brad R., and **Ritterbush, Lauren W.**, US Department of the Interior, \$80,330, "National Register of Historic Places Evaluation of Selected Sites at Lovewell Reservoir, Jewell County, Kansas."

Ritterbush, Lauren W., (see **Logan, Brad R.**, Sociology, Anthropology, and Social Work).

SPEECH COMMUNICATION, THEATRE AND DANCE

Procter, David E., Council on Public Policy Education, \$5,000, "Encouraging Public Deliberation through the Institute for Civic Discourse and Democracy."

STATISTICS

Pontius, Jeffrey S., (see **Gipson, Philip S.**, Biology).

COLLEGE OF BUSINESS ADMINISTRATION

ACCOUNTING

Ott, Richard L., Kansas State University Foundation, \$75,000, "Accounting Department KSU Foundation."

Vruwink, David R., (see **Niehoff, Brian P.**, Management).

DEAN OF BUSINESS ADMINISTRATION

Ebadi, Yar M., Kansas State University Foundation, \$265,800, "Kansas State University Foundation Support."

Sampson, Ronald L., Mid-America Technology Management, Inc., \$10,600, "Impact of Technology Entrepreneurship and Commercialization on the Development of Regional Economies within Local Communities of Interest."

MANAGEMENT

McHaney, Roger W., Kansas Board of Regents, \$9,300, "Develop a Video Conferencing Facility to Allow the Faculty, Students, and Staff at Kansas State University, College of Business Administration to Communicate with the Prospective Students, University Partners and Research Collaborators."

Niehoff, Brian P., and **Vruwink, David R.** (Accounting), Multisponsor, \$3,750, "MBA Practicum."

COLLEGE OF EDUCATION

DEAN OF EDUCATION

Flaherty, Roberta D., National Academic Advising Association, \$796,176, "National Academic Advising Association Executive Office."

Havlicek, Barbara J., Kansas Foundation for Agriculture in the Classroom, \$104,156, "Kansas Foundation for Agriculture in the Classroom."

Havlicek, Barbara J., Multisponsor, \$9,331, "Council for Public School Improvement."

Havlicek, Barbara J., Multisponsor, \$142,803, "Educational Computer Assistance."

Havlicek, Barbara J., Schools for Quality Education, Inc., \$7,000, "Schools for Quality Education."

Herrera, Socorro G., US Department of Education, \$35,000, "Dos Puentes."

Herrera, Socorro G., US Department of Education, \$389,528 (includes \$56,831 from USD 253 - Emporia, and \$56,831 from USD 305 - Salina), "Making the Grade."

Herrera, Socorro G., US Department of Education, \$340,000, "Operation ADVANCE (Achieving Values and Accomplishments for Migrant Adults through Networking Community Entities)."

Herrera, Socorro G., US Department of Education, \$43,200, "Project ABC."

Herrera, Socorro G., US Department of Education, \$376,487 (includes \$77,182 from USD 253 - Emporia), "Project CARE."

Herrera, Socorro G., US Department of Education, \$284,906, "Project Maestra."

Herrera, Socorro G., US Department of Education, \$348,742, "Project Synergy."

Middendorf, B. Jan, and **Thurston, Linda P.**, Kansas Board of Regents, \$425,000, "KAN-ED Evaluation - Phase IV."

Middendorf, B. Jan, (see **Thurston, Linda P.**, Dean of Education).

Murry, Kevin G., US Department of Education, \$104,217, "Las Estrellas."

Murry, Kevin G., US Department of Education, \$438,079, "Project Chrysalis."

Murry, Kevin G., US Department of Education, \$481,537, "Project New Horizons."

Rankin, Charles I., US Department of Education, \$753,094, "Midwest Equity Assistance Center."

Staver, John R., National Science Foundation, \$48,894, "Assessing Science Knowledge Project."

Thurston, Linda P., and **Middendorf, B. Jan**, Kauffman Foundation, \$47,600, "Proposal for the Evaluation of the Implementation of the Chalkwaves Instant Video Library."

Thurston, Linda P., (see **Middendorf, B. Jan**, Dean of Education).

Thurston, Linda P., (see **Spears, Jacqueline D.**, Secondary Education).

EDUCATIONAL LEADERSHIP

Gould, Carol A., Corporation for National and Community Service, \$20,786, "Kansas Campus Compact."

ELEMENTARY EDUCATION

Allen, David S., (see **Bay-Williams, Jennifer M.**, Elementary Education).

Bay-Williams, Jennifer M., **Allen, David S.**, and **Bennett, Andrew G.** (Mathematics), US Department of Education, \$104,567 (includes \$4,567 from USD 475), "Advancing Content Understanding in Mathematics through Effective Networks (ACUMEN) Project."

Shroyer, Margaret G., **Bennett, Andrew G.** (Mathematics), and **Yahnke, Sally J.** (Secondary Education), US Department of Education, \$1,879,194, "Equity and Access: Enhancing Teacher Quality through Multi-Institutional Partnerships."

Vontz, Thomas, Center for Civic Education, \$22,550, "Development of a Reliable and Valid Instrument to Measure Elementary Teachers' Understanding of Core Civics Concepts."

Vontz, Thomas, US Department of Education, \$40,000, "2006 Kansas State University Institute for Social Studies Teachers: Teaching and Learning the United States Constitution."

SECONDARY EDUCATION

Goodson, F. Todd, International Reading Association Inc., \$5,000, "Editorship of Journal of Adolescent and Adult Literacy."

Goodson, F. Todd, US Department of Education, \$45,000, "Flint Hills Writing Project."

Kane, Mary R., Kansas State Department of Education, \$70,604, "FFA-YF/YFW Organizations."

McGrath, Diane, (see **Spears, Jacqueline D.**, Secondary Education).

Spears, Jacqueline D., **McGrath, Diane**, and **Thurston, Linda P.** (Dean of Education), National Science Foundation, \$55,000, "Seeing Gender: Tools for Change."

Spears, Jacqueline D., (see **Montelone, Beth A.**, Dean of Arts and Sciences).

Yahnke, Sally J., (see **Shroyer, Margaret G.**, Elementary Education).

COLLEGE OF ENGINEERING

ADVANCED MANUFACTURING INSTITUTE

Case, Scott A., (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

Case, Scott A., (see **Tucker, Jeffrey W.**, Advanced Manufacturing Institute).

Chalfant, Mark A., (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

Kramer, Bradley A., Kansas Technology Enterprise Corporation, \$765,284, "Kansas Technology Enterprise Corporation Center of Excellence Grant Agreement."

Kramer, Bradley A., **Amanor-Boadu, Vincent R.** (Agricultural Economics), **King, Terry S.** (Dean of Engineering), **Madl, Ronald L.** (Grain Science and Industry), and **Tucker, Jeffrey W.**, National Science Foundation, \$197,242, "Partnership to Accelerate Commercialization of Kansas Bioscience Products and Technologies."

Kramer, Bradley A., and **Case, Scott A.**, Multisponsor, \$158,739, "Advanced Manufacturing - Multi-sponsor."

Kramer, Bradley A., **Case, Scott A.**, and **Chalfant, Mark A.**, US Department of Commerce, \$1,068,297 (includes \$149,548 from Kansas Technology Enterprise Corporation), "Agreement to Provide Technology Diffusion and Product Development Services to MAMTC Clients."

Kramer, Bradley A., and **Tucker, Jeffrey W.**, Kansas Technology Enterprise Corporation, \$50,000, "EDA 'Early Stage Technology Development Assistance Center'."

Kramer, Bradley A., and **Tucker, Jeffrey W.**, Kansas Technology Enterprise Corporation, \$20,000, "Partnership to Accelerate Commercialization of Kansas Bioscience Products and Technologies."

Kramer, Bradley A., and **Tucker, Jeffrey W.**, US Department of Commerce, \$155,000, "Early-Stage Technology Development Assistance Center: Bridging the Gap between New Technologies and Commercialization."

Tucker, Jeffrey W., US Department of Defense, \$50,000, "Design and Build a Revised Emergency Destruct Press."

Tucker, Jeffrey W., US Department of Transportation, \$36,000, "KHP Safety Belt Convincers."

Tucker, Jeffrey W., and **Case, Scott A.**, Multisponsor, \$1,006,773, "Advanced Manufacturing Institute - Manufacturing Learning Center."

Tucker, Jeffrey W., (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

BIOLOGICAL AND AGRICULTURAL ENGINEERING

Barnes, Philip L., US Environmental Protection Agency, \$29,767, "Joint State Atrazine Big Blue River Monitoring Project."

Barnes, Philip L., (see **Devlin, Daniel L.**, Agronomy).

Clark, Gary A., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Clark, Gary A., (see **Rogers, Danny H.**, Biological and Agricultural Engineering).

Harner III, Joseph P., US Environmental Protection Agency, \$17,514, "Kansas Livestock Environmental Stewardship Web Site Enhancement and Maintenance."

Harner III, Joseph P., (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

Hutchinson, Stacy L., and **Hutchinson, J. M. Shawn** (Geography), City of Topeka, Kansas, \$100,000, "Research and Stormwater Best Management Practices Manual Creation and Geographic Information Service Support 2005-2008."

Hutchinson, Stacy L., **Hutchinson, J. M. Shawn** (Geography), and **Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), City of Mission, Kansas, \$50,000, "Stormwater Best Management Practice Evaluation and Design."

Hutchinson, Stacy L., and **Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), Johnson County Public Works, \$40,902, "Johnson County Stormwater Infiltration Demonstration."

Hutchinson, Stacy L., (see **Steichen, James M.**, National Institute for Land Management and Training).

Koelliker, James K., US Department of the Interior, \$86,300, "Modeling and Field Experimentation to Determine the Effects of Land Terracing and Non-Federal Reservoirs on Water Supplies in the Republican River Basin above Hardy, Nebraska."

Koelliker, James K., (see **Dodds, Walter K.**, Biology).

Maghirang, Ronaldo G., US Department of Agriculture, \$10,000, "Improved Handling of Grain in Commercial Elevators."

Maghirang, Ronaldo G., **Broce, Alberto B.** (Entomology), **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), **Harner III, Joseph P.**, **Murphy, James P.** (Agriculture and Natural Resources), and **Pickrell, John A.** (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$123,042, "Air Quality: Odor, Dust, and Gaseous Emissions from Concentrated Animal Feeding Operations in the Southern Great Plains."

Mankin, Kyle R., (see **Leatherman, John C.**, Agricultural Economics).

Mankin, Kyle R., (see **Devlin, Daniel L.**, Agronomy).

Powell, G. Morgan, Two awards from US Environmental Protection Agency, for \$136,550, for "Kansas Environmental Leadership Program."

Powell, G. Morgan, and **Willingham, Judith M.**, Kansas Water Office, \$10,000, "Kansas Water Resources Adult Education."

Powell, G. Morgan, (see **Janke, Rhonda R.**, Horticulture, Forestry and Recreation Resources).

Rogers, Danny H., **Alam, Mahbub U.** (Southwest Area Office), and **Clark, Gary A.**, Kansas Water Office, \$50,000, "Technical Assistance to Water Users: K-State Mobile Irrigation Lab."

Rogers, Danny H., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Rogers, Danny H., (see **Lamm, Freddie R.**, Northwest Research Extension Center).

Schrock, Mark D., (see **Langemeier, Michael R.**, Agricultural Economics).

Slocombe, John W., US Department of Agriculture, \$175,857, "Kansas AgrAbility Project."

Wang, Donghai, US Department of Agriculture, \$54,634, "Fermentation Quality of Sorghum."

Wang, Donghai, (see **Sun, X. Susan**, Grain Science and Industry).

Willingham, Judith M., (see **Powell, G. Morgan**, Biological and Agricultural Engineering).

Wolf, Robert E., US Department of Agriculture, \$30,000, "Spray Table Demonstration Kit Project - Phase II."

Zhang, Naiqian, AGCO Corporation, \$42,677, "Embedded System Development for ISO Virtual Terminal and ISO Task Controller."

Zhang, Naiqian, AGCO Corporation, \$44,025, "Optical Processing Methods for Application to Agricultural Machines."

Zhang, Naiqian, (see **Steichen, James M.**, National Institute for Land Management and Training).

CENTER FOR HAZARDOUS SUBSTANCE RESEARCH

Erickson, Larry E., **Eckels, Steven J.** (Institute for Environmental Research), **Guikema, James A.** (Office of the Vice Provost for Research and Dean of Graduate School), and **Leven, Blase A.**, US Department of Defense, \$53,900, "Urban Operations Laboratory Research."

Erickson, Larry E., and **Kulakow, Peter A.** (Agronomy), US Department of Energy, \$10,000, "Design and Implementation of Remediation Technologies at Former USDA Grain Bin Sites."

Leven, Blase A., and **Kulakow, Peter A.** (Agronomy), US Department of Health and Human Services, \$12,000, "International Conference on the Future of Agriculture: Science, Stewardship, and Sustainability."

Leven, Blase A., (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

Leven, Blase A., (see **Reddi, Lakshmi N.**, Civil Engineering).

CHEMICAL ENGINEERING

Edgar, James H., National Science Foundation, \$82,000, "Collaborative Research: Analysis of Defects and Their Causes in Bulk Aluminum Nitride Crystals."

Edgar, James H., National Science Foundation, \$90,000, "Materials World Network: Collaborative Research: An Investigation into the Properties of B12As2, B4C and Their Heterostructures."

Edgar, James H., US Department of Defense, \$75,000, "Highly Durable Materials to Support Large AlN Crystal Growth."

Erickson, Larry E., and **Davis, Lawrence C.** (Biochemistry), National Science Foundation, \$43,259, "Recruiting Native Americans into Environmental Science."

Hohn, Keith L., US Department of Commerce, \$7,800, "NIST Summer Undergraduate Research Fellowship Program - Nelson Green."

Pfromm, Peter H., US Department of Agriculture, \$2,300, "Low-Cost Succinate Production Using Grain Sorghum and Engineered E.coli."

Pfromm, Peter H., (see **Amanor-Boadu, Vincent R.**, Agricultural Economics).

CIVIL ENGINEERING

Bhandari, Alok, (see **Starrett, Steven K.**, Civil Engineering).

Dissanayake, Sunanda, Kansas Department of Transportation, \$50,000, "Economic Impacts of not Wearing Safety Belts."

Dissanayake, Sunanda, US Department of Transportation, \$30,000, "Effects of Not Wearing Safety Belts on Injury Severity."

Dissanayake, Sunanda, (see **Landman, E. Dean**, Civil Engineering).

Dissanayake, Sunanda, (see **Romanoschi, Stefan A.**, Civil Engineering).

Esmaily, Asadollah, (see **Peric, Dunja**, Civil Engineering).

Hossain, Mustaque A., Kansas Department of Transportation, \$17,500, "Administration of KDOT/KTRAN Program 2006."

Hossain, Mustaque A., and **Romanoschi, Stefan A.**, Kansas Department of Transportation, \$52,000, "Demonstration of Intelligent Compaction Control for Embankment Construction in Kansas."

Hossain, Mustaque A., and **Romanoschi, Stefan A.**, Kansas Department of Transportation, \$74,000, "Rational Method of Determining Life of Defective Pavement."

Hossain, Mustaque A., (see **Romanoschi, Stefan A.**, Civil Engineering).

Landman, E. Dean, Babcock, Michael W. (Economics), and **Dissanayake, Sunanda**, Kansas Department of Transportation, \$60,000, "Developing a Statewide Truck Trip Management System."

Landman, E. Dean, Dissanayake, Sunanda, and **Russell, Eugene R.**, Kansas Department of Transportation, \$60,000, "Evaluation of Longitudinal Construction Joints on Traffic Operations and Safety."

Mathews, Alexander P., National Science Foundation, \$5,247, "US-India Planning Visit: International Cooperative Program on the Production of Biodegradable Polymers from Low-Cost Substrates."

Peric, Dunja, and **Esmaily, Asadollah**, Kansas Department of Transportation, \$35,000, "Effects of Ambient Temperature Change on Integral Bridges."

Peterman, Robert J., High Concrete Structures, Inc., \$11,310, "Evaluating the Bond Performance of Self-Consolidating Concrete in Prestressing Applications."

Reddi, Lakshmi N., US Department of Transportation, \$466,240, "Enhancement of Transportation Research at Kansas State University."

Reddi, Lakshmi N., US Department of Transportation, \$300,000, "Transportation Research at Kansas State University."

Reddi, Lakshmi N., **Kulakow, Peter A.** (Agronomy), and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$115,000, "Midwest Hazardous Substance Research Center Technical Assistance to Brownfields."

Reddi, Lakshmi N., and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$195,000, "Technical Outreach and Service to Native American Communities (TOSNAC): Center for Integrated Remediation using Managed Natural Systems."

Reddi, Lakshmi N., and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$56,250, "Training and Technical Assistance to Brownfields (TTAB) Grants."

Reddi, Lakshmi N., and **Pierzynski, Gary M.** (Agronomy), US Environmental Protection Agency, \$74,000, "Use of Pelletized/Unpelletized Compost Materials as Amendments for Lead Zinc Impacted Chat Tailings in Galena, Kansas, Phase I."

Romanoschi, Stefan A., Kansas Department of Transportation, \$1,000, "Determination of the Response of the US-75 Experimental Flexible Pavement Structures under Dynamic Loading."

Romanoschi, Stefan A., Kansas Department of Transportation, \$62,326, "Fatigue Properties and Pavement Response Modeling of Kansas Perpetual Pavements."

Romanoschi, Stefan A., **Dissanayake, Sunanda**, and **Hossain, Mustaque A.**, US Department of Transportation, \$49,996, "Implementation of the 2002 AASHTO Design Guide for Pavement Structures."

Romanoschi, Stefan A., (see **Hossain, Mustaque A.**, Civil Engineering).

Russell, Eugene R., Kansas Department of Transportation, \$69,000, "Mitigating Crashes at High-Risk Rural Intersections with Two-Way Stop Control."

Russell, Eugene R., and **Rys, Malgorzata J.** (Industrial and Manufacturing Systems Engineering), US Department of Transportation, \$56,316 (includes \$25,000 from KDOT - In-kind), "Safety Analysis of Driver Reaction to Alternative Traffic Control Devices at Rail-Highway Grade Crossings."

Russell, Eugene R., (see **Landman, E. Dean**, Civil Engineering).

Starrett, Steven K., and **Bhandari, Alok**, US Golf Association, \$10,000, "Measuring Nutrient Losses via Runoff from an Established Golf Course."

Steward, David R., US Environmental Protection Agency, \$5,000, "ICAEM: The 5th International Conference on the Analytic Element Method."

Steward, David R., (see **Dodds, Walter K.**, Biology).

Steward, David R., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute).

Stokes, Robert W., US Department of Transportation, \$98,066, "Traffic Assistance Services for Kansas."

COMPUTING AND INFORMATION SCIENCES

Amtoft, Torben, (see **Hatcliff, John M.**, Computing and Information Sciences).

Andresen, Daniel A., National Science Foundation, \$42,514, "DESPOI: Enhanced Dynamic Process Management for Beowulf Clusters on the Grid."

Andresen, Daniel A., (see **Singh, Gurdip**, Computing and Information Sciences).

Banerjee, Anindya, (see **Hatcliff, John M.**, Computing and Information Sciences).

DeLoach, Scott A., and **Robby**, US Department of Defense, \$147,772, "Organization-Based Model-Driven Development of High-Assurance Multiagent Systems."

DeLoach, Scott A., (see **Singh, Gurdip**, Computing and Information Sciences).

Hatcliff, John M., Lockheed Martin Corporation, \$100,000, "Integrated Specification and Verification Environment for Component-Based Architectures of Large-Scale Distributed Systems."

Hatcliff, John M., National Science Foundation, \$43,508, "Community Resource to Support Controlled Experimentation with Program Analysis and Software Testing Techniques."

Hatcliff, John M., National Science Foundation, \$37,493, "Program Analysis Techniques to Support Dependable Real-time Specification for Java Applications."

Hatcliff, John M., US Department of Defense, \$269,499, "Software Model Checking for Embedded Systems."

Hatcliff, John M., **Amtoft, Torben**, and **Banerjee, Anindya**, US Department of Defense, \$149,024, "Integrated Specification and Verification Environment for Component-Based Architectures of Large-Scale Distributed Systems."

Hsu, William H., Aldentity Matrix Medical, Inc., \$12,000, "Web Interface for Intelligent Human-Computer Interactive Systems."

Hsu, William H., (see **Monaco, Gregory E.**, Psychology).

Hsu, William H., (see **Welch, Stephen M.**, Agronomy).

Neilsen, Mitchell L., US Department of Agriculture, \$69,100, "Software Tools for Hydraulic Structure Design and Analysis - Phase II."

Robby, (see **DeLoach, Scott A.**, Computing and Information Sciences).

Singh, Gurdip, National Science Foundation, \$304,999, "CSR-PDOS: Methodologies for Customization of Distributed Algorithms and Middleware."

Singh, Gurdip, Andresen, Daniel A., DeLoach, Scott A., Natarajan, Balasubramaniam (Electrical and Computer Engineering), and **Warren, Steven** (Electrical and Computer Engineering), National Science Foundation, \$196,970, "Experimentation Platform for Developing Customized, Large-Scale Sensor Systems."

DEAN OF ENGINEERING

Bitsie-Baldwin, LaVerne, (see **Douglas, Kimberly D.**, Dean of Engineering).

Bitsie-Baldwin, LaVerne, (see **Larson, Nancy J.**, Kansas Industrial Extension Services).

Douglas, Kimberly D., Bitsie-Baldwin, LaVerne, and Starrett, Shelli K. (Electrical and Computer Engineering), National Science Foundation, \$1,220,312, "K-State STEP: Increasing the Number and Diversity of Students Graduating in STEM Fields at Kansas State University."

Douglas, Kimberly D., (see **Hanson, Brian R.**, Kansas Industrial Extension Services).

Douglas, Kimberly D., (see **Larson, Nancy J.**, Kansas Industrial Extension Services).

Douglas, Kimberly D., (see **Montelone, Beth A.**, Dean of Arts and Sciences).

Franks, Suzanne E., (see **Dyer, Ruth A.**, Office of the Provost).

Hayter, Richard B., US Department of Education, \$9,180, "Inter-University Program in Human Resources Training in Computational Mechanics."

King, Terry S., Multisponsor, \$13,000, "Pre-Enrollment Mathematics and Sciences Tutoring of Minority Engineering Recruits."

King, Terry S., (see **Dyer, Ruth A.**, Office of the Provost).

King, Terry S., (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

ELECTRICAL AND COMPUTER ENGINEERING

Carpenter, Kenneth H., US Department of Energy, \$74,221, "Integrated Firing-System/Initiation-Train Modeling Enhancement."

Das, Sanjoy, (see **Pahwa, Anil**, Electrical and Computer Engineering).

Das, Sanjoy, (see **Welch, Stephen M.**, Agronomy).

Day, Dwight D., Kansas Department of Transportation, \$40,000, "Detection and Characterization of Pavement Cracking via Imaging and Computer Vision Techniques."

Day, Dwight D., and Devore, John J., US Department of Energy, \$100,000, "Hardware and Software Evaluation, Development, and Testing Supporting a New Generation Computer for Airborne and Space Applications."

DeVault, James E., Kansas Department of Transportation, \$160,000, "Automated Small Vehicle Transportation on a University Campus Phase II-Multi-Objective Research of Implementation Issues."

DeVault, James E., Kansas Department of Transportation, \$20,000, "Multi-Sensor, Mobile Cover-Meter for Three-Dimensional Rapid Tie-Bar Placement Verification."

Devore, John J., (see **Day, Dwight D.**, Electrical and Computer Engineering).

Gruenbacher, Don M., US Department of Energy, \$139,829, "Quality Dependent Traffic."

Gruenbacher, Don M., (see **Natarajan, Balasubramaniam**, Electrical and Computer Engineering).

Kuhn, William B., National Aeronautics and Space Administration, \$119,112, "Proximity Microtransceiver for Interoperable Mars Communications."

Kuhn, William B., Peregrine Semiconductor Corporation, \$8,088, "Design of Watt-Level Power Amplifiers in Peregrine SOS - Phase II."

Kuhn, William B., US Department of Energy, \$13,201, "Design Support for PA and Synthesizer IC Development."

Kuhn, William B., US Department of Energy, \$49,536, "Full-Integrated Multi-Watt Power Amplifier in Triquint GaAs Process."

Kuhn, William B., (see **Natarajan, Balasubramaniam**, Electrical and Computer Engineering).

Kuhn, William B., (see **Rys, Andrew**, Electrical and Computer Engineering).

Lewis, Christopher L., and Schinstock, Dale E. (Mechanical and Nuclear Engineering), National Aeronautics and Space Administration, \$3,354, "Autonomous Cartography (GRA Fellowship)."

Natarajan, Balasubramaniam, Gruenbacher, Don M., and Kuhn, William B., National Science Foundation, \$160,000, "Shared Laboratory Experience: Comprehensive Resource for Teaching Engineering Concepts."

Natarajan, Balasubramaniam, (see **Singh, Gurdip**, Computing and Information Sciences).

Pahwa, Anil, and Das, Sanjoy, National Science Foundation, \$240,000, "Investigating the Influence of Environmental Factors on Reliability of Distribution Systems."

Pahwa, Anil, (see **Starrett, Shelli K.**, Electrical and Computer Engineering).

Rys, Andrew, and Kuhn, William B., US Department of Energy, \$43,712, "VCSEL Driver Array IC, Task #1 vcsl." "

Scoglio, Caterina M., National Science Foundation, \$14,975, "Network and Traffic Engineering for DiffServ MPLS-Based Networks."

Soldan, David L., (see **Starrett, Shelli K.**, Electrical and Computer Engineering).

Starrett, Shelli K., Pahwa, Anil, and Soldan, David L., National Science Foundation, \$100,000, "Planning Learning Environments for a More Diversified Workforce."

Starrett, Shelli K., (see **Douglas, Kimberly D.**, Dean of Engineering).

Warren, Steven, (see **Bennett, Andrew G.**, Mathematics).

Warren, Steven, (see **Singh, Gurdip**, Computing and Information Sciences).

ENGINEERING EXPERIMENT STATION

Jones, Byron W., Kansas Technology Enterprise Corporation, \$2,000, "ADMRC Administration."

INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

Ben-Arieh, David H., National Aeronautics and Space Administration, \$24,000, "MARS: Mission Analysis and Resource Simulation - Nyla Polli."

Ben-Arieh, David H., National Aeronautics and Space Administration, \$24,000, "Mission Analysis of Complexity and Resource Organization - Brandon Evans."

Ben-Arieh, David H., National Aeronautics and Space Administration, \$70,001, "Mission Complexity Analysis/Cost Benefit Analysis Study."

Harnett, R. Michael, US Department of Defense, \$45,492, "Part-Time M.S. Program in Industrial Engineering - Fall 2005."

Harnett, R. Michael, US Department of Defense, \$52,529, "Part-Time M.S. Program in Industrial Engineering - Spring 2006."

Harnett, R. Michael, US Department of Defense, \$23,186, "Part-Time M.S. Program in Industrial Engineering - Summer 2006."

Lei, Shuting, National Science Foundation, \$6,000, "Design and Development of Novel Responsive Cutting Tools for Laser-Assisted Machining and Diagnosis of Structural Ceramics: A Research Integrated Education Career Landscape."

Pei, Zhijian, Boeing Company, \$30,000, "Ultrasonic Drilling Testing."

Pei, Zhijian, MEBO Travel, \$17,900, "Graduate Student Support - Yu Chen."

Pei, Zhijian, MEMC Electronic Materials Inc., \$15,000, "Modeling of Wafering Processes."

Pei, Zhijian, National Science Foundation, \$6,000, "Fundamental Research on Silicon Wafer Fine Grinding to Foster a Quantum Leap in Manufacturing of Silicon Wafers."

Pei, Zhijian, National Science Foundation, \$149,863, "Innovative Laser-Based Techniques for Characterization of Subsurface Cracks in Semiconductor Wafers."

Pei, Zhijian, National Science Foundation, \$16,600, "NSF CAREER Proposal Writing Workshop."

Pei, Zhijian, Saint-Gobain High Performance Materials, \$60,000, "Machining of Hard Materials."

Rys, Malgorzata J., (see **Russell, Eugene R.**, Civil Engineering).

INSTITUTE FOR ENVIRONMENTAL RESEARCH

Eckels, Steven J., Multisponsor, \$190,553, "Institute for Environmental Research Support."

Eckels, Steven J., and **Jones, Byron W.**, US Department of Transportation, \$140,928, "Aircraft Recirculation Filter Research for Incident Assessment."

Eckels, Steven J., (see **Babin, Bruce R.**, Mechanical and Nuclear Engineering).

Eckels, Steven J., (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

Eckels, Steven J., (see **Hosni, Mohammad H.**, Mechanical and Nuclear Engineering).

Jones, Byron W., and **Hosni, Mohammad H.** (Mechanical and Nuclear Engineering), Boeing Company, \$220,223, "Sponsor Research Agreement - KSU Project Agreement No. 2."

Jones, Byron W., and **Hosni, Mohammad H.** (Mechanical and Nuclear Engineering), US Department of Transportation, \$125,807, "Decontamination Project."

Jones, Byron W., (see **Eckels, Steven J.**, Institute for Environmental Research).

McCullough, Elizabeth A., Land's End, \$40,057, "Determining the Insulation Values and Temperature Ratings for Children's Outdoor Clothing."

McCullough, Elizabeth A., Professional's Choice Sports Medicine Products, \$22,513, "Performance Evaluation of Saddle Pads."

McCullough, Elizabeth A., Taiwan Textile Research Institute, \$20,586, "Interlaboratory Study of Hot Plate Tests."

McCullough, Elizabeth A., US Department of Defense, \$474,503, "Comprehensive Evaluation of Personal Cooling Systems for Soldiers."

KANSAS INDUSTRIAL EXTENSION SERVICES

Davis, Sherry J., (see **Larson, Nancy J.**, Kansas Industrial Extension Services).

Hanson, Brian R., **Douglas, Kimberly D.** (Dean of Engineering), and **Snead, Bruce C.**, US Environmental Protection Agency, \$135,000, "Operational Process for EPA Radiation and Indoor Environments Laboratory Environmental Professional Student Intern Program."

Hanson, Brian R., (see **Snead, Bruce C.**, Kansas Industrial Extension Services).

Larson, Nancy J., Two awards from US Environmental Protection Agency, totalling \$660,605, for "Comprehensive Small Business Environmental Assistance Program."

Larson, Nancy J., US Environmental Protection Agency, \$26,316 (includes \$1,316 from In-kind), "Persistent, Bioaccumulative and Toxic Chemical Reduction (PBT) and Source Reduction."

Larson, Nancy J., **Bitsie-Baldwin, LaVerne** (Dean of Engineering), **Davis, Sherry J.**, and **Douglas, Kimberly D.** (Dean of Engineering), US Environmental Protection Agency, \$100,822, "Pollution Prevention Incentives for States."

Larson, Nancy J., (see **Travis, Stephen R.**, Kansas Industrial Extension Services).

Nelson, Richard G., US Department of Energy, \$41,804 (includes \$3,804 from University of Kansas Center for Research, Inc., and \$3,000 from Midwest Energy), "Tradeable Renewable Energy Credits - KEC Phase II."

Nelson, Richard G., and **Barkley, Andrew P.** (Agricultural Economics), Kansas Inc., \$15,000, "Energy Researcher Database."

Nelson, Richard G., **Rice, Charles W.** (Agronomy), **Staggenborg, Scott A.** (Northeast Area Office), and **Williams, Jeffery R.** (Agricultural Economics), US Department of Energy, \$93,349, "National Carbon Sequestration Database and Geographic Information System."

Nelson, Richard G., **Rice, Charles W.** (Agronomy), and **Williams, Jeffery R.** (Agricultural Economics), Environmental Defense, \$50,000, "Agricultural Benefits/Costs Resulting from a Greenhouse Gas Cap-and-Trade System."

Nelson, Richard G., and **Snead, Bruce C.**, US Department of Energy, \$45,000, "Kansas Energy Extension Service."

Nelson, Richard G., (see **Fox, John A.**, Agricultural Economics).

Nelson, Richard G., (see **Larson, Nancy J.**, Kansas Industrial Extension Services).

Nelson, Richard G., (see **Madl, Ronald L.**, Grain Science and Industry).

Snead, Bruce C., Kansas Corporation Commission, \$24,500, "Energy Efficiency and Conservation in the Public, Residential, Commercial, and Industrial Sectors."

Snead, Bruce C., US Environmental Protection Agency, \$259,574 (includes \$81,683 from Kansas County Health and Extension Departments), "Radon Projects for Kansas."

Snead, Bruce C., US Environmental Protection Agency, \$8,600 (includes \$3,600 from various participants), "Radon Workshops."

Snead, Bruce C., US Environmental Protection Agency, \$42,750 (includes \$19,500 from various participants), "Radon Workshops for Nebraska."

Snead, Bruce C., US Environmental Protection Agency, \$26,275, "Regional Radon Training Center."

Snead, Bruce C., and **Hanson, Brian R.**, US Environmental Protection Agency, \$44,231, "Reducing Radon Risk in Rental Housing Through Education of Landlords, Property Managers and Housing Services Officials."

Snead, Bruce C., (see **Hanson, Brian R.**, Kansas Industrial Extension Services).

Snead, Bruce C., (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

Travis, Stephen R., and **Larson, Nancy J.**, US Environmental Protection Agency, \$6,556, "Region 7 EMS Center for Public Entities."

MECHANICAL AND NUCLEAR ENGINEERING

Babin, Bruce R., and **Beck, B. Terry**, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., \$69,808, "Determine the Effect of Duct Fittings on Air Flow Traverse."

Babin, Bruce R., and **Eckels, Steven J.** (Institute for Environmental Research), American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., \$179,128, "Experimental Evaluation of the Heat Transfer Impacts of Tube Pitch in a Highly Enhanced Surface Tube Bundle."

Babin, Bruce R., and **Hosni, Mohammad H.**, Whirlpool Corporation, \$18,000, "Flow Visualization Strategies for Commercial Dryer Drums."

Beck, B. Terry, (see **Babin, Bruce R.**, Mechanical and Nuclear Engineering).

Beck, B. Terry, (see **Hosni, Mohammad H.**, Mechanical and Nuclear Engineering).

Dunn, William L., and **McGregor, Douglas S.**, US Department of Energy, \$102,502, "High-Efficiency Thin-Film-Coated Semiconductor Neutron Detectors for Active Dosimetry Monitors."

Dunn, William L., (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

Hosni, Mohammad H., **Beck, B. Terry**, and **Eckels, Steven J.** (Institute for Environmental Research), Visteon, \$20,000, "PIV/LDV Measurements of Air Distribution around a Heated Manikin."

Hosni, Mohammad H., **Beck, B. Terry**, and **Jones, Byron W.** (Institute for Environmental Research), Boeing Company, \$230,000, "Large Eddy Simulation Validation Lab Test-Gaseous Diffusion."

Hosni, Mohammad H., (see **Babin, Bruce R.**, Mechanical and Nuclear Engineering).

Hosni, Mohammad H., (see **Jones, Byron W.**, Institute for Environmental Research).

Lease, Kevin B., Kansas Technology Enterprise Corporation, \$50,000, "Effects of Cladding and Anodizing on the Fatigue Behavior of Varying Gage Aluminum Sheet."

McGregor, Douglas S., US Department of Defense, \$165,120, "Coated SiC Neutron Detectors."

McGregor, Douglas S., US Department of Defense, \$192,470, "Morphologically Optimized Neutron Detectors for Detection, Measurement and Dosimetry."

McGregor, Douglas S., US Department of Energy, \$298,852, "Materials for High Resolution Room Temperature Gamma Ray Spectrometers."

McGregor, Douglas S., **Dunn, William L.**, and **Shultis, J. Kenneth**, National Science Foundation, \$698,487, "IMR-MIP: High-Detection-Efficiency and High-Spatial-Resolution Thermal Neutron Imaging System for the Spallation Neutron Source Using Pixelated Semiconductor Neutron Detectors."

McGregor, Douglas S., **Dunn, William L.**, and **Shultis, J. Kenneth**, US Department of Defense, \$490,000, "Perforated Neutron Detectors and New Materials Development and Shielding Structures."

McGregor, Douglas S., **Dunn, William L.**, and **Shultis, J. Kenneth**, US Department of Energy, \$50,000, "Midwest Nuclear Science and Engineering Consortium."

McGregor, Douglas S., (see **Shultis, J. Kenneth**, Mechanical and Nuclear Engineering).

McGregor, Douglas S., (see **Dunn, William L.**, Mechanical and Nuclear Engineering).

Schinstock, Dale E., **Goodin, Douglas G.** (Geography), and **Ham, Jay M.** (Agronomy), National Science Foundation, \$597,000, "Development of UAV Remote Sensing for Ecosystems Research."

Schinstock, Dale E., and **Thompson, J. Garth**, National Aeronautics and Space Administration, \$118,171, "Modular Wireless Avionics System for Autonomous UAVs."

Schinstock, Dale E., (see **Lewis, Christopher L.**, Electrical and Computer Engineering).

Shultis, J. Kenneth, and **McGregor, Douglas S.**, US Department of Energy, \$99,903, "Electro-Optic Laser-Sampled Neutron Detector."

Shultis, J. Kenneth, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

Thompson, J. Garth, (see **Schinstock, Dale E.**, Mechanical and Nuclear Engineering).

Tokuhiro, Akira T., US Department of Energy, \$138,015, "Heat Exchanger Studies for Supercritical CO₂ Power Conversion System."

Wang, Youqi, US Department of Defense, \$30,000, "High Performance Cluster for Simulation of Ballistic Penetrations."

Wang, Youqi, US Department of Defense, \$126,423, "High Speed Penetration Failure Mechanisms of Textile Fabrics and Armor-Grade Textile Composites."

Whaley, Paul M., US Department of Energy, \$24,672, "University Reactor Instrumentation Grant."

White, Warren N., American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., \$192,101, "Heat Gains from Electrical and Control Equipment in Industrial Plants, Part 2."

Zheng, Zhongquan, National Aeronautics and Space Administration, \$74,968, "Investigation of Sound Generation Mechanisms in Aircraft Vortex Wakes."

NATIONAL GAS MACHINERY LABORATORY

Chapman, Kirby S., Pipeline Research Council International, Inc., \$35,000, "Pipeline Engine NO_x Retrofit Technology Gaps and Program Roadmap."

Chapman, Kirby S., US Department of Energy, \$580,951 (includes \$82,500 from Universal Compression), "Cost-Effective Reciprocating Engine Emissions Control and Monitoring for E & P Field and Gathering Engines."

Chapman, Kirby S., and **Keshavarz, Ali**, BP America Production Company, \$123,597, "Model for the Operational Optimization of Combustion Turbines in Oil and Gas Service."

Chapman, Kirby S., and **Keshavarz, Ali**, Pipeline Research Council International, Inc., \$75,100, "Development of a Turbocharger Booster System."

Chapman, Kirby S., and **Keshavarz, Ali**, Pipeline Research Council International, Inc., \$75,100, "Development of a Turbocharger Component Specification Software Package."

Chapman, Kirby S., and **Keshavarz, Ali**, Pipeline Research Council International, Inc., \$102,500 (includes \$15,000 from Exline, Inc.), "Port Flow Design to Enhance Scavenging."

Keshavarz, Ali, (see **Chapman, Kirby S.**, National Gas Machinery Laboratory).

NATIONAL INSTITUTE FOR LAND MANAGEMENT AND TRAINING

Biles, Bertram R., US Department of Defense, \$200,976, "ITAM FY 2006 Workshop."

Biles, Bertram R., US Department of Defense, \$39,636, "ITAM FY 2007 Workshop."

Steichen, James M., **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), and **Zhang, Naiqian** (Biological and Agricultural Engineering), US Department of Defense, \$230,000, "Assessing the Impact of Maneuver Training on NPS Pollution and Water Quality."

COLLEGE OF HUMAN ECOLOGY

DEAN OF HUMAN ECOLOGY

Fink, Carol J., US Department of Agriculture, \$15,000, "Evaluation of Family and Consumer Sciences Plan of Work."

Kellett, Carol E., US Department of Agriculture, \$5,000, "Strategic Planning."

Kellett, Carol E., (see **Medeiros, Denis M.**, Human Nutrition).

Moxley, Virginia M., Great Plains IDEA Alliance, \$67,267, "Great Plains IDEA Lead Institution."

Moxley, Virginia M., US Department of Agriculture, \$12,191, "Social Responsibility in Textile, Apparel, and Footwear Industry Supply Chains Development of a Post-Baccalaureate Core."

Moxley, Virginia M., and **Maes, Sue C.** (Regents' Educational Communications Center), US Department of Education, \$12,383, "NEXus-The Nursing Education Xchange: Partnering to Increase the Capacity of Nursing PhD Programs."

Wang, Weiqun, (see **Welti, Ruth**, Biology).

HOTEL, RESTAURANT, INSTITUTION MANAGEMENT AND DIETETICS

Barrett, Elizabeth B., and **Riggins, Lynn D.**, Child Nutrition Foundation, \$3,165, "Development of a HACCP Based Food Safety Management Plan: Child Care."

Canter, Deborah D., and **Leson, Suzanne M.**, Kansas State University Foundation, \$3,500, "Evaluation of Two Menu Systems in a Skilled Long Term Care Facility."

Leson, Suzanne M., (see **Canter, Deborah D.**, Hotel, Restaurant, Institution Management and Dietetics).

Riggins, Lynn D., (see **Barrett, Elizabeth B.**, Hotel, Restaurant, Institution Management and Dietetics).

HUMAN NUTRITION

Baybutt, Richard C., (see **Medeiros, Denis M.**, Human Nutrition).

Baybutt, Richard C., (see **Wang, Weiqun**, Human Nutrition).

Chambers IV, Edgar, Multisponsor, \$461,552, "Sensory Analysis Center Support."

Chambers IV, Edgar, and **Chambers, Delores H.**, Frito Lay, Inc., \$252,015, "Consumer Perception of Products under Extended Use."

Chambers, Delores H., (see **Chambers IV, Edgar**, Human Nutrition).

Fink, Carol J., and **Johannes, Elaine M.** (Four-H Youth Development), US Department of Agriculture, \$15,000, "National Family and Consumer Sciences Plan of Work Impact Reporting and Evaluation Assessment Project."

Fitzgerald, Karen D., (see **Peters, Paula**, Extension Family and Consumer Sciences).

Haub, Mark D., American Heart Association, Heartland Affiliate, \$69,575, "Exercise on Postprandial Inflammation and Lipemia in Overweight Men."

Haub, Mark D., (see **Wang, Weiqun**, Human Nutrition).

Hudson, Karen S., (see **Peters, Paula**, Extension Family and Consumer Sciences).

Medeiros, Denis M., US Department of Health and Human Services, \$263,092, "Kansas Bridges to the Future."

Medeiros, Denis M., Baybutt, Richard C., and **Wang, Weiqun**, Kansas State University Foundation, \$2,400, "Travel Awards."

Medeiros, Denis M., and **Kellett, Carol E.** (Dean of Human Ecology), US Department of Health and Human Services, \$248,000, "Website Portal on Nutrition, Obesity and Physical Activity for Kansas Use."

Medeiros, Denis M., **Melgarejo, L. Tonatiuh**, and **Wang, Weiqun**, Kansas State University Foundation, \$8,000, "Nanodrop ND-1000 Spectrophotometer."

Melgarejo, L. Tonatiuh, Hill's Pet Nutrition, Inc., \$29,784, "Develop a Canine Intestinal Cell Line and Perform Selected Simulations and Incubations."

Melgarejo, L. Tonatiuh, (see **Medeiros, Denis M.**, Human Nutrition).

Steele, Lea, US Department of Veterans Affairs, \$198,148, "Agreement between Kansas State University and Veterans Affairs Eastern Kansas Healthcare System."

Wang, Weiqun, and **Baybutt, Richard C.**, Kansas State University, \$4,000, "Undergraduate Student Research Awards."

Wang, Weiqun, **Baybutt, Richard C.**, **Deng, Youping** (Biology), **Haub, Mark D.**, and **Yang, Shie-Shien**, US Department of Health and Human Services, \$224,546, "Weight Control, Cell Signaling and Cancer Prevention."

Wang, Weiqun, (see **Medeiros, Denis M.**, Human Nutrition).

Yang, Shie-Shien, (see **Wang, Weiqun**, Human Nutrition).

SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES

Bailey, Gwen L., (see **Bollman, Stephan R.**, School of Family Studies and Human Services).

Bollman, Stephan R., and **Bailey, Gwen L.**, Kansas Child Care Training Opportunities, Inc, \$36,969, "Infant/Toddler Initiative."

Bollman, Stephan R., **Bailey, Gwen L.**, and **Hockersmith, Carol D.**, Kansas Child Care Training Opportunities, Inc, \$141,179, "KACCRRR Flint Hills Resource and Referral."

Bollman, Stephan R., **Bailey, Gwen L.**, and **Hockersmith, Carol D.**, Kansas Child Care Training Opportunities, Inc, \$25,839, "Kansas Child Care Training Opportunities."

Bollman, Stephan R., **Bailey, Gwen L.**, and **Hockersmith, Carol D.**, US Department of Defense, \$149,021, "Army Sponsored Quality Child Care Project."

Bollman, Stephan R., and **Hockersmith, Carol D.**, Kansas Child Care Training Opportunities, Inc, \$38,000, "KCCTO - Smart Start Substitute Care."

Bradshaw, Michael H., Kansas Health Foundation, \$7,025, "Health Promotion for Older Kansans."

Bradshaw, Michael H., (see **Johannes, Elaine M.**, Four-H Youth Development).

Bradshaw, Michael H., (see **Johannes, Elaine M.**, School of Family Studies and Human Services).

DeLuccie, Mary L., US Department of Agriculture, \$8,977, "Federal Aid in Support of the Child and Adult Care Food Program."

DeLuccie, Mary L., USD 383, Manhattan, \$16,916, "Early Childhood Lab."

Fees, Bronwyn S., and **Toland, Susan E.**, US Department of Health and Human Services, \$30,000, "Comparative Analysis of Subsidized and Non-Subsidized Relative Child Care."

Garcia, Robert, USD 379, Clay Center, \$3,010, "Speech and Language Services."

Garcia, Robert, USD 383, Manhattan, \$8,215, "Speech and Language Services."

Glasscock, Marlene K., US Department of Agriculture, \$1,087,097, "CYFAR Supported Extension Staff Development."

Glasscock, Marlene K., US Department of Agriculture, \$782,250, "USDA/Air Force Partnership for 4-H Opportunities."

Glasscock, Marlene K., US Department of Agriculture, \$3,155,706, "USDA/Army Youth Development Project."

Goff, Briana S., and **Griffin, Charles L.**, US Department of Health and Human Services, \$90,000, "Kansas All Hazards Behavioral Health Plan."

Grable, John E., Int'l Association of Registered Financial Consultants, Inc., \$2,800, "Journal of Personal Finance."

Griffin, Charles L., Kansas Department of Social and Rehabilitation Services, \$590,643, "SRS Organizational Development Training and Curriculum Development."

Griffin, Charles L., Two awards from US Department of Health and Human Services, totalling \$11,782, for "Kansas Farm and Ranch Family Assistance Program: Sowing the Seeds of Hope for Kansas."

Griffin, Charles L., **Fogleman, Sarah L.** (Southeast Area Office), and **Olsen, Charlotte S.**, US Department of Agriculture, \$115,000, "Women Managing the Farm."

Griffin, Charles L., and **Olsen, Charlotte S.**, US Department of Agriculture, \$150,000, "Helping Farm Families Manage Successful Businesses."

Griffin, Charles L., (see **Goff, Briana S.**, School of Family Studies and Human Services).

Hoag, Linda A., US Department of Health and Human Services, \$94,285, "Communicative Competence and the Use of Prestored Text."

Hockersmith, Carol D., (see **Bollman, Stephan R.**, School of Family Studies and Human Services).

Johannes, Elaine M., and **Bradshaw, Michael H.**, Sunflower Foundation, \$70,000, "Powerful YOUTH on 4-H Trails (Walking Trail Program and Dissemination)."

Johannes, Elaine M., (see **Mack, Diane D.**, Northeast Area Office).

Maddux, Estoria (Esther) M., National Association of Animal Breeders, \$49,604, "Starting Your Investment Program with \$1 to \$1000."

Murray, Ann D., Tobacco Settlement, \$12,000, "Smart Start Local Evaluation Plan."

O'Conner, Nancy T., and **White, Mark B.**, US Department of Health and Human Services, \$89,297, "Program for Training and Consultation of CMHC Practitioners Delivering Intensive Home Based Family Therapy Services."

Olsen, Charlotte S., (see **Griffin, Charles L.**, School of Family Studies and Human Services).

Toland, Susan E., (see **Fees, Bronwyn S.**, School of Family Studies and Human Services).

White, Mark B., (see **O'Conner, Nancy T.**, School of Family Studies and Human Services).

COLLEGE OF TECHNOLOGY AND AVIATION

SALINA ENGINEERING TECHNOLOGY

Delker, David G., (see **Mosier, Nancy K.**, Salina Engineering Technology).

Mosier, Nancy K., and **Delker, David G.**, Kansas State Department of Education, \$10,190, "Solomon University."

COLLEGE OF VETERINARY MEDICINE

ANATOMY AND PHYSIOLOGY

Blecha, Frank, and **Freeman, Lisa C.**, US Department of Health and Human Services, \$121,062, "Short-Term Training Students in Health Professional Schools."

Blecha, Frank, (see **Freeman, Lisa C.**, Anatomy and Physiology).

Blecha, Frank, (see **Welti, Ruth**, Biology).

Erickson, Howard H., Grayson-Jockey Club Research Foundation, \$25,000, "Can Conjugated Estrogens and Aminocaproic Acid Reduce EIPH?"

Erickson, Howard H., and **Minton, J. Ernest** (Animal Sciences and Industry), United Feeds, \$55,166, "Omega-3 Fatty Acids for Exercise-Induced Pulmonary Hemorrhage."

Freeman, Lisa C., and **Blecha, Frank**, US Department of Health and Human Services, \$29,322, "Basic Research Immersion Training Experience (BRITE) Veterinary Student Program."

Freeman, Lisa C., (see **Blecha, Frank**, Anatomy and Physiology).

Freeman, Lisa C., (see **Montelone, Beth A.**, Dean of Arts and Sciences).

Kenney, Michael J., US Department of Health and Human Services, \$28,516, "Effect of Vertebral Loading on Sympathetic Nerve Regulation."

Kukanich, Stanley P., (see **Davis, Elizabeth G.**, Clinical Sciences).

Kumari, Meena, US Department of Health and Human Services, \$304,696, "Ethanol-Induced NMDA R1 mRNA Stabilization."

Marcus, Daniel C., US Department of Health and Human Services, \$718,362, "Cochlear and Vestibular Ion Transport."

Marcus, Daniel C., US Department of Health and Human Services, \$4,313,713, "Epithelial Function in Health and Disease."

Poole, David C., American Heart Association, Heartland Affiliate, \$71,500, "Mechanisms of Microcirculatory Dysfunction in Heart Failure."

Schultz, Bruce D., (see **Tomich, John M.**, Biochemistry).

Wangemann, A. Philine, US Department of Health and Human Services, \$323,234, "Cytosolic Regulation of Inner Ear Ion Transport."

Weiss, Mark L., US Department of Health and Human Services, \$270,100, "Neural Circuitry of the Kidney."

CLINICAL SCIENCES

Apley, Mike D., US Department of Health and Human Services, \$73,355, "Veterinary Antimicrobial Decision Support System (VADS)."

Apley, Mike D., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Coetzee, Johann F., (see **Ganta, Roman Reddy R.**, Diagnostic Medicine/Pathobiology).

Davis, Elizabeth G., and **Kukanich, Stanley P.** (Anatomy and Physiology), Kansas Racing and Gaming Commission, \$11,000, "Pharmacokinetic and Pharmacodynamic Modeling of Oral Dexamethasone Administered to Healthy Horses."

Davis, Elizabeth G., and **Kukanich, Stanley P.** (Anatomy and Physiology), Morris Animal Foundation, \$4,000, "Veterinary Student Fellowship - Pharmacokinetic and Pharmacodynamic Modeling of Oral Dexamethasone Administered to Healthy Horses."

Davis, Elizabeth G., **Rush, Bonnie R.**, and **Wilkerson, Melinda** (Diagnostic Medicine/Pathobiology), Fort Dodge Animal Health, \$231,000, "Characterization of Cell-Mediated Immune Responses in Healthy Horses Following Vaccination."

Davis, Elizabeth G., **Rush, Bonnie R.**, and **Wilkerson, Melinda** (Diagnostic Medicine/Pathobiology), Fort Dodge Animal Health, \$150,000, "Characterization of Cell-Mediated Immune Responses in Healthy Steers Following Vaccination."

Grauer, Gregory F., Ross University, \$100,635, "Clinical Training for Ross University School of Health Sciences."

Grauer, Gregory F., St. George's University, \$368,995, "Clinical Training for St. George University."

Graves, Harriet J., (see **Takemoto, Dolores J.**, Biochemistry).

Renberg, Walter C., and **Roush, James K.**, American Kennel Club Canine Health Foundation, Inc., \$10,249, "Efficacy of Coxofemoral Denervation for the Treatment of Chronic Hip Dysplasia and Pain in Dogs: An Objective Analysis Using Ground Reaction Forces - Stephanie Lister."

Roush, James K., (see **Renberg, Walter C.**, Clinical Sciences).

Rush, Bonnie R., (see **Davis, Elizabeth G.**, Clinical Sciences).

Sanderson, Michael W., US Department of Agriculture, \$35,588, "Kansas John's Work Plan 2005."

Schermerhorn, Thomas, Morris Animal Foundation, \$35,704, "Role of Glucokinase in Feline Hepatic Glucose Metabolism."

Schermerhorn, Thomas, Nestle', \$8,904, "Hexokinase Expression in the Feline Pancreas - Erin Hiskett."

Schermerhorn, Thomas, US Department of Health and Human Services, \$32,500, "Protein Kinase A Mediated Phosphorylation of Flotillin 1."

Schermerhorn, Thomas, (see **Welti, Ruth**, Biology).

Thomson, Daniel U., and **Nagaraja, Tiruvor G.** (Diagnostic Medicine/Pathobiology), Eptipix, LLC, \$121,474, "Efficacy of Eptipix Vaccine in Reducing Prevalence and Shedding of *Escherichia coli* O157 in Cattle."

Thomson, Daniel U., and **Nagaraja, Tiruvor G.** (Diagnostic Medicine/Pathobiology), National Cattlemen's Beef Association, \$215,800, "Effects of SRP Vaccine Technology on Pre-Harvest Control and Shedding of *E. coli* O157:H7 in Cattle."

Thomson, Daniel U., and **Retzlaff, Deanna D.** (Dean of Continuing Education), US Department of Agriculture, \$34,233, "Development of Bilingual Modules to Train Diverse Pre-Harvest Workforce Audiences on the Importance of Biosecurity and Good Management Practice Measures for Decreasing the Prevalence of Foodborne Pathogens in Finished Beef Products."

Thomson, Daniel U., (see **Nagaraja, Tiruvor G.**, Diagnostic Medicine/Pathobiology).

Thomson, Daniel U., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Thomson, Daniel U., (see **Drouillard, James S.**, Animal Sciences and Industry).

DEAN OF VETERINARY MEDICAL CENTER

Logan, Cynthia L., (see **Willard, Gayle K.**, Dean of Veterinary Medical Center).

Willard, Gayle K., and **Logan, Cynthia L.**, Kansas Library Network, \$7,825, "Kansas Library ILDP Animals in Society."

DIAGNOSTIC MEDICINE/PATHOBIOLOGY

Anderson, Gary A., State of Nebraska, \$8,100, "Rabies Testing for the State of Nebraska."

Anderson, Gary A., US Department of Agriculture, \$8,100, "Classical Swine Fever Surveillance."

Anderson, Gary A., and **Stockham, Steven L.**, US Department of Agriculture, \$30,000, "NAHLN:KS."

Anderson, Gary A., (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

Chengappa, M. M., (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

Chengappa, M. M., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Chengappa, Muthu M., (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

Chowdhury, Shafiqul I., Fort Dodge Animal Health, \$386,500, "Fort Dodge Animal Health Innovation Award."

De Groot, Bradley D., National Pork Board, \$12,000, "Pilot Surveillance System for Emerging Diseases in Swine."

De Groot, Bradley D., US Department of Agriculture, \$162,000, "RSVP-A 2005 - Rapid Syndrome Validation Program for Animals."

Dritz, Steven S., **DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Nelssen, Jim L.** (Animal Sciences and Industry), and **Tokach, Michael D.** (Animal Sciences and Industry), Purco, \$28,000, "Fixed Price Agreement - Purco Project."

Dritz, Steven S., (see **Minton, J. Ernest**, Animal Sciences and Industry).

Dritz, Steven S., (see **Tokach, Michael D.**, Animal Sciences and Industry).

Dryden, Michael W., Bayer Corporation, \$40,224, "Evaluation of an Imidacloprid 10% w/v/permethrin 50% w/v spot-on and a Fipronil 10% w/v/(s)-methoprene 9% w/v spot-on to Repel, Prevent Attachment and Kill *Rhipicephalus sanguineus* (Brown Dog Tick) and *Dermacentor Variabilis* (American Dog Tick)."

Dryden, Michael W., Bayer Corporation, \$20,573, "Imidacloprid Flea Susceptibility Monitoring Program."

Dryden, Michael W., Fort Dodge Animal Health, \$68,384, "Efficacy of a Single Dose of a Topically Applied Spot-on Formulation of Metaflumizone Combined with Amitraz to Repel, Prevent Attachment and Kill *Rhipicephalus sanguineus* and *Dermacentor variabilis*."

Dryden, Michael W., Fort Dodge Animal Health, \$100,175, "Efficacy of a Topically Applied Spot-on Formulation of Metaflumizone Combined with Amitraz Applied on a Monthly Dose Schedule for the Control of Ticks in Dogs Exposed to Challenge in a Simulated Field Exposure Model."

Dryden, Michael W., Merial Limited, \$52,004, "Sponsorship Agreement."

Dryden, Michael W., (see **Wilkerson, Melinda**, Diagnostic Medicine/Pathobiology).

Fortney, William D., Kansas Racing and Gaming Commission, \$21,650, "Evaluating the Racing Greyhound's Immune Status against the Common Infectious Diseases Using Serological Titers."

Fortney, William D., Anderson, Gary A., Chengappa, M. M., Chengappa, Muthu M., Kapil, Sanjay, Nietfeld, Jerome C., and Oberst, Richard D., Kansas Racing and Gaming Commission, \$70,150, "Field Applications of Advanced Diagnostic Testing for Kennel Cough Agents Including Canine 'Influenza Virus'."

Ganta, Roman Reddy R., US Department of Health and Human Services, \$29,250, "West Nile-Analysis Laboratory."

Ganta, Roman Reddy R., Chapes, Stephen K. (Biology), and **Wilkerson, Melinda**, US Department of Health and Human Services, \$356,423, "Cellular Immunity Against Ehrlichia chaffeensis."

Ganta, Roman Reddy R., and **Coetzee, Johann F.** (Clinical Sciences), Kansas State University, \$60,000, "Development of a Project on Heartwater Disease Agent, Ehrlichia Ruminantium."

Ganta, Roman Reddy R., (see **Brown, Susan J.**, Biology).

Gottlob, Russell O., (see **Tokach, Michael D.**, Animal Sciences and Industry).

Kapil, Sanjay, (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

Kastner, Justin J., (see **Kastner, Curtis L.**, Food Science Institute).

Kastner, Justin J., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Moro, Manuel H., US Department of Health and Human Services, \$73,000, "Lyme Borreliosis and Babesial Coinfection."

Nagaraja, Tiruvoor G., Drouillard, James S. (Animal Sciences and Industry), and **Thomson, Daniel U.** (Clinical Sciences), Epitopix, LLC, \$162,957, "Efficacy of Epitopix Vaccine in Reducing Prevalence and Shedding of Escherichia coli O157 in Cattle."

Nagaraja, Tiruvoor G., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Nagaraja, Tiruvoor G., (see **Thomson, Daniel U.**, Clinical Sciences).

Narayanan, Sanjeevkumar, Apley, Mike D. (Clinical Sciences), **Chengappa, M. M., Drouillard, James S.** (Animal Sciences and Industry), **Kastner, Justin J., Nagaraja, Tiruvoor G., Nutsch, Abbey L.** (Animal Sciences and Industry), **Renter, David G., Rice, Charles W.** (Agronomy), and **Thomson, Daniel U.** (Clinical Sciences), Kansas State University, \$100,000, "Molecular Infrastructure to Assess Flow of Genetic Elements in Food Production Systems."

Nietfeld, Jerome C., (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

Nietfeld, Jerome C., (see **Rowland, Raymond R. R.**, Diagnostic Medicine/Pathobiology).

Oberst, Richard D., Kansas State University, \$20,000, "Biosecurity Research Institute at Kansas State University: Developing Enhanced Capabilities for Validating Methods and Technologies for Detecting Select Agents/Toxins in Food Safety Research."

Oberst, Richard D., US Department of Energy, \$25,000, "Inactivation of Influenza with Various Disinfectants."

Oberst, Richard D., (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

Pickrell, John A., (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

Renter, David G., (see **Narayanan, Sanjeevkumar**, Diagnostic Medicine/Pathobiology).

Rowland, Raymond R. R., Kansas State University, \$27,000, "Development of Antibody Tools for the Diagnosis of SARS and Analysis of Virus Replication in Experimental Animal Models."

Rowland, Raymond R. R., National Pork Board, \$10,000, "Accurate ELISA Test Development: Evaluation of Cyseine Protease Domain of PRRSV Non-Structural Protein 2 as a Potential Diagnostic Target."

Rowland, Raymond R. R., US Department of Agriculture, \$23,404, "Management of PRRS Persistence: Identification of Persistently Infected Swine."

Rowland, Raymond R. R., US Department of Health and Human Services, \$37,960, "Structure and Nucleolar Function of SARS N Protein."

Rowland, Raymond R. R., and **Nietfeld, Jerome C.**, National Pork Board, \$47,975, "'Kansas Cluster' of Severe Postweaning Multisystemic Wasting Syndrome Cases: Characterization of a Novel PCV2 as the Possible Etiological Agent."

Spire, Mark F., (see **Blasi, Dale A.**, Animal Sciences and Industry).

Stockham, Steven L., (see **Anderson, Gary A.**, Diagnostic Medicine/Pathobiology).

Wilkerson, Melinda, Bagladi-Swanson, Mary S. (Veterinary Medical Teaching Hospital), and **Dryden, Michael W.**, Fort Dodge Animal Health, \$112,416, "Testing a Vaccine as a Preventative or Therapeutic in a Canine Model of Flea Allergic Dermatitis."

Wilkerson, Melinda, (see **Davis, Elizabeth G.**, Clinical Sciences).

Wilkerson, Melinda, (see **Ganta, Roman Reddy R.**, Diagnostic Medicine/Pathobiology).

VETERINARY MEDICAL TEACHING HOSPITAL

Arck, Shirley T., University of Kansas, \$2,800, "Pharm.D. Clerkship."

Bagladi-Swanson, Mary S., (see **Wilkerson, Melinda**, Diagnostic Medicine/Pathobiology).

Fingland, Roger B., City of Manhattan, Kansas, \$26,000, "Veterinary Services at the Sunset Zoological Park, Manhattan, Kansas."

OFFICE OF THE PRESIDENT

AUDITORIUM

Martin, Richard P., Mid-America Arts Alliance, \$15,000 (includes \$10,000 from Friends of McCain), "Magic Flute."

Martin, Richard P., National Foundation on the Arts and the Humanities, \$83,017 (includes \$75,000 from various private donations), "2005-06 Performance Series."

Martin, Richard P., National Foundation on the Arts and the Humanities, \$15,000 (includes \$10,000 from ticket sales), "Munich Symphony with Peter Entremont."

BEACH ART MUSEUM

Render, Lorne E., National Foundation on the Arts and the Humanities, \$8,017, "Beach Museum of Art General Operating Support, 2006."

Render, Lorne E., and **Schlageck, Kathrine W.**, Manhattan Convention and Visitors Bureau, \$700, "Beach Museum of Art Rack Card Project."

Render, Lorne E., and **Schlageck, Kathrine W.**, National Foundation on the Arts and the Humanities, \$7,500, "Early Childhood Art: A Work in Progress."

Schlageck, Kathrine W., (see Render, Lorne E., Beach Art Museum).

VICE PRESIDENT FOR ADMINISTRATION AND FINANCE

KSU POLICE DEPARTMENT

Grice, Ronnie D., US Department of Homeland Security, \$49,866, "Buffer Zone Protection Program."

VICE PRESIDENT FOR INSTITUTIONAL ADVANCEMENT

DEPARTMENT OF HOUSING

Ring, Debra J., (see Bosco, Pat J., Office of Student Life).

EDUCATIONAL AND PERSONAL DEVELOPMENT

Greene, Kathleen V., US Department of Agriculture, \$16,741, "Kansas State University - Salina Upward Bound Program Summer Food Service Program."

Greene, Kathleen V., US Department of Education, \$240,043, "Ronald E. McNair Post-Baccalaureate Achievement Program."

Leon, Rebecca M., US Department of Agriculture, \$6,000, "Kansas State University Upward Bound Math and Science Program - Summer Food Service Program."

Lynch, Michael L., US Department of Education, \$255,743, "Upward Bound Math and Science Program."

Lynch, Michael L., US Department of Education, \$220,000, "Upward Bound Program - Salina Campus."

McGowan, Reginland, Kansas State Department of Education, \$7,278, "Kansas State University Upward Bound Program Summer Food Service Program."

McGowan, Reginland, US Department of Agriculture, \$3,580, "Kansas State University Upward Bound at Salina - Summer Food Service Program 2005."

McGowan, Reginland, US Department of Agriculture, \$5,495, "Kansas State University Upward Bound Math and Science Program Summer Food Service Program."

McGowan, Reginland, and McNair, Jr., Robert L., US Department of Education, \$396,200 (includes \$181,328 from various local non-profit organizations and local businesses), "Kansas State University Gear Up Program #2."

McNair, Jr., Robert L., (see McGowan, Reginland, Educational and Personal Development).

Turner, Margaret A., US Department of Agriculture, \$7,277, "Kansas State University Upward Bound - Summer Food Service Program."

KSU CHILD DEVELOPMENT CENTER, INC.

Ring, Debra J., Caroline Peine Foundation, \$13,458, "Infant Childcare Program."

Ring, Debra J., Kansas State University, \$65,000, "Kansas State University Student Governing Association."

Ring, Debra J., Manhattan Community Foundation, \$860, "Infant Childcare Program."

OFFICE OF STUDENT LIFE

Bosco, Pat J., and Ring, Debra J. (Department of Housing), US Department of Education, \$125,522, "K-State Childcare Access Means Parents in School (KCAMPIS)."

UNIVERSITY COUNSELING SERVICES

Arck Jr, William, City of Manhattan, Kansas, \$5,605, "Youth Oriented Alcohol Abuse Prevention Program."

Rathbun, Arthur J., City of Manhattan, Kansas, \$1,860, "Project ABC--Targeted Intervention with KSU Residence Hall Judicial-Board Referred Alcohol and/or Drug Use/Abuse Students."

VICE PRESIDENT FOR INSTITUTIONAL ADVANCEMENT

Lynch, Michael L., Kauffman Scholars, Inc., \$62,299, "Campus Residential Institutes for Kauffman Scholars."

OFFICE OF THE PROVOST

INTERNATIONAL PROGRAMS

Holland, Kenneth M., Canadian Department of Foreign Affairs and International Trade, \$8,339, "Canadian Studies Program Enhancement."

Holland, Kenneth M., Kansas State University, \$55,000, "Afghanistan Initiatives."

Holland, Kenneth M., Peace Corps, \$15,800, "Peace Corps Recruitment."

Holland, Kenneth M., US Department of Education, \$63,200, "Teaching American History."

Holland, Kenneth M., and Graff, David A. (History), US Department of Education, \$76,069, "Asian Studies Minor."

Wood, Mary, NCN Institute, \$25,111, "English Training Sponsorship."

KANSAS CENTER FOR RURAL INITIATIVES

Gould, Carol A., and Tolar, Mary H., Corporation for National and Community Service, \$112,760 (includes \$10,460 from consortium members), "Campus - Community Youth Service Corps."

Tolar, Mary H., (see Gould, Carol A., Kansas Center for Rural Initiatives).

LIBRARY

Farmer, Diana M., (see Stockham, Marcia G., Library).

Haddock, Michael J., and Ramaswamy, Mohan, US Department of Agriculture, \$4,505, "Digitizing and Preserving Rare Images of Pathological Disorders of Corn and Potatoes."

Ramaswamy, Mohan, (see Haddock, Michael J., Library).

Ratliff, Ron, Kansas Library Network, \$1,000, "Graphic Novels."

Stockham, Marcia G., and Farmer, Diana M., Kansas Library Network, \$5,250, "Disability Etiquette: Awareness of How Disabilities Affect Individuals."

Watts, Tim J., Kansas Library Network, \$1,500, "America at War: History through Feature Films."

OFFICE OF THE PROVOST

Dyer, Ruth A., Franks, Suzanne E. (Dean of Engineering), King, Terry S. (Dean of Engineering), Montelone, Beth A. (Dean of Arts and Sciences), Unger, Elizabeth A. (Vice Provost for Academic Services and Technology), and White, Stephen E. (Dean of Arts and Sciences), National Science Foundation, \$709,678, "ADVANCE Institutional Transformation Award: Institutional Transformation at Kansas State University."

Dyer, Ruth A., (see Montelone, Beth A., Dean of Arts and Sciences).

VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY

DEAN OF CONTINUING EDUCATION

Retzlaff, Deanna D., (see **Getty, Kelly J. K.**, Food Science Institute).

Retzlaff, Deanna D., (see **Thomson, Daniel U.**, Clinical Sciences).

REGENTS' EDUCATIONAL COMMUNICATIONS CENTER

Chastain, Melvin L., Kansas Board of Regents, \$10,000, "KAN-ED Technology and Equipment Grant."

Chastain, Melvin L., Kansas Board of Regents, \$24,825, "Project SCALE (Strategic Creation of Accessible Learning Environments)."

Maes, Sue C., (see **Boggs, Donald L.**, Agricultural Experiment Station).

Maes, Sue C., (see **Moxley, Virginia M.**, Dean of Human Ecology).

VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY

Unger, Elizabeth A., (see **Dyer, Ruth A.**, Office of the Provost).

VICE PROVOST FOR RESEARCH AND DEAN OF THE GRADUATE SCHOOL

NATIONAL AGRICULTURAL BIOSECURITY CENTER

Vanier, Martha A., US Department of Agriculture, \$350,000, "High Pathogenic Avian Influenza Working Group."

Vanier, Martha A., US Department of Homeland Security, \$200,000, "Vulnerability Assessment of Kansas Agricultural Production."

OFFICE OF THE VICE PROVOST FOR RESEARCH AND DEAN OF THE GRADUATE SCHOOL

Guikema, James A., Kansas Technology Enterprise Corporation, \$5,000, "Kansas NASA EPSCoR 2000 Program."

Guikema, James A., (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

Shanklin, Carol W., and **Montelone, Beth A.** (Dean of Arts and Sciences), National Science Foundation, \$89,188, "Leveraging an Existing Summer Research Program into an Alliances for Graduate Education and the Professoriate Program Submission."

Trewyn, R. W., Kansas State University Research Foundation, \$12,706, "KSU Research Foundation Staff Compensation."

BIOTECHNOLOGY CORE LABORATORY

Tomich, John M., Multisponsor, \$49,426, "Biotechnology Laboratory Support."

Tomich, John M., US Department of Agriculture, \$5,000, "Proteomics of Coleopteran Midgut Proteins."

ELECTRONICS DESIGN LABORATORY

Sobering, Timothy J., Multisponsor, \$148,104, "Electronics Design Laboratory Support."

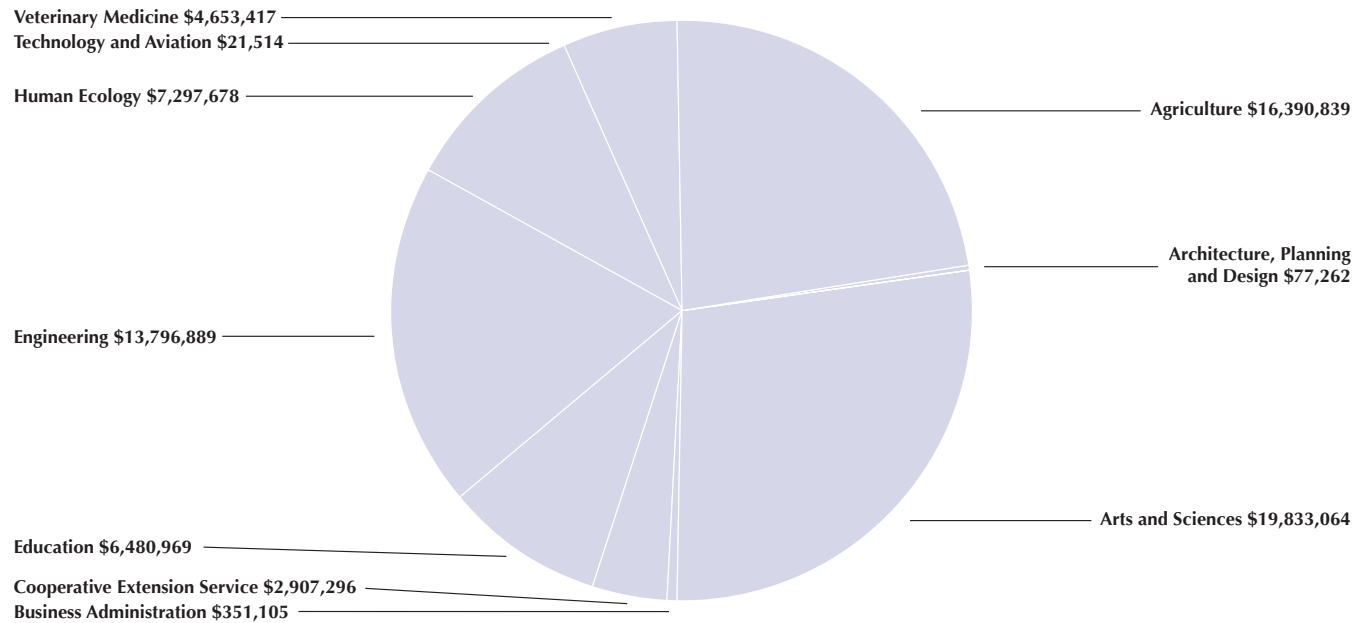
Sobering, Timothy J., (see **Taylor, Russell D.**, Vice Provost Electronics Design Laboratory).

Taylor, Russell D., and **Sobering, Timothy J.**, Kintec, Inc., \$1,332, "General Maintenance for Digital Brake Controller - Phase 2."

SECTION 2: EXPENDITURES

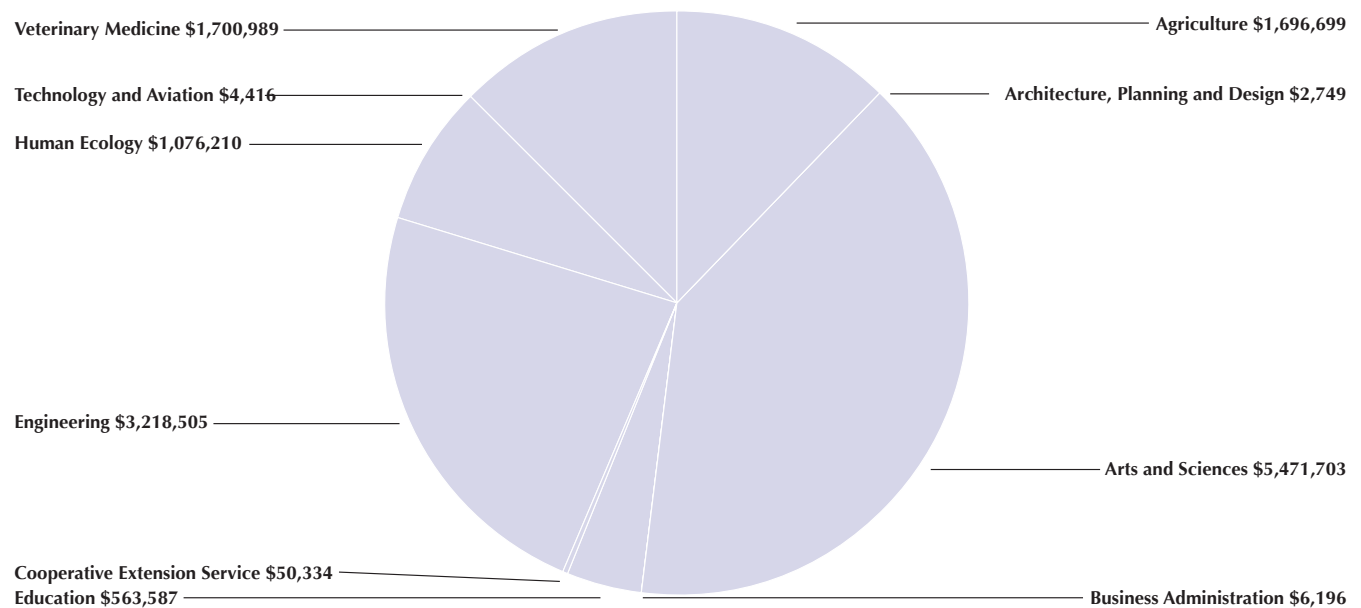
DIRECT COST EXPENDITURES BY COLLEGE AND EXTENSION*

Fiscal Year 2006



FACILITIES AND ADMINISTRATIVE COST RECOVERY BY COLLEGE AND EXTENSION*

Fiscal Year 2006



*Note: Data provided by the KSU Controller's Office, Sponsored Projects Accounting

EXPENDITURES FOR SPONSORED EXTRAMURAL FUNDING BY COLLEGE AND EXTENSION DEPARTMENT*

Fiscal Year 2006

| COLLEGE OF AGRICULTURE | DIRECT COSTS | FACILITIES AND ADMINISTRATIVE COSTS | TOTAL |
|--|-------------------------|--|----------------------|
| Dean of Agriculture and Director of AES | 18,278.92 | 0.00 | 18,278.92 |
| Agricultural Economics | 1,455,126.01 | 174,163.64 | 1,629,289.65 |
| Agronomy | 2,942,488.00 | 322,850.07 | 3,265,338.07 |
| Animal Sciences and Industry | 1,343,702.97 | 129,950.42 | 1,473,653.39 |
| Communications | 62,208.99 | 19,749.07 | 81,958.06 |
| Entomology | 1,484,032.85 | 232,755.95 | 1,716,788.80 |
| Grain Science and Technology | 766,178.10 | 144,662.57 | 910,840.67 |
| Horticulture, Forestry and Recreation Resources | 396,618.10 | 13,497.96 | 410,116.06 |
| International Agricultural Programs | 1,000.00 | 0.00 | 1,000.00 |
| Plant Pathology | 3,888,580.98 | 453,664.96 | 4,342,245.94 |
| Kansas Center for Ag. Resource & Env. | 983,199.71 | 87,919.32 | 1,071,119.03 |
| Agricultural Experiment Station | 2,205,890.31 | 110,623.88 | 2,316,514.19 |
| Northwest Research Extension Center | 145,429.94 | 4,383.32 | 149,813.26 |
| Agricultural Research Center-Hays. | 371,447.42 | 0.00 | 371,447.42 |
| Southwest Research Extension Center | 149,171.93 | 918.80 | 150,090.73 |
| Southeast Agricultural Research Center | 52,562.55 | 0.00 | 52,562.55 |
| Food Science Institute | 124,921.98 | 1,558.74 | 126,480.72 |
| Total-College of Agriculture | 16,390,838.76 | 1,696,698.70 | 18,087,537.46 |
| COLLEGE OF ARCHITECTURE AND DESIGN | | | |
| Architecture. | 31,792.57 | 2,749.38 | 34,541.95 |
| Landscape Architecture/Regional &Community Plan. | 45,469.69 | 0.00 | 45,469.69 |
| Total-College of Architecture & Design. | 77,262.26 | 2,749.38 | 80,011.64 |
| COLLEGE OF ARTS AND SCIENCES | | | |
| Dean of Arts and Sciences | 305,193.35 | 24,312.07 | 329,505.42 |
| Biochemistry | 2,927,709.75 | 611,967.70 | 3,539,677.45 |
| Biology | 8,535,778.80 | 2,166,485.05 | 10,702,263.85 |
| Chemistry | 1,479,658.82 | 525,295.62 | 2,004,954.44 |
| Economics. | 6,109.88 | 0.00 | 6,109.88 |
| Geography. | 194,228.77 | 67,909.11 | 262,137.88 |
| Geology | 268,746.32 | 82,862.55 | 351,608.87 |
| History | 21,217.21 | 0.00 | 21,217.21 |
| James R. MacDonald Laboratory | 1,992,630.52 | 817,594.97 | 2,810,225.49 |
| School of Journalism and Mass Communication | 184,692.13 | 15,679.61 | 200,371.74 |
| Mathematics | 353,154.14 | 99,943.30 | 453,097.44 |
| Music | 28,070.37 | 0.00 | 28,070.37 |
| Kinesiology | 1,298.61 | 129.89 | 1,428.50 |
| Physics | 2,864,947.88 | 894,043.30 | 3,758,991.18 |
| Political Science | 54,588.68 | 23,330.81 | 77,919.49 |
| Psychology | 432,333.68 | 105,744.25 | 538,077.93 |
| Sociology, Anthropology, & Social Work | 104,131.04 | 17,828.48 | 121,959.52 |
| Speech, Communications, Theatre and Dance. | 1,929.89 | 0.00 | 1,929.89 |
| Statistics | 30,541.02 | 4,581.29 | 35,122.31 |
| Community Health Institute. | 46,102.93 | 13,995.13 | 60,098.06 |
| Total-College of Arts and Sciences | 19,833,063.79 | 5,471,703.13 | 25,304,766.92 |

| COLLEGE OF BUSINESS ADMINISTRATION | DIRECT COSTS | FACILITIES AND ADMINISTRATIVE COSTS | TOTAL |
|---|---------------------|--|-------------------|
| Dean of Business Administration | 348,019.67 | 5,023.43 | 353,043.10 |
| Management | 9,085.10 | 1,172.84 | 10,257.94 |
| Total-College of Business Administration | 357,104.77 | 6,196.27 | 363,301.04 |

COOPERATIVE EXTENSION SERVICES

| | | | |
|---|---------------------|------------------|---------------------|
| Director of Cooperative Extension | 73,639.56 | 0.00 | 73,639.56 |
| 4-H Youth Development | 116,861.72 | 0.00 | 116,861.72 |
| Extension Communication | 2,325.47 | 0.00 | 2,325.47 |
| Kansas Forest Service | 1,809,898.54 | 8,530.18 | 1,818,428.72 |
| Agriculture and Natural Resources | 608,016.05 | 392.56 | 608,408.61 |
| Northwest Area Office | 48,305.48 | 183.54 | 48,489.02 |
| Southwest Area Office | 13,933.76 | 0.00 | 13,933.76 |
| Northeast Area Office | 18,534.62 | 0.00 | 18,534.62 |
| Southeast Area Office | 39,562.41 | 0.00 | 39,562.41 |
| Extension Office of Community Health | 176,218.87 | 41,227.98 | 217,446.85 |
| Total-Cooperative Extension Services | 2,907,296.48 | 50,334.26 | 2,957,630.74 |

COLLEGE OF EDUCATION

| | | | |
|---|---------------------|-------------------|---------------------|
| Dean of Education | 5,831,800.77 | 422,251.62 | 6,254,052.39 |
| Educational Leadership | 41,393.51 | 811.32 | 42,204.83 |
| Elementary Education | 234,576.78 | 63,180.24 | 297,757.02 |
| Secondary Education | 373,197.70 | 77,343.93 | 450,541.63 |
| Total-College of Education | 6,480,968.76 | 563,587.11 | 7,044,555.87 |

COLLEGE OF ENGINEERING

| | | | |
|---|----------------------|---------------------|----------------------|
| Dean of Engineering | 76,284.53 | 22,147.20 | 98,431.73 |
| Biological & Agricultural Engineering | 1,231,684.16 | 122,266.77 | 1,353,950.93 |
| Chemical Engineering | 699,414.82 | 204,918.61 | 904,333.43 |
| Civil Engineering | 1,110,531.14 | 214,552.96 | 1,325,084.10 |
| Computing & Information Sciences | 1,409,243.84 | 294,518.75 | 1,703,762.59 |
| Electrical & Computer Engineering | 665,326.09 | 252,993.33 | 918,319.42 |
| Engineering Experiment Station | 1,923.60 | 182.00 | 2,105.60 |
| Institute for Environmental Research | 361,104.62 | 125,192.24 | 486,296.86 |
| Industrial & Manufacturing Systems Engineering | 411,743.64 | 106,929.52 | 518,673.16 |
| Mechanical and Nuclear Engineering | 1,907,440.81 | 520,663.86 | 2,428,104.67 |
| Advanced Manufacturing Institute | 1,796,015.43 | 223,854.26 | 2,019,869.69 |
| Kansas Industrial Extension Services | 859,493.02 | 138,280.75 | 997,773.77 |
| Center for Hazardous Substance Research | 2,367,593.41 | 706,555.85 | 3,074,149.26 |
| National Institute for Land Management & Training | 396,684.33 | 128,159.32 | 524,843.65 |
| National Gas Machinery Laboratory | 502,405.20 | 157,289.91 | 659,695.11 |
| Total-College of Engineering | 13,796,888.64 | 3,218,505.33 | 17,015,393.97 |

COLLEGE OF HUMAN ECOLOGY

| | | | |
|---|---------------------|---------------------|---------------------|
| Dean of Human Ecology | 4,135,292.17 | 627,338.37 | 4,762,630.54 |
| Apparel, Textiles and Interior Design | 61,196.31 | 14,334.63 | 75,530.94 |
| Hotel, Restaurant, Institution Management & Dietetics | 116,771.24 | 25,100.23 | 141,871.47 |
| Human Nutrition | 1,008,304.86 | 253,078.08 | 1,261,382.94 |
| School of Family Studies & Human Services | 1,976,112.95 | 156,358.32 | 2,132,471.27 |
| Total-College of Human Ecology | 7,297,677.53 | 1,076,209.63 | 8,373,887.16 |

| VETERINARY MEDICAL CENTER | DIRECT COSTS | FACILITIES AND ADMINISTRATIVE COSTS | TOTAL |
|---|-------------------------|--|----------------------|
| Dean of Veterinary Medical Center | 152,707.01 | 0.00 | 152,707.01 |
| Anatomy and Physiology | 2,317,087.30 | 816,589.45 | 3,133,676.75 |
| Diagnostic Medicine/Pathobiology | 1,456,568.73 | 603,255.12 | 2,059,823.85 |
| Clinical Sciences | 699,172.99 | 277,691.02 | 976,864.01 |
| Veterinary Medical Teaching Hospital | 27,881.14 | 3,453.54 | 31,334.68 |
| Total-Veterinary Medical Center | 4,653,417.17 | 1,700,989.13 | 6,354,406.30 |
| SALINA COLLEGE OF TECHNOLOGY | | | |
| Dean of College of Tech and Aviation | 4,528.44 | 0.00 | 4,528.44 |
| Salina Aviation | 16,985.16 | 4,416.16 | 21,401.32 |
| Total-Salina College of Technology | 21,513.60 | 4,416.16 | 25,929.76 |
| Grand Total | 71,816,031.76 | 13,791,389.10 | 85,607,420.86 |

UNIVERSITY SMALL RESEARCH GRANTS

University Small Research Grants are awarded by the Office of Research and Sponsored Programs to support the research, scholarly activity and other creative efforts of tenure-track faculty members.

Fall 2005 Awards

Adhikari, Koushik, Human Nutrition, \$4,500, "Interaction among three flavor compounds as measured by head space solid phase micro-extraction-gas chromatography (HS-SPME-GC) and sensory intensity ratings."

Askey, Jennifer Drake, Modern Languages, \$2,500. "Girls and Geography in Germany, 1871-1895: What space is there in this nation for girls?"

Bopp, Melissa, Kinesiology, \$1,500, "A Home-Based Physical Activity Intervention for Older Rural Adults: Formative Research and Intervention Development."

Burrack, Frederick, Music, \$500, to prepare an assessment study of instrumental music programs within a 35-mile radius of Kansas State University.

Cain, Mary, Psychology, \$2,000, "The Ability of Environmental Enrichment to Decrease Drug Relapse."

Dudek, Michael, Apparel, Textiles, and Interior Design, \$365, "Power in Numbers: An Effort to Increase Membership and Participation in Interior Design Educators Council."

Fees, Bronwyn, School of Family Studies and Human Services, \$1,100, "Design and Evaluation of a Child's Apparel Product to House Movement and Sound Receptors for Measurement of Language and Physical Activity"

Garcia, Jane, School of Family Studies and Human Services, \$1,500, "Nutritional Well-Being of Frail Elderly with Impaired Swallowing: Perceptions of Residents and their Caregivers."

Kim, Seok-Eun, Political Science, \$1,600, "A Meta-Analysis of Antecedents of Employee Turnover in Nonprofit Human Services Agencies: Update and Implications for Future Empirical Research."

Kulcsar, Laszlo, Sociology, Anthropology and Social Work, \$3,000, "Aging in Place: A Comparative Study of the Rural Midwest and Eastern Europe."

Lee, Kyoungmi, Marketing, \$1,000. "Cultural Influences on Self-Presentation Patterns: The Case of Store Reputation Effects."

Lester, Barri, Art, \$1,800, to purchase equipment to expand artistic complexity of creative output in research.

Linder, Robert, History, \$1,900, "Between Heaven and Hell: A History of Australian Evangelical Christianity, 1788-2000."

Loschky, Lester, Psychology, \$2,000, "Exploring Scene Gist Recognition Using Visual Masking."

Moran, Christy, Counseling and Educational Psychology, \$2,000, "The Nature, Function and Impact of Judicial Affairs at Religious-Affiliated Colleges and Universities"

Muturi, Nancy, Journalism and Mass Communications, \$4,500, "Information Communication Technologies and HIV/AIDS Prevention through Behavior Change Communication among Women and Youth: A Case Study of the Caribbean."

Narayanan, Sanjeevkumar, Diagnostic Medicine/Pathobiology, \$4,500, "Effects of Feeding of Copper and Zinc on Antimicrobial Resistance Genes and Horizontally Transmissible Genetic Elements among Fecal Bacteria of Feedlot Cattle."

Riquelme, Marcial, Sociology, Anthropology and Social Work, \$3,000, "Brazilian Migration to Paraguay: Causes and Consequences."

Sandercock, Brett, Biology, \$4,000, to develop Micro-satellite Markers for a Migratory Shorebird.

Saucier, Donald, Psychology, \$1,300 "Moderators of the Expression of Sexual Prejudice by Heterosexuals Against Gay Men and Lesbians."

Shaw, Bradley, Modern Languages, \$1,400, "Hispanic-American Trans-lingual Fiction: Using Translation Theory in the Study of Selected Hispanic-American Writers."

Spohn, Ryan, Sociology, Anthropology and Social Work, \$1,500, "Community Change, Collective Efficacy and Crime: Examination of a Community in Rapid Transition."

Tamura, Masaaki, Anatomy and Physiology, \$4,000, "Study of Experimental Lung Carcinogenesis: Regulation of Macrophage Infiltration in Lung Tumor Tissues."

Taylor, Kay, Elementary Education, \$2,320, "Multiple Perspectives of Students, Teachers, and Administrators at an Alternative School: Breaking the Cycle of Educational Inequality."

Teagarden, James, Special Education, \$1,100, "Behavioral Disorders and Accuracy Errors in the Interpretation of Nonverbal Communication"

Totten, Iris, Geology, \$4,500, "A Comprehensive Geoscience Spatial Visualization Study."

Wesch, Michael, Sociology, Anthropology and Social Work, \$4,500, "The Effects of Media in Rural Papua New Guinea: A Pilot Study."

Williams, Susan, Sociology, Anthropology and Social Work, \$2,300, "Getting Ready for Company: Qualitative Data Collection Prior to Fort Riley Expansion: A Model for Communities in Rapid Transition."

Spring 2006 Awards

Arana, Andrew, Philosophy, \$500, "Descartes' Geometry."

Arthaud-Day, Marne, Management, \$1,500, to purchase KLD STATS database on corporate social and environmental performance.

Bemiller, Michelle, Sociology, Anthropology, and Social Work, \$1,000, to examine shelter workers' experiences of occupational burnout entitled: "Heating Up or Burning Out?"

Bossmann, Stefan, Chemistry, \$1,500, "Electron-Paramagnetic Resonance Measurements at Columbia University in New York City."

Dayton, Timothy, English, \$1,200, to collect poetry materials for First World War and American Literature and Culture.

Dodd, Elizabeth, English, \$700, to do essay research in Big Bone Lick, Kentucky.

Frey, Timothy, Special Education, \$1,500, to produce a pilot study entitled "Practicum Experiences for Special Education Teachers in an On-line Environment."

Goodin, Douglas, Geography, \$1,000, to develop a collaborative research program in the eastern border region of Paraguay.

Harms, Craig, Kinesiology, \$2,100, to determine the effect of a high fat meal on airway hyper-responsiveness in healthy subjects.

Janette, Michele, \$2,000 to attend the School of Criticism and Theory, Cornell University.

Kim, Seok-Eun, Political Science, \$1,200, to assess the impact of ownership on the quality of care in nursing homes.

King, Kathleen, Art, \$1,200, to create a new suite of Monotype Prints incorporating Chine Colle layering technique.

Kisangani, Emizet, \$1,500, to prepare an exploratory survey of military officers' attitudes.

Kukanich, Stanley, \$2,000, to determine the effects of flunixin and ceftiofur on the in vitro plasma protein binding of lidocaine in equine plasma.

Kulcsar, Laszlo, Sociology, Anthropology and Social Work, \$2,000, to perform a comparative study of rural Midwest and Eastern Europe entitled: "Aging in Place."

Lawhon, Larry, Landscape Architecture/Regional and Community Planning, \$1,000, to produce a survey of local government use of development impact fees in the United States.

Lester, Barri, Art, \$1,500, to purchase supplies for the solo art show at the Kansas Artists Coalition.

Melis, Rachel, Art, \$1,500 to purchase traditional, letterpress-printmaking supplies to integrate contemporary and traditional printmaking methods for making artists' books.

Moro, Manuel, Diagnostic Medicine/Pathobiology, \$1,000, to determine the prevalence of Lyme Disease and Human Babesiosis Agents in Ticks in Kansas.

***Myers-Bowman, Karen**, School of Family Studies and Human Services, \$2,000, to execute parent-child discussions about Peace, War and Terrorism in Manhattan, Kansas and the surrounding area.

Nel, Philip, English, \$1,500, to produce a collection of children's literature entitled: "Tales for Little Rebels"

Parker, Craig, Music, \$1,000, to perform research at UCLA Libraries on "Igor Stravinsky in Los Angeles" and "A History of the Los Angeles Music Festival".

Rayat, Sundeep, Chemistry, \$2,000, "Inhibition of Pyruvate Dehydrogenase Complex by the Oxidative Metabolites of 4-Cysteinyldatecholamines"

Smith, Jeffrey, Geography, \$1,200, to prepare a pilot study of the impact remittance money has on quality of life and gender roles in the state of Zacatecas, Mexico.

Taylor, Kay, Elementary Education, \$1,000, reviewing alternative school students who return to mainstream classroom entitled: "Did "It" Work?"

Teagarden, James, Special Education, \$1,000, "Social Skills Training for Children with Autistic Spectrum Disorder by the Use of an Avatar in a Virtual Environment"

Van Der Merwe, Deon, Diagnostic Medicine/Pathobiology, \$2,000, GIS-based spatial and temporal risk model for nitrate poisoning of livestock in Kansas"

*pending

FACULTY DEVELOPMENT AWARDS

Faculty Development Awards are awarded by the Office of Research and Sponsored Programs and serve primarily as travel awards. They can be used for travel to international meetings, travel for foreign exchange, travel to the offices of potential external funding sponsors, and as matching funds on certain fellowships. They cannot be used for research travel.

Fall 2005 Awards

An, Soontae, Journalism and Mass Communications, \$1,800, to present at the World Media Economics Conference, Beijing, People's Republic of China.

Arana, Andrew, Philosophy, \$300, to present "The Development of Mathematical Analysis and Analytical Mechanics in the 28th and 29th Centuries," Mexico City.

Behlman, Lee, English, \$2,000, to present at the Australasian Victorian Studies Association Conference, Latrobe University, Melbourne, Australia.

Britton, Dana, Sociology, Anthropology, and Social Work, \$1,200, to present at the conference Gender in the Context of Globalization: Exploring Diversity and Change, San Juan, Puerto Rico.

Burrack, Frederick, Music, \$1,000, to present "Teaching Musicianship in a Studio Setting and Understanding the Relationship between Child Development and Studio Teaching" at the conference Exploring Trumpet in Greece, Kalavrita, Greece.

Cable, Ted, Horticulture, Forestry and Recreation Resources, \$2,000, to work on funding opportunities at the Department of Tourism, Blaise Pascal University, France.

Dandu, Raju, Salina Engineering Technology, \$500, to attend the International Mechanical Engineering Education Conference in Beijing, People's Republic of China.

Esmaily, Asadollah, Civil Engineering, \$2,000, to present at the International Congress on Civil Engineering, Tarbiat Moddaress University, Tehran, Iran.

Exdell, John, Philosophy, \$1,000, to present "Race, Welfare and the Politics of Desert" at the Association of Legal and Social Philosophers Conference, Dublin, Ireland.

Ferguson, Carolyn, Biology, \$1,400, to present "Phylogeny, Morphological Character Evolution and Pollination Ecology of the Plant Genus *Phlox* (Polemoniaceae)" at the University of Colima in Mexico.

Ganta, Roman Reddy R., Diagnostic Medicine/Pathobiology, \$1,200, Integrating an International Dimension with India into the Expansion of Teaching and Research of Roman Ganta.

Garavito, C. L., Modern Languages, \$1,000, to present at the Latin American Studies Association Congress, San Juan, Puerto Rico.

Goins, Wayne, Music, \$600, to present "Charlie Christain, Jazz Guitar's King of Swing" at the International Conference on Arts and Humanities, Honolulu, Hawaii.

Hamilton, James, Philosophy, \$1,100, to present "Integrating Work and Interpreting Author" Prague Colloquium on Interpretation held in the Czech Republic.

Harris, Richard, Psychology, \$1,000, to present "Effects of Playing First-Person Shooter Violent Video Games" at the International Communication Association meeting, Dresden, Germany.

Hernandez, Monica, Marketing, \$1,188, to present at the Latin American Association for Consumer Research Conference held in Monterrey, Mexico.

Hunt, Daniel, Art, \$2,500, to exhibit at the Iron Casting Workshop at Stanford Contemporary Fine Arts, Oxfordshire, and attend the International Conference on Contemporary Cast Iron Art held at the Ironbridge World Heritage Site, Telford, United Kingdom.

Klein, Melanie, Landscape Architecture/Regional and Community Planning, \$500, to present "An Inter-Disciplinary Curriculum for Beginning Landscape Architecture Students" at the International Landscape Studies Education Symposium, Tongji University, Shanghai, People's Republic of China.

Kramer, Kimberly, Architectural Engineering and Construction Science, \$3,500, to present "Looking Back -- 100 Years of Tilt-Up Concrete Construction in the United States" at the International Congress on Construction History at the Queens' College, University of Cambridge, United Kingdom.

Lewis, Katrina, Interior Architecture and Product Design, \$500, to present "An Inter-Disciplinary Curriculum for Beginning Landscape Architecture Students" at the International Landscape Studies Education Symposium, Tongji University, People's Republic of China.

Maderazo, Catherine, Elementary Education, \$1,900, to present at the Word Consciousness Inquiry Project: Transforming K-6 Vocabulary Teaching and Student Learning.

Mathews, Alexander, Civil Engineering, \$1,700 to present at the International Water Association Specialist Conference on Oxidation Technologies for Water and Wastewater Treatment, Gosair, Germany.

Narayanan, Sanjeevkumar, Diagnostic Medicine/Pathobiology, \$1,000, to present at the conference on Gut Microbiology: Research to Improve Health, Immune Response and Nutrition, held at Aberdeen, Scotland.

Natarajan, Balasubramaniam, Electrical and Computer Engineering, \$500, to present at the Institution of Electronics and Electrical Engineers Vehicular Technology Conference, Melbourne, Australia.

Poggi-Corradini, Pietro, \$500, Research collaboration in Italy; Complex and Harmonic Analysis conference in Greece and a workshop in Poland.

Powers, Angela, Journalism and Mass Communications, \$1,800, to present at the World Media Economics Conference held in Beijing, People's Republic of China.

Smit, David, English, \$900, to be an exchange professor and lecture at Charles University, Prague, Czech Republic.

Totten, Iris, Geology, \$1,900 to present proposals for additional funding to the National Science Foundation, Arlington, Virginia.

Westman, Karin, English, \$1,600, to present "Seeing Bridget Jones, Seeing England" at the Contemporary Women's Writing Network Inaugural Conference, Bangor, Wales, United Kingdom.

Yum, Young-Ok, Speech Communication, Theatre and Dance, \$3,000, to present at the International Communication Association conference, Dresden, Germany.

Spring 2006 Awards

Anderson, Barbara, Apparel, Textiles and Interior Design, \$700, to present at the international conference on Recent Advances in Retailing and Consumer Services Science, Budapest, Hungary.

Arnds, Peter, Modern Languages, \$1,500, to present at the Nomadic Perspectives in Art, Literature and Theatre, Odessa, Ukraine.

Asano, Katsura, Biology, \$1,400, to present at the IUBMB meeting held in Kyoto, Japan.

Bailey, Sally, Speech Communication, Theatre and Dance, \$1,000, to present at the International Conference of Creative Arts Therapies, Tokyo, Japan.

Calluori Holcombe, Anna, Art, \$1,000, to present at the International Academy of Ceramics Assembly, Riga, Latvia.

Clark, Robert, Modern Languages, \$1,000, to present "Author! Author! Staging the Authorial Persona in the Illuminated Manuscripts of Guillaume de Digulleville" at the Arts in Society conference, Edinburgh, Scotland.

Clem, Rollie, Biology, \$1,200, to present at the Society for Invertebrate Pathology meeting.

Coates, Gary, Architecture, \$1,500, to present "Affordable and Sustainable Housing: Reweaving the Fabric of Older Neighborhoods in a Small Midwestern City" at the International Association of People-Environment Studies Conference, Alexandria, Egypt.

Eiselein, Gregory, English, \$2,500, to present at the Forging the Local and the Global Conference, Stellenbosch, South Africa.

Hedrick, Donald, English, \$1,000, to present at the World Shakespeare Congress, Queensland, Australia.

Hossain, Mustaque, Civil Engineering, \$900, to present at the International Conference on Asphalt Pavements, in Quebec City, Canada.

Jumpponen, Ari, Biology, \$1,400 to present "Cell Programmes: From Genome to Transcriptome" at the International Conference on Mycorrhizae, Granada, Spain.

Janda, Swinder, Marketing, \$1,000 to present "Does Enhanced Web Experience Always Matter? The Role of Product Involvement and Website Familiarity" at the International Conference on Recent Advances in Retailing and Services Science, Budapest Hungary.

Kambhampati, Srinivas, Entomology, \$1,000, to present at the International Union for the Study of Social Insects, Washington, DC and at the Brazilian Congress of Entomology, Brazil.

Lara, Amy, Philosophy, \$1,500, to speak at the International Philosophy Colloquium held in Bariloche, Argentina.

LeHew, Melody L. A., Apparel, Textiles and Interior Design, \$700, to present at the International Conference on Recent Advances in Retailing and Consumer Services Science, Budapest, Hungary.

Mahoney, Jon, Philosophy, \$1,500, to present "Legal Reasons, Morality, and Law" at the International Philosophy Colloquium held in Bariloche, Argentina.

Muturi, Nancy, Journalism and Mass Communications, \$1,500, to attend the International Association of Media and Communication Research in Cairo, Egypt.

Passarelli, A. Lorena, Biology, \$1,200, to present at the Society for Invertebrate Pathology meeting, Wuhan, China.

Pentz, Julie, Speech Communication, Theatre and Dance, \$1,000, to study at the Estada Internacional de Dansa conference in Banyoles-Girona, Spain; perform in Matt Mattox Workshop in Perpignan, France and attend the CobosMika modern dance workshop in Palamos, Spain.

Ramm, Alexander, Mathematics, \$200, to present at the 7th International Conference on the Electrical, Transport, and Optical Properties of Inhomogeneous Media held in Sydney, Australia.

Renter, David, Diagnostic Medicine/Pathobiology, \$1,500, to present "Pen-level Assessment of E. coli O157:H7 in Feedlot Cattle at Marketing for Slaughter" at the International Symposium of Veterinary Epidemiology and Economics, Cairns, Australia.

Rintoul, David, Biology, \$1,000, to present "Seasonal Variation of Stable Isotopes in Precipitation is Reflected in Feathers of Grassland Birds" at the North American Ornithological conference, Veracruz, Mexico.

Sauter, Silvia, Modern Languages, \$1,200, to present at the International Symposium of Literature: Literature and Globalization at Montevideo, Uruguay.

Shoemaker, Candice, Horticulture, Forestry and Recreation Resources, \$1,500, to serve as a convenor at the International Horticultural Congress and Exhibition at Seoul, Korea and to attend the Korean Horticultural Therapy Association meeting.

Stockham, Steven, Diagnostic Medicine/Pathobiology, \$1,500, to speak at the General and Scientific meeting of the European Society of Veterinary Clinical Pathology, United Kingdom.

Zurek, Ludek, Entomology, \$1,800, to speak at the Research Institute of Crop Production, University of Veterinary and Pharmaceutical Sciences and International Symbiosis Congress.

UNIVERSITY DISTINGUISHED PROFESSORS

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FRANK BLECHA, Anatomy and Physiology (2001)
M. CHENGAPPA, Diagnostic Medicine/Pathobiology (2003)
C. LEWIS COCKE, Physics (1997)
GARY W. CONRAD, Biology (1998)
ROBIN DENELL, Biology, (2000)
L. T. FAN, Chemical Engineering (1987)
BIKRAM S. GILL, Plant Pathology (1997)
DAVID HARTNETT, Biology (2004)
JONATHAN HOLDEN, English (1988)
YOSHIRO IKEDA, Art (2004)
HONGXING JIANG, Physics (2004)
MICHAEL R. KANOST, Biochemistry (2005)
KENNETH KLABUNDE, Chemistry (1988)
ALAN KNAPP, Biology (2002)
CHII-DONG LIN, Physics (1990)
ROBERT D. LINDER, History (2003)
DAVID LITTRELL, Music (2001)
DANIEL C. MARCUS, Anatomy and Physiology (2006)
JAMES L. MARSDEN, Regents Distinguished Professor of Animal Sciences (1994)
RICHARD A. MARSTON, Geography (2006)
E. WAYNE NAFZIGER, Economics (1999)
VINCENT ORTIZ, Chemistry (2004)
HARALD E.L. PRINS, Anthropology (2005)
TALAT RAHMAN, Physics (2001)
SONNY RAMASWAMY, Entomology (2004)
PATRICK RICHARD, Cortelyou-Rust Distinguished Professor of Physics (1988)
TOM ROCHE, Biochemistry (2002)
SADAHIRO SAEKI, Mathematics (1988)
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TED SCHROEDER, Agricultural Economics (2004)
CHRISTOPHER SORENSEN, Physics, (2000)
BRIAN S. SPOONER, Biology (1999)
MICHAEL W. SULEIMAN, Political Science (1990)
LARRY TAKEMOTO, Biology (2001)
BARBARA VALENT, Plant Pathology (2002)
DEAN ZOLLMAN, Physics (2001)

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The Distinguished Graduate Faculty Award is made annually to those faculty members who have distinguished themselves nationally and internationally for their excellence in research and graduate education. Normally, up to two faculty members are selected annually by a group of faculty peers. Recipients receive an honorarium and deliver a public lecture following selection for this award.

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HILMER H. LAUDE Agronomy 1955-56

ALVIN B. CARDWELL Physics 1956-57
CHARLES H. SCHOLER Applied Mechanics 1956-57

HOWARD T. HILL Speech 1957-58
ARTHUR D. WEBER College of Agriculture 1957-58

CHARLES M. CORRELL History 1958-59
LEON R. QUINLAN Landscape Architecture 1958-59

FRANCIS D. FARRELL President Emeritus 1959-60
FRED L. PARRISH History 1959-60

KLING L. ANDERSON Agronomy 1960-61
HOLLY C. FRYER Statistics 1960-61

A. M. GUHL Zoology 1961-62
H. HENLEY HAYMAKER Botany 1961-62

ROBERT KATZ Physics 1962-63

ERLE E. BARTLEY Dairy and Poultry Science 1963-64

ROY LANGFORD Psychology 1964-65

V. D. FOLTZ Bacteriology 1965-66

BREWSTER ROGERSON English 1966-67

JOHN A. JOHNSON Grain Science and Industry 1967-68

R. KENNETH BURKHARD Biochemistry 1968-69

CLIFTON E. MELOAN Chemistry 1969-70

ROBIN HIGHAM History 1970-71

ANGELO C. GARZIO Art 1971-72

L. T. FAN Chemical Engineering 1972-73

IVAN D. TEARE Agronomy 1973-74

STANLEY E. LELAND Veterinary Pathology 1974-75

RICHARD CONSIGLI Biology 1975-76

DUDLEY WILLIAMS Physics 1976-77

FREDERICK W. OEHME Surgery and Medicine 1977-78

ELMER G. HEYNE Agronomy 1978-79

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JAMES F. SHEPARD Plant Pathology 1980-81

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NASIR AHMED Electrical Engineering 1982-83

WILLIAM FATELEY Chemistry 1983-84

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MARSHA FREY History 1999-2000

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GEORGE KEISER English 2000-01

PAUL SEIB Grain Science and Industry 2000-01

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DALE HERSPRING Political Science 2003-04

DAVID NORMAN Agricultural Economics 2003-04

DALLAS JOHNSON Statistics 2004-05

DUY HUA Chemistry 2004-05

EDGAR CHAMBERS IV Human Nutrition 2005-06

ALLEN FEATHERSTONE Agricultural Economics 2005-06

U.S. PATENTS

Issued from July 1, 2005 to June 30, 2006 to the KSU Research Foundation

(Listed in reverse chronological order)

Kenneth J. Klabunde, Olga Koper and Abbas Khaleel "Porous Pellet Adsorbents Fabricated from Nanocrystals" (#RE39,098)

Bing Shan, Chun Wang and Zenghu Chang "High Peak-Power Kilohertz Laser System Employing Single-Stage Multi-Pass Amplification" (#7,050,474)

Frank Blecha and Jishu Shi "Synthetic Peptides That Inhibit Leukocyte Superoxide Anion Production and/or attract Leukocytes" (#7,049,396)

Duy H. Hua, Dolores J. Takemoto, Alan Brightman and Bradley W. Fenwick "Methods of Treating Cataracts and Diabetic Retinopathy with Tricyclic Pyrones" (#6,916,824)

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