

# RESEARCH 2004

A Report of  
Research and  
Sponsored  
Programs for  
Fiscal Year  
2004

Conjuring the  
Gene out of  
the beetle



K a n s a s   S t a t e   U n i v e r s i t y

#### ABOUT THE COVER:

“Conjuring the gen(i)e out of the beetle” is an imaginative way of thinking about the red flour beetle genome sequencing project, funded by the National Human Genome Research Institute.

At the urging of K-State genetics researchers Sue Brown and Robin Denell, entomologist Richard Beeman of USDA-ARS-Grain Marketing and Production Research Center, and colleagues at Baylor Medical School, this tiny pantry pest, *Tribolium castaneum*, was selected in 2003 for whole-genome sequencing, the first agronomic pest species to be chosen.

The first draft of the completed genome is expected early in 2005.

A knowledge bonanza awaits the release of the complete genome sequence of this beetle: What we learn about *Tribolium* will apply to beetles as a group, and beetles are the most species-diverse animals on the face of the earth. Beetles include many damaging species that cost billions of dollars annually in crop losses and forest destruction. Beetles also include beneficial and beautiful species such as fireflies and ladybugs.

Cover design by graphic artist Yvonne Bachura

Cover concept and beetle image by Richard Beeman, USDA-ARS-GMPRC.



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

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

January 2005

K-State Colleagues and Friends,

During fiscal year 2004 Kansas State University made history as it surpassed the \$100 million mark for its competitive funding for research.

I'd like to congratulate the faculty for your hard work on more than 1,000 successful proposals! Everywhere on campus, in all colleges, outstanding programs are flourishing.

K-State's overall funding base now exceeds \$186 million. Our record-level of competitive funding this year includes 10 awards that exceed \$1 million each. Three grants surpassed \$3 million, and four others were in the \$2-3 million range.

As many people are aware, K-State's research funding base has been growing steadily for a decade. K-State's reputation as a mature research university, as the academic home of a cadre of well-respected, creative, results-oriented faculty is a huge part of the success story.

In reading this report you will find many examples of creativity at work: research teams of faculty members from unrelated disciplines are collaborating on important projects.

The world's problems are too complex to be viewed through a single lens any longer. Instead, solutions will be found when there is intellectual "cross-pollination" of the kind that's demonstrated daily at Kansas State University.

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

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

***Fiscal Year 2004***

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.

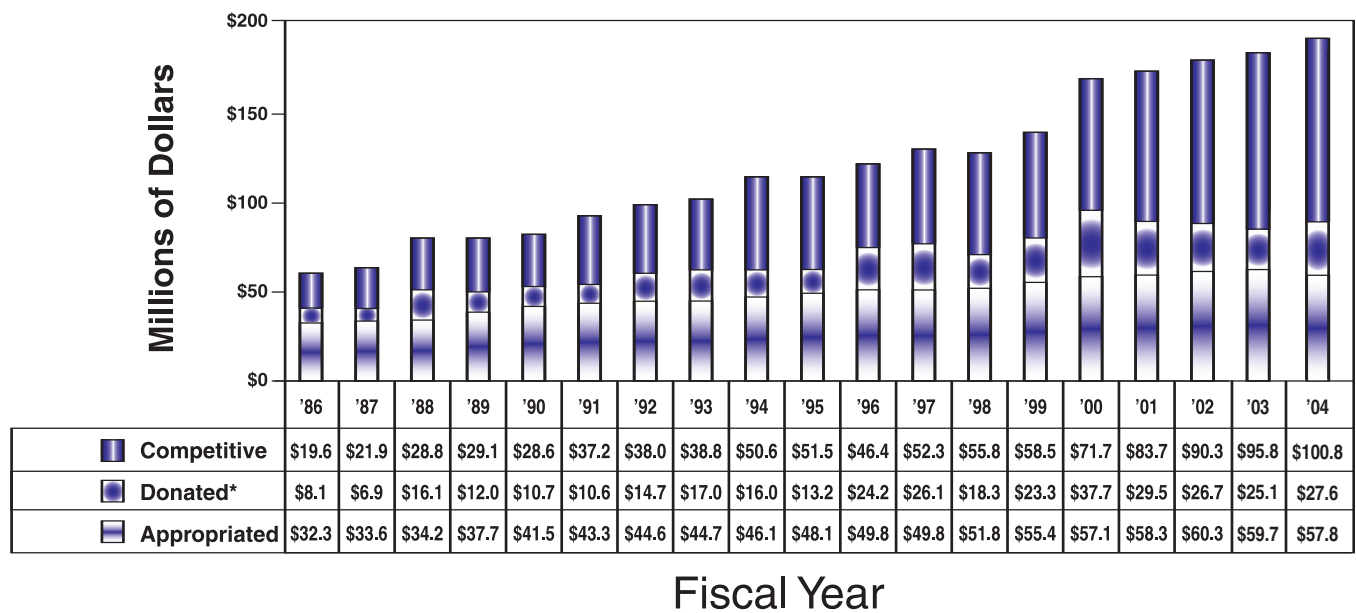
<b>I.    <u>SPONSORED</u></b>	<b><u>\$100,845,195</u></b>
<b>II.   <u>APPROPRIATED</u></b>	
Main Campus State Appropriation	\$3,451,310
Experiment Station Programs and Extension Services	
Federal Appropriation	\$7,978,031
State Appropriation	\$45,930,765
Veterinary Medical Center State Appropriation	\$431,971
<b><u>SUBTOTAL</u></b>	<b><u>\$57,792,077</u></b>
<b>III.   <u>DONATED*</u></b>	<b><u>\$27,638,058</u></b>
<b>RESEARCH/SCHOLARLY ACTIVITY BASE GRAND TOTAL</b>	<b><u>\$186,275,330</u></b>

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

# SECTION 1: AWARDS

## KANSAS STATE UNIVERSITY RESEARCH/SCHOLARLY ACTIVITY FUNDING BASE

*Fiscal Years 1986–2004*



\* Donated = KSU Foundation funds transferred to KSU in support of research/scholarly activity

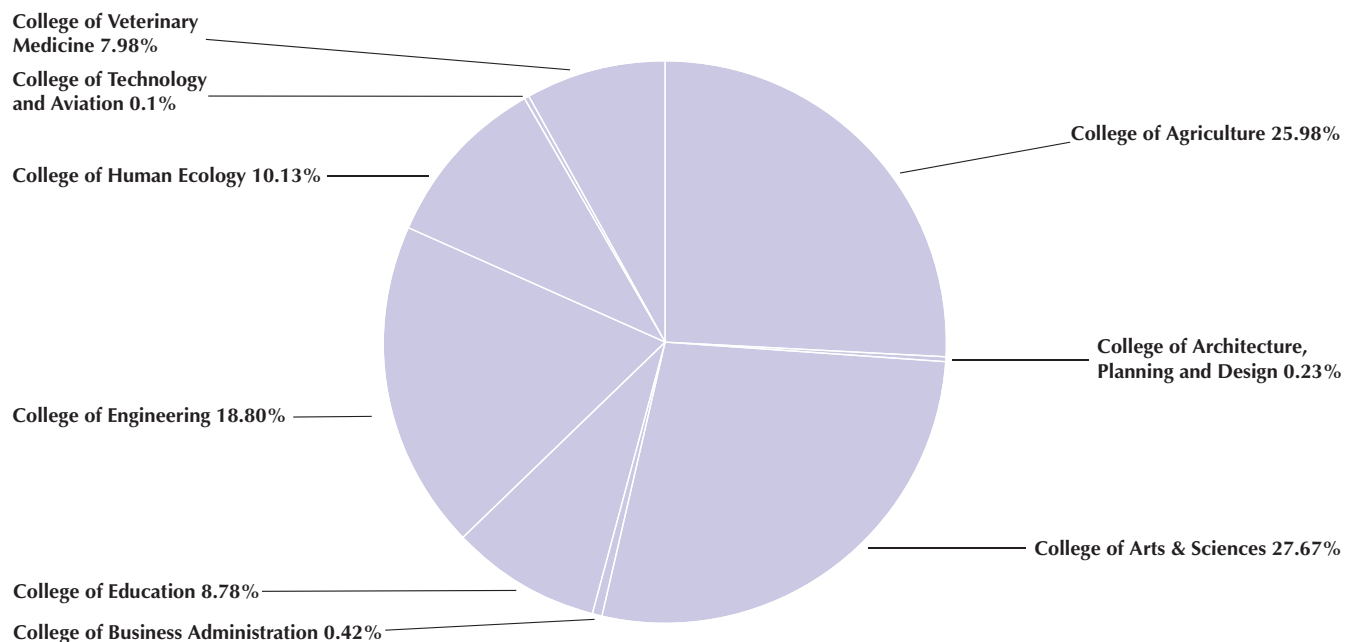
# DISTRIBUTION OF NEW AWARDS AMONG COLLEGES AND OFFICES OF THE UNIVERSITY

*Fiscal Year 2004*

	Number	Dollar
College/Office	of Awards	Value
College of Agriculture .....	359	\$23,848,650
College of Architecture, Planning and Design .....	6	213,984
College of Arts and Sciences .....	184	25,395,142
College of Business Administration .....	5	383,381
College of Education .....	34	8,059,764
College of Engineering .....	197	17,261,417
College of Human Ecology .....	72	9,299,664
College of Technology and Aviation .....	2	7,578
College of Veterinary Medicine .....	86	7,322,548
Office of the President .....	5	74,662
Office of the Provost .....	8	1,068,524
Vice President for Administration and Finance .....	1	90,000
Vice President for Institutional Advancement .....	18	2,216,182
Vice Provost for Academic Services and Technology .....	3	1,279,750
Vice Provost for Research and Dean of Graduate School .....	17	4,323,949
UNIVERSITY TOTALS .....	997	\$100,845,195

## AWARDS BY COLLEGE

*Fiscal Year 2004*



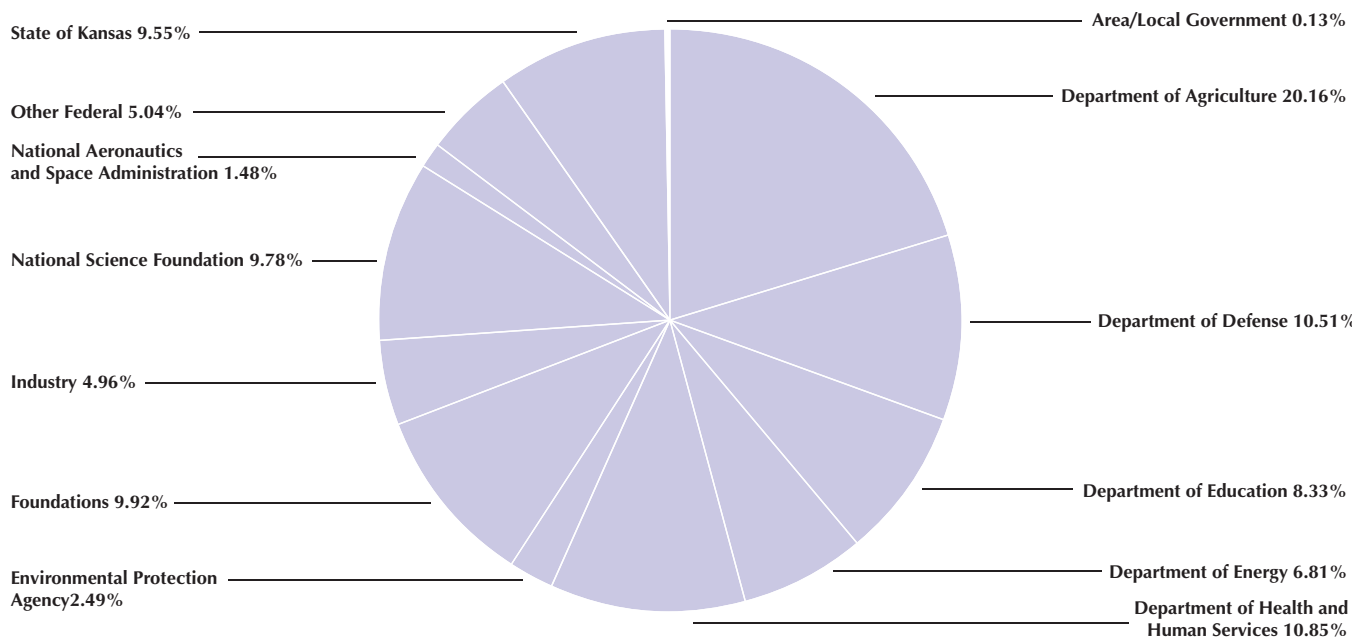
# KANSAS STATE UNIVERSITY SOURCES OF AWARDS

*Fiscal Year 2004*

Source	Number of Awards	Dollar Value
Area/Local Government	8	\$130,477
Department of Agriculture	137	\$20,329,933
Department of Defense	34	\$10,594,977
Department of Education	37	\$8,398,839
Department of Energy	38	\$6,870,637
Department of Health and Human Services	77	\$10,944,224
Environmental Protection Agency	30	\$2,506,093
Foundations	207	\$10,001,423
Industry	193	\$5,005,922
National Science Foundation	100	\$9,862,856
National Aeronautics and Space Administration	19	\$1,489,043
Other Federal	53	\$5,078,730
State of Kansas	64	\$9,632,041
<b>TOTALS</b>	<b>997</b>	<b>\$100,845,195</b>

## SOURCES OF AWARDS

*Fiscal Year 2004*





# EXTRAMURAL AWARDS

*Fiscal Year 2004 (July 1, 2003 - June 30, 2004)*

## COLLEGE OF AGRICULTURE

### AGRICULTURAL ECONOMICS

**Amanor-Boadu, Vincent R.**, US Department of Agriculture, \$729,000, "Provision of Services to the Kansas Ag Innovation Center."

**Barkley, Andrew P.**, (see **Crespi, John M.**, Agricultural Economics).

**Barkley, Andrew P.**, (see **Fox, John A.**, Agricultural Economics).

**Barton, David G.**, Multisponsor, \$47,000, "Arthur Capper Cooperative Center."

**Boland, Michael A.**, US Department of Agriculture, \$50,000, "Value Added Producer."

**Crespi, John M.**, and **Marsh, Thomas L.**, US Department of Agriculture, \$13,956, "Welfare Estimates Under Product Differentiation: The Benefits of Table Grape Promotion on Grape Varieties."

**Crespi, John M.**, **Barkley, Andrew P.**, **Fox, John A.**, and **Marsh, Thomas L.**, Kansas Wheat Commission, \$12,627, "Economic Impact of Introduction of GM Wheat: Possible Effect on Trade to Countries with GM Labeling Laws."

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

**Fox, John A.**, **Barkley, Andrew P.**, **Crespi, John M.**, and **Marsh, Thomas L.**, Kansas Wheat Commission, \$15,127, "Consumer Acceptance of Genetically Modified Wheat."

**Fox, John A.**, US Department of Agriculture, \$15,000, "Potential Impact of Bovine Spongiform Encephalopathy on Demand for Beef in the United States."

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

**Jones, Rodney D.**, (see **Fick, Walter H.**, Agronomy).

**Kasterns, Terry**, (see **Dille, Johanna A.**, Agronomy).

**Langemeier, Michael R.**, (see **Herrman, Timothy J.**, Grain Science and Industry).

**Leatherman, John C.**, US Department of Agriculture, \$90,730, "Information Technology and E-Commerce: Implications for Small Business Development in Rural Areas."

**Marsh, Thomas L.**, (see **Crespi, John M.**, Agricultural Economics).

**Marsh, Thomas L.**, (see **Fox, John A.**, Agricultural Economics).

**Mintert, James R.**, US Department of Agriculture, \$55,000, "Assessment of Economic Losses to the US Cattle and Beef Industry Sectors Associated with Discovery of Bovine Spongiform Encephalopathy (BSE) in the United States."

**Norman, David W.**, Food and Agriculture Organization of United Nations, \$10,000, "Personal Services Agreement."

**Norman, David W.**, Food and Agriculture Organization of United Nations, \$20,775, "Personal Services Agreement—Solomon Islands."

**Norman, David W.**, US Department of Agriculture, \$9,359, "Agricultural Sector Training Needs Assessment."

**Peterson, Hikaru H.**, US Department of Agriculture, \$158,726, "Market Risk Analysis for Organic Grain Farmers in the Great Plains."

**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).

**Peterson, Jeffrey M.**, (see **Steward, David R.**, Civil Engineering).

**Schroeder, Ted C.**, US Department of Agriculture, \$10,000, "Comprehensive Analysis of Australian Meat Traceability Systems—Glynn Tonsor."

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

### AGRICULTURAL EXPERIMENT STATION

**Chumley, Forrest G.**, (see **Knapp, Mary C.**, Extension Communications).

**Rife, Charles L.**, US Department of Agriculture, \$112,320, "Development and Management of Canola in the Great Plains Region."

### AGRICULTURAL RESEARCH CENTER-HAYS

**Kofoed, Kenneth D.**, Kansas Grain Sorghum Commission, \$15,000, "Sorghum Research—Plot Combine."

**Kofoed, Kenneth D.**, Multisponsor, \$1,000, "Sorghum Research."

**Kofoed, Kenneth D.**, US Department of Agriculture, \$5,000, "Regeneration of Sorghum Accessions."

**Kofoed, Kenneth D.**, **Harvey, Tom L.** (Entomology), **Michaud, John P.** (Entomology), **Reese, John C.** (Entomology), **Seifers, Dallas L.**, and **Tuinstra, Mitchell R.** (Agronomy), Kansas Grain Sorghum Commission, \$45,500, "Breeding Sorghum with Improved Grain Yield, Greenbug and Virus Resistance, and Pre-Flowering Drought Tolerance."

**Kofoed, 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, \$19,516, "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, \$88,709, "Kansas Dual Purpose Pest Resistant White Wheats."

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

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

**Seifers, Dallas L.**, (see **Kofoed, Kenneth D.**, Agricultural Research Center-Hays).

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

**Stahlman, Phillip W.**, Multisponsor, \$85,400, "Weed Research."

**Stahlman, Phillip W.**, US Department of Agriculture, \$3,000, "Characterization of Post-Dispersal Jointed Goatgrass Seed Predation (Jointed Goatgrass: A Threat to U. S. Wheat Production)."

**Stahlman, Phillip W.**, US Department of Agriculture, \$19,500, "Clearfield Winter Wheat Risk Assessment (Part 3)."

**Stahlman, Phillip W.**, US Department of Agriculture, \$61,073, "National Jointed Goatgrass Research Program Extension Coordinator."

**Stahlman, Phillip W.**, and **White, Anthony D.**, US Department of Agriculture, \$1,100, "Environmental and General Effects on Seed Dormancy and After-Ripening in Jointed Goatgrass (Jointed Goatgrass: A Threat to U. S. Wheat Production)."

**Stahlman, Phillip W.**, and **White, Anthony D.**, US Department of Agriculture, \$16,000, "Technology Transfer of Jointed Goatgrass Research in the Western United States."



**Stahlman, Phillip W., Martin, Terry J., and Martin, Victor L.** (Agronomy), Kansas Wheat Commission, \$11,000, "Risk and Management of Clearfield Winter Wheat."  
**Stahlman, Phillip W.**, (see **Dille, Johanna A.**, Agronomy).  
**White, Anthony D.**, (see **Stahlman, Phillip W.**, Agricultural Research Center–Hays).

## AGRONOMY

**Al-Khatib, Kassim**, Mid-America Commercialization Corporation, \$9,000, "Field Trials V-10216."  
**Brown-Guedira, Gina L.**, (see **Fritz, Allan K.**, Agronomy).  
**Claassen, Mark M.**, (see **Roozeboom, Kraig L.**, Agronomy).  
**Claassen, Mark M.**, (see **Tuinstra, Mitchell R.**, Agronomy).  
**Devlin, Daniel L.**, (see **Mankin, Kyle R.**, Biological and Agricultural Engineering).  
**Devlin, Daniel L.**, (see **Powell, G. Morgan**, Extension Biological and Agricultural Engineering).  
**Dille, Johanna A., Kasterns, Terry** (Agricultural Economics), **Staggenborg, Scott A.** (Northeast Area Office), **Stahlman, Phillip W.** (Agricultural Research Center–Hays), **Taylor, Randal K.** (Biological and Agricultural Engineering), **Wolf, Robert E.** (Biological and Agricultural Engineering), and **Zhang, Naiqian** (Biological and Agricultural Engineering), US Department of Agriculture, \$17,402, "Implementing Practical and Cost-Effective Approaches to Site-Specific Weed Management."  
**Eberle, William M.**, Kansas Department of Health and Environment, \$12,229, "Compost Site Development and Operation and Compost Operator Educational and Technical Assistance—FY2004."  
**Fick, Walter H.**, Multisponsor, \$1,600, "Range and Pasture Brush and Weed Control."  
**Fick, Walter H.**, and **Jones, Rodney D.** (Agricultural Economics), US Environmental Protection Agency, \$175,307, "Implementing TMDL's Using Water Quality Financial Analysis and Resource Evaluation (WQFARE) Program."  
**Fjell, Dale L.**, Kansas Corn Commission, \$4,000, "Corn Production in Kansas: Extension and Applied Research."  
**Fjell, Dale L.**, Kansas Soybean Commission, \$4,000, "Soybean Production in Kansas: Extension and Applied Research."  
**Fritz, Allan K.**, Kansas Crop Improvement Association, \$9,000, "Development of Heat Tolerant Wheat Varieties for Kansas."  
**Fritz, Allan K.**, Kansas Wheat Commission, \$50,000, "Development of Hard White Winter Wheat for Kansas."  
**Fritz, Allan K.**, and **Brown-Guedira, Gina L.**, Kansas Wheat Commission, \$6,000, "Developing Multiple Pest Resistant Wheat Germplasm."  
**Fritz, Allan K.**, and **Gill, Bikram S.** (Plant Pathology), US Department of Agriculture, \$58,642, "Bringing Genomics to the Wheat Fields."  
**Fritz, Allan K.**, and **Martin, Terry J.** (Agricultural Research Center–Hays), Kansas Wheat Commission, \$107,000, "Improvement of Hard Red Winter Wheat for Kansas."  
**Fritz, Allan K.**, (see **Trick, Harold N.**, Plant Pathology).  
**Gordon, Walter B., Janssen, Keith A., Kilgore, Gary L.** (Southeast Area Office), **Lamond, Ray E.**, and **Sweeney, Daniel W.** (Southeast Agricultural Research Center), Kansas Corn Commission, \$30,000, "Use of Strip-Tillage for Corn Production in Kansas."  
**Gordon, Walter B., Maddux, Larry D., Marsh, Brian H.**, and **Pierzynski, Gary M.**, Multisponsor, \$50,750, "Soil Fertility and Soil Management Investigations."

**Gordon, Walter B.**, (see **Roozeboom, Kraig L.**, Agronomy).  
**Gordon, Walter B.**, (see **Tuinstra, Mitchell R.**, Agronomy).  
**Ham, Jay M., DeRouchey, Joel M.** (Northeast Area Office), **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), **Maghirang, Ronaldo G.** (Biological and Agricultural Engineering), and **Pierzynski, Gary M.**, US Department of Agriculture, \$477,775, "Ammonia Losses from a Commercial Cattle Feedlot: Towards a Realistic NH3 Emissions Inventory for the Great Plains."  
**Ham, Jay M.**, (see **Lamm, Freddie R.**, Northwest Research Extension Center).  
**Heer, William F.**, Cotton Foundation, \$2,000, "Conversion of Allis Chalmers 860XTB Cotton Harvester for Plot Research."  
**Janssen, Keith A.**, Four Star Services, Inc., \$1,500, "Evaluation of Agri-SC for Reducing Soil, Nutrient, and Herbicide Losses in Cropland Runoff."  
**Janssen, Keith A.**, (see **Gordon, Walter B.**, Agronomy).  
**Janssen, Keith A.**, (see **Regehr, David L.**, Agronomy).  
**Janssen, Keith A.**, (see **Roozeboom, Kraig L.**, Agronomy).  
**Janssen, Keith A.**, (see **Tuinstra, Mitchell R.**, Agronomy).  
**Kluitenberg, Gerard J.**, US Department of the Interior, \$14,000, "Field Assessment of a Method for Estimation of Groundwater Consumption by Phreatophytes."  
**Kulakow, Peter A.**, and **Erickson, Larry E.** (Center for Hazardous Substance Research), Environment Canada, \$12,920, "Remediation Technologies Development Forum."  
**Lamond, Ray E.**, (see **Gordon, Walter B.**, Agronomy).  
**Lamond, Ray E.**, (see **Leikam, Dale F.**, Extension Agronomy).  
**Lamond, Ray E.**, (see **Rice, Charles W.**, 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).  
**Martin, Victor L.**, (see **Tuinstra, Mitchell R.**, Agronomy).  
**Mengel, David B.**, US Department of Agriculture, \$117,000, "Facilitate Development of Abiotic Stress Resistant Wheat Germplasm."  
**Mengel, David B.**, US Department of Agriculture, \$49,400, "Wind Erosion Model for Military Lands."  
**Owensby, Clenton E., Ham, Jay M.**, and **Knapp, Alan K.** (Biology), US Department of Energy, \$52,493, "Net Ecosystem Carbon and Water Vapor Exchange of Tallgrass Prairie."  
**Pierzynski, Gary M.**, (see **Gordon, Walter B.**, Agronomy).  
**Pierzynski, Gary M.**, (see **Ham, Jay M.**, Agronomy).  
**Ransom, Michel D.**, US Department of Agriculture, \$22,300, "Soil Laboratory Analysis to Support Soil Properties for Use in Determining How Soils Interpret for Various Uses."  
**Regehr, David L.**, and **Janssen, Keith A.**, Multisponsor, \$131,860, "Field Herbicidal Evaluations."  
**Rice, Charles W.**, and **Lamond, Ray E.**, Georgia-Pacific Corporation, \$93,131, "Controlled N Release on Wheat Production and Soil Microbial Activity."  
**Rice, Charles W., Todd, Timothy C.** (Plant Pathology), and **Wilson, Gail T.** (Biology), National Science Foundation, \$162,000, "Grazer-Mycorrhizal Interactions in Tallgrass Prairie: Effects on Carbon and Nitrogen Partitioning and Sequestration."  
**Rice, Charles W.**, (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

**Rife, Charles L.**, US Department of Agriculture, \$15,284, "National Canola Cultivar Development Program to Identify Adapted Canola Cultivars to Improve Efficiency and Grower Profitability."

**Roozeboom, Kraig L.**, Multisponsor, \$358,150, "Crop Performance."

**Roozeboom, Kraig L., Claassen, Mark M., Gordon, Walter B., Janssen, Keith A., and Tuinstra, Mitchell R.**, National Grain Sorghum Producers Association, \$2,400, "Evaluation of Tan-Plant Sorghum Hybrids."

**Schaffer, Vernon A.**, Multisponsor, \$8,174, "Foundation Seed Maintenance."

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

**Schapaugh, Jr., William T.**, Kansas Crop Improvement Association, \$11,900, "Development of Herbicide Resistant and Special Purpose Varieties for Kansas."

**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, \$200,000, "Enhancing Soybean Germplasm Development."

**Schapaugh, Jr., William T.**, (see **Buschman, Larry L.**, Entomology).

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

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

**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., Claassen, Mark M., Claflin, Larry E.** (Plant Pathology), **Gordon, Walter B., Janssen, Keith A., Kofoid, Kenneth D.** (Agricultural Research Center–Hays), and **Martin, Victor L.**, Kansas Grain Sorghum Commission, \$45,500, "Breeding Grain Sorghum for Improved Dryland Production."

**Thien, Stephen J.**, and **Gipson, Philip S.** (Biology), US Department of the Interior, \$16,043, "Evaluation of the Impact of Military Training on Soil Quality Indicators."

**Tuinstra, Mitchell R.**, and **Hancock, Joe D.** (Animal Sciences and Industry), US Agency for International Development, \$135,100, "Enhancing the Utilization of Grain Sorghum and Pearl Millet through the Improvement of Grain Quality via Genetic and Nutrition Research."

**Tuinstra, Mitchell R., Kofoid, Kenneth D.** (Agricultural Research Center–Hays), and **Vanderlip, Richard**, US Department of Agriculture, \$246,099, "Sorghum Research."

**Tuinstra, Mitchell R.**, (see **Kofoid, Kenneth D.**, Agricultural Research Center–Hays).

**Tuinstra, Mitchell R.**, (see **Roozeboom, Kraig L.**, Agronomy).

**Vanderlip, Richard**, (see **Tuinstra, Mitchell R.**, Agronomy).

**Welch, Stephen M.**, (see **Steward, David R.**, Civil Engineering).

## ANIMAL SCIENCES AND INDUSTRY

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

**Beyer, R. Scott**, (see **Herald, Thomas J.**, Animal Sciences and Industry).

**Beyer, R. Scott**, and **Behnke, Keith C.** (Grain Science and Industry), US Department of Agriculture, \$14,700, "How Do Feed Quality Factors Affect the Amino Acid Requirement of Poultry?"

**Blakeslee, Karen M.**, (see **Herald, Thomas J.**, Animal Sciences and Industry).

**Blasi, Dale A.**, (see **Drouillard, James S.**, Animal Sciences and Industry).

**Blasi, Dale A.**, (see **Spire, Mark F.**, Diagnostic Medicine/Pathobiology).

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

**Dikeman, Michael E.**, National Cattlemen's Beef Association, \$47,430, "Evaluation of Factors Causing 'Black Bone' Condition in Packaged Beef Retail Cuts and Ways to Decrease the Incidence."

**Dikeman, Michael E.**, Tyson Foods, Inc., \$14,980, "Evaluation of Factors Causing the 'Black Bone' Condition in Packaged Beef Retail Cuts and Ways to Decrease the Incidence."

**Drouillard, James S.**, Eli Lilly and Company, \$82,500, "Evaluation of Optaflexx on Growth Performance and Carcass Characteristics in Calf-Fed Holstein Feedlot Steers."

**Drouillard, James S.**, KK Animal Nutrition, \$32,000, "Oral Dosing of Feedlot Cattle with Megasphaera Elsdenii: Impact on Adaptation to High-Concentrate Diets."

**Drouillard, James S.**, National Corn Growers Association, \$86,000, "Distiller's Solubles as Major Constituents of Protein Blocks for Cattle."

**Drouillard, James S.**, and **Blasi, Dale A.**, US Department of Agriculture, \$35,000, "Effect of Wet and Dry Distillers Grains on Performance of Beef Cattle."

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

**Goodband, Robert D.**, (see **DeRouchey, Joel M.**, Northeast Area Office).

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

**Goodband, Robert D.**, (see **Nelssen, Jim L.**, Animal Sciences and Industry).

**Gottlob, Russell O.**, (see **DeRouchey, Joel M.**, Northeast Area Office).

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

**Herald, Thomas J., Aramouni, Fadi M., Beyer, R. Scott**, and **Blakeslee, Karen M.**, American Egg Board, \$110,884, "Comparative Study: Functionality of Egg and Egg Substitutes in Selected Food Systems."

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

**Herald, Thomas J.**, (see **Phebus, Randall K.**, Animal Sciences and Industry).

**James, Dee W.**, Kansas State University Foundation, \$15,482, "Teaching Support—Livestock and Meat Industry Council."

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

**Marsden, James L.**, National Cattlemen's Beef Association, \$79,700, "Evaluation of the Effectiveness of Acidified Sodium Chlorite (Sanova) for Decontaminating Commercial Beef Carcasses Post-Chill."

**Marsden, James L.**, National Cattlemen's Beef Association, \$44,800, "Hide-On Decontamination System Using Sandia National Laboratories DF-200 Foam."

**Marsden, James L.**, (see **Phebus, Randall K.**, Animal Sciences and Industry).

**Nelssen, Jim L., Goodband, Robert D., and Tokach, Michael D.** (Extension Animal Sciences and Industry), Hill's Pet Nutrition, Inc., \$28,000, "Effect of Amino Acid Balance on Controlling Food Intake in Growing Pigs."

**Nelssen, Jim L., Goodband, Robert D., and Tokach, Michael D.** (Extension Animal Sciences and Industry), Hill's Pet Nutrition, Inc., \$56,000, "Effect of Nutrient Enhanced Foods on Joint Development in 25 to 115 Kg Pigs—Experiment 2."

**Nelssen, Jim L., Goodband, Robert D., and Tokach, Michael D.** (Extension Animal Sciences and Industry), Hill's Pet Nutrition, Inc., \$28,000, "Effect of Soluble:Insoluble Fiber Ratios on Controlling Food Intake in Growing Pigs."

**Nelssen, Jim L.,** (see **DeRouchey, Joel M.**, Northeast Area Office).

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

**Phebus, Randall K., Herald, Thomas J., and Marsden, James L.,** National Cattlemen's Beef Association, \$47,916, "Efficacy of the Grovac System for Decontamination of Retail Beef Trimmings: Process Validation against Pathogens and Commercial Shelf-Life Study."

**Phebus, Randall K.,** (see **Kastner, Curtis L.**, Food Science Institute).

**Riley, Jack G.,** Kansas Beef Council, \$100,000, "Support of Regents Distinguished Professorship in Animal Sciences."

**Rozell, Timothy G.,** US Department of Health and Human Services, \$36,500, "Bridging: Expression of Altered FSH Receptors in Bovine Ovaries."

**Schmidt, Karen A.,** US Department of Agriculture, \$26,517, "Ingredient Technology and Interactions for Stable, Nutritionally-Designed Milk-Based Beverages."

**Swanson, Janice C.,** (see **Spire, Mark F.**, Diagnostic Medicine/Pathobiology).

**Tokach, Michael D.,** (see **DeRouchey, Joel M.**, Northeast Area Office).

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

## COMMUNICATIONS

**Knapp, Mary C.,** (see **Landman, E. Dean**, Civil Engineering).

## OFFICE OF THE DEAN OF THE COLLEGE OF AGRICULTURE AND DIRECTOR OF THE AGRICULTURAL EXPERIMENT STATION

**Chumley, Forrest G.,** US Department of Agriculture, \$350,503 "USDA/ARS Research Support Agreement." (6 awards)

**Johnson, Marc A.,** US Department of Agriculture, \$1,098, "USDA Research Apprenticeship Program."

**Johnson, Marc A.,** US Department of Agriculture, \$32,850, "USDA/ARS Research Support Agreement." (2 awards)

**Wilson, Ron J.,** Kansas Agriculture and Rural Leadership, Inc., \$1,499, "Part-Time Temporary Office Training Support—Huck Boyd National Institute for Rural Development."

**Wilson, Ron J.,** Kansas Agriculture and Rural Leadership, Inc., \$17,318, "Secretarial Support—Huck Boyd National Institute for Rural Development."

**Wilson, Ron J.,** Kansas Agriculture and Rural Leadership, Inc., \$2,200, "Work-Study Student Hourly Support—Huck Boyd National Institute for Rural Development."

## ENTOMOLOGY

**Beeman, Richard W.,** (see **Brown, Susan J.**, Biology).

**Beeman, Richard W.,** (see **Denell, Robin E.**, Biology).

**Beeman, Richard W.,** (see **Muthukrishnan, Subbarat**, Biochemistry).

**Broce, Alberto B.,** US Department of Health and Human Services, \$147,512, "West Nile Surveillance in the State of Kansas (ELC Program: West Nile Virus)."

**Broce, Alberto B., and Zurek, Ludek,** Multisponsor, \$1,000, "Methods for Control of Livestock Insects."

**Broce, Alberto B., and Zurek, Ludek,** US Department of Agriculture, \$134,595, "Management of Stable Fly Populations Developing in Feeding Sites of Round Bales."

**Broce, Alberto B.,** (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

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

**Buschman, Larry L.,** Multisponsor, \$10,500, "Insecticide Management of Field Crop Insects in Southwestern Kansas."

**Buschman, Larry L.,** Syngenta Corporation, \$14,000, "Lepidoptera Insect Control." (2 awards)

**Buschman, Larry L.,** US Environmental Protection Agency, \$3,000, "Improving the F2 Screen for European Corn Borer."

**Buschman, Larry L., Schapaugh, Jr., William T. (Agronomy), Sloderbeck, Phillip E. (Southwest Area Office), Trick, Harold N. (Plant Pathology), and Witt, Merle D. (Southwest Area Office),** Kansas Soybean Commission, \$25,901, "Biology and Management of the Soybean Stem Borer in Kansas."

**Harvey, Tom L.,** (see **Kofoid, Kenneth D.**, Agricultural Research Center—Hays).

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

**Higgins, Randall A.,** National Science Foundation, \$500, "2003 Entomology Society of America Annual Meeting—Huarong Li."

**Jia, Feng You,** (see **Ramaswamy, Sonny B.**, Entomology).

**Kambhampati, Srinivas,** Multisponsor, \$15,000, "Insect Genetics."

**Kambhampati, Srinivas,** US Department of Agriculture, \$70,200, "DNA Fingerprinting of Tribolium Castaneum for Tracking Infestations."

**Kambhampati, Srinivas, and Bhadriraju, Subramanyam** (Grain Science and Industry), National Science Foundation, \$500, "Graduate Student Travel Award—Tony Grace."

**Michaud, John P., and Sloderbeck, Phillip E. (Southwest Area Office),** National Sunflower Association, \$9,500, "Impact Assessment of Stem-Boring Insects in Sunflower: A Pilot Study."

**Michaud, John P.,** (see **Kofoid, Kenneth D.**, Agricultural Research Center—Hays).

**Park, Yoonseong,** Syngenta Corporation, \$169,294, "Toxicological Characterization of Heliothis Sodium Channel hscp."

**Park, Yoonseong,** US Department of Agriculture, \$81,240, "Development of RIDL-Based Pink Bollworm."

**Pszczolkowski, Maciej A.,** (see **Ramaswamy, Sonny B.**, Entomology).

**Ramaswamy, Sonny B.,** National Science Foundation, \$52,591, "Collaborative Research: Infection Decisions by Insect—Parasitic Nematodes."

**Ramaswamy, Sonny B.,** National Science Foundation, \$500, "Graduate Student Travel Award—Jayne Christen."

**Ramaswamy, Sonny B.,** National Science Foundation, \$458, "Graduate Student Travel Award—Olgaly Ramos."

**Ramaswamy, Sonny B.,** Tougaloo College, \$3,000, "Tougaloo College Project."



**Ramaswamy, Sonny B.**, 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*."

**Ramaswamy, Sonny B.**, US Department of Agriculture, \$58,079, "Facilitate Multiple Pest Resistant Wheat Germplasm Research." (2 awards)

**Ramaswamy, Sonny B.**, US Environmental Protection Agency, \$24,370, "Implementation of a Monitoring Program to Reduce Pesticide Applications at Certified Seed Facilities."

**Ramaswamy, Sonny B.**, and **Bhadriraju, Subramanyam** (Grain Science and Industry), US Department of Agriculture, \$405,943, "Consortium for Integrated Management of Stored Product Insect Pests."

**Ramaswamy, Sonny B.**, and **Jia, Feng You**, US Department of Agriculture, \$25,000, "Pesticide Usage Survey and Crop Profile for Corn in the Northern and Central Plains (Kansas, Nebraska, North Dakota and South Dakota)."

**Ramaswamy, Sonny B.**, and **Pszczolkowski, Maciej A.**, Washington State Tree Fruit Research Commission, \$15,000, "Feeding Enhancements for Insecticides Targeting Neonate Lepidopteran Larvae."

**Ramaswamy, Sonny B.**, (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

**Reese, John C.**, National Science Foundation, \$457, "Graduate Student Travel Award—Navdeep S. Mutti."

**Reese, John C.**, **Higgins, Randall A.** (Extension Entomology), **Jardine, Douglas J.** (Plant Pathology), **Schapaugh, Jr., William T.** (Agronomy), **Sloderbeck, Phillip E.** (Southwest Area Office), **Smith, C. Michael**, and **Wolf, Robert E.** (Biological and Agricultural Engineering), Kansas Soybean Commission, \$23,558, "Management of the Soybean Aphid: A Pro-Active Approach to a New Pest."

**Reese, John C.**, (see **Kofoid, Kenneth D.**, Agricultural Research Center—Hays).

**Reese, John C.**, (see **Shah, Jyoti**, Biology).

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

**Smith, C. Michael**, Kansas Crop Improvement Association, \$8,000, "Aphid Resistance DNA Marker Selection System for Improved Kansas Wheat Variety Development."

**Smith, C. Michael**, National Science Foundation, \$347, "Graduate Student Travel Award—Sheila Prabhakar."

**Smith, C. Michael**, US Department of Agriculture, \$29,858, "Evaluation, Molecular Analysis and Development of Molecular Markers Linked to Pest Resistance Genes in Barley Populations."

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

**Wilde, Gerald E.**, Agrigenetics, Inc., \$3,285, "Assessing Performance of a Lead Transgenic Corn Event Expressing Rootworm-Active Insecticidal Proteins."

**Wilde, Gerald E.**, Monsanto Company, \$7,000, "Corn Rootworm Efficacy of MON 88017."

**Wilde, Gerald E.**, Monsanto Company, \$13,860, "Investigating Adult Emergence Patterns from YieldGard Rootworm."

**Wilde, Gerald E.**, US Department of Agriculture, \$15,841, "Biologically Intensive Areawide Integrated Pest Management of the Russian Wheat Aphid and Greenbug."

**Wilde, Gerald E.**, and **Reese, John C.**, Multisponsor, \$79,735, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

**Wilde, Gerald E.**, and **Wolf, Robert E.** (Biological and Agricultural Engineering), National Sunflower Association, \$8,000, "Effect of Timing and Number of Insecticide Applications on Sunflower Headmoth Control in Kansas."

**Zhu, Kun Yan**, National Science Foundation, \$500, "Graduate Student Travel Award—Troy Anderson."

**Zhu, Kun Yan**, US Department of Agriculture, \$72,400, "Mechanisms of Pesticide Interactions in Aquatic Organisms: Implications to Watershed Contamination and Ecosystem Health."

**Zurek, Ludek**, (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

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

**Zurek, Ludek**, (see **Nagaraja, Tiruvor G.**, Diagnostic Medicine/Pathobiology).

## FOOD SCIENCE INSTITUTE

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

**Kastner, Curtis L.**, Kansas State University, \$2,000,000, "Food Safety and Security: Protecting America's Health, Agricultural Infrastructure, and Economy."

**Kastner, Curtis L.**, **Fung, Daniel Y.C.** (Animal Sciences and Industry), **Getty, Kelly J. K.**, **Phebus, Randall K.** (Animal Sciences and Industry), and **Retzlaff, Deanna D.** (Dean of Continuing Education), US Department of Education, \$26,314, "North American Food Safety/Seguridad Alimentaria de Norte America (SANA)."

**Kastner, Curtis L.**, **Fung, Daniel Y.C.** (Animal Sciences and Industry), and **Kropf, Donald H.** (Animal Sciences and Industry), US Department of Agriculture, \$315,701, "Animal Science Food Safety Consortium—Kansas State University."

## GRAIN SCIENCE AND INDUSTRY

**Alavi, Sajid**, and **Sun, X. Susan**, US Department of Agriculture, \$249,000, "Phase-Transition Analysis and Non-Invasive Imaging for Understanding Microstructure Formation in Biopolymeric Foams."

**Alavi, Sajid**, (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

**Alavi, Sajid**, (see **Herrman, Timothy J.**, Grain Science and Industry).

**Behnke, Keith C.**, (see **Beyer, R. Scott**, Animal Sciences and Industry).

**Bhadriraju, Subramanyam**, US Department of Agriculture, \$7,000, "Improvement and Field Validation of an Attract-and-Kill Bait Station for the Indian Meal Moth."

**Bhadriraju, Subramanyam**, **Alavi, Sajid**, and **Huang, Fangneng**, US Department of Agriculture, \$20,000, "Development and Implementation of a Thermal Death Kinetic Model for Management of Indianmeal Moth and Red Flour Beetle in Food Processing Environments."

**Bhadriraju, Subramanyam**, **Broce, Alberto B.** (Entomology), **Dryden, Michael W.** (Diagnostic Medicine/Pathobiology), and **Huang, Fangneng**, Koston Technologies, \$120,000, "Evaluation of Two Novel Ultrasonic Devices and a Lactose-Based Pesticide for Management of Urban Insects."

**Bhadriraju, Subramanyam**, **Huang, Fangneng**, and **Zurek, Ludek** (Entomology), Appliqa Consumer Products, Inc., \$180,000, "Improved Protocols for Evaluating Efficacy of Ultrasound Technology against Economically Important Urban Pests."

**Bhadriraju, Subramanyam**, and **Huang, Fangneng**, Kansas Wheat Commission, \$12,488, "Efficacy and Adoption of New Grain Protectants by Kansas Wheat Producers."

**Bhadriraju, Subramanyam**, and **Huang, Fangneng**, US Environmental Protection Agency, \$39,946, "FQPA and Management of Insects in Stored Wheat: Perceptions and Implementation of OP Alternatives by Kansas Farmers."

**Bhadriraju, Subramanyam**, and **Ramaswamy, Sonny B.** (Entomology), National Science Foundation, \$470, "Graduate Student Travel Award—Rizana M. Mahroof."

**Bhadriraju, Subramanyam**, (see **Kambhampati, Srinivas**, Entomology).

**Bhadriraju, Subramanyam**, (see **Ramaswamy, Sonny B.**, Entomology).

**Donnelly, Brendan J.**, Texas Wheat Producers Board, \$15,000, "International Grains Program Advisory Board."

**Herrman, Timothy J.**, Kansas Crop Improvement Association, \$7,166, "Feasibility Study on Developing Grain Tracing Technology."

**Herrman, Timothy J.**, Kansas Wheat Commission, \$18,415, "Protein/Hardness Screening of Early Progeny Wheats."

**Herrman, Timothy J.**, Kansas Wheat Commission, \$79,050, "Quality Evaluation from KAES Wheat Breeding Programs."

**Herrman, Timothy J.**, US Department of Agriculture, \$41,250, "Factors Governing the Suitability of Sorghum and Maize for Wet Milling, Dry Milling, and Alkaline Processing."

**Herrman, Timothy J.**, US Department of Agriculture, \$25,350, "Strategies to Manage Karnal Bunt and Retain Global Wheat Markets."

**Herrman, Timothy J.**, **Alavi, Sajid**, and **Lee, Kyung-Eun**, US Department of Agriculture, \$61,000 (includes \$3,000 from Ohio State University, and \$25,000 from Kansas Corporation Commission), "Suitability of Maize and Sorghum for Dry Milling and Extrusion Processing."

**Herrman, Timothy J.**, **Langemeier, Michael R.** (Agricultural Economics), and **Schrock, Mark D.** (Biological and Agricultural Engineering), US Department of Agriculture, \$500,000, "Global Tracing and Recall System for U.S. Grains: Proof of Concept."

**Howard, John E.**, Kansas Corn Commission, \$36,000, "Market Development Grant—International Grains Program Grain Storage, Handling and Sanitation Specialist."

**Howard, John E.**, Kansas Soybean Commission, \$36,000, "Market Development Grant—International Grains Program."

**Howard, John E.**, Kansas Wheat Commission, \$400,000, "International Grains Program Support Project."

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

**Huang, Fangneng**, (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

**Lee, Kyung-Eun**, (see **Herrman, Timothy J.**, Grain Science and Industry).

**MacRitchie, Finlay I.**, and **Madl, Ronald L.**, MGP Ingredients, Inc., \$29,750, "Wheat Gluten Modification for Value Addition."

**MacRitchie, Finlay I.**, and **Madl, Ronald L.**, US Department of Agriculture, \$29,750, "Wheat Gluten Modification for Value Addition."

**Madl, Ronald L.**, (see **MacRitchie, Finlay I.**, Grain Science and Industry).

**Seib, Paul A.**, Kansas Wheat Commission, \$25,762, "Bright-White Wheat: Origin and Food Products."

**Seib, Paul A.**, US Department of Agriculture, \$87,600, "Development of Prediction Models for Wheat Quality Parameters."

**Seib, Paul A.**, (see **Sun, X. Susan**, Grain Science and Industry).

**Sun, X. Susan**, Georgia-Pacific Corporation, \$47,350, "Soy Adhesives Research."

**Sun, X. Susan**, US Department of Defense, \$56,309, "Low-Density High Strength Biodegradable Composite."

**Sun, X. Susan**, **Hua, Duy H.** (Chemistry), **Hulbert, Scot H.** (Plant Pathology), **Rahman, Talat S.** (Physics), **Tomich, John M.** (Biochemistry), and **Wang, Donghai** (Biological and Agricultural Engineering), Kansas State University, \$900,000, "Biomaterials by Design."

**Sun, X. Susan**, and **Seib, Paul A.**, US Department of Energy, \$45,000, "High-Strength Degradable Plastic From Starch And Poly(Lactic Acid)."

**Sun, X. Susan**, (see **Alavi, Sajid**, Grain Science and Industry).

**Sun, X. Susan**, (see **Wang, Xuemin**, Biochemistry).

## HORTICULTURE, FORESTRY AND RECREATION RESOURCES

**Becker, Constance Dustin**, Earthwatch Institute, \$12,114, "Ecuador Cloud Forest Research."

**Becker, Constance Dustin**, Washington Crossing Audubon Society, \$13,650, "Monitoring Endemic Birds and Educating Local People About Their Importance in Loma Alta, Ecuador."

**Bremer, Dale J.**, National Science Foundation, \$48,250, "Nitrous Oxide Fluxes in Turfgrass: Effects of Irrigation and Nitrogen Fertilization Rates."

**Bremer, Dale J.**, **Fry, Jack D.**, and **Rajashekar, Channa B.**, Scotts Company, \$14,000, "Evaluation of Texas Bluegrass for Use in Golf Course Fairways and Roughs."

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

**Carey, Edward E.**, National Science Foundation, \$425, "2004 ASHA Annual Conference - Xin Zhao."

**Carey, Edward E.**, Organic Farming Research Foundation, \$8,000, "Are Organic Vegetables More Nutritious?—Fresh and Postharvest Assessment of Nutritional Quality of Organically—and Conventionally-Grown Lettuce and Other Salad Greens."

**Carey, Edward E.**, US Department of Agriculture, \$100,246, "Growing Growers for Greater Kansas City: Improving Skills for Sustainable Local Food Production and Marketing."

**Carey, Edward E.**, US Department of Agriculture, \$10,000, "Laboratory, Field and Farm-Based Assessment of Compost and Compost Teas for Vegetable Crop Health—Chandrappa Gangaiah."

**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, \$64,250, "Turfgrass Investigations."

**Fry, Jack D.**, **Fagerness, Matthew J.**, and **Keeley, Steven J.**, National Turfgrass Federation, \$23,800, "Turfgrass Testing."

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

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

**Griffin, Jason**, Landscape Plant Development Center, \$1,000, "Identification of Stress Tolerant Rootstocks for the Southern Great Plains."

**Griffin, Jason**, Landscape Plant Development Center, \$1,000, "Stress Tolerant Sugar Maples as Rootstocks for the Southern Great Plains."

**Griffin, Jason**, and **Khatamian, Houchang**, Multisponsor, \$3,000, "Evaluation of Species and Cultivars for the Great Plains."

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

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

**Khatamian, Houchang**, (see **Griffin, Jason**, Horticulture, Forestry and Recreation Resources).

**Rajashekar, Channa B.**, (see **Bremer, Dale J.**, Horticulture, Forestry and Recreation Resources).

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

**Reid, William R.**, University of Missouri, \$7,500, "Missouri Pecan Growers."

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

**Upham, Ward S.**, (see **Ricketts, Mitchell S.**, Agricultural Experiment Station).

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

**Beckman, Jana J.**, (see **Buchholz, Daryl D.**, Agriculture and Natural Resources).

**Hargrove, William L.**, US Department of the Interior, \$313,148 (includes \$136,390 from University of Kansas), "Kansas Water Resources Research Institute."

**Hargrove, William L.**, US Environmental Protection Agency, \$95,985 (includes \$26,759 from Sedgwick County Extension Council), "E.A.R.T.H. Part 3: Program Expansion Project."

**Hargrove, William L.**, **Aiken, Robert M.** (Northwest Research Extension Center), **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), **Schlegel, Alan J.** (Southwest Research Extension Center), **Steward, David R.** (Civil Engineering), and **Stone, Loyd R.** (Agronomy), US Department of Agriculture, \$386,980, "Sustaining Rural Economies through New Water Management Technologies—KSU."

**Hargrove, William L.**, and **Kahl, Daniel W.** (Extension Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$5,500, "Healthy Ecosystems—Healthy Communities: Building Community Water Quality Leadership."

**Hargrove, William L.**, (see **Ham, Jay M.**, Agronomy).

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

**Hargrove, William L.**, (see **Mankin, Kyle R.**, Biological and Agricultural Engineering).

## **NORTHWEST RESEARCH EXTENSION CENTER**

**Aiken, Robert M.**, Multisponsor, \$38,000, "Sunflower Investigations."

**Aiken, Robert M.**, National Sunflower Association, \$2,000, "Identifying Sunflower Resistance to Stem Weevil and Sunflower Moth."

**Aiken, Robert M.**, US Department of Energy, \$3,000, "Field Evaluation of Cool Season Oilseeds for Biodiesel Feasibility Analysis."

**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).

**Coyne, Patrick J.**, Multisponsor, \$2,425, "Sunflower Performance Testing Program."

**Lamm, Freddie R.**, **Aiken, Robert M.**, and **O'Brien, Daniel M.** (Northwest Area Office), Kansas Corn Commission, \$12,000, "Reducing Irrigation Water Needs with High Frequency, Limited Subsurface Drip Irrigation."

**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, \$139,302, "Water Conservation—Increased Efficiency in Usage."

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

## **PLANT PATHOLOGY**

**Bockus, William W.**, Kansas Crop Improvement Association, \$4,000, "Incorporation of Barley Yellow Dwarf Resistance into Wheat Germplasm Adapted to Kansas."

**Bockus, William W.**, Kansas Wheat Commission, \$25,500, "Development of Barley Yellow Dwarf-Resistant Wheat Cultivars for Kansas."

**Bockus, William W.**, Multisponsor, \$3,830, "Seed Treatment."

**Bockus, William W.**, US Department of Agriculture, \$24,443, "Development of Scab Resistant Wheat Cultivars for Kansas."

**Bockus, William W.**, US Department of Agriculture, \$55,360, "Marker-Assisted Characterization and Selection of Wheat Cultivars for Scab Resistance."

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

**Bowden, Robert L.**, Multisponsor, \$2,000, "Winter Wheat Seed Treatment Tests."

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

**Claflin, Larry E.**, US Agency for International Development, \$64,350, "Agroecology and Biotechnology of Fungal Pathogens of Sorghum and Millet."

**Claflin, Larry E.**, (see **Tuinstra, Mitchell R.**, Agronomy).

**Garrett, Karen A.**, Smithsonian Institution, \$7,000, "Invasibility of Tropical Forests by Pathogens."

**Gill, Bikram S.**, (see **Wallentine, Virgil E.**, Computing and Information Sciences).

**Gill, Bikram S.**, Kansas Wheat Commission, \$90,000, "Wheat Genetics Resource Center and Its Contribution to the Kansas Wheat Industry."

**Gill, Bikram S.**, McKnight Foundation, \$19,580, "Better Understanding and Further Utilization of Genes for Wheat Scab Resistance (China)."

**Gill, Bikram S.**, National Science Foundation, \$215,654, "Assessment of the Insular Organization of the Wheat D Genome by Physical Mapping."

**Gill, Bikram S.**, National Science Foundation, \$64,501, "Haplotype Polymorphism in Polyploid Wheats and Their Diploid Ancestors."

**Gill, Bikram S.**, National Science Foundation, \$20,000, "Workshop on Wheat Genome Sequencing."

**Gill, Bikram S.**, US Department of Agriculture, \$466,199, "Wheat Genetics Resource Center at Kansas State University."

**Gill, Bikram S.**, US Department of Agriculture, \$20,000, "Workshop on Wheat Genome Sequencing, November 2003."



**Gill, Bikram S.**, and **Nelson, James**, National Science Foundation, \$168,950, "VCA Dealing in the Wheat Genome: Development and Application of Large-Scale Reverse Genetic Tools for Crop Plants."

**Gill, Bikram S.**, (see **Fritz, Allan K.**, Agronomy).

**Hei, Leung**, (see **Leach, Jan E.**, Plant Pathology).

**Hulbert, Scot H.**, Kansas State University Foundation, \$6,496, "Non-Conventional Plant Improvement Technology."

**Hulbert, Scot H.**, US Department of Agriculture, \$44,000, "Molecular Characterization of Rearrangement and Recombination Hot Spots in Maize, Sorghum and Pearl Millet."

**Hulbert, Scot H.**, and **Zeigler, Robert S.**, US Department of Agriculture, \$80,925, "Facilitate Multiple Stress Resistant Wheat and Alfalfa Germplasm."

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

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

**Hulbert, Scot H.**, (see **Sun, X. Susan**, Grain Science and Industry).

**Hulbert, Scot H.**, and **Zeigler, Robert S.**, US Agency for International Development, \$950,000, "Cereals Comparative Genomics Initiative Grants Program."

**Jardine, Douglas J.**, Multisponsor, \$10,125, "Soybean Foliar Fungicide and Seed Treatment Tests."

**Jardine, Douglas J.**, United Soybean Board, \$11,813, "Limiting Losses to Phytophthora sojae in the North Central Region."

**Jardine, Douglas J.**, US Department of Agriculture, \$5,000, "Managing Frogeye Leaf Spot and Charcoal Rot in the North Central Region."

**Leach, Jan E.**, US Agency for International Development, \$80,000, "Validating Functions of Candidate Defense Genes for Broad-Spectrum Disease Resistance."

**Leach, Jan E.**, **Hei, Leung**, and **Hulbert, Scot H.**, US Department of Agriculture, \$300,000, "Contribution of Three Defense Response Genes in Quantitative Disease Resistance."

**Leach, Jan E.**, (see **Wallentine, Virgil E.**, Computing and Information Sciences).

**Leslie, John F.**, American Society for Microbiology, \$21,129, "Editor Position for Applied and Environmental Microbiology."

**Leslie, John F.**, Multisponsor, \$919, "Fusarium Research."

**Leslie, John F.**, US Agency for International Development, \$91,000, "Agroecology and Biotechnology of Fungal Pathogens of Sorghum and Millet."

**Leslie, John F.**, US Agency for International Development, \$36,280, "Diversity in Fusarium Species Causing Stalk and Ear Rot of Maize and Sorghum in West Africa."

**Leslie, John F.**, and **Bowden, Robert L.**, US Department of Agriculture, \$42,900, "Diversity of North and South American and Korean Populations of *Gibberella zeae*."

**Leslie, John F.**, and **Bowden, Robert L.**, US Department of Agriculture, \$48,293, "Genetic Mapping of Aggressiveness and Fertility Barriers in *Gibberella zeae*."

**Nelson, James**, (see **Gill, Bikram S.**, Plant Pathology).

**Singh, Sukhwinder**, and **Hulbert, Scot H.**, Kansas Wheat Commission, \$16,500, "Developing DNA Markers for Breeding Karnal Bunt Resistant Bread Wheat."

**Stack, James P.**, US Department of Agriculture, \$746,296, "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.**, US Department of Agriculture, \$163,333, "Plant Diagnostic Laboratories for Plant Disease and Pest Diagnosis and Surveillance."

**Stack, James P.**, US Department of Agriculture, \$119,500, "Regional Plant Diagnostic Laboratory."

**Stack, James P.**, (see **Staggenborg, Scott A.**, Northeast Area Office).

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

**Tang, Xiaoyan**, National Science Foundation, \$163,000, "Functional Genomics of the Interactions of Tomato and *Pseudomonas syringae* pv tomato DC3000."

**Tang, Xiaoyan**, and **Stewart, George C.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$169,077, "Structural Approaches for Control of Microbial Pathogens."

**Tang, Xiaoyan**, and **White, Frank F.**, US Department of Agriculture, \$180,000, "Characterization of a Protein Phosphatase Type III Bacterial Effector from *Xanthomonas*."

**Tisserat, Ned A.**, Multisponsor, \$8,250, "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.**, (see **Buschman, Larry L.**, Entomology).

**Trick, Harold N.**, **Muthukrishnan, Subbarat** (Biochemistry), **Schapaugh, Jr., William T.** (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$56,369, "Enhancement of Soybean Through Genetic Engineering."

**Trick, Harold N.**, **Fritz, Allan K.** (Agronomy), and **Muthukrishnan, Subbarat** (Biochemistry), Kansas Wheat Commission, \$40,500, "Wheat Improvement Through Genetic Engineering."

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

**White, Frank F.**, (see **Tang, Xiaoyan**, Plant Pathology).

**Zeigler, Robert S.**, US Agency for International Development, \$15,000, "Development of a Microsatellite Framework Map for Marker Assisted Selection for the Control and Management of Abiotic and Biotic Stresses in Rice."

**Zeigler, Robert S.**, and **Stack, James P.**, US Department of Agriculture, \$91,333, "Plant Diagnostic Laboratories for Plant Disease and Pest Diagnosis and Surveillance."

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

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

**Zhou, Jianmin**, US Department of Agriculture, \$220,000, "Innate Immunity in Arabidopsis."

## **SOUTHEAST AGRICULTURAL RESEARCH CENTER**

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

**Moyer, Joseph L.**, Multisponsor, \$3,750, "Southeast Kansas Crop Performance Testing Program."

**Sweeney, Daniel W.**, (see **Gordon, Walter B.**, Agronomy).

## **SOUTHWEST RESEARCH EXTENSION CENTER**

**Currie, Randall S.**, Multisponsor, \$13,000, "Weed Control Research in Southwest Kansas."

**Klocke, Norman L.**, and **Dumler, Troy** (Southwest Area Office), Kansas Soybean Commission, \$9,050, "Water Savings from Crop Residues in Irrigated Soybeans."

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).

**Klocke, Norman L.**, (see **Willson, Thomas C.**, Extension Southwest Research Extension Center).

**Schlegel, Alan J.**, Multisponsor, \$8,000, "Soil Fertility and Soil Management Research for Western Kansas."

**Schlegel, Alan J.**, Multisponsor, \$3,750, "Variety Testing of Alternative Crops."

**Schlegel, Alan J., Dumler, Troy** (Southwest Area Office), and **Stone, Loyd R.** (Agronomy), Kansas Corn Commission, \$12,000, "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 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 **Leikam, Dale F.**, Agronomy).

**Schlegel, Alan J.**, (see **Staggenborg, Scott A.**, Northeast Area Office).

**Schlegel, Alan J.**, (see **Willson, Thomas C.**, Extension Southwest Research Extension Center).

**Willson, Thomas C.**, US Environmental Protection Agency, \$41,866, "Fecal Coliform in Southwest Kansas."

**Witt, Merle D.**, Multisponsor, \$5,500, "Yield Appraisal of Crops for Southwestern Kansas."

## COLLEGE OF ARCHITECTURE, PLANNING, AND DESIGN

### ARCHITECTURE

**Simon, Madlen**, Kansas City Design Center, \$1,500, "Architectural Design Studio 7/8."

**Simon, Madlen**, National Foundation on the Arts and the Humanities, \$5,889, "2004 Centennial Year Celebration of the KSU Department of Architecture."

### LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING

**Bernard, Eric A.**, (see **Steward, David R.**, Civil Engineering).

**Day, Dennis J.**, Prairie Band of Potawatomi Indians, \$4,900, "Mixed Use Residential Plan."

**Lawhon, Larry L.**, US Department of Housing and Urban Development, \$126,500, "Community Development Work Study Program 2003-2005."

**Page, Robert L.**, City of Marysville, Kansas, \$4,000, "Master Plan for Lion's Park, Marysville, Kansas."

**Smith, Sheri L.**, City of La Vista, Nebraska, \$300, "Infrastructure Planning and Development Review for the City of LaVista, Nebraska."

## COLLEGE OF ARTS AND SCIENCES

### BIOCHEMISTRY

**Davis, Lawrence C., Erickson, Larry E.** (Chemical Engineering), and **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), Kansas Department of Health and Environment, \$99,180, "Bioaugmentation Field Demonstration for Reductive Dechlorination of Drycleaning Solvent Contaminants Utilizing Desulfuromonas and Dehalococcoides Organisms."

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

**Kanost, Michael R.**, US Department of Agriculture, \$10,000, "Characterization of Protein Interactions that Occur During Initiation of the Immune Response in Insects."

**Kanost, Michael R.**, US Department of Health and Human Services, \$109,000, "Adhesion Receptors of the Insect Immune System."

**Kanost, Michael R.**, US Department of Health and Human Services, \$65,134, "Pilot Studies in Biochemistry of Anopheles Gambiae."

**Kanost, Michael R.**, US Department of Health and Human Services, \$288,090, "Proteinase Systems in Insect Hemolymph."

**Kanost, Michael R.**, US Department of Health and Human Services, \$75,000, "Startup Support for Dr. Qize Wei."

**Kanost, Michael R.**, and **Kramer, Karl J.**, National Science Foundation, \$230,000, "Protein Cross-Linking Reactions for Insect Cuticle Sclerotization."

**Kanost, Michael R.**, (see **Muthukrishnan, Subbarat**, Biochemistry).

**Kanost, Michael R.**, (see **Zolkiewska, Anna**, Biochemistry).

**Kanost, Michael R.**, (see **Zolkiewski, Michal**, Biochemistry).

**Kramer, Karl J.**, (see **Muthukrishnan, Subbarat**, Biochemistry).

**Kramer, Karl J.**, (see **Kanost, Michael R.**, Biochemistry).

**Muthukrishnan, Subbarat, Beeman, Richard W.** (Entomology), **Kanost, Michael R.**, and **Kramer, Karl J.**, National Science Foundation, \$253,292, "Molecular Genetic and Functional Analysis of Chitin Synthase during Insect Development."

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

**Takemoto, Dolores J.**, US Department of Health and Human Services, \$328,500, "Protein Kinase C Gamma in the Lens."

**Tomich, John M.**, (see **Sun, X. Susan**, Grain Science and Industry).

**Wang, Xuemin, Rintoul, David A.** (Biology), **Shad, Jyoti** (Biology), **Sun, X. Susan** (Grain Science and Industry), and **Welti, Ruth** (Biology), National Science Foundation, \$288,731, "Establishment of the Lipidomics Research Center at Kansas State University."

**Wang, Xuemin, Shad, Jyoti** (Biology), and **Welti, Ruth** (Biology), National Science Foundation, \$14,985, "Metabolomic Profiling of Membrane Lipids and Their Compositional Dynamics in Plant Stress Responses."

**Wang, Xuemin**, (see **Wallentine, Virgil E.**, Computing and Information Sciences).

**Zolkiewska, Anna**, US Department of Health and Human Services, \$219,000, "Molecular Analysis of Metalloprotease Disintegrin ADAM12."

**Zolkiewska, Anna, Kanost, Michael R.**, and **Zolkiewski, Michal**, US Department of Health and Human Services, \$181,875, "Protein Structure and Function."

**Zolkiewski, Michal**, and **Kanost, Michael R.**, US Department of Health and Human Services, \$13,537, "Protein Structure and Function."

**Zolkiewski, Michal**, (see **Zolkiewska, Anna**, Biochemistry).

## BIOLOGY

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

**Asano, Katsura**, US Department of Health and Human Services, \$36,500, "Control of Translation Initiation in Fission Yeast."

**Asano, Katsura**, US Department of Health and Human Services, \$213,885, "Studies on Start Codon Selection by Eukaryotic Ribosomes."

**Blair, John M.**, National Science Foundation, \$913,160, "Konza Prairie LTER V: Long-Term Research on Grassland Dynamics and Global Change."

**Blair, John M.**, and **Knapp, Alan K.**, US Department of Energy, \$131,468, "Belowground Responses to Multiple Climate Change Factors: Interactive Effects of Warming and More Extreme Precipitation Patterns on Grassland Ecosystems."

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

**Blair, John M.**, (see **Knapp, Alan K.**, Biology).

**Brown, Susan J.**, US Department of Health and Human Services, \$140,469, "Kansas Biomedical Research Infrastructure Network (K-BRIN)."

**Brown, Susan J.**, **Beeman, Richard W.** (Entomology), and **Denell, Robin E.**, US Department of Agriculture, \$1,000,000, "Insertional Mutagenesis of a Coleopteran Stored Grain Pest, The Red Flour Beetle *Tribolium castaneum*."

**Brown, Susan J.**, **Beeman, Richard W.** (Entomology), and **Denell, Robin E.**, US Department of Health and Human Services, \$290,543, "Genetic Control of Segmentation."

**Brown, Susan J.**, (see **Denell, Robin E.**, Biology).

**Brown, Susan J.**, (see **Wallentine, Virgil E.**, Computing and Information Sciences).

**Chapes, Stephen K.**, US Department of Health and Human Services, \$12,375, "Common Equipment Request for K-BRIN Mentors at Kansas State University."

**Chapes, Stephen K.**, US Department of Health and Human Services, \$350,436, "Kansas Biomedical Research Infrastructure Network."

**Chapes, Stephen K.**, US Department of Health and Human Services, \$12,500, "Kansas Biomedical Research Infrastructure Network—Jessica Morton."

**Chapes, Stephen K.**, US Department of Health and Human Services, \$25,000, "Kansas Biomedical Research Infrastructure Network—Star Trainee Program."

**Chapes, Stephen K.**, US Department of Health and Human Services, \$10,150, "Kansas Biomedical Research Infrastructure Network—Summer/Semester Scholarships."

**Chapes, Stephen K.**, **Clem, Rollie J.**, and **Passarelli, A. Lorena**, US Department of Health and Human Services, \$254,625, "Analysis of CD81-PGRL Complex on T Cells."

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

**Chapes, Stephen K.**, (see **Uhlarik, John J.**, Psychology).

**Clem, Rollie J.**, US Department of Health and Human Services, \$10,000, "K-BRIN Faculty Scholar Award."

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

**Conrad, Gary W.**, US Department of Health and Human Services, \$365,000, "Fibroblast Differentiation During Eye Development."

**Conrad, Gary W.**, and **Tasheva, Elena S.**, US Department of Health and Human Services, \$253,715, "Transcriptional Regulation of Keratocan and Mimecan."

**Cully, Jr., Jack F.**, Kansas Department of Wildlife and Parks, \$3,200, "Mapping Black-Tailed Prairie Dog Colonies at the Cimarron National Grassland."

**Cully, Jr., Jack F.**, National Science Foundation, \$51,271, "Landscape Effects on Disease Dynamics in Prairie Dogs."

**Cully, Jr., Jack F.**, US Department of Agriculture, \$5,000, "Active Black-Tailed Prairie Dog Towns on the Kiowa and Rita Blanca National Grasslands."

**Cully, Jr., Jack F.**, US Department of Agriculture, \$9,100, "Challenge Cost-Share Agreement."

**Cully, Jr., Jack F.**, US Department of the Interior, \$66,000, "Metapopulation Ecology of the Black-Tailed Prairie Dog: A Keystone Species of Badlands National Park."

**Cully, Jr., Jack F.**, US Environmental Protection Agency, \$33,660, "Habitat Alteration and Disease Effects of Black-Tailed Prairie Dogs."

**Denell, Robin E.**, **Beeman, Richard W.** (Entomology), **Brown, Susan J.**, and **Shippy, Teresa D.**, National Science Foundation, \$459,105, "Evolution of Genetic Mechanisms Controlling Developmental Fate."

**Denell, Robin E.**, (see **Brown, Susan J.**, Biology).

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

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

**Ferguson, Carolyn J.**, (see **Bolton, Timothy A.**, Physics).

**Gido, Keith B.**, Kansas Department of Wildlife and Parks, \$9,552, "Effects of Water Willow on Age-0 Centrarchids in Kansas."

**Gido, Keith B.**, US Department of the Interior, \$41,000, "Kansas State University's Involvement in the San Juan River Recovery Implementation Program."

**Gido, Keith B.**, US Department of the Interior, \$149,481, "Using GIS to Build Models that Predict Rare Species Occurrences in Kansas Streams."

**Gido, Keith B.**, and **Dodds, Walter K.**, US Department of the Interior, \$95,373, "Development of Aquatic GAP Analysis for Kansas."

**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.**, Rocky Mountain Elk Foundation, \$42,500, "Fort Riley Elk Study."

**Gipson, Philip S.**, US Department of the Interior, \$115,575, "Responses of Northern Bobwhite to Landscape Scale Habitat Improvements."

**Gipson, Philip S.**, US Department of the Interior, \$48,452, "Tracking Real-Time Wildlife Responses to Military Mission Related Activities."

**Gipson, Philip S.**, **Althoff, Donald P.**, and **Pontius, Jeffrey S.** (Statistics), US Department of the Interior, \$258,071, "Land Condition Trend Analysis on Fort Riley."

**Gipson, Philip S.**, (see **Thien, Stephen J.**, Agronomy).

**Hartnett, David C.**, and **Wilson, Gail T.**, National Science Foundation, \$7,000, "Belowground Meristem Populations as Regulators of Grassland Dynamics."

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

**Herman, Michael A.**, National Science Foundation, \$800, "Faculty Travel Award to Attend the IGERT Assistance Workshop."

**Herman, Michael A.**, US Department of Health and Human Services, \$259,853, "Control of Cell Polarity in *C. elegans*."



**Herman, Michael A.**, US Department of Health and Human Services, \$15,000, "Kansas Biomedical Research Infrastructure Network Faculty Scholar Award."

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

**Hirt, Helmut**, US Department of Health and Human Services, \$70,475, "Enterococcus Faecalis Protein EbsG and LTA Function."

**Johnson, Loretta C.**, National Science Foundation, \$111,297, "Developing Process-Level Understanding of Controls on Belowground Carbon and Nutrient Dynamics in Tundra Ecosystems."

**Johnson, Loretta C.**, National Science Foundation, \$800, "Faculty Travel Award to Attend the IGERT Assistance Workshop."

**Johnson, Loretta C., Blair, John M., Herman, Michael A., and Shah, Jyoti**, National Science Foundation, \$707,800, "Functional Genomic Approaches to Study Organismal Response to Global Environmental Change."

**Johnson, Loretta C., and Blair, John M.**, National Aeronautics and Space Administration, \$189,316, "Scaling Up the Ecosystem Consequences of Forest Expansion in the Great Plains Region."

**Johnson, Terry C.**, Kansas State University Foundation, \$89,694, "Cancer Center Core."

**Jumpponen, Ari M.**, National Science Foundation, \$268,838, "Fungal Significance of 'Dark Septate' Endophytes in Grassland and Meadow Ecosystems of Western North America."

**Knapp, Alan K., and Blair, John M.**, US Department of Agriculture, \$300,000, "Ecosystem Responses to Experimental Warming and More Extreme Precipitation Patterns."

**Knapp, Alan K.**, (see **Blair, John M.**, Biology).

**Knapp, Alan K.**, (see **Owensby, Clenton E.**, Agronomy).

**Marchin, George L.**, (see **Mankin, Kyle R.**, Biological and Agricultural Engineering).

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

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

**Passarelli, A., Lorena**, US Department of Health and Human Services, \$188,277, "Purification and Crystal Structure of a Novel Baculovirus RNA Polymerase Subunit."

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

**Perchellet, Jean-Pierre H.**, US Department of Health and Human Services, \$29,100, "125-I-SDF-1a Competition Binding Essay."

**Perchellet, Jean-Pierre H.**, US Department of Health and Human Services, \$13,267, "High Throughput Screening and Target Identification."

**Perchellet, Jean-Pierre H., and Hua, Duy H.** (Chemistry), US Department of Health and Human Services, \$196,425, "Triptycene Analogs: Novel Bifunctional Anticancer Drugs."

**Rintoul, David A.**, (see **Wang, Xuemin**, Biochemistry).

**Sandercock, Brett K.**, National Science Foundation, \$477, "Graduate Student Travel Award—Jacqueline Kay Nooker."

**Sandercock, Brett K.**, National Science Foundation, \$491, "Tenth Annual Conference of the Wildlife Society—Tony Mong."

**Sandercock, Brett K.**, National Science Foundation, \$477, "Travel to the American Ornithologists' Union 123rd Stated Meeting—Karl Kosciuch."

**Shah, Jyoti**, US Department of Agriculture, \$62,269, "Enhancing Resistance to Scab in Wheat by Overexpressing the Wheat and Arabidopsis NPR1 Gene."

**Shah, Jyoti**, US Department of Health and Human Services, \$36,500, "Lipid Compositional Changes in Host Defense."

**Shah, Jyoti, Reese, John C.** (Entomology), and **Welti, Ruth**, US Department of Agriculture, \$378,679, "Arabidopsis-Green Peach Aphid Interaction."

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

**Shah, Jyoti**, (see **Wang, Xuemin**, Biochemistry).

**Shippy, Teresa D.**, (see **Denell, Robin E.**, Biology).

**Smith, Ann S.**, (see **Shroyer, Margaret G.**, Elementary Education).

**Spooner, Brian S.**, National Aeronautics and Space Administration, \$150,000, "BioServe Space Technologies: A NASA Center for the Commercial Development of Space."

**Spooner, Brian S.**, US Department of Health and Human Services, \$127,020, "Recruitment Enhancement Package for Physiology/Cell Physiology."

**Takemoto, Larry J.**, Fight for Sight, Inc., \$16,000, "Mechanism of Internalization of Albumin and Determination of the Protein Function in the Lens—Judith Regine Sabah."

**Takemoto, Larry J.**, US Department of Health and Human Services, \$327,375, "Lens Membrane in Relation to Human Cataractogenesis."

**Tasheva, Elena S.**, (see **Conrad, Gary W.**, Biology).

**Upton, Steve J.**, US Department of Health and Human Services, \$30,920, "Polyamine Metabolism of Cryptosporidia: Rational Therapy."

**Upton, Steve J., and Woods, Keith M.**, US Department of Health and Human Services, \$181,875, "In vitro Refinements for Cryptosporidium parvum."

**Welti, Ruth**, US Department of Health and Human Services, \$25,575, "Core Facility Support for the Kansas Lipodomics Research Center Analytical Laboratory."

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

**Welti, Ruth**, (see **Wang, Xuemin**, Biochemistry).

**Wilson, Gail T., and Hartnett, David C.**, National Science Foundation, \$58,993, "Testing a Unified Hypothesis of Mycorrhizal Function."

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

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

**With, Kimberly A.**, US Department of Agriculture, \$350,000, "Regional Assessment of Population Viability for Grassland Birds in Agricultural Grasslands."

**Woods, Keith M.**, (see **Upton, Steve J.**, Biology).

## CHEMISTRY

**Aakeroy, Christer B.**, National Science Foundation, \$269,000, "Developing Supramolecular Synthesis: From Molecular Function to Supramolecular Assembly."

**Aakeroy, Christer B.**, National Science Foundation, \$449, "Graduate Student Travel Award—Nate Schultheiss."

**Collinson, Maryanne M.**, National Science Foundation, \$5,870, "Preparation and Characterization of Templated Sol-Gel Derived Materials."

**Collinson, Maryanne M.**, (see **Higgins, Daniel A.**, Chemistry).

**Culbertson, Christopher T.**, National Aeronautics and Space Administration, \$30,000, "Biosentinels: Biology-Based Microfluidic Reporter Technology for Monitoring Environmental Stressors."

**Culbertson, Christopher T.**, US Department of Energy, \$75,000, "Development of a Microfluidics Package for A KC-135 Flight at NASA JSC."

**Culbertson, Christopher T.**, US Department of Health and Human Services, \$50,000, "NIH-Approved Bioengineering Research."

**Higgins, Daniel A.**, and **Collinson, Maryanne M.**, National Science Foundation, \$207,000, "Single Molecule Spectroscopy Studies of the Nanoscale Properties of Microporous/Mesoporous Silicate Films Prepared by the Sol-Gel Process."

**Hollingsworth, Mark D.**, National Aeronautics and Space Administration, \$45,000, "Crystal Growth of New Families of Ferroelastic Materials."

**Hua, Duy H.**, American Chemical Society, \$80,000, "Synthesis, Self Assembly, and Application of Beltenes and Cyclacenes."

**Hua, Duy H.**, US Department of Defense, \$2,495, "Evaluations of New Anti-Ebola Compounds for Walter Reed Army Institute of Research."

**Hua, Duy H.**, US Department of Health and Human Services, \$36,500, "Amelioration of Amyloid-Beta Neuronal Toxicity."

**Hua, Duy H.**, (see **Perchellet, Jean-Pierre H.**, Biology).

**Hua, Duy H.**, (see **Sun, X. Susan**, Grain Science and Industry).

**Klabunde, Kenneth J.**, National Science Foundation, \$37,116, "Size and Shape of Small Crystals Affect Surface Chemistry and Consolidation. Rational Synthetic Methods."

**Klabunde, Kenneth J.**, **Eckels, Steven J.** (Institute for Environmental Research), and **Sorensen, Christopher M.** (Physics), Kansas State University, \$250,000, "Nanoparticle Sciences and Environmental Technology."

**Klabunde, Kenneth J.**, and **Sorensen, Christopher M.** (Physics), National Aeronautics and Space Administration, \$36,000, "Nanocrystal Superlattices: Synthesis and Properties."

**Levy, Christopher J.**, National Science Foundation, \$500,000, "Helical Catalysts for Asymmetric Oxidations."

**Maatta, Eric A.**, US Department of Energy, \$112,000, "New Vistas for Functionalized Polyoxometalates."

**Sherwood, Peter M.**, Kansas Technology Enterprise Corporation, \$1,000, "DoD Workshop on Research Grant Proposal Preparation."

**Sherwood, Peter M.**, Kansas Technology Enterprise Corporation, \$750,000, "Kansas Defense 2010 Program."

**Sherwood, Peter M.**, National Science Foundation, \$120,000, "Corrosion and Oxide-Free Surfaces Probed by Surface Analysis."

**Sherwood, Peter M.**, US Department of Defense, \$5,446, "DoD Workshop on Research Grant Proposal Preparation."

**Smith, Paul E.**, US Department of Health and Human Services, \$10,000, "K-BRIN Faculty Scholar Award."

## OFFICE OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

**Spears, Jacqueline D.**, (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

**Watt, Susan D.**, US Department of Health and Human Services, \$6,000, "Health Careers Pathways Program."

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

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

## ECONOMICS

**Nafziger, Wayne**, and **Saleh, Basel A.**, University of Leicester, \$38,000, "Macroeconomic Impact of Political Violence in Israel and Egypt—Fellowship Grant."

**Ragan, Jr., James F.**, Multisponsor, \$2,562, "Roe R. Cross Chair of Economics."

**Saleh, Basel A.**, (see **Nafziger, Wayne**, Economics).

**Turner, Tracy M.**, and **Tsoodle, Leah J.** (Agricultural Economics), US Department of Housing and Urban Development, \$15,000, "Impact of Preferential Assessment on Housing Affordability."

## GEOGRAPHY

**Goodin, Douglas G.**, US Department of Agriculture, \$54,922, "Assessing Inter-Annual Variation in Forage Production: Integrating Climatic Analysis Remote Sensing, and Ecological Forecasting for Risk Assessment and Management."

**Goodin, Douglas G.**, **Harrington, Jr., John A.**, and **Hutchinson, J. M. Shawn**, National Aeronautics and Space Administration, \$292,709, "HYSPIRE: Hyper-Resolution Remote Sensing of Kansas Rural Environments."

**Goodin, Douglas G.**, and **Hutchinson, J. M. Shawn**, US Department of Health and Human Services, \$102,297, "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 **Uhlarik, John J.**, Psychology).

**Harrington, Jr., John A.**, US Department of Energy, \$23,934, "Predicted Global Change on Livestock Reproduction and Performance."

**Harrington, Jr., John A.**, **Goodin, Douglas G.**, **Harrington, Lisa M.**, **Lu, Max**, and **White, Stephen E.** (Dean of Arts and Sciences), National Science Foundation, \$77,114, "Infrastructure to Develop a Human-Environment Regional Observatory Network." (2 awards)

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

**Harrington, Jr., John A.**, (see **Unger, Elizabeth A.**, Computing and Network Services).

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

**Hutchinson, J. M. Shawn**, US Department of the Interior, \$61,533, "Cooperative Agreement between the U.S. Department of the Interior, National Park Service and Kansas State University."

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

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

**Hutchinson, J. M. Shawn**, (see **Unger, Elizabeth A.**, Computing and Network Services).

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

## GEOLOGY

**Cullers, Robert L.**, Kansas Geological Survey, \$5,000, "Geochemistry of Kansas Lamproites and Kimberlites."

**Hubbard, Mary S.**, (see **Uhlarik, John J.**, Psychology).

**Nicolaysen, Kirsten E.**, National Science Foundation, \$53,811, "Do Sediment Melts Contribute to the Lavas of Yunaska Island, Aleutian Arc, Alaska?"

**Oviatt, Charles G.**, US Department of the Interior, \$10,000, "Preparation of Great Salt Lake Sediment Samples for Particle Size Analysis."

**Oviatt, Charles G.**, (see **Steward, David R.**, Civil Engineering).

## HISTORY

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

**Mrozek, Donald J.**, US Department of Defense, \$141,121, "Distinguished Visiting Professor."

**Mrozek, Donald J.**, and **Mulready-Stone, Kristin**, Council of Graduate Schools, \$5,000, "Proposal to Create a Professional M.A. in Security Studies."

**Mulready-Stone, Kristin**, (see **Mrozek, Donald J.**, History).

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

**Parillo, Mark P.**, Kansas State University Foundation, \$65,000, "Institute for Military History and 20th Century Studies."

**Parillo, Mark P.**, and **Mulready-Stone, Kristin**, Kansas State University, \$150,000, "Enhancing Military History and Security Studies: A Synergistic Plan for Sustained Excellence."

## KINESIOLOGY

**Estabrooks, Paul A.**, and **Bradshaw, Michael H.** (School of Family Studies and Human Services), American Heart Association, Heartland Affiliate, \$120,966, "Developing a Self-Sustaining Physical Activity Program for Under-Served Older Adults."

**Gyurcsik, Nancy C.**, US Department of Health and Human Services, \$11,693, "Data Analysis of Arthritis Program Leader Surveys."

**Gyurcsik, Nancy C.**, and **Brittain, Danielle R.** (Dean of Human Ecology), Lesbian Health Fund, \$3,940, "Barriers to Physical Activity in Healthy Adult Lesbians."

## MATHEMATICS

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

**Korten, Marianne**, and **Moore, Charles N.**, National Science Foundation, \$8,000 (includes \$1,000 from Mathematical Sciences Research Institute), "Prairie Analysis Seminar 2003."

**Lin, Zongzhu**, National Science Foundation, \$39,432, "Connecting Representations of Algebraic Groups, Finite Groups, Lie Algebras, Quantum Groups, and Related Quivers."

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

**Rosenberg, Alexander**, National Science Foundation, \$42,300, "D-modules on Noncommutative Spaces, Noncommutative Local Algebra and Representations, Noncommutative Smooth Spaces."

**Ryabogin, Dmitry**, National Science Foundation, \$32,018, "Fourier Transform and Convex Bodies."

## MUSIC

**Walker, Rodney G.**, Master Teacher, Inc., \$13,896, "Summer Choral Institute."

## PHILOSOPHY

**Glymour, Bruce D.**, (see **Bolton, Timothy A.**, Physics).

## PHYSICS

**Bolton, Timothy A.**, **Ferguson, Carolyn J.** (Biology), and **Glymour, Bruce D.** (Philosophy), Kansas State University, \$150,000, "Center for the Understanding of Origins."

**Bolton, Timothy A.**, **Ratra, Bharat**, **Sidwell, Ronald A.**, **Stanton, Noel R.** and **von Toerne, Eckhard**, US Department of Energy, \$957,413 (includes \$209,627 from University of Kansas), "Kansas Advanced Semiconductor Project (KASP)."

**Bolton, Timothy A.**, **Ratra, Bharat**, **Sidwell, Ronald A.**, **Stanton, Noel R.**, and **von Toerne, Eckhard**, US Department of Energy, \$530,000, "Heavy Quark and Neutrino Physics."

**Bolton, Timothy A.**, **Ratra, Bharat**, **Sidwell, Ronald A.**, **Stanton, Noel R.**, and **von Toerne, Eckhard**, Kansas Technology Enterprise Corporation, \$135,291, "Kansas Advanced Semiconductor Project (KASP)."

**Bolton, Timothy A.**, **Sidwell, Ronald A.**, **Stanton, Noel R.**, and **von Toerne, Eckhard**, National Science Foundation, \$91,564, "Quarknet."

**Bolton, Timothy A.**, **Sidwell, Ronald A.**, **Stanton, Noel R.**, and **von Toerne, Eckhard**, National Science Foundation, \$82,136 "Development of a Silicon Vertex Detector for the Higgs Search at the Tevatron Collider."

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

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

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

**Cocke, Charles L.**, US Department of Energy, \$2,560,000, "Structure and Dynamics of Atoms, Ions, Molecules, and Surfaces."

**Corwin, Kristan L.**, National Science Foundation, \$68,750, "Development of Robust and Portable Frequency Standards Using Stabilized Optical Frequency Combs for Molecular Spectroscopy in Photonic Bandgap Optical Fibers."

**Esry, Brett D.**, National Science Foundation, \$57,670, "Theoretical Investigation of Ultracold Three-Body Collisions."

**Esry, Brett D.**, US Department of Defense, \$100,000, "Theoretical Investigation of Atom Optical Elements."

**Jiang, Hongxing**, and **Lin, Jingyu**, National Science Foundation, \$58,783, "III-Nitride Wide Bandgap Semiconductors for Optical Communications."

**Jiang, Hongxing**, and **Lin, Jingyu**, US Department of Defense, \$325,000, "III-Nitride UV Optoelectronic Devices for Bio-Agents Detection."

**Jiang, Hongxing**, and **Lin, Jingyu**, US Department of Defense, \$200,000, "Wide Bandgap III-Nitride Micro- and Nano-Photonics."

**Jiang, Hongxing**, and **Lin, Jingyu**, US Department of Energy, \$146,502, "Optical and Electrical Properties of III-V Nitride Wide Bandgap Semiconductors."

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

**Law, Bruce M.**, US Department of Energy, \$153,423, "Neutron and X-Ray Reflectometry Study of Surface Critical Phenomena."

**Lin, Jingyu**, and **Jiang, Hongxing**, National Science Foundation, \$167,209, "Nitride Quantum Wells and Photonic Structures—Growth, Optical Studies and Applications."

**Lin, Jingyu**, and **Jiang, Hongxing**, US Department of Defense, \$87,000, "III—Nitrides Growth, Characterization, and Devices for High Power Electronic Device and Deep UV Sensor Applications."

**Lin, Jingyu**, and **Jiang, Hongxing**, US Department of Defense, \$500,000, "Instrumentation for III-Nitride Microphotronics and Electronics Materials and Devices Research."

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

**Rahman, Talat S.**, (see **Sun, X. Susan**, Grain Science and Industry).

**Rahman, Talat S.**, National Science Foundation, \$100,000, "Single Molecule Magnets for Quantum Computing."

**Rahman, Talat S.**, National Science Foundation, \$233,400, "Theoretical Studies of Chemisorption of Metal Surfaces."

**Rahman, Talat S.**, US Civilian Research and Development Foundation, \$13,200, "Kinetics of Diffusion Driven Processes on Metal Surfaces."



**Rahman, Talat S.**, US Department of Energy, \$121,394, "Controlling Structural, Electronic, and Energy Flow Dynamics of Catalytic Processes through Tailored Nanostructures."

**Rahman, Talat S.**, US Department of Energy, \$100,000, "Structure, Vibrational Dynamics, and Thermodynamics of Metal Surfaces."

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

**Rebello, N. Sanjay**, Hewlett-Packard Company, \$7,500, "HP: Technology for Teaching Grant Initiative—2004."

**Rebello, N. Sanjay**, National Science Foundation, \$86,211, "Research on Students' Mental Models, Learning and Transfer as a Guide to Application-Based Curriculum Development and Instruction in Physics."

**Richard, Patrick**, US Department of Energy, \$66,000, "Structure and Dynamics of Atoms, Ions, Molecules, and Surfaces."

**Sidwell, Ronald A.**, **Bolton, Timothy A.** (Physics), **Stanton, Noel R.**, and **von Toerne, Eckhard**, US Department of Energy, \$110,320, "D0 Silicon Microstrip Detector Project."

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

**Sidwell, Ronald A.**, (see **von Toerne, Eckhard**, Physics).

**Sorensen, Christopher M.**, American Chemical Society, \$80,000, "Raman Studies of Hydrophobic Hydration."

**Sorensen, Christopher M.**, National Aeronautics and Space Administration, \$24,000, "Light Scattering by Nonspherical Particles—Matthew Berg."

**Sorensen, Christopher M.**, National Science Foundation, \$7,500, "Aerosol Physics: Optics, Gelation and Turbulent Aggregation."

**Sorensen, Christopher M.**, and **Chakrabarti, Amitabha**, National Aeronautics and Space Administration, \$102,955, "Aggregation in Dense Systems: Crossover from Cluster-Cluster-Aggregation to Percolation."

**Sorensen, Christopher M.**, (see **Klabunde, Kenneth J.**, Chemistry).

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

**Stanton, Noel R.**, (see **Sidwell, Ronald A.**, Physics).

**Stanton, Noel R.**, (see **von Toerne, Eckhard**, Physics).

**Thumm, Uwe**, National Science Foundation, \$45,000, "Quantum Dynamics in Particle Interactions with Complex Surfaces."

**von Toerne, Eckhard**, **Bolton, Timothy A.**, **Sidwell, Ronald A.**, and **Stanton, Noel R.**, US Department of Energy and National Science Foundation, \$23,442, "Compact Muon Solenoid - Sensors."

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

**von Toerne, Eckhard**, (see **Sidwell, Ronald A.**, Physics).

**Zollman, Dean A.**, National Science Foundation, \$302,281, "Modern Miracle Medical Machines: Research-Based Curriculum Enhancements for the Pre-Med Physics Course."

## PSYCHOLOGY

**Brannon, Laura A.**, Society for the Psychological Study of Social Issues, \$1,500, "Modifying Responsible Drinking Attitudes and Behaviors by Matching Messages to Persons."

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

**Slick, Renee**, and **Downey, Ronald G.**, DriveSafety Inc., \$421,403, "Simulation Training and Assessment Research Lab—STAR Lab Project."

**Uhlarik, John J.**, US Department of Transportation, \$10,000, "Aviation Weather Avionics and Usability Assessment."

**Uhlarik, John J.**, **Chapes, Stephen K.** (Biology), **Goodin, Douglas G.** (Geography), and **Hubbard, Mary S.** (Geology), National Aeronautics and Space Administration, \$71,751, "Kansas Space Grant Consortium."

## A. Q. MILLER SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS

**Landholm, Bambi**, (see **Simon, Todd F.**, School of Journalism and Mass Communications).

**Simon, Todd F.**, Kansas State University Foundation, \$2,347, "Huck Boyd National Center for Community Media."

**Simon, Todd F.**, and **Landholm, Bambi**, CampusEAI, \$61,250, "CampusEAI IP Video Grant."

## SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

**Bloomquist, Leonard E.**, and **Maes, Sue C.** (Regents' Educational Communications Center), Council of Graduate Schools, \$5,000, "Master's in Community Development: Model for Collaborative Inter-Institutional Degree."

**Bloomquist, Leonard E.**, (see **Gibbons, Jacque E.**, Sociology, Anthropology, and Social Work).

**Bloomquist, Leonard E.**, (see **Steward, David R.**, Civil Engineering).

**Gibbons, Jacque E.**, and **Bloomquist, Leonard E.**, Annie E. Casey Foundation, \$26,466, "Kansas Self-Sufficiency 2004."

**Logan, Brad R.**, US Department of Defense, \$2,031, "Cultural Resources Survey of a Proposed Borrow Area and Dam Site in the Tuttle Creek Wildlife Area Marshall County, Kansas."

**Logan, Brad R.**, US Department of the Interior, \$35,294 (includes \$1,648 from various volunteers), "National Register of Historic Places Evaluation of the Caenen and Paul Sites, Stranger Creek Valley, Leavenworth County, Kansas."

**Logan, Brad R.**, and **Ritterbush, Lauren W.**, US Department of the Interior, \$24,997, "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).

## STATISTICS

**Pontius, Jeffrey S.**, (see **Gipson, Philip S.**, Biology).

**Yang, Shie-Shien**, (see **Wang, Weiquan**, Human Nutrition).

## COLLEGE OF BUSINESS ADMINISTRATION

### ACCOUNTING

**Vruwink, David R.**, (see **Niehoff, Brian P.**, Management).

### OFFICE OF THE DEAN OF THE COLLEGE OF BUSINESS ADMINISTRATION

**Ebadi, Yar M.**, Kansas State University Foundation, \$264,781, "Kansas State University Foundation Support."

**Katz, Jeffrey P.**, Multisponsor, \$100, "Center for Leadership."

**Katz, Jeffrey P.**, US Department of Education, \$80,000, "Promoting Internationalization in Central Kansas: The Business Education and Student Training Initiative at Kansas State University (PICK-the-BEST-In-Kansas)."

### MANAGEMENT

**Niehoff, Brian P.**, and **Smith, Gregory L.**, Project ACCESS, \$35,000, "Clinics' Patient Index and Future Directions."

**Niehoff, Brian P.**, and **Vruwink, David R.** (Accounting), Multisponsor, \$3,500, "MBA Practicum."

**Smith, Gregory L.**, (see **Niehoff, Brian P.**, Management).

## COLLEGE OF EDUCATION

### OFFICE OF THE DEAN OF THE COLLEGE OF EDUCATION

**Flaherty, Roberta D.**, National Academic Advising Association, \$903,000, "National Academic Advising Association Executive Office."

**Havlicek, Barbara J.**, Kansas Foundation for Agriculture in the Classroom, \$79,936, "Kansas Foundation for Agriculture in the Classroom."

**Havlicek, Barbara J.**, Multisponsor, \$13,170, "Council for Public School Improvement."

**Havlicek, Barbara J.**, Multisponsor, \$66,008, "Educational Computer Assistance."

**Herrera, Socorro G.**, US Department of Education, \$56,609, "Dos Puentes."

**Herrera, Socorro G.**, US Department of Education, \$10,000, "ESL and In-Service Training for USD 500 Teachers."

**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, \$440,000, "Operation ADVANCE (Achieving Values and Accomplishments for Migrant Adults through Networking Community Entities)."

**Herrera, Socorro G.**, US Department of Education, \$55,000, "Project ABC."

**Herrera, Socorro G.**, US Department of Education, \$153,000, "Project Besitos."

**Herrera, Socorro G.**, US Department of Education, \$177,900, "Project COLLABORATE."

**Herrera, Socorro G.**, US Department of Education, \$257,463, "Project Maestra."

**Herrera, Socorro G.**, US Department of Education, \$350,142, "Project Synergy."

**Herrera, Socorro G.**, US Department of Education, \$361,500, "Project Ramos Secundarios."

**Herrera, Socorro G.**, US Department of Education, \$23,916, "Salida Del Sol."

**Herrera, Socorro G.**, US Department of Education, \$55,659, "Supporting Innovative Leaders in Today's Schools."

**Murphy, Kevin G.**, US Department of Education, \$98,163, "Las Estrellas."

**Murphy, Kevin G.**, US Department of Education, \$224,657, "Project Alcance."

**Murphy, Kevin G.**, US Department of Education, \$237,195, "Project Chrysalis."

**Murphy, Kevin G.**, US Department of Education, \$228,200, "Project Dimelo."

**Murphy, Kevin G.**, US Department of Education, \$225,080, "Project New Horizons."

**Rankin, Charles L.**, US Department of Education, \$1,462,942, "Midwest Equity Assistance Center."

**Ross, Tweed R.**, US Department of Education, \$52,735, "Knowledge Development for the Technology Integration Community."

**Spears, Jacqueline D.**, McGrath, Diane (Foundations and Adult Education), and **Thurston, Linda P.**, National Science Foundation, \$316,773, "Seeing Gender: Tools for Change."

**Staver, John R.**, National Science Foundation, \$51,106, "Assessing Science Knowledge (ASK) Project."

**Thurston, Linda P.**, Kansas Board of Regents, \$435,350, "KAN-ED Evaluation–Phase II."

**Thurston, Linda P.**, (see **Spears, Jacqueline D.**, Dean of Education).

## ELEMENTARY EDUCATION

**Bay-Williams, Jennifer M.**, National Science Foundation, \$15,312, "Research and Revision of the TIMS/Math Trailblazers Elementary Mathematics Curriculum."

**Norton-Meier, Lori A.**, (see **Goodson, F. Todd**, Secondary Education).

**Shroyer, Margaret G.**, **Bennett, Andrew G.** (Mathematics), and **Yahnke, Sally J.** (Secondary Education), US Department of Education, \$958,586 (includes \$142,824 from USD 375, Junction City, Kansas; \$89,041 from USD 383, Manhattan, Kansas; \$64,169 from USD 500, Kansas City, Kansas), "Improving Teacher Quality through the Kansas State University Professional Development Schools Partnership."

**Staples, Kimberly A.**, US Department of Education, \$4,904, "Supporting Elementary Teacher Professional Development and Student Success in Science."

## FOUNDATIONS AND ADULT EDUCATION

**Cumaranatunge, Chandima**, Manhattan Public Library, \$2,000, "Manhattan Public Library Website."

**McGrath, Diane**, (see **Spears, Jacqueline D.**, Dean of Education).

**Wright, Emmett L.**, National Science Foundation, \$146,151, "Intergovernmental Personnel Act Assignee Cost Data."

## SECONDARY EDUCATION

**Goodson, F. Todd**, US Department of Education, \$97,175 (includes \$16,175 from USD 292 and USD 320), "Flint Hills Writing Project."

**Kane, Mary R.**, Kansas State Department of Education, \$70,604, "FFA-YF/YFW Organizations."

**Yahnke, Sally J.**, (see **Shroyer, Margaret G.**, Elementary Education).

## SPECIAL EDUCATION

**Zabel, Mary Kay**, US Department of Education, \$40,000, "Continuous Improvement in Special Education Teacher Preparation."

## COLLEGE OF ENGINEERING

### 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.**, and **Chalfant, Mark A.**, Mid-America Manufacturing Technology Center, \$566,284 (includes \$163,284 from Kansas Technology Enterprise Corporation), "Agreement to Operate MAMTC Regional Office."

**Tucker, Jeffrey W.**, Multisponsor, \$233,410, "Advanced Manufacturing Institute - Manufacturing Learning Center."

**Tucker, Jeffrey W.**, US Department of Defense, \$28,600, "Conceptual Design for an Emergency Destruct Press."

**Tucker, Jeffrey W.**, US Department of Defense, \$12,565, "Seat Belt Convincer Build."

**Tucker, Jeffrey W.**, US Department of Defense, \$1,160, "Separator Tool Drawing Detail."

**Tucker, Jeffrey W.**, US Department of Defense, \$5,090, "Solid Modeling of AGT1500 Accessory Gearbox."

**Tucker, Jeffrey W.**, US Department of Transportation, \$10,815, "Seat Belt Convincer Trailer Build."

## **ARCHITECTURAL ENGINEERING AND CONSTRUCTION SCIENCE**

**Stephens, Sutton F.**, Federal Emergency Management Agency, \$45,000, "Evaluating Tornado Refuge Areas Workshop."

## **BIOLOGICAL AND AGRICULTURAL ENGINEERING**

**Barnes, Philip L.**, (see **Mankin, Kyle R.**, Biological and Agricultural Engineering).

**Clark, Gary A.**, US Department of the Interior, \$6,028, "High Plains Aquifer Information Network (HIPLAIN)."

**Clark, Gary A.**, and **Rogers, Danny H.**, Extension Biological and Agricultural Engineering, Kansas Water Office, \$60,000, "Technical Assistant to Water Users: K-State Mobile Irrigation Lab."

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

**Harner III, Joseph P.**, (see **Mankin, Kyle R.**, Biological and Agricultural Engineering).

**Hutchinson, Stacy L.**, and **Hutchinson, J. M. Shawn** (Geography), City of Topeka, Kansas, \$50,000, "Research and Stormwater Best Management Practice Manual Creation and Geographic Information Service Support."

**Hutchinson, Stacy L.**, (see **Davis, Lawrence C.**, Biochemistry).

**Hutchinson, Stacy L.**, (see **Reddi, Lakshmi N.**, Civil Engineering).

**Hutchinson, Stacy L.**, (see **Steichen, James M.**, Center for Hazardous Substance Research).

**Hutchinson, Stacy L.**, (see **Steichen, James M.**, National Institute for Land Management and Training).

**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.** (Extension Biological and Agricultural Engineering), **Murphy, James P.** (Extension Biological and Agricultural Engineering), and **Pickrell, John A.** (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$116,090, "Air Quality: Odor, Dust, and Gaseous Emissions from Concentrated Animal Feeding Operations in the Southern Great Plains."

**Maghirang, Ronaldo G.**, (see **Ham, Jay M.**, Agronomy).

**Mankin, Kyle R.**, National Science Foundation, \$500, "Travel Award—Shilpa Anand."

**Mankin, Kyle R.**, US Environmental Protection Agency, \$120,393, "Performance Evaluation of Wetlands in Northeast Kansas."

**Mankin, Kyle R.**, **Barnes, Philip L.**, **DeRouchey, Joel M.** (Northeast Area Office), **Devlin, Daniel L.** (Agronomy), **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), **Harner III, Joseph P.**, and **Marchin, George L.** (Biology), US Department of Agriculture, \$550,000, "Sources and Abatement of Fecal Bacteria in a High Priority Total Maximum Daily Load Watershed in Northeast Kansas."

**Powell, G. Morgan**, and **Willingham, Judith M.**, Kansas Water Office, \$10,000, "Kansas Water Resources Adult Education."

**Rogers, Danny H.**, (see **Lamm, Freddie R.**, Northwest Research Extension Center).

**Schrock, Mark D.**, National Science Foundation, \$386, "Durability of Pulse Width Modulation (PWM) Valve in Precision Anhydrous Ammonia Application—Ganesh Bora."

**Schrock, Mark D.**, (see **Herrman, Timothy J.**, Grain Science and Industry).

**Slocombe, John W.**, (see **Ricketts, Mitchell S.**, Agricultural Experiment Station).

**Taylor, Randal K.**, (see **Dille, Johanna A.**, Agronomy).

**Wang, Donghai**, National Science Foundation, \$500, "Travel Award for Ying Wang."

**Wang, Donghai**, US Department of Agriculture, \$42,927, "Fermentation Quality of Sorghum."

**Wang, Donghai**, (see **Sun, X. Susan**, Grain Science and Industry).

**Wolf, Robert E.**, (see **Dille, Johanna A.**, Agronomy).

**Zhang, Naiqian**, John Deere Company, \$84,836, "Embedded Systems Development for Sensor Fusion of GPS and Vision."

**Zhang, Naiqian**, National Science Foundation, \$249, "ASAE Annual International Meeting 2003—Kyeong Hwan Lee."

**Zhang, Naiqian**, National Science Foundation, \$398, "Wireless Sensor for Measuring Suspended-Sediment Concentration in Streams—Quentin Stoll."

**Zhang, Naiqian**, US Department of Agriculture, \$53,972, "Development of Calibrations and Procedures for a High Speed Machine Vision Grain Inspection System."

**Zhang, Naiqian**, (see **Dille, Johanna A.**, Agronomy).

**Zhang, Naiqian**, (see **Steichen, James M.**, National Institute for Land Management and Training).

## **CENTER FOR HAZARDOUS SUBSTANCE RESEARCH**

**Erickson, Larry E.**, US Department of Defense, \$30,734, "Fort Riley Cemetery Environmental Assessment."

**Erickson, Larry E.**, and **Guikema, James A.** (Vice Provost for Research and Dean of Graduate School), US Department of Defense, \$3,090,000, "Urban Operations Laboratory Research."

**Erickson, Larry E.**, and **Spears, Jacqueline D.** (Dean of Arts and Sciences), US Agency for International Development, \$137,282 (includes \$8,658 from Civil Society Group, and \$3,624 from Gorno-Altai State University), "Media Relations for Science Reporting and Environmental Advocacy: Facilitating Higher Education Leadership and Administrative Transformation at Gorno-Altai State University."

**Erickson, Larry E.**, (see **Kulakow, Peter A.**, Agronomy).

**Leven, Blase A.**, (see **Reddi, Lakshmi N.**, Civil Engineering).

**Steichen, James M.**, and **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), US Department of Defense, \$24,995, "Modeling Degradation of Unmaintained Military Road Networks."

## **CHEMICAL ENGINEERING**

**Edgar, James H.**, National Science Foundation, \$70,087, "Collaborative Research: Analysis of Defects and Their Causes in Bulk Aluminum Nitride Crystals."

**Edgar, James H.**, National Science Foundation, \$500, "International Workshop on Nitride Semiconductors."

**Edgar, James H.**, US Department of Defense, \$70,000, "Rapid Growth of Bulk Aluminum Nitride Crystals."

**Erickson, Larry E.**, DT Search and Designs, LLC, \$8,686, "Evaluation of Animal Waste Recycling Processes."

**Erickson, Larry E.**, and **Davis, Lawrence C.** (Biochemistry), National Science Foundation, \$28,258, "Recruiting Native Americans into Environmental Science."



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

**Erickson, Larry E.**, (see **Reddi, Lakshmi N.**, Civil Engineering).

**Hohn, Keith L.**, Kansas Technology Enterprise Corporation, \$15,455, "X-Ray Adsorption Studies of Vanadium-Containing Metal Oxide Nanocrystals."

**Hohn, Keith L.**, US Department of Energy, \$70,584, "X-Ray Absorption Studies of Vanadium-Containing Metal Oxide Nanocrystals."

**Schlup, John R.**, US Department of Energy, \$111,000, "Establishment of a Graduate Certificate Program in Biobased Industrial Products."

## CIVIL ENGINEERING

**Bhandari, Alok**, Black and Veatch, \$16,095, "Surfactants and Foaming Potential with Ballasted Flocculation Treatment of Wastewater Study."

**Bhandari, Alok**, (see **Reddi, Lakshmi N.**, Civil Engineering).

**Bhandari, Alok**, (see **Starrett, Steven K.**, Civil Engineering).

**Dissanayake, Sunanda**, US Department of Transportation, \$30,000, "Identification of Countermeasures to Reduce Severity of Rural Highway Crashes."

**Dissanayake, Sunanda**, (see **Hossain, Mustaque A.**, Civil Engineering).

**Dissanayake, Sunanda**, (see **Landman, E. Dean**, Civil Engineering).

**Dissanayake, Sunanda**, (see **Romanoschi, Stefan A.**, Civil Engineering).

**Esmaily, Asadollah**, (see **Peterman, Robert J.**, Civil Engineering).

**Hossain, Mustaque A.**, Kansas Department of Transportation, \$17,500, "Administration of KDOT/KTRAN Program 2005."

**Hossain, Mustaque A.**, Kansas Department of Transportation, \$3,715, "Investigation and Quantification of Factors Affecting Aggregate Specific Gravities as Determined by KDOT Test Method KT-6."

**Hossain, Mustaque A.**, **Dissanayake, Sunanda**, and **Romanoschi, Stefan A.**, Kansas Department of Transportation, \$62,000, "Implementation of the 2002 AASHTO Design Guide for Pavement Structures in KDOT."

**Hossain, Mustaque A.**, (see **Romanoschi, Stefan A.**, Civil Engineering).

**Landman, E. Dean**, **Dissanayake, Sunanda**, and **Knapp, Mary C.** (Communications), Kansas Department of Transportation, \$60,000, "Road Weather Forecast Quality Analysis."

**Najjar, Yacoub M.**, and **Rasheed, Hayder A.**, National Science Foundation, \$30,000, "Exploratory Research: Neural Networked Finite Element Methodology for Health Monitored Structural Systems."

**Peterman, Robert J.**, **Beck, B. Terry** (Mechanical and Nuclear Engineering), and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), Kansas Department of Transportation, \$12,000, "Evaluating the Transfer Length in Pretensioned Prestressed Concrete Members with Self-Consolidating Concrete."

**Peterman, Robert J.**, **Beck, B. Terry** (Mechanical and Nuclear Engineering), and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), Precast/Prestressed Concrete Institute, \$18,000, "Using Laser-Speckle Imaging to Determine the Transfer Length in Pretensioned Members with Self-Consolidating Concrete."

**Peterman, Robert J.**, and **Esmaily, Asadollah**, US Department of Transportation, \$400,000, "Evaluating the Time-Dependent and Bond Characteristics of Self-Consolidating Concrete for Kansas Prestressed Concrete Bridges."

**Peterman, Robert J.**, and **Rasheed, Hayder A.**, Kansas Department of Transportation, \$4,850, "Evaluating FRP Repair Method for Cracked Prestressed Concrete Bridge Members Subjected to Repeated Loadings (Phase 2)."

**Rasheed, Hayder A.**, (see **Najjar, Yacoub M.**, Civil Engineering).

**Rasheed, Hayder A.**, (see **Peterman, Robert J.**, Civil Engineering).

**Reddi, Lakshmi N.**, **Bhandari, Alok**, **Erickson, Larry E.** (Chemical Engineering), **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), and **Steward, David R.**, National Science Foundation, \$12,000, "Combined Research-Curriculum Development in Geoenvironmental Engineering."

**Reddi, Lakshmi N.**, and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$120,000, "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, \$187,500, "Technical Outreach and Service to Native American Communities (TOSNAC)."

**Reddi, Lakshmi N.**, and **Xiao, Ming**, National Aeronautics and Space Administration, \$192,412, "Flow and Distribution of Fluid Phases Through Porous Plant Growth Media in Microgravity."

**Romanoschi, Stefan A.**, US Department of Transportation, \$269,973, "Thin Bonded Rigid Overlay on PCC and HMA Pavements."

**Romanoschi, Stefan A.**, **Dissanayake, Sunanda**, and **Hossain, Mustaque A.**, US Department of Transportation, \$99,971, "Implementation of the 2002 AASHTO Design Guide for Pavement Structures (NYDOT)."

**Romanoschi, Stefan A.**, (see **Hossain, Mustaque A.**, Civil Engineering).

**Russell, Eugene R.**, Kansas Department of Transportation, \$20,000, "Providing Engineering Services to Counties."

**Russell, Eugene R.**, Kansas Department of Transportation, \$35,000, "Redevelopment of the Kansas Handbook for Traffic Control Practices for Low-Volume Rural Roads and Compliance Check of the Handbook of Small Cities with the 2003 MUTCD."

**Russell, Eugene R.**, (see **Rys, Malgorzata J.**, Industrial and Manufacturing Systems Engineering).

**Starrett, Steven K.**, and **Bhandari, Alok**, US Golf Association, \$30,000, "Measuring Nutrient Losses Via Runoff from an Established Golf Course."

**Steward, David R.**, National Science Foundation, \$800, "Kansas NSF EPSCoR Travel Grant."

**Steward, David R.**, and **Bernard, Eric A.** (Landscape Architecture/Regional and Community Planning), National Science Foundation, \$48,125, "Planning Grant: Establishing a Center for Research on Groundwater Based Economies."

**Steward, David R.**, **Bernard, Eric A.** (Landscape Architecture/Regional and Community Planning), **Bloomquist, Leonard E.** (Sociology, Anthropology, and Social Work), **Oviatt, Charles G.** (Geology), **Peterson, Jeffrey M.** (Agricultural Economics), and **Welch, Stephen M.** (Agronomy), Kansas State University, \$300,000, "Consortium for Global Research on Water-Based Economies (GRoWE) 'Scientific Discovery of Socio-Economic and Natural Processes Associated with Water'."

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

**Steward, David R.**, (see **Reddi, Lakshmi N.**, Civil Engineering).

**Stokes, Robert W.**, US Department of Transportation, \$100,441, "Traffic Assistance Services for Kansas."

**Xiao, Ming**, (see **Reddi, Lakshmi N.**, Civil Engineering).

## COMPUTING AND INFORMATION SCIENCES

**Andresen, Daniel A.**, National Science Foundation, \$428, "Distributed Logging in Java with Constrained Resource Usage—Sunil Brown Varghese."

**Andresen, Daniel A.**, National Science Foundation, \$448, "SOAP Optimization via Client-Side Caching—Kiran Kumar Devaram."

**Andresen, Daniel A.**, **Erickson, Howard H.** (Anatomy and Physiology), **Poole, David C.** (Anatomy and Physiology), **Spire, Mark F.** (Diagnostic Medicine/Pathobiology), and **Warren, Steven** (Electrical and Computer Engineering), National Science Foundation, \$87,615, "Infrastructure for Veterinary Telemedicine—Proactive Herd Health Management for Disease Prevention from Farm to Market."

**Andresen, Daniel A.**, (see **Dwyer, Matthew B.**, Computing and Information Sciences).

**Andresen, Daniel A.**, (see **Neilsen, Mitchell L.**, Computing and Information Sciences).

**Banerjee, Anindya**, National Science Foundation, \$132,065, "Type Systems and Program Analyses for Secure and Reliable Interactive Web Services."

**Banerjee, Anindya**, (see **Schmidt, David A.**, Computing and Information Sciences).

**DeLoach, Scott A.**, National Science Foundation, \$450,000, "Autonomous Reorganization of Cooperative Robotic Teams for Robustness."

**DeLoach, Scott A.**, US Department of Defense, \$58,645, "Autonomous, Adaptive Information Systems."

**Dwyer, Matthew B.**, **Andresen, Daniel A.**, **Hatcliff, John M.**, and **Wallentine, Virgil E.**, US Department of Defense, \$394,991, "Parallel Analysis of Models for Distributed Real-Time Embedded Systems."

**Dwyer, Matthew B.**, and **Hatcliff, John M.**, US Department of Defense, \$241,961, "Software Model Checking for Embedded Systems."

**Dwyer, Matthew B.**, **Hatcliff, John M.**, **Mizuno, Masaaki**, **Neilsen, Mitchell L.**, and **Singh, Gurdip**, US Department of Defense, \$849,693, "Technologies, Development Tools, and Patterns for Automatic Generation and Customization of Adaptable DRE Middleware."

**Hatcliff, John M.**, (see **Dwyer, Matthew B.**, Computing and Information Sciences).

**Hsu, William H.**, Aldentity Matrix Medical, Inc., \$100,000, "Intelligent Tutoring System for Medical Imaging." (2 awards)

**Hsu, William H.**, (see **Chang, Shing I.**, Industrial and Manufacturing Systems Engineering).

**Mizuno, Masaaki**, (see **Dwyer, Matthew B.**, Computing and Information Sciences).

**Mizuno, Masaaki**, (see **Neilsen, Mitchell L.**, Computing and Information Sciences).

**Neilsen, Mitchell L.**, **Andresen, Daniel A.**, and **Mizuno, Masaaki**, US Department of Agriculture, \$147,000, "Software Tools for Watershed Dam Design/Analysis."

**Neilsen, Mitchell L.**, (see **Dwyer, Matthew B.**, Computing and Information Sciences).

**Schmidt, David A.**, National Science Foundation, \$94,555, "Design Conformant Software."

**Schmidt, David A.**, and **Banerjee, Anindya**, National Science Foundation, \$81,000, "Language-Based Software Security."

**Singh, Gurdip**, (see **Dwyer, Matthew B.**, Computing and Information Sciences).

**Wallentine, Virgil E.**, Manko Window Systems, Inc., \$2,768, "Internship."

**Wallentine, Virgil E.**, National Science Foundation, \$500, "2003 International Conference on Parallel and Distributed Processing Techniques and Applications—Liubo Chen."

**Wallentine, Virgil E.**, **Blecha, Frank** (Anatomy and Physiology), **Gill, Bikram S.** (Plant Pathology), **Leach, Jan E.** (Plant Pathology), and **Wang, Xuemin** (Biochemistry), Kansas State University, \$924,998, "Bioinformatics."

**Wallentine, Virgil E.**, (see **Dwyer, Matthew B.**, Computing and Information Sciences).

**Wallentine, Virgil E.**, (see **Chapman, Kirby S.**, National Gas Machinery Laboratory).

## OFFICE OF THE DEAN OF THE COLLEGE OF ENGINEERING

**Hayter, Richard B.**, US Department of Education, \$8,748, "Inter-University Program in Human Resources Training in Computational Mechanics."

**King, Terry S.**, Multisponsor, \$45,000, "Pre-Enrollment Mathematics and Sciences Tutoring of Minority Engineering Recruits."

**King, Terry S.**, (see **Dyer, Ruth A.**, Office of the Provost).

## ELECTRICAL AND COMPUTER ENGINEERING

**Carpenter, Kenneth H.**, US Department of Energy, \$72,907, "Integrated Firing-System/Initiation-Train Modeling Enhancement."

**Day, Dwight D.**, and **Devore, John J.**, US Department of Energy, \$29,000, "Hardware and Software Evaluation, Development, and Testing Supporting a New Generation Computer for Airborne and Space Applications."

**Devore, John J.**, (see **Day, Dwight D.**, Electrical and Computer Engineering).

**Gruenbacher, Don M.**, National Aeronautics and Space Administration, \$8,333, "Wireless Communication and Signal Processing Methods."

**Gruenbacher, Don M.**, National Science Foundation, \$500, "Performance of Spread OFDM with LDPC Coding in Outdoor Environments—Ali Serener."

**Gruenbacher, Don M.**, US Department of Energy, \$99,933, "Quality Dependent Traffic."

**Kuhn, William B.**, National Aeronautics and Space Administration, \$28,165, "Design of RFICs in Peregrine SOS Phase II."

**Kuhn, William B.**, National Aeronautics and Space Administration, \$27,222, "Fully-Integrated T/R Module for SAR Applications—Phase II."

**Kuhn, William B.**, Peregrine Semiconductor Corporation, \$20,177, "Design of Watt-Level Power Amplifiers in Peregrine SOS."

**Kuhn, William B.**, and **Rys, Andrew**, US Department of Energy, \$110,084, "RFIC, Optical and Analog Circuit Development Using Integrated Circuit Technologies."

**Soldan, David L.**, Kansas Department of Transportation, \$23,300, "Advanced Transportation Technology Research for KDOT."

**Warren, Steven**, National Science Foundation, \$500, "Ambulatory Medical Instrumentation Suitable for Long-Term Health Monitoring of Cattle—Scott Schoenig."

**Warren, Steven**, National Science Foundation, \$75,000, "Beyond Telemedicine: Realizing a Proactive Home Health Care Delivery Model through Research and Education in Plug-and-Play Components and Novel Sensors."

**Warren, Steven**, National Science Foundation, \$500, "Experiences Using WinCE Pocket PCs as Computation and Data Acquisition Platforms for Ambulatory Telemonitoring—Luke Nagl."

**Warren, Steven**, National Science Foundation, \$500, "HL7-Compliant Healthcare Information System for Home Monitoring—Jeffrey Lebak."

**Warren, Steven**, National Science Foundation, \$500, "Novel Algorithm to Separate Motion Artifacts from Photoplethysmographic Signals Obtained with a Reflectance Pulse Oximeter—Jianchu Yao."

**Warren, Steven**, US Department of Energy, \$20,000, "Explore Electron Transport in a Complex Solid Model Using the Adjoint Version of ITS-CAD."

**Warren, Steven**, (see **Andresen, Daniel A.**, 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, \$115,339, "Design, Analysis and Implementation of CaTS: Carrier Tracking System."

**Ben-Arieh, David H.**, National Aeronautics and Space Administration, \$24,000, "Predicting Useful Life of Payload Carrier Hardware—Kyle Grabill."

**Ben-Arieh, David H.**, National Science Foundation, \$480, "On the Fusion of Linguistic Information in Group Decision Making—Travel Award for Zhifeng Chen."

**Ben-Arieh, David H.**, (see **Chang, Shing I.**, Industrial and Manufacturing Systems Engineering).

**Chang, Shing I.**, **Ben-Arieh, David H.**, **Hsu, William H.** (Computing and Information Sciences), and **Rys, Malgorzata J.**, Kansas Department of Transportation, \$11,500, "Production of Sub-Standard Stopping Sight Distance Data Set and Development of Highway Design Verification and Passing Sight Distance Analysis via GPS Spatial Models."

**Easton, Todd W.**, National Science Foundation, \$495, "Hypergraphs and the Facial Structure of General Binary Integer Programming Polytopes—Travel Award for Kevin Hooker."

**Harnett, R. Michael**, US Department of Defense, \$31,284, "Part-Time M.S. Program in Industrial Engineering—Fall 2003."

**Harnett, R. Michael**, US Department of Defense, \$29,922, "Part-Time M.S. Program in Industrial Engineering—Spring 2004."

**Harnett, R. Michael**, US Department of Defense, \$18,014, "Part-Time M.S. Program in Industrial Engineering—Summer 2004."

**Lee, E. Stanley**, and **Pei, Zhijian**, National Science Foundation, \$500, "Application of Fuzzy Adaptive Networks in Manufacturing: Waviness Removal in Grinding of Wire-Sawn Silicon Wafers—Yue Jiao."

**Pei, Zhijian**, Desano, Inc., \$7,938, "Reengineering Business Model: Improving Efficiency, Productivity and Decreasing Cost."

**Pei, Zhijian**, General Electric Company, \$39,740, "Development of New Ultrasonic Techniques."

**Pei, Zhijian**, National Science Foundation, \$500, "Application of Fuzzy Adaptive Networks in Manufacturing: Waviness Removal in Grinding of Wire-Sawn Silicon Wafers—Jian Wu."

**Pei, Zhijian**, National Science Foundation, \$400,000, "Fundamental Research on Silicon Wafer Fine Grinding to Foster a Quantum Leap in Manufacturing of Silicon Wafers."

**Pei, Zhijian**, Strasbaugh, Inc., \$30,000, "Wafer Grinding."

**Pei, Zhijian**, US Department of Energy, \$48,947, "Laser-Based Techniques to Detect Defects and Machining Damage in Ceramic Components and Silicon Wafers."

**Pei, Zhijian**, and **Xin, Xiao J.** (Mechanical and Nuclear Engineering), General Electric Company, \$3,986, "Stress Analysis on Spoolpieces by Finite Element Analysis."

**Pei, Zhijian**, (see **Lee, E. Stanley**, Industrial and Manufacturing Systems Engineering).

**Rys, Malgorzata J.**, Kansas Department of Transportation, \$100,000, "Pilot Car Wait Time Notification System for Work Zones."

**Rys, Malgorzata J.**, and **Russell, Eugene R.** (Civil Engineering), National Academy of Sciences, \$14,280, "Pavement Marking Material and Markers: Safety Impact and Cost-Effectiveness."

**Rys, Malgorzata J.**, (see **Chang, Shing I.**, Industrial and Manufacturing Systems Engineering).

**Wu, Chih-Hang**, (see **Peterman, Robert J.**, Civil Engineering).

## INSTITUTE FOR ENVIRONMENTAL RESEARCH

**Eckels, Steven J.**, KEDDEG Company, \$4,500, "Development of a HEPA Filter Test Stand."

**Eckels, Steven J.**, (see **Hosni, Mohammad H.**, Institute for Environmental Research).

**Eckels, Steven J.**, (see **Klabunde, Kenneth J.**, Chemistry).

**Hosni, Mohammad H.**, Multisponsor, \$154,389, "Institute for Environmental Research Support."

**Hosni, Mohammad H.**, **Beck, B. Terry** (Mechanical and Nuclear Engineering), and **Eckels, Steven J.**, Visteon, \$132,500, "PIV/LDV Measurements of Air Distribution Around a Heated Manikin."

**McCullough, Elizabeth A.**, W. L. Gore & Associates, Inc., \$10,000, "Development of a Multifunctional Airflow Hood for a Sweating Hot Plate."

**McCullough, Elizabeth A.**, RefrigiWear, Inc., \$3,000, "Comparing the Insulating Properties of Transport Bags (MOA)."

## KANSAS INDUSTRIAL EXTENSION SERVICES

**Davis, Sherry J.**, (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

**Larson, Nancy J.**, US Environmental Protection Agency, \$4,092, "Fostering H2E Participation in EPA Region 7."

**Larson, Nancy J.**, and **Nelson, Richard G.**, US Environmental Protection Agency, \$14,000, "Compliance and P2 Checklist Tool."

**Larson, Nancy J.**, (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

**Meyer, Gene M.**, US Department of Energy, \$84,167, "Special Codes and Standards Grant."

**Meyer, Gene M.**, and **Nelson, Richard G.**, Kansas Corporation Commission, \$45,000, "Kansas Energy Extension Service."

**Meyer, Gene M.**, and **Nelson, Richard G.**, US Environmental Protection Agency, \$391,197, "Comprehensive Environmental Assistance Program."



**Meyer, Gene M.**, (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

**Nelson, Richard G.**, US Department of Agriculture, \$21,000, "USDA Biodiesel Fuel Education Grant Program."

**Nelson, Richard G., Davis, Sherry J., Larson, Nancy J., and Meyer, Gene M.**, US Environmental Protection Agency, \$120,000, "Pollution Prevention Incentives for States."

**Nelson, Richard G., Rice, Charles W.** (Agronomy), **Staggenborg, Scott A.** (Northeast Area Office), and **Williams, Jeffery R.** (Agricultural Economics), US Department of Energy, \$30,478, "National Carbon Sequestration Database and Geographic Information System."

**Nelson, Richard G.**, (see **Larson, Nancy J.**, Kansas Industrial Extension Services).

**Nelson, Richard G.**, (see **Meyer, Gene M.**, Kansas Industrial Extension Services).

**Snead, Bruce C.**, US Environmental Protection Agency, \$298,430 (includes \$98,000 from Kansas County Health and Extension Departments), "Radon Projects for Kansas."

**Snead, Bruce C.**, US Environmental Protection Agency, \$27,500 (includes \$17,500 from various participants), "Radon Training."

**Snead, Bruce C.**, US Environmental Protection Agency, \$18,971, "Radon Workshops for Michigan." (3 awards)

**Snead, Bruce C.**, US Environmental Protection Agency, \$32,859, "Regional Radon Training Center."

## **MECHANICAL AND NUCLEAR ENGINEERING**

**Babin, Bruce R.**, US Department of Defense, \$15,000, "Test Stand Configuration for Aqueous Ammonia Measurements."

**Babin, Bruce R.**, US Department of Defense, \$7,669, "Tomahawk Torpedo LRIP Fuel System."

**Babin, Bruce R.**, US Department of Defense, \$11,106, "Tomahawk Torpedo Tube Launch Pressure Vent System."

**Beck, B. Terry**, (see **Hosni, Mohammad H.**, Institute for Environmental Research).

**Beck, B. Terry**, (see **Hosni, Mohammad H.**, Mechanical and Nuclear Engineering).

**Beck, B. Terry**, (see **Peterman, Robert J.**, Civil Engineering).

**Cai, Liang-Wu**, Wichita State University, \$33,650, "Design of Noise-Absorbing Composite Sandwich Panels."

**Dunn, William L.**, National Academy for Nuclear Training, \$14,000, "National Academy for Nuclear Training Fellowship."

**Hosni, Mohammad H., Beck, B. Terry, and Jones, Byron W.**, Boeing Company, \$53,764, "Large Eddy Simulation Validation Lab Tests."

**Jones, Byron W.**, (see **Hosni, Mohammad H.**, Mechanical and Nuclear Engineering).

**Krishnaswami, Prakash**, (see **Chapman, Kirby S.**, National Gas Machinery Laboratory).

**McGregor, Douglas S.**, and **Schinstock, Dale E.**, US Department of Energy, \$116,265, "Semiconductor Radiation Detectors with Frisch Collars and Collimators for Gamma Ray Spectroscopy and Imaging."

**McGregor, Douglas S., Shultis, J. Kenneth, and Whaley, Paul M.**, US Department of Energy, \$212,886, "Near-Core and In-Core Neutron Radiation Monitors for Real Time Neutron Flux Monitoring and Reactor Power Level Measurements."

**Schinstock, Dale E.**, Kansas Technology Enterprise Corporation, \$31,744, "Electromechanical Systems Laboratory—Infrastructure Improvement, KSU."

**Schinstock, Dale E.**, National Science Foundation, \$15,683, "Electromechanical Systems Lab Infrastructure Improvement, KSU."

**Schinstock, Dale E.**, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

**Shultis, J. Kenneth**, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

**Swenson, Daniel V.**, US Department of Energy, \$119,503, "Creation of an Enhanced Geothermal System through Hydraulic and Thermal Stimulation."

**Wang, Youqi**, Kansas Department of Transportation, \$22,228, "Application of Mechanical Properties Characterization of FRP Bridge Deck Materials."

**Wang, Youqi**, National Aeronautics and Space Administration, \$49,967, "Computational Models for Electrostrictive Graft Elastometer."

**Wang, Youqi**, National Aeronautics and Space Administration, \$53,360, "Stiffness and Strength of Polymer Network and Carbon Nanotube Reinforced Polymer Network."

**Whaley, Paul M.**, Electric Power Research Institute, \$60,000, "EPRI/DOE/KSU Nuclear Engineering Education Program."

**Whaley, Paul M.**, US Department of Energy, \$26,000, "Matching Grant Program."

**Whaley, Paul M.**, US Department of Energy, \$20,000, "University Reactor Sharing Program."

**Whaley, Paul M.**, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

**Xin, Xiao J.**, National Science Foundation, \$490, "Graduate Student Travel Award—Jianfeng Ma."

**Xin, Xiao J.**, National Science Foundation, \$490, "Graduate Student Travel Award—Wenjie Liu."

**Xin, Xiao J.**, (see **Pei, Zhijian**, Industrial and Manufacturing Systems Engineering).

**Zheng, Zhongquan**, National Aeronautics and Space Administration, \$48,514, "Vortex Dynamic Mechanisms and Innovative Modeling of Aerodynamic Noise Generation in Slats."

## **NATIONAL GAS MACHINERY LABORATORY**

**Chapman, Kirby S.**, Gas Research Institute, \$102,500 (includes \$15,000 from Exline Inc.), "Port Flow Design to Enhance Energy Mixing."

**Chapman, Kirby S.**, Gas Research Institute, \$60,000, "Turbocharger Degradation Measurement through Embedded Sensors."

**Chapman, Kirby S.**, Gas Research Institute, \$40,000, "Turbocharger Scavenging Impact."

**Chapman, Kirby S.**, US Department of Energy, \$430,804 (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**, Gas Research Institute, \$29,915, "Development of a Turbocharger Testing Standard."

**Chapman, Kirby S., Krishnaswami, Prakash** (Mechanical and Nuclear Engineering), and **Wallentine, Virgil E.** (Computing and Information Sciences), US Department of Energy, \$200,000, "Virtual Pipeline System Testbed to Optimize the U. S. Natural Gas Transmission Pipeline System."

**Keshavarz, Ali**, (see **Chapman, Kirby S.**, National Gas Machinery Laboratory).

## **NATIONAL INSTITUTE FOR LAND MANAGEMENT AND TRAINING**

**Biles, Bertram R.**, US Department of Defense, \$185,235, "ITAM FY2004 Workshop."

**Steichen, James M., Hutchinson, Stacy L.** (Biological and Agricultural Engineering), and **Zhang, Naiqian** (Biological and Agricultural Engineering), US Department of Defense, \$354,000, "Assessing the Impact of Maneuver Training on NPS Pollution and Water Quality."

## **COLLEGE OF HUMAN ECOLOGY**

### **APPAREL, TEXTILES, AND INTERIOR DESIGN**

**LeHew, Melody L. A.**, and **Meyer, Deborah J. C.**, US Department of Agriculture, \$100,000, "Developing Leaders for the Textile and Apparel Industry: Infusing Global Citizenship into the Undergraduate Curriculum."

**McCullough, Elizabeth A.**, BHA Technologies, Inc., \$5,000, "Moisture Vapor Transmission Properties of Fabric/Film Laminates."

**McCullough, Elizabeth A.**, Ford Motor Company, \$17,024, "Comfort Evaluation of Automobile Seats."

**Meyer, Deborah J. C.**, (see **LeHew, Melody L. A.**, Apparel, Textiles, and Interior Design).

### **OFFICE OF THE DEAN OF THE COLLEGE OF HUMAN ECOLOGY**

**Brittain, Danielle R.**, (see **Gyurcsik, Nancy C.**, Kinesiology).

**Moxley, Virginia M.**, Certified Financial Planner Board of Standards, Inc., \$12,000, "Partnership to Increase the Diversity of the Financial Planning Profession."

**Moxley, Virginia M.**, Great Plains IDEA Alliance, \$48,984, "Great Plains IDEA Lead Institution."

**Moxley, Virginia M.**, and **Maes, Sue C.** (Regents' Educational Communications Center), US Department of Education, \$739,706 (includes \$22,422 from 1890's Institution, \$25,686 from HETS Institution, and \$68,952 from North Central Regional Center for Rural Development), "Advancing the Efficacy of Diverse Higher Education Academic Alliances."

**Norris-Baker, Carolyn**, US Department of Health and Human Services, \$6,000, "Central Plains Geriatric Education Center."

**Norris-Baker, Carolyn**, US Department of Health and Human Services, \$273,855 (includes \$56,583 from various professional consultants), "Promoting Excellent Alternatives in Kansas Nursing Homes."

### **HOTEL, RESTAURANT, INSTITUTION MANAGEMENT AND DIETETICS**

**Back, Ki-Joon**, CES Co., Ltd., \$5,198, "Memorandum of Agreement to Fund a Fellowship Program."

**Huang, Hui-chun**, (see **Shanklin, Carol W.**, Hotel, Restaurant, Institution Management and Dietetics).

**Jang, Soocheng**, Travel and Tourism Research Association, \$2,300, "Mitigating Travel Market Seasonality: An Application of Financial Portfolio Theory."

**Shanklin, Carol W.**, and **Huang, Hui-chun**, Child Nutrition Foundation, \$2,500, "Evaluation of the 'Breakfast by the Door' Program in St. Joseph, Missouri."

**Shanklin, Carol W.**, and **Huang, Hui-chun**, Kappa Omicron Nu Honor Society, \$2,000, "Factors Affecting Service Quality Perception and Residents' Behavioral Intention to Utilize Foodservice in Assisted Living Facilities."

## **HUMAN NUTRITION**

**Allen, Cynthia**, (see **Holcomb, Carol A.**, Human Nutrition).

**Baybutt, Richard C.**, (see **Wang, Weiqun**, Human Nutrition).

**Chambers IV, Edgar**, Multisponsor, \$404,155, "Sensory Analysis Center Support."

**Fitzgerald, Karen D.**, (see **Peters, Paula**, Extension Dean of Human Ecology).

**Fitzgerald, Karen D.**, (see **Peters, Paula**, Human Nutrition).

**Haub, Mark D.**, Kansas Wheat Commission, \$28,981, "Grain-Based and Carbohydrate Restricted Diets on Exercise Performance in Overweight Men and Women and Elite Athletes."

**Haub, Mark D.**, (see **Wang, Weiqun**, Human Nutrition).

**Higgins, Mary L.**, US Department of Health and Human Services, \$10,000, "Fix It Fresh Fruits and Vegetables Series for the Kansas Senior Farmers' Market Nutrition Program."

**Holcomb, Carol A.**, and **Allen, Cynthia**, American Egg Board, \$27,500, "Egg Consumption and Age-Related Macular Degeneration: A Pilot Study."

**Huang, Hui-chun**, (see **Shanklin, Carol W.**, Human Nutrition).

**Martin, Lisa J.**, (see **Peters, Paula**, Human Nutrition).

**Medeiros, Denis M.**, US Department of Health and Human Services, \$163,026, "Kansas Bridges to the Future."

**Peters, Paula**, and **Fitzgerald, Karen D.**, Kansas Department of Commerce and Housing, \$10,000, "KACAP Community Food and Nutrition 2003-04 Project."

**Peters, Paula**, and **Martin, Lisa J.**, Let's Help, \$3,749, "Education Program in Nutrition in Shawnee County (FANI Program)."

**Shanklin, Carol W.**, and **Huang, Hui-chun**, Kansas State University Foundation, \$1,198, "Factors Affecting Service Quality Perception and Residents' Behavioral Intention to Utilize Foodservice in Assisted Living Facilities."

**Steele, Lea**, US Department of Veterans Affairs, \$187,200, "Agreement between Kansas State University and Veterans Affairs Eastern Kansas Healthcare System."

**Wang, Weiqun**, Kansas State University Foundation, \$8,000, "Cancer Implications of Weight Control and RAS-MED-AP-1 Signaling."

**Wang, Weiqun**, Kansas State University Foundation, \$773, "Graduate Student Travel Award- Hongyan Qu."

**Wang, Weiqun, Baybutt, Richard C., Deng, Youping** (Biology), **Haub, Mark D.**, and **Yang, Shie-Shien** (Statistics), US Department of Health and Human Services, \$266,450, "Weight Control, Cell Signaling and Cancer Prevention." (2 awards)

### **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, \$54,042, "Flint Hills Child Care Resource and Referral Project."

**Bollman, Stephan R.**, and **Bailey, Gwen L.**, Kansas Child Care Training Opportunities, Inc, \$47,519, "Infant/Toddler Initiative."

**Bollman, Stephan R.**, and **Bailey, Gwen L.**, Kansas Child Care Training Opportunities, Inc, \$13,085, "Kansas Child Care Training Opportunities."

**Bollman, Stephan R.**, and **Bailey, Gwen L.**, Kansas Child Care Training Opportunities, Inc, \$23,307, "Oral Health Training."

**Bollman, Stephan R.**, and **Glasscock, Marlene K.**, US Department of Agriculture, \$5,278, "National Network for Child Care Internet Web Site and Database Recruitment for Air Force Internships Pilot Project."

**Bollman, Stephan R.**, (see **Glasscock, Marlene K.**, School of Family Studies and Human Services).

**Bradshaw, Michael H.**, United Methodist Health Ministry Fund, \$23,705, "K-State Extension Stroke Prevention Project."

**Bradshaw, Michael H.**, (see **Estabrooks, Paul A.**, Kinesiology).

**Crowe, Linda K.**, (see **DeLuccie, Mary L.**, School of Family Studies and Human Services).

**DeLuccie, Mary L.**, US Department of Agriculture, \$9,200, "Federal Aid in Support of the Child and Adult Care Food Program."

**DeLuccie, Mary L.**, USD 383, Manhattan, \$16,916, "Early Childhood Lab."

**DeLuccie, Mary L.**, **Crowe, Linda K.**, and **Fees, Bronwyn S.**, US Department of Education, \$36,000, "Early Childhood HigherEd Options (ECHO) Project."

**Fees, Bronwyn S.**, (see **DeLuccie, Mary L.**, School of Family Studies and Human Services).

**Fees, Bronwyn S.**, (see **Trost, Stewart G.**, Community Health Institute).

**Garcia, Robert**, Capper Foundation, \$46,522, "Capper—KSU Clinical Affiliation in Speech Pathology."

**Garcia, Robert**, USD 379, Clay Center, \$6,758, "Speech and Language Services."

**Garcia, Robert**, USD 383, Manhattan, \$12,561, "Speech and Language Services."

**Glasscock, Marlene K.**, US Department of Agriculture, \$421,561, "CYFAR Supported Extension Staff Development."

**Glasscock, Marlene K.**, US Department of Agriculture, \$48,500, "Extension CARES for America's Children and Youth."

**Glasscock, Marlene K.**, US Department of Agriculture, \$370,370, "USDA/Air Force Partnership for 4-H Opportunities."

**Glasscock, Marlene K.**, US Department of Agriculture, \$796,235, "USDA/Army Youth Development Project."

**Glasscock, Marlene K.**, (see **Bollman, Stephan R.**, School of Family Studies and Human Services).

**Griffin, Charles L.**, Kansas Department of Social and Rehabilitation Services, \$590,643, "SRS Organizational Development Training and Curriculum Development."

**Griffin, Charles L.**, US Department of Agriculture, \$141,400, "Helping Farm Families Make Sound Business Decisions."

**Murray, Ann D.**, Tobacco Settlement, \$18,212, "Smart Start Local Evaluation Plan."

**Parsons, Kerri**, American Association of Retired Persons, \$1,000, "Tenderhearts: Caregiving Support for Home and Community."

**Smit, Ann B.**, US Department of Health and Human Services, \$75,000, "Priorities for the Templin Archive Project."

**Walker, Doris K.**, Kansas Health Foundation, \$1,188, "Health Promotion for Older Kansans."

**Webb, Farrell J.**, Kansas State University, \$375,000, "Integration of Parenting and Family Partnerships into the Developing Scholars Program for Underrepresented College Students."

## COLLEGE OF TECHNOLOGY AND AVIATION

### SALINA ENGINEERING TECHNOLOGY

**Dandu, Raju**, Philips Lighting Company, \$5,448, "Philips Lighting Summer Project."

**Mosier, Nancy K.**, Kansas State Department of Education, \$2,130, "Solomon University."

## COLLEGE OF VETERINARY MEDICINE

### ANATOMY AND PHYSIOLOGY

**Behnke, Brad J.**, (see **Poole, David C.**, Anatomy and Physiology).

**Blecha, Frank**, and **Freeman, Lisa C.**, US Department of Health and Human Services, \$62,024, "Short-Term Training Students in Health Professional Schools."

**Blecha, Frank**, (see **Freeman, Lisa C.**, Anatomy and Physiology).

**Blecha, Frank**, (see **Wallentine, Virgil E.**, Computing and Information Sciences).

**Erickson, Howard H.**, Kansas Racing and Gaming Commission, \$11,981, "Role of Pulmonary Leukocytes in Reducing Exercise-Induced Pulmonary Hemorrhage (EIPH) with Concentrated Equine Serum."

**Erickson, Howard H.**, (see **Andresen, Daniel A.**, Computing and Information Sciences).

**Erickson, Howard H.**, (see **Poole, David C.**, Anatomy and Physiology).

**Freeman, Lisa C.**, and **Blecha, Frank**, Merck and Company, Inc., \$19,900, "Veterinary Research Scholars."

**Freeman, Lisa C.**, and **Blecha, Frank**, US Department of Health and Human Services, \$28,453, "Basic Research Immersion Training Experience (BRITE) Veterinary Student Program."

**Freeman, Lisa C.**, (see **Blecha, Frank**, Anatomy and Physiology).

**Hunter, Robert P.**, Kansas Racing and Gaming Commission, \$39,000, "Cytochrome P-450 Drug Metabolism in Greyhounds."

**Hunter, Robert P.**, **Carpenter, James W.** (Clinical Sciences), **Isaza, Ramiro** (Clinical Sciences), and **Mutlow, Adrian G.** (Clinical Sciences), Morris Animal Foundation, \$7,776, "Pharmacokinetics and Pharmacodynamics of Carfentanil and Naltrexone in the Common Eland Antelope *Taurotragus oryx*."

**Hunter, Robert P.**, and **Isaza, Ramiro** (Clinical Sciences), Busch Entertainment Corporation, \$5,104, "Pharmacokinetics and Metabolism of Butorphanol in Elephants *Elephas maximus*."

**Kenney, Michael J.**, US Department of Health and Human Services, \$62,616, "Effect of Vertebral Loading on Sympathetic Nerve Regulation."

**Kenney, Michael J.**, US Department of Health and Human Services, \$218,250, "Senescence Alters Sympathetic Regulation to Heat Stress."

**Kenney, Michael J.**, US Department of Health and Human Services, \$218,250, "Sympathetic-Immune Interface: Central Sites and Function."

**Kumari, Meena**, Alcoholic Beverage Medical Research Foundation, \$49,700, "Effect of Chronic Ethanol Exposure on In Vivo Regulation of NR1 mRNA Binding Trans-acting Proteins."

**Marcus, Daniel C.**, Kansas Technology Enterprise Corporation, \$50,000, "Epithelial Function in Health and Disease."



**Marcus, Daniel C.**, US Department of Health and Human Services, \$331,013, "Cochlear and Vestibular Ion Transport."

**Marcus, Daniel C.**, US Department of Health and Human Services, \$2,150,658, "Epithelial Function in Health and Disease."

**McDonough, Paul J.**, (see **Poole, David C.**, Anatomy and Physiology).

**Musch, Timothy I.**, Proctor and Gamble Company, \$95,399, "Effects of Rho-Kinase Inhibition on Left Ventricular Function in Rats with Chronic Heart Failure Induced by Myocardial Infarction."

**Poole, David C.**, American Heart Association, Heartland Affiliate, \$71,500, "Mechanisms of Microcirculatory Dysfunction in Heart Failure."

**Poole, David C.**, US Department of Health and Human Services, \$27,419, "Minority Predoctoral Fellowship—Danielle J. Padilla."

**Poole, David C.**, and **Behnke, Brad J.**, US Department of Health and Human Services, \$25,862, "Minority Predoctoral Fellowship."

**Poole, David C.**, **Erickson, Howard H.**, and **McDonough, Paul J.**, Kansas Racing and Gaming Commission, \$41,522, "Incidence and Severity of Exercise-Induced Pulmonary Hemorrhage (EIPH) in Racing Greyhounds."

**Poole, David C.**, (see **Andresen, Daniel A.**, Computing and Information Sciences).

**Ross, Chris R.**, US Department of Health and Human Services, \$7,583, "Cerebral Protection and Recovery After Circulatory Arrest."

**Schultz, Bruce D.**, Cystic Fibrosis Foundation, \$64,800, "HCO<sub>3</sub> Secretion by Human and Porcine Epithelia."

**Schultz, Bruce D.**, US Department of Agriculture, \$240,000, "Epithelial Sodium Transport Mechanisms and Associated Regulatory Pathways that Affect Bovine Mammary Development, Function, and Involution."

**Schultz, Bruce D.**, US Department of Health and Human Services, \$146,000, "HCO<sub>3</sub>- and Na<sup>+</sup> Transport in Human and Pig Vas Deferens."

**Schultz, Bruce D.**, US Department of Health and Human Services, \$27,042, "Synthetic Peptide Modulator of Paracellular Conductance."

**Wangemann, A. Philine**, US Department of Health and Human Services, \$331,013, "Cytosolic Regulation of Inner Ear Ion Transport."

**Weiss, Mark L.**, US Department of Health and Human Services, \$58,200, "Cytokines and Sympathetic Activation in Heart Failure."

**Weiss, Mark L.**, US Department of Health and Human Services, \$270,100, "Neural Circuitry of the Kidney."

## CLINICAL SCIENCES

**Bulmer, Barret J.**, and **Heaney, Allison L.**, Boehringer Ingelheim, \$18,720, "Efficacy of a Three Months Treatment with Cilobradine Oral Solution on Clinical Symptoms and Diastolic Heart Function in Symptomatic Cats with Hypertrophic Cardiomyopathy."

**Carpenter, James W.**, (see **Hunter, Robert P.**, Anatomy and Physiology).

**Chun, Ruthanne**, Heska Corporation, \$8,938, "Canine Interleukin-2-Staphylococcus Aureus Enterotoxin Immunotherapy."

**Chun, Ruthanne**, and **DeBey, Brad M.** (Diagnostic Medicine/Pathobiology), Hill's Pet Nutrition, Inc., \$78,600, "Normalize Metabolic Abnormalities and Inhibit Recurrence of Tumors in Dogs with Mammary Cancer."

**Chun, Ruthanne**, (see **Garrett, Laura D.**, Clinical Sciences).

**Garrett, Laura D.**, and **Chun, Ruthanne**, Nathan Cummings Foundation, \$35,000, "Clinical Trial Evaluating Piroxicam in the Treatment of Naturally Occurring Osteosarcoma."

**Grauer, Gregory F.**, Ross University, \$107,964, "Clinical Training for Ross University School of Health Sciences."

**Grauer, Gregory F.**, (see **Moore, Lisa E.**, Clinical Sciences).

**Harkin, Kenneth R.**, Fort Dodge Animal Health, \$5,840, "Duration of Urinary Shedding of Leptospire in Dogs After Recovery from Clinical Leptospirosis."

**Heaney, Allison L.**, (see **Bulmer, Barret J.**, Clinical Sciences).

**Isaza, Ramiro**, (see **Hunter, Robert P.**, Anatomy and Physiology).

**Moore, Lisa E.**, Hill's Pet Nutrition, Inc., \$5,886, "Dietary Intervention for the Treatment of Chronic Diarrhea in Cats."

**Moore, Lisa E.**, Hill's Pet Nutrition, Inc., \$2,500, "Dietary Intervention for the Treatment of Chronic Diarrhea in Dogs."

**Moore, Lisa E.**, and **Grauer, Gregory F.**, Heska Corporation, \$190,074, "Wellness Screening as an Early Indicator of Disease in Dogs and Cats."

**Mutlow, Adrian G.**, (see **Hunter, Robert P.**, Anatomy and Physiology).

**Sanderson, Michael W.**, (see **Nagaraja, Tiruvor G.**, Diagnostic Medicine/Pathobiology).

**Schermerhorn, Thomas**, US Department of Health and Human Services, \$1,080, "Beta Cell Inhibitors Act by Disrupting the SNARE Complex."

## OFFICE OF THE DEAN OF THE COLLEGE OF VETERINARY MEDICAL CENTER

**Willard, Gayle K.**, US Department of Health and Human Services, \$11,269, "Access E-Information."

## DIAGNOSTIC MEDICINE/PATHOBIOLOGY

**De Groot, Bradley D.**, (see **Spire, Mark F.**, Diagnostic Medicine/Pathobiology).

**DeBey, Brad M.**, (see **Chun, Ruthanne**, Clinical Sciences).

**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, \$14,000, "Purco Project."

**Dritz, Steven S.**, (see **DeRouchey, Joel M.**, Northeast Area Office).

**Dryden, Michael W.**, Bayer Corporation, \$32,171, "Imidacloprid Flea Susceptibility Monitoring Project."

**Dryden, Michael W.**, Fort Dodge Animal Health, \$44,594, "Efficacy of a Topically Applied Spot-On Formulation of R-28153 Against Fleas on Cats Study."

**Dryden, Michael W.**, (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

**Fenwick, Bradley W.**, Kansas Racing and Gaming Commission, \$53,100, "Molecular Approaches for Improving the Greyhounds Immune Response, Reproductive Efficiency, and Racing Performance: Breeding the Optimal Histocompatibility Genotypes."

**Fenwick, Bradley W.**, Kansas Racing and Gaming Commission, \$20,000, "Securing the Quality of the Racing Greyhound Breed: Real-Time Parentage Analysis of All Breeding Greyhounds."

**Fenwick, Bradley W.**, and **Fortney, William D.**, Bayer Corporation, \$236,214, "Evaluation of the Clinical Efficacy of Pradofloxacin Tablets for the Treatment of Experimentally-Induced Bordetella Bronchiseptica Infections."

**Fenwick, Bradley W.**, and **Fortney, William D.**, Kansas Racing and Gaming Commission, \$40,000, "Establishment, Development and Maintenance of the Kansas Racing Greyhound Health Institute (KRGHI)."

**Fortney, William D.**, (see **Fenwick, Bradley W.**, Diagnostic Medicine/Pathobiology).

**Ganta, Roman Reddy R.**, US Department of Health and Human Services, \$19,000, "West Nile-Analysis Laboratory."

**Ganta, Roman Reddy R.**, Chapes, Stephen K. (Biology), and Wilkerson, Melinda, US Department of Health and Human Services, \$471,333, "Cellular Immunity Against Ehrlichia chaffeensis."

**Kapil, Sanjay**, US Department of Agriculture, \$27,500, "Pseudorabies Laboratory Testing."

**Kapil, Sanjay**, US Department of Energy, \$39,921, "Efficacy Testing of Sandia DF-200-Based Formulations Against Coronaviruses."

**Kapil, Sanjay**, and **Oberst, Richard D.**, US Department of Energy, \$18,088, "Agricultural Biosecurity Decontamination Technology—Reducing the Threat of Infectious Agent Spread."

**Kapil, Sanjay**, and **Oberst, Richard D.**, US Department of Energy, \$40,000, "Evaluation of the Antiviral Efficacy and Viral Adsorption of Sandia Chemical Formulations."

**Kapil, Sanjay**, and **Oberst, Richard D.**, US Department of Energy, \$50,808, "Inactivation of Influenza with Various Disinfectants."

**Nagaraja, Tiruvoor G.**, **Oberst, Richard D.**, **Sanderson, Michael W.** (Clinical Sciences), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$172,726, "Ecology of E. coli O157:H7 in Beef Cow-Calf Operations from Ranch to Feedlot."

**Nagaraja, Tiruvoor G.**, (see **Spire, Mark F.**, Diagnostic Medicine/Pathobiology).

**Oberst, Richard D.**, Cepheid, \$8,484, "Evaluation of Scorpion Probes to Detect E. coli O157:H7 in Pure Culture and Inoculated Ground Beef."

**Oberst, Richard D.**, (see **Kapil, Sanjay**, Diagnostic Medicine/Pathobiology).

**Oberst, Richard D.**, (see **Nagaraja, Tiruvoor G.**, Diagnostic Medicine/Pathobiology).

**Pickrell, John A.**, (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

**Pickrell, John A.**, (see **Rowland, Raymond R. R.**, Diagnostic Medicine/Pathobiology).

**Rowland, Raymond R. R.**, US Department of Health and Human Services, \$58,400, "Structure and Nucleolar Function of SARS N Protein."

**Rowland, Raymond R. R.**, and **Pickrell, John A.**, US Department of Agriculture, \$118,864 (includes \$21,181 from South Dakota State University), "Student Experiential Learning in Food Animal Infectious Diseases."

**Rowland, Raymond R. R.**, and **Wyatt, Carol R.**, US Department of Agriculture, \$240,000, "Mechanisms of Short- and Long-Term Consequences of Fetal PRRSV Infection."

**Spire, Mark F.**, US Department of Agriculture, \$44,000, "Kansas Johnes's Work Plan."

**Spire, Mark F.**, **Blasi, Dale A.** (Animal Sciences and Industry), **Nagaraja, Tiruvoor G.**, and **Swanson, Janice C.** (Animal Sciences and Industry), US Department of Agriculture, \$45,802, "Clean Truck, Clean Steak Program."

**Spire, Mark F.**, and **De Groot, Bradley D.**, US Department of Agriculture, \$150,000, "Rapid Syndrome Validation Program for Animals."

**Spire, Mark F.**, (see **Andresen, Daniel A.**, Computing and Information Sciences).

**Stewart, George C.**, US Department of Health and Human Services, \$126,631, "Control of Enterotoxin Gene Expression S. aureus."

**Stewart, George C.**, US Department of Health and Human Services, \$245,954, "Function of the Bacillus Anthracis Spore Carbohydrate."

**Stewart, George C.**, (see **Tang, Xiaoyan**, Plant Pathology).

**Wilkerson, Melinda**, (see **Ganta, Roman Reddy R.**, Diagnostic Medicine/Pathobiology).

**Wyatt, Carol R.**, (see **Rowland, Raymond R. R.**, Diagnostic Medicine/Pathobiology).

## VETERINARY MEDICAL TEACHING HOSPITAL

**Arck, Shirley T.**, University of Kansas, \$4,000, "Pharm.D. Clerkship."

**Carpenter, James W.**, City of Manhattan, Kansas, \$11,500, "Veterinary Services at the Sunset Zoological Park, Manhattan, Kansas."

**Fingland, Roger B.**, US Department of Defense, \$3,749, "Emergency Surgery and Hospital Care for FFP for Government Owned Horse."

## KANSAS COOPERATIVE EXTENSION SERVICE

### AGRICULTURAL ECONOMICS

**Dhuyvetter, Kevin C.**, **Kasterns, Terry**, and **Taylor, Mykel R.**, Kansas Corn Commission, \$9,300, "Corn Basis and Other Farm Management and Marketing Information."

**Dhuyvetter, Kevin C.**, (see **Staggenborg, Scott A.**, Northeast Area Office).

**Kasterns, Terry**, (see **Dhuyvetter, Kevin C.**, Agricultural Economics).

**Langemeier, Michael R.**, US Department of Agriculture, \$17,638, "Cost Production Studies for Corn and Wheat Grown in Kansas."

**Taylor, Mykel R.**, (see **Dhuyvetter, Kevin C.**, Agricultural Economics).

**Tsoodle, Leah J.**, (see **Turner, Tracy M.**, Economics).

### AGRICULTURAL EXPERIMENT STATION

**Ricketts, Mitchell S.**, **Marr, Charles W.** (Horticulture, Forestry and Recreation Resources), **Slocombe, John W.** (Biological and Agricultural Engineering), and **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), US Department of Labor, \$217,590, "Training Materials for Preventing Injuries from Motor Vehicles, Machinery, and Tree-Trimming Hazards in the Landscaping and Horticultural Services Industry."

### AGRICULTURE AND NATURAL RESOURCES

**Buchholz, Daryl D.**, Kansas Farm Service Agency, \$397, "Memorandum of Understanding between Kansas Agricultural Mediation Service and Kansas Farm Service Agency."

**Buchholz, Daryl D.**, US Department of Agriculture, \$378,178, "Kansas Agricultural Mediation Service."

**Buchholz, Daryl D.**, US Department of Agriculture, \$211, "Memorandum of Understanding between Kansas Agricultural Mediation Services and Kansas Natural Resources Conservation Service."

**Buchholz, Daryl D.**, US Department of Agriculture, \$133,026, "North Central Region Professional Development Program Regional Coordination Plan of Work."

**Buchholz, Daryl D.**, US Department of Agriculture, \$46,583, "Renewable Resources Extension Act Program."

**Buchholz, Daryl D.**, and **Beckman, Jana J.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Department of Agriculture, \$50,000, "North Central Region SARE Professional Development Program."

**Buchholz, Daryl D.**, and **Peters, Paula** (Dean of Human Ecology), US Department of Agriculture, \$36,109, "Upper Great Plains Drought Education Consortium."

## AGRONOMY

**Devlin, Daniel L.**, and **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$548,158, "Abatement of Fecal Coliform Bacteria in Kansas—Part 4."

**Devlin, Daniel L.**, and **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$90,876, "Implementing BMPs in the Smoky Hill—Kanopolis Lake Watershed."

**Fjell, Dale L.**, Kansas Grain Sorghum Commission, \$3,000, "Grain Sorghum Production in Kansas: Extension and Applied Research."

**Fjell, Dale L.**, (see **Rogers, Danny H.**, Extension Biological and Agricultural Engineering).

**Leikam, Dale F.**, **Lamond, Ray E.**, and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Corn Commission, \$10,000, "Revising KSU Corn Phosphorus and Potassium Nutrient Recommendations."

**Leikam, Dale F.**, **Lamond, Ray E.**, and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$15,000, "Revising KSU Sorghum Phosphorus and Potassium Nutrient Recommendations."

**Ohlenbusch, Paul D.**, (see **Fick, Walter H.**, Agronomy).

**Peterson, Dallas E.**, (see **Olson, Brian L.**, Northwest Area Office).

**Peterson, Dallas E.**, (see **Regehr, David L.**, Extension Agronomy).

**Regehr, David L.**, and **Peterson, Dallas E.**, Kansas Corn Commission, \$6,500, "Control of Field Pansy, A 'New' Winter Annual in No-Till Crops."

**Shroyer, James P.**, Kansas Wheat Commission, \$2,500, "Wheat Production in Kansas: Extension and Applied Research."

**Shroyer, James P.**, (see **Staggenborg, Scott A.**, Northeast Area Office).

## ANIMAL SCIENCES AND INDUSTRY

**Aramouni, Fadi M.**, and **Herald, Thomas J.**, Kansas Department of Commerce and Housing, \$30,000, "Development of a Whey-Based Health Drink."

**Aramouni, Fadi M.**, and **Herald, Thomas J.**, Kansas Department of Commerce and Housing, \$66,580, "Food and Feed Value Added Program."

**Aramouni, Fadi M.**, (see **Boyle, Elizabeth**, Extension Animal Sciences and Industry).

**Boyle, Elizabeth**, US Department of Agriculture, \$22,310, "Good Natured Family Farms Chicken Shelf Life Study."

**Boyle, Elizabeth**, and **Aramouni, Fadi M.**, US Department of Agriculture, \$13,500 (includes \$6,000 from Program Income), "Meat and Poultry Small and Very Small Education Initiative."

**Lee, Charles D.**, Kansas Department of Wildlife and Parks, \$30,584, "Extension Education Position Support."

**Lee, Charles D.**, US Department of Agriculture, \$500, "North Central Regional Aquaculture Center Extension Project."

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

## BIOLOGICAL AND AGRICULTURAL ENGINEERING

**Harner III, Joseph P.**, US Environmental Protection Agency, \$21,175, "Livestock Pollution Control Web Site."

**Harner III, Joseph P.**, (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

**Kahl, Daniel W.**, (see **Powell, G. Morgan**, Biological and Agricultural Engineering).

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

**Powell, G. Morgan**, **Buchholz, Daryl D.** (Director of Cooperative Extension), and **Devlin, Daniel L.** (Agronomy), US Environmental Protection Agency, \$24, "Kansas Environmental Leadership Program (KELP)."

**Powell, G. Morgan**, and **Kahl, Daniel W.**, US Environmental Protection Agency, \$20,910, "Kansas Environment Leadership Program."

**Powell, G. Morgan**, and **Willingham, Judith M.**, US Environmental Protection Agency, \$36,710, "Kansas Environmental Leadership Program—Class 4."

**Powell, G. Morgan**, (see **Janke, Rhonda R.**, Extension Horticulture, Forestry and Recreation Resources).

**Rogers, Danny H.**, **Alam, Mahbub U.**, **Clark, Gary A.**, and **Fjell, Dale L.** (Extension Agronomy), Kansas Corn Commission, \$15,500, "Mobile Irrigation Lab—Improved Irrigation Efficiency for Corn Production."

**Rogers, Danny H.**, (see **Clark, Gary A.**, Biological and Agricultural Engineering).

**Willingham, Judith M.**, (see **Powell, G. Morgan**, Biological and Agricultural Engineering).

**Wolf, Robert E.**, US Department of Agriculture, \$25,000, "Spray Table Demonstration Kit Project to Enhance Pesticide Safety Education Program."

**Wolf, Robert E.**, (see **Reese, John C.**, Entomology).

**Wolf, Robert E.**, (see **Wilde, Gerald E.**, Entomology).

## COMMUNICATIONS

**Knapp, Mary C.**, and **Chumley, Forrest G.** (Agricultural Experiment Station), Kansas Water Office, \$8,000, "Technical Assistance to Water Users: ET/Weather Station Operation and Maintenance."

**Terry, Roger V.**, US Department of Agriculture, \$10,000, "Healthy Places, Healthy Communities."

**Terry, Roger V.**, US Department of Agriculture, \$16,100, "CYFERNet Technology."

**Wright, Kathleen A.**, US Department of Agriculture, \$195,052, "Creation of a National Training Program for First Detectors in Agriculture Homeland Security: Faculty Support for Design, Development and Implementation."

## COMMUNITY HEALTH INSTITUTE

**Dzewaltowski, David A.**, Kansas Health Foundation, \$20,000, "Support of Research and Extension Health Outcomes Initiative."



**Dzewaltowski, David A.**, (see **Trost, Stewart G.**, Community Health Institute).

**Johannes, Elaine M.**, and **Fink, Carol J.** (4-H Youth Development), US Department of Agriculture, \$131,831, "New Communities Project—Kansas Teen Leadership for Physically Active Lifestyles."

**Ponte, Christine M.**, Kansas Department of Health and Environment, \$8,789, "Cooperative Agreement Between Kansas Department of Health and Environment and Cooperative Extension Service, Kansas State University."

**Trost, Stewart G.**, US Department of Health and Human Services, \$10,204, "Predictors of Adolescent Girls' Physical Activity."

**Trost, Stewart G.**, **Dzewaltowski, David A.**, and **Fees, Bronwyn S.** (School of Family Studies and Human Services), United Methodist Health Ministry Fund, \$99,600, "Impact of a Move and Learn Curriculum on Physical Activity in Preschool Children."

### DEAN OF HUMAN ECOLOGY

**Peters, Paula**, and **Fitzgerald, Karen D.** (Human Nutrition), Kansas Health Foundation, \$17,840, "Berry Berry Good—Childhood Overweight Prevention Project."

**Peters, Paula**, (see **Buchholz, Daryl D.**, Agriculture and Natural Resources).

### DIRECTOR OF COOPERATIVE EXTENSION

**Buchholz, Daryl D.**, (see **Powell, G. Morgan**, Extension Biological and Agricultural Engineering).

**Lindquist, Jack W.**, Kansas Agriculture and Rural Leadership, Inc., \$69,238, "Kansas Agriculture and Rural Leadership, Inc."

### ENTOMOLOGY

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

### EXTENSION FAMILY AND CONSUMER SCIENCES

**Peters, Paula**, **Fitzgerald, Karen D.** (Human Nutrition), and **Hudson, Karen S.** (Human Nutrition), US Department of Agriculture, \$3,763,297 (includes \$729,492 from Kansas counties), "Kansas Food Stamp Nutrition Education Plan."

### 4-H YOUTH DEVELOPMENT

**Fink, Carol J.**, (see **Johannes, Elaine M.**, Community Health Institute).

### HORTICULTURE, FORESTRY AND RECREATION RESOURCES

**Janke, Rhonda R.**, and **Powell, G. Morgan** (Biological and Agricultural Engineering), US Environmental Protection Agency, \$69,923, "Towards Meeting Kansas TMDL Goals: Education Combined with Volunteer Soil and Water Testing for Enhanced Natural Resource Stewardship."

**Marr, Charles W.**, (see **Ricketts, Mitchell S.**, Agricultural Experiment Station).

**Reid, William R.**, US Department of Agriculture, \$6,000, "Evaluation of Phenotypic Diversity I Two Juglans Nigra Collections Using Species-Specific Descriptors."

### HUMAN NUTRITION

**Fitzgerald, Karen D.**, (see **Peters, Paula**, Extension Family and Consumer Sciences).

**Hudson, Karen S.**, (see **Peters, Paula**, Extension Family and Consumer Sciences).

### KANSAS FOREST SERVICE

**Aslin, Raymond G.**, US Department of Agriculture, \$1,992, "Conservation Reserve." (2 awards)

**Aslin, Raymond G.**, US Department of Agriculture, \$2,394,501 (includes \$953,055 from Various Rural Fire Departments), "Consolidated Payment Grant 2003."

**Aslin, Raymond G.**, US Department of Agriculture, \$77,861, "Forest Inventory Analysis—Kansas Forest Inventory."

**Aslin, Raymond G.**, US Department of Agriculture, \$122,255, "Forest Land Enhancement Program."

**Aslin, Raymond G.**, US Department of Agriculture, \$98,000, "NRCS Technical Service Provider."

**Aslin, Raymond G.**, US Department of Agriculture, \$8,000, "Resource Conservation and Development FY 2003."

**Aslin, Raymond G.**, US Environmental Protection Agency, \$50,000, "Marais des Cygnes Riparian Initiative Program."

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

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

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

### NORTHEAST AREA OFFICE

**DeRouchey, Joel M.**, **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Gottlob, Russell O.** (Animal Sciences and Industry), **Nelssen, Jim L.** (Animal Sciences and Industry), and **Tokach, Michael D.** (Animal Sciences and Industry), International Quality Ingredients b.v., \$12,410, "Determination of the Ileal Amino Acid Digestibility and Metabolizable Energy Content of Rice Protein Concentrate and Salmon Protein Hydrolysate."

**DeRouchey, Joel M.**, (see **Ham, Jay M.**, Agronomy).

**DeRouchey, Joel M.**, (see **Mankin, Kyle R.**, Biological and Agricultural Engineering).

**Duncan, Stewart R.**, Cotton, Inc., \$5,478, "Kansas State Research and Extension Cotton Production and Management Project."

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

**Staggenborg, Scott A.**, (see **Dille, Johanna A.**, Agronomy).

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

### NORTHWEST AREA OFFICE

**O'Brien, Daniel M.**, (see **Lamm, Freddie R.**, Northwest Research Extension Center).

**Olson, Brian L.**, Kansas Wheat Commission, \$19,933, "No-Till Wheat Production in County Variety Trials."

**Olson, Brian L.**, and **Peterson, Dallas E.** (Extension Agronomy), National Sunflower Association, \$2,150, "Devil's Claw Control In and Impact on Sunflower."

## PLANT PATHOLOGY

Jardine, Douglas J., (see Reese, John C., Entomology).

## SOUTHEAST AREA OFFICE

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 Extension 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 Gordon, Walter B., Agronomy).

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

Robbins, Benny S., and Kilgore, Gary L., Multisponsor, \$625, "Double-Crop Soybean Performance Tests—Extension Area Offices."

## SOUTHWEST AREA OFFICE

Dumler, Troy, (see Klocke, Norman L., Southwest Research Extension Center).

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

Dumler, Troy, (see Willson, Thomas C., Southwest Research Extension Center).

Sloderbeck, Phillip E., (see Buschman, Larry L., Entomology).

Sloderbeck, Phillip E., (see Michaud, John P., Entomology).

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

Thompson, Curtis R., Multisponsor, \$15,850, "Chemical Evaluation."

Thompson, Curtis R., (see Willson, Thomas C., Southwest Research Extension Center).

Witt, Merle D., (see Buschman, Larry L., Entomology).

## SOUTHWEST RESEARCH EXTENSION CENTER

Willson, Thomas C., Dumler, Troy (Southwest Area Office), Klocke, Norman L., Schlegel, Alan J., and Thompson, Curtis R. (Southwest Area Office), US Environmental Protection Agency, \$56,000, "Demonstration of Best Management Practices to Avoid Groundwater Pollution from Application of Livestock Manure to Cropland."

## PRESIDENT

### AUDITORIUM PERFORMANCES

Martin, Richard P., National Foundation on the Arts and the Humanities, \$25,881 (includes \$17,500 from KSU Student Government Fine Arts Fee), "McCain Performance Series FY 2004."

Martin, Richard P., National Foundation on the Arts and the Humanities, \$15,000 (includes \$10,000 from KSU Student Government Fine Arts Fee), "Moscow Festival Ballet—'Giselle'."

Martin, Richard P., National Foundation on the Arts and the Humanities, \$5,000, "Moscow State Radio Symphony Orchestra."

### BEACH ART MUSEUM

Render, Lorne E., Institute of Museum and Library Services, \$18,720, "2004 IMLS Conservation Project Support."

Render, Lorne E., National Foundation on the Arts and the Humanities, \$10,061, "Beach Museum of Art General Operating Support, FY 2004."

## VICE PRESIDENT FOR ADMINISTRATION AND FINANCE

### DIVISION OF FACILITIES

Seely, H. Alvin, (see Woods, John L., Division of Facilities).

Woods, John L., and Seely, H. Alvin, Kansas Department of Health and Environment, \$90,000, "Campus Wide Desk Side Mixed Office Paper Recycling Project for KSU."

## VICE PRESIDENT FOR INSTITUTIONAL ADVANCEMENT

### EDUCATIONAL AND PERSONAL DEVELOPMENT

Arck, Jr., William, City of Manhattan, Kansas, \$23,500, "Youth Oriented Alcohol Abuse Prevention Program."

Arck, Jr., William, Michael Andretti Foundation, \$7,000, "Century Council's Alcohol 101 Plus Program."

Greene, Kathleen V., National Science Foundation, \$28,850, "Kansas EPSCoR Summer Research Program."

Greene, Kathleen V., US Department of Education, \$240,043, "Ronald E. McNair Post-Baccalaureate Achievement Program."

Greene, Kathleen V., US Department of Education, \$266,711, "Student Support Services."

Greene, Kathleen V., US Department of Education, \$205,317, "Student Support Services—Salina."

Lynch, Judith A., and Lynch, Michael L., US Department of Agriculture, \$1,547, "Kansas State University—Beyond the Boundaries: A Summer Enrichment Academy."

Lynch, Michael L., Kauffman Foundation, \$75,000, "Beyond the Boundaries: A Summer Enrichment Program."

Lynch, Michael L., (see Lynch, Judith A., Educational and Personal Development).

McGowan, Reginland, American Chemical Society, \$400, "Project SEED."

McGowan, Reginland, US Department of Agriculture, \$20,077, "Kansas State University Upward Bound Math and Science Program Summer Food Service Program."

McGowan, Reginland, US Department of Agriculture, \$4,841, "Kansas State University Upward Bound Program at Salina Summer Food Service Program."

McGowan, Reginland, US Department of Agriculture, \$31,319, "Kansas State University Upward Bound Program Summer Food Service Program."

McGowan, Reginland, US Department of Education, \$196,846, "Kansas State University/Gear Up."

McGowan, Reginland, US Department of Education, \$214,872, "Kansas State University Gear Up Program #2."

McGowan, Reginland, US Department of Education, \$414,116, "Upward Bound Program."

McGowan, Reginland, US Department of Education, \$255,743, "Upward Bound Math and Science Program."

McGowan, Reginland, US Department of Education, \$220,000, "Upward Bound Program—Salina Campus."

### UNIVERSITY COUNSELING SERVICES

Rathbun, Arthur J., City of Manhattan, Kansas, \$10,000, "Targeted Intervention with KSU Residence Hall Judicial-Board Referred Alcohol and/or Drug Use/Abuse Students."

## PROVOST

### INTERNATIONAL PROGRAMS

**Holland, Kenneth M.**, and **Graff, David A.** (History), US Department of Education, \$77,000, "Asian Studies Minor."

**Wood, Mary**, NCN Institute, \$32,580, "English Training Sponsorship."

### KANSAS CENTER FOR RURAL INITIATIVES

**Gould, Carol A.**, Corporation for National and Community Service, \$50,991, "Kansas Campus Compact."

**Gould, Carol A.**, Kansas Department on Aging, \$1,800, "Lifelong Communities Initiative Training."

**Gould, Carol A.**, North Central Regional Planning Commission, \$30,000, "Rural Business Assistance."

**Gould, Carol A.**, US Department of Commerce, \$60,000, "Kansas Center for Community Economic Development."

**Gould, Carol A.**, and **Tolar, Mary H.**, Brown University, \$4,275, "Raise Your Voice."

**Tolar, Mary H.**, (see **Gould, Carol A.**, Kansas Center for Rural Initiatives).

### OFFICE OF THE PROVOST

**Dyer, Ruth A.**, **Franks, Suzanne E.** (Dean of Engineering), **King, Terry S.** (Dean of Engineering), **Montelone, Beth A.** (Biology), and **White, Stephen E.** (Dean of Arts and Sciences), National Science Foundation, \$811,878, "ADVANCE Institutional Transformation Award: Institutional Transformation at Kansas State University."

## VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY AND DEAN OF CONTINUING EDUCATION

### COMPUTING AND NETWORK SERVICES

**Townsend, Harvard C.**, (see **Unger, Elizabeth A.**, Computing and Network Services).

**Unger, Elizabeth A.**, **Gould, Rebecca A.** (Information Technology Assistance Center), **Harrington, Jr., John A.** (Geography), and **Townsend, Harvard C.**, Kansas State University, \$330,000, "Geospatial Technology Infrastructure Enhancement Program."

### DEAN OF CONTINUING EDUCATION

**Retzlaff, Deanna D.**, (see **Kastner, Curtis L.**, Food Science Institute).

### INFORMATION TECHNOLOGY ASSISTANCE CENTER

**Gould, Rebecca A.**, (see **Unger, Elizabeth A.**, Computing and Network Services).

### REGENTS' EDUCATIONAL COMMUNICATIONS CENTER

**Maes, Sue C.**, (see **Bloomquist, Leonard E.**, Sociology, Anthropology, and Social Work).

**Maes, Sue C.**, (see **Moxley, Virginia M.**, Dean of Human Ecology).

## VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY

**Caffey, John R.**, (see **Unger, Elizabeth A.**, Vice Provost for Academic Services and Technology).

**Unger, Elizabeth A.**, and **Caffey, John R.**, CampusEAI, \$949,750, "KSU CampusEAI Oracle Portal Grant."

## VICE PROVOST FOR RESEARCH AND DEAN OF THE GRADUATE SCHOOL

### OFFICE OF THE VICE PROVOST FOR RESEARCH AND DEAN OF GRADUATE SCHOOL

**Guikema, James A.**, Kansas Technology Enterprise Corporation, \$5,000, "Kansas NASA EPSCoR 2000 Program."

**Guikema, James A.**, National Physical Science Consortium, \$16,000, "NPSC Graduate Fellowship—Daniel Bayouth."

**Guikema, James A.**, (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

**Trewyn, R. W.**, Kansas Board of Regents, \$16,000, "Kansas Minority Graduate Fellowship Awards."

**Trewyn, R. W.**, Kansas State University Research Foundation, \$105,408, "KSU Research Foundation Staff Compensation."

**Trewyn, R. W.**, US Department of Defense, \$2,800,000, "Infrastructure Support for the KSU Biosecurity Research Institute Facility."

### BIOTECHNOLOGY CORE LABORATORY

**Tomich, John M.**, Multisponsor, \$59,588, "Biotechnology Laboratory Support."

### ELECTRONICS DESIGN LABORATORY

**Sobering, Timothy J.**, Multisponsor, \$168,457, "Electronics Design Laboratory."

**Sobering, Timothy J.**, (see **Taylor, Russell D.**, Vice Provost Electronics Design Laboratory).

**Taylor, Russell D.**, and **Sobering, Timothy J.**, Kintec, Inc., \$2,450, "General Maintenance for Digital Brake Controller."

### NATIONAL AGRICULTURAL BIOSECURITY CENTER

**Franz, David R.**, and **Vanier, Martha A.**, National Institute for Justice, \$29,884, "Defining the Role of Law Enforcement in Protecting American Agriculture from Bioterrorism."

**Jaax, Gerald P.**, US Department of Agriculture, \$210,000, "Vulnerability and Response to Agroterrorism."

**Tafanelli, Lee E.**, (see **Vanier, Martha A.**, National Agricultural Biosecurity Center).

**Vanier, Martha A.**, and **Tafanelli, Lee E.**, US Department of Defense, \$911,162, "Evaluation of Agroterrorism Responses and Capabilities Within NORTHCOM and Selected State National Guards."

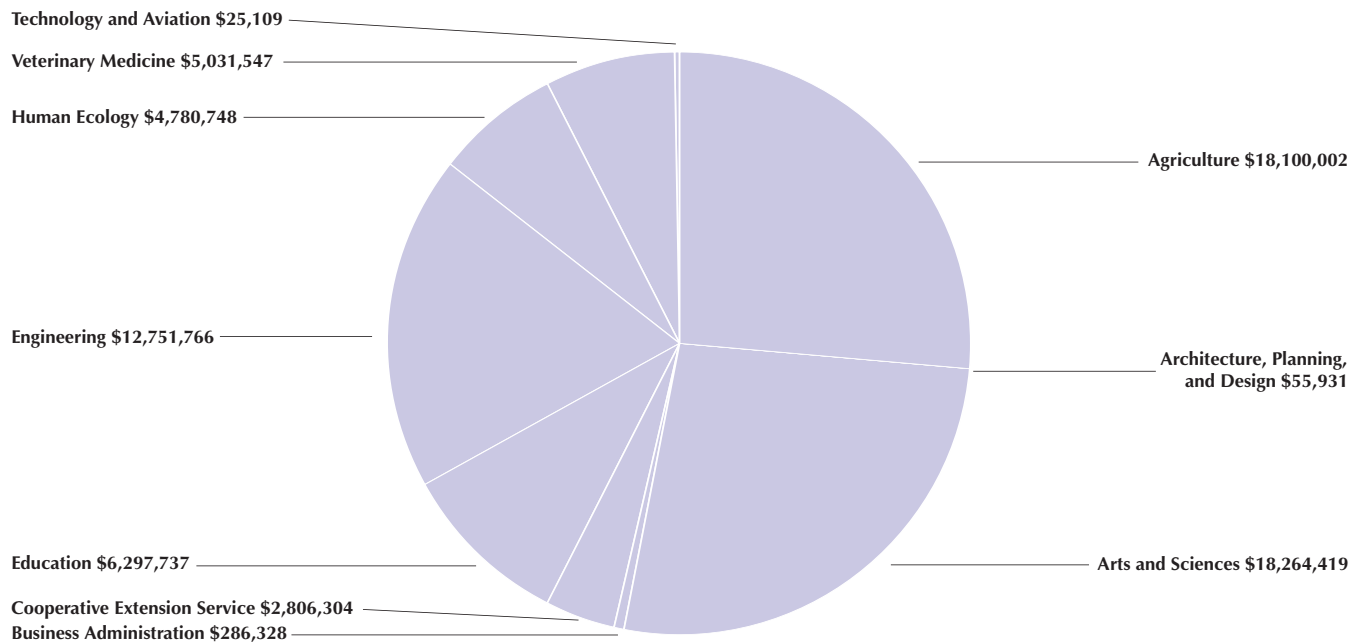
**Vanier, Martha A.**, (see **Franz, David R.**, National Agricultural Biosecurity Center).



# SECTION 2: EXPENDITURES

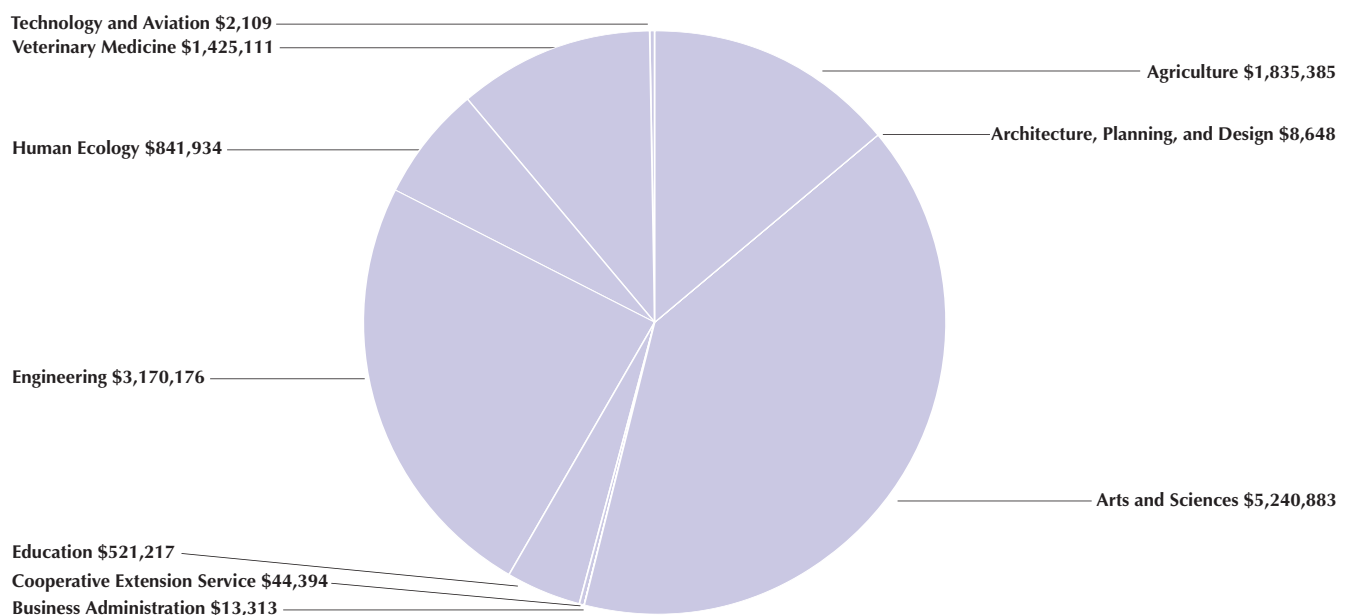
## DIRECT COST EXPENDITURES BY COLLEGE AND EXTENSION\*

*Fiscal Year 2004*



## FACILITIES AND ADMINISTRATIVE COST RECOVERY BY COLLEGE AND EXTENSION\*

*Fiscal Year 2004*



\*Note: Data provided by the KSU Controller's Office, Sponsored Projects Accounting

# EXPENDITURES FOR SPONSORED EXTRAMURAL FUNDING BY COLLEGE AND EXTENSION DEPARTMENT\*

*Fiscal Year 2004*

	DIRECT COSTS	FACILITIES AND ADMINISTRATIVE COSTS	TOTAL
<b>COLLEGE OF AGRICULTURE</b>			
Dean of Agriculture and Director of AES	30,956.16	0.00	30,956.16
Agricultural Economics	1,037,025.12	206,560.80	1,243,585.92
Agronomy	2,402,550.95	279,219.88	2,681,770.83
Animal Sciences and Industry	1,458,260.85	202,149.31	1,660,410.16
Communications	10,690.50	148.28	10,838.78
Entomology	1,618,236.08	164,824.04	1,783,060.12
Grain Science and Industry	1,464,211.16	233,581.66	1,697,792.82
Horticulture, Forestry and Recreation Resources	463,174.04	45,004.40	508,178.44
International Agricultural Programs	14,722.08	0.00	14,722.08
Plant Pathology	3,629,933.82	486,769.09	4,116,702.91
Kansas Center for Ag. Resource & Env	755,929.65	62,956.55	818,886.20
Agricultural Experiment Station	4,455,535.78	150,810.48	4,606,346.26
Northwest Research Extension Center	145,747.39	727.62	146,475.01
Agricultural Research Center-Hays	347,155.27	0.00	347,155.27
Southwest Research Extension Center	228,891.71	2,370.21	231,261.92
Southeast Agricultural Research Center	33,695.10	0.00	33,695.10
Food Science Institute	3,286.96	262.96	3,549.92
<b>Total—College of Agriculture</b>	<b>18,100,002.62</b>	<b>1,835,385.28</b>	<b>19,935,387.90</b>
<b>COLLEGE OF ARCHITECTURE, PLANNING, AND DESIGN</b>			
Architecture	21,604.53	5,616.52	27,221.05
Landscape Architecture/Regional & Community Plan.	34,327.19	3,031.72	37,358.91
<b>Total—College of Architecture, Planning, and Design</b>	<b>55,931.72</b>	<b>8,648.24</b>	<b>64,579.96</b>
<b>COLLEGE OF ARTS AND SCIENCES</b>			
Dean of Arts and Sciences	203,730.34	15,043.36	218,773.70
Biochemistry	1,921,957.55	641,462.52	2,563,420.07
Biology	6,901,177.18	1,854,422.10	8,755,599.28
Chemistry	1,852,562.41	652,763.75	2,505,326.16
Economics	71,933.06	0.00	71,933.06
Geography	381,984.83	52,114.38	434,099.21
Geology	160,231.23	45,918.14	206,149.37
History	48,960.66	0.00	48,960.66
James R. MacDonald Laboratory	1,678,916.19	709,342.81	2,388,259.00
School of Journalism and Mass Communication	222,322.73	28,960.31	251,283.04
Mathematics	253,061.30	107,406.65	360,467.95
Music	6,993.94	0.00	6,993.94
Kinesiology	95,732.61	13,802.05	109,534.66
Physics	2,623,786.69	721,668.94	3,345,455.63
High Energy Physics	1,346,284.61	249,351.96	1,595,636.57
Political Science	69,473.20	0.00	69,473.20
Psychology	276,663.85	114,855.20	391,519.05
Sociology, Anthropology, & Social Work	81,021.03	19,400.92	100,421.95
Statistics	67,625.62	14,370.05	81,995.67
<b>Total—College of Arts and Sciences</b>	<b>18,264,419.03</b>	<b>5,240,883.14</b>	<b>23,505,302.17</b>

\*Note: Data provided by the KSU Controller's Office, Sponsored Projects Accounting

<b>COLLEGE OF BUSINESS ADMINISTRATION</b>	<b>DIRECT COSTS</b>	<b>FACILITIES AND ADMINISTRATIVE COSTS</b>	<b>TOTAL</b>
Dean of Business Administration .....	262,417.92	.989.91	263,407.83
Accounting .....	0.00	2,494.05	2,494.05
Management .....	23,911.06	9,829.64	33,740.70
<b>Total—College of Business Administration .....</b>	<b>286,328.98</b>	<b>13,313.60</b>	<b>299,642.58</b>

### **COOPERATIVE EXTENSION SERVICES**

Director of Cooperative Extension .....	64,461.38	0.00	64,461.38
Extension Family and Consumer Sciences .....	174.11	0.00	174.11
Extension Communication .....	22,188.81	0.00	22,188.81
Kansas Forest Service .....	1,588,970.53	0.00	1,588,970.53
Agriculture and Natural Resources .....	611,176.03	3,158.82	614,334.85
Northwest Area Office .....	25,232.17	0.00	25,232.17
Southwest Area Office .....	36,929.56	0.00	36,929.56
Northeast Area Office .....	5,477.77	1,131.95	6,609.72
Southeast Area Office .....	20,304.63	406.36	20,710.99
Extension Office of Community Health .....	431,389.48	39,697.71	471,087.19
<b>Total—Cooperative Extension Services .....</b>	<b>2,806,304.47</b>	<b>44,394.84</b>	<b>2,850,699.31</b>

### **COLLEGE OF EDUCATION**

Dean of Educational Instructional Support .....	4,903,704.99	308,566.66	5,212,271.65
Foundations & Adult Education .....	269,550.88	95,187.98	364,738.86
Special Education .....	41,786.23	2,089.32	43,875.55
Elementary Education .....	987,042.02	134,000.26	1,121,042.28
Secondary Education .....	95,653.20	0.00	95,653.20
<b>Total—College of Education .....</b>	<b>6,297,737.32</b>	<b>539,844.22</b>	<b>6,837,581.54</b>

### **COLLEGE OF ENGINEERING**

Dean of Engineering .....	34,277.71	0.00	34,277.71
Biological & Agricultural Engineering .....	1,033,861.05	52,115.63	1,085,976.68
Chemical Engineering .....	729,000.57	189,651.28	918,651.85
Civil Engineering .....	1,226,691.35	250,331.82	1,477,023.17
Computing & Information Sciences .....	2,148,575.92	666,307.02	2,814,882.94
Electrical & Computer Engineering .....	340,591.20	139,157.64	479,748.84
Engineering Experiment Station .....	1,738.00	173.99	1,911.99
Institute for Environmental Research .....	239,187.42	292,828.18	532,015.60
Industrial & Manufacturing Systems Engineering .....	366,297.33	93,507.47	459,804.80
Mechanical and Nuclear Engineering .....	1,175,488.81	306,766.45	1,482,255.26
Advanced Manufacturing Institute .....	1,449,744.43	88,175.85	1,537,920.28
Kansas Industrial Extension Services .....	864,450.86	95,333.84	959,784.70
Center for Hazardous Substance Research .....	2,221,549.05	718,325.45	2,939,874.50
National Institute for Land Management & Training .....	353,332.29	93,912.95	447,245.24
National Gas Machinery Laboratory .....	566,980.35	183,588.68	750,569.03
<b>Total—College of Engineering .....</b>	<b>12,751,766.34</b>	<b>3,170,176.25</b>	<b>15,921,942.59</b>

### **COLLEGE OF HUMAN ECOLOGY**

Dean of Human Ecology .....	2,697,642.04	641,718.85	3,339,360.89
Apparel, Textiles and Interior Design .....	47,282.57	8,492.25	55,774.82
Hotel, Restaurant, Institution Management & Dietetics .....	21,269.88	5,261.20	26,531.08
Human Nutrition .....	591,180.88	98,482.73	689,663.61
School of Family Studies & Human Services .....	1,423,373.41	87,978.97	1,511,352.38
<b>Total—College of Human Ecology .....</b>	<b>4,780,748.78</b>	<b>841,934.00</b>	<b>5,622,682.78</b>



<b>COLLEGE OF TECHNOLOGY</b>	<b>DIRECT COSTS</b>	<b>FACILITIES AND ADMINISTRATIVE COSTS</b>	<b>TOTAL</b>
Dean of College of Tech and Aviation .....	.130.00	.....	.130.00
Salina Arts, Science & Business .....	.21,600.62	..... .40.60	.21,641.22
Salina Engineering Technology .....	.3,378.76	..... .2,069.24	.5,448.00
<b>Total—Salina—College of Technology .....</b>	<b>.25,109.38</b>	<b>..... .2,109.84</b>	<b>..... .27,219.22</b>
<b>VETERINARY MEDICAL CENTER</b>			
Dean of Veterinary Medical Center .....	.99,104.70	..... .1,587.28	..... .100,691.98
Anatomy and Physiology .....	.2,729,787.87	..... .748,716.96	... .3,478,504.83
Diagnostic Medicine/Pathobiology .....	.1,530,554.64	..... .317,077.18	... .1,847,631.82
Clinical Sciences .....	.650,162.52	..... .357,730.57	... .1,007,893.09
Veterinary Medical Teaching Hospital .....	.21,937.57	..... .0.00	..... .21,937.57
<b>Total—Veterinary Medical Center .....</b>	<b>.5,031,547.30</b>	<b>..... .1,425,111.99</b>	<b>... .6,456,659.29</b>
<b>GRAND TOTAL .....</b>	<b>.68,399,895.94</b>	<b>..... .13,121,801.40</b>	<b>... .81,521,697.34</b>

# UNIVERSITY SMALL RESEARCH GRANTS

---

University Small Research Grants are awarded by the Office of Research and Sponsored Programs to support research, scholarly activity and other creative efforts of tenure-track faculty members.

## Fall 2003 Awards

**An, Soontae** and **Jin, Hyun**, School of Journalism and Mass Communications, \$1,300. Effects of Political News and Advertising on the Issue of Salience of the Public.

**Chi, Wei**, Economics, \$1,140. Job Displacement and Receipt of Unemployment Insurance Benefits of Immigrant Workers.

**Ehie, Ike**, Management, \$2,000. Effect of Manufacturing and Marketing Conflict on Organizational Performance: An Empirical Investigation.

**Horne, Eva**, Biology, \$1,500. The Effects of Ectoparasites on Behavior in Collared Lizards.

**Mora Fayos, Silvia**, Biology, \$4,000. Insulin Sensitization Effects of Adiponectin in Striated Muscle Cells.

**Nel, Philip**, English, \$1,330. Crockett Johnson and Ruth Krauss: A Biography.

**Pfromm, Peter**, Chemical Engineering, \$3,000. NMR Technique for Evaluation of Enzymatic Production of Chiral Pharmaceuticals

**Westman, Karin**, English, \$260. Gods and Monsters: Information Literacy, Intellectual Endeavor, and Dialogic Practice.

**Yum, Young-Ok**, Speech Communication, Theatre and Dance, \$840. Conceptualizing Communication in Diverse Intercultural Contexts.

## Spring 2004 Awards

**Brazeal, Leann**, Speech Communication, Theatre and Dance, \$2,000. A Functional Analysis Of Debates In Senatorial And Gubernatorial Campaigns.

**Chi, Wei**, Economics, \$1,300. Unemployment Duration and Re-employment Success of Immigrant Workers.

**Cooper, Cora**, Music, \$1,431. Preliminary Research towards a Graded Anthology of Violin Music by Women Composers.

**Dickson, Marsha**, Apparel, Textiles, and Interior Design, \$2,200. Textile Artisans of India: "Our Hands are our Future!".

**Dodd, Elizabeth C**, English, \$1,272. Poetry and Essay Projects.

**Goff, Briana**, School of Family Studies and Human Services, \$1,700. Primary and Secondary Post-Traumatic Stress in Couples.

**Harms, Craig**, Kinesiology, \$2,000. The Effect Of Antioxidant Vitamins On Pulmonary Function At Rest And During Exercise In Healthy Subjects.

**\*Haub, Mark**, Human Nutrition, \$3,200. Green Tea on Glucose-induced Inflammation in Postmenopausal Women.

**Hillard, Derek**, Modern Languages, \$2,000. Critical Moments: Paul Celan and the Poetry of Trauma: Work On Two Chapters From A Monograph Project.

**Miller, Teresa**, Educational Leadership, \$1,500. Historical, Biographical And Social Factors Affecting Educational Organizations In Kansas, Related To The New Federal Requirements Of The No Child Left Behind Act Of 2001, The Changing Demographics Of The Student And Staff Populations, And The Current Financial Shortfall For School Funding.

**Nicolaysen, Kirsten**, Geology, \$1,330. Measurement Of 226-Ra-210-Pb Disequilibria By Y-Ray Counting And Its Application To Dating Young Lavas.

**\*Rodgers, Susan**, English, \$1,000. A Novel in Progress.

**Routson, Roger**, Art, \$1,000. The Changing Format Of Visual Fine Art Publication.

\*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 offices of potential external funding sponsors, and as matching funds on certain fellowships. They cannot be used for research travel.

## Fall 2003 Awards

**Aakeroy, Christer**, Chemistry, \$500. Department of Defense Workshop on Research Grant Proposal Preparation.

**Becker, Constance Dustin**, Horticulture, Forestry and Recreation Resources, \$1,032. Symposium on Biodiversity and Resource Monitoring for Management in Developing Countries, Copenhagen, Denmark.

**Brooks, Kenneth**, Landscape Architecture/Regional and Community Planning, \$2,000. Council of Educators in Landscape Architecture; Annual International Meeting, Christchurch, New Zealand.

**Darling, David**, Agricultural Economics, \$200. Assessment of Foot and Mouth Disease Outbreak in England.

**Dissanayake, Sunanda**, Civil Engineering, \$2,000. TRANSED 2004—10th International Conference on Mobility and Transport for Elderly and Disabled People, Hamamatsu, Japan.

**Gordon, Joye**, School of Journalism and Mass Communications, \$2,925. Association for International Agricultural and Extension Education (AIAEE) and Presidency of the European Union Conference, Risk Communication, and Social Marketing, Dublin and Cork, Ireland.

**Hall, Dean**, English, \$1,200. Invited Lecturer in American Literature at Charles University in Prague, Czech Republic.

**Hamilton, James**, Philosophy, \$500. Third Prague Interpretation Colloquium—"The Constraints of Interpretation;" Prague, Czech Republic.

**Janda, Swinder**, Marketing, \$2,000. Presenting two papers at the European Marketing Academy Annual Conference, Murcia, Spain.

**Jang, Soocheong**, Hotel, Restaurant, Institution Management and Dietetics, \$1,500. Second Asia Pacific CHRIE Conference and the Sixth Biennial Conference on Tourism in Asia, Phuket/Bangkok, Thailand.

**Klein, Melanie**, Landscape Architecture/Regional and Community Planning, \$1,750. CELA 2004 "Here or There? The Global and the Local." Council of Educators in Landscape Architecture Annual Conference, Christchurch, New Zealand.

**McHaney, Roger**, Management, \$1,675. Software Development Impact Statement (SoDIS) Research Symposium conducted by the Software Engineering Practice Improvement Alliance (SEPIA), Auckland, New Zealand.

**Patterson, Douglas**, Philosophy, \$476. Bolzano et la Verite Conference in Paris, France.

**Prakash, Om**, Biochemistry, \$600. IUPC International Conference on Biodiversity and Natural Products, New Delhi, India.

**Rolley, Stephanie**, Landscape Architecture/Regional and Community Planning, \$1,750. Council of Educators in Landscape Architecture Annual Meeting, CELA 2004 "Here or There?" Interconnections between the Global and the Local, Christchurch, New Zealand.

**\*Shah, Jyoti**, Biology, \$1,500. International Joint Workshop on PR Proteins and Induced Resistance; Snekkersten, Denmark.

**Shoemaker, Candice**, Horticulture, Forestry and Recreation Resources, \$2,000. 8th International People-Plant Symposium "Exploring the Therapeutic Power of Flower, Greenery and Nature" with pre- and post-conference tours; Conference, Awaji Island, Hyogo Prefecture, Japan.

**Trussell, Alice**, Library, \$1,500. The 25th Annual Conference of the International Association of Technological University Libraries, Krakowska Krakow, Poland.

**Wood, Naomi**, English, \$1,200. Invited Lecture and Professor Exchange to Charles University, Prague, the Czech Republic and to Pedagogical Faculty, the University of South Bohemia, Ceske Budejovice, the Czech Republic.

## Spring 2004 Awards

**An, Soontae**, School of Journalism and Mass Communications, \$1,500. 7th Annual Meeting of International Society of Political Psychology, Lund, Sweden.

**Brown, Glen**, Art, \$1,347. The first International Ceramic Journal Editors' Symposium, Fuping, Shannix, China.

**Calluori-Holcombe, Anna**, Art, \$2,000. Attend and participate in an exhibition and catalog, International Academy of Ceramics General Assembly, Seoul and Icheon, South Korea; Post conference tour and meeting, 1000 Year Celebration of Porcelain in Jingdezhen, China.

**Clark, Robert**, Modern Languages, \$1,400. Conference Presentation at Triennial Colloquium of the International Society for the Study of Medieval Theater (SITM), in Elche, Spain.

**Edgar, James**, Chemical Engineering, \$1,064. International Workshop on Bulk Nitride Semiconductors III; Zakopane, Poland.

**Garavito, C. Lucia**, Modern Languages, \$1,200. Genero y generos: escritura y escritoras iberoamericanas (Genders and Genres: Writing and Hispanic Women Writers); Madrid, Spain. Paper to be presented: "Criaturas de aire de Lucia Laragione: biopoder y subversion" (Creatures of Air by Lucia Laragione: Biopower and Subversion).

**Harrington Jr, John**, Geography, \$1,500. The 30th Congress of the International Geographical Union; Glasgow, Scotland.

**Harrington, Lisa**, Geography, \$1,500. The 30th Congress of the International Geographical Union; Glasgow, Scotland.

**Hedrick, Donald**, English, \$1,100. Giving a paper at the annual Shakespeare Association Meeting on Shakespeare and Early Modern Entertainment Value; Bermuda.

**Ikeda, Yoshiro**, Art, \$2,200. Jingdezhen Municipal Government Planning Office for Ceramic Art; Jingdezhen 1000 Years Celebration of Porcelain/Jindeqhen Int'l Ceramic Education Conference; Jindezhen, China.

**Kambhampati, Srinivas**, Entomology, \$1,800. XXII International Congress of Entomology, Brisbane, Australia.

**Kolonosky, Walter**, Modern Languages, \$1,200. The 12th Symposium of the International Dostoevsky Society, Geneva, Switzerland.

**Lu, Max**, Geography, \$1,364. The Second International Conference on Population Geographies; University of St. Andrews, Scotland, UK.



**Machor, James**, English, \$2,500. Professional travel to Lyon, France to deliver a talk at the 12th annual international conference of the Society for the History of Authorship, Reading, and Publication, sponsored by the Institute d'histoire du livre, Ecole normale superieure—lettres et sciences humaines, Lyon.

**Michaud, John**, Entomology, \$1,500. Ecology of Aphidophaga IX, an International Conference on Biological Control of Aphids, Ceske Budejovice, Czech Republic.

**Najjar, Yacoub**, Civil Engineering, \$2,000. Attend Geo2004: International Conference on Advances in Geotechnical Engineering with Emphasis on Dam Engineering; Irbid, Jordan; and visit the Civil Engineering department at Jordan University of Science and Technology (JUST), Irbid, Jordan.

**Ossar, Michael**, Modern Languages, \$400. The German Presence in the USA.

**Parker, Craig**, Music, \$2,000. Symposium of the International Musicological Society: Melbourne, Australia, to deliver paper on "Sousa's Band in Australia."

**Paul, Bimal**, Geography, \$1,500. The International Geographical Union (IGU) Commission on Health and the Environment Pre-Conference meeting to the 30th IGU's International Geographical Congress to be held in Irsee, Germany.

**Pecar, Marina**, Architecture, \$1,500. 2004 World Congress on Housing: Sustainability of the Housing Projects, organized by the International Association for Housing Science, to be held at the University of Trento, Italy.

**Potts, Donna**, English, \$2,500. Conferences on Irish Literature: American Conference for Irish Studies, Liverpool, UK; International Association for the Study of Irish Literature, Galway, Ireland; Conference on the Literature of Region and Nation, Cheshire, UK.

**Ramm, Alexander**, Mathematics, \$2,800. International Conference on Mathematical Inequalities & Applications to be held in Melbourne, Australia, at Victoria University, and the International Conference on "Optimization: Techniques and Applications," to be held at the University of Ballarat. Prof Ramm will work at the University of Ballarat with Professor Rubinov and Dr. Bagirov on a joint project.

**Richter, Linda**, Political Science, \$1,500. Global Conference on Democracy, Power and International Tourism at University of Brighton, Eastbourne, U.K.

**Ryabogin, Dmitry**, Mathematics, \$1,500. Seventh International Conference on Harmonic Analysis and Partial Differential Equations, El Escorial, Madrid (Spain).

**Sabates, Marcelo**, Philosophy, \$1,000. Seventh Bariloche Colloquium of Philosophy; Bariloche, Argentina.

**Shepard, Scott**, Engineering Technology, \$1,600. Photon Correlation and Scattering; Royal Netherlands Academy of Sciences; Amsterdam, Netherlands.

**Sheu, Chwen**, Management, \$1,600. 2004 GMRG Annual Meeting in Istanbul and Marmaris, Simon, Madlen, Architecture, \$900. International Conference: The German Presence in the USA, University of Bielefeld, Germany.

**Smith, Michael**, Entomology, \$2,000. XXII International Congress of Entomology—Strength in Diversity, to be held in Brisbane, Australia.

**Watts, Donald**, Architecture, \$2,467. Post Traditional Environments in a Post Global World—Ninth Conference of the International Association for the Study of Traditional Environments—Sharjah/Dubai, United Arab Emirates.

# UNIVERSITY DISTINGUISHED PROFESSORS

---

**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)  
**KENNETH KLABUNDE**, Chemistry (1988)  
**ALAN KNAPP**, Biology (2002)  
**CHII-DONG LIN**, Physics (1990)  
**ROBERT D. LINDER**, History (2003)  
**DAVID LITTRELL**, Music (2001)  
**JAMES L. MARSDEN**, Regents Distinguished Professor of Animal Sciences (1994)  
**E. WAYNE NAFZIGER**, Economics (1999)  
**VINCENT ORTIZ**, Chemistry (2004)  
**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)  
**DAVID A. SCHMIDT**, Computing and Information Sciences (2003)  
**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)

A COMPLETE LISTING, INCLUDING UNIVERSITY DISTINGUISHED PROFESSORS EMERITUS, APPEARS AT  
[HTTP://WWW.KSU.EDU/GRAD/FACULTY/GRADPRO.HTM](http://www.ksu.edu/grad/faculty/gradpro.htm)

# RECIPIENTS OF THE DISTINGUISHED GRADUATE FACULTY AWARD

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.

**JOHN F. HELM** Architecture and Applied Arts 1955–56  
**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

**DONALD W. SETSER** Chemistry 1979–80

**JAMES F. SHEPARD** Plant Pathology 1980–81

**ROGER FEDDE** Anatomy and Physiology 1981–82

**NASIR AHMED** Electrical Engineering 1982–83

**WILLIAM FATELEY** Chemistry 1983–84

**BURTON I. KAUFMAN** History 1984–85

**PATRICK RICHARD** Physics 1984–85

**JONATHAN HOLDEN** English 1985–86

**HORST LEIPOLD** Pathology 1985–86

**TERRY C. JOHNSON** Biology 1986–87

**MICHAEL W. SULEIMAN** Political Science 1986–87

**CORNELIA BUTLER FLORA** Sociology 1987–88

**RICHARD N. MCDONALD** Chemistry 1987–88

**MARGO KREN** Art 1988–89

**GERALD R. REECK** Biochemistry 1988–89

**BIKRAM S. GILL** Plant Pathology 1989–90

**PATRICIA J. O' BRIEN** Sociology, Anthropology and Social Work 1989–90

**BRIAN S. SPOONER** Biology 1990–91

**BENJAMIN R. TILGHMAN** Philosophy 1990–91

**ALBERT N. HAMSCHER** History 1991–92

**KENNETH J. KLABUNDE** Chemistry 1991–92

**C. LEWIS COCKE** Physics 1992–93

**JANE A. WESTFALL** Anatomy and Physiology 1992–93

**ROBIN E. DENELL** Biology 1993–94

**JOHN J. IANDOLO** Pathology and Microbiology 1993–94

**DONALD J. MROZEK** History 1993–94

**THEODORE L. HOPKINS** Entomology 1994–95

**THOMAS E. ROCHE** Biochemistry 1994–95

**GARY W. CONRAD** Biology 1995–96

**JAN E. LEACH** Plant Pathology 1995–96

**E. WAYNE NAFZIGER** Economics 1995–96

**ALEXANDER G. RAMM** Mathematics 1996–97

**CHRISTOPHER M. SORENSEN** Physics 1996–97

**FRANK BLECHA** Anatomy and Physiology 1997–98

**TALAT RAHMAN** Physics 1997–98

**ROLLIN SEARS** Agronomy 1997–98

**LARRY TAKEMOTO** Biology 1998–99

**MARSHA FREY** History 1999–00

**ERIC MAATA** Chemistry 1999–00

**GEORGE KEISER** English 2000–01

**PAUL SEIB** Grain Science and Industry 2000–01

**SCOT H. HULBERT** Plant Pathology 2001–02

**JOSEPH VINCENT ORTIZ** Chemistry 2001–02

**LARRY E. ERICKSON** Chemical Engineering 2002–03

**JAMES SHANTEAU** Psychology 2002–03

**DALE HERSPRING** Political Science 2003–04

**DAVID NORMAN** Agricultural Economics 2003–04



# U.S. PATENTS

---

Issued from July 1, 2003 to June 30, 2004 to the KSU Research Foundation

*(Listed in reverse chronological order)*

**Xuemin Wang** and **Yongming Sang** "Drought Tolerant Plants and Methods of Increasing Drought Tolerance in Plants" (#6,756,526)

**John M. Tomich**, **Takeo Iwamoto**, **James R. Broughman** and **Bruce D. Schultz** "M2GlyR Derived Channel Forming Peptides" (#6,750,200)

**Sanjay Kapil** and **Kumar Shanmukhappa** "Identification and Applications of Porcine Reproductive and Respiratory Syndrome Virus Host Susceptibility Factor(s) for Improved Swine Breeding" (#6,740,490)

**Duy H. Hua**, **Sung I. Koo** and **Sang K. Noh** "Compounds Affecting Cholesterol Absorption" (#6,727,277)

**Xiuzhi S. Sun** and **Greggory S. Karr** "Biodegradable and Edible Feed Packaging Materials" (#6,716,022)

**Frank Blecha** and **Jishu Shi** "Synthetic Peptides that Inhibit Leukocyte Superoxide Anion Production and/or Attract Leukocytes" (#6,713,605)

**Eric A. Maatta** and **Aaron R. Moore** "Polymers Incorporating Covalently Attached Organoimido Polyoxometalates" (#6,706,833)

**Tiruvor G. Nagaraja**, **George C. Stewart**, **Sanjeev K. Narayanan** and **Muckatira M. Chengappa** "Recombinant Fusobacterium Necrophorum Leukotoxin Vaccine and Preparation Thereof" (#6,669,940)

**Sherry J. Haar** "Therapy Apparel for Children Diagnosed with Sensory Integration Dysfunction" (#6,654,967)

---

The Kansas State University Research Foundation (KSURF), a not-for-profit 501(c)(3) corporation is assigned the responsibility for technology transfer activities for Kansas State University. KSURF secures legal protection (patents, copyrights, trademarks, etc.) for intellectual property created at the University and facilitates various commercialization efforts involving this property. Licensing and entrepreneurial

initiatives are carried out by the National Institute for Strategic Technology Acquisition and Commercialization, formerly the Mid-America Commercialization Corporation, in conjunction with KSURE.

E-mail: [tech.transfer@ksu.edu](mailto:tech.transfer@ksu.edu)

<http://www.ksu.edu/tech.transfer>

**Notice of nondiscrimination**

Kansas State University is committed to nondiscrimination on the basis of race, sex, national origin, disability, religion, age, sexual orientation, or other nonmerit reasons, in admissions, educational programs or activities and employment (including employment of disabled veterans and veterans of the Vietnam Era), as required by applicable laws and regulations. Responsibility for coordination of compliance efforts and receipt of inquiries concerning Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and the Americans With Disabilities Act of 1990, has been delegated to Clyde Howard, Director of Affirmative Action, Kansas State University, 214 Anderson Hall, Manhattan, KS 66506-0124, (Phone) 785-532-6220; (TTY) 785-532-4807.

35439-1/05-1.1M