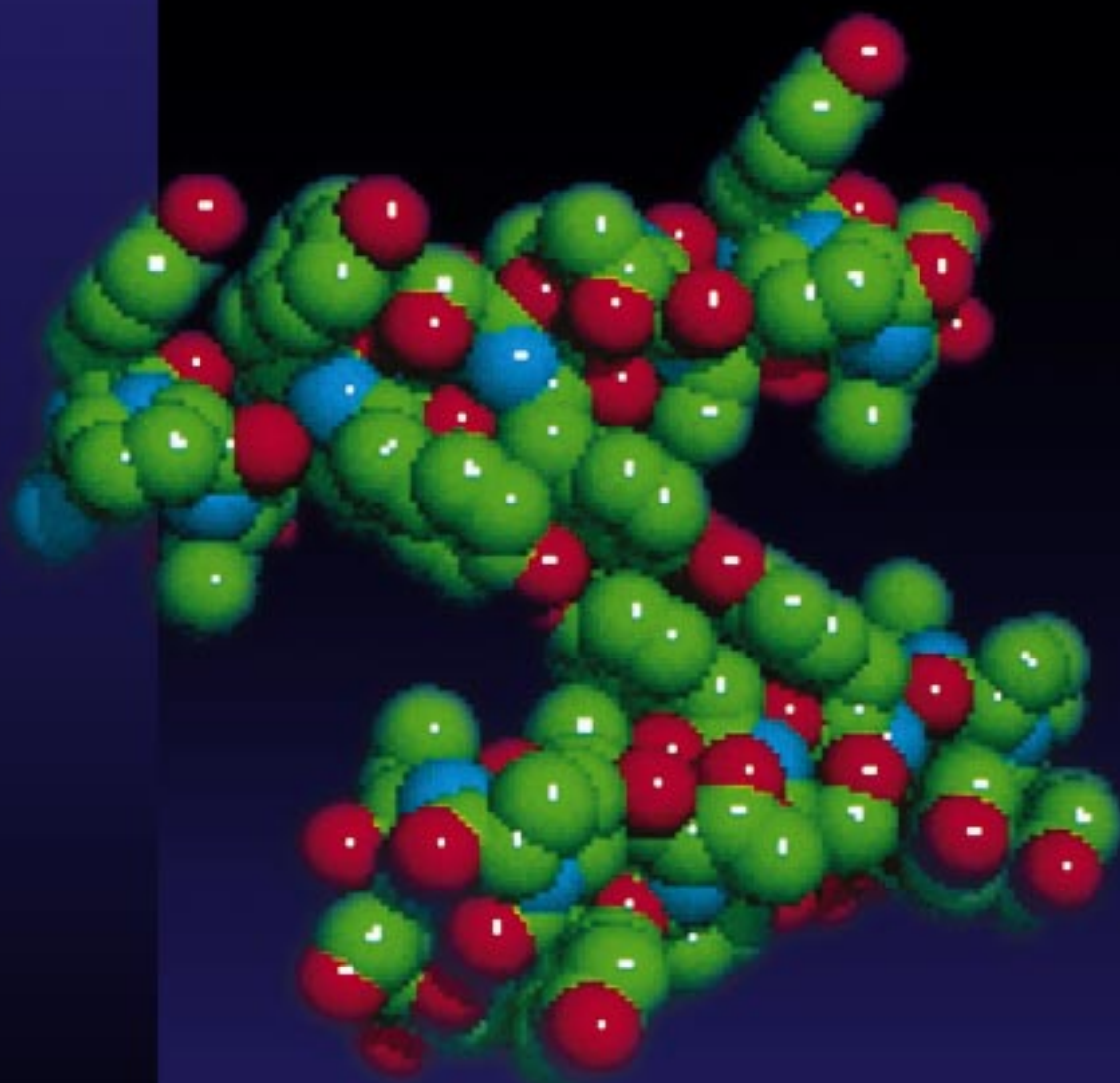


RESEARCH 2000

A Report of
Research and
Sponsored
Programs for
Fiscal Year
2000



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



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

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

Dear Colleagues:

Kansas State University faculty marked the new millennium by breaking records again for extramural funding.

Fiscal Year 2000 brought good news for the university:

- Competitive external funding jumped to almost \$72 million, absolutely shattering last year's record of \$58 million.
- The total research base exceeded \$100 million for the first time in history, finishing at \$106 million.
- More than 800 research projects won funding from federal and state agencies, private-sector companies, not-for-profit foundations, and other diverse sponsors.

And as if that weren't enough good news, the Carnegie Foundation awarded Kansas State University its highest ranking, "Doctoral/Research University, Extensive."

K-State is clearly on the move.

A speaker at a recent Pacific Rim economic development conference spoke of "packaged brainpower" as the economic driver for the new century, comparable to oil in the last century.

The "brainpower packaging" challenge for public universities in the new millennium may be the next area where K-State will excel. Universities are being asked to fuel technology-based economic development in their states by patenting and commercializing faculty innovations. To date, K-State has four start-up companies currently under development.

As new companies and industries emerge based on faculty research they will create jobs for K-State students as interns and research team members. Graduates will be able to pursue technology-based careers in the new global economy without leaving the state.

Kansas State University, with a work ethic based on creative problem-solving, collaboration and teamwork, is preparing its undergraduates and graduate students well for the future.

Congratulations to the faculty and staff for another dynamic and successful year.

Keep up the great work!

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

KANSAS STATE
UNIVERSITY
**RESEARCH
FUNDING BASE**

Fiscal Year 2000

The research funding base at Kansas State University consists of awards of extramural funds from federal and state agencies, from foundations, and from various private and industrial organizations, mainly through the competitive grants process, together with other funds appropriated from federal and state sources as line items designated specifically for related activities.

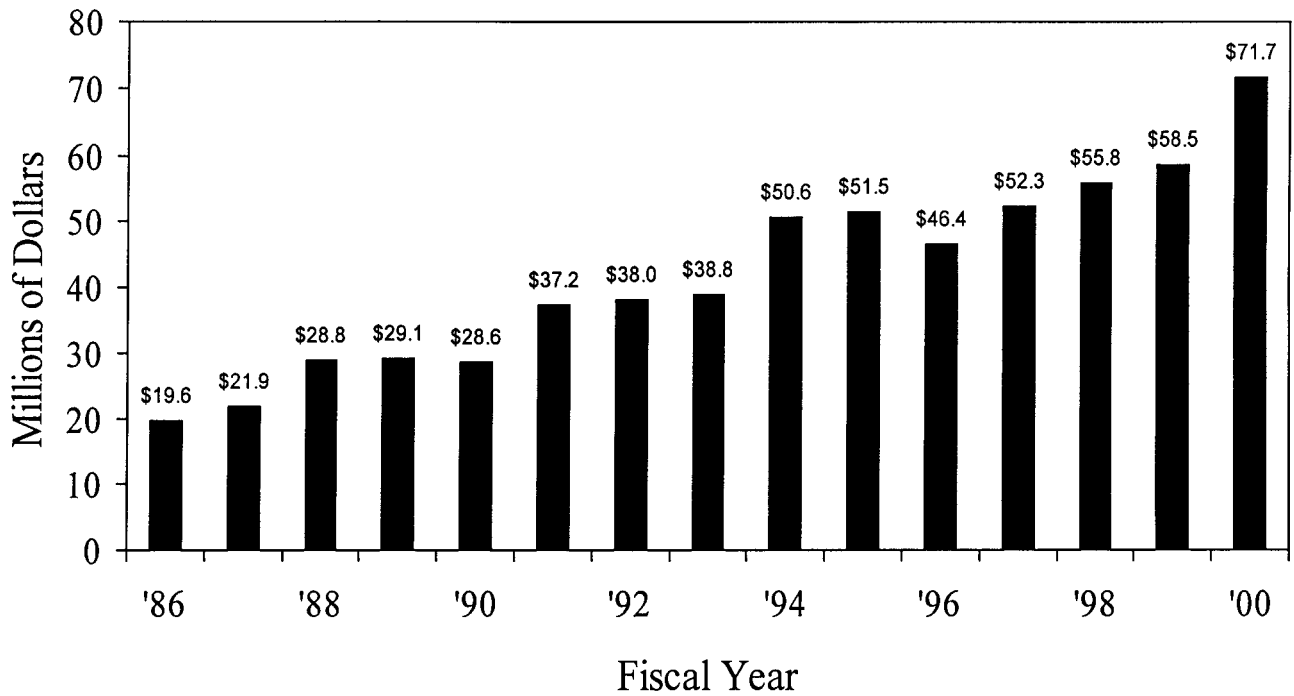
I. AWARDS:	
Competitive Grants and Contracts	\$ 71,670,690
<u>SUBTOTAL</u>	<u>\$ 71,670,690</u>
II. UNIVERSITY and EXPERIMENT STATIONS:	
University/Vice Provost for Research	625,543
Kansas Agricultural Experiment Station	
Federal Appropriation	3,203,829
State Appropriation	28,177,159
Engineering Experiment Station	
State Appropriation	1,856,375
Veterinary Medical Center	
Food Animal Health and Management Center	
State Appropriation	516,662
<u>SUBTOTAL</u>	<u>\$ 34,379,568</u>
<u>RESEARCH BASE GRAND TOTAL</u>	<u>\$106,050,258</u>

SECTION 1: AWARDS

KANSAS STATE
UNIVERSITY

TOTAL EXTRAMURAL AWARDS RECEIVED

Fiscal Years 1986–2000



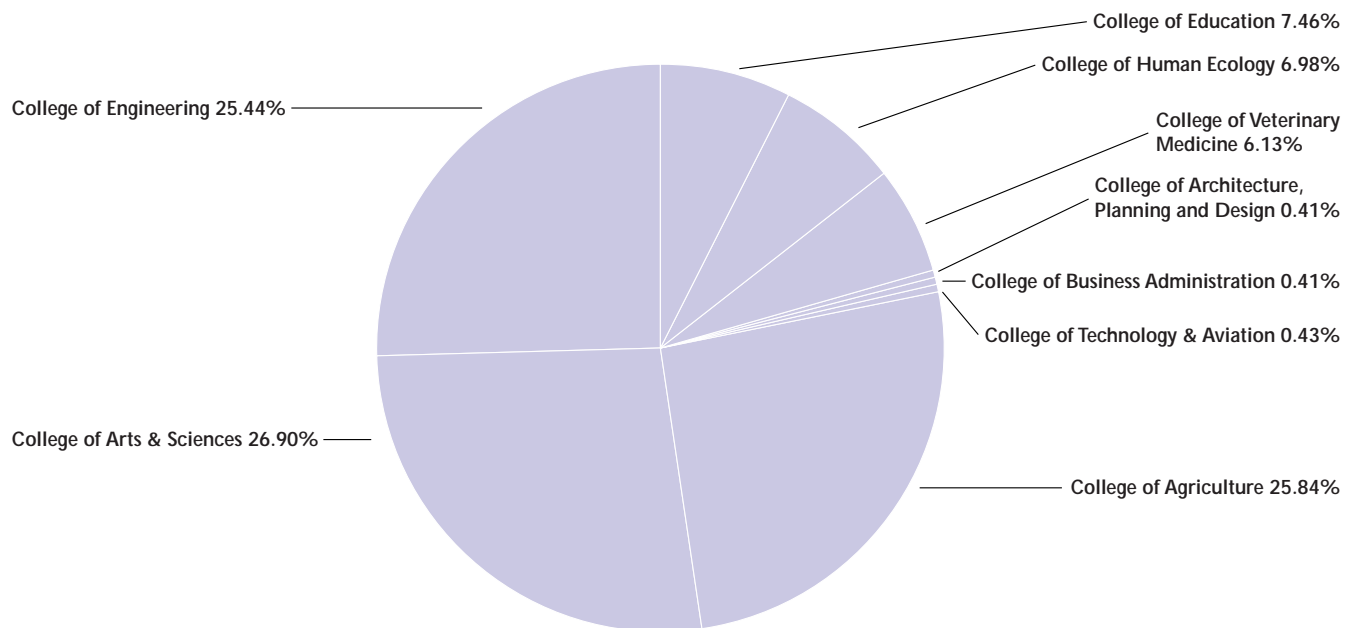
DISTRIBUTION OF NEW AWARDS AMONG COLLEGES AND OFFICES OF THE UNIVERSITY

Fiscal Year 2000

College/Office	Number of Awards	Dollar Value
College of Agriculture	315	\$17,153,117
College of Architecture, Planning and Design	7	271,363
College of Arts and Sciences	185	17,855,393
College of Business Administration	4	271,035
College of Education	26	4,949,789
College of Engineering	147	16,883,076
College of Human Ecology	49	4,635,719
College of Technology and Aviation	6	288,122
College of Veterinary Medicine	68	4,067,896
Office of the President	5	99,169
Office of the Provost	15	315,315
Vice President for Administration and Finance	2	475,000
Vice President for Institutional Advancement	16	1,302,065
Vice Provost for Academic Services and Instruction	6	2,864,533
Vice Provost for Research and Dean of Graduate School	7	239,098
UNIVERSITY TOTALS	858	\$71,670,690

AWARDS BY COLLEGE

Fiscal Year 2000



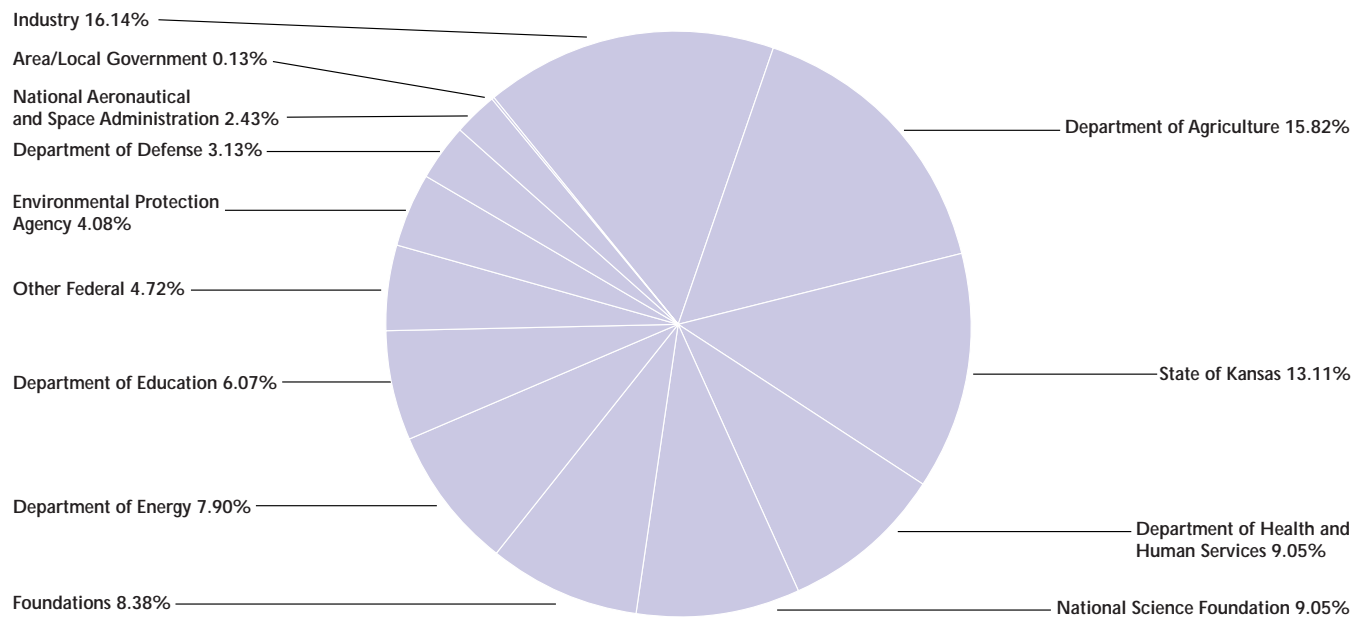
KANSAS STATE UNIVERSITY SOURCES OF AWARDS

Fiscal Year 2000

Source	Number of Awards	Dollar Value
Area/Local Government	5	89,921
Department of Agriculture	104	11,336,856
Department of Defense	27	2,243,126
Department of Education	24	4,353,401
Department of Energy	37	5,660,987
Department of Health and Human Services	40	6,482,938
Environmental Protection Agency	25	2,925,249
Foundations	145	6,004,897
Industry	172	11,569,492
National Science Foundation	52	6,483,665
National Aeronautics and Space Administration	28	1,739,554
Other Federal	45	3,384,462
State of Kansas	154	9,396,142
TOTAL	858	\$71,670,690

SOURCES OF AWARDS

Fiscal Year 2000



EXTRAMURAL AWARDS

Fiscal Year 2000 (July 1, 1999–June 30, 2000)

COLLEGE OF AGRICULTURE

AGRICULTURAL ECONOMICS

Barton, David G., Multisponsor, \$80,000, "Arthur Capper Cooperative Center."

Barton, David G., (see **Boland, Michael A.**, Agricultural Economics).

Bernardo, Daniel J., (see **Hargrove, William L.**, Kansas Center for Agriculture Resource and Environment).

Boland, Michael A., Farm Foundation, \$5,000, "Exporting US and Uruguayan Beef to the European Union: A Case Study in Supply Management."

Boland, Michael A., and **Barton, David G.**, US Department of Agriculture, \$68,441, "Cooperatives and Their Role in Value-Added White Wheat Markets."

Boland, Michael A., and **Dhuyvetter, Kevin C.**, Kansas Department of Agriculture, \$14,176, "Market Research on Value-Enhanced Soybeans."

Boland, Michael A., and **Dhuyvetter, Kevin C.**, Kansas Department of Agriculture, \$14,176, "Market Research on Grain Sorghum (Milo)."

Boland, Michael A., and **Herrman, Timothy J.** (Grain Science and Industry), Kansas Department of Agriculture, \$18,959, "Market Research in Value-Enhanced Corn."

Boland, Michael A., and **Kastens, Terry**, Kansas Crop Improvement Association, \$3,500, "Cost/Benefits Study of Using Certified versus Bin-Run Seed."

Boland, Michael A., and **Kastens, Terry**, Kansas Wheat Commission, \$10,000, "Current Economic Issues with Hard White Wheat in Kansas."

Boland, Michael A., (see **Barton, David G.**, Extension Agricultural Economics).

Dhuyvetter, Kevin C., (see **Boland, Michael A.**, Agricultural Economics).

Dhuyvetter, Kevin C., (see **Maddux, Larry D.**, Agronomy).

Featherstone, Allen M., Agricultural Research Institute, \$11,150, "Fellowship for January M. Mafuru."

Featherstone, Allen M., Kansas Department of Health and Environment, \$5,000, "Development of NPS Loan Agreement."

Fox, John A., US Department of Agriculture, \$120,000, "Estimating the Nationwide Demand for Risk Reduction from Foodborne Pathogens."

Hamilton, Stephen F., (see **Lamm, Freddie R.**, Northwest Research Extension Center).

Jones, Rodney D., (see **Ohlenbusch, Paul D.**, Extension Agronomy).

Jones, Rodney D., (see **Rice, Charles W.**, Agronomy).

Kastens, Terry (see **Boland, Michael A.**, Agricultural Economics).

Kastens, Terry, (see **Margolies, David C.**, Entomology).

Langemeier, Michael R., Kansas Department of Wildlife and Parks, \$6,400, "Analysis of Small Game Harvest Survey Data."

Langemeier, Michael R., (see **Nelson, Richard G.**, Kansas Industrial Extension Service).

Leatherman, John C., US Department of Commerce, \$11,729, "Economic and Fiscal Implications of Electronic Commerce for Rural Communities: New Business Opportunity or Death Knell for Main Street?"

Marsh, Thomas L., (see **Margolies, David C.**, Entomology).

Norman, David W., International Development Research Center, \$7,400, "Participatory Evaluation of Community-Based Water Supply Projects in Central Tanzania."

Norman, David W., Rockefeller Foundation, \$10,000, "Participatory Evaluation of Community-Based Water Supply Projects in Central Tanzania."

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

AGRICULTURAL EXPERIMENT STATION

Ham, George E., US Department of Agriculture, \$85,800, "Development and Management of Canola in the Great Plains Region."

AGRICULTURAL RESEARCH CENTER-HAYS

Brethour, John R., Kansas Beef Council, \$33,800, "Predicting Future Carcass Attributes on Weanling Calves with Ultrasound Technology."

Kofoid, Kenneth D., Multisponsor, \$800, "Sorghum Research."

Kofoid, Kenneth D., **Seifers, Dallas L.**, **Sloderbeck, Phillip E.** (Southwest Area Office), **Tuinstra, Mitchell R.** (Agronomy), **Wilde, Gerald E.** (Entomology), **Harvey, Tom L.** (Entomology), and **Reese, John C.** (Entomology), Kansas Department of Agriculture, \$77,000, "Breeding Sorghum with Improved Grain Yield, Greenbug and Virus Resistance, and Pre-Flowering Drought Tolerance."

Kofoid, Kenneth D., (see **Martin, Victor L.**, Agronomy).

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

Kofoid, Kenneth D., (see **Vanderlip, Richard**, Agronomy).

Martin, Terry J., Kansas Crop Improvement Association, \$4,000, "Wheat Streak Mosaic Virus Regional Screening Nursery."

Martin, Terry J., **Harvey, Tom L.** (Entomology), and **Seifers, Dallas L.**, Kansas Wheat Commission, \$76,000, "Kansas Dual Purpose Pest Resistant White Wheats."

Martin, Terry J., (see **Mengel, David B.**, Agronomy).

Seifers, Dallas L., and **Harvey, Tom L.** (Entomology), Pioneer Hi-Bred International, Inc., \$3,537, "Identification, Detection and Variability of the High Plains Pathogen."

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

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

Stahlman, Phillip W., Multisponsor, \$15,800, "Weed Research."

Stahlman, Phillip W., National Sunflower Association, \$700, "Efficacy Trials for Flumioxazin on Sunflower."

Stahlman, Phillip W., and **O'Brien, Daniel M.** (Northwest Area Office), US Department of Agriculture, \$20,000, "Integrated Management Systems for Jointed Goatgrass Control in the Central Great Plains."

Stahlman, Phillip W., **Stockton, Roger D.** (Northwest Area Office), and **Price, Troy M.** (Northwest Research Extension Center), High Plains National Sunflower Association, \$2,800, "Optimizing Spartan Performance in No-Till Sunflower."

Thompson, Carlyle A., Multisponsor, \$18,000, "Agricultural Research Center-Hays Crop Culture."

Thompson, Carlyle A., Stockhausen, Inc., \$10,000, "Effect of Stockosorb Agro on Winter Wheat Grown in Central Kansas."

Thompson, Carlyle A., Stockhausen, Inc., \$14,779, "Effects of Stockosorb Agro on Grain Sorghum Grown in Central Kansas."

AGRONOMY

Al-Khatib, Kassim, and **Horak, Michael J.**, National Sunflower Association, \$13,566, "Gene Flow, Distribution, Growth and Competitiveness of Pursuit-Resistant Common Sunflower."

Al-Khatib, Kassim, **Horak, Michael J.**, **St. Amand, Paul C.**, and **Smith, C. Michael**, (Entomology), US Department of Agriculture, \$160,000, "Potential for Imidazolinone-Resistant Sunflower Gene Escape and Altered Fitness of Related Wild Species."

Brown-Guedira, Gina L., (see **Mengel, David B.**, Agronomy).

Claassen, Mark J., (see **Bockus, William W.**, Plant Pathology).

Claassen, Mark J., (see **Martin, Victor L.**, Agronomy).

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

Devlin, Daniel L., (see **Barden, Charles J.**, Horticulture, Forestry and Recreation Resources).

Fick, Walter H., Multisponsor, \$14,000, "Range and Pasture Brush and Weed Control."

Fick, Walter H., **Ohlenbusch, Paul D.**, and **Kilgore, Gary L.** (Southeast Area Office), Kansas Department of Agriculture, \$80,000, "Developing a Research and Extension Program to Limit the Spread and Enhance the Management of Sericea Lespedeza in Kansas."

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

Fjell, Dale L., (see **Maddux, Larry D.**, Agronomy).

Fritz, Allan K., Kansas Crop Improvement Association, \$4,000, "Development of Hard Wheat Varieties for Eastern Kansas."

Gordon, Walter B., **Fjell, Dale L.**, **Kilgore, Gary L.** (Southeast Area Office), **Duncan, Stewart R.** (South Central Area Office), and **Staggenborg, Scott A.** (Northeast Area Office), Kansas Department of Agriculture, \$49,000, "Planting Dates and Maturity Group Effects on Soybean Production in Kansas."

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

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

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

Horak, Michael J., (see **Al-Khatib, Kassim**, Agronomy).

Janssen, Keith A., Multisponsor, \$500, "Double-Crop Soybean Performance Tests - Agronomy."

Janssen, Keith A., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment).

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

Lamond, Ray E., **Pierzynski, Gary M.**, **Maddux, Larry D.**, and **Marsh, Brian H.**, Multisponsor, \$56,600, "Soil Fertility and Soil Management Investigations."

Lamond, Ray E., (see **Schmidt, John P.**, Agronomy)

Liang, George H., Kansas Crop Improvement Association, \$5,000, "Addition of Genes Encoding Thaumatin-Like Protein and Late Embryogenesis Abundant Protein to Jaggar Wheat for Resistance to Fungal Pathogen and Tolerance to Water Deficit."

Liang, George H., Pioneer Hi-Bred International, Inc., \$38,000, "Jeoung Fellowship."

Liang, George H., **Muthukrishnan, Subbarat**, (Biochemistry), and **Tuinstra, Mitchell R.**, Kansas Department of Agriculture, \$50,000, "Transformation of Sorghum with Agronomically Useful Genes."

Liang, George H., (see **Muthukrishnan, Subbarat**, Biochemistry).

Maddux, Larry D., **Staggenborg, Scott A.** (Northeast Area Office), **Gordon, Walter B.**, **Dhuyvetter, Kevin C.** (Agricultural Economics), and **Fjell, Dale L.**, Kansas Department of Agriculture, \$6,000, "Environmental Stress Impacts on High Oil Corn Yields."

Maddux, Larry D., (see **Lamond Ray E.**, Agronomy).

Marsh, Brian H., (see **Lamond Ray E.**, Agronomy).

Martin, Victor L., **Clark, Gary A.** (Biological and Agricultural Engineering), and **Vanderlip, Richard**, Kansas Department of Agriculture, \$7,000, "Effect of Irrigation Rate, Planting Date and Tillage on Varied Maturity Corn Production."

Martin, Victor L., **Tuinstra, Mitchell R.**, **Claassen, Mark J.**, **Kofoid, Kenneth D.** (Agricultural Research Center-Hays), and **Witt, Merle D.** (Southwest Research Extension Center), Kansas Department of Agriculture, \$29,500, "Evaluation of Early Planting and Cold Tolerance in Grain Sorghum."

Martin Victor L., (see **Hargrove, William L.**, Kansas Water Resource Research Institute).

Martin, Victor L., (see **Tuinstra, Mitchell R.**, Agronomy).

Mengel, David B., US Department of Agriculture, \$170,000, "Wind Erosion Model for Military Lands."

Mengel, David B., US Department of Agriculture, \$31,000, "Wind Erosion Assessment and Control."

Mengel, David B., and **Brown-Guedira, Gina L.**, Kansas Wheat Commission, \$6,000, "Development of Wheat Germplasm with Multiple Disease and Insect Resistance for the Southern Great Plains."

Mengel, David B., and **Martin, Terry J.** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$72,000, "Improvement of Hard Red Winter Wheat for Kansas."

Ohlenbusch, Paul D., (see **Fick, Walter H.**, Agronomy).

Owensby, Clenton E., **Knapp, Alan K.** (Biology), and **Ham, Jay M.**, US Department of Energy, \$166,361, "Landscape-Level Trace Gas Fluxes on Grazed and Ungrazed Tallgrass."

Owensby, Clenton E., **Knapp, Alan K.** (Biology), and **Ham, Jay M.**, US Department of Energy, \$51,202, "Landscape-Level Trace Gas Fluxes on Grazed and Ungrazed Tallgrass Prairie."

Paulsen, Gary M., Kansas Wheat Commission, \$35,000, "Development of Hard White Winter Wheat for Kansas."

Pierzynski, Gary M., (see **Lamond Ray E.**, Agronomy).

Ransom, Michel D., Kansas Department of Revenue, \$73,735, "Soil Rating and Plant Growth Model for the Valuation of Irrigated Lands in Kansas."

Ransom, Michel D., US Department of Agriculture, \$10,000, "Providing Soil Sample Analyses for Soil Survey Activities."

Ransom, Michel D., (see **Seyler, Harry L.**, Geography).

Ransom, Michel D., (see **Thien, Stephen J.**, Agronomy).

Regehr, David L., and **Janssen, Keith A.**, Multisponsor, \$100,500, "Field Herbicidal Evaluations."

Regehr, David L., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment).

Rice, Charles W., Kansas Technology Enterprise Corporation, \$375,000, "EPA Experimental Program to Stimulate Competitive Research."

Rice, Charles W., US Department of Energy, \$10,000, "Terrestrial Carbon Processes, II."

Rice, Charles W., US Department of Energy, \$61,467, "Belowground Carbon Allocation and Cycling in Tallgrass Prairie and Wheat Ecosystems."

Rice, Charles W., US Department of Energy, \$7,693, "Pilot Study of Influences of Atmospheric Pressure Fluctuations on Fluxes of Trace Gases from Soils."

Rice, Charles W., **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kalita, Prasanta K.** (Biological and Agricultural Engineering), **Marchin, George L.** (Biology), and **Jones, Rodney D.** (Agricultural Economics), State Conservation Commission, \$58,736, "Fecal Coliform Contamination in Kansas River Basins: Source, Monitoring and Development and Demonstration of Best Management Practices."

Rice, Charles W., (see Thien, Stephen J., Agronomy).

Rife, Charles L., Kansas Crop Improvement Association, \$5,000, "Aluminum Tolerance in Canola: Developing Canola Varieties Adapted to Low pH Soils."

Roozeboom, Kraig L., Multisponsor, \$327,046, "Crop Performance."

Schapaugh, William T., Kansas Crop Improvement Association, \$9,000, "Development of Improved Soybean Varieties for Kansas."

Schapaugh, William T., Long, James H. (Southeast Agricultural Research Center), and Todd, Timothy C. (Plant Pathology), Kansas Department of Agriculture, \$168,221, "Improving Soybean Profitability Through Breeding."

Schapaugh, William T., (see Herald, Thomas L., Animal Sciences and Industry).

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

Schapaugh, William T., (see Tang, Xiaoyan, Plant Pathology).

Schapaugh, William T., (see Todd, Timothy C., Plant Pathology).

Schapaugh, William T., (see Welch, Stephen M., Agronomy).

Schlegel, Alan J., Thompson, Curtis R. (Southwest Area Office), Schmidt, John P. (Agronomy), and Taylor, Randal K. (Biological and Agricultural Engineering), Kansas Department of Agriculture, \$25,255, "Iron (Fe) Chlorosis: Addressing a Familiar Problem with New Technology."

Schmidt, John P., Lamond, Ray E., and Schrock, Mark D. (Biological and Agricultural Engineering), Kansas Department of Agriculture, \$30,800, "Variable Nitrogen Management for Protecting Groundwater Quality."

Schmidt, John P., (see Schlegel, Alan J., Agronomy).

Sears, Rollin G., (see MacRitchie, Finlay I., Grain Science and Industry).

Shroyer, James P. (see Herrman, Timothy J., Grain Science and Industry).

Skinner, Daniel Z., (see St. Amand, Paul, Agronomy).

St. Amand, Paul, and Skinner, Daniel Z., Kansas Crop Improvement Association, \$3,700, "Development of Acid-Tolerant Alfalfa Germplasm for Kansas."

St. Amand, Paul C., (see Al-Khatib, Kassim, Agronomy).

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

Thien, Stephen J., BION Technologies, Inc., \$15,000, "Impact of Animal Waste Compost on Turfgrass Soil Quality."

Thien, Stephen J., Rice, Charles W., and Ransom, Michel D., US Golf Association, \$10,000, "Impact of Golf Courses on Soil Quality."

Tuinstra, Mitchell R., Witt, Merle D. (Southwest Research Extension Center), Martin, Victor L., Gordon, Walter B., Clafin, Larry E. (Plant Pathology), Claassen, Mark J., and Kofoid, Kenneth D. (Agricultural Research Center-Hays), Kansas Department of Agriculture, \$47,500, "Breeding Grain Sorghum for Improved Dryland Production."

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

Tuinstra, Mitchell R., (see Liang, George H., Agronomy).

Tuinstra, Mitchell R., (see Martin, Victor L., Agronomy).

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

Tuinstra, Mitchell R., (see Wilde, Gerald E., Entomology).

Vanderlip, Richard, Tuinstra, Mitchell R., and Kofoid, Kenneth D. (Agricultural Research Center-Hays), US Department of Agriculture, \$99,174, "Sorghum Research."

Vanderlip, Richard, (see Martin, Victor L., Agronomy).

Vanderlip, Richard, (see Welch, Stephen M., Agronomy).

Welch, Stephen M., Schapaugh, William T., and Vanderlip, Richard, Kansas Department of Agriculture, \$12,785, "Adding Genetic Features of New Cultivars to Soybean Decision Support Systems."

Welch, Stephen M., Schapaugh, William T., and Vanderlip, Richard, United Soybean Board, \$75,000, "Integrating Genetics and Precision Farming Information into Decision Support Systems."

Xia, Kang, US Environmental Protection Agency, \$71,832, "Role of Natural Organic Material in the Disposition and Binding of Organic Contaminants and Heavy Metals."

ANIMAL SCIENCES AND INDUSTRY

Aramouni, Fadi M., Kansas Department of Commerce and Housing, \$69,750, "Food and Feed Value-Added Program."

Aramouni, Fadi M., (see Penner, Karen P., Animal Sciences and Industry).

Boyle, Elizabeth, (see Penner, Karen P., Animal Sciences and Industry).

Dikeman, Michael E., National Cattlemen's Beef Association, \$122,000, "Carcass Merit Traits: Development of EPD's and Genetic Marker Validation."

Drouillard, James S., Kansas Department of Agriculture, \$26,895, "Modulation of Immune Response in Feeder Cattle with Full-Fat Soybeans."

Drouillard, James S., North Dakota State University, \$10,000, "Modulation of Immune Response in Feeder Cattle with Flaxseed."

Drouillard, James S., (see Kastner, Curtis L., Animal Sciences and Industry).

Fung, Daniel Y. C., California Prune Board, \$45,000, "Effects of Dried Plum Puree on Foodborne Pathogens in Meats and Meat Products."

Fung, Daniel Y. C., National Cattlemen's Beef Association, \$40,000, "Reduction of Natural Microflora and Escherichia coli 0157:H7 by Combination of Hot Lactic Acid, Vacuum Packaging and Microwave Treatment of Subprimal Beef Cuts."

Fung, Daniel Y. C., (see Kastner, Curtis L., Animal Sciences and Industry).

Gugle, Terry L., (see Hancock, Joe D., Animal Sciences and Industry).

Hancock, Joe D., Hines, Robert J., Gugle, Terry L., and Behnke, Keith C. (Grain Science and Industry), Kansas Department of Agriculture, \$20,700, "Extruder/Expander/Expeller Conditions to Optimize Utilization of Full-Fat Soybeans in Nursery and Finishing Pigs."

Hancock, Joe D., (see Kastner, Curtis L., Animal Sciences and Industry).

Herald, Thomas L., Schmidt, Karen A., and Schapaugh, William T. (Agronomy), Kansas Department of Agriculture, \$24,500, "Characterization of Soybean Protein Fractions."

Herald, Thomas L., (see Brent, John L., Grain Science and Industry).

Herald, Thomas L., (see MacRitchie, Finlay I., Grain Science and Industry).

Hines, Robert J., (see Hancock, Joe D., Animal Sciences and Industry).

James, Dee W., Kansas State University Foundation, \$45,963, "Teaching Support - Livestock and Meat Industry Council."

Kastner, Curtis L., Drouillard, James S., Hancock, Joe D., and Flores, Rolando A. (Grain Science and Industry), Kansas Department of Agriculture, \$23,010, "Development of Feed Ingredients by Integrating Grain Sorghum with Meat Coproducts."

Kastner, Curtis L., Kropf, Donald H., and Fung, Daniel Y. C., US Department of Agriculture, \$684,698, "Animal Sciences Food Safety Consortium - Kansas State University."

Kropf, Donald H., (see **Kastner, Curtis L.**, Animal Sciences and Industry).

Lee, Charles D., US Environmental Protection Agency, \$6,705, "Wetland and Riparian Areas Project Seasonal Wetlands."

Minton, J. Ernest, National Pork Producers Council, \$23,992, "Immunomodulatory and Growth Effects of the Seaweed *Ascophyllum nodosum* in Pigs."

Nelssen, Jim L., Lonza, Inc., \$3,212, "Influence of Modified Tall Oil and Creatine Monohydrate on Carcass and Meat Quality of Finishing Pigs."

Nelssen, Jim L., (see **Koo, Sung I.**, Human Nutrition).

Penner, Karen P., Aramouni, Fadi M., Boyle, Elizabeth, and Gast, Karen L. (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$30,000, "Kansas Food Safety Plan of Work Projects."

Riley, Jack G., Kansas Beef Council, \$162,250, "Support of Regents Distinguished Professorship in Animal Sciences."

Schmidt, Karen A., (see **Herald, Thomas L.**, Animal Sciences and Industry).

Thippareddi, Harshavardhan, US Department of Agriculture, \$124,026, "Post-Process Pasteurization of Packaged, Ready-to-Eat Meat Products for Control of *Listeria monocytogenes*."

COMMUNICATIONS

Flores, Sandra A., (see **Penner, Karen P.**, Extension Animal Sciences and Industry).

Jackson, William L., Kansas Department of Administration, \$48,681, "Kansas Public Broadcasters Council Service and Incentive Program."

Jackson, William L., Corporation for Public Broadcasting, \$12,006, "National Program Production and Acquisition Grant."

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

Johnson, Marc A., US Department of Agriculture, \$804,829, "USDA/ARS Research Support Agreement." (8 awards)

Johnson, Marc A., US Department of Agriculture, \$1,602, "USDA Research Apprenticeship Program."

Johnson, Marc A., Multisponsor, \$124,905, "Farmland/KSU Research Alliance."

Johnson, Marc A., USFT Other, \$12,886, "IAP USFT Other."

Johnson, Marc A., and **Denell, Robin E.** (Biology), US Department of Agriculture, \$84,670, "USDA/ARS Research Support Agreement." (3 awards)

Johnson, Marc A., and **Ramaswamy, Sonny B.** (Entomology), US Department of Agriculture, \$16,540, "USDA/ARS Research Support Agreement."

Johnson, Marc A., (see **Buchholz, Daryl D.**, Production Management and Natural Resource Development).

Wilson, Ron J., Kansas Agriculture and Rural Leadership, \$1,500, "Work-Study Student Hourly Support-Huck Boyd National Institute for Rural Development."

Wilson, Ron J., Kansas Agriculture and Rural Leadership, \$16,017, "Secretarial Support - Huck Boyd National Institute for Rural Development."

ENTOMOLOGY

Baker, James E., (see **Reeck, Gerald R.**, Biochemistry).

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

Beeman, Richard W., (see **Reeck, Gerald R.**, Biochemistry).

Broce, Alberto B., Multisponsor, \$6,000, "Methods for Control of Livestock Insects."

Broce, Alberto B., Novartis, \$9,699, "Wildlife Flea Infestation Correlated to Selected Urban Ecological Factors—Melissa Minto Portis."

Buschman, Larry L., Multisponsor, \$9,200, "Insecticide Management of Field Crop Insects in Southwestern Kansas."

Buschman, Larry L., and **Sloderbeck, Phillip E.** (Southwest Area Office), Monsanto Company, \$6,000, "Efficacy of Lepidopteran Active Genes against Stalk- and Ear-Feeding Insect Pests and Mycotoxin Occurrence."

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

Buschman, Larry L., (see **Sloderbeck, Phillip E.**, Entomology).

Buschman, Larry L., (see **Wilde, Gerald E.**, Entomology).

Charlton, Ralph E., US Department of Agriculture, \$15,000, "Investigation of Adult Male Gypsy Moth Dispersal Behavior."

Cress, Donald C., US Department of Agriculture, \$6,000, "Management of North Central Region Pesticide Impact Assessment Program—Soybean, Beef and Corn."

Harvey, Tom L., (see **Kofoed, Kenneth D.**, Agricultural Research Center-Hays).

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

Higgins, Randall A., Bayer Corporation, \$1,500, "Alfalfa Weevil Insecticide Efficacy Research."

Higgins, Randall A., Dow AgroSciences, \$5,250, "Spinosad and Transgenic Corn for Controlling Corn Borers."

Higgins, Randall A., Monsanto Company, \$6,000, "Efficacy of Lepidopteran Active Genes against Stalk- and Ear-Feeding Insect Pests and Mycotoxin."

Higgins, Randall A., Pioneer Hi-Bred International, Inc., \$2,000, "Efficacy of Lepidopteran Active Genes against Stalk- and Ear-Feeding Insect Pests and Mycotoxin Occurrence."

Higgins, Randall A., Zeneca, Inc., \$1,500, "Second Generation European Corn Borer/Southwestern Corn Borer Research."

Higgins, Randall A., **Schapaugh, William T.** (Agronomy), **Buschman, Larry L.**, and **Sloderbeck, Phillip E.** (Southwest Area Office), Kansas Department of Agriculture, \$22,200, "Investigations on the Soybean Stem Borer in Kansas."

Higgins, Randall A., **Sloderbeck, Phillip E.** (Southwest Area Office), and **Buschman, Larry L.**, Monsanto Company, \$6,000, "Milkweed Survey."

Higgins, Randall A., (see **Wilde, Gerald E.**, Entomology).

Kambhampati, Srinivas, State of California, \$24,116, "Field Trip to Asia to Collect Fruit Flies."

Kambhampati, Srinivas, National Science Foundation, \$200,000, "Phylogenetics of Termites."

Margolies, David C., **Kastens, Terry**, (Agricultural Economics), **Marsh, Thomas L.** (Agricultural Economics), **Nechols, James R.**, and **Williams, Kimberly A.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$95,000, "Integrated Crop Management: Spider Mites on Greenhouse-Grown Ivy Geraniums." (2 awards)

Nechols, James R., Multisponsor, \$1,000, "Aphid Biological Control for Greenhouse and Cut Flower Crops."

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

Ramaswamy, Sonny B., Tougaloo College, \$23,000, "Tougaloo College Project."

Ramaswamy, Sonny B., US Department of Agriculture, \$50,000, "Facilitate Multiple Pest Resistant Wheat Germplasm Research."

Ramaswamy, Sonny B., Clark II, George R. (Geology), **Denell, Robin E.** (Biology), **Reddi, Lakshmi N.** (Civil Engineering), and **Seib, Paul A.** (Grain Science and Industry), National Science Foundation, \$176,190, "Acquisition of a Low-Vacuum Scanning Electron Microscope for Biological, Physical, Chemical, and Engineering Research and Training."

Ramaswamy, Sonny B., (see **Johnson, Marc A.**, Dean of Agriculture and Director of AES).

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

Reese, John C., (see **Reeck, Gerald R.**, Biochemistry).

Reese, John C., (see **Seifers, Dallas L.**, Agricultural Research Center-Hays).

Sloderbeck, Phillip E., and **Buschman, Larry L.** (Entomology), Monsanto Company, \$5,000, "Efficacy of Lead Transgenic Corn Rootworm Events against Western and Northern Corn Rootworm."

Smith, C. Michael, US Department of Agriculture, \$7,600, "Exchange of Triticeae Germplasm and Molecular Biochemical Techniques for Enhanced Aphid Resistance in Wheat."

Smith, C., Michael, (see **Al-Khatib, Kassim**, Agronomy).

Whiles, Matthew R., (see **Dodds, Walter K.**, Biology).

Wilde, Gerald E., Monsanto Company, \$12,000, "Efficacy of Lead Transgenic Corn Rootworm Events Against Western and Northern Corn Rootworm."

Wilde, Gerald E., Multisponsor, \$57,875, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

Wilde, Gerald E., Sloderbeck, Phillip E. (Southwest Research Extension Center), **Higgins, Randall A., Zhu, Kun Yan,** and **Buschman, Larry L.**, US Department of Agriculture, \$621,902, "Areawide Management of Corn Rootworms Using Semiochemical Baits."

Wilde, Gerald E., and **Tuinstra, Mitchell R.** (Agronomy), Kansas Department of Agriculture, \$8,500, "Chinch Bug Resistance in Grain Sorghum."

Wilde, Gerald E., (see **Bockus, William W.**, Plant Pathology).

Wilde, Gerald E., (see **Kofoid, Kenneth D.**, Agricultural Research Center Hays).

Zhu, Kun Yan, (see **Wilde, Gerald E.**, Entomology).

FOOD AND FEED GRAINS INSTITUTE

Acasio, Ulysses A., and **Schenck-Hamlin, Donna C.** (Food and Feed Grains Institute), US Agency for International Development, \$311,038, "Post Harvest Handling/Uganda."

Lea, John D., US Agency for International Development, \$540, "Haiti Productive Land Use Systems Project."

Schenck-Hamlin, Donna C., (see **Acasio, Ulysses A.**, Food and Feed Grains Institute).

GRAIN SCIENCE AND INDUSTRY

Behnke, Keith C., (see **Hancock, Joe D.**, Animal Sciences and Industry).

Bhadriraju, Subramanyam, Ralston Purina Company, \$47,544, "Development and Evaluation of Pest Management Programs at Retail Grocery Stores."

Bhadriraju, Subramanyam, Weitech, Inc., \$150,000, "Development and Evaluation of Ultrasonic Devices for Management of Stored Product Moths and Other Arthropods."

Bhadriraju, Subramanyam, and **Reed, Carl**, Kansas Wheat Commission, \$9,590, "Spinosad: An Alternative to Pesticides for Management of Stored-Wheat Insects."

Brent, John L., and **Fairchild, Fred J.**, AgriChem, Inc., \$45,500, "Evaluation of On-Line Moisture Sensors in an Extrusion Process Line."

Brent, John L., and **Fairchild, Fred J.**, III Sigma, \$46,875, "Evaluation of On-Line Moisture Sensors in an Extrusion Process Line."

Brent, John L., and **Fairchild, Fred J.**, US Department of Agriculture, \$50,000, "Evaluation of On-Line Moisture Sensors in an Extrusion Process Line."

Brent, John L., and **Herald, Thomas L.** (Animal Sciences and Industry), Kansas Wheat Commission, \$26,300 (includes \$16,302 from the National Wheat Research Center), "Extrusion Process for Pregelatinizing Modified Wheat Starch."

Brent, John L., Klopfenstein, Carol F., Gwartz, Jeffrey A., Seib, Paul A., Setser, Carole S. (Human Nutrition), and **MacRitchie, Finlay I.**, Kansas Department of Agriculture, \$31,880, "Extruded Foods from White Grain Sorghum."

Brent, John L., (see **Klopfenstein, Carol F.**, Grain Science and Industry).

Brent, John L., (see **Sun, X. Susan**, Grain Science and Industry).

Donnelly, Brendan J., Bakers National Education Foundation, \$339,250, "Bakery Science and Management Professorship."

Donnelly, Brendan J., Colorado Wheat Administrative Committee, \$10,000, "International Grains Program Advisory Board."

Donnelly, Brendan J., Kansas Department of Agriculture, \$109,800, "Market Development Grant - International Grains Program and Grain Storage, Handling, and Sanitation Specialist."

Donnelly, Brendan J., Kansas Wheat Commission, \$100,000, "International Grains Program Support Project."

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

Donnelly, Brendan J., Oklahoma Wheat Commission, \$15,000, "International Grains Program Advisory Board."

Donnelly, Brendan J., Oklahoma Wheat Commission, \$4,000, "Terminal Elevator Operator's Seminar."

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

Donnelly, Brendan J., and **McCluskey, Patrick J.**, Kansas Wheat Commission, \$40,000, "Quality Evaluation of Materials from KAES Wheat Breeding Programs."

Donnelly, Brendan J., and **Reed, Carl**, US Department of Agriculture, \$290,000, "Development of a Stored Wheat Areawide Management Program in Kansas."

Donnelly, Brendan J., Reed, Carl, and **Trigo-Stockli, Dionisia M.**, US Grains Council, \$78,314, "Sorghum Grain Storage and Handling Activity."

Eustace, W. Dale, (see **Madl, Ronald L.**, National Wheat Research Center).

Eustace, W. Dale, (see **Sun, X. Susan**, Grain Science and Industry).

Fairchild, Fred J., (see **Brent, John L.**, Grain Science and Industry).

Flores, Rolando A., Laidig Industrial Systems, \$34,275, "Laidig Wheat Millfeeds Test Project."

Flores, Rolando A., (see **Kastner, Curtis L.**, Animal Sciences and Industry).

Gwartz, Jeffrey A., (see **Brent, John L.**, Grain Science and Industry).

Gwartz, Jeffrey A., (see **Herrman, Timothy J.**, Grain Science and Industry).

Herrman, Timothy J., (see **Boland, Michael A.**, Agricultural Economics).

Herrman, Timothy J., and **Gwartz, Jeffrey A.**, Ohio State University, \$15,000, "Impact of Storage on Wheat Milling Performance."

Herrman, Timothy J., and **Shroyer, James P.** (Agronomy), Kansas Wheat Commission, \$4,000, "White Wheat Commercialization."

Klopfenstein, Carol F., **Reeves, Robert D.** (Human Nutrition), **Setser, Carole S.** (Human Nutrition), and **Brent, John L.**, Kansas Department of Agriculture, \$50,030, "Over-the-Counter, Cholesterol-Lowering, Extruded Soy Fiber Dietary Supplements."

Klopfenstein, Carol F., (see **Brent, John L.**, Grain Science and Industry).

Klopfenstein, Carol F., (see **Sun, X. Susan**, Grain Science and Industry).

MacRitchie, Finlay I., and **Sears, Rollin G.** (Agronomy), US Department of Agriculture, \$140,000, "Genetic and Environmental Effects on Wheat Protein Quality during Grain Development."

MacRitchie, Finlay I., **Chung, Do Sup**, (Biological and Agricultural Engineering), and **Herald, Thomas L.** (Animal Sciences and Industry), Kansas Wheat Commission, \$40,000, "Chemical/Physical Modification of Gluten Protein and Characterization."

MacRitchie, Finlay I., (see **Brent, John L.**, Grain Science and Industry).

MacRitchie, Finlay I., (see **Seib, Paul A.**, Grain Science and Industry).

McCluskey, Patrick J., (see **Donnelly, Brendan J.**, Grain Science and Industry).

McCluskey, Patrick J., (see **Seib, Paul A.**, Grain Science and Industry).

Reed, Carl. (see **Bhadriraju, Subramanyam**, Grain Science and Industry).

Reed, Carl. (see **Donnelly, Brendan J.**, Grain Science and Industry).

Schapaugh, William T., (see **Sun, X. Susan**, Grain Science and Industry).

Seib, Paul A., Kansas Wheat Commission, \$30,150, "Gluten Proteins that Improve Bread Quality."

Seib, Paul A., **McCluskey, Patrick J.**, **MacRitchie, Finlay I.**, and **Tilley, Katherine A.**, Kansas Wheat Commission, \$59,000, "Quality of Hard White Winter Wheat for Bread, Tortillas and Asian Noodles."

Seib, Paul A., (see **Brent, John L.**, Grain Science and Industry).

Seib, Paul A., (see **Ramaswamy, Sonny B.**, Entomology).

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

Sun, X. Susan, US Department of Agriculture, \$8,101, "Edible/Biodegradable Composites for Animal Feed Packaging."

Sun, X. Susan, US Department of Defense, \$17,201, "Marine Degradable and Edible Gun Plug."

Sun, X. Susan, US Department of Defense, \$29,828, "U.S. Army - Adhesive Project."

Sun, X. Susan, and **Schapaugh, William T.** (Agronomy), Kansas Department of Agriculture, \$67,232, "Adhesive Performance of Soy Protein in Navy Applications."

Sun, X. Susan, **Klopfenstein, Carol F.**, and **Eustace, W. Dale**, Kansas Department of Agriculture, \$38,351, "Novel Sorghum Composite Flours Designed for Breadmaking."

Sun, X. Susan, **Seib, Paul A.**, and **Brent, John L.**, Kansas Wheat Commission, \$22,625, "Compatibility of Starch and Polylactic Acid."

Tilley, Katherine A., (see **Seib, Paul A.**, Grain Science and Industry).

Trigo-Stockli, Dionisia M., (see **Donnelly, Brendan J.**, Grain Science and Industry).

Wetzel, David L., Kansas Wheat Commission, \$37,500, "Wheat Screening for Natural Desirable Lipids."

HORTICULTURE, FORESTRY AND RECREATION RESOURCES

Barden, Charles J., and **Devlin, Daniel L.** (Agronomy), US Environmental Protection Agency, \$15,340, "Riparian Buffer Education to Improve Surface Water Quality in the Blue River of Nebraska and Kansas."

Becker, Constance D., (see **Gipson, Philip S.**, Biology).

Cable, Ted T., (see **Gipson, Philip S.**, Biology).

Fry, Jack D., and **Huang, Bingru**, Golf Course Superintendents Association of America, \$30,000, "Converting Transition Zone Fairways from Perennial Ryegrass to Kentucky Bluegrass or Seeded Zoysiagrass."

Fry, Jack D., and **Huang, Bingru**, Kansas Golf Course Superintendents Association, \$10,000, "Converting Transition Zone Fairways from Perennial Ryegrass to Kentucky Bluegrass or Seeded Zoysiagrass."

Fry, Jack D., **Huang, Bingru**, and **Keeley, Steven J.**, National Turfgrass Federation, \$7,000, "Turfgrass Testing."

Fry, Jack D., **Wiest, Steven C.**, **Marcum, Kenneth B.**, **Huang, Bingru**, and **Pair, John C.**, Multisponsor, \$50,600, "Turfgrass Investigations."

Fry, Jack D., (see **Huang, Bingru**, Horticulture, Forestry and Recreation Resources).

Fry, Jack D., (see **Tisserat, Ned A.**, Plant Pathology).

Gast, Karen L., (see **Penner, Karen P.**, Animal Sciences and Industry).

Geyer, Wayne A., US Department of Defense, \$52,000, "Noxious Weed Pesticide Reduction Study in Support of Developing Best Management Practices for Land Management Systems at Fort Riley, Kansas."

Huang, Bingru, Eco Soil Systems, Inc., \$14,000, "Effects of Bacterium (*Azospirillum brasilense*) and Vesicular Arbuscular Mycorrhizae (*Glomus intraradices*) on Cool-Season Turfgrasses."

Huang, Bingru, and **Fry, Jack D.**, US Golf Association, \$25,000, "Importance of Carbon Balance and Root Activity in Creeping Bentgrass Tolerance to Summer Stresses."

Huang, Bingru, (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

Huang, Bingru, (see **Tisserat, Ned A.**, Plant Pathology).

Janke, Rhonda R., US Environmental Protection Agency, \$28,000, "Pilot Project for the Testing and Assessment of Participatory Farm Monitoring to Achieve Local Watershed TMDL Goals."

Janke, Rhonda R., (see **Buchholz, Daryl D.**, Production Management and Natural Resource Development).

Janke, Rhonda R., (see **Penner, Karen P.**, Extension Animal Sciences and Industry).

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

Keeley, Steven J., (see **Tisserat, Ned A.**, Plant Pathology).

Marcum, Kenneth B., (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

Pair, John C., (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

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

Reid, William R., University of Missouri, \$4,305, "Missouri Pecan Growers."

Warner, Thomas D., J. Frank Schmidt Family Charitable Trust, \$3,000, "Evaluation of Ornamental Species for the Great Plains."

Wiest, Steven C., (see **Fry, Jack D.**, Horticulture, Forestry and Recreation Resources).

Williams, Kimberly A., Bedding Plants Foundation, Inc., \$11,050, "Relationship between Tissue Nitrogen and Phosphorus Concentrations of Impatiens and Thrips Infestation and Damage on Impatiens."

Williams, Kimberly A., Fred C. Gloeckner Foundation, Inc., \$12,000, "Relationship between Tissue Nitrogen and Phosphorus Concentrations of Impatiens and Thrips Infestation and Damage."

Williams, Kimberly A., Fred C. Gloeckner Foundation, Inc., \$9,700, "Use of Pre-Charged Zeolites to Provide Aluminum for Blue Sepal Coloration during the Hydrangea Production."

Williams, Kimberly A., Multisponsor, \$6,000, "Floriculture Research."

Williams, Kimberly A., (see **Margolies, David C.**, Entomology).

KANSAS CENTER FOR AGRICULTURE RESOURCES AND THE ENVIRONMENT

Hargrove, William L., **Janssen, Keith A.** (Agronomy), **Regehr, David L.** (Agronomy), **Kilgore, Gary L.** (Southeast Area Office), **Barnes, Philip L.** (Biological and Agricultural Engineering), and **Bernardo, Daniel J.** (Agricultural Economics), Kansas Department of Agriculture, \$111,227, "Integrated Agricultural Management Systems (IAMS): Using Best Management Practices (BMPs) to Improve the Quality of Kansas Surface Waters." (3 awards)

KANSAS WATER RESOURCE RESEARCH INSTITUTE

Hargrove, William L., Kansas Department of Agriculture, \$10,000, "Implementing TMDL's in Kansas: Abatement of Non-Point Sources of Fecal Coliform Bacteria."

Hargrove, William L., US Department of the Interior, \$74,203, "State Water Research Institute Internship - Fort Hays State University and Wichita State University."

Hargrove, William L., US Department of the Interior, \$68,178, "State Water Research Institute Program."

Hargrove, William L., US Department of Agriculture, \$15,000, "Livestock Environmental Stewardship Initiative."

Hargrove, William L., **Martin, Victor L.** (Agronomy), **Schlegel, Alan J.** (Southwest Research Extension Center), and **Bernardo, Daniel J.** (Agricultural Economics), Kansas Wheat Commission, \$15,000, "Integrated Agricultural Management Systems (IAMS): Using Best Management Practices (BMPs) to Improve the Quality of Kansas Surface Waters."

Hargrove, William L., (see **Buchholz, Daryl D.**, Production Management and Natural Production Development).

NATIONAL WHEAT RESEARCH CENTER

Madl, Ronald L., and **Eustace, W. Dale**, (Grain Science and Industry), Kansas Wheat Commission, \$3,300, "Hard White Wheat Varieties' Milling Performance."

Madl, Ronald L., and **Eustace, W. Dale**, (Grain Science and Industry), Kansas Department of Commerce and Housing, \$6,000, "Hard White Wheat Varieties' Milling Performance."

NORTHWEST RESEARCH EXTENSION CENTER

Aiken, Robert M., Multisponsor, \$3,000, "Sunflower Investigations."

Coyne, Patrick J., Multisponsor, \$27,720, "Northwest Research Extension Center Sunflower Performance Testing Program."

Lamm, Freddie R., **Peterson, Jeffrey M.** (Agricultural Economics), **Stone, Loyd R.** (Agronomy), **Trooien, Todd P.** (Southwest Research Extension Center), and **Rogers, Danny H.** (Biological and Agricultural Engineering), US Department of Agriculture, \$73,904, "Water Conservation—Increased Efficiency in Usage."

Lamm, Freddie R., **Trooien, Todd P.** (Southwest Research Extension Center), **Rogers, Danny H.** (Biological and Agricultural Engineering), **Hamilton, Stephen F.** (Agricultural Economics), and **Stone, Loyd R.** (Agronomy), US Department of Agriculture, \$73,912, "Water Conservation—Increased Efficiency in Usage."

Lamm, Freddie R., (see **Trooien, Todd P.**, Southwest Research Extension Center).

Price, Troy M., (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

OFFICE OF ACADEMIC PROGRAMS

McClaskey, Jackie M., (see **Boone, Kristina M.**, Extension Communications).

PLANT PATHOLOGY

Ardales, Edna, (see **Leach, Jan E.**, Plant Pathology).

Bockus, William W., Multisponsor, \$9,050, "Seed Treatment."

Bockus, William W., US Department of Agriculture, \$42,027, "Development of Scab Resistant Wheat Cultivars for Kansas."

Bockus, William W., **Bowden, Robert L.**, **Wilde, Gerald E.** (Entomology), and **Claassen, Mark J.** (Agronomy), Kansas Wheat Commission, \$32,000, "Control of Residue-Borne Winter Wheat Diseases."

Bowden, Robert L., Multisponsor, \$2,040, "Winter Wheat Seed Treatment Tests."

Bowden, Robert L., US Department of Agriculture, \$78,727, "Genetics and Diversity of *Gibberella zeae*."

Bowden, Robert L., (see **Bockus, William W.**, Plant Pathology).

Claflin, Larry E., and **Leslie, John F.**, US Agency for International Development, \$90,000, "Agroecology and Biotechnology of Fungal Pathogens of Sorghum and Millet From the Greater Horn of Africa."

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

Gill, Bikram S., Kansas Wheat Commission, \$85,000, "Wheat Genetics Resource Center and Its Contribution to Kansas Wheat Industry."

Gill, Bikram S., McKnight Foundation, \$139,700, "Collaborative Crop Research Program (China)."

Gill, Bikram S., National Science Foundation, \$107,000, "Structure and Function of the Expressed Portion of the Wheat Genomes."

Gill, Bikram S., US Department of Agriculture, \$488,356, "Wheat Genetics Resource Center at Kansas State University."

Gill, Bikram S., US Department of Agriculture, \$76,073, "Microsatellite Marker Development and Construction of a Microsatellite Size Database."

Gill, Bikram S., (see **Muthukrishnan, Subbarat**, Biochemistry).

Hulbert, Scot H., National Science Foundation, \$125,000, "Molecular Characterization of Novel Rp1 Alleles."

Hulbert, Scot H., and **Leach, Jan E.**, National Science Foundation, \$219,785, "Functional and Comparative Genomics of NBS-LRR Encoding Genes."

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

Hulbert, Scot H., (see **Trick, Harold N.**, Plant Pathology).

Jardine, Douglas J., Multisponsor, \$5,700, "Soybean Foliar Fungicide and Seed Treatment Tests."

Leach, Jan E., Republic of Korea, \$69,000, "Application of Resistance- and Defense- Related Genes to Increase Durability of Rice Resistance to Blast."

Leach, Jan E., Rockefeller Foundation, \$10,000, "Research Expenses for Kamlesh Kukreja."

Leach, Jan E., US Agency for International Development, \$29,000, "Predicting Durability of Disease Resistance Based on Analysis of the Cost of Pathogen Adaptation."

Leach, Jan E., US Department of Agriculture, \$300,000, "Rice Deletion Mutants for Dissection of Quantitative Resistance."

Leach, Jan E., **Hulbert, Scot H.**, and **Ardales, Edna**, Pioneer Hi-Bred International, Inc., \$1,500, "Compounds Useful to Affect Resistance in Plants and Methods Related Thereto and Genetic Sequences Conferring Pathogen Resistance in Plants and Uses Therefor."

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

Leslie, John F., American Society for Microbiology, \$23,000, "Editor Position for Applied and Environmental Microbiology."

Leslie, John F., Multisponsor, \$2,520, "Fusarium Research."

Leslie, John F., (see **Claflin, Larry E.**, Plant Pathology).

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

Schwenk, Fred W., Kansas State University Foundation, \$20,000, "Non-conventional Plant Improvement Technology."

Schwenk, Fred W., (see **Todd, Timothy C.**, Plant Pathology).

Tang, Xiaoyan, Trick, Harold N., and **Schapaugh, William T.** (Agronomy), Kansas Department of Agriculture, \$43,900, "Improvement of Soybean Disease Resistance Via Genetic Engineering."

Tang, Xiaoyan, (see **Zhou, Jianmin**, Plant Pathology).

Tisserat, Ned A., Multisponsor, \$22,050, "Evaluation and Testing of Fungicides and Nematicides on Horticultural Crops."

Tisserat, Ned A., **Keeley, Steven J.** (Horticulture, Forestry and Recreation Resources), **Huang, Bingru** (Horticulture, Forestry and Recreation Resources), and **Fry, Jack D.** (Horticulture, Forestry and Recreation Resources), US Golf Association, \$22,669, "Biology and Management of Spring Dead Spot in Bermudagrass."

Todd, Timothy C., Kansas Department of Agriculture, \$10,000, "Free Soil Testing for Soybean Cyst Nematode."

Todd, Timothy C., **Schwenk, Fred W.**, **Long, James H.** (Southeast Agricultural Research Center), and **Schapaugh, William T.** (Agronomy), Kansas Department of Agriculture, \$39,800, "Integrated Management of the Soybean Cyst Nematode and Charcoal Rot."

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

Trick, Harold N., US Department of Agriculture, \$120,000, "Maize Resistance Genes Expressed in Transgenic Cereals."

Trick, Harold N., and **Hulbert, Scot H.**, Kansas Wheat Commission, \$30,000, "Transgenic Wheat Expressing Maize PF1 Genes (Introduction of RP1 Genes of Maize into Wheat to Confer Resistance against Leaf Rust)."

Trick, Harold N., **Muthukrishnan, Subbarat**, (Biochemistry), and **Schapaugh, William T.** (Agronomy), Kansas Department of Agriculture, \$60,919, "Over-Expression of Anti-Fungal Proteins in Transgenic Soybean."

Trick, Harold N., (see **Muthukrishnan, Subbarat**, Biochemistry).

Trick, Harold N., (see **Tang, Xiaoyan**, Plant Pathology).

Zeigler, Robert S., Kansas Technology Enterprise Corporation, \$100,000, "Great Plains Cereals Biotechnology Consortium."

Zeigler, Robert S., National Science Foundation, \$928,416 (includes \$100,307 from the University of Nebraska, and \$78,109 from Oklahoma State University), "Cereal Grains Biotechnology Consortium."

Zeigler, Robert S., US Department of Agriculture, \$138,000, "Plant Biotechnology National Needs at Kansas State University."

Zhou, Jianmin, and **Tang, Xiaoyan**, National Science Foundation, \$97,732, "Signal Transduction in Tomato Disease Resistance."

SOUTHEAST AGRICULTURAL RESEARCH CENTER

Kelley, Kenneth W., Multisponsor, \$4,950, "Weed Control in Farm Crops."

Kelley, Kenneth W., and **Sweeney, Daniel W.**, Kansas Department of Agriculture, \$11,513, "Effects of Crop Rotation and Tillage Systems on Soybean Yield in Southeastern Kansas."

Long, James H., National Crop Insurance Services, \$1,500, "Soybean Research in Southeast Kansas."

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

Long, James H., (see **Todd, Timothy C.**, Plant Pathology).

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

Sweeney, Daniel W., and **Moyer, Joseph L.**, Multisponsor, \$4,000, "Soil Fertility and Management Investigations in Southeastern Kansas."

Sweeney, Daniel W., (see **Kelley, Kenneth W.**, Southeast Agricultural Research Center).

SOUTHWEST RESEARCH EXTENSION CENTER

Currie, Randall S., Multisponsor, \$21,050, "Weed Control Research in Southwest Kansas."

Currie, Randall S., (see **Norwood, Charles A.**, Southwest Research Extension Center).

Norwood, Charles A., and **Currie, Randall S.**, Kansas Department of Agriculture, \$7,500, "Management of Dryland Corn in Southwest Kansas."

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

Schlegel, Alan J., and **Thompson, Curtis R.** (Southwest Area Office), National Sunflower Association, \$1,000, "Long-Term, Large-Scale Dryland Cropping Systems."

Schlegel, Alan J., (see **Hargrove, William L.**, Kansas Water Resource Research Institute).

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

Trooien, Todd P., and **Lamm, Freddie R.** (Northwest Research Extension Center), Pioneer Hi-Bred International, Inc., \$4,500, "Optimal Planting Strategies for Irrigated Corn Production with Limited Well Capacities."

Trooien, Todd P., (see **Alam, Mahbub U.**, Southwest Area Office).

Trooien, Todd P., (see **Lamm, Freddie R.**, Northwest Research Extension Center).

Witt, Merle D., Multisponsor, \$3,000, "Yield Appraisal of Crops for Southwest Kansas - Yield Appraisals of Immature Corn."

Witt, Merle D., (see **Martin, Victor L.**, Agronomy).

Witt, Merle D., (see **Tuinstra, Mitchell R.**, Agronomy).

COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN

ARCHITECTURE

Sachs, David H., **Dubois, James H.** (Interior Architecture), and **Rolley, Stephanie A.** (Landscape Architecture/Regional and Community Planning), City of Kingman, Kansas, \$3,000, "Kingman, Kansas, Visioning Project."

Shapiro, Mark, American Institute of Architects, \$7,500, "Sense of the City: Drawings and Models for Louis I. Kahn's Design for an Office Building in Kansas City, 1966- 1973."

OFFICE OF THE DEAN OF THE COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN

Norris-Baker, Carolyn, and **Altus, Deborah** (School of Family Studies and Human Services), US Department of Health and Human Services, \$111,846 (includes \$3,166 from the University of Kansas Medical Center and \$23,675 from the Kansas Mental Health and Aging Coalition), "Mental Health and Aging: Further Dissemination and Evaluation of Information from A Mental Health Guide for Older Kansans and Their Families."

INTERIOR ARCHITECTURE

Borchers, Vicky L., US Environmental Protection Agency, \$5,924, "Planning and Designing Services for the Prairie Band of Potawatomi Nations."

Dubois, James H., (see **Sachs, David H.**, Architecture).

LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING

Rolley, Stephanie A., (see **Sachs, David H.**, Architecture).

Keithley, Claude A., (see **Lawhon, Larry L.**, Landscape Architecture/Regional and Community Planning).

Lawhon, Larry L., and **Keithley, Claude A.**, US Department of Housing and Urban Development, \$118,060, "Curriculum Development Work Study Program."

Page, Robert L., Botanica, \$25,452, "Botanica."

Page, Robert L., Northland Community Church of the Nazarene, \$3,331, "Master Plan for Northland Community Church of the Nazarene."

COLLEGE OF ARTS AND SCIENCES

BIOCHEMISTRY

Jiang, Haobo, US Department of Health and Human Services, \$146,689, "Biochemistry of Pro-Phenol Oxidase Activating Proteinase."

Kanost, Michael R., US Department of Health and Human Services, \$228,820, "Proteinase Systems in Insect Hemolymph."

Kanost, Michael R., and **Kramer, Karl J.**, National Science Foundation, \$125,000, "Regulation of Protein Cross-Linking for Insect Cuticle Sclerotization."

Kanost, Michael R., and **Oppert, Brenda**, Dow AgroSciences, \$30,000, "Evaluation of Insect Serpins as Biopesticides."

Kanost, Michael R., and **Oppert, Brenda**, US Department of Energy, \$30,000 (includes \$15,000 from Dow AgroSciences), "Evaluation of Insect Serpins as Biopesticides."

Kanost, Michael R., (see **Reeck, Gerald R.**, Biochemistry).

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

Krishnamoorthi, Ramaswamy, American Heart Association, Heartland Affiliate, \$31,800, "NMR Studies of Inactive and Active Forms of Blood Coagulation Factor XII."

Krishnamoorthi, Ramaswamy, American Heart Association, Heartland Affiliate, \$40,000, "Factor XII: Structure-Function Relationships."

Muthukrishnan, Subbarat, Rockefeller Foundation, \$44,700, "Biotechnology Career Fellowship - Dr. Rethinasamy Velazhahan."

Muthukrishnan, Subbarat, US Department of Agriculture, \$165,000, "Development of Insect Chitinolytic Enzymes as Biopesticides."

Muthukrishnan, Subbarat, **Gill, Bikram S.** (Plant Pathology), **Liang, George H.** (Agronomy), and **Trick, Harold N.** (Plant Pathology), Kansas Wheat Commission, \$60,000, "Wheat Crop Improvement by Genetic Engineering."

Muthukrishnan, Subbarat, **Trick, Harold N.** (Plant Pathology), and **Gill, Bikram S.** (Plant Pathology), US Department of Agriculture, \$39,024, "Enhanced Resistance to Scab by Genetic Engineering with Genes for Defense Proteins."

Muthukrishnan, Subbarat, (see **Liang, George H.**, Agronomy).

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

Oppert, Brenda, (see **Kanost, Michael R.**, Biochemistry).

Prakash, Om, Rigel Pharmaceuticals, Inc., \$4,500, "Novel Mini-Protein Scaffold for Creation of Compact Structures for Retroviral-Mediated Intracellular Peptide Libraries."

Prakash, Om, US Department of Health and Human Services, \$10,318, "Immunogenic Tumor-Associated Mucin Peptides."

Prakash, Om, US Department of Health and Human Services, \$5,679, "Molecular Analysis of Mucin-Type O-Glycosylation."

Prakash, Om, (see **Reeck, Gerald R.**, Biochemistry).

Reeck, Gerald R., **Baker, James E.** (Entomology), **Beeman, Richard W.** (Entomology), **Reese, John C.** (Entomology), and **Kanost, Michael R.**, National Science Foundation, \$175,000, "Molecular Genetics and Function of Pectinases in Two Animal Species."

Reeck, Gerald R., and **Prakash, Om**, American Heart Association, Heartland Affiliate, \$31,800, "Cyclic Peptide Inhibitors of the Enzymes of the Contact System."

Roche, Thomas E., AstraZeneca UK Limited, \$47,500, "AstraZeneca Compounds as Inhibitors."

Roche, Thomas E., AstraZeneca UK Limited, \$47,500, "Precise Mechanism of PDH Regulation of PDH Kinases."

Roche, Thomas E., US Department of Health and Human Services, \$72,750, "Regulation of Mammalian Pyruvate Dehydrogenase."

Smith, Paul E., Kansas Technology Enterprise Corporation, \$11,962, "Molecular Dynamics Simulations of the Effects of Salts on the Aggregation Properties of Benzene in Water."

Smith, Paul E., US Department of Energy, \$47,850, "Molecular Dynamics Simulations of the Effects of Salts on the Aggregation Properties of Benzene in Water."

Takemoto, Dolores J., (see **Montelone, Beth A.**, Biology).

Tomich, John M., **Mitchell, Kathy E.** (Anatomy and Physiology), and **Schultz, Bruce D.** (Anatomy and Physiology), US Department of Health and Human Services, \$183,329, "Role of Ordered Helical Segments in Membrane Proteins."

Wang, Xuemin, National Science Foundation, \$110,000, "Regulation and Function of Membrane Lipid Hydrolysis in Lipid-Based Signaling of Plants."

Zolkiewska, Anna, US Department of Health and Human Services, \$65,700, "Role of ADAM 12 Disitegrin Domain in Myoblast Fusion."

Zolkiewski, Michal, American Heart Association, Heartland Affiliate, \$39,128, "Functional Domains in ClpB, a Novel Molecular Chaperone."

Zolkiewski, Michal, US Department of Health and Human Services, \$181,875, "Structure and Function of Hsp100 Proteins."

DIVISION OF BIOLOGY

Blair, John M., Fay, Philip A., and Knapp, Alan K., US Department of Energy, \$100,000, "Belowground Responses to Manipulation of Precipitation Timing and Amounts in a Grassland Ecosystem."

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

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

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

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

Clem, Rollie J., US Department of Health and Human Services, \$128,371, "Functional Analysis of Anti-Apoptotic IAP Proteins."

Conrad, Gary W., US Department of Health and Human Services, \$324,146, "Fibroblast Differentiation During Eye Development."

Consigli, Richard A., University of Kansas Endowment Association, \$10,000, "Olin Petefish Award in the Basic Sciences."

Consigli, Richard A., US Department of Health and Human Services, \$75,125, "Virology and Tumor Biology."

Cully, Jr., Jack F., Kansas Department of Wildlife and Parks, \$15,000, "Landscape Ecology of Plague in Black-Tailed Prairie Dogs."

Cully, Jr., Jack F., US Department of the Interior, \$10,000, "Metapopulation Ecology of the Black-Tailed Prairie Dog: A Keystone Species of Badlands National Park."

Cully, Jr., Jack F., US Department of the Interior, \$15,000, "Landscape Ecology of Plague in Black-Tailed Prairie Dogs."

Cully, Jr., Jack F., US Department of the Interior, \$4,418, "Reclamation of Native Tallgrass Prairie at the Kansas Army Ammunition Plant."

Cully, Jr., Jack F., and Kaufman, Glennis A., Kansas Department of Wildlife and Parks, \$69,299, "Gap Analysis in Kansas."

Cully, Jr., Jack F., and Kaufman, Glennis A., US Department of the Interior, \$90,000, "Gap Analysis in Kansas."

Denell, Robin E., US Department of Health and Human Services, \$252,334, "Genetic Control of Segmentation."

Denell, Robin E., Beeman, Richard W. (Entomology), and **Brown, Susan J.**, National Science Foundation, \$200,000, "Genetic Regulation of Developmental Fate."

Denell, Robin E., (see **Ramaswamy, Sonny B.**, Entomology).

Denell, Robin E., (see **Johnson, Marc A.**, Dean of Agriculture and Director of AES).

Dodds, Walter K., and Whiles, Matthew R. (Entomology), Kansas Department of Health and Environment, \$13,000, "Quality and Quantity of Suspended Material in Kansas Rivers: Demonstrating the Influence of Management Practices."

Dodds, Walter K., Horne, Eva A., and Smith, Christopher C., National Science Foundation, \$56,204, "Research Experience for Undergraduates in Grassland Ecology at Konza Prairie Research Natural Area."

Fay, Philip A., (see **Blair, John M.**, Biology).

Fay, Philip A., (see **Knapp, Alan K.**, Biology).

Garvey, James E., (see **Knapp, Alan K.**, Biology).

Gipson, Philip S., Kansas Department of Wildlife and Parks, \$16,000, "Changes in Land Use Patterns and Their Effects on Rio Grand Turkey in Southwest Kansas."

Gipson, Philip S., Kansas Department of Wildlife and Parks, \$25,000, "Establishment and Operation of the Kansas Cooperative Fish and Wildlife Research Unit."

Gipson, Philip S., and Pontius, Jeffrey S. (Statistics), US Department of the Interior, \$185,185, "Evaluation of Land Condition Trend Analysis as a Component of the Integrated Training Area Management Program at Fort Riley, Kansas."

Gipson, Philip S., Becker, Constance D. (Horticulture, Forestry and Recreation Resources), **Cable, Ted T.** (Horticulture, Forestry and Recreation Resources), and **Rintoul, David A.**, US Department of the Interior, \$25,000, "Responses of Birds and Other Wildlife to Recreation Along the Niobrara River, Fort Niobrara National Wildlife Refuge."

Guikema, James A., National Aeronautics and Space Administration, \$6,190, "Administrative Support for the Executive Committee of the Kansas NASA EPSCoR Program."

Guikema, James A., National Aeronautics and Space Administration, \$155,832, "Influence of Gravity as a Determinant in Cellular Biology."

Guikema, James A., (see **Uharik, John J.**, Psychology).

Hartnett, David C., Kansas State University Research Foundation, \$78,437, "Konza Prairie Documentary Film."

Herman, Michael A., US Department of Health and Human Services, \$105,095, "Control of Cell Polarity in *C. elegans*."

Horne, Eva A., (see **Dodds, Walter K.**, Biology).

Johnson, Loretta C., National Science Foundation, \$188,514 (includes \$19,114 from the University of Kansas), "Acquisition of an Isotope Ratio Mass Spectrometer in the KSU-KU-Creighton University Consortium."

Johnson, Loretta C., National Science Foundation, \$54,103, "Belowground Carbon and Nutrient Dynamics in Arctic Tundra Under Changing Climates."

Johnson, Loretta C., and Blair, John M., National Aeronautics and Space Administration, \$58,120, "Land-Cover Change in the Great Plains: Predicting Impacts of Regional Forest Expansion on Biogeochemical Processes."

Johnson, Terry C., Kansas State University Foundation, \$20,000, "Cancer Center Core."

Johnson, Terry C., National Aeronautics and Space Administration, \$520,697, "BioServe Space Technologies - A NASA Center for the Commercial Development of Space."

Kaufman, Glennis A., (see **Cully, Jr., Jack F.**, Biology).

Knapp, Alan K., The Nature Conservancy, \$1,000, "Use of Remote Sensing and GIS to Monitor and Model Bison Grazing Patterns at Landscape Levels - Greg A. Hoch."

Knapp, Alan K., and Blair, John M., National Science Foundation, \$5,000, "Evaluating the Role of Resource Heterogeneity in Restoring Grasslands."

Knapp, Alan K., Blair, John M., and Fay, Philip A., US Department of Agriculture, \$253,500, "Grassland Ecosystem Response to the Experimental Manipulation of Precipitation."

Knapp, Alan K., Blair, John M., Briggs, John M., and Garvey, James E., National Science Foundation, \$686,006, "Long-Term Ecological Research in Tallgrass Prairie: The Konza LTER Program."

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

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

Marchin, George L., PentaPure, Inc., \$12,000, "Testing of Water Filter and Purification Devices."

Marchin, George L., (see **Klabunde, Kenneth J.**, Chemistry).

Marchin, George L., (see **Reddi, Lakshmi N.**, Civil Engineering).

Marchin, George L., (see **Rice, Charles W.**, Agronomy).

Montelone, Beth A., Dyer, Ruth A. (Office of the Provost), **Spears, Jacqueline D.** (Office of the Dean of the College of Arts and Sciences), and **Takemoto, Dolores J.** (Biochemistry), National Science Foundation, \$29,956, "Women on the Prairie: Bringing Girls into Science through Environmental Stewardship."

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 **Gipson, Philip S.**, Biology).

Robel, Robert J., Kansas Department of Wildlife and Parks, \$214,059, "Use of Sandsage Habitat by Lesser Prairie-Chickens in Southwestern Kansas."

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

Smith, Christopher C., (see **Dodds, Walter K.**, Biology).

Spooner, Brian S., National Aeronautics and Space Administration, \$22,000, "Determining Lymphocyte Responsiveness to Low Gravity Environments - Luis Cubano."

Spooner, Brian S., US Department of Agriculture, \$10,000, "Wildlife Services Collaboration and Support Agreement."

Takemoto, Larry J., US Department of Health and Human Services, \$285,861, "Lens Membrane in Relation to Human Cataractogenesis."

Upton, Steve J., Merck and Company, Inc., \$5,000, "Evaluating Parasitocidal Activity of Compounds Provided by Merck against *Cryptosporidium parvum* in vitro."

Upton, Steve J., US Department of Health and Human Services, \$55,090, "dsRNAs of *Cryptosporidium parvum*."

Urban, James E., National Aeronautics and Space Administration, \$8,000, "Biological Wastewater Processor Experiment Definition."

Wilson, Fred E., National Science Foundation, \$80,000, "Thyroxine and Seasonality in American Tree Sparrows."

CHEMISTRY

Collinson, Maryanne M., US Department of Defense, \$100,000, "Preparation and Characterization of Nanostructured Materials for Solid-State Electrochemical Applications."

Higgins, Daniel A., National Science Foundation, \$51,446, "High Resolution Optical Microscopy Studies of Mesostuctured Polymer-Dispersed Liquid Crystal Films."

Hollingsworth, Mark D., National Science Foundation, \$31,000, "Cooperative Phenomena and Domain Switching Processes in Organic Inclusion Compounds."

Hollingsworth, Mark D., National Science Foundation, \$31,618, "Energetic and Structural Studies of Functional Group Pairs for Materials Research."

Hua, Duy H., US Department of Defense, \$4,000, "Evaluations of New Anti-Ebola Compounds for Walter Reed Army Institute of Research."

Hua, Duy H., and Koo, Sung I. (Human Nutrition), American Heart Association, Heartland Affiliate, \$40,000, "Synthesis and Biological Evaluation of Cholesteryl Ester Transfer Protein Inhibitors: Chloropuupehenone and its Analogs."

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

Kelley, Anne M., American Chemical Society, \$6,500, "Single Molecule Spectroscopy and Kinetics of Organic Charge-Transfer Systems in Polymers."

Kelley, Anne M., (see **Waterland, Mark R.**, Chemistry).

Kelley, David F., US Department of Energy, \$75,000, "Electron Transfer at Nanocluster/Liquid Interfaces."

Kelley, David F., (see **Waterland, Mark R.**, Chemistry).

Klabunde, Kenneth J., Center for Indoor Air Research, \$100,564, "Nanoscale Metal Oxides as Destructive Adsorbents."

Klabunde, Kenneth J., National Science Foundation, \$370,638, "Shape and Size of Small Crystals Can Affect Surface Chemistry and Consolidation."

Klabunde, Kenneth J., US Department of Defense, \$130,000, "Identification of Chemical Agent (Mimics) Residues after Destructive Adsorption, Using TPD and UV-Visible-IR and Raman."

Klabunde, Kenneth J., US Department of Defense, \$147,417, "Protection against Chemical Warfare Agents: Reactive Nanoparticles as Destructive Adsorbents."

Klabunde, Kenneth J., US Department of Defense, \$99,999, "Nanoscale Metal and Metal Oxide Particle Chemistry: Unique Catalytic, Adsorptive, and Storage Capabilities."

Klabunde, Kenneth J., and Marchin, George L. (Biology), US Department of Defense, \$150,000, "Reactive Nanoparticles as Destructive Adsorbents for Biological and Chemical Decontamination."

Klabunde, Kenneth J., and Sorensen, Christopher M. (Physics), National Aeronautics and Space Administration, \$35,000, "Nanocrystal Superlattices: Synthesis and Properties."

Maatta, Eric A., US Department of Energy, \$119,485, "Homogeneous Models of Ammoxidation Catalysis."

Muino, Pedro L., National Science Foundation, \$39,100, "Research Experiences for Undergraduates in Chemistry at Kansas State University."

Ortiz, J. Vincent, American Chemical Society, \$60,000, "Structure and Bonding in Free and Hydrated Dicarboxylate Dianions."

Ortiz, J. Vincent, Gaussian, Inc., \$30,000, "Propagator Programs for Gaussian Software."

Ortiz, J. Vincent, National Science Foundation, \$110,000, "Ab Initio Electron Propagator Calculations on Molecular Anions."

Sherwood, Peter M., Kansas Technology Enterprise Corporation, \$170,885, "Kansas DEPSCoR: Kansas Defense 2000 Program for Year One."

Sherwood, Peter M., Kansas Technology Enterprise Corporation, \$70,561, "Kansas DEPSCoR: Kansas Defense 2000 Program for Year One."

Sherwood, Peter M., Lease, Kevin B. (Mechanical and Nuclear Engineering), and **Wang, Youqi** (Mechanical and Nuclear Engineering), National Aeronautics and Space Administration, \$159,186, "Studies of the Role of Surface Treatment and Sizing of Carbon Fiber Surfaces on the Mechanical Properties of Composites Containing Carbon Fibers."

Warmuth, Ralf, US Department of Health and Human Services, \$174,798, "Structural Investigation of Unnatural Peptide Helices."

Waterland, Mark R., Kelley, David F., and Kelley, Anne M., Foundation for Research, Science and Technology, \$67,300, "Solvent Effects in Charge-Transfer Processes."

OFFICE OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

McGowan, Juanita M., Dow Chemical Company, \$5,000, "Tilford/Dow Chemical Diversity Intern."

McGowan, Juanita M., (see **Peak, Carol A.**, Kansas Center for Rural Initiatives).

Spears, Jacqueline D., (see **Montelone, Beth A.**, Biology).

ECONOMICS

Babcock, Michael W., Kansas Department of Transportation, \$42,000, "Impact of Kansas Grain Transportation on Kansas Highway Damage Costs."

Babcock, Michael W., US Department of Agriculture, \$14,200, "Forecasting the Demand for Rail Grain Transportation."

Babcock, Michael W., (see **Stokes, Robert W.**, Civil Engineering).

Bratsberg, Bernt M., (see **Bloomquist, Leonard E.**, Sociology, Anthropology and Social Work).

GEOGRAPHY

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

Goodin, Douglas G., (see **Uhlarik, John J.**, Psychology).

Harrington, Jr., John A., National Aeronautics and Space Administration, \$22,000, "Estimating Soil Moisture over Tallgrass Prairie using ERS-2 SAR- James M. S. Hutchinson."

Harrington, Jr., John A., US Department of Energy, \$12,000, "Predicted Global Change Effects on Livestock Performance Based on Empirical Algorithms."

Harrington, Jr., John A., and **Goodin, Douglas G.**, National Aeronautics and Space Administration, \$161,900, "Spatial and Spectral Scale Dimensions for Modeling Kansas Rural Resource Systems: Projections for Global Change."

Harrington, Jr., John A., (see **Koelliker, James K.**, Agricultural and Biological Engineering).

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

Lu, Max, and **Harrington, Jr., John A.**, US Environmental Protection Agency, \$8,365, "Kansas Water Quality Action Targeting System 14 Regression Analysis Training."

Seyler, Harry L., US Department of Agriculture, \$15,600, "Recompile Soil Surveys of Colorado."

Seyler, Harry L., US Department of Agriculture, \$57,100, "Recompile and/or Digitize Soil Surveys of Colorado."

Seyler, Harry L., and **Ransom, Michel D.** (Agronomy), US Department of Agriculture, \$45,000, "SSURGO Certification of Soil Surveys in Kansas."

GEOLOGY

Archer, Allen W., National Aeronautics and Space Administration, \$25,000, "Aspects and Control of Tidal Sedimentation and the Extraction and Modeling of Tidal Parameters from Modern and Ancient Tidal Rhythmites."

Clark II, George R., (see **Ramaswamy, Sonny B.**, Entomology).

Clement, Monica D., (see **Goldston, M. Jenice**, Elementary Education).

Gao, Stephen A., (see **Liu, Kelley**, Geography).

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

Liu, Kelly, and **Gao, Stephen S.**, National Science Foundation, \$63,415, "High Resolution Imaging of Mantle Discontinuities across South America at 20 Degrees South."

Oviatt, Charles G., US Department of the Interior, \$11,000, "Surficial Deposits of Dugway Proving Ground, Utah."

Oviatt, Charles G., US Department of the Interior, \$12,000, "Total Inorganic Carbon (TIC) Analyses and X-Ray Analysis of Great Salt Lake."

Oviatt, Charles G., (see **Goldston, M. Jenice**, Elementary Education).

HISTORY

Frey, Marsha L., US Department of Defense, \$103,177, "Visiting Professorship at West Point."

Higham, Robin, Journal of the West, Inc., \$46,392, "Journal of the West."

Holl, Jack M., John Templeton Foundation, \$5,000, "Science and Religion in Western Culture."

A. Q. MILLER SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS

Gould, Thomas H., Multisponsor, \$19,000, "Journalism and Mass Communications Website Management."

Simon, Todd F., Kansas State University Foundation, \$61,000, "Huck Boyd National Center for Community Media."

Simon, Todd F., Journalism Education Association, \$58,000, "Journalism Education Association."

KINESIOLOGY

Estabrooks, Paul A., (see **Dzewaltowski, David A.**, Extension Community Health).

Dzewaltowski, David A., US Department of Health and Human Services, \$482,417, "Youth Environments Promoting Nutrition and Activity."

Dzewaltowski, David A., Kansas Department of Health and Environment, \$26,710, "Kansas Lean School Health Project: Phase III."

Harms, Craig A., Francis Families Foundation, \$38,000, "Cardiopulmonary Interactions During Exercise."

Musch, Timothy I., (see **Poole, David C.**, Kinesiology).

Poole, David C., and **Musch, Timothy I.**, US Department of Health and Human Services, \$468,660, "Muscle Capillary Geometry, Flow, and Oxygen Transfer."

MATHEMATICS

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

Crane, Louis, (see **Yetter, David**, Mathematics).

Kapitanski, Lev, National Science Foundation, \$59,631, "Local and Global Behavior of Solutions of Schrodinger Equations."

Lin, Zongzhu, National Science Foundation, \$83,640, "Interplay of Algebraic Groups, Finite Groups, Lie Algebras, Quantum Groups, and Their Representations and Cohomology."

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

Vaninsky, Kirill, National Science Foundation, \$74,358, "Asymptotic Localization, Moser-Calogero Systems and Super Symmetric Yang-Mills Theory."

Yetter, David, and **Crane, Louis**, National Science Foundation, \$100,000, "State-Sum Methods in Low-Dimensional Topology and Quantum Gravity-Categorical Underpinnings and Applications."

PHYSICS

Bhalla, Chander P., National Aeronautics and Space Administration, \$10,000, "R-Matrix Calculations for EBIT."

Bolton, Timothy A., (see **Reay, Neville W.**, Physics).

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

Demina, Regina, (see **Reay, Neville W.**, Physics).

DePaola, Brett D., (see **Weaver, Oliver L.**, Physics).

Esry, Brett D., Research Corporation, \$35,000, "Microscopic Investigation of the Collapse of an Atomic Bose-Einstein Condensate with a Negative Scattering Length."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Defense, \$250,000, "Fabrication and Characterization of AlGaIn/GaN HFET Structures with High Al-Contents for High-Power Amplifier Applications."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Defense, \$266,326, "Instrumentation for III-Nitride Wide Bandgap Semiconductor Research."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Defense, \$50,000, "Picosecond Time-Resolved Photoluminescence Studies of III-Nitride Materials and Structures."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Defense, \$60,000, "Fabrication and Optical Recombination in III-Nitride Microstructures and Devices."

Jiang, Hongxing, and **Lin, Jingyu**, US Department of Energy, \$127,927, "Optical and Electrical Properties of III-V Nitride Wide Bandgap Semiconductors."

Jiang, Hongxing, **Lin, Jingyu**, **Wysin, Gary M.**, **Rys, Andrzej**, (Electrical and Computer Engineering), and **Edgar, James H.** (Chemical Engineering), Kansas Technology Enterprise Corporation, \$100,000, "Advanced Semiconductor Research Group in the State of Kansas."

Jiang, Hongxing, **Lin, Jingyu**, **Yu, Qiuming**, (Chemical Engineering), **Wysin, Gary M.**, **Rys, Andrzej** (Electrical and Computer Engineering), and **Edgar, James H.** (Chemical Engineering), National Science Foundation, \$656,166 (includes \$103,349 from the University of Kansas Center for Research, Inc., and \$52,817 from Wichita State University), "Advanced Semiconductor Research Group in the State of Kansas."

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

Lin, Chii-Dong, US Department of Energy, \$322,000, "Atomic Physics of Strongly Correlated Systems."

Lin, Jingyu, and **Jiang, Hongxing**, National Science Foundation, \$138,599, "Mechanisms of Optical Transitions in AlGaIn Alloys and GaN/Al GaN Quantum Wells."

Lin, Jingyu, and **Jiang, Hongxing**, US Department of Defense, \$100,000, "Material and Device Characterization of Photoconductors."

Lin, Jingyu, and **Jiang, Hongxing**, US Department of Defense, \$20,000, "Fabrication and Optical and Electrical Characterization of AlGaIn/GaN HFET Structures for High-Power Transistor Applications."

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

Rahman, Talat S., Kansas Technology Enterprise Corporation, \$12,500, "Atomistic Studies of Nanotribology: Finite Temperature Energetics and Vibrational Dynamics."

Rahman, Talat S., US Department of Energy, \$40,633, "Structure, Dynamics and Thermodynamics of Metal Surfaces."

Rahman, Talat S., US Department of Energy, \$50,000, "Atomistic Studies of Nanotribology: Finite Temperature Energetics and Vibrational Dynamics."

Reay, Neville W., US Department of Energy, \$252,812, "D Zero Silicon Microstrip Detector Project."

Reay, Neville W., US Department of Energy, \$35,277, "D Zero Silicon Upgrade Project."

Reay, Neville W., **Sidwell, Ronald A.**, **Demina, Regina**, **Bolton, Timothy A.**, and **Stanton, Noel R.**, US Department of Energy, \$795,000, "Heavy Quark and Neutrino Physics."

Richard, Patrick, US Department of Energy, \$2,473,323, "Atomic Physics with Highly Charged Ions." (2 awards)

Sidwell, Ronald A., (see **Reay, Neville W.**, Physics).

Sorensen, Christopher M., National Science Foundation, \$95,000, "Aerosol Fractal Aggregate Optics and Kinetics in Laminar and Turbulent Flows."

Sorensen, Christopher M., and **Chakrabarti, Amitabha**, National Aeronautics and Space Administration, \$39,999, "Gelation in Aerosols: Non-Mean-Field Aggregation Kinetics."

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

Stanton, Noel R., (see **Reay, Neville W.**, Physics).

Thumm, Uwe, US Department of Energy, \$70,000, "Strong External Field Effects in Decay and Photodetachment of Negative Ions."

Weaver, Oliver L., and **DePaola, Brett D.**, National Science Foundation, \$68,319, "Undergraduate Summer Research in Experimental and Theoretical Physics."

Wysin, Gary M., (see **Jiang, Hongxing**, Physics).

Zollman, Dean A., National Science Foundation, \$32,300, "Creating a Modern Physics Course: Visualization and Computation for Undergraduate Physics Majors."

PSYCHOLOGY

Kiefer, Stephen W., Council of Graduate Departments of Psychology, \$6,000, "Council of Graduate Departments of Psychology."

Kiefer, Stephen W., US Department of Health and Human Services, \$86,386, "Naltrexone and Alcohol Reactivity."

Shanteau, James C., US Department of Transportation, \$156,193, "Evaluation of a Performance-Based Description of Expertise in Air Traffic Control."

Smith, Kip C. S., US Department of Transportation, \$95,000, "Human Factors Research to Support Collaborative Decision Making in Air Traffic Management."

Uhlarik, John J., National Aeronautics and Space Administration, \$5,500, "Human Factors Research on Cockpit Display of Traffic Information (Kimberly R. Raddatz)."

Uhlarik, John J., National Aeronautics and Space Administration, \$15,000, "Human Factors Research on Cockpit Display of Traffic Information."

Uhlarik, John J., **Guikema, James A.** (Biology), **Goodin, Douglas G.** (Geography), **Hubbard, Mary S.** (Geology), **Gorder, Peter J.** (Mechanical and Nuclear Engineering), and **Kelkar, Atul G.** (Mechanical and Nuclear Engineering), National Aeronautics and Space Administration, \$41,000, "Kansas Space Grant Consortium."

Uhlarik, John J., (see **Gorder, Peter J.**, Mechanical and Nuclear Engineering).

SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

Bloomquist, Leonard E., and **Spears, Daniel**, \$2,800, "Survey of Opinions on Native American Casino Gaming in Three Northeast Kansas Counties."

Bloomquist, Leonard E., US Department of Health and Human Services, \$106,170, "Evaluation of the HealthWave Program."

Bloomquist, Leonard E., **Gibbons, Jacque E.**, and **Bratsberg, Bernt M.** (Economics), US Department of Health and Human Services, \$50,000, "Estimating Self Sufficiency Costs for Kansas Families."

Cauble, A. Elizabeth, and **Thurston, Linda P.** (Special Education), US Department of Health and Human Services, \$838,589, "Supervisor Training Project."

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

Goe, W. R., US Department of Agriculture, \$39,676, "Agriculture in the Internet Economy."

Logan, Brad, Wheat State Telephone Company, \$1,778, "Archaeological Survey for Wheat State Telephone Company."

Roper, Donna C., US Department of the Interior, \$9,453, "Archeological Investigations at Medicine Creek Reservoir, Nebraska."

STATISTICS

Milliken, George A., Kansas Water Office, \$25,000, "Statistical and Computer Support."

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

Rumsey, Deborah J., Duxbury Press, \$3,000, "STAR (Statistics Teaching and Resource) Library on the World Wide Web."

COLLEGE OF BUSINESS ADMINISTRATION

ACCOUNTING

Vruwink, David R., (see **Niehoff, Brian P.**, Office of the Dean of Business).

OFFICE OF THE DEAN OF THE COLLEGE OF BUSINESS ADMINISTRATION

Ebadi, Yar M., Kansas State University Foundation, \$119,569, "Kansas State University Foundation Support."

McCahon, Cynthia S., (see **Niehoff, Brian P.**, Office of the Dean of Business).

Niehoff, Brian P., **McCahon, Cynthia S.**, and **Vruwink, David R.** (Accounting), Multisponsor, \$6,000, "MBA Practicum."

SMALL BUSINESS DEVELOPMENT CENTER

Rice, Frederick H., US Small Business Administration, \$120,466, "Small Business Development Center."

Rice, Frederick H., US Department of Commerce, \$25,000, "Project Impact — Model Business Disaster Plan."

COLLEGE OF EDUCATION

OFFICE OF THE DEAN OF THE COLLEGE OF EDUCATION

Flaherty, Roberta D., National Academic Advising Association, \$420,256, "National Academic Advising Association Executive Office."

Havlicek, Barbara J., Multisponsor, \$74,588, "Educational Computer Assistance."

Havlicek, Barbara J., Multisponsor, \$6,500, "Council for Public School Improvement."

Havlicek, Barbara J., Kansas Foundation for Agriculture in the Classroom, \$39,824, "Kansas Foundation for Agriculture in the Classroom."

Herrera, Socorro G., US Department of Education, \$184,000, "Project Ramos Secundarios."

Herrera, Socorro G., US Department of Education, \$18,000, "Future's Edge."

Holen, Michael C., USD 383, Manhattan, \$30,250, "Manhattan USD #383 and Kansas State University."

Holen, Michael C., US Department of Education, \$126,859, "Intergovernmental Personnel Act Assignment Agreement (IPA) for Emmett L. Wright."

McCann, Kevin M., US Department of Education, \$4,500, "North Central Kansas Educational Service Center and Kansas State University Memorandum of Agreement."

Murry, Kevin G., US Department of Education, \$228,000, "Project Dimelo."

Rankin, Charles I., US Department of Education, \$40,000, "IAS Regional Conference."

Rankin, Charles I., US Department of Education, \$753,399, "Midwest Equity Assistance Center."

Ross, Tweed R., US Department of Education, \$499,060 (includes \$27,300 from Cloud County Community College, \$27,300 from Highland Community College, \$27,300 from USD #475 Geary County, Kansas, and \$27,300 from USD #383 Manhattan, Kansas), "Teachers Teaching with Technology (T3) Academy."

Shroyer, Margaret G., **Yahnke, Sally J.** (Secondary Education), **Smith, Ann S.** (Biology), and **Bennett, Andrew G.**

(Mathematics), US Department of Education, \$1,416,932 (includes \$153,764 from USD #475 Geary County, Kansas, \$67,740 from USD #383 Manhattan, Kansas, and \$81,420 from USD #500 Kansas City, Kansas), "Improving Teacher Quality through the Kansas State University Professional Development Schools Partnership."

Wright, Emmett L., Multisponsor, \$124,821, "Educational, Cultural and Scientific Cooperation Between the Oblast of Voronezh, the Russian Federation, and the State of Kansas."

ELEMENTARY EDUCATION

Bay, Jennifer M., and **Goldston, M. Jenice**, US Department of Education, \$64,066 (includes \$5,995 from USD #383 Manhattan, Kansas, and \$3,000 from USD #475 Geary County, Kansas), "Communication and Problem Solving: A Vehicle for Improving Mathematics and Science."

Goldston, M. Jenice, National Science Foundation, \$5,000, "Workshop Module for Field Test: Moving Objects."

Goldston, M. Jenice, Kansas Health Foundation, \$21,084, "Twenty-First Century Community Service Learning Center Sites: Technical Assistance for Service Learning Sites."

Goldston, M. Jenice, **Oviatt, Charles G.** (Geology), **Spears, Jacqueline D.** (Foundations and Adult Education), and **Clement, Monica D.** (Geology), National Aeronautics and Space Administration, \$30,958 (includes \$6,000 from the Kansas State University Foundation), "Think Globally, Act Locally: Strengthening Geology Content Courses for Prospective Elementary School Teachers."

Goldston, M. Jenice, (see **Bay, Jennifer M.**, Elementary Education).

Smith, Ben A., National Geographic Society, \$44,000, "Kansas Geographic Alliance - Governor's Water Quality Initiative."

FOUNDATIONS AND ADULT EDUCATION

Spears, Jacqueline D., (see **Goldston, M. Jenice**, Elementary Education).

Wright, Emmett L., US Information Agency, \$111,919 (includes \$7,919 from the country of Russia), "Kansas/Voronezh/Kirov Connection: Involving Rural Schools in Land Stewardship."

SECONDARY EDUCATION

Harbstreit, Steven R., US Department of Education, \$11,244, "Inservice Activities for New Teachers in Agricultural Education."

Heerman, Charles E., US Department of Education, \$59,100 (includes \$13,100 from the Flint Hills Job Corps Center), "Math and Reading for Employability and Job Advancement."

Jankovich, Ann G., US Department of Education, \$5,578, "Teacher Education."

Kane, Mary R., Kansas State Department of Education, \$67,996, "FFA-YF/YFW Organizations."

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

SPECIAL EDUCATION

Thurston, Linda P., (see **Cauble, A. Elizabeth**, Sociology, Anthropology and Social Work).

COLLEGE OF ENGINEERING

ADVANCED MANUFACTURING INSTITUTE

Azadivar, Farhad, Kansas Technology Enterprise Corporation, \$865,000, "Advanced Manufacturing Institute."

Azadivar, Farhad, National Institute of Standards and Technology, \$695,500 (includes \$171,000 from Kansas Technology Enterprise Corporation), "MAMTC Regional Office."

Azadivar, Farhad, Kuecker Equipment Company, \$4,226, "Air Logic Conveying System-Phase 1 Conceptual Design."

Azadivar, Farhad, Multisponsor, \$235,714, "Advanced Manufacturing Institute - Manufacturing Learning Center."

Azadivar, Farhad, 3D Systems, Inc., \$68,208, "University Alliance Program Agreement."

Azadivar, Farhad, Mid-America Manufacturing Technology Center, \$8,000, "LS-Dyna Software."

Azadivar, Farhad, Kansas Technology Enterprise Corporation, \$50,000, "1999 Manufacturing Education Plan Grants Program."

Azadivar, Farhad, Multisponsor, \$44,418, "Advanced Manufacturing Institute-Manufacturing Learning Center."

ARCHITECTURAL ENGINEERING AND CONSTRUCTION SCIENCE

Lewis-Smith, John F., Illuminating Engineering Society of North America, \$5,477, "Illuminating Studies."

BIOLOGICAL AND AGRICULTURAL ENGINEERING

Barnes, Philip L., Novartis, \$28,482, "Atrazine Monitoring Project: Joint Nebraska/Kansas Blue River Study."

Barnes, Philip L., US Environmental Protection Agency, \$72,940, "Joint State Atrazine Big Blue River Monitoring Project."

Barnes, Philip L., (see **Hargrove, William L.**, Kansas Center for Agriculture Resources and the Environment).

Barnes, Philip L., (see **Nelson, Richard G.**, Kansas Industrial Extension Service).

Chung, Do Sup, (see **MacRitchie, Finlay I.**, Grain Science and Industry).

Clark, Gary A., and **Rogers, Danny H.**, Kansas Water Office, \$18,095, "Technical Assistance to Water Users: South Central Kansas Irrigation Scheduling and Water Management Project."

Clark, Gary A., (see **Martin, Victor L.**, Agronomy).

Harner III, Joseph P., (see **Rice, Charles W.**, Agronomy).

Koelliker, James K., **Harrington, Jr., John A.** (Geography), and **Kalita, Prasanta K.**, Kansas Department of Health and Environment, \$25,000, "Cheney Agricultural Nonpoint Source: Evaluation of AGNPS Modeling in Cheney Lake NPS Management."

Kalita, Prasanta K., (see **Koelliker, James K.**, Agricultural and Biological Engineering).

Kalita, Prasanta K., (see **Rice, Charles W.**, Agronomy).

Maghirang, Ronaldo G., US Department of Health and Human Services, \$36,346, "Improving the Work Environment in Livestock Buildings."

Mankin, Kyle R., (see **Nelson, Richard G.**, Kansas Industrial Extension Service).

Rogers, Danny H., (see **Clark, Gary A.**, Biological and Agricultural Engineering).

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

Schrock, Mark D., US Department of Agriculture, \$101,111, "Precise Injection of NH₃ Using Pulse-Width Modulation Metering."

Schrock, Mark D., (see **Schmidt, John P.**, Agronomy).

Slocombe, John W., and **Wolf, Robert E.**, US Environmental Protection Agency, \$40,000, "Drift Minimization through Education: An Interactive Multimedia CD and Internet Delivered Course of Study."

Taylor, Randal K., (see **Schlegel, Alan J.**, Agronomy).

Wolf, Robert E., (see **Slocombe, John W.**, Biological and Agricultural Engineering).

Zhang, Naiqian, US Department of Agriculture, \$15,000, "Identification of Wheat Quality Characteristics Using Single Kernel Spectral Analysis."

Zhang, Naiqian, (see **Neilsen, Mitchell L.**, Computing and Information Sciences).

CHEMICAL ENGINEERING

Edgar, James H., US Department of Defense, \$35,000, "Nitride Semiconductor Substrates."

Edgar, James H., US Department of Defense, \$89,000, "Study of Growth Morphology and Defect Generation in Aluminum Nitride Crystals Grown by Sublimation."

Edgar, James H., (see **Jiang, Hongxing**, Physics).

Fan, Liang T., (see **Walawender, Walter P.**, Chemical Engineering).

Gehrke, Stevin H., Kansas Technology Enterprise Corporation, \$10,462, "Molecular Simulations of Complex Fluids in Confined Geometries."

Gehrke, Stevin H., National Aeronautics and Space Administration, \$44,810, "Design, Synthesis and Characterization of Well-Defined, Biomimetic Polypeptide Networks."

Gehrke, Stevin H., US Department of Energy, \$44,473, "Molecular Simulations of Complex Fluids in Confined Geometries."

Glasgow, Larry A., (see **Reddi, Lakshmi N.**, Civil Engineering).

Walawender, Walter P., and **Fan, Liang T.**, Ford Motor Company, \$65,995, "Absorbed Natural Gas Storage."

Yu, Qiuming, (see **Jiang, Hongxing**, Physics).

CIVIL ENGINEERING

Bhandari, Alok, US Environmental Protection Agency, \$68,876, "Role of Natural Organic Materials in the Disposition and Binding of Organic Contaminants and Heavy Metals."

Hossain, Mustaque A., Kansas Department of Transportation, \$3,464, "Study of Factors Affecting Superpave Mixture Properties."

Hossain, Mustaque A., Kansas Department of Transportation, \$36,000, "Investigation and Quantification of Factors Affecting Aggregate Specific Gravities as Determined by KDOT Test Method KT-6."

Hossain, Mustaque A., US Department of Transportation, \$1,550, "Eisenhower Faculty Fellowship."

Hossain, Mustaque A., and **Devore, John J.** (Electrical and Computer Engineering), Kansas Department of Transportation, \$68,000, "Investigation of Effect of Curling on As-Constructed Smoothness and Ride Quality of KDOT PCC Pavements."

Hu, Kuo Kuang, Mark Development, Inc., \$22,683, "Stiffness Coupler for PCCP Joints (Super-Dowel in Pavements) and in Expansion Joints of Structures."

Landman, E., Dean, (see **Russell, Eugene R.**, Civil Engineering).

Melhem, Hani G., US Department of Transportation, \$229,264, "Effect of Moisture/Drainage on Non-Reinforced PCCP and Performance of FRP and Steel Dowels as Joint Repairs."

Najjar, Yacoub M., National Science Foundation, \$58,218, "Retrainable Class of Constitutive Models for Sand: A Neuro-Mechanistic Approach."

Peterman, Robert J., Kansas Department of Transportation, \$94,000 (includes \$34,000 from the Kansas Prestressed Concrete Association), "Evaluation of the Inverted-Tee Shallow Bridge System for Use in Kansas."

Reddi, Lakshmi N., National Science Foundation, \$4,335, "U.S.-Korea Cooperative Research: Impact of Particle Transport in Soils on Filter Performance."

Reddi, Lakshmi N., Glasgow, Larry A. (Chemical Engineering), and **Marchin, George L.** (Biology), National Science Foundation, \$89,736, "Development of Soil Filter Design Nomograms Incorporating Physicochemical and Biological Mechanisms."

Reddi, Lakshmi N., (see **Ramaswamy, Sonny B.**, Entomology).

Russell, Eugene R., Insurance Institute for Highway Safety, \$53,503, "Roundabout Field Study."

Russell, Eugene R., Kansas Department of Transportation, \$17,500, "Administration of KDOT/K-TRAN Program."

Russell, Eugene R., US Department of Transportation, \$101,216, "Traffic Assistance Services for Kansas (TASK)."

Russell, Eugene R., and **Landman, E. Dean**, Kansas Department of Transportation, \$35,000, "Quick Response Community Planning."

Russell, Eugene R., and **Landman, E. Dean**, US Department of Transportation, \$20,000, "Quick Response Community Planning."

Russell, Eugene R., and **Rys, Malgorzata J.** (Industrial and Manufacturing Systems Engineering), Kansas Department of Transportation, \$40,000, "Roundabout Traffic Patterns."

Russell, Eugene R., Stokes, Robert W., and **Rys, Malgorzata J.** (Industrial and Manufacturing Systems Engineering), Kansas Department of Transportation, \$75,000, "Center of Lane Rumble Strips."

Russell, Eugene R., (see **Stokes, Robert W.**, Civil Engineering).

Starrett, Steven K., US Golf Association, \$23,630, "Comparing Nutrient Losses via Runoff from a New Golf Course and the Golf Course Site's Previous Native Condition."

Stokes, Robert W., Russell, Eugene R., Babcock, Michael W. (Economics), and **Rys, Malgorzata J.** (Industrial and Manufacturing Systems Engineering), Kansas Department of Transportation, \$35,489, "Development of a Prototype Model for Estimating the Benefits of KTRAN Research Projects."

Stokes, Robert W., (see **Russell, Eugene R.**, Civil Engineering).

COMPUTING AND INFORMATION SCIENCES

Andresen, Daniel A., (see **Wallentine, Virgil E.**, Institute for Computational Research).

Dwyer, Matthew B., National Science Foundation, \$24,151, "Experimental Study of Static Analysis Techniques for Concurrent Software."

Dwyer, Matthew B., National Science Foundation, \$55,447, "Engineering High-Quality Concurrent Software."

Dwyer, Matthew B., Sun Microsystems, Inc., \$27,375, "Toward Model Checking Java Programs."

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

Dwyer, Matthew B., (see **Schmidt, David A.**, Computing and Information Sciences).

Gustafson, David A., Rockwell International, \$19,000, "Robot Lab Expansion Project."

Hatcliff, John M., Lucent Technologies, \$2,500, "Partial Evaluation Tool Set for Automatically Customizing Adaptable Software."

Hatcliff, John M., National Science Foundation, \$50,000, "Partial Evaluation Tool Set for Automatically Customizing Adaptable Software."

Hatcliff, John M., Dwyer, Matthew B., and **Schmidt, David A.**, National Science Foundation, \$65,982, "Model Construction Tool Suite for Finite-State Verification of Java (CCR)."

Hatcliff, John M., (see **Schmidt, David A.**, Computing and Information Sciences).

Hsu, William H., US Department of Defense, \$92,375, "Synthesis, Reduction, and Integration of T & E Data for Monitoring Applications (Integration of Data Sources for Time Series Analysis)."

Hsu, William H., (see **Wallentine, Virgil E.**, Institute for Computational Research).

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

Neilsen, Mitchell L., US Department of Agriculture, \$20,000, "Integrated Development System for Water Resource Site Analysis."

Neilsen, Mitchell L., Singh, Gurdip, Mizuno, Masaaki, Zhang, Naiqian, (Biological and Agricultural Engineering), and **Lenhart, Donald H.** (Electrical and Computer Engineering), National Science Foundation, \$408,596 (includes \$9,500 from Motorola, Inc.), "Real-Time Embedded Systems Research and Curriculum Development."

Schmidt, David A., National Science Foundation, \$105,000, "Static Analysis Based on Model Checking."

Schmidt, David A., Dwyer, Matthew B., and **Hatcliff, John M.**, National Science Foundation, \$15,467, "Integrating Platforms for Finite-State Verification."

Schmidt, David A., (see **Hatcliff, John M.**, Computing and Information Sciences).

Singh, Gurdip, (see **Neilsen, Mitchell L.**, Computing and Information Sciences).

Wallentine, Virgil E., AT&T Technologies, \$6,660, "AT&T Summer on Campus."

Wallentine, Virgil E., Lucent Technologies, \$19,980, "Lucent Technologies Summer On Campus."

Wallentine, Virgil E., Multisponsor, \$44,455, "CIS Internship Program."

OFFICE OF THE DEAN OF THE COLLEGE OF ENGINEERING

Rathbone, Donald E., Multisponsor, \$39,000, "Pre-Enrollment Mathematics and Sciences Tutoring of Minority Engineering Recruits."

ELECTRICAL AND COMPUTER ENGINEERING

Carpenter, Kenneth H., US Department of Energy, \$56,750, "Integrated Firing-System/Initiation Train Model."

Devore, John J., (see **Hossain, Mustaque A.**, Civil Engineering).

Dillman, Norman G., Transportation Design and Manufacturing, \$66,217, "Power Electronic Applications to Alternative Fuel Vehicles."

Dyer, Stephen A., National Science Foundation, \$74,987, "Macroelectronics: A Gateway to Electronics Education."

Gruenbacher, Don M., Motorola, Inc., \$65,938, "Analysis of Turbo Codes Applied to Wideband Communication Systems."

Gruenbacher, Don M., National Aeronautics and Space Administration, \$10,000, "Analysis of Interspacecraft Communications."

Kuhn, William B., National Aeronautics and Space Administration, \$73,704, "Applications of Spiral Inductors and Transformers in JPL's System-on-a-Chip (SOAC) Development Initiatives."

Lenhart, Donald H., (see **Neilsen, Mitchell L.**, Computing and Information Sciences).

Pahwa, Anil. (see **White, Warren N.**, Mechanical and Nuclear Engineering).

Rys, Andrzej. (see **Jiang, Hongxing.** Physics).

Simons, Gale G., Western Resources, Inc., \$47,529, "Kansas Wind Energy Assessment."

Soldan, David L., US Department of Agriculture, \$25,000, "Decision Support System for Insect Pest in Grain Elevators."

Starrett, Shellie K., National Science Foundation, \$36,910 (Includes \$20,000 from the Institute of Electrical and Electronics Engineers), "Promoting Student Participation in the IEEE Power Engineering Society."

Warren, Steven. US Department of Energy, \$40,493, "Explore Electron Transport in a Complex Solid Model Using the Adjoint Version of ITS-CAD."

HAZARDOUS SUBSTANCE RESEARCH CENTER

Erickson, Larry E., US Agency for International Development, \$33,816, "Community Based Drinking Water Assessment."

Erickson, Larry E., US Department of Health and Human Services, \$8,000, "NIEHS Support for 2000 Conference."

Erickson, Larry E., and **Hayter, Richard B.** (Extension Engineering), US Environmental Protection Agency, \$756,746, "Collateral Great Plains/Rocky Mountain Hazardous Substance Research Center Program."

Erickson, Larry E., and **Hayter, Richard B.** (Extension Engineering), US Environmental Protection Agency, \$961,814, "Great Plains/Rocky Mountain Hazardous Substance Research Center."

INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

Azadivar, Farhad. Kansas Technology Enterprise Corporation, \$150,000, "Engineering Learning Center: A Model for Systemic Engineering Education Reform."

Harnett, R. Michael. US Department of Defense, \$16,051, "Part-Time M.S. Program in Industrial Engineering - Summer 2000."

Harnett, R. Michael. US Department of Defense, \$18,866, "Part-Time M.S. Program in Industrial Engineering - Spring 2000."

Harnett, R. Michael. US Department of Defense, \$35,272, "Part-Time M.S. Program in Industrial Engineering - Fall 1999."

Rys, Malgorzata J., (see **Russell, Eugene R.**, Civil Engineering).

Rys, Malgorzata J., (see **Stokes, Robert W.**, Civil Engineering).

INSTITUTE FOR COMPUTATIONAL RESEARCH

Wallentine, Virgil E., **Hsu, William H.** (Computing and Information Sciences), and **Andresen, Daniel A.** (Computing and Information Sciences), Wal-Mart Stores, Inc. and NCR Corporation, \$5,000,000, "Data and Knowledge Management, Mining and Warehousing: Integration of Research and Curricular Processes."

INSTITUTE FOR ENVIRONMENTAL RESEARCH

Eckels, Steven. and **Hosni, Mohammad H.**, Ford Motor Company, \$48,020, "Effects of Oil Separation on Automotive Air Conditioning System Performance."

Eckels, Steven. (see **Hosni, Mohammad H.**, Institute for Environmental Research).

Hosni, Mohammad H., US Department of Energy, \$49,717, "Desiccant Dehumidification and Its Relationship to Human Thermal Comfort."

Hosni, Mohammad H., Ford Motor Company, \$122,983, "PNGV Testing for Ford Motor Company."

Hosni, Mohammad H., Multisponsor, \$226,175, "Institute for Environmental Research Support."

Hosni, Mohammad H., and **Jones, Byron W.**, Ford Motor Company, \$304,045, "Enhancement of the Visteon Vehicle Thermal Comfort Model."

Hosni, Mohammad H., (see **Eckels, Steven.** Institute for Environmental Research).

Hosni, Mohammad H., and **Eckels, Steven.** Ford Motor Company, \$93,100, "Air Conditioning System Optimization."

Jones, Byron W., (see **Hosni, Mohammad H.**, Institute for Environmental Research).

KANSAS INDUSTRIAL EXTENSION SERVICES

Nelson, Richard G., Kansas Department of Health and Environment, \$13,000, "Demonstration of Sediment Load Reduction into Perry Reservoir through Selective Switchgrass Plantings in the Delaware Basin, Part 1."

Nelson, Richard G., and **Langemeier, Michael R.** (Agricultural Economics), US Environmental Protection Agency, \$51,188, "Water Quality Profit Optimization Project."

Nelson, Richard G., **Mankin, Kyle R.** (Biological and Agricultural Engineering), and **Barnes, Philip L.** (Biological and Agricultural Engineering), Kansas Corporation Commission, \$22,694, "Proposal to Plant 1,000 to 2,000 Acres of Switchgrass in the Perry Reservoir Basin for Co-firing at the Jeffrey Energy Center and Evaluation of Environmental Benefits."

Snead, Bruce C., US Environmental Protection Agency, \$6,065, "Michigan Radon Workshop."

Snead, Bruce C., US Environmental Protection Agency, \$25,700, "Radon Projects for Nebraska."

Snead, Bruce C., US Environmental Protection Agency, \$217,741, "SIRG Public Information Assistance Grant."

Snead, Bruce C., US Environmental Protection Agency, \$16,869, "Regional Radon Training Center."

Snead, Bruce C., US Environmental Protection Agency, \$8,000, "Tools for Schools Presentations."

MECHANICAL AND NUCLEAR ENGINEERING

Bajorek, Stephen M., National Academy for Nuclear Training, \$15,000, "National Academy for Nuclear Training."

Bajorek, Stephen M., US Department of Energy, \$112,941, "Investigation of Minimum Film Boiling Phenomena on Fuel Rods under Blow-Down Cooling Conditions."

Bajorek, Stephen M., US Department of Energy, \$23,219, "Enhancement of Nuclear Safety and Reactor Thermal-Hydraulic Studies."

Bajorek, Stephen M., US Department of Energy, \$42,048, "Identification and Experimental Database for Binary Multicomponent Mixtures with Potential for Increasing Overall Cycle Efficiency."

Bajorek, Stephen M., US Department of Energy, \$62,795, "Kansas State University FY 2000 Reactor Instrumentation Grant."

Bajorek, Stephen M., US Department of Energy, \$8,500, "University Reactor Sharing."

Bajorek, Stephen M., Westinghouse Electric Company, \$23,219, "Westinghouse - KSU Internship Program: FY 1999-2000."

Fenton, Donald L., American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., \$59,523, "ASHRAE Standard 15 User's Manual."

Gorder, Peter J., Kansas Technology Enterprise Corporation, \$2,000, "ADMRC Administration."

Gorder, Peter J., Uhlarik, John J. (Psychology), and **Thompson, J. Garth**, National Aeronautics and Space Administration, \$159,936, "Advanced Information Subsystems for Next Generation General Aviation Aircraft."

Gorder, Peter J., (see **Uhlarik, John J.**, Psychology).

Jaberi, Farhad A., American Chemical Society, \$25,000, "Numerical Simulation of Turbulent Premixed Hydrocarbon Flames."

Jaberi, Farhad A., National Aeronautics and Space Administration, \$33,000, "Large Eddy Simulation of Gravitational Effects on Transitional and Turbulent Gas-Jet Diffusion Flames."

Kelkar, Atul G., National Aeronautics and Space Administration, \$21,885, "Further Investigation of Receding Horizon-Based Controllers and Neural Network-Based GPC Systems."

Kelkar, Atul G., National Aeronautics and Space Administration, \$15,000, "Synthesis Methods for Robust Passification and Control of Linear, Time-Invariant Systems."

Kelkar, Atul G., National Aeronautics and Space Administration, \$24,919, "Predictive and Neural Predictive Control of Uncertain Systems."

Kelkar, Atul G., National Science Foundation, \$50,000, "Robust Control of Passive and Non-Passive Aerospace Systems."

Kelkar, Atul G., (see **Uhlarik, John J.**, Psychology).

Krishnaswami, Prakash, (see **Wang, Youqi**, Mechanical and Nuclear Engineering).

Lease, Kevin B., Kansas Technology Enterprise Corporation, \$47,326, "Development of a Digital Image-Based Inspection Technique for the Quality Control of Phosphoric Acid Anodized Surfaces Used in Structural Adhesive Bonding."

Lease, Kevin B., Raytheon Aircraft Company, \$70,000, "Fatigue Crack Growth in Shot Peen Formed Components."

Lease, Kevin B., Wichita State University, \$57,123, "Fatigue Analysis Software for Use in Civil Aviation."

Lease, Kevin B., (see **Sherwood, Peter M.**, Chemistry).

Madanshetty, Sameer I., US Department of Defense, \$303,701, "Microcavitation for Surface Cleaning."

Swenson, Daniel V., New Energy Development Organization, \$38,087, "Universal Understanding and Design of Engineered Geothermal Reservoirs."

Swenson, Daniel V., US Department of Energy, \$160,717, "Modeling Production/Injection Strategies in Fracture-Dominated Geothermal Reservoirs."

Thompson, J. Garth, National Aeronautics and Space Administration, \$5,500, "Advanced Information Subsystems for the Next Generation General Aviation Aircraft-Melissa McDonald."

Thompson, J. Garth, National Aeronautics and Space Administration, \$34,918, "Advanced Information Subsystems for the Next Generation General Aviation Aircraft."

Thompson, J. Garth, National Aeronautics and Space Administration, \$5,500, "Advanced Information Subsystems for the Next Generation General Aviation Aircraft - Xu Zhang."

Thompson, J. Garth, US Department of Energy, \$49,500, "University Reactor Instrumentation Grant Program."

Thompson, J. Garth, (see **Gorder, Peter J.**, Mechanical and Nuclear Engineering).

Walker, Hugh S., Kansas Department of Transportation, \$7,994, "Redesign and Testing of Composite Bridge Deck Panels."

Walker, Hugh S., US Department of Transportation, \$60,000, "Fiber Reinforced Polymer Bridge Rail and Attachment."

Wang, Youqi, and **Krishnaswami, Prakash**, Wichita State University, \$90,356, "Development of Three Dimensional Braiding Processes for Aircraft Structural Components."

Wang, Youqi, (see **Sherwood, Peter M.**, Chemistry).

Whaley, Paul M., US Department of Energy, \$12,840, "Detection of Enriched Uranium Prototype I System Measurements."

White, Warren N., and **Pahwa, Anil** (Electrical and Computer Engineering), American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., \$138,994, "Heat Gain from Electrical and Control Equipment in Industrial Plants."

Xin, Xiao J., National Science Foundation, \$30,000, "Two-Year Research Plan for the Powder Project."

NATIONAL GAS MACHINERY LABORATORY

Chapman, Kirby S., Kansas Technology Enterprise Corporation, \$225,000, "National Gas Machinery Laboratory Turbocharger Test and Research Facility."

Chapman, Kirby S., American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., \$52,562, "Window Performance for Human Thermal Comfort."

Chapman, Kirby S., Kansas Technology Enterprise Corporation, \$30,000 (includes \$25,000 from the University of Kansas Center for Research, Inc.), "Engineering Research Center."

NATIONAL INSTITUTE FOR LAND MANAGEMENT AND TRAINING

Biles, Bertram R., US Department of Defense, \$69,500, "Kansas Army National Guard Web Server Project."

Steichen, James M., US Environmental Protection Agency, \$28,215, "Integrated Pest Management Instructional Video Program."

COLLEGE OF HUMAN ECOLOGY

APPAREL, TEXTILES, AND INTERIOR DESIGN

Bode, Marilyn, US Department of Agriculture, \$2,000, "Healthy Indoor Air for America's Homes."

OFFICE OF THE DEAN OF THE COLLEGE OF HUMAN ECOLOGY

Chambers, Delores H., Farmland Foods, Inc., \$7,950, "Evaluation of Meat Products."

Chambers, Delores H., Kraft Foods, Inc., \$10,532, "Evaluation of Products."

Chambers, Delores H., Farmland Industries, Inc., \$730, "Discussion Group."

Chambers, Delores H., and **Barrett, Elizabeth B.** (Hotel, Restaurant, Institution Management and Dietetics), Kansas Department on Aging, \$15,025, "Focus Group Training for Kansas Department on Aging."

Hudson, Karen S., (see **Peters, Paula**, Human Nutrition).

McFarland, Marcia R., US Department of Agriculture, \$120,000, "CYFAR Supported Extension Staff Training."

HOTEL, RESTAURANT, INSTITUTION MANAGEMENT AND DIETETICS

Barrett, Elizabeth B., (see **Chambers, Delores H.**, Office of the Dean of the College of Human Ecology).

Hsu, Cathy H. C., Kansas Department of Commerce and Housing, \$50,000, "Tourism/Market Research for the Division of Travel and Tourism."

HUMAN NUTRITION

Baybutt, Richard C., US Department of Agriculture, \$170,000, "Role of Vitamin A in Lung Epithelial Cell Repair."

Chambers IV, Edgar I., Abbott Laboratories, \$8,262, "Evaluation of Products."

Chambers IV, Edgar I., Coca-Cola Company, \$8,360, "Product Methods Testing."

Chambers IV, Edgar I., Multisponsor, \$221,304, "Sensory Analysis Center Support."

Chambers IV, Edgar I., and **Chambers, Delores H.**, Frito Lay, Inc., \$85,462, "Consumer Perception of Products under Extended Use."

Chambers IV, Edgar I., and **Chambers, Delores H.**, Peryam and Kroll Research Corporation, \$54,050, "Evaluation of Product Characteristics."

Chambers IV, Edgar I., and **Chambers, Delores H.**, S.C. Johnson & Sons, Inc., \$67,180, "Confidential Disclosure and Testing Agreement."

Chambers IV, Edgar I., and **Chambers, Delores H.**, SSE Foods, Inc., \$40,015, "Sensory Analysis Assistance."

Chambers, Delores H., (see **Chambers IV, Edgar I.**, Human Nutrition).

Koo, Sung I., and **Nelssen, Jim L.** (Animal Sciences and Industry), Lonza, Inc., \$10,585, "Effects of Modified Tall Oil on Body Composition in Rats When Fed in Conjunction with Other Nutritional Supplements."

Koo, Sung I., (see **Hua, Duy H.**, Chemistry).

Peters, Paula, and **Hudson, Karen S.** (Dean of Human Ecology), US Department of Agriculture, \$1,965,396, "Family Nutrition Program."

Reeves, Robert D., (see **Klopfenstein, Carol F.**, Grain Science and Industry).

Setser, Carole S., Hill's Pet Nutrition, Inc., \$16,151, "Sensory Evaluation of Pet Foods."

Setser, Carole S., (see **Brent, John L.**, Grain Science and Industry).

Setser, Carole S., (see **Klopfenstein, Carol F.**, Grain Science and Industry).

SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES

Altus, Deborah, (see **Norris-Baker, Carolyn**, Dean of Architecture, Planning and Design).

Bailey, Gwen L., (see **Bollman, Stephan R.**, School of Family Studies and Human Services).

Bollman, Stephan R., (see **Griffin, Charles L.**, School of Family Studies and Human Services).

Bollman, Stephan R., Kansas Child Care Training Opportunities, Inc, \$14,332, "Flint Hills Child Care Resource and Referral Project."

Bollman, Stephan R., Kansas Child Care Training Opportunities, Inc, \$337,039, "Kansas Child Care Training Opportunities."

Bollman, Stephan R., Kansas Child Care Training Opportunities, Inc., \$30,477, "Infant/Toddler Initiative."

Bollman, Stephan R., and **Bailey, Gwen L.**, US Department of Education, \$18,572, "Special Care Curriculum - Training."

Bollman, Stephan R., and **Glasscock, Marlene K.**, US Department of Agriculture, \$64,001, "National Network for Child Care Internet Web Site and Database Recruitment for Air Force Internships Pilot Project."

Bollman, Stephan R., and **Glasscock, Marlene K.**, US Department of Agriculture, \$20,000, "Implementing the Cooperative Extension System Child Care Initiative."

Bollman, Stephan R., and **Glasscock, Marlene K.**, US Department of Agriculture, \$89,105 (includes \$10,000 from Iowa State University and \$875 from the University of Connecticut), "Expanding Access to USDA and Land-Grant University Child Care Information, Programs and Services."

Bollman, Stephan R., and **O'Conner, Nancy T.**, Kansas Department of Social and Rehabilitation Services, \$196,649, "Family Preservation Services."

Bradshaw, Michael H., US Department of Health and Human Services, \$25,000, "Immunize for Life Promotion and Education."

DeLuccie, Mary L., US Department of Education, \$63,197, "Early Childhood Education."

DeLuccie, Mary L., USD #383, Manhattan, \$17,171, "Early Childhood Lab."

Garcia, Robert, (see **Smit, Ann B.**, School of Family Studies and Human Services).

Glasscock, Marlene K., (see **Bollman Stephan R.**, School of Family Studies and Human Services).

Griffin, Charles L., and **Bollman, Stephan R.**, US Department of Health and Human Services, \$178,794, "SRS Dispute Resolution Training and Curriculum Development."

McFarland, Marcia R., US Department of Agriculture, \$312,706, "USDA/Army School-Age and Teen Project, Task I."

O'Conner, Nancy T., (see **Bollman, Stephan R.**, School of Family Studies and Human Services).

Poresky, Robert H., Kansas Department of Social and Rehabilitation Services, \$124,510, "Alcohol and Drug Treatment Effectiveness Evaluation."

Poresky, Robert H., US Department of Transportation, \$62,761, "Kansas Safety Belt Direct Observation CATI Survey."

Schumm, Walter R., US Department of Health and Human Services, \$15,000, "Evaluation of the Effectiveness of Anti-Bias Teaching Practices in the Reduction of Prejudice Among Children Attending Head Start in Kansas - Abigail E. Baucom."

Smit, Ann B., USD #379, Clay Center, Kansas, \$7,490, "Speech and Language Services."

Smit, Ann B., and **Garcia, Robert**, Capper Foundation, \$40,872, "Capper - KSU Clinical Affiliation in Speech Pathology."

Walker, Doris K., Kansas Health Foundation, \$6,452, "Health Promotion for Older Kansans."

Webb, Farrell J., Kansas Department of Health and Environment, \$39,194, "K-State Cares: Rural Health Issues in Kansas."

Webb, Farrell J., Kansas Department of Health and Environment, \$98,814, "HIV/AIDS Testing Survey."

COLLEGE OF TECHNOLOGY AND AVIATION

OFFICE OF THE DEAN OF THE COLLEGE OF TECHNOLOGY AND AVIATION

Averette, Danny F., Wichita State University, \$1,500, "Science Olympiad."

SALINA ARTS, SCIENCE AND BUSINESS

Thompson, Stephen, Kansas Water Office, \$52,694, "GPS Base Station Operation and Technical Support."

Thompson, Stephen, Saline County, \$15,000, "Proposal to Recover and Determine Geodetic Coordinates for Section Corners in Saline County."

SALINA CONTINUING EDUCATION

Krause, Joseph M., Kansas Department of Transportation, \$55,970, "Certified Inspector Training Program."

SALINA ENGINEERING TECHNOLOGY

Buchanan, Randy K., (see **Dandu, Raju**, Salina Engineering Technology).

Buchwald, Donald L., (see **Dandu, Raju**, Salina Engineering Technology).

Dandu, Raju, and **Buchanan, Randy K.**, Society of Manufacturing Engineers, \$90,060, "SME Education Foundation In-Kind Gifts."

Dandu, Raju, and **Buchwald, Donald L.**, Society of Manufacturing Engineers, \$58,790, "SME Education Foundation In-Kind Gifts."

COLLEGE OF VETERINARY MEDICINE

ANATOMY AND PHYSIOLOGY

Blecha, Frank, US Department of Health and Human Services, \$46,073, "Short-Term Training of Students in Health Professional Schools."

Erickson, Howard H., American Quarter Horse Association, \$35,732, "Does Nitric Oxide Reduce Pulmonary Vascular Pressures and Exercise-Induced Pulmonary Hemorrhage?"

Erickson, Howard H., CNS, Inc., \$105,436, "Evaluation of a Nasal Dilator in Horses."

Freeman, Lisa C., US Department of Health and Human Services, \$181,923, "LKS and LKUR in Granulosa Cells."

Freeman, Lisa C., and **Lillich, James D.** (Clinical Sciences), Cornell University, \$16,350, "Ionic Basis of Repolarization in Equine Heart: Relevance to Atrial Fibrillation and Acquired Long QT Syndrome."

Kenney, Michael J., American Heart Association, Heartland Affiliate, \$39,814, "Heart Failure Alters Sympathetic Neural Strategies to Heat Stress."

Marcus, Daniel C., US Department of Health and Human Services, \$262,277, "Cochlear and Vestibular Ion Transport."

McAllister, Richard M., American Heart Association, Kansas Affiliate, Inc., \$31,060, "Nitric Oxide Synthase: Control by Shear Stress and Humoral Agents."

McAllister, Richard M., US Department of Health and Human Services, \$98,984, "Exercise: Muscle Blood Flow, Vascular Adaptations."

Mitchell, Kathy E., (see **Tomich, John M.**, Biochemistry).

Musch, Timothy I., and **Poole, David C.**, American Heart Association, Heartland Affiliate, \$40,000, "Kinetics of Muscle Oxygen Exchange in Chronic Heart Failure."

Poole, David C., (see **Musch, Timothy I.**, Anatomy and Physiology).

Ross, Chris R., US Department of Health and Human Services, \$145,500, "NADPH Oxidase and Neutrophil Recruitment in Muscle."

Schultz, Bruce D., Cystic Fibrosis Foundation, \$75,000, "Regulated Ion Transport by Vas Deferens Epithelium."

Schultz, Bruce D., (see **Tomich, John M.**, Biochemistry).

Wangemann, A. Philine, US Department of Health and Human Services, \$247,950, "Cytosolic Regulation of Inner Ear Ion Transport."

Wangemann, A. Philine, US Department of Health and Human Services, \$249,967, "Neurogenic Regulation of Cochlear Blood Flow."

Weiss, Mark L., US Department of Health and Human Services, \$151,421, "Neural Circuitry of the Kidney."

Westfall, Jane A., National Science Foundation, \$6,596, "Neurons and Neuropeptides in Sea Anemones."

CLINICAL SCIENCES

Carpenter, James W., City of Manhattan, Kansas, \$10,000, "Veterinary Services at the Sunset Zoological Park, Manhattan, Kansas."

Chenoweth, Peter J., AlphaPharma Inc., \$17,253, "Assessment of Semen Quality in Bulls."

Chun, Ruthanne, Morris Animal Foundation, \$38,000, "Evaluation of Vascular Endothelial Growth Factor in Normal and Tumor Bearing Dogs."

Chun, Ruthanne, Bayer Corporation, \$547,180, "Evaluation of Clinical Efficacy and Safety of Bay 12-9566 as an Adjunct Therapy for Treating Canine Appendicular Osteosarcoma and Lymphoma."

Fingland, Roger B., Ross University, \$77,456, "Clinical Training for Ross University School of Health Sciences."

Gaughan, Earl M., Kansas Racing and Gaming Commission, \$9,800, "Design and Development of a Biodegradable Plate for Coaptation of Flexor Tendon Injury in Horses."

Hoskinson, James J., Hill's Pet Nutrition, Inc., \$13,078, "Scintigraphic Evaluation of Gastrointestinal Transit Time in Healthy Cats using Dry Diets of Varied Shape and Fiber Type."

Lillich, James D., Kansas Racing and Gaming Commission, \$4,615, "Effects of Cast Immobilization followed by Exercise on the Equine Proximal Sesamoid Bones."

Lillich, James D., (see **Freeman, Lisa C.**, Anatomy and Physiology).

Renberg, Walter C., Novartis, \$84,500, "Multi-Center Clinical Study of the Effect of an Investigational Drug on Chronic Pain in Dogs with Osteoarthritis."

Roush, James K., Nutramax Laboratories, Inc., \$79,598, "Effects of Diacerein on Acute Inflammation in a Canine Sunovitis Model - A Pilot Study."

Roush, James K., Nutramax Laboratories, Inc., \$12,490, "Serologic Evaluation of Markers in Articular Disease in Dogs Following Administration of Cosequin DS."

Rush, Bonnie R., 3M Corporation, \$7,620, "Pulmonary Ventilation in Horses with Heaves after Administration of Aerosolized Beclomethasone Dipropionate."

Rush, Bonnie R., 3M Corporation, \$6,880, "Pulmonary Immune Function after Administration of Aerosolized Beclomethasone."

Sanderson, Michael W., Kansas Buffalo Association, \$933, "Survey of Management Practices of U. S. Bison Producers and the Reproductive Performance of Bison Herds."

OFFICE OF THE DEAN OF THE COLLEGE OF VETERINARY MEDICINE

Willard, Gayle K., Kansas Library Network, \$5,600, "Kansas Library ILDP Animals in Society."

DIAGNOSTIC MEDICINE/PATHOBIOLOGY

Dryden, Michael W., Bayer Corporation, \$68,258, "Imidacloprid Flea Susceptibility Monitoring Project."

Dryden, Michael W., Merial Corporation, \$51,685, "Efficacy Evaluation of ML-2,095,988 508Q for the Control of Ctenocephalides felis on the Cat."

Dryden, Michael W., Pfizer Inc., \$78,811, "Efficacy of Revolution, Advantage and Frontline TopSpot to Control Flea Populations on Naturally Infested Pets and in Private Residences."

Fenwick, Bradley W., Kansas Racing and Gaming Commission, \$120,000, "Why Do Current Vaccines Fail to Reliably Prevent Kennel Cough in Racing Greyhounds? - Development and Testing of a Reliable Kennel Cough Vaccine."

Fenwick, Bradley W., Kansas Racing and Gaming Commission, \$50,000, "Enhancing Greyhound Immune Function and Reproductive Efficiency: Breeding for Optimal Histocompatibility Genotypes (A Molecular Approach for Breed Improvement)."

Kapil, Sanjay, Embassy of the Arab Republic of Egypt, \$4,300, "Advanced Training in Molecular Virology."

Kapil, Sanjay, Schering Plough Animal Health, \$18,151, "Preparation of Challenge Stocks of Bovine Coronavirus (Minnesota - 1988)."

Kapil, Sanjay, US Department of Agriculture, \$34,000, "Pseudorabies Laboratory Testing."

Kapil, Sanjay, and **Nietfeld, Jerome C.**, ProdiGene, Inc., \$13,685, "Immunogenicity of Corn-Based Vaccines for Transmissible Gastroenteritis Virus Infection in Piglets."

Kapil, Sanjay, Kirkegaard and Perry Laboratories, \$607, "Production of Full-Length Nucleoprotein for PRRSV Antibody ELISA (KSU ELISA)."

MohanKumar, Puliur S., (see **MohanKumar, Sheba M. J.**, Diagnostic Medicine/Pathobiology).

MohanKumar, Sheba M. J., and **MohanKumar, Puliur S.**, Kansas Racing and Gaming Commission, \$50,416, "Suppression of Heat in Racing Female Greyhounds."

Nietfeld, Jerome C., (see **Kapil, Sanjay**, Diagnostic Medicine/Pathobiology).

Oehme, Frederick W., S.C. Johnson & Sons, Inc., \$157,249, "Studies of the Safety of Fiber AB Product in Household Pets."

Oehme, Frederick W., S.C. Johnson & Sons, Inc., \$10,000, "Toxicology Training Program."

Oehme, Frederick W., S.C. Johnson & Sons, Inc., \$156,500, "Fabric Refresher #2."

Oehme, Frederick W., Kansas Masonic Foundation, Inc., \$50,000, "Is Neoplastic and Neurologic Disease in Scott County, Kansas, Related to Agricultural Chemical Exposure?"

Stewart, George C., US Department of Health and Human Services, \$126,071, "Cell Division Gene Products of Bacillus Subtilis."

FOOD ANIMAL HEALTH AND MANAGEMENT CENTER

Galland, John C., and **Hyatt, Doreene R.**, US Department of Agriculture, \$59,811, "Veterinarian HACCP Training Program for Reducing On-Farm Foodborne Pathogens."

Gillespie, Jerry R., and **Sargeant, Janice M.**, US Department of Agriculture, \$198,347, "Ecology of E. coli O157:H7 in Beef Cow-Calf Operations from Ranch through Feedlot."

Hyatt, Doreene R., (see **Galland, John C.**, Food Animal Health and Management Center).

Sanderson, Michael W., (see **Sargeant, Janice M.**, Food Animal Health and Management Center).

Sargeant, Janice M., and **Sanderson, Michael W.** (Clinical Sciences), US Department of Agriculture, \$210,000, "Ecological Distribution of E. coli O157:H7 Strains in Agricultural Environments."

Sargeant, Janice M., (see **Gillespie, Jerry R.**, Food Animal Health and Management Center).

KANSAS COOPERATIVE EXTENSION SERVICE

AGRICULTURAL ECONOMICS

Barton, David G., and **Boland, Michael A.**, US Department of Agriculture, \$286,000 (includes \$154,000 from the Kansas Department of Commerce and Housing), "Kansas Cooperative Development Center Education and Assistance Program."

Darling, David L., Prairie Band of Potawatomi Indians, \$10,000, "Impact Analysis."

Dhuyvetter, Kevin C., (see **Staggenborg, Scott A.**, Northeast Area Office).

Flinchbaugh, Barry L., US Department of Agriculture, \$150,000, "Risk Management Education: A Risk Management Club Approach."

Kastens, Terry, (see **Taylor, Randal K.**, Extension Biological and Agricultural Engineering).

Leatherman, John C., US Environmental Protection Agency, \$101,140, "Kansas Urban Water Quality Restoration and Protection Initiative."

AGRONOMY

Devlin, Daniel L., **Staggenborg, Scott A.** (Northeast Area Office), **Barnes, Philip L.** (Biological and Agricultural Engineering), and **Regehr, David L.**, US Environmental Protection Agency, \$80,000, "Reducing Atrazine Runoff - Blue River and Delaware River."

Devlin, Daniel L., (see **Barden, Charles J.**, Extension Horticulture, Forestry and Recreation Resources).

Devlin, Daniel L., (see **Powell, G. Morgan**, Extension Biological and Agricultural Engineering).

Fjell, Dale L., (see **Rogers, Danny H.**, Extension Biological and Agricultural Engineering).

Fjell, Dale L., (see **Staggenborg, Scott A.**, Northeast Area Office).

Gordon, Walter B., (see **Staggenborg, Scott A.**, Northeast Area Office).

Martin, Victor L., (see **Rogers, Danny H.**, Extension Biological and Agricultural Engineering).

Ohlenbusch, Paul D., and **Jones, Rodney D.** (Agricultural Economics), US Environmental Protection Agency, \$122,218, "Developing a Grazing Land Water Quality Education Program."

Peterson, Dallas E., (see **Staggenborg, Scott A.**, Northeast Area Office).

Regehr, David L., (see **Devlin, Daniel L.**, Extension Agronomy).

Shroyer, James P., Kansas Wheat Commission, \$25,000, "Wheat Research/Extension Assistant."

Shroyer, James P., **Bowden, Robert L.** (Plant Pathology), **Thompson, Curtis R.** (Southwest Area Office), **Duncan, Stewart R.** (South Central Area Office), and **Staggenborg, Scott A.** (Northeast Area Office), Finnup Foundation, \$9,500, "Wheat Research/Extension Assistant."

ANIMAL SCIENCES AND INDUSTRY

Aramouni, Fadi M., and **Boyle, Elizabeth**, US Department of Agriculture, \$83,750, "HACCP Implementation and Management in Small Meat and Food Processors in Four Midwest States."

Blasi, Dale A., Kansas Wheat Commission, \$5,000, "Feeding Value and Present Day Marketing Channels of Wheat Dockage."

Boyle, Elizabeth, US Department of Agriculture, \$35,600, "Land Grant College HACCP Training and Support for State and Local Regulators on Meat and Poultry Processing HACCP Systems."

Boyle, Elizabeth, Kansas Department of Commerce and Housing, \$17,500, "KSU Meat Extension and Pilot Plant."

Boyle, Elizabeth, (see **Aramouni, Fadi M.**, Extension Animal Sciences and Industry).

Lee, Charles D., US Department of Agriculture, \$1,500, "North Central Regional Aquaculture Center Extension Project."

Penner, Karen P., **Cress, Donald C.** (Entomology), **Gast, Karen L.** (Horticulture, Forestry and Recreation Resources), **Stokka, Gerald L.**, **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Janke, Rhonda R.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$100,000, "Food A*Syst for Food Producers and Home Food Preparers."

Penner, Karen P., and **Flores, Sandra A.** (Communications), US Department of Agriculture, \$12,117, "USDA Recipe Analysis."

Penner, Karen P., and **Flores, Sandra A.** (Communications), US Department of Agriculture, \$67,656, "HACCP Training Materials for Schools."

Stokka, Gerald L., (see **Penner, Karen P.**, Extension Animal Sciences and Industry).

AREA OFFICES

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

Robbins, Benny S., and **Kilgore, Gary L.**, Multisponsor, \$950, "Double-Crop Soybean Performance Tests - Extension Area Offices."

BIOLOGICAL AND AGRICULTURAL ENGINEERING

Barnes, Philip L., (see **Devlin, Daniel L.**, Extension Agronomy).

Clark, Gary A., (see **Rogers, Danny H.**, Extension Biological and Agricultural Engineering).

Mankin, Kyle R., (see **Barden, Charles J.**, Extension Horticulture, Forestry and Recreation Resources).

Murphy, James P., (see **Buchholz, Daryl D.**, Production Management and Natural Resource Development).

Powell, G. Morgan, **Buchholz, Daryl D.** (Community Development), and **Devlin, Daniel L.** (Agronomy), US Environmental Protection Agency, \$11,185, "Kansas Environmental Leadership Program (KELP)."

Rogers, Danny H., **Clark, Gary A.**, **Martin, Victor L.** (Agronomy), and **Fjell, Dale L.** (Agronomy), Kansas Department of Agriculture, \$28,000, "South Central Kansas Irrigation Management Project."

Rogers, Danny H., (see **Alam, Mahbub U.**, Southwest Area Office).

Rogers, Danny H., (see **Penner, Karen P.**, Extension Animal Sciences and Industry).

Taylor, Randal K., **Kilgore, Gary L.** (Southeast Area Office), **Staggenborg, Scott A.** (Northeast Area Office), and **Kastens, Terry** (Agricultural Economics), Kansas Department of Agriculture, \$18,500, "Using Georeferenced Data to Optimize Soybean Production."

Taylor, Randal K., (see **Staggenborg, Scott A.**, Northeast Area Office).

COMMUNICATIONS

Boone, Kristina M., and **McClaskey, Jackie M.** (Office of Academic Programs), US Department of Agriculture, \$20,000, "Impact Evaluation Plan: Future Directions."

COMMUNITY DEVELOPMENT

Buchholz, Daryl D., (see **Powell, G. Morgan**, Extension Biological and Agricultural Engineering).

COMMUNITY HEALTH

Dzewaltowski, David A., Kansas Health Foundation, \$10,000, "Kansas Health Foundation Distinguished Professorship in Community Health."

Dzewaltowski, David A., Kansas Health Foundation, \$212,165, "Agreement between the Kansas Health Foundation and Cooperative Extension Service, Kansas State University."

Dzewaltowski, David A., Kansas Department of Health and Environment, \$100,000, "Agreement between the Kansas Department of Health and Environment and Kansas State University, Cooperative Extension Service."

Dzewaltowski, David A., United Methodist Health Ministry Fund, \$25,000, "Agreement between the United Methodist Health Ministry Fund and Kansas State University, Cooperative Extension Service."

Dzewaltowski, David A., and **Estabrooks, Paul A.** (Kinesiology), US Department of Health and Human Services, \$100,000, "Connect Kansas."

Johannes, Elaine M., US Department of Justice, \$10,000, "Promoting Alternative Thinking Strategies."

Johannes, Elaine M., US Department of Agriculture, \$325,000, "Opportunities for Prevention Education and Networking in Kansas."

Ponte, Christine M., Kansas Department of Health and Environment, \$16,362, "Cooperative Agreement Between Kansas Department of Health and Environment and Cooperative Extension Service, Kansas State University."

Terry, Roger V., (see **Wootton, Richard D.**, Extension Community Health).

Wootton, Richard D., and **Terry, Roger V.**, US Department of Agriculture, \$20,600, "National Network for Health."

Zoller, Eric B., American Lung Association of Kansas, \$3,000, "American Lung Association Contractual Agreement between Kansas Smokeless Kids Initiative, Inc., and Kansas State University."

DIRECTOR OF COOPERATIVE EXTENSION

Lindquist, Jack W., Kansas Agriculture and Rural Leadership, \$117,936, "Kansas Agriculture and Rural Leadership, Inc."

Wootton, Richard D., (see **Buchholz, Daryl D.**, Production Management and Natural Resource Development).

ENTOMOLOGY

Cress, Donald C., US Department of Agriculture, \$39,374, "Pesticide Applicator Training Program."

Cress, Donald C., (see **Penner, Karen P.**, Extension Animal Sciences and Industry).

EXTENSION ENERGY

Meyer, Gene M., US Department of Energy, \$108,964, "Continued Efforts to Achieve Compliance with the Model Energy Code (1993) for Residential Building and ASHRAE/IES Standard 90.1-1989 for Commercial Buildings as Adopted in the State of Kansas."

Meyer, Gene M., National Institute of Standards and Technology, \$17,093, "NIST/DOE-FEMP Project-Oriented LCC Workshop in Rockville, Maryland, and Basic LCC Class in Denver, Colorado."

Meyer, Gene M., US Department of Energy, \$55,000, "Kansas Energy Extension Service."

Snead, Bruce C., US Environmental Protection Agency, \$16,000, "Indoor Air Quality Tools for Schools Demonstrations and Workshop for U. S. EPA Region 7."

Waters, Jean S., Kansas Department of Health and Environment, \$305,000, "Pollution Prevention Project."

Waters, Jean S., US Environmental Protection Agency, \$99,984, "KSU Pollution Prevention Institute Proposal to Strengthen Section 507 Program."

EXTENSION ENGINEERING

Hayter, Richard B., (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

HOME ECONOMICS

McFarland, Marcia R., US Department of Agriculture, \$580, "Army School-Age and Teen Project, Task 1."

HORTICULTURE, FORESTRY AND RECREATION RESOURCES

Barden, Charles J., **Devlin, Daniel L.** (Agronomy), and **Mankin, Kyle R.** (Biological and Agricultural Engineering), US Environmental Protection Agency, \$104,402, "Water Quality Improvement of Vegetated Riparian Areas and Buffers."

Barden, Charles J., and **Geyer, Wayne A.**, Kansas Department of Health and Environment, \$5,000, "Benefits and Design of Kansas Riparian Forest Buffers."

Gast, Karen L., (see **Penner, Karen P.**, Extension Animal Sciences and Industry).

Geyer, Wayne A., (see **Barden, Charles J.**, Extension Horticulture, Forestry and Recreation Resources).

KANSAS FOREST SERVICE

Aslin, Raymond G., US Department of Agriculture, \$5,000, "Resource Conservation and Development."

Aslin, Raymond G., US Department of Agriculture, \$10,000, "Survey and Technical Assistant - Forest Pest Management."

Aslin, Raymond G., US Department of Agriculture, \$5,000, "Economic Program - Cooperative Forestry Assistance."

Aslin, Raymond G., US Department of Agriculture, \$8,000, "Consolidated Grants Program - Cooperative Forestry Assistance."

Aslin, Raymond G., US Department of Agriculture, \$1,000, "Forestry Incentives Program."

Aslin, Raymond G., US Department of Agriculture, \$8,000 (includes \$4,000 from the City of Haysville, Kansas), "Community Forestry Tornado Recovery Haysville, Kansas."

NORTHEAST AREA OFFICE

Dhuyvetter, Kevin C., (see **Staggenborg, Scott A.**, Northeast Area Office).

Staggenborg, Scott A., **Gordon, Walter B.** (Agronomy), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Fjell, Dale L.** (Agronomy), and **Peterson, Dallas E.** (Agronomy), Kansas Department of Agriculture, \$8,000, "Evaluating Roundup-Ready Soybean Yields Under Different Management Strategies."

Staggenborg, Scott A., **Taylor, Randal K.** (Biological and Agricultural Engineering), **Dhuyvetter, Kevin C.**, and **Fjell, Dale L.** (Agronomy), Kansas Department of Agriculture, \$15,000, "Assessing the Role of Infrared Images and Yield Maps in Corn Production."

Staggenborg, Scott A., (see **Devlin, Daniel L.**, Extension Agronomy).

Staggenborg, Scott A., (see **Gordon, Walter B.**, Agronomy).

Staggenborg, Scott A., (see **Maddux, Larry D.**, Agronomy).

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

Staggenborg, Scott A., (see **Taylor, Randal K.**, Extension Biological and Agricultural Engineering).

NORTHWEST AREA OFFICE

O'Brien, Daniel M., (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

Stockton, Roger D., (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

PLANT PATHOLOGY

Bowden, Robert L., (see **Shroyer, James P.**, Extension Agronomy).

PRODUCTION MANAGEMENT AND NATURAL RESOURCE DEVELOPMENT

Buchholz, Daryl D., Kansas Farm Service Agency, \$2,762, "Memorandum of Understanding between Kansas Agricultural Mediation Service (KAMS) and Kansas Farm Service Agency (FSA)."

Buchholz, Daryl D., US Department of Agriculture, \$163, "Memorandum of Understanding between Kansas Agricultural Mediation Services (KAMS) and Kansas Natural Resources Conservation Service (NRCS)."

Buchholz, Daryl D., US Department of Agriculture, \$150,000, "North Central Region Sustainable Agriculture Professional Development Program Coordinator."

Buchholz, Daryl D., and **Hargrove, William L.** (Kansas Water Resource Research Institute), US Department of Agriculture, \$82,994, "Environmental Farm Analysis and Planning: A Whole Farm Planning Training Exercise Designed for Extension and NRCS Personnel."

Buchholz, Daryl D., and **Janke, Rhonda R.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$13,500, "Sustainable Agriculture Research and Education."

Buchholz, Daryl D., and **Johnson, Marc A.** (Dean of Agriculture and Director of AES), US Department of Agriculture, \$398,044, "Kansas Agricultural Mediation Service."

Buchholz, Daryl D., **Wootton, Richard D.** (Director of Cooperative Extension), and **Murphy, James P.** (Biological and Agricultural Engineering), US Department of Agriculture, \$31,940, "Farm Safety Program Formula Funds."

SOUTH CENTRAL AREA OFFICE

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

Duncan, Stewart R., (see **Shroyer, James P.**, Extension Agronomy).

SOUTHEAST AREA OFFICE

Kilgore, Gary L., and **Fausett, Marvin R.**, Kansas Department of Agriculture, \$3,382, "Short Season Corn Educational Program in Southeast Kansas."

Kilgore, Gary L., and **Fausett, Marvin R.**, Kansas Department of Agriculture, \$11,180, "Soybean Extension Educational Program in Southeast Kansas."

Kilgore, Gary L., (see **Fick, Walter H.**, Agronomy).

Kilgore, Gary L., (see **Gordon, Walter B.**, Agronomy).

Kilgore, Gary L., (see **Hargrove, William L.**, Kansas Center for Agriculture Resource and Environment).

Fausett, Marvin R., (see **Kilgore, Gary L.**, Southeast Area Office).

Kilgore, Gary L., (see **Taylor, Randal K.**, Extension Biological and Agricultural Engineering).

SOUTHWEST AREA OFFICE

Alam, Mahbub U., **Trooiien, Todd P.** (Southwest Research Extension Center), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Dumler, Troy**, Kansas Department of Agriculture, \$23,646, "Irrigation Scheduling Demonstration of Efficient Water Use by Corn in Western Kansas."

Dumler, Troy, (see **Alam, Mahbub U.**, Southwest Area Office).

Sloderbeck, Phillip E., (see **Buschman, Larry L.**, Entomology).

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

Sloderbeck, Phillip E., (see **Kofoid, Kenneth D.**, Agricultural Research Center-Hays).

Thompson, Curtis R., Multisponsor, \$20,400, "Chemical Evaluation."

Thompson, Curtis R., (see **Schlegel, Alan J.**, Agronomy).

Thompson, Curtis R., (see **Schlegel, Alan J.**, Southwest Research Extension Center).

Thompson, Curtis R., (see **Shroyer, James P.**, Extension Agronomy).

OFFICE OF THE PRESIDENT

AUDITORIUM PERFORMANCES

Martin, Richard P., National Foundation on the Arts and the Humanities, \$43,686 (includes \$1,500 from the Bell Family Endowment, \$1,000 from the Durkee Memorial Fund, \$5,500 from various corporate sponsors, \$500 from Foundation Support, and \$24,062 from the Friends of McCain), "Operational Support FY2000."

BEACH ART MUSEUM

Render, Lorne E., Kansas Arts Commission, \$48,453 (includes \$500 from the Kansas Quilters Organization, \$500 from Kansas Farm Bureau, \$11,750 from the Graham Foundation, \$9,225 from the Florsheim Foundation, \$750 from the AIA College of Fellows, and \$15,000 from Arnold Garfinkle), "Operational Support FY2000."

Render, Lorne E., Institute of Museum and Library Services, \$1,775, "Museum Assessment Program I."

Render, Lorne E., National Foundation on the Arts and the Humanities, \$680, "Kansas Quilts, Past and Present: Community Exhibition and Programming."

Render, Lorne E., and **Schlageck, Kathrine W.**, Manhattan Convention and Visitors Bureau, \$825, "Beach Museum of Art Rack Card Project."

Schlageck, Kathrine W., (see **Render, Lorne E.**, Beach Art Museum).

OFFICE OF THE PROVOST

INTERNATIONAL PROGRAMS

Richter, William L., Peace Corps, \$15,400, "Peace Corps Recruitment."

KANSAS CENTER FOR RURAL INITIATIVES

Peak, Carol A., Corporation for National Service, \$134,875 (includes \$22,875 from the Western Kansas Community Service Consortium), "New Linkages for Service Learning Through the Kansas State University Community Service Program."

Peak, Carol A., US Department of Commerce, \$50,000, "University Center Program - Kansas Center for Community Economic Development."

Peak, Carol A., US Department of Agriculture, \$5,000, "Evaluation Services for the Rural Center Common Grounds Project."

Peak, Carol A., Kauffman Foundation, \$50,000, "Strengthening the Connections for Rural Entrepreneurship."

Peak, Carol A., Corporation for National Service, \$4,463 (includes \$963 from various community sources), "A Day On! Not a Day Off — Getting Things Done in Manhattan, Kansas."

Peak, Carol A., Corporation for Enterprise Development, \$5,000, "Kansas Microenterprise Opportunity Network."

Peak, Carol A., US Department of Agriculture, \$11,300, "Heartland Network."

Peak, Carol A., **Scott, Susan M.** (Office of Leadership Studies and Programs), and **McGowan, Juanita M.** (Dean of Arts and Sciences), W. K. Kellogg Foundation, \$70,000, "Strengthening Civic Learning at K-State."

LIBRARY

LaSee-Willemsen, Jeneen, and **Royse, M. Molly**, Kansas State Library, \$5,000, "Diversity Classroom Materials."

Liestman, Daniel, Kansas State Library, \$2,505, "Anthropology."

Royse, M. Molly, (see **LaSee-Willemsen, Jeneen**, Library).

Turtle, Elizabeth, Kansas State Library, \$3,690, "Medical Plants."

Watts, Tim J., Kansas State Library, \$870, "Films on National Film Registry."

OFFICE OF THE PROVOST

Dyer, Ruth A., (see Montelone, Beth A., Biology).

PLANNING AND ANALYSIS

Downey, Ronald G., US Department of Defense, \$3,412, "Needs Assessment Survey."

VICE PRESIDENT FOR ADMINISTRATION AND FINANCE

FACILITIES SERVICES

Rice, Edward D., US Department of Transportation, \$464,000, "TEA-21 Pedestrian and Bicycle Facilities on North Manhattan and Kimball Avenues."

Woods, John L., National Association for PET Container Resources, \$11,000 (includes \$5,000 from the Pepsi-Cola Bottling Company of Marysville, Inc.), "K-State Recycles PET Reclamation Project."

VICE PRESIDENT FOR INSTITUTIONAL ADVANCEMENT

EDUCATIONAL AND PERSONAL DEVELOPMENT

Arck, William, City of Manhattan, KS, \$17,500, "Youth Oriented Alcohol Abuse Prevention Program."

Blair, Andrea E., (see **Holden, Gretchen**, Educational and Personal Development).

Greene, Kathleen V., US Department of Education, \$200,644, "Student Support Services."

Greene, Kathleen V., US Department of Education, \$208,599, "McNair Post-Baccalaureate Achievement Program."

Holden, Gretchen, and **Blair, Andrea E.**, National Foundation for Improvement of Education, \$1,000, "Leadership Grant."

McGowan, Reginland, US Department of Agriculture, \$22,030, "Kansas State University Upward Bound Program Summer Food Service Program."

McGowan, Reginland, US Department of Agriculture, \$15,623, "Kansas State University Upward Bound Math and Science Program Summer Food Service Program."

McGowan, Reginland, US Department of Education, \$372,271, "Upward Bound Program."

McGowan, Reginland, US Department of Education, \$230,451, "Kansas State University Upward Bound Math and Science Program." (2 awards)

McGowan, Reginland, US Department of Education, \$196,846, "Kansas State University/Gear Up."

OFFICE OF DIVERSITY AND DUAL CAREER DEVELOPMENT

Harris, Jewel L., US Department of Education, \$6,500, "Health Careers Pathways Program - Satellite Center."

OFFICE OF STUDENT LIFE

Davis, Donna J., National Association of Foreign Student Advisors, \$2,500, "Korean Student Assistance - Jae Sung Kang."

Davis, Donna J., National Association of Foreign Student Advisors, \$2,500, "Korean Student Assistance - Huen-Sup Shim."

Davis, Donna J., National Association of Foreign Student Advisors, \$2,500, "Korean Student Assistance - Kyeong Sook Cho."

OFFICE OF LEADERSHIP STUDIES AND PROGRAMS

Scott, Susan M., (see **Peak, Carol A.**, Kansas Center for Rural Initiatives).

VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY

COMPUTING AND NETWORK SERVICES

Townsend, Harvard C., (see **Unger, Elizabeth A.**, Vice Provost for Academic Services and Technology).

DEAN OF CONTINUING EDUCATION

Spire, Lynda D., Kansas Department of Commerce and Housing, \$1,997,231 (includes \$978,993 from Sykes Enterprises, Inc.), "Investments in Major Projects and Comprehensive Training (IMPACT) Program."

INFORMATION TECHNOLOGY ASSISTANCE CENTER

Harold, Jeanette M., (see **Unger, Elizabeth A.**, Vice Provost for Academic Services and Technology).

REGENTS TELENET

Allard, John W., Southwestern Bell Corporation Foundation, \$12,500, "HEAT- Health Education and Assessment Training - A Kansas Community Enrichment Program."

Allard, John W., US Department of Agriculture, \$500,000 (includes \$150,000 from the Kansas State University Foundation), "Reach Across Kansas."

REGENTS EDUCATIONAL COMMUNICATIONS CENTER

Chastain, Melvin L., US Department of Education, \$79,802, "Plains Academy Co-Op."

OFFICE OF THE VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY

Unger, Elizabeth A., **Harold, Jeanette M.** (Information Technology Assistance Center), and **Townsend, Harvard C.** (Computing and Network Services), National Science Foundation, \$175,000, "High-Performance Network Connection in Support of Meritorious Research at Kansas State University."

Unger, Elizabeth A., Kansas State University Foundation, \$100,000, "Information Technology Equipment."

VICE PROVOST FOR RESEARCH AND DEAN OF THE GRADUATE SCHOOL

BIOTECHNOLOGY CORE LABORATORY

Tomich, John M., Multisponsor, \$51,308, "Biotechnology Laboratory Support."

DEAN OF GRADUATE SCHOOL

Guikema, James A., (see **Murray, John P.**, Office of the Vice Provost for Research).

Trewyn, R. W., Kansas Board of Regents, \$24,000, "Kansas Minority Graduate Fellowship Awards."

OFFICE OF THE VICE PROVOST FOR RESEARCH

Guikema, James A., and **Trewyn, R. W.**, (Office of the Vice Provost for Research), Kansas Technology Enterprise Corporation, \$41,515, "Integrating Research and Technology Transfer in Agricultural Biotechnology."

Murray, John P., and **Guikema, James A.** (Dean of the Graduate School), Kansas Technology Enterprise Corporation, \$8,150, "Science Writing Internship Program Enhancement (SWIPE): Expanding the Research Infrastructure at Kansas State University."

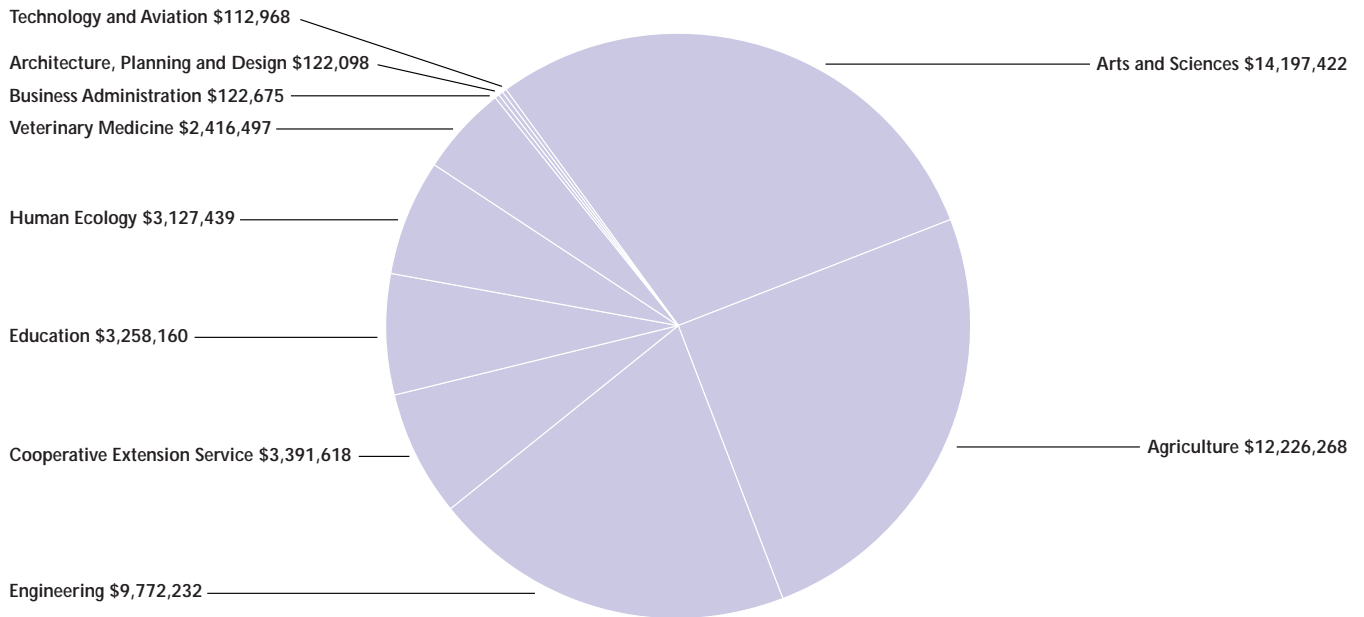
Trewyn, R. W., Kansas State University Research Foundation, \$114,130, "KSU Research Foundation Staff Compensation."

Trewyn, R. W., (see **Guikema, James A.**, Office of the Vice Provost for Research).

SECTION 2: EXPENDITURES

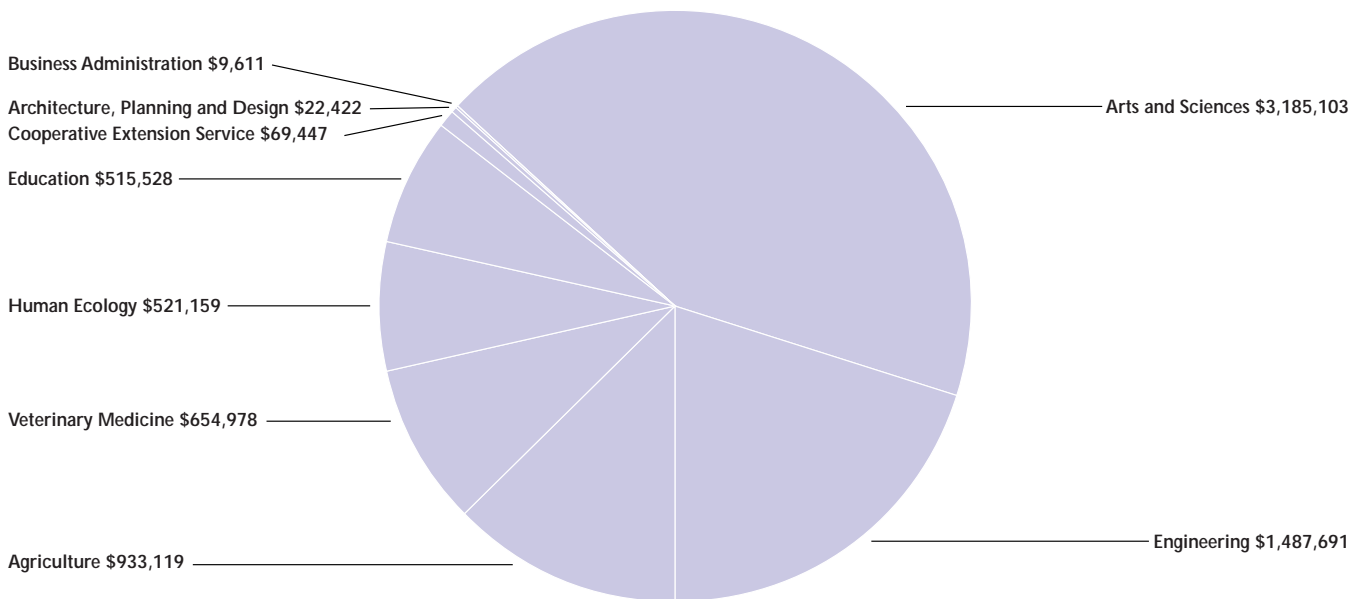
DIRECT COST EXPENDITURES BY COLLEGE AND EXTENSION*

Fiscal Year 2000



FACILITIES AND ADMINISTRATIVE COST RECOVERY BY COLLEGE AND EXTENSION*

Fiscal Year 2000



*Note: Data provided by the KSU Controller's Office, Sponsored Projects Accounting

EXPENDITURES FOR SPONSORED EXTRAMURAL FUNDING BY COLLEGE AND EXTENSION DEPARTMENT*

Fiscal Year 2000

COLLEGE OF AGRICULTURE	DIRECT COSTS	FACILITIES AND ADMINISTRATIVE COSTS	TOTAL
Dean of Agriculture and Director of AES	\$74,377.85	\$0.00	\$74,377.85
Agricultural Economics	\$733,600.58	\$96,495.05	\$830,095.63
Agronomy	\$2,999,446.37	\$215,619.30	\$3,215,065.67
Animal Sciences and Industry	\$1,734,551.21	\$42,450.02	\$1,777,001.23
Communications	\$72,080.31	\$0.00	\$72,080.31
Entomology	\$1,351,883.40	\$85,461.72	\$1,437,345.12
National Wheat Research Center	\$3,533.42	\$0.00	\$3,533.42
Grain Science and Technology	\$1,577,259.38	\$85,411.81	\$1,662,671.19
Horticulture, Forestry and Recreation Resources	\$244,500.48	\$26,456.92	\$270,957.40
International Agricultural Programs	\$47,105.42	\$0.00	\$47,105.42
Plant Pathology	\$2,122,199.93	\$251,391.46	\$2,373,591.39
Food and Feed Grains Institute	\$352,218.74	\$122,023.83	\$474,242.57
Kansas Center for Ag. Resource & Env/Ks	\$302,091.25	\$5,473.54	\$307,564.79
Agricultural Experiment Station	\$108,271.82	\$0.00	\$108,271.82
Northwest Research Extension Center	\$65,114.00	\$0.00	\$65,114.00
Agricultural Research Center-Hays	\$278,109.14	\$2,335.36	\$280,444.50
Southwest Research Extension Center	\$98,697.60	\$0.00	\$98,697.60
Southeast Agricultural Research Center	\$61,227.28	\$0.00	\$61,227.28
Total—College of Agriculture	\$12,226,268.18	\$933,119.01	\$13,159,387.19
COLLEGE OF ARCHITECTURE AND DESIGN			
Dean of Architecture, Planning and Design	\$45,721.42	\$21,050.89	\$66,772.31
Architecture	\$14,435.78	\$473.43	\$14,909.21
Interior Architecture	\$5,200.88	\$768.63	\$5,969.51
Landscape Architecture/Regional & Community Plan.	\$56,739.95	\$129.96	\$56,869.91
Total—College of Architecture & Design	\$122,098.03	\$22,422.91	\$144,520.94
COLLEGE OF ARTS AND SCIENCES			
Dean of Arts and Sciences	\$131,102.16	\$10,285.20	\$141,387.36
Biochemistry	\$1,112,798.65	\$293,183.00	\$1,405,981.65
Biology	\$5,093,843.70	\$1,030,154.84	\$6,123,998.54
Chemistry	\$1,804,054.87	\$330,036.61	\$2,134,091.48
Economics	\$26,978.32	\$23.30	\$27,001.62
Geography	\$309,680.37	\$7,267.13	\$316,947.50
Geology	\$67,216.83	\$9,123.37	\$76,340.20
History	\$45,103.44	\$0.00	\$45,103.44
James R. MacDonald Laboratory	\$1,729,089.18	\$631,672.03	\$2,360,761.21
School of Journalism and Mass Communication	\$118,182.34	\$0.00	\$118,182.34
Mathematics	\$104,985.03	\$47,738.48	\$152,723.51
Kinesiology	\$432,953.45	\$101,208.60	\$534,162.05
Physics	\$1,819,535.53	\$435,121.73	\$2,254,657.26
High Energy Physics	\$915,112.83	\$170,075.57	\$1,085,188.40
Psychology	\$330,471.03	\$104,836.29	\$435,307.32
Sociology, Anthropology, & Social Work	\$123,071.15	\$10,646.53	\$133,717.68
Statistics	\$33,243.93	\$3,731.26	\$36,975.19
Total—College of Arts and Sciences	\$14,197,422.81	\$3,185,103.94	\$17,382,526.75

*Note: Data provided by the KSU Controller's Office, Sponsored Projects Accounting

COLLEGE OF BUSINESS ADMINISTRATION	DIRECT COSTS	FACILITIES AND ADMINISTRATIVE COSTS	TOTAL
Accounting	\$620.82	\$0.00	\$620.82
Management	\$6,744.07	\$3,622.71	\$10,366.78
Small Business Development Center	\$115,310.74	\$5,988.44	\$121,299.18
Total—College of Business Administration	\$122,675.63	\$9,611.15	\$132,286.78

COOPERATIVE EXTENSION SERVICES

Director of Cooperative Extension	\$59,113.29	\$0.00	\$59,113.29
Extension Engineering	\$216,355.15	\$21,088.35	\$237,443.50
Extension Family & Consumer Sciences	\$583,390.11	(\$573.66)	\$582,816.45
Extension Communications	\$7,624.73	\$0.00	\$7,624.73
Kansas Forest Service	\$982,993.98	\$983.48	\$983,977.46
Production Management & Natural Resource Dev.	\$404,484.44	\$0.00	\$404,484.44
Extension Energy	\$466,072.19	\$38,112.95	\$504,185.14
Northeast Area Office	\$88,540.95	(\$0.49)	\$88,540.46
South Central Area Office	\$7,781.18	\$0.00	\$7,781.18
Southeast Area Office	\$21,290.77	\$3,685.90	\$24,976.67
Southwest Area Office	\$49,010.71	\$905.70	\$49,916.41
Extension Office of Community Health	\$504,961.04	\$5,244.86	\$510,205.90
Total—Cooperative Extension Services	\$3,391,618.54	\$69,447.09	\$3,461,065.63

COLLEGE OF EDUCATION

Dean of Educational Instructional Support	\$1,853,999.63	\$307,537.18	\$2,161,536.81
Foundations & Adult Education	\$364,688.66	\$26,760.24	\$391,448.90
Special Education	\$635,237.36	\$162,313.66	\$797,551.02
Elementary Education	\$329,839.86	\$18,218.17	\$348,058.03
Secondary Education	\$74,394.98	\$699.34	\$75,094.32
Total—College of Education	\$3,258,160.49	\$515,528.59	\$3,773,689.08

COLLEGE OF ENGINEERING

Dean of Engineering	\$41,580.23	\$0.00	\$41,580.23
Biological & Agricultural Engineering	\$648,386.36	\$59,552.84	\$707,939.20
Architectural Engineering and Construction Science	\$4,982.98	\$0.00	\$4,982.98
Chemical Engineering	\$587,294.78	\$109,002.80	\$696,297.58
Civil Engineering	\$1,007,256.58	\$202,382.89	\$1,209,639.47
Computing & Information Sciences	\$578,373.35	\$125,497.89	\$703,871.24
Electrical & Computer Engineering	\$443,919.94	\$85,303.55	\$529,223.49
Institute for Environmental Research	\$469,926.97	\$90,443.01	\$560,369.98
Industrial & Manufacturing Systems Engineering	\$39,335.05	\$31,584.60	\$70,919.65
Mechanical Engineering	\$1,426,868.96	\$293,460.56	\$1,720,329.52
Nuclear Engineering	\$0.00	\$0.00	\$0.00
Advanced Manufacturing Institute	\$2,063,666.38	\$111,434.61	\$2,175,100.99
Kansas Industrial Extension Services	\$242,331.62	\$25,582.75	\$267,914.37
Center for Hazardous Substance Research	\$1,290,913.75	\$284,289.03	\$1,575,202.78
National Institute for Land Management & Training	\$119,567.86	\$2,126.28	\$121,694.14
National Gas Machinery Laboratory	\$807,827.24	\$67,030.83	\$874,858.07
Total—College of Engineering	\$9,772,232.05	\$1,487,691.64	\$11,259,923.69

COLLEGE OF HUMAN ECOLOGY

Dean of Human Ecology	\$897,452.52	\$205,328.35	\$1,102,780.87
Clothing, Textiles, & Interior Design	\$66,440.82	\$20,306.09	\$86,746.91
Hotel, Restaurant, Institution Management & Dietetics	\$42,985.41	\$1,261.57	\$44,246.98
Foods & Nutrition	\$753,636.72	\$194,087.66	\$947,724.38
School of Family Studies & Human Services	\$1,366,924.04	\$100,175.54	\$1,467,099.58
Total—College of Human Ecology	\$3,127,439.51	\$521,159.21	\$3,648,598.72

SALINA COLLEGE OF TECHNOLOGY	DIRECT COSTS	FACILITIES AND ADMINISTRATIVE COSTS	TOTAL
Salina Arts, Science & Business	\$67,252.10	\$0.00	\$67,254.46
Salina Engineering Technology	\$50.00	\$0.00	\$50.00
Salina Continuing Education	\$45,666.50	\$0.00	\$45,666.50
Total—Salina College of Technology	\$112,968.60	\$0.00	\$112,970.96

VETERINARY MEDICAL CENTER

Dean of Veterinary Medical Center	\$4,665.04	\$0.00	\$4,665.04
Anatomy and Physiology	\$1,189,227.84	\$369,648.86	\$1,558,876.70
Food Animal Health & Management Center	\$198,355.79	\$10,074.79	\$208,430.58
Diagnostic Medicine/Pathobiology	\$828,002.49	\$205,386.10	\$1,033,388.59
Clinical Sciences	\$196,246.58	\$69,868.28	\$266,114.86
Total—Veterinary Medical Center	\$2,416,497.74	\$654,978.03	\$3,071,475.77

UNIVERSITY SMALL RESEARCH GRANTS

University Small Research Grants are awarded by the Office of the Research and Sponsored Programs to support the research, scholarly activity, and other creative efforts of tenure-track faculty.

Fall 1999 Awards

Adityavarman, R. (see *Grable, J.*)

Andrus, L.E., Art, \$2,000, "Art Exhibition, Prairie Dreams."

Baures, P.W., Chemistry, \$1,500, "Molecularly- Imprinted Polymers As Tools In Conformational Analysis."

Brokel, B., Psychology, \$2,000, "The Role of Serotonin in Lead-Induced Impulsivity."

Crowe, L.K., Family Studies and Human Services, \$2,600, "Comparison of Two Treatment Approaches In Improving Children's Oral and Written Language Performance."

Ebright, W.K.W., Speech, Communication, Theatre, and Dance, \$500, "Extension Research in the Field of Dance History, Specifically that of Black Classical Dancers."

Emizet, K.N., Political Science, \$1,500, "Civil- Military Relations and Regional Study."

Estabrooks, P., Kinesiology, \$2,309, "Refinement and Validation of the Physical Activity Environment Questionnaire for Older Adults."

Gao, S.S., Geology, \$2,000, "Purchase of a Magnetometer to Study Riley Kimberlites."

Goins, W.E., Music, \$820, "Continuous Response Digital Interface Workstation."

Grable, J., Family Studies and Human Services and Adityavarman, R., Apparel, Textiles, and Interior Design, \$1,020, "Cross Disciplinary Risk Taking: Assessment and Evaluation."

Hedrick, D.K., English, \$1,000, "Completion of Shakespeare Book: Research Travel and Editing."

Hunt, D.W., Art, \$2,800, "Funding Request for Large Scale Sculpture."

Kaup, M.L., Apparel, Textiles, and Interior Design, \$2,000, "Assessment of Design Impact on (Nursing Home) Resident Social Patterns."

Knox, M., Architecture, \$1,339, "Space, View, and Topography in the English Architecture and Landscape."

Lawhon, L.L., Landscape Architecture, \$600, "Has New Urbanism Invalidated the Neighborhood Unit Concept as a Current Community Design Model?"

Machor, J.L., English, \$900, "Reception Study: Literary Theory to Cultural Studies."

Mason, D.E., Clinical Sciences, \$1,056, "Does the Kv1.5 Potassium Channel Co-Associate with MiRP1 Peptide?"

McElroy, M., Kinesiology, \$800, "Changing Women's Work and Sedentary Lifestyles."

McNamara, M., Architecture, \$1,710, "Mazzoni Traveling Exhibit Model Completion."

Nellis, R., Art, \$1,695, "Illustrative Content and the Web Environment."

Pagell, M.D., Management, \$1,075, "The Effect of Context on Team Performance."

Pickering, J., Political Science, \$1,000, "Research at the Public Records Office in London Updating Book."

Radlinsky, M.G., Clinical Sciences, \$2,990, "Thoracoscopic Visualization and Ligation of the Thoracic Duct in Dogs."

Smith, J.S., Geography, \$1,000, "An Assessment of 'Cultural Geography' at the Turn of the Century."

Swanson, D., Management, \$210, "A Case Study of the Social and Ethical Dimensions of Internet Affiliate Marketing."

Tollefson, S.D., Political Science, \$1,800, "Civil- Military Relations in Argentina, Brazil, and Chile."

Xuhong, Shang, Art, \$2,000, "Oil Paintings (Mountain Series)."

Spring 2000 Awards

Arens, R.M., Architecture, \$1,250, "Travel and Digital Imaging Support for Dymaxion House Reconstruction Program."

Benson, J.E., Sociology, Anthropology, and Social Work, \$992, "Migrants, Low-Wage Labor, and Public Policy."

Buszek, K.R., Chemistry, \$2,000, "Large-Scale Synthesis of Octalactin A."

Dehon, C.L., Modern Languages, \$500, "Guest Speaker for Mid-America Alliance for African Studies."

Estabrooks, P., Kinesiology, \$2,000, "Current Physical Activity Programs for Senior Kansans: A Needs Assessment Project."

Finnegan, M., Sociology, Anthropology, and Social Work, \$2,142, "Travel to Research Collections in Central Europe."

Gao, S.S., Geology, \$1,900, "An Expansion of an NSF-Funded Project."

Gyurcsik, N., Kinesiology, \$1,590, "A Test of the Predictive Validity of the Exercise Thoughts Coping Measure."

Harris, R.J., Psychology, \$521, "Software for Language Reaction-Time Research."

Mitchell, K.E., Anatomy and Physiology, \$2,000, "Skeletal Muscle Na⁺-K⁺-ATPase Expression in Rats with Chronic Heart Failure."

Parker, C.B., Music, \$1,500, "Research at the Franz Waxman Archive, Syracuse University."

Renberg, W.C., Clinical Sciences, \$2,100, "Biomechanical Evaluation of Multiple Spinal Decompressive Surgeries."

Smith, J.S., Geography, \$1,350, "GIS Mapping of Two Acequias in South-Central Colorado: A Pilot Study."

Stone, D.R., History, \$590, "U.S. Financial Diplomacy During the Cold War."

Van Ness, B., (see *Warr, R.*)

Van Ness, R., (see *Warr, R.*)

Warr, R., Van Ness, B., and Van Ness R., Finance, \$1,000, "How Well Do Adverse Selection Components Measure Adverse Selection? (And four other papers)"

Worster, A.A., Clinical Sciences, \$1,000, "The Efficacy of Intralesional 5 Fluorouracil in Sarcoids of Horses."

Wright, D.J., Counseling and Educational Psychology, \$2,500, "Career Development of Women in Jazz: A Qualitative Investigation."

FACULTY DEVELOPMENT AWARDS

Faculty Development Awards are awarded by the Office of Research and Sponsored Programs and serve primarily as travel awards. They may 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, but may not be used for research travel.

Fall 1999 Awards

Alam, M., Biological and Agricultural Engineering, S.W. Office, \$1,500, "China Agriculture University, Beijing."

Bay, J.M., Elementary Education, \$1,000, "Eighth International Consortium for Research in Science and Mathematics Education, San Jose, Costa Rica."

Bloodgood, J.M., Management, \$500, "Strategic Management Society International Conference, Berlin, Germany."

Emizet, K.N., Political Science, \$1,500, "Economic Integration and Concerts of Africa."

Gao, S.S., Geology, \$1,500, "U.S.-China Cooperative Studies."

Goldston, M.J., Elementary Education, \$1,000, "Eighth International Consortium for Research in Science and Mathematics Education, San Jose, Costa Rica."

Harris, R.J., Psychology, \$1,000, "International Communication Association, Acapulco, New Mexico."

Hsu, C.H.C., Hotel, Restaurant, Institution Management, and Dietetics, \$1,500, "Seminars at Universities in Taiwan; Fourth Biannual Conference on Tourism in SE Asia and Indo-China; and Asia Pacific Tourism Association Sixth Annual Conference."

Hubbard, M., Geology, \$1,000, "Fifteenth Himalaya-Karakoram-Tibet Workshops and Field Trip, Chengdu, China."

Kirkham, M.B., Agronomy, \$1,000, "Second International Conference on Contaminants in the Soil Environment in the Asia-Pacific Region, New Delhi, India."

Krstic, V., Architecture, \$1,500, "Megacities 2000, Hong Kong, China."

Mathews A.P., Civil Engineering, \$1,000, "The Second Pacific Basin Conference on Adsorption Science and Technology, Brisbane, Australia."

Ornelas, W., Architecture, \$700, "Desarrollo Humano y Sostenibilidad, San Jose, Costa Rica."

Surowski, D.B., Mathematics, \$750, "Workshop on Groups and Combinatorics, Shanghai, Peoples Republic of China."

Swanson, D.L., Management, \$1,000, "International Association of Business and Society Conference, Essex Junction, Vermont."

Tollefson, S.D., Political Science, \$1,500, "Fifth International Congress of the Brazilian Studies Association, 'Brazil 500 Years,' Recife, Brazil."

Watts, C.M., Architecture, \$1,000, "Nexus 2000 Conference on Mathematics and Architecture, Ferrara, Italy."

Spring 2000 Awards

Aakeroy, C., Chemistry, \$1,000, "Royal Society of Chemistry Dalton Discussion 3 on 'Inorganic Crystal Engineering,' Bologna, Italy."

Andresen, D., Computing and Information Sciences, \$750, "International Workshop on Scalable Web Services, Toronto, Canada."

Arnds, P., Modern Languages, \$1,300, "Seventh Conference of the International Society for Study of European Ideas (ISSEI), Bergen, Norway."

Bidarkota, P.V., Economics, \$1,500, "Twentieth International Symposium on Forecasting, Lisbon, Portugal."

Cassou, S., Economics, \$941, "Paper Presentation at the 2000 Annual Meeting of the Society for Economic Dynamics, San Jose, Costa Rica."

Coates, G., Architecture, \$1,500, "Integrating Design and Care in Hospital Planning for the New Millennium: The Second International Conference on Health and Design, Stockholm, Sweden."

Deans, J.R., English, \$1,000, "Autobiographies and Changing Identities Conference, University of British Columbia, Vancouver, Canada."

Ebright, W.K.W., Speech, Communication, Theatre, and Dance, \$1,000, "National Ballet School's Summer Seminar on 'The Art and Science of Dance, Equilibrium in Turning: Transformation in Performance,' Toronto, Canada."

Edgar, J.H., Chemical Engineering, \$500, "International Specialist Meeting on Bulk Nitride Growth and Related Techniques, Iguasso Falls, Parana, Brazil."

Freeman, L.C., Anatomy and Physiology, \$1,500, "Eighth International Congress of the European Association for Veterinary Pharmacology and Therapeutics (EAVPT), Jerusalem, Israel."

Hancock, M.R., Elementary Education, \$1,500, "International Association's Eighteenth World Congress on Reading, Auckland, New Zealand."

Hauck, C., English, \$500, "Third Annual Conference of 'The Space Between,' University of Western Ontario, Canada."

Hippolyte, J-L., Modern Languages, \$1,300, "Seventh Conference of the International Society for the Study of European Ideas (ISSEI), University of Bergen, Norway."

Holcombe, A.C., Art, \$750, "Fushan International Ceramics Woodfiring Festival/International Ceramics Symposium 'The Spirit of Porcelain,' Fushan and Jingdezhen, China."

Hower, R., Art, \$700, "Invited Lecture Presentation, University of Applied Sciences, Trier, Germany."

Jumpponen, A., Biology, \$750, "Sixth International Symposium on Arctic and Alpine Mycology, Kangerlussuaq, Greenland."

Kelkar, A.G., Mechanical and Nuclear Engineering, \$750, "IASTED International Conference on Control and Applications, Cancun, Mexico."

Kolonosky, W.F., Modern Languages, \$1,000, "Three Centuries of Russian Humor and Satire, University of Nottingham."

Kremer, S.L., English, \$1,500, "International Scholars' Holocaust Conference, Oxford and London, England."

Krstic, V., Architecture, \$500, "The Ninth International Conference of the European Association for Japanese Studies, Lahti, Finland."

Lamm, F.R., NW Research Office, \$2,000, "Micro 2000 Conference (Sixth International Microirrigation Congress), Capetown, South Africa."

Meyer, D.J.C., Apparel, Textiles, and Interior Design, \$1,000, "Ars Textrina International Conference, Leeds, England."

Pierzynski, G.M., Agronomy, \$1,500, "SOILREM 2000 International Conference of Soil Remediation, Hangzhou, China."

Ramm, A.G., Mathematics, \$1,500, "International Conference on Chaos and Supercomputers, Yerevan, Armenia; Lectures at Moscow State University, Moscow, Russia."

Rolley, S., Landscape Architecture/Regional and Community Planning, \$2,000, "Habitus 2000 Conference, Curtin University of Technology, Perth, Australia."

Sadler, M.A., Economics, \$1,000, "Annual Meeting of the Society for Economic Dynamics, San Jose, Costa Rica."

Sauter, S., Modern Languages, \$1,500, "Nineteenth International Symposium on Literature, Lima, Peru."

Shah, J., Biology, \$922, "Sixth Congress of the International Society of Plant Molecular Biology, Quebec City, Canada."

Shang, X., Art, \$2,000, "Euro Art 2000, Barcelona, Spain."

Sheu, C., Management, \$1,296, "2000 APICS Annual Meeting, 'Collaboration and Creativity - The Twenty- First Century in Asia-Pacific,' Tokyo, Japan."

Smith, C.M., Entomology, \$1,500, "International Congress of Entomology, Iguassu Falls, Brazil."

Unruh, J.A., Animal Sciences and Industry, \$1,322, "Forty-Sixth International Congress of Meat Science and Technology, Buenos Aires, Argentina."

Wang, X., Biochemistry, \$1,200, "Fourteenth International Symposium on Plant Lipids, Cardiff, England."

Watts, D.J., Architecture, \$1,000, "Seventh Biennial Conference of the International Association for the Study of Traditional Environments (IASTE), Trani, Italy."

Xia, K., Agronomy, \$1,500, "Tenth International Humic Substances Society Annual Meeting on Organic Matter in Water, Soil, and Sediments, Toulouse, France."

U.S. PATENTS

Nine patents were issued from July 1, 1999 to June 30, 2000 to the KSU Research Foundation

(Listed in reverse chronological order)

John M. Tomich, Takeo Iwamoto, and Lawrence P. Sullivan "Synthetic Macromolecular Channel Assembly for Transport of Chloride Ions Through Epithelium Useful in Treating Cystic Fibrosis" (#6,077,826)

Peter M. A. Sherwood and John A. Rotole "Metals Having Phosphate Protective Films" (#6,066,403)

Kenneth J. Klabunde, Dajie Zhang, and Christopher Sorensen "Encapsulated Nanometer Magnetic Particles" (#6,045,925)

John J. Iandolo and Scott Crupper "Broad Spectrum Chemotherapeutic Peptide" (#6,043,219)

Patrick R. O'Quinn, Kevin Q. Owen, Jim L. Nelssen, Mike Tokach, and Robert D. Goodband "Modified Tall Oil Supplemented Diet for Growing-Finishing Pigs" (#6,020,377)

Kenneth J. Klabunde "Nanometer Sized Metal Oxide Particles for Ambient Temperature Adsorption of Toxic Chemicals" (#5,990,373)

Duy H. Hua and Jean-Pierre Perchellet "Tricyclic and Tetracyclic Pyrones" (#5,958,970)

John R. Brethour "Measurement of Intramuscular Fat in Cattle" (#5,960,105)

John M. Tomich and Takeo Iwamoto "Methods for Purifying Synthetic Peptides" (#5,922,840)

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.

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JAN E. LEACH Plant Pathology

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JAMES L. MARSDEN Regents Distinguished Professor of Animal Sciences

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DAVID LEITH Regents Distinguished Professor Emeritus of Pathology

DONALD SETSER Chemistry

DUDLEY WILLIAMS Regents Distinguished Professor Emeritus of Physics

RECIPIENTS OF THE DISTINGUISHED GRADUATE FACULTY AWARD

The Distinguished Graduate Faculty Award is made annually to those faculty who have distinguished themselves nationally and internationally for excellence in research and graduate education. Normally, up to two faculty 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

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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

