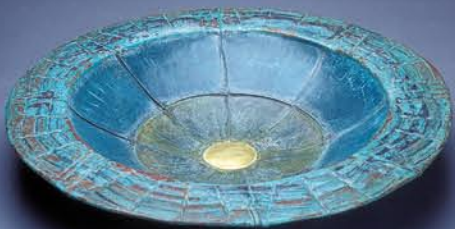


# RESEARCH 2005



A Report  
of Research  
and Sponsored  
Programs for  
Fiscal Year 2005

Kansas State University

**ARTWORK BY PROFESSOR ELLIOTT PUJOL**  
**Cover design by Bob Holcombe**

**FRONT COVER, left to right:**

*Big Bowl*, copper, 23k gold  
4" × 24", 2002

Photo: Edward Sturr

*Bryce*, from the *Canyon Wall Series*, copper vessel  
12" × 20", 1989

Photo: Photographics

*Coke Flag*, wall piece, copper, aluminum  
36" × 45", 1970

Photo: Richard Prillman

**Background:**

*Sterling Chalice*, sterling silver  
7.5" × 5", 1974

Photo: Barbara T. Pujol

**BACK COVER, left to right:**

*Untitled Vessel*, brass, 23k gold  
14" × 9", 1998

Photo: Photographics

*Thistle*, vessel, barbed wire  
10.5" × 13", 2000

Photo: Barbara T. Pujol

*Copper Truck*, exterior piece, copper, brass  
1960 Dodge, 15 ft. by 6 ft., a work in progress

Photo: Barbara T. Pujol

**Background:**

*Stepping Out*, copper vessel  
24" × 12", 1985

Photo: Barbara T. Pujol



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

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January 2006

Dear Colleagues and Friends,

We are delighted to announce that this last fiscal year, Kansas State University again exceeded the \$100 million mark in terms of funding awarded to the faculty for research. The \$110.9 million is a \$10 million increase, and as such, is one of the largest one year jumps in K-State extramural funding history.

K-State faculty members compete very effectively at the national level. Last year, the nation's top funding agencies gave 935 awards to K-State. Fourteen awards exceeded \$1 million. When appropriations and donations in support of research and scholarly activity are included, the university's total funding base approached \$200 million.

These figures represent terrific accomplishments by our faculty, but there are other measures of faculty success as well. Thus, we're taking a different approach with the cover for Research 2005 in order to highlight another example. The theme is "Metalsmithing: Art at the Crossroads of Science and Engineering."

A few months ago, K-State art professor Elliott Pujol was recognized by his peers for lifetime achievement: he was named the 2005 Master Metalsmith by the National Ornamental Metal Museum in Memphis. In his honor, a retrospective exhibit of his copper and silver artwork was on display at the museum for two months. The museum also flew the Kansas flag at its entrance as a tribute to the artist.

Because metalsmithing techniques link art with the science and engineering disciplines highlighted in Research 2005, examples of Pujol's work were chosen for the report cover. A feature article about his artistic and teaching career is included here as well.

Congratulations to Professor Pujol and to the entire K-State faculty for all the ways in which you've made 2005 another outstanding year.

A handwritten signature in black ink that reads 'Ron Trewyn' in a cursive, flowing script.

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

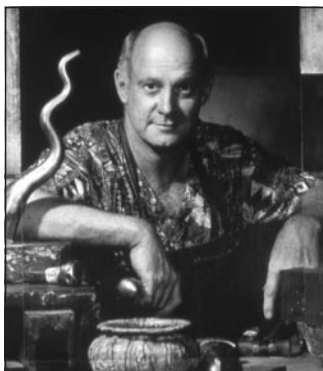


Photo by Evon Streetman

## Metalsmithing: Art at the crossroads of science and engineering

Kansas State University art professor Elliott Pujol was honored as the 2005 Master Metalsmith by the National Ornamental Metal Museum in Memphis.

The museum exhibited a 30-year retrospective of Pujol's copper and silver vessels, large wall pieces and other artwork for two months.

Elliott Pujol joined K-State's art faculty in 1973 to establish the metalsmithing and jewelry program, a program that now prepares undergraduate and graduate students. Throughout his career, he has taught the traditional ways of working metal by hand, techniques that rest in part on scientific and engineering knowledge.

His artwork is included in private and museum collections throughout the country including the Marianna Kistler Beach Museum of Art; the Renwick Gallery in Washington, DC; the Minnesota Museum; the Samuel Dorsky Museum of Art at SUNY-New Paltz; Topeka Public Library and the Wichita Museum of Art.

A "smith" is one who smites or hits: blacksmith, tinsmith, and goldsmith. Since around 7000 BC, metalsmiths have made our utilitarian and our ornamental objects: horse shoes, armor, weapons, religious relics, household vessels and jewelry. The Etruscans, forerunners of the Romans, created exquisite gold vessels and coins, and are credited with some of the earliest metal work.

In order to work in metals, the artist must know the physical and chemical characteristics and limits of the material: metals are typically shiny, dense, malleable, and hard; they have a high melting point, conduct heat and electricity well, have a unique specific gravity, and tend to tarnish or oxidize. The lattice-like atomic structure changes as a metal is worked. Hammering, for example, distorts that structure and the metal becomes brittle and can break. Applying heat, or annealing the metal, realigns the latticework and restores its malleability.

According to Pujol, in their pure form, the precious metals, gold, silver and copper, are "soft like butter." To increase their strength, hardness and other useful properties a second metal usually is alloyed.

**ONE ARTIST'S PATH:** Pujol's artistic path began as a theater major at Southern Illinois University at Carbondale. In the SIU scene shop, he learned costume and set design, how to drape and fold material, the importance of color and subtleties of lighting to help convey meaning.

Several of his large wall hangings—waving, flowing, textured metal surfaces reminiscent of flags in the wind—show the influence of the scene-shop experiences.

A jewelry-making class to learn to make props was his entrée to the "microcosm of the jeweler's bench."

"I realized that these"—he holds up his hands—"could do wonderful things, and that art was really what I wanted to do."

He completed the MFA at SIU, studying with L. Brent Kington, one of the nation's most influential teachers of metalsmithing.

Pujol worked first in silver, but found it to be "a colorless, white metal." By contrast, he was drawn to copper, which became his dominant medium for the past 25 years—"I love the colors you can create on copper, and copper takes textures beautifully. I also love how light plays across a surface."

He now typically creates at least 24 new pieces a year. His first works were made from single sheets of metal, the largest piece being 36 inches.

Early in his career, he used the explosive force of dynamite to impregnate copper sheets with texture, successfully lifting the serial number and the rust from discarded farm machinery, and a Coca-Cola logo from an old advertising sign.

After his "dynamite phase," he began to make vessels, the form that has sustained his career.

"My work, for the most part has been articulated through the format of the vessel," he said.

"The vessel is an ancient, classic form. Nothing new. It goes back to the Greeks, 1000 BC. A vessel contains space and also defines form. Basically, I'm working with the most classical forms."

He forms some vessels from one piece of metal given texture through the folding and forming process. Others he fabricates from many pieces of metal that are folded,



textured, and then formed. Small copper rivets secure the separate pieces together.

"At one point, I wanted to be able to see through metal. Accidentally, I ripped a piece, and was very depressed that I'd ruined it.

"On reflection, that piece was very, very important to me because of those rips. From then on I just continued to help more rips occur. I became fascinated with that negative space, and with being able to see light through a vessel."

By incorporating meshes of bronze and brass and copper he achieves spaces in the joinery. His transparent baskets, ones he calls "light gatherers," have been exhibited alongside works of America's best-known fiber artists and basket makers.

He also built vessels that combine four and five pieces of textured metal. In recent years, he has returned to working a single piece of metal.

"I'm eclectic, and I also tend to be cyclic," Pujol says. "I might go back and try to improve on a piece I did years ago."

**WHERE IDEAS COME FROM:** Pujol says ideas "arrive." They come from the landscape and natural settings; pumpkins and gourds he grows in his garden inspire vessels.

He usually works in a short series of related pieces, but occasionally, a project scales up. The landscapes of Mesa Verde and Chaco Canyon, for example, precipitated a 30-piece Canyon Wall Series—tall copper vessels, constructed by riveting together individually formed pieces. The crevices and breaks and openings in each piece capture in copper the essence of canyon light.

His series of barbed wire vessels "arrived" from the pasture landscape of Kansas Flint Hills with long miles of fence that at once separates and contains cattle and people.

Italian sunlight and Italy's gold-adorned cathedrals inspired Pujol to make vessels rimmed in gold, like "Tuscan Vessel."

He was awe struck by the sight of rain gracing the cyclone fencing along a Colorado mountainside.

"That's art," he thought. After that "aha" moment, he drove directly to a Denver scrap yard, purchased rolls of bronze and copper mesh, and began using mesh and teaching his students its properties.

His copper-clad 1960 Dodge truck stole the show at Memphis Repair Days, and Pujol intends for this "homage to the farm truck" to take a permanent place outdoors in a field, planted with sunflowers.

**IN THE ARTIST'S STUDIO:** a metalsmith renders an idea into an object, transforms inert material with hands and hand tools.

Pujol starts each piece with his insignia: a disc of gold that draws the work together at its base.

"People know 'that's a Pujol'," he says.

Around that foot he will create his bowls, mesh containers and vessels.

Hammers and mallets of many sizes, shapes and materials are piled on the heavy tabletop, within easy reach as he begins work.

Hammers from the aircraft industry and the auto body repair trade have found a home alongside his jeweler's tools. To a metalsmith, a hammer must match a task.

"I don't like a lot of hammer marks to show in a finished piece," he explains. "I prefer the texture and lines I create. So I use micarta hammers and paper hammers that don't leave marks on metal."

Hammer names are as striking as the hammers: planishing, chasing, creasing, raising, riveting, finishing, repousse, and cross pein.

One of Pujol's first lessons for his students: make a hammer, then dress it, or round off the edges. Left sharp, a hammer cuts into metal.

"They would not get that lesson if not from a teacher," he says.

Near his worktable are shot-filled weights, sand bags for forming, burnishing tools, stakes, anvils, broken wood handles he uses to smoothe dents. At a second work area are torches, acetylene tanks, a revolving work pedestal, sinks and quenching tubs.

**PUTTING PETALS IN THE METAL:** Pujol begins a new vessel by cutting a copper circle 24 inches in diameter. He reaches for a heavy hammer and a large arc of iron. He will create a series of petals using a technique called form folding. First he folds the metal back over the hard iron arc, undercutting it. He tightens each fold with pliers, and then flattens it.

"I won't flatten it completely at this stage because that would create a weak spot or rip," he explains.

He'll repeat this folding action 8 to 16 times. Then he'll put in all the folds on the opposite arc of the petal.

"At that point, I'll need to stop and anneal the metal," he says. "It will become super hard and brittle from so much hammering and folding."

The atomic structure of metal is latticelike, a lot of little plates. Hammering pushes the plates apart, hardening it. Heat realigns the plates and restores the metal to a malleable state.

Depending on the project, Pujol might need to anneal the metal 10 to 15 times. Or, he might choose to anneal only an area that he wants to be soft, and leave the rest of the piece work-hardened.

To anneal it, he moves the creation to the second workstation, places the folded piece upside down on the revolving pedestal and ignites the Prestolite torch. As the piece revolves, he moves the torch methodically up and down its folds.

In a few minutes, the metal surface begins to glow red, and the flame changes color to green—"that's cuprous oxide," says Pujol.

He immediately removes the vessel to a mild acid bath to clean the surface, and then into a neutralizing baking soda and water bath.

The red hot metal bowl floats and then glows blue, looking like a jellyfish. "The metal is so soft now I can bend it with my hands," he says.

Pujol also demonstrates angle-raising, a way to decrease circumference and draw a piece vertically. He traces a series of circles on the outer surface to guide the symmetry. With the wooden Tee stake clamped in the vise, he hammers the piece from the bottom to the upper edge, over and over.

And he listens.

"The timbre will shift up. It has to do with those plates of metal being pushed apart. When I hear the shift I know to stop and anneal or else I'm going to get rips and punctures."

After he has formed and textured a piece, he turns his attention to its color.

"Sometimes I have a predetermined idea of how I will want to color a piece, but usually I put it aside for awhile. The finishing decisions depend on the individual piece."

Pujol loves creating color on metal.

"When I started working with copper, I realized I could use common household chemicals like vinegar, ammonia and salt to color it. That was my first patina."

Patinas are chemicals applied to metal surfaces to create colors. Temperature, humidity or lack of it, and time are critical factors to the coloration process, which he stops at the desired point by applying acrylic fixatives and wax.

"When I'm coloring a piece, I work like a research scientist monitoring an experiment," he notes. "I'm in the studio in the middle of the night, checking progress of the chemical reactions and adjusting the process."

He has worked out hundreds of coloration formulas, at times in consultation with K-State chemistry faculty members.

"I'd check with Cliff Meloan, now retired, to avoid a nasty reaction; if he thought my idea would work, I'd try the combination on a piece."

"Sometimes the second chemical I applied undid the color I'd achieved with the first chemical, and I'd have to try again."

Pujol now has two patinas he relies on. One is ammonium chloride and copper acetate. Another is salt water and ammonia.

"The color is breathtaking, and rendering it is simple," he says.

"I also have a third patina I can never count on, but when it works it is just wonderful."

**IT'S ABOUT THE STUDENTS:** Students of metalsmithing learn by doing. Even in the 21st century there is nothing "virtual" about learning the techniques or the properties or limitations of the materials, or understanding when a work is finished.

During his K-State career, Pujol has taught hundreds of art students.

Non-art students are enrolling, too. Engineering students, for example. They seek first-hand experience with the metals whose structures and properties they study in chemical and mechanical engineering courses.

Keith Kovala, a K-State senior in electrical engineering, took Pujol's introductory classes. "Like many engineering students, I'm the type of person who likes to work with my hands," he said.

The art classes naturally complemented the engineering lectures about subatomic lattice structure of metals, how atoms align, why things become brittle, meld or compacted.

"I could see the material properties as I worked on an art project," he said.

The art class provided practical applications: how a metal responds to heating or hammering, its tolerance for being bent, if it needs to be worked hot or cold.

"If I beat on silver long enough I learned it becomes brittle and might break. The nice thing is, when it becomes brittle, you can heat it with a torch. It returns to a malleable state. After it cools, you can hammer it again. And you can repeat that process many times."

Pujol distributes a 30-page handout in the first class and asks his students to create six pieces a semester.

Their first assignment, cold connecting, is an exercise to join two pieces of metal without heat, using rivets and screws. Kovala asked permission to work with titanium instead of silver and copper because of his interest in building robots. He's active in K-State's Robotics Club, which competes nationally.

Hammering titanium isn't going to move it very much, and bending it requires applying heat from a torch, Kovala noted. Titanium doesn't like to be bent past 90 degrees or it breaks.

"In the art classes I gained an intuitive sense of what a metal is capable of," Kovala said.

In addition to teaching the technical skills and properties about the materials, Pujol coaches his students to learn to "listen" to their work.

"At first, they don't understand when a work is where it needs to be," he says. "Later, they'll say: 'I think this is finished, what do you think?' Then I know they are beginning to understand their relationship to their art."

**THE FUTURE:** At this stage of his career, Pujol is in the process of "weaning" himself from copper, and he plans to return to silver, focusing on two new alloys.

One contains more pure silver than sterling and is much more malleable.

"The beauty of the .985 silver," he says, "you can work it hot, unlike sterling, which cracks and falls apart."

A second metal of interest, Argentium © silver, does not tarnish. "From my reading, it sounds like a wonderful metal," says Pujol.

Admitting he'll miss copper, he values the change.

"I want to learn about the new metals and pass that on to the students."

"That's my goal. I'm a teacher. I don't want to recommend something that I'm not familiar with."

**POSTSCRIPT:** Steve Ortiz, a former K-State art instructor, now teaches at South Texas College at McAllen. He was encouraged by Pujol to attend Memphis Repair Days and other metalsmithing events.

Ortiz regards Repair Days as a supportive setting where art students can try new techniques, ask a lot of questions, and go away with much greater confidence in their skills. "It's great for students and for all of us, teachers and artists, because we learn from one another."

Fifteen K-State art students attended the 2005 Repair Days at the National Ornamental Metal Museum. With peers from metalsmithing programs in Illinois, Ohio, Michigan, Texas, Tennessee, and elsewhere, they faced shelves and racks filled with metal repair and restoration problems.

For every challenge—a silver tray scorched in a house fire, copper pots to be retinned, gems to be reset in a money clip—there was a mentor in a Repair Days denim apron to guide and assist.

One covey of K-Staters at work in the repair tent pounded dings out of old hubcaps, hammering loudly, joking above the din about the odd V-shaped emblem—a 1973 Volvo.

Master Metalsmith Pujol worked just a few feet away from his students.

With the whisper of a linen hammer, he reshaped a silver teapot lid, which settled into place without a sound.

—by Kay Garrett

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

*Fiscal Year 2005*

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

<b>I.</b>	<b><u>SPONSORED</u></b>	<b><u>\$110,859,813</u></b>
<b>II.</b>	<b><u>APPROPRIATED</u></b>	
	Main Campus State Appropriation	\$3,623,891
	Experiment Station Programs and Extension Services	
	Federal Appropriation	\$7,984,832
	State Appropriation	\$47,887,873
	Veterinary Medical Center State Appropriation	\$512,158
	<b><u>SUBTOTAL</u></b>	<b><u>\$60,008,754</u></b>
<b>III.</b>	<b><u>DONATED*</u></b>	<b><u>\$27,789,344</u></b>
<b>RESEARCH/SCHOLARLY ACTIVITY BASE GRAND TOTAL</b>		<b><u>\$198,657,911</u></b>

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

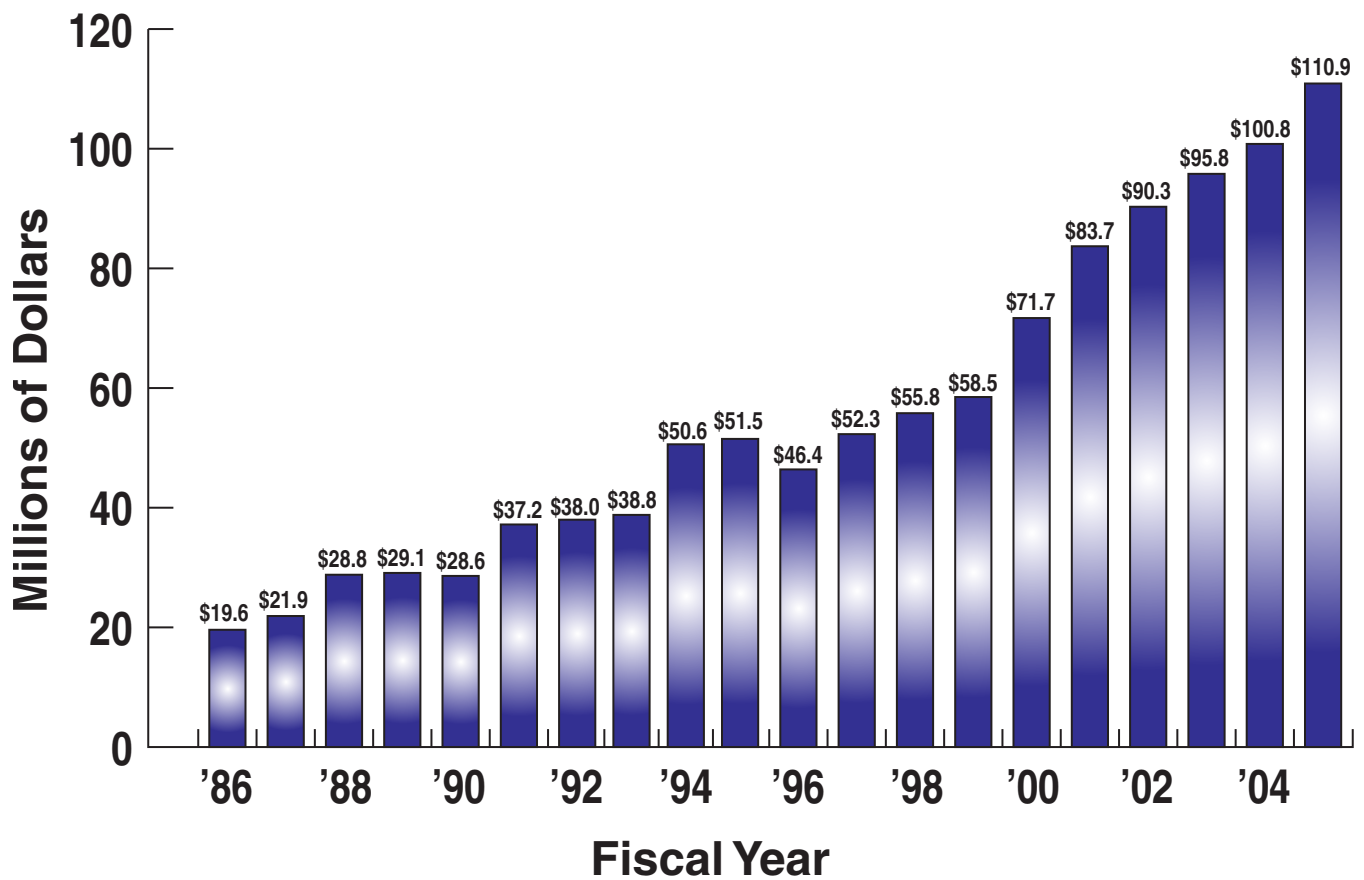


# SECTION 1: AWARDS

**KANSAS STATE  
UNIVERSITY**

## **SPONSORED RESEARCH FUNDING**

*Fiscal Years 1986–2005*



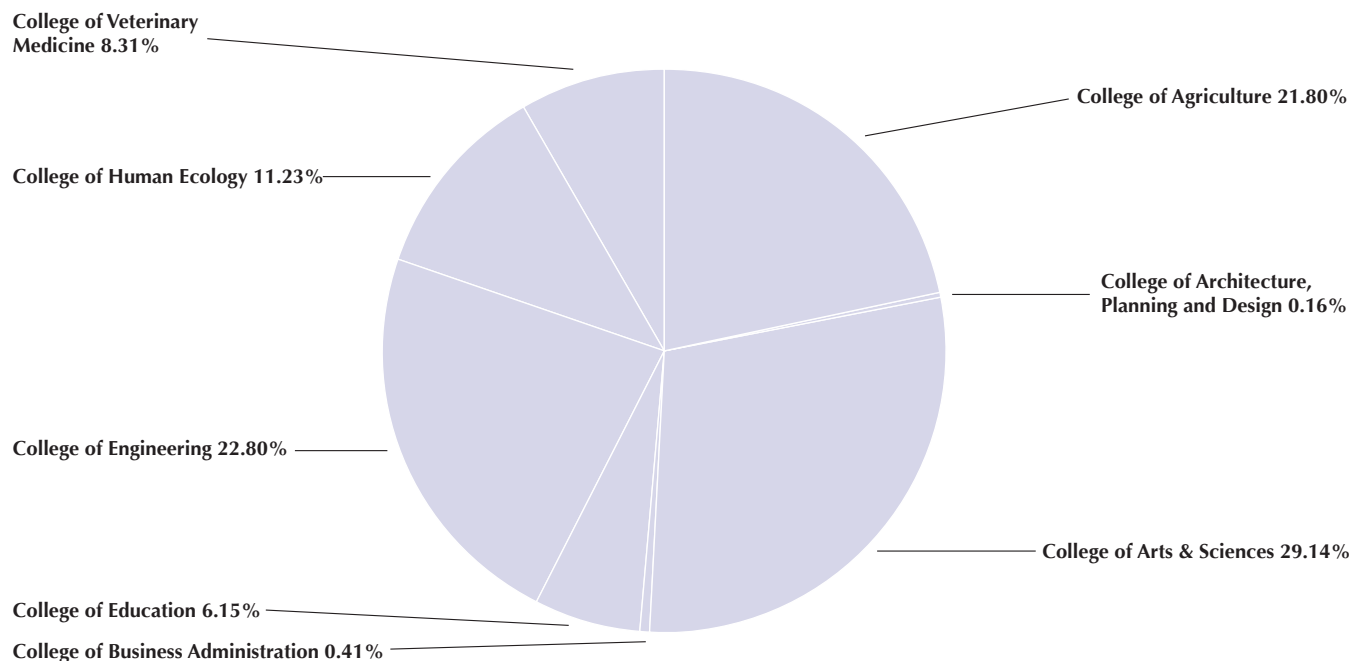
# DISTRIBUTION OF NEW AWARDS AMONG COLLEGES AND OFFICES OF THE UNIVERSITY

*Fiscal Year 2005*

College/Office	Number of Awards	Dollar Value
College of Agriculture . . . . .	316 . . . . .	20,107,681
College of Architecture, Planning and Design . . . . .	4 . . . . .	149,440
College of Arts and Sciences . . . . .	183 . . . . .	26,874,852
College of Business Administration . . . . .	4 . . . . .	376,139
College of Education . . . . .	24 . . . . .	5,671,578
College of Engineering . . . . .	202 . . . . .	21,035,385
College of Human Ecology . . . . .	57 . . . . .	10,357,472
College of Veterinary Medicine . . . . .	84 . . . . .	7,668,251
Office of the President . . . . .	9 . . . . .	2,494,723
Office of the Provost . . . . .	14 . . . . .	1,195,470
Vice President for Administration and Finance . . . . .	1 . . . . .	100,000
Vice President for Institutional Advancement . . . . .	15 . . . . .	3,285,560
Vice Provost for Academic Services and Technology . . . . .	6 . . . . .	149,152
Vice Provost for Research and Dean of Graduate School . . . . .	16 . . . . .	11,394,110
UNIVERSITY TOTALS . . . . .	935 . . . . .	110,859,813

## AWARDS BY COLLEGE

*Fiscal Year 2005*



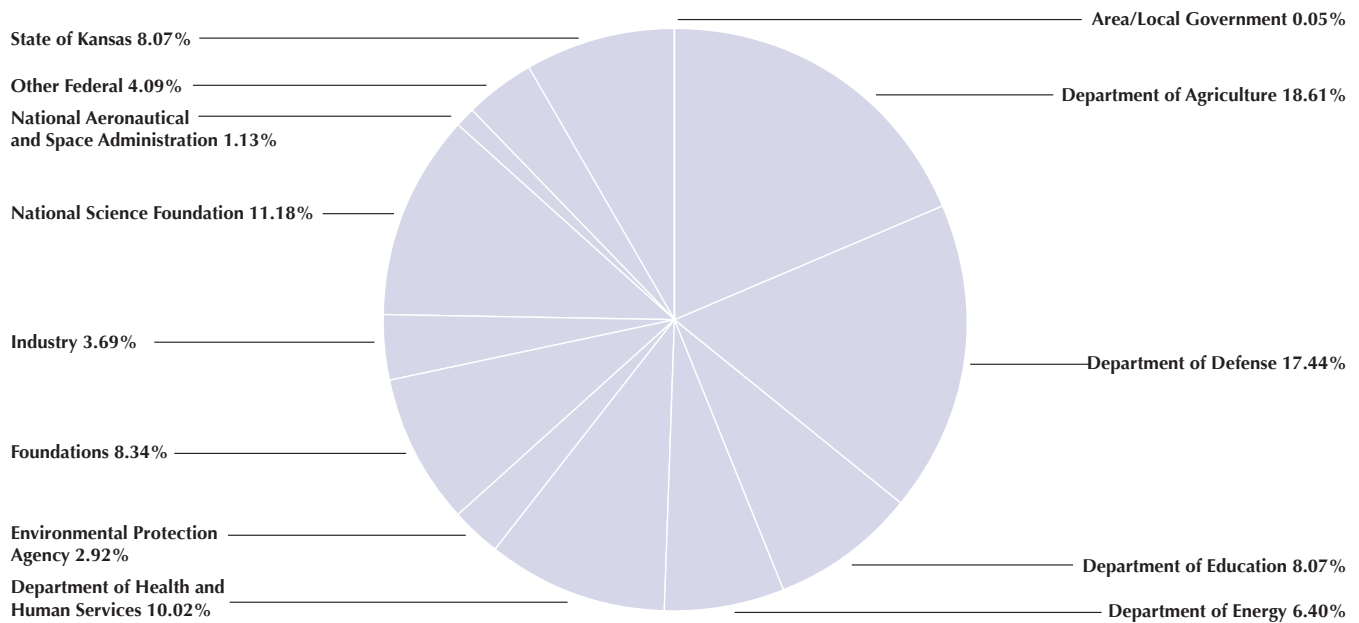
# KANSAS STATE UNIVERSITY SOURCES OF AWARDS

*Fiscal Year 2005*

College/Office	Number of Awards	Dollar Value
Area/Local Government	6	\$52,857
Department of Agriculture	143	\$20,631,179
Department of Defense	37	\$19,330,651
Department of Education	30	\$8,949,324
Department of Energy	34	\$7,095,191
Department of Health and Human Services	73	\$11,109,230
Environmental Protection Agency	41	\$3,239,487
Foundations	186	\$9,246,025
Industry	168	\$4,090,009
National Science Foundation	80	\$12,391,078
National Aeronautics and Space Administration	17	\$1,249,251
Other Federal	53	\$4,533,155
State of Kansas	67	\$8,942,376
<b>TOTAL</b>	<b>935</b>	<b>\$110,859,813</b>

## SOURCES OF AWARDS

*Fiscal Year 2005*



# EXTRAMURAL AWARDS

*Fiscal Year 2005 (July 1, 2004–June 30, 2005)*

## COLLEGE OF AGRICULTURE

### AGRICULTURAL ECONOMICS

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

**Barton, David G.**, Multisponsor, \$100,500, "Arthur Capper Cooperative Center."

**Bernardo, Daniel J.**, US Department of Agriculture, \$273,457, "Improving Agriculture Students' Understanding of Global Production Systems Through Distance Learning."

**Bernardo, Daniel J.**, and **Mintert, James R.** (Extension Agricultural Economics), Kansas Corn Commission, \$12,600, "Grain Marketing Research and Education in Support of Kansas Corn Producers."

**Boland, Michael A.**, US Department of Agriculture, \$50,000, "USDA Agricultural Marketing Resource Center."

**Crespi, John M.**, (see **Schroeder, Ted C.**, Agricultural Economics).

**Dhuyvetter, Kevin C.**, (see **Dille, Johanna A.**, Agronomy).

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

**Fox, John A.**, US Department of Agriculture, \$10,000, "Potential Impact of Bovine Spongiform Encephalopathy on Demand for Beef in the United States."

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

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

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

**Jones, Rodney D.**, (see **Sanderson, Michael W.**, Clinical Sciences).

**Marsh, Thomas L.**, US Department of Agriculture, \$27,767, "Organization, Regulation, and Performance of the U. S. Food System."

**Peterson, Jeffrey M.**, Kansas Water Office, \$26,665, "Evaluation of Water Conservation from More Efficient Irrigation Systems."

**Peterson, Jeffrey M.**, **Fox, John A.**, **Leatherman, John C.** (Extension Agricultural Economics), and **Mankin, Kyle R.** (Biological and Agricultural Engineering), US Environmental Protection Agency, \$376,165, "Integrating Economic and Biophysical Models to Assess the Impacts of Water Quality Trading."

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

**Peterson, Jeffrey M.**, (see **Harrington, Lisa M.**, Geography).

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

**Schroeder, Ted C.**, Canfax Research Services, \$191,150, "Determining Heterogenous Consumer Risk Perceptions and Attitudes: Implications for Improving Supply Chain Management."

**Schroeder, Ted C.**, **Crespi, John M.**, and **Fox, John A.**, US Department of Agriculture, \$276,000, "Meeting National Needs for Scholars Trained in Economics of Food Marketing and Biosecurity."

**Schroeder, Ted C.**, and **Drouillard, James S.** (Animal Sciences and Industry), US Department of Agriculture, \$206,376, "Development of a Research-Based Risk Assessment and Management Tool for Cattle Feeders."

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

### AGRICULTURAL EXPERIMENT STATION

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

**Chumley, Forrest G.**, and **Heer, William F.** (Agronomy), US Department of Agriculture, \$124,606, "Development and Management of Canola in the Great Plains Region."

**Ricketts, Mitchell S.**, and **Aramouni, Fadi M.** (Animal Sciences and Industry), US Department of Labor, \$227,306, "Occupational Safety and Health Training Materials for Fruit and Vegetable Preserving and Specialty Manufacturing."

### AGRICULTURAL RESEARCH CENTER-HAYS

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

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

**Kofoed, Kenneth D.**, **Harvey, Tom L.** (Entomology), **Michaud, John P.** (Entomology), **Reese, John C.** (Entomology), **Seifers, Dallas L.**, and **Tuinstra, Mitchell R.** (Agronomy), Kansas Grain Sorghum Commission, \$48,000, "Breeding Sorghum with Improved Grain Yield, Greenbug and Virus Resistance, and Pre-Flowering Drought Tolerance."

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

**Martin, Terry J.**, **Bockus, William W.** (Plant Pathology), **Schaffer, Vernon A.** (Agronomy), and **Seifers, Dallas L.**, Kansas Crop Improvement Association, \$19,516, "Effect of Wheat Streak Mosaic Virus and Barley Yellow Dwarf Mosaic Virus Infection on the Production of Certified Seed Wheat in Kansas."

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

**Martin, Terry J.**, (see **Thompson, Carlyle A.**, Agricultural Research Center-Hays).

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

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

**Stahlman, Phillip W.**, Multisponsor, \$118,700, "Weed Research."

**Stahlman, Phillip W.**, **Martin, Terry J.**, **Martin, Victor L.** (Agronomy), and **White, Anthony D.**, US Department of Agriculture, \$19,500, "Clearfield Winter Wheat Risk Assessment."

**Stahlman, Phillip W.**, **Michaud, John P.** (Entomology), and **White, Anthony D.**, US Department of Agriculture, \$5,000, "Characterization of Post Dispersal Jointed Goatgrass Seed Predation."

**Stahlman, Phillip W.**, **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Southwest Area Office), and **White, Anthony D.**, US Department of Agriculture, \$18,000, "Technology Transfer of Jointed Goatgrass Research in the Western United States."

**Stahlman, Phillip W.**, and **White, Anthony D.**, US Department of Agriculture, \$58,000, "National Jointed Goatgrass Research Program Extension Coordinator."

**Stahlman, Phillip W.**, (see **Dille, Johanna A.**, Agronomy).

**Thompson, Carlyle A.**, and **Martin, Terry J.**, Multisponsor, \$20,790, "Crop Culture."

**White, Anthony D.**, (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

## AGRONOMY

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

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

**Devlin, Daniel L.**, and **Barden, Charles J.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$89,259, "Heartland Integrated Water Quality Coordination Initiative."

**Dille, Johanna A.**, **Dhuyvetter, Kevin C.** (Agricultural Economics), and **Stahlman, Phillip W.** (Agricultural Research Center-Hays), US Department of Agriculture, \$92,594, "In-Field Decision Making Tool for Site-Specific Weed Management."

**Fick, Walter H.**, Multisponsor, \$10,000, "Range and Pasture Brush and Weed Control."

**Fick, Walter H.**, and **Jones, Rodney D.** (Agricultural Economics), US Environmental Protection Agency, \$49,385, "Implementing Total Maximum Daily Load's Using Water Quality Financial Analysis and Resource Evaluation Program."

**Fick, Walter H.**, (see **Haddock, Michael J.**, Library).

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

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

**Fritz, Allan K.**, Kansas Crop Improvement Association, \$10,000, "Development of Hard Winter Wheats with Tolerance to Heat and Drought."

**Fritz, Allan K.**, US Department of Agriculture, \$12,500, "Breeding for Resistance to Karnal Bunt in Kansas."

**Fritz, Allan K.**, and **Gill, Bikram S.** (Plant Pathology), US Department of Agriculture, \$72,221, "Bringing Genomics to the Wheat Fields."

**Gordon, Walter B.**, and **Fjell, Dale L.**, Kansas Grain Sorghum Commission, \$6,500, "Management Systems for Grain Sorghum Production Under Dryland and Limited Irrigated Conditions."

**Gordon, Walter B.**, **Maddux, Larry D.**, **Marsh, Brian H.**, and **Pierzynski, Gary M.**, Multisponsor, \$53,500, "Soil Fertility and Soil Management Investigations."

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

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

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

**Janssen, Keith A.**, Multisponsor, \$250, "Double-Crop Soybean Performance Tests—Agronomy."

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

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

**Kluitenberg, Gerard J.**, National Aeronautics and Space Administration, \$22,922, "Flow and Distribution of Fluid Phases through Porous Plant Growth Media in Microgravity."

**Kluitenberg, Gerard J.**, National Science Foundation, \$180,334, "Development of Multi-Functional Heat Pulse Probe for Ecological and Soil Hydrological Monitoring of Plant Root Zones."

**Kluitenberg, Gerard J.**, US Department of Agriculture, \$47,266, "Evaluation of a Pedotransfer Function Approach for Estimation of Saturated Hydraulic Conductivity."

**Kulakow, Peter A.**, US Department of Agriculture, \$20,442, "Carbon Sequestration, Phytoremediation and Carbon Fixation Data Development."

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

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

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

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

**Mengel, David B.**, US Department of Agriculture, \$150,000, "Facilitate Development of Abiotic Stress Resistant Wheat Germplasm."

**Mengel, David B.**, US Department of Agriculture, \$9,672, "National Canola Cultivar Development Program to Identify Adapted Canola Cultivars to Improve Efficiency and Grower Profitability."

**Mengel, David B.**, US Department of Agriculture, \$45,000, "Wind Erosion Model for Military Lands."

**Mengel, David B.**, US Department of Agriculture, \$60,000, "Wind Erosion Prediction System User Documentation, Tutorials and Training Materials."

**Mengel, David B.**, and **Brown-Guedira, Gina L.**, US Department of Agriculture, \$2,500, "International Agricultural Research for the Republics of Central Asia and the Caucasus."

**Owensby, Clenton E.**, **Ham, Jay M.**, and **Knapp, Alan K.** (Biology), US Department of Energy, \$54,965, "Net Ecosystem Carbon and Water Vapor Exchange of Tallgrass Prairie."

**Peterson, Dallas E.**, Monsanto Company, \$5,000, "Roundup Ready Alfalfa Non-Dormant Tankmixes - Establishment."

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

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

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

**Regehr, David L.**, and **Geier, Patrick W.** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$5,000, "Evaluating Herbicides for Crop Tolerance and Grass Control in Grain Sorghum."

**Regehr, David L.**, and **Janssen, Keith A.**, Multisponsor, \$146,350, "Field Herbicidal Evaluations."

**Rice, Charles W.**, US Department of Agriculture, \$51,441, "2005 USDA Research Symposium: Greenhouse Gases in Agriculture and Forest: Refining Knowledge and Building Tools."

**Rice, Charles W.**, US Department of Agriculture, \$30,000, "Implementation and Evaluation of Greenhouse Gas Credits for Agriculture."

**Rice, Charles W.**, **Todd, Timothy C.** (Plant Pathology), and **Wilson, Gail T.** (Biology), National Science Foundation, \$112,000, "Grazer-Mycorrhizal Interactions in Tallgrass Prairie: Effects on Carbon and Nitrogen Partitioning and Sequestration."

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

**Roozeboom, Kraig L.**, Multisponsor, \$297,114, "Crop Performance."

**Roozeboom, Kraig L.**, (see **Wilde, Gerald E.**, Entomology).

**Schaffer, Vernon A.**, Multisponsor, \$5,035, "Foundation Seed Maintenance."

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

**Schapaugh Jr, William T.**, Kansas Crop Improvement Association, \$12,200, "Development of Herbicide Resistant and Special Purpose Varieties for Kansas."



**Schapaugh Jr, William T., Long Jr, James H.** (Southeast Agricultural Research Center), **Todd, Timothy C.** (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$224,447, "Soybean Variety and Germplasm Improvement."

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

**Staggenborg, Scott A., Dhuyvetter, Kevin C.** (Agricultural Economics), and **Taylor, Randal K.** (Biological and Agricultural Engineering), Kansas Soybean Commission, \$24,500, "Determining Profitable Soybean Planting Systems in Kansas."

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

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

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

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

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

**Thien, Stephen J.**, and **Gipson, Philip S.** (Biology), US Department of the Interior, \$200,000, "Soil Sustainability in High-Use Military Training Areas."

**Tuinstra, Mitchell R.**, US Department of Agriculture, \$30,000, "Increased Sorghum Cold Tolerance."

**Tuinstra, Mitchell R., Claassen, Mark M., Gordon, Walter B., and Kofoid, Kenneth D.** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$72,500, "Breeding Grain Sorghum for Improved Dryland Production."

**Tuinstra, Mitchell R.**, and **Hancock, Joe D.** (Animal Sciences and Industry), US Agency for International Development, \$132,192, "Enhancing the Utilization of Grain Sorghum and Pearl Millet through the Improvement of Grain Quality via Genetic and Nutrition Research."

**Tuinstra, Mitchell R.**, and **Kofoid, Kenneth D.** (Agricultural Research Center-Hays), US Department of Agriculture, \$126,860, "Center for Sorghum Improvement."

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

**Welch, Stephen M., Das, Sanjoy** (Electrical and Computer Engineering), **Hsu, William H.** (Computing and Information Sciences), **Knapp, Mary C.** (Communications), and **Roe, Judith L.** (Biology), National Science Foundation, \$450,558, "Molecular Evolutionary Ecology of Developmental Signaling Pathways in Complex Environments."

## **ANIMAL SCIENCES AND INDUSTRY**

**Aramouni, Fadi M.**, (see **Madl, Ronald L.**, Grain Science and Industry).

**Aramouni, Fadi M.**, (see **Ricketts, Mitchell S.**, Agricultural Experiment Station).

**Blasi, Dale A.**, and **Spire, Mark F.** (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$200,000, "Animal Transport: Use of Mobile Technologies to Link Premise Identification, Animal Location and Individual Animal Identification to Semi-Loads of Cattle or Swine during Commercial Transport."

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

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

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

**Drouillard, James S.**, Dakota Gold Research Association, \$81,700, "Evaluation of Growth Performance and Carcass Characteristics of Finishing Cattle Fed Ethanol Byproducts as a Partial Replacement for Steam-Flaked Corn."

**Drouillard, James S.**, Kansas Corn Commission, \$30,970, "Distiller's Grain For Cattle—A Strategy to Reduce Dependence on Feed Grade Antibiotics."

**Drouillard, James S.**, and **Blasi, Dale A.**, US Department of Agriculture, \$52,500, "Effect of Wet and Dry Distiller's Grains on Performance of Beef Cattle."

**Drouillard, James S.**, (see **Schroeder, Ted C.**, Agricultural Economics).

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

**Fung, Daniel Y.C.**, (see **Vanier, Martha A.**, National Agricultural Biosecurity Center).

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

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

**Groesbeck, Crystal N.**, (see **Nelssen, Jim L.**, Animal Sciences and Industry).

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

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

**Hunt, Melvin C.**, US Department of Agriculture, \$100,800, "Effects of Mitochondria on Postmortem Myoglobin Redox Stability."

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

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

**Minton, J. Ernest**, Biotechnology Research and Development Corporation, \$20,800, "Novel Genes Involved in the Molecular Responses of Pigs to the Effects of Endotoxemia."

**Minton, J. Ernest**, and **Erickson, Howard H.** (Diagnostic Medicine/Pathobiology), United Feeds, \$56,849, "Effects of Dietary Omega-3 Fatty Acids on Exercise-Induced Pulmonary Hemorrhage."

**Nelssen, Jim L.**, Hill's Pet Nutrition, Inc., \$44,000, "Effect of Nutrient Enhanced Foods on Joint and Bladder Development in 30 to 130 kg Pigs."

**Nelssen, Jim L., Goodband, Robert D., Groesbeck, Crystal N., and Tokach, Michael D.**, Kemin Americas, \$7,000, "Influence of Chromium Source on Plasma NEFA Levels in Grow-Finish Pigs."

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

**Phebus, Randall K.**, 3M Company, \$34,989, "Testing Project."

**Phebus, Randall K., Marsden, James L., and Tanus, Carlos A.**, American Meat Institute Foundation, \$224,000 (includes \$29,000 from Excel Corporation and StayFresh Technologies), "Elimination of Escherichia coli O157:H7 and Salmonella spp. on Beef Trimmings Prior to Grinding Using a Controlled Phase Carbon Dioxide System: Process Validation and Quality Determinations after Packaging and Retail Display."

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

**Phebus, Randall K.**, (see **Vanier, Martha A.**, National Agricultural Biosecurity Center).

**Schneider, Jason D.**, (see **Tokach, Michael D.**, Animal Sciences and Industry).

**Tanus, Carlos A.**, (see **Phebus, Randall K.**, Animal Sciences and Industry).

**Titgemeyer, Evan C.**, AFGRI Operations Ltd/Carr's Milling Industries PLC, \$60,000, "Comparison of Four Soybean Meal Products."

**Titgemeyer, Evan C.**, US Department of the Interior, \$50,000, "Laboratory Analysis Project."

**Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Nelssen, Jim L., and Schneider, Jason D.**, National Pork Board, \$66,684, "Effects of Feeding Schedule on Body Condition, Aggressiveness, and Reproductive Failure in Group Housed Gestating Sows."

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

## COMMUNICATIONS

**Baldwin, Will G.**, (see **Hulbert, Scot H.**, Plant Pathology).

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

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

**Cholick, Fred**, US Department of Agriculture, \$805, "USDA Research Apprenticeship Program."

**Cholick, Fred**, USFT Other, \$17,287, "IAP USFT Other."

**Chumley, Forrest G.**, US Department of Agriculture, \$362,155, "USDA/ARS Research Support Agreement." (6 awards)

**Wilson, Ron J.**, Kansas Agriculture and Rural Leadership, Inc., \$17,650, "Secretarial Support—Huck Boyd National Institute for Rural Development."

## ENTOMOLOGY

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

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

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

**Broce, Alberto B.**, and **Zurek, Ludek**, Multisponsor, \$12,400, "Methods for Control of Livestock Insects."

**Broce, Alberto B.**, and **Zurek, Ludek**, US Department of Agriculture, \$33,188, "Population Outbreaks of an Introduced Species of Itch Mites."

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

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

**Buschman, Larry L.**, Multisponsor, \$13,000, "Insecticide Management of Field Crop Insects in Southwestern Kansas."

**Buschman, Larry L., Higgins, Randall A., Schapaugh Jr, William T.** (Agronomy), **Sloderbeck, Phillip E.** (Southwest Area Office), **Trick, Harold N.** (Plant Pathology), and **Witt, Merle D.** (Southwest Area Office), Kansas Soybean Commission, \$26,223, "Biology and Management of the Soybean Stem Borer in Kansas."

**Campbell, Leslie R.**, (see **Nechols, James R.**, Entomology).

**Chen, Ming-Shun**, (see **Hulbert, Scot H.**, Plant Pathology).

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

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

**Harvey, Tom L.**, and **Michaud, John P.**, Multisponsor, \$250, "Insecticide Management of Field Crop Insects."

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

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

**Kambhampati, Srinivas**, (see **Bolton, Timothy A.**, Physics).

**Margolies, David C.**, and **Nechols, James R.**, US Department of Agriculture, \$30,000, "Implementing Integrated Pest Management for Insect Pests on Ornamental Crops Under Commercial Greenhouse and Nursery Production."

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

**Michaud, John P.**, National Sunflower Association, \$10,011, "Impact Assessment of *Dectes texanus* in Sunflower."

**Michaud, John P.**, US Department of Agriculture, \$25,210, "Early Detection of Invasive Plant Pests: Development of Targeted Survey Techniques and Improved Sampling Protocols."

**Michaud, John P.**, and **Qureshi, Jawwad A.**, US Environmental Protection Agency, \$48,472, "Evaluation of Sunflowers as a Trap Crop for the Soybean Stem Borer."

**Michaud, John P.**, (see **Harvey, Tom L.**, Entomology).

**Michaud, John P.**, (see **Kofoed, Kenneth D.**, Agricultural Research Center-Hays).

**Michaud, John P.**, (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

**Nechols, James R., Campbell, Leslie R., Margolies, David C.**, and **Marr, Charles W.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$96,273, "Is Biological Control of Thrips by a Predatory Mite Effective in Preventing Spread of Tomato Spotted Wilt Virus on Greenhouse-Grown Tomatoes?"

**Nechols, James R.**, (see **Carey, Edward E.**, Horticulture, Forestry and Recreation Resources).

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

**Park, Yoonseong**, US Department of Agriculture, \$8,250, "Development of RIDL-Based Pink Bollworm."

**Park, Yoonseong**, US Department of Agriculture, \$45,000, "Digestive and Immune-Related Components of the *Tribolium* Gut Transcriptome."

**Park, Yoonseong**, (see **Brown, Susan J.**, Biology).

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

**Qureshi, Jawwad A.**, (see **Michaud, John P.**, Entomology).

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

**Ramaswamy, Sonny B.**, US Department of Agriculture, \$6,000, "Determine Physiological Effects of Insect Growth Regulators for Major Pest Species."

**Ramaswamy, Sonny B.**, US Department of Agriculture, \$31,000, "Facilitate Multiple Pest Resistant Wheat Germplasm Research."

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

**Ramaswamy, Sonny B.**, and **Dobesh, Sharon**, US Department of Agriculture, \$47,804, "Pesticide Applicator Training Program."

**Ramaswamy, Sonny B.**, and **Pszczolkowski, Maciej A.**, US Department of Health and Human Services, \$45,500, "Signal Transduction from Juvenile Hormone to Ion Pumps."

**Reece, John C.**, and **Whitworth, Jeff**, North Central Soybean Research Program, \$16,555, "Management of Soybean Aphid in the North Central States."

**Reese, John C.**, and **Whitworth, Jeff**, US Department of Agriculture, \$19,979, "North Central Soybean Research Program Proposal on Soybean Aphids."

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

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

**Smith, C. Michael**, Kansas Crop Improvement Association, \$5,000, "Aphid Resistance DNA Marker Selection System for Improved Kansas Wheat Variety Development."

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

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

**Wilde, Gerald E.**, Agrigenetics, Inc., \$4,000, "Assessing Rootworm Protection for Management of Western and Northern Corn Rootworm Larvae."

**Wilde, Gerald E.**, Monsanto Company, \$15,120, "Investigating Adult Emergence Patterns from YieldGard Rootworm."

**Wilde, Gerald E.**, Monsanto Company, \$5,040, "MON 88017 EUP Trial—Academic."

**Wilde, Gerald E.**, Pioneer Hi-Bred International, Inc., \$4,380, "Assessing Performance of a Lead Transgenic Corn Event Expressing Rootworm-Active Insecticidal Proteins."

**Wilde, Gerald E.**, US Department of Agriculture, \$31,682, "Biologically Intensive Area-wide IPM of the Russian Wheat Aphid and Greenbug."

**Wilde, Gerald E.**, and **Reese, John C.**, Multisponsor, \$104,325, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

**Wilde, Gerald E.**, and **Roozeboom, Kraig L.** (Agronomy), Kansas Corn Commission, \$13,000, "Effect of Systemic Insecticide Seed Treatments on Yield of Corn and Pests."

**Zurek, Ludek**, and **Broce, Alberto B.**, US Department of Health and Human Services, \$68,260, "West Nile Surveillance in the State of Kansas."

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

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

## FOOD SCIENCE INSTITUTE

**Getty, Kelly J. K.**, and **Boyle, Elizabeth** (Animal Sciences and Industry), US Department of Agriculture, \$72,763, "Jerky Validation for Small and Very Small Meat and Poultry Business."

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

**Kastner, Curtis L.**, **Fung, Daniel Y.C.** (Animal Sciences and Industry), **Getty, Kelly J. K.**, **Phebus, Randall K.** (Animal Sciences and Industry), and **Retzlaff, Deanna D.** (Dean of Continuing Education), US Department of Education, \$57,049, "North American Food Safety/Seguridad Alimentaria de Norte America (SANA)."

**Kastner, Curtis L.**, **Fung, Daniel Y.C.** (Animal Sciences and Industry), and **Kropf, Donald H.** (Animal Sciences and Industry), US Department of Agriculture, \$311,642, "Animal Science Food Safety Consortium - Kansas State University."

## GRAIN SCIENCE AND INDUSTRY

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

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

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

**Herrman, Timothy J.**, (see **Hale, Ronald L.**, Southwest Area Office).

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

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

**Howard, John E.**, Texas Wheat Producers Board, \$30,000, "International Grains Program Advisory Board."

**Howard, John E.**, (see **Madl, Ronald L.**, Grain Science and Industry).

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

**Madl, Ronald L.**, Abengoa Bioenergy R&D, Inc., \$140,000, "Fixed Price Services Agreement between Kansas State University and Abengoa Bioenergy R & D, Inc."

**Madl, Ronald L.**, **Aramouni, Fadi M.** (Animal Sciences and Industry), **Howard, John E.**, and **Medeiros, Denis M.** (Human Nutrition), Kansas Soybean Commission, \$10,000, "Commercialization of New, Innovative Foods for Use in World Food and Health Center Program."

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

**Seib, Paul A.**, US Department of Agriculture, \$131,000, "Development of Prediction Models for Wheat Quality Parameters."

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

**Seib, Paul A.**, (see **Wang, Donghai**, Biological and Agricultural Engineering).

**Sun, X. Susan**, Foseco International Limited, \$40,515, "Soy-Based Binders."

**Sun, X. Susan**, Hill's Pet Nutrition, Inc., \$40,698, "Development of Cold Pellet Processing Technology."

**Sun, X. Susan**, US Department of Agriculture, \$25,240, "Poly(Lactic Acid)/Starch Blend for a Degradable Agricultural Mulch Film."

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

**Sun, X. Susan**, and **Wang, Donghai** (Biological and Agricultural Engineering), US Department of Defense, \$65,000, "Low Density High Strength Biodegradable Composite."

**Sun, X. Susan**, (see **Welti, Ruth**, Biology).

## HORTICULTURE, FORESTRY AND RECREATION RESOURCES

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

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

**Carey, Edward E.**, **Kadir, Sorkel M.**, and **Nechols, James R.** (Entomology), US Department of Agriculture, \$45,000, "Organic Integrated Pest Management in High Tunnel Vegetable, Small Fruit and Flower Production."

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

**Fry, Jack D.**, **Bremer, Dale J.**, **Fagerness, Matthew J.**, **Griffin, Jason**, and **Keeley, Steven J.**, Multisponsor, \$68,987, "Turfgrass Investigations."

**Fry, Jack D.**, **Fagerness, Matthew J.**, and **Keeley, Steven J.**, National Turfgrass Federation, \$27,300, "Turfgrass Testing."

**Geyer, Wayne A.**, Multisponsor, \$17,549, "Woody Plants."

**Griffin, Jason**, Horticultural Research Institute, \$4,000, "Selecting a Drought Tolerant Sugar Maple Rootstock."

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

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



**Kadir, Sorkel M.**, US Department of Agriculture, \$15,000, "Varietal Evaluation of Grapes under Kansas Conditions."

**Kadir, Sorkel M.**, (see **Carey, Edward E.**, Horticulture, Forestry and Recreation Resources).

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

**Marr, Charles W.**, (see **Nechols, James R.**, Entomology).

**McElwain, Scott K.**, (see **Warner, Thomas D.**, Horticulture, Forestry and Recreation Resources).

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

**Reid, William R.**, University of Missouri, \$7,700, "Missouri Pecan Growers."

**Reid, William R.**, US Department of Agriculture, \$12,695, "Development of Phenological and Morphological Descriptors for Cultivated Walnut Varieties."

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

**Warner, Thomas D.**, and **McElwain, Scott K.**, Manhattan Convention and Visitors Bureau, \$500, "Tourism Site Brochures."

**Williams, Kimberly A.**, Fred C. Gloeckner Foundation, Inc., \$10,000, "Nutrient Retention of Clay-Type Amendments for Greenhouse Crop Production in Soilless Media."

**Williams, Kimberly A.**, US Department of Agriculture, \$10,000, "Comparing Organic and Conventional Fertilization Methods for Cut Flower Production in Haygrove High Tunnels - Katherine M. Stolp."

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

**Hargrove, William L.**, US Environmental Protection Agency, \$16,391 (includes \$5,075 from Sedgwick County Extension Council), "Earth Awareness Researchers for Tomorrow's Habitat (EARTH) Part 3: Program Expansion Project."

**Hargrove, William L.**, US Department of the Interior, \$164,842 (includes \$72,430 from University of Kansas), "Kansas Water Resources Research Institute."

**Hargrove, William L.**, **Aiken, Robert M.** (Northwest Research Extension Center), **Brouk, Micheal J.** (Animal Sciences and Industry), **Clark, Gary A.** (Biological and Agricultural Engineering), **Klocke, Norman L.** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Peterson, Jeffrey M.** (Agricultural Economics), **Schlegel, Alan J.** (Southwest Research Extension Center), **Steward, David R.** (Civil Engineering), and **Stone, Loyd R.** (Agronomy), US Department of Agriculture, \$269,291, "Sustaining Rural Economies through New Water Management Technologies - KSU."

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

## **NORTHWEST RESEARCH EXTENSION CENTER**

**Aiken, Robert M.**, Blue Sun Biodiesel, \$1,000, "Dormant-Seeding for Cool Season Oilseeds, Supporting Biodiesel Feasibility Analysis."

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

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

**Aiken, Robert M.**, US Department of Energy, \$23,760, "Field Variety Evaluation and Dormant-Seeding of Cool Season Oilseeds, Supporting Biodiesel Development."

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

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

**Coyne, Patrick J.**, Multisponsor, \$31,920, "Sunflower Performance Testing Program."

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

**Lamm, Freddie R.**, **Peterson, Jeffrey M.** (Agricultural Economics), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Stone, Loyd R.** (Agronomy), US Department of Agriculture, \$69,449, "Water Conservation—Increased Efficiency in Usage."

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

## **PLANT PATHOLOGY**

**Bai, Jianfa**, (see **Garrett, Karen A.**, Plant Pathology).

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

**Bockus, William W.**, Multisponsor, \$4,225, "Seed Treatment."

**Bockus, William W.**, US Department of Agriculture, \$24,974, "Development of Scab Resistant Wheat Cultivars for Kansas."

**Bockus, William W.**, US Department of Agriculture, \$44,072, "Marker-Assisted Characterization and Selection of Wheat Cultivars for Scab Resistance."

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

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

**Garrett, Karen A.**, The Land Institute, \$4,500, "Perenniality, Cytogenetics, and Disease Resistance of Thinopyrum spp. X Triticum aestivum Hybrids and Genetic Heterogeneity Effects on Disease Epidemiology—Cindy M. Cox."

**Garrett, Karen A.**, US Department of Agriculture, \$7,500, "Karnal Bunt Pest Risk Assessment Research."

**Garrett, Karen A.**, US Department of Agriculture, \$16,325, "Risk of Fusarium Head Blight Based on Larger Scale Patterns of Land Management."

**Garrett, Karen A.**, **Bai, Jianfa**, **Herman, Michael A.** (Biology), **Leach, Jan E.**, and **Wangemann, A. Philine** (Anatomy and Physiology), National Science Foundation, \$378,504, "Acquisition of Equipment to Enhance Gene Expression Analysis Capacity at Kansas State University."

**Garrett, Karen A.**, **Bai, Jianfa**, **Hulbert, Scot H.**, **Leach, Jan E.**, and **Travers, Steven E.**, US Department of Energy, \$610,061, "Bridging the Divide: Linking Genomics to Ecosystem Responses to Climate Change."

**Gill, Bikram S.**, National Science Foundation, \$99,179, "Haplotype Polymorphism in Polyploid Wheats and Their Diploid Ancestors."

**Gill, Bikram S.**, US Department of Agriculture, \$25,634, "Identification of Genes Encoding Essential Components of LR21-Mediated Leaf Rust Resistance in Wheat."

**Gill, Bikram S.**, US Department of Agriculture, \$7,500, "Karnal Bunt Pest Risk Assessment Research."

**Gill, Bikram S.**, US Department of Agriculture, \$70,342, "Map-Base Clone a Major Quantitative Trait Locus for Fusarium Head Blight Resistance in Wheat."

**Gill, Bikram S.**, US Department of Agriculture, \$36,000, "Positional Cloning of the Lr46/Yr29 Gene of Wheat."

**Gill, Bikram S.**, US Department of Agriculture, \$227,794, "Wheat Genetics Resource Center at Kansas State University."

**Gill, Bikram S.**, and **Nelson, James**, National Science Foundation, \$154,912, "Virtual Center Awards Dealing in the Wheat Genome: Development and Application of Large-Scale Reverse Genetic Tools for Crop Plants."

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

**Hulbert, Scot H.**, Kansas State University Foundation, \$25,515, "Non-Conventional Plant Improvement Technology."

**Hulbert, Scot H.**, and **Baldwin, Will G.** (Communications), US Department of Agriculture, \$22,000, "Implementation of Pest Diagnostics Information Modules."

**Hulbert, Scot H.**, and **Baldwin, Will G.** (Communications), US Department of Agriculture, \$88,700, "Safeguarding American Agriculture from New and Emerging Diseases and Pests: A GIS and Web-Based Disease Monitoring, Forecasting, and Information Delivery System."

**Hulbert, Scot H.**, and **Chen, Ming-Shun** (Entomology), US Department of Agriculture, \$202,864, "Functional Genomics of Hessian Fly Avirulence in Wheat."

**Hulbert, Scot H.**, **Leach, Jan E.**, and **Nelson, James**, US Department of Agriculture, \$89,956, "Coordinated Research, Education, and Extension Project for the Application of Genomic Discoveries to Improve Rice in the United States."

**Hulbert, Scot H.**, **Leach, Jan E.**, and **Trick, Harold N.**, US Department of Agriculture, \$328,391, "Dissection of the Rxo1 Defense Signaling Pathway in Maize."

**Hulbert, Scot H.**, **Leach, Jan E.**, and **Zeigler, Robert S.**, US Agency for International Development, \$51,946, "Identification and Functional Validation of Genes Conditioning Broad-Spectrum Disease Resistance in Rice and Pearl Millet."

**Hulbert, Scot H.**, and **Zeigler, Robert S.**, US Department of Agriculture, \$87,367, "Facilitate Multiple Stress Resistant Wheat and Alfalfa Germplasm."

**Hulbert, Scot H.**, (see **Garrett, Karen A.**, Plant Pathology).

**Jardine, Douglas J.**, Multisponsor, \$16,000, "Soybean Foliar Fungicide and Seed Treatment Tests."

**Jardine, Douglas J.**, North Central Soybean Research Program, \$18,000, "Sentinel Plots to Monitor the Spread of Asian Soybean Rust in the US Soybean Production Regions."

**Jardine, Douglas J.**, United Soybean Board, \$17,200, "Limiting Losses to Phytophthora sojae in the North Central Region."

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

**Jardine, Douglas J.**, and **O'Mara, Judith A.**, Kansas Soybean Commission, \$10,000, "Asian Soybean Rust Detection and Monitoring."

**Leach, Jan E.**, and **White, Frank F.**, National Science Foundation, \$71,520, "Xanthomonas Pathovars Enabling a Broad Comparative Genomics Approach to Understanding Vascular and Non-Vascular Bacterial Diseases of Dicots and Monocots."

**Leach, Jan E.**, (see **Garrett, Karen A.**, Plant Pathology).

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

**Leslie, John F.**, American Society for Microbiology, \$17,392, "Editor Position for Applied and Environmental Microbiology."

**Leslie, John F.**, Multisponsor, \$15,559, "Fusarium Research."

**Leslie, John F.**, US Agency for International Development, \$75,000, "Agroecology and Biotechnology of Fungal Pathogens of Sorghum and Millet."

**Leslie, John F.**, US Agency for International Development, \$30,200, "Diversity in Fusarium Species Causing Stalk and Ear Rot of Maize and Sorghum in West Africa."

**Leslie, John F.**, and **Bowden, Robert L.**, US Department of Agriculture, \$54,950, "Diversity of North and South American and Korean Populations of Gibberella zeae."

**Leslie, John F.**, and **Bowden, Robert L.**, US Department of Agriculture, \$62,030, "Genetic Mapping of Aggressiveness and Fertility Barriers in Gibberella Zeae."

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

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

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

**Stack, James P.**, Multisponsor, \$17,000, "Winter Wheat Seed Treatment Tests."

**Stack, James P.**, US Department of Agriculture, \$36,115, "Plant Diagnostic Center Laboratories for Plant Disease and Pest Diagnosis and Surveillance (Great Plains Diagnostic Network: Protecting Agriculture in America's Heartland)."

**Stack, James P.**, US Department of Agriculture, \$150,000, "Plant Diagnostic Laboratories for Plant Disease and Pest Diagnosis and Surveillance." (3 awards)

**Tang, Xiaoyan**, US Department of Agriculture, \$311,091, "Host Sensing, Type III Secretion System, Pseudomonas syringae."

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

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

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

**Travers, Steven E.**, (see **Garrett, Karen A.**, Plant Pathology).

**Trick, Harold N.**, Monsanto Company, \$75,000, "Identifying Target Genes for Nematode Resistance."

**Trick, Harold N.**, and **Todd, Timothy C.**, US Department of Agriculture, \$374,000, "RNA Interference: A Novel Approach for Soybean Cyst Nematode Resistance."

**Trick, Harold N.**, (see **Buschman, Larry L.**, Entomology).

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

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

**Valent, Barbara**, National Science Foundation, \$212,107, "Molecular and Cellular Biology of Biotrophic Interactions in Rice Blast Disease."

**White, Frank F.**, (see **Leach, Jan E.**, Plant Pathology).

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

## **SOUTHEAST AGRICULTURAL RESEARCH CENTER**

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

## **SOUTHWEST RESEARCH EXTENSION CENTER**

**Currie, Randall S.**, Multisponsor, \$17,500, "Weed Control Research in Southwest Kansas."

**Klocke, Norman L.**, and **Dumler, Troy** (Southwest Area Office), Kansas Soybean Commission, \$8,260, "Water Savings from Crop Residues in Irrigated Soybeans."

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

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

**Schlegel, Alan J.**, Multisponsor, \$12,950, "Soil Fertility and Soil Management Research for Western Kansas."



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

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

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

**Schlegel, Alan J.**, (see **Hale, Ronald L.**, Southwest Area Office).

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

## COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN

### ARCHITECTURE

**Simon, Madlen**, National Foundation on the Arts and the Humanities, \$4,995, "2004 Centennial Year Celebration of the KSU Department of Architecture."

### LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING

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

**Day, Dennis J.**, Prairie Band of Potawatomi Indians, \$3,750, "Mixed Use Residential Plan."

**Page, Robert L.**, Platin Properties, \$1,000, "Platin Properties SP05."

**Siepl-Coates, Susanne**, (see **Simon, Madlen**, Landscape Architecture/Regional and Community Planning).

**Simon, Madlen**, and **Siepl-Coates, Susanne**, Sunflower Foundation, \$99,207 (includes \$12,480 from Brent Bowman and Associates, and \$6,240 from Manhattan Chamber of Commerce), "SLIM DOWntown: Reducing Obesity through Community Redevelopment."

## COLLEGE OF ARTS AND SCIENCES

### BIOCHEMISTRY

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

**Kanost, Michael R.**, US Department of Health and Human Services, \$73,000, "Pilot Studies in Biochemistry of *Anopheles gambiae*."

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

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

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

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

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

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

**Lin, Dingbo**, and **Takemoto, Dolores J.**, National Organization for Rare Disorders, \$40,000, "Mutations of Protein Kinase C gamma in Spinocerebellar Ataxia Cause Altered Cell Gap Junctional Communication."

**Muthukrishnan, Subbarat, Beeman, Richard W.** (Entomology), **Kanost, Michael R.**, and **Kramer, Karl J.**, National Science Foundation, \$461,151, "Molecular Genetic and Functional Analysis of Chitin Synthase during Insect Development."

**Roche, Thomas E.**, US Department of Health and Human Services, \$54,750, "Regulation of Mammalian Pyruvate Dehydrogenase."

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

**Takemoto, Dolores J., Graves, Harriet J.** (Clinical Sciences), and **Takemoto, Larry J.** (Biology), US Department of Health and Human Services, \$292,000, "Expression of Therapeutic Proteins in the Whole Lens."

**Takemoto, Dolores J.**, (see **Lin, Dingbo**, Biochemistry).

**Tomich, John M.**, and **Schultz, Bruce D.** (Anatomy and Physiology), US Department of Health and Human Services, \$262,800, "Model Synthetic Channel Assemblies."

**Wang, Xuemin**, National Science Foundation, \$181,223, "Regulation and Function of Membrane Lipid Hydrolysis in Lipid-Based Signaling of Plants."

**Wang, Xuemin, Shah, Jyoti** (Biology), and **Welti, Ruth** (Biology), National Science Foundation, \$194,955, "Metabolomic Profiling of Lipids and Their Compositional Dynamics in Plant Stress Responses."

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

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

**Wei, Qize**, US Department of Health and Human Services, \$12,629, "Roles of MyoGEF and its Interacting Partners in Cell Division and Cell Signaling."

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

**Zolkiewski, Michal**, Dystonia Medical Research Foundation, \$65,115, "Activity and Interactions of Human TorsinA."

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

**Zolkiewski, Michal**, and **Kanost, Michael R.**, US Department of Health and Human Services, \$6,143, "Protein Structure and Function."

### BIOLOGY

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

**Asano, Katsura**, US Department of Health and Human Services, \$10,000, "Biomedical Excellence Faculty Scholar Award."

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

**Blair, John M.**, National Science Foundation, \$6,000, "Climatic Variability and Ecosystem Response: Precipitation Patterns, Soil Moisture Dynamics, and Productivity in Tallgrass Prairie."

**Blair, John M.**, National Science Foundation, \$820,000, "Konza Prairie LTER V: Long-Term Research on Grassland Dynamics and Global Change."

**Blair, John M.**, US Department of Agriculture, \$80,240, "Ecosystem Responses to Experimental Warming and More Extreme Precipitation Patterns."

**Blair, John M., Fay, Philip A., and Knapp, Alan K.,** US Department of Energy, \$134,231, "Belowground Responses to Multiple Climate Change Factors: Interactive Effects of Warming and More Extreme Precipitation Patterns on Grassland Ecosystems."

**Blair, John M.,** (see **Steward, David R.,** Civil Engineering).

**Blair, John M.,** (see **Uhlarik, John J.,** Psychology).

**Brown, Susan J.,** US Department of Health and Human Services, \$10,000, "Biomedical Excellence Faculty Scholar Award."

**Brown, Susan J.,** US Department of Health and Human Services, \$41,262, "Developing Advanced Statistical Tools for Microarray Data Analysis with Potential Applications to Lipodomics and Proteomics."

**Brown, Susan J.,** US Department of Health and Human Services, \$167,900, "KSU Bioinformatics Core."

**Brown, Susan J., Beeman, Richard W.** (Entomology), and **Denell, Robin E.,** US Department of Health and Human Services, \$585,181, "Genetic Control of Segmentation."

**Brown, Susan J., Beeman, Richard W.** (Entomology), and **Park, Yoonseong** (Entomology), US Department of Health and Human Services, \$45,500, "Tissue-Specific cDNA Libraries in *Tribolium castaneum*."

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

**Chapes, Stephen K.,** National Aeronautics and Space Administration, \$22,550, "Differentiation of Bone Marrow Macrophages in Space."

**Chapes, Stephen K.,** US Department of Health and Human Services, \$124,100, "KSU Undergraduate Support Core."

**Chapes, Stephen K.,** US Department of Health and Human Services, \$13,521, "Summer Scholar Awards."

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

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

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

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

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

**Cully, Jr., Jack F.,** National Science Foundation, \$104,801, "Landscape Effects on Disease Dynamics in Prairie Dogs."

**Cully, Jr., Jack F.,** US Department of Agriculture, \$6,000, "Challenge Cost-Share Agreement."

**Denell, Robin E.,** Kansas State University Foundation, \$18,546, "Cancer Center Core."

**Denell, Robin E.,** University of Kansas Endowment Association, \$10,000, "Higuchi-Endowment Association Research Achievement Award."

**Denell, Robin E., Beeman, Richard W.** (Entomology), **Brown, Susan J.,** and **Shippy, Teresa D.,** National Science Foundation, \$238,028, "Evolution of Genetic Mechanisms Controlling Developmental Fate."

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

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

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

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

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

**Fleming, Sherry D.,** US Department of Defense, \$39,996, "Role of Complement Activation in Mouse Hemorrhage and Resuscitation-Associated Injury."

**Gido, Keith B.,** US Department of the Interior, \$60,286, "Factors that Influence Current and Historical Distribution of Fishes in the Lower Colorado River."

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

**Gido, Keith B., and Dodds, Walter K.,** National Science Foundation, \$320,000, "Interactive Effects of Disturbance Frequency and Species Composition on Ecosystem Functioning of Intermittent Streams: A Test of Future Climate Change Scenarios."

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

**Gipson, Philip S.,** Rocky Mountain Elk Foundation, \$17,500, "Fort Riley Sustainability Study."

**Gipson, Philip S.,** US Department of the Interior, \$33,019, "Assessing Wildlife Responses to Vehicle Impacts."

**Gipson, Philip S.,** US Department of the Interior, \$145,168, "Changes in Vegetation, Small Mammal Communities, and Soil Compaction Associated with Military Training at the Smoky Hills Air National Guard Range, Kansas."

**Gipson, Philip S., Althoff, Donald P., and Pontius, Jeffrey S.** (Statistics), US Department of the Interior, \$216,981, "Land Condition Trend Analysis on Fort Riley."

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

**Hancock, Lynn E.,** US Department of Health and Human Services, \$59,200, "Genetics of Capsule Synthesis in *Enterococcus faecalis*."

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

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

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

**Herman, Michael A.,** (see **Garrett, Karen A.,** Plant Pathology).

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

**Hirt, Helmut,** American Society for Microbiology, \$2,500, "2005 ASM Branch Meeting Support."

**Joern, Anthony,** National Science Foundation, \$366,804, "Niche Diversification and Coexistence of Insect Herbivores along the Food Quality Axis: Do Grasshoppers Ride the Rails?."

**Joern, Anthony,** US Department of Energy, \$97,698, "Effect of Global Climate Change on Grassland Pests: Impact on Interactions between Rangeland, Grasshoppers and Spider Predators."

**Johnson, Loretta C., and Herman, Michael A.,** Kansas State University, \$2,000,000, "Targeted Excellence in Ecological Genomics: Building a Research Initiative into an Institute."

**Johnson, Loretta C., and Herman, Michael A.,** National Science Foundation, \$479,650, "Functional Genomic Approaches to Study Organismal Response to Global Environmental Change."

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

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

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

**Mora Fayos, Silvia,** Diabetes Action Research and Education Foundation, \$44,000, "Effects of Adiponectin/ACRP30 on Muscle Cells."

**Mora Fayos, Silvia,** US Department of Health and Human Services, \$58,400, "Protein Interactions that Regulate Leptin Secretion."

**Passarelli, A. Lorena**, US Department of Health and Human Services, \$73,000, "Characterization of a Viral Fibroblast Growth Factor."

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

**Paukert, Craig**, Kansas Department of Wildlife and Parks, \$14,975, "Wildlife Surveys and Research: Assessment of Streams on Public Lands."

**Paukert, Craig**, Turner Enterprises, Inc., \$100,000, "Prairies Streams Native Fishes Survey."

**Paukert, Craig**, US Department of the Interior, \$107,546, "Evaluation of the Trophy Potential for Flathead Catfish in the Kansas River."

**Paukert, Craig**, and **Whittier, Joanna B.**, US Department of the Interior, \$158,612, "Identification of Data Gaps in Published and Unpublished Literature on Fishes in the Lower Colorado River."

**Rintoul, David A.**, (see **Welti, Ruth**, Biology).

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

**Sandercok, Brett K.**, US Department of the Interior, \$18,400, "Restoring Rock Ptarmigan in the Aleutian Islands, Alaska."

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

**Shah, Jyoti**, US Department of Agriculture, \$40,000, "Enhancing Resistance to Scab in Wheat by Overexpressing the Wheat and Arabidopsis NPR1 Gene."

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

**Spooner, Brian S.**, US Department of Health and Human Services, \$31,965, "Laboratory Animal Care Services Facilities Enhancement."

**Takemoto, Larry J.**, Sigma Xi Scientific Research Society, \$500, "Analysis of Aggregate Protein in the Cataract Lens—Stacy M. Jackson."

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

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

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

**Upton, Steve J.**, US Department of Health and Human Services, \$31,848, "Polyamine Metabolism of Cryptosporidia: Rational Therapy."

**Von Ohlen, Tonia L.**, US Department of Health and Human Services, \$134,875, "Mechanisms of Dorsolateral Patterning During Neural Development."

**Welti, Ruth**, US Department of Health and Human Services, \$17,154, "Data Base for Lipidomics."

**Welti, Ruth**, **Rintoul, David A.**, **Shah, Jyoti**, and **Sun, X. Susan** (Grain Science and Industry), National Science Foundation, \$303,939, "Establishment of the Lipidomics Research Center at Kansas State University."

**Welti, Ruth**, and **Shah, Jyoti**, National Science Foundation, \$118,687, "Metabolomic Profiling of Lipids and Their Compositional Dynamics in Plant Stress Responses."

**Welti, Ruth**, and **Shah, Jyoti**, National Science Foundation, \$32,675, "Metabolomic Profiling of Membrane Lipids and Their Compositional Dynamics in Plant Stress Responses."

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

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

**Wilson, Gail T.**, and **Hartnett, David C.**, National Science Foundation, \$119,117, "Testing a Unified Hypothesis of Mycorrhizal Function."

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

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

**Wisely, Samantha**, Arizona Game and Fish Department, \$11,000, "Biomedical Survey of Wild Black-Footed Ferrets."

## CHEMISTRY

**Aakeroy, Christer B.**, National Science Foundation, \$140,343, "Developing Supramolecular Synthesis: From Molecular Function to Supramolecular Assembly."

**Bossmann, Stefan**, National Science Foundation, \$68,750, "Porin from *Mycobacterium smegmatis* (MspA) as a Tool for the Development of Functional Nanostructures on Gold-Electrodes."

**Collinson, Maryanne M.**, National Science Foundation, \$150,000, "Enhancing the Performance and Applications of Sol-Gel Derived Materials via Template Based Strategies."

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

**Culbertson, Christopher T.**, American Chemical Society, \$47,900, "Fabrication of Novel Sol-Gel Modified Poly(dimethylsiloxane) Microfluidic Devices with High Electroosmotic Mobilities and Hydrophilic Channel Wall Characteristics."

**Culbertson, Christopher T.**, National Aeronautics and Space Administration, \$100,000, "Automated Microfluidic Devices for Monitoring Biological Systems in Space."

**Culbertson, Christopher T.**, National Aeronautics and Space Administration, \$77,000, "Biosentinel: Biology-Based Microfluidic Reporter Technology for Monitoring Environmental Stressors."

**Culbertson, Christopher T.**, National Science Foundation, \$67,750, "Novel Materials and Methods for the Fabrication and Coating of Microfluidic Devices."

**Culbertson, Christopher T.**, US Department of Energy, \$50,000, "NIH-Approved Bioengineering Research."

**Culbertson, Christopher T.**, US Department of Health and Human Services, \$90,989, "High Throughput Measurement of Cellular Signaling."

**Higgins, Daniel A.**, National Science Foundation, \$357,000, "High Resolution Optical Microscopy Studies of Aggregation and Dynamics in Photoactive Self-Assembled Polyelectrolyte-Surfactant Composites."

**Higgins, Daniel A.**, and **Collinson, Maryanne M.**, National Science Foundation, \$100,000, "Single Molecule Spectroscopy Studies of the Nanoscale Properties of Microporous/Mesoporous Silicate Films Prepared by the Sol-Gel Process."

**Hua, Duy H.**, Kansas State University Foundation, \$15,900, "Graduate Student Summer Stipend/Innovative Research Award."

**Jankowiak, Ryszard J.**, US Department of Defense/National Aeronautics and Space Administration, \$160,000, "Novel Concept for Desalination of Seawater."

**Klabunde, Kenneth J.**, US Department of Defense, \$540,092, "Enzyme, Antibody, and Photocatalytically Active Nanoscale Scavengers and Sensors for Chemical Warfare and Biological Agents."

**Maatta, Eric A.**, Honda Research Institute USA, Inc., \$29,727, "Organic Media-Soluble Polyoxometalate Salts for Electrocatalysis Screening."

**Ortiz, J. Vincent**, National Science Foundation, \$153,000, "Electron Propagator Theory and Electronic Structure of Nucleotides, Double Rydberg Anions, Metal-Oxide Clusters and Metal-Base Complexes."

**Ortiz, J. Vincent**, National Science Foundation, \$222,459, "Selective Prediction of Novel Molecular Wires."



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

**Montelone, Beth A., Dyer, Ruth A.** (Office of the Provost), **Franks, Suzanne E.** (Dean of Engineering), **King, Terry S.** (Dean of Engineering), **Unger, Elizabeth A.** (Vice Provost for Academic Services and Technology), and **White, Stephen E.**, National Science Foundation, \$586,471, "ADVANCE Institutional Transformation Award: Institutional Transformation at Kansas State University."

**Watt, Susan D.**, US Department of Health and Human Services, \$7,000, "Health Careers Pathways Program."

**White, Stephen E.**, (see **Montelone, Beth A.**, Dean of Arts and Sciences).

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

## ECONOMICS

**Babcock, Michael W.**, Kansas Department of Transportation, \$14,500, "Approximation of the Economic Impacts of the Kansas Comprehensive Transportation Program."

**Chi, Wei, W.E.** Upjohn Institute for Employment Research, \$9,244, "How Important are the Incentive Effects of Unemployment Insurance? Implications for Public Policy."

**Ragan Jr, James F.**, Multisponsor, \$2,640, "Roe R. Cross Chair of Economics."

**Turner, Tracy M.**, US Department of Housing and Urban Development, \$15,000, "Housing Cost, Non-Housing Consumption, and Household Debt."

## GEOGRAPHY

**Dobbs, Mary E.**, (see **Harrington, Lisa M.**, Geography).

**Goodin, Douglas G., Harrington Jr, John A., and Hutchinson, J. M. Shawn**, National Aeronautics and Space Administration, \$292,708, "HYSPIRE: Hyper-Resolution Remote Sensing of Kansas Rural Environments."

**Goodin, Douglas G., and Hutchinson, J. M. Shawn**, US Department of Health and Human Services, \$102,911, "Impact of Rapid Anthropogenic Land Cover Change in the Chaco and Interior Atlantic Forest in Paraguay on Hantavirus Ecology."

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

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

**Harrington Jr, John A., Goodin, Douglas G., Harrington, Lisa M., Lu, Max, and White, Stephen E.** (Dean of Arts and Sciences), National Science Foundation, \$79,456, "Infrastructure to Develop a Human-Environment Regional Observation Network." (2 awards)

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

**Harrington Jr, John A.**, (see **Hutchinson, J. M. Shawn**, Geography).

**Harrington, Lisa M., Dobbs, Mary E., and Peterson, Jeffrey M.** (Agricultural Economics), National Science Foundation, \$9,850, "Economic Impact of the Conservation Reserve Program on Households and Counties."

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

**Hutchinson, J. M. Shawn**, US Department of the Interior, \$38,523, "Cooperative Agreement between the U.S. Department of the Interior, National Park Service and Kansas State University."

**Hutchinson, J. M. Shawn, and Harrington Jr, John A.**, Kansas State University, \$550,000, "Geospatial Technology Infrastructure Enhancement Program - Phase II."

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

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

## GEOLOGY

**Archer, Allen W.**, Kansas Department of Transportation, \$11,909, "Development of a Fine-Scale Sequence Stratigraphy on the Lawrence Formation (Douglas Group) with Concern to Rock/Slope Failure."

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

**Gao, Stephen S., Cullers, Robert L., and Liu, Kelly**, National Science Foundation, \$139,247, "Continental Crustal Composition and Evolution: Constraints from Receiver Function Analysis."

**Hubbard, Mary S.**, (see **Bolton, Timothy A.**, Physics).

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

**Nicolaysen, Kirsten E.**, National Science Foundation, \$114,334, "Natural Experiment to Examine Hafnium Mobility in Subduction Zones."

**Nicolaysen, Kirsten E.**, (see **Uhlarik, John J.**, Psychology).

## HISTORY

**Parillo, Mark P.**, Kansas State University Foundation, \$40,000, "Institute for Military History and 20th Century Studies."

## MATHEMATICS

**Auckly, David R.**, National Science Foundation, \$154,343, "Brainstorming and Barnstorming: A Research Experience for Undergraduates Site at KSU."

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

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

**Hansen, Soren**, National Science Foundation, \$42,443, "Geometric Aspects of 2+1-Dimensional Topological Quantum Field Theories."

**Hoehn, Gerald H.**, National Science Foundation, \$38,318, "Generalized Kac-Moody Algebras Arising from String Theory."

**Korten, Marianne**, National Science Foundation, \$84,000, "Free Boundary Problems with a Degenerate Phase: Regularity of Solutions and Interphases."

**Korten, Marianne, and Moore, Charles N.**, Mathematical Sciences Research Institute, \$2,000, "Prairie Analysis Seminar 2004-2005."

**Lin, Zongzhu**, National Science Foundation, \$149, "Graduate Student Travel Award—Yiqiang Li."

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

## MUSIC

**Walker, Rodney G.**, Master Teacher, Inc., \$12,000, "Summer Choral Institute."

## PHILOSOPHY

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

## PHYSICS

**Bolton, Timothy A.**, US Department of Energy, \$6,000, "US Compact Muon Solenoid Teacher Fellowship."

**Bolton, Timothy A., Ferguson, Carolyn J.** (Biology), **Glymour, Bruce D.** (Philosophy), **Hubbard, Mary S.** (Geology), and **Kambhampati, Srinivas** (Entomology), Kansas State University, \$335,000, "Center for the Understanding of Origins."

**Bolton, Timothy A., Horton-Smith, Glenn A., Ratra, Bharat, Sidwell, Ronald A., Stanton, Noel R., and von Toerne, Eckhard**, US Department of Energy, \$538,080 (includes \$106,080 from University of Kansas), "Kansas Advanced Semiconductor Project."

**Bolton, Timothy A., Horton-Smith, Glenn A., Ratra, Bharat, Sidwell, Ronald A., Stanton, Noel R., and von Toerne, Eckhard**, US Department of Energy, \$500,000, "Heavy Quark and Neutrino Physics."

**Bolton, Timothy A., Ratra, Bharat, Sidwell, Ronald A., Stanton, Noel R., and von Toerne, Eckhard**, Kansas Technology Enterprise Corporation, \$131,419, "Kansas Advanced Semiconductor Project."

**Bolton, Timothy A., Sidwell, Ronald A., Stanton, Noel R., and von Toerne, Eckhard**, National Science Foundation, \$12,100, "Quarknet."

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

**Chang, Zenghu**, National Science Foundation, \$157,000, "High Order Harmonic Generation in Aligned Molecules."

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

**Corwin, Kristan L.**, National Science Foundation, \$400,000, "Fiber-Based Optical Frequency Standards Characterized with Optical Frequency Combs."

**Corwin, Kristan L.**, US Department of Defense, \$60,050, "Novel Wavelength Standards in the Near Infrared."

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

**Esry, Brett D.**, US Department of Defense, \$110,000, "Theoretical Investigation of Atom Optical Elements."

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

**Jiang, Hongxing, and Lin, Jingyu**, National Aeronautics and Space Administration, \$25,000, "Metal-Organic Chemical Vapor Deposition Growth of AlGaIn Materials."

**Jiang, Hongxing, and Lin, Jingyu**, US Department of Defense, \$444,579, "III-Nitride UV Optoelectronic Devices for Bio-Agents Detection."

**Jiang, Hongxing, and Lin, Jingyu**, US Department of Defense, \$145,000, "Instrumentation for Growth of Rare Earth Doped III-Nitrides for Optical Communications."

**Jiang, Hongxing, and Lin, Jingyu**, US Department of Defense, \$129,890, "Wide Bandgap III-Nitride Micro- and Nano-Photonics."

**Jiang, Hongxing, and Lin, Jingyu**, US Department of Energy, \$149,815, "Optical and Electrical Properties of III-V Nitride Wide Bandgap Semiconductors."

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

**Law, Bruce M.**, US Department of Energy, \$159,205, "Neutron and X-Ray Reflectometry Study of Surface Critical Phenomena."

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

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

**Rahman, Talat S.**, National Science Foundation, \$20,000, "U.S.—Pakistan Workshop: 29th International Nathiagali Summer College on Physics and Contemporary Needs: Islamabad, Pakistan June/July 2004."

**Rahman, Talat S.**, US Department of Energy, \$185,656, "Controlling Structural, Electronic, and Energy Flow Dynamics of Catalytic Processes through Tailored Nanostructures."

**Rahman, Talat S., Hsu, William H.** (Computing and Information Sciences), and **Wallentine, Virgil E.** (Computing and Information Sciences), National Science Foundation, \$766,344, "Parallel Data Mining for Nanoscale Kinetic Monte Carlo Simulation Models."

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

**Rebello, N. Sanjay**, Kansas Board of Regents, \$28,681, "Curriculum Resources for Physics Instruction Using Interactive Technologies and Digital Formats."

**Rebello, N. Sanjay**, National Science Foundation, \$14,607, "CoMPASS: Integrating Digital Text in Design-Based Science Classes."

**Rebello, N. Sanjay**, National Science Foundation, \$91,170, "Research on Students' Mental Models, Learning and Transfer as a Guide to Application-Based Curriculum Development and Instruction in Physics."

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

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

**Sorensen, Christopher M.**, National Science Foundation, \$173,225, "Nanoscale Interdisciplinary Research Team: Multi-Scale Simulation of Nanoparticle Aggregation for Scale Up of High-Rate Synthesis Methods."

**Sorensen, Christopher M., and Chakrabarti, Amitabha**, National Aeronautics and Space Administration, \$108,998, "Aggregation in Dense Systems: Crossover from Cluster-Cluster-Aggregation to Percolation."

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

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

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

**Zollman, Dean A.**, National Science Foundation, \$333,575, "Pathway II: Addressing the Needs of the Nation's Physics Teachers through State-of-the-Art Video Applications and Contemporary Pedagogy."

## PSYCHOLOGY

**Brannon, Laura A.**, (see **Shanklin, Carol W.**, Hotel, Restaurant, Institution Management and Dietetics).

**Crow, Janis J.**, (see **Shanteau, James C.**, Psychology).

**Fullagar, Clive J. A.**, US Department of Health and Human Services, \$2,500, "Training in Occupational Health Psychology."

**Kiefer, Stephen W.**, DOV Pharmaceutical, Inc., \$15,201, "Anti-Depressant Medication and Male Rat Sexual Behavior."

**Kiefer, Stephen W., and Monaco, Gregory E.**, Great Plains Network Consortium, \$121,485, "Funding for Director of Research—Great Plains Network."

**Monaco, Gregory E.**, (see **Kiefer, Stephen W.**, Psychology).

**Shanteau, James C., and Crow, Janis J.**, National Science Foundation, \$9,106, "Doctoral Dissertation Research in Decision, Risk and Management Sciences: Examining Processes for Unstructural Decision Making."

**Shanteau, James C.**, US Department of Defense, \$148,061, "Performance Evaluation of Expert Teams in Technological Environments."

**Shanteau, James C.**, US Department of Transportation, \$20,000, "National Air Traffic Performance Enhancement (NATPRO) Series 1: Concentration."

**Uhlarik, John J., Blair, John M.** (Biology), **Chapes, Stephen K.** (Biology), **Goodin, Douglas G.** (Geography), **Hubbard, Mary S.** (Geology), and **Nicolaysen, Kirsten E.** (Geology), National Aeronautics and Space Administration, \$41,149, "Kansas Space Grant Consortium."

**Uhlarik, John J.**, US Department of Transportation, \$100,000, "Human Factors: Issues in Avionics Certification."



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

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

**Bressers, Bonnie M.**, Kansas Health Foundation, \$18,512, "Kansas Health Foundation Children's Health Reporting Project."

### **SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK**

**Logan, Brad R.**, and **Ritterbush, Lauren W.**, US Department of the Interior, \$148,230, "National Register of Historic Places Evaluation of Selected Sites at Lovewell Reservoir, Jewell County, Kansas."

**Ritterbush, Lauren W.**, (see **Logan, Brad R.**, Sociology, Anthropology, and Social Work).

**Roper, Donna C.**, US Department of the Interior, \$24,974, "Continued Fieldwork and Analysis on Upper Republican Sites Harry Strunk Lake, Frontier County, Nebraska."

**Williams, L. Susan**, US Department of Justice, \$19,946, "Impact of Incarceration on Young Women in Kansas."

### **SPEECH COMMUNICATION, THEATRE AND DANCE**

**Procter, David E.**, Kansas State University, \$450,000, "Institute for Civic Discourse and Democracy."

### **STATISTICS**

**Loughin, Thomas M.**, National Science Foundation, \$53,170, "Estimation and Testing for Associations with Multiple-Response Categorical Variables from Complex Surveys."

**Pontius, Jeffrey S.**, US Department of the Interior, \$52,900, "Comprehensive Sampling Design for Environmental Monitoring as Related to the Land Condition Trend Analysis Program at Fort Riley, Kansas."

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

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

## **COLLEGE OF BUSINESS ADMINISTRATION**

### **ACCOUNTING**

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

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

**Ebadi, Yar M.**, Kansas State University Foundation, \$302,489, "Kansas State University Foundation Support."

**Katz, Jeffrey P.**, US Department of Education, \$53,000, "Promoting Internationalization in Central Kansas: The Business Education and Student Training Initiative at Kansas State University (PICK-the-BEST-In-Kansas)."

### **MANAGEMENT**

**Katz, Jeffrey P.**, (see **Dickson, Marsha A.**, Apparel, Textiles, and Interior Design).

**Niehoff, Brian P.**, and **Smith, Gregory L.**, Central Plains Regional Health Care Foundation, \$16,400, "Clinics' Patient Index and Future Directions."

**Niehoff, Brian P.**, and **Vruwink, David R.** (Accounting), Multisponsor, \$4,250, "MBA Practicum."

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

## **COLLEGE OF EDUCATION**

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

**Flaherty, Roberta D.**, National Academic Advising Association, \$746,091, "National Academic Advising Association Executive Office."

**Havlicek, Barbara J.**, Kansas Foundation for Agriculture in the Classroom, \$93,730, "Kansas Foundation for Agriculture in the Classroom."

**Havlicek, Barbara J.**, Multisponsor, \$9,676, "Council for Public School Improvement."

**Havlicek, Barbara J.**, Multisponsor, \$68,712, "Educational Computer Assistance."

**Havlicek, Barbara J.**, Schools for Quality Education, Inc., \$7,000, "Schools for Quality Education."

**Herrera, Socorro G.**, Flint Hills Special Education Cooperative, \$3,005, "Flint Hills Special Education Cooperative."

**Herrera, Socorro G.**, US Department of Education, \$389,528 (includes \$56,831 from USD 253—Emporia, and \$56,831 from USD 305—Salina), "Making the Grade."

**Herrera, Socorro G.**, US Department of Education, \$340,000, "Operation ADVANCE (Achieving Values and Accomplishments for Migrant Adults through Networking Community Entities)."

**Herrera, Socorro G.**, US Department of Education, \$186,913 (includes \$36,913 from USD 253—Emporia), "Project CARE."

**Herrera, Socorro G.**, US Department of Education, \$257,362, "Project Maestra."

**Herrera, Socorro G.**, US Department of Education, \$347,048, "Project Synergy."

**Middendorf, B. Jan**, and **Thurston, Linda P.**, Kansas Board of Regents, \$425,000, "KAN-ED Evaluation—Phase III."

**Murry, Kevin G.**, US Department of Education, \$101,130, "Las Estrellas."

**Murry, Kevin G.**, US Department of Education, \$239,626, "Project Chrysalis."

**Murry, Kevin G.**, US Department of Education, \$229,800, "Project Dimelo."

**Murry, Kevin G.**, US Department of Education, \$233,622, "Project New Horizons."

**Staver, John R.**, (see **Neilsen, Mitchell L.**, Computing and Information Sciences).

**Thurston, Linda P.**, (see **Middendorf, B. Jan**, Dean of Education).

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

### **ELEMENTARY EDUCATION**

**Allen, David S.**, (see **Bay-Williams, Jennifer M.**, Elementary Education).

**Bay-Williams, Jennifer M.**, National Science Foundation, \$9,678, "Research and Revision of the TIMS/Math Trailblazers Elementary Mathematics Curriculum."

**Bay-Williams, Jennifer M.**, **Allen, David S.**, and **Bennett, Andrew G.** (Mathematics), US Department of Education, \$208,601 (includes \$8,610 from USD 475), "Advancing Content Understanding in Mathematics through Effective Networks (ACUMEN) Project."

**Shroyer, Margaret G., Bennett, Andrew G.** (Mathematics), and **Yahnke, Sally J.** (Secondary Education), US Department of Education, \$1,971,742 (includes \$23,550 from Dodge City Community College, \$23,509 from Garden City Community College, \$23,509 from Seward County Community College, \$17,272 from USD 214—Ulysses, \$11,459 from USD 383—Manhattan, \$17,634 from USD 443—Dodge City, \$17,564 from USD 457—Garden City, and \$12,360 from USD 475—Geary County), “Equity and Access: Enhancing Teacher Quality through Multi-Institutional Partnerships.”

## SECONDARY EDUCATION

**Goodson, F. Todd**, International Reading Association Inc., \$5,000, “Editorship of Journal of Adolescent and Adult Literacy.”

**Goodson, F. Todd**, US Department of Education, \$46,778 (includes \$3,778 from USD 320—Wamego), “Flint Hills Writing Project.”

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

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

**Spears, Jacqueline D., McGrath, Diane**, and **Thurston, Linda P.** (Dean of Education), National Science Foundation, \$291,193, “Seeing Gender: Tools for Change.”

**Wright, Emmett L.**, National Science Foundation, \$189,690, “Intergovernmental Personnel Act Assignee Cost Data.”

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

## COLLEGE OF ENGINEERING

### ADVANCED MANUFACTURING INSTITUTE

**Case, Scott A.**, (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

**Kramer, Bradley A.**, Kansas Technology Enterprise Corporation, \$765,284, “Kansas Technology Enterprise Corporation Center of Excellence Grant Agreement.”

**Kramer, Bradley A., Amanor-Boadu, Vincent R.** (Agricultural Economics), **King, Terry S.** (Dean of Engineering), **Madl, Ronald L.** (Grain Science and Industry), and **Tucker, Jeffrey W.**, National Science Foundation, \$211,047 (includes \$20,069 from KTEC), “Partnership to Accelerate Commercialization of Kansas Bioscience Products and Technologies.”

**Kramer, Bradley A.**, and **Case, Scott A.**, Mid-America Manufacturing Technology Center (MAMTC), \$142,073 (includes \$40,822 from Kansas Technology Enterprise Corporation, “Agreement to Provide Technology Diffusion and Product Development Services to MAMTC Clients.”

**Kramer, Bradley A.**, and **Case, Scott A.**, Multisponsor, \$9,028, “Projects Identified for MAMTC.”

**Kramer, Bradley A.**, and **Tucker, Jeffrey W.**, Kansas Department of Commerce, \$90,000, “Early Stage of Technology Development.”

**Kramer, Bradley A.**, and **Tucker, Jeffrey W.**, Kansas Technology Enterprise Corporation, \$50,000, “Economic Development Administration ‘Early Stage Technology Development Assistance Center’.”

**Kramer, Bradley A.**, and **Tucker, Jeffrey W.**, Kansas Technology Enterprise Corporation, \$20,000, “Partnership to Accelerate Commercialization of Kansas Bioscience Products and Technologies.”

**Kramer, Bradley A.**, and **Tucker, Jeffrey W.**, US Department of Commerce, \$235,000 (includes \$30,000 from KS Dept of Commerce, and \$50,000 from KTEC), “Early-Stage Technology Development Assistance Center: Bridging the Gap Between New Technologies and Commercialization.”

**Tucker, Jeffrey W.**, Lamar, Kansas, Jaycees, \$11,163, “Seat Belt Convincer Trailer Build.”

**Tucker, Jeffrey W.**, Multisponsor, \$429,579, “Advanced Manufacturing Institute - Manufacturing Learning Center.”

**Tucker, Jeffrey W.**, (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

### BIOLOGICAL AND AGRICULTURAL ENGINEERING

**Barnes, Philip L.**, US Environmental Protection Agency, \$20,000, “Cooperative Agreement to Monitor Pesticides in Big and Little Blue River Basins.”

**Barnes, Philip L.**, US Environmental Protection Agency, \$20,000, “Cooperative Agreement with Nebraska Department of Agriculture.”

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

**Hutchinson, Stacy L.**, National Science Foundation, \$500, “Travel Award for Ik Jae Kim.”

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

**Koelliker, James K.**, US Department of the Interior, \$45,400, “Modeling and Field Experimentation to Determine the Effects of Land Terracing and Non-Federal Reservoirs on Water Supplies in the Republican River Basin above Hardy, Nebraska.”

**Koelliker, James K.**, US Environmental Protection Agency, \$213,000, “Evaluation System for Alternative Technologies for Feeding Operations (Concentrated Animal Feeding Operations) to Manage Process Wastewater and Nutrients.”

**Koelliker, James K.**, (see **Mankin, Kyle R.**, Biological and Agricultural Engineering).

**Koelliker, James K.**, (see **Steward, David R.**, Civil Engineering).

**Maghirang, Ronaldo G., Broce, Alberto B.** (Entomology), **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), **Harner III, Joseph P.** (Extension Biological and Agricultural Engineering), **Murphy, James P.** (Extension Biological and Agricultural Engineering), and **Pickrell, John A.** (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$116,090, “Air Quality: Odor, Dust, and Gaseous Emissions from Concentrated Animal Feeding Operations in the Southern Great Plains.”

**Mankin, Kyle R.**, and **Koelliker, James K.**, US Environmental Protection Agency, \$85,400, “Kanopolis Watershed Assessment - Part 3.”

**Mankin, Kyle R.**, (see **Peterson, Jeffrey M.**, Agricultural Economics).

**Rogers, Danny H.**, (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

**Taylor, Randal K.**, (see **Staggenborg, Scott A.**, Agronomy).

**Wang, Donghai**, US Department of Agriculture, \$58,222, “Fermentation Quality of Sorghum.”

**Wang, Donghai**, and **Seib, Paul A.** (Grain Science and Industry), US Department of Agriculture, \$450,000, “Sorghum as a Viable Renewable Resource for Biofuels and Biobased Products: Sorghum BioConversion Research.”

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

**Zhang, Naiqian**, John Deere Company, \$87,588, "Embedded Systems Development for Sensor Fusion of GPS and Vision."

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

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

## **CENTER FOR HAZARDOUS SUBSTANCE RESEARCH**

**Erickson, Larry E.**, Ag Partners Inc., \$37,052, "Remediation of Contaminated Soil and Water."

**Erickson, Larry E.**, **Eckels, Steven J.** (Institute for Environmental Research), **Guikema, James A.** (Vice Provost for Research and Dean of Graduate School), and **Leven, Blase A.**, US Department of Defense, \$3,163,000, "Urban Operations Laboratory Research."

**Erickson, Larry E.**, and **Kulakow, Peter A.** (Agronomy), US Department of Energy, \$20,000, "Design and Implementation of Remediation Technologies at Former USDA Grain Bin Sites."

**Erickson, Larry E.**, and **Kulakow, Peter A.** (Agronomy), US Environmental Protection Agency, \$25,000, "Cooperative Agreement between U. S. Environmental Protection Agency and Kansas State University to Provide Technical Assistance in Support of Bioremediation and Phytoremediation Research in Kazakhstan."

**Leven, Blase A.**, US Environmental Protection Agency, \$23,000, "Des Moines Reinvestment Initiative."

**Leven, Blase A.**, (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

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

## **CHEMICAL ENGINEERING**

**Edgar, James H.**, National Science Foundation, \$78,971, "Collaborative Research: Analysis of Defects and Their Causes in Bulk Aluminum Nitride Crystals."

**Edgar, James H.**, National Science Foundation, \$500, "Sublimation Growth of Aluminum Nitride-Silicon Carbide Alloy Crystals on SiC(0001) Substrates—Zheng Gu."

**Edgar, James H.**, US Department of Defense, \$150,000, "Bulk Aluminum Nitride Crystal Growth Using Silicon Carbide Seed Crystals."

**Edgar, James H.**, US Department of Defense, \$75,000, "Highly Durable Materials to Support Large AlN Crystal Growth."

**Edgar, James H.**, US Department of Defense, \$40,131, "Rapid Growth of Bulk Aluminum Nitride Crystals."

**Edgar, James H.**, (see **Singh, Gurdip**, Computing and Information Sciences).

**Erickson, Larry E.**, and **Bhandari, Alok** (Civil Engineering), US Department of Agriculture, \$25,258, "Development of the DT Animal Waste Treatment System."

**Erickson, Larry E.**, and **Davis, Lawrence C.** (Biochemistry), National Science Foundation, \$6,929, "Recruiting Native Americans into Environmental Science."

**Hohn, Keith L.**, US Department of Defense, \$181,000, "X-Ray Photoelectron Spectrometer for Characterization of Partial Oxidation Catalysts."

**Pfromm, Peter H.**, AgRenew, Inc., \$3,919, "Electrodialysis of Fermentation Broth."

**Pfromm, Peter H.**, National Science Foundation, \$213,119, "Electrodialysis/Reverse Osmosis - Development of an Improved Method to Concentrate Dissolved Organic Matter from Seawater."

**Pfromm, Peter H.**, (see **Rezac, Mary E.**, Chemical Engineering).

**Rezac, Mary E.**, National Aeronautics and Space Administration, \$19,367, "Nanoporous Separators for Lithium-Ion Batteries."

**Rezac, Mary E.**, USFilter-Envirex, \$11,064, "Digester Membrane Evaluation."

**Rezac, Mary E.**, and **Pfromm, Peter H.**, US Department of Agriculture, \$360,000, "Membrane Reactor Technology for the Production of Partially Hydrogenated Vegetable Oil with a Low Trans-Fatty Acid Content."

## **CIVIL ENGINEERING**

**Bhandari, Alok**, (see **Erickson, Larry E.**, Chemistry).

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

**Dissanayake, Sunanda**, Kansas Department of Transportation, \$65,000, "Exploring the Methods to Increase Safety Belt Usage in Kansas."

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

**Esmaily, Asadollah**, Kansas Department of Transportation, \$10,000, "Development of a Simple Procedure for Evaluation of Bridge."

**Esmaily, Asadollah**, Kansas Department of Transportation, \$30,000, "Feasibility of Using Clear-Span Arches for Short-Span Bridges."

**Hossain, Mustaque A.**, and **Romanoschi, Stefan A.**, Kansas Department of Transportation, \$115,736, "Field Verification of Superpave Mixture Properties to be Used as Inputs in the AASHTO Mechanistic Design Guide for Pavement Structures."

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

**Najjar, Yacoub M.**, Kansas Department of Transportation, \$65,000, "Mining the Kansas Traffic-Crash Database to Extract and Discover New Useful Correlations (Phase II)."

**Peterman, Robert J.**, High Concrete Structures, Inc., \$62,200, "Evaluating the Bond Performance of Self-Consolidating Concrete in Prestressing Applications." (2 awards)

**Peterman, Robert J.**, Wiss, Janney, Elstner Associates, Inc., \$24,824, "Development and Evaluation of Strand-Bond Pullout Tests."

**Reddi, Lakshmi N.**, and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$75,000, "Midwest Hazardous Substance Research Center Technical Assistance to Brownfields."

**Reddi, Lakshmi N.**, and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$195,000, "Technical Outreach and Service to Native American Communities (TOSNAC): Center for Integrated Remediation using Managed Natural Systems."

**Reddi, Lakshmi N.**, and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$56,250, "Training and Technical Assistance to Brownfields (TTAB) Grants."

**Reddi, Lakshmi N.**, and **Xiao, Ming**, Kansas Livestock Association, \$57,311, "Engineering Applications of KLA Compost Materials."

**Romanoschi, Stefan A.**, Kansas Department of Transportation, \$16,478, "Determination of the Response of the US-75 Experimental Flexible Pavement Structures under Dynamic Loading."

**Romanoschi, Stefan A.**, US Department of Transportation, \$64,957, "Thin Bonded Rigid Overlay on Portland Cement Concrete and Hot-Mix Asphalt Pavements."



**Romanoschi, Stefan A., Dissanayake, Sunanda, and Hossain, Mustaque A.**, US Department of Transportation, \$59,996, "Implementation of the 2002 AASHTO Design Guide for Pavement Structures."

**Romanoschi, Stefan A., and Hossain, Mustaque A.**, US Department of Transportation, \$884,362, "Midwest States Accelerated Pavement Testing Pooled Funds Program (Verification of Mechanistic - Empirical Design Models for Flexible Pavements through Accelerated Pavement Testing."

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

**Russell, Eugene R.**, Insurance Institute for Highway Safety, \$5,000, "Roundabout Field Study II."

**Russell, Eugene R.**, Kansas Department of Transportation, \$20,000, "Develop a Crash Identification and Mitigation Guide for Rural, Two-Lane State and Local Highways."

**Russell, Eugene R.**, Kansas Department of Transportation, \$49,000, "Study of the Effect of ADA Accessibility Proposals on Kansas Roundabouts."

**Russell, Eugene R., Rys, Malgorzata J.** (Industrial and Manufacturing Systems Engineering), and **Stokes, Robert W.**, Kansas Department of Transportation, \$40,570, "Guidelines for Center-of-Lane and Shoulder Rumble Strips on Two-Lane Rural Highways."

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

**Steward, David R.**, Layne Western, \$4,241, "Comparison of Horizontal Collector Well and Angle Well for City of Wichita Municipal Water Supplies."

**Steward, David R.**, and **Bernard, Eric A.** (Landscape Architecture/Regional and Community Planning), RIZA (Institute for Inland Water Management and Waste Water Treatment), \$25,497, "Data Model and Implementation in ArcGIS for MLAEM (Multi-Layer Analytic Element Model)."

**Steward, David R., Blair, John M.** (Biology), and **Koelliker, James K.** (Biological and Agricultural Engineering), Kansas State University, \$381,790, "Strategically Positioning K-State to Benefit for National Science Foundation's Consortium of Universities for the Advancement of Hydrologic Science and National Ecological Observatory Network Programs."

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

**Stokes, Robert W.**, US Department of Transportation, \$102,677, "Traffic Assistance Services for Kansas."

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

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

## COMPUTING AND INFORMATION SCIENCES

**Andresen, Daniel A.**, National Science Foundation, \$42,514, "Enhanced Dynamic Process Management for Beowulf Clusters on the Grid."

**Andresen, Daniel A.**, National Science Foundation, \$500, "Graduate Student Travel Award—Balakumar Krishnamurthi."

**Andresen, Daniel A., Erickson, Howard H.** (Anatomy and Physiology), **Poole, David C.** (Anatomy and Physiology), **Spire, Mark F.** (Diagnostic Medicine/Pathobiology), and **Warren, Steven** (Electrical and Computer Engineering), National Science Foundation, \$396,383, "Infrastructure for Veterinary Telemedicine—Proactive Herd Health Management for Disease Prevention from Farm to Market."

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

**Banerjee, Anindya**, National Science Foundation, \$69,490, "Type Systems and Program Analyses for Secure and Reliable Interactive Web Services."

**DeLoach, Scott A.**, US Department of Defense, \$51,503, "Autonomous, Adaptive Information Systems."

**DeLoach, Scott A.**, US Department of Defense, \$77,879, "Information Management Staff Toolkit—Information System."

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

**Hatcliff, John M.**, National Science Foundation, \$37,493, "Collaborative Research: Program Analysis Techniques to Support Dependable Real-Time Specification for Java Applications."

**Hatcliff, John M.**, and **Dwyer, Matthew B.**, US Department of Defense, \$1,069,979, "Software Model Checking for Embedded Systems."

**Hatcliff, John M.**, and **Singh, Gurdip**, US Department of Defense, \$185,001, "High-Assurance Infrastructure for Component-Based Embedded Systems."

**Hsu, William H.**, Aldentity Matrix Medical, Inc., \$48,000, "Intelligent Tutoring Tool for Medical Informatics."

**Hsu, William H.**, (see **Welch, Stephen M.**, Agronomy).

**Hsu, William H.**, (see **Rahman, Talat S.**, Physics).

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

**Neilsen, Mitchell L.**, US Department of Agriculture, \$20,000, "Software Tools for Watershed Design and Analysis—Phase II."

**Neilsen, Mitchell L.**, US Department of Energy, \$23,999, "Software Tools for Mesh Generation and Finite Element Analysis."

**Neilsen, Mitchell L., Andresen, Daniel A., and Mizuno, Masaaki**, US Department of Agriculture, \$44,500, "Software Tools for Watershed Dam Design/Analysis."

**Neilsen, Mitchell L., Mizuno, Masaaki, Singh, Gurdip, Staver, John R.** (Dean of Education), and **Zhang, Naiqian** (Biological and Agricultural Engineering), National Science Foundation, \$161,997, "Collaborative Learning Through Real-Time Embedded System Design."

**Schmidt, David A.**, National Science Foundation, \$63,327, "Design Conformant Software."

**Singh, Gurdip, Edgar, James H.** (Chemical Engineering), and **McGregor, Douglas S.** (Mechanical and Nuclear Engineering), Kansas State University, \$1,500,000, "Center for Sensors and Sensor Systems."

**Singh, Gurdip**, (see **Hatcliff, John M.**, Computing and Information Sciences).

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

**Wallentine, Virgil E.**, (see **Rahman, Talat S.**, Physics).

**Wallentine, Virgil E.**, Thunderhead Engineering Consultants, Inc., \$4,400, "CIS Internship Program."

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

## OFFICE OF THE DEAN OF THE COLLEGE OF ENGINEERING

**Hayter, Richard B.**, US Department of Education, \$9,180, "Inter-University Program in Human Resources Training in Computational Mechanics."

**King, Terry S.**, Multisponsor, \$20,000, "Pre-Enrollment Mathematics and Sciences Tutoring of Minority Engineering Recruits."

**King, Terry S.**, (see **Montelone, Beth A.**, Dean of Arts and Sciences).

**King, Terry S.**, (see **Kramer, Bradley A.**, Advanced Manufacturing Institute).

## **ELECTRICAL AND COMPUTER ENGINEERING**

**Carpenter, Kenneth H.**, US Department of Energy, \$73,685, "Integrated Firing-System/Initiation-Train Modeling Enhancement."

**Das, Sanjoy**, National Science Foundation, \$500, "Multiobjective Artificial Immune Systems Based Complex Spreading Code Sets for DS-CDMA—Travel Award for Daniel Stevens."

**Das, Sanjoy**, (see **Welch, Stephen M.**, Agronomy).

**Day, Dwight D.**, and **Devore, John J.**, US Department of Energy, \$75,000, "Hardware and Software Evaluation, Development, and Testing Supporting a New Generation Computer for Airborne and Space Applications."

**DeVault, James E.**, Kansas Department of Transportation, \$56,000 (includes \$5,000 from Koss Construction), "Multi-Sensor, Mobile Cover-Meter for Three-Dimensional Rapid Tie-Bar Placement Verification."

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

**Gruenbacher, Don M.**, National Aeronautics and Space Administration, \$33,768, "Wireless Communication and Signal Processing Methods."

**Kuhn, William B.**, National Aeronautics and Space Administration, \$132,436, "Proximity Microtransceiver for Interoperable Mars Communications."

**Kuhn, William B.**, and **Rys, Andrew**, US Department of Energy, \$179,993, "Radio Frequency Integrated Circuit, Optical and Analog Circuit Development Using Integrated Circuit Technologies."

**Natarajan, Balasubramaniam**, TriSquare Communications, Inc., \$7,810, "Analysis of Frequency-Hopping Sequence Design Strategies."

**Pahwa, Anil**, KEMA Inc., \$11,129, "Distribution System Reliability Assessment."

**Rys, Andrew**, (see **Kuhn, William B.**, Electrical and Computer Engineering).

**Warren, Steven**, National Instruments, \$6,004, "Enhanced Learning via the National Instruments labVIEW and NI ELVIS Platforms."

**Warren, Steven**, National Science Foundation, \$81,000, "Beyond Telemedicine: Realizing a Proactive Home Health Care Delivery Model through Research and Education in Plug-and-Play Components and Novel Sensors."

**Warren, Steven**, (see **Andresen, Daniel A.**, Computing and Information Sciences).

## **ENGINEERING EXPERIMENT STATION**

**Jones, Byron W.**, Kansas Technology Enterprise Corporation, \$2,000, "Aircraft Design and Manufacturing Research Center Administration."

**Jones, Byron W.**, Kansas Technology Enterprise Corporation, \$112,500, "Kansas Defense 2010."

## **INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING**

**Ben-Arieh, David H.**, National Aeronautics and Space Administration, \$110,890, "Design, Analysis and Implementation of CaTS: Carrier Tracking System."

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

**Harnett, R. Michael**, US Department of Defense, \$30,914, "Part-Time M.S. Program in Industrial Engineering - Fall 2004."

**Harnett, R. Michael**, US Department of Defense, \$35,186, "Part-Time M.S. Program in Industrial Engineering - Spring 2005."

**Harnett, R. Michael**, US Department of Defense, \$17,452, "Part-Time M.S. Program in Industrial Engineering - Summer 2005."

**Lei, Shuting**, National Science Foundation, \$6,000, "Design and Development of Novel Responsive Cutting Tools for Laser-Assisted Machining and Diagnosis of Structural Ceramics: A Research Integrated Education Career Landscape."

**Pei, Zhijian**, Desano, Inc., \$3,969, "Reengineering Business Model: Improving Efficiency, Productivity and Decreasing Cost."

**Pei, Zhijian**, MEMC Electronic Materials Inc., \$60,000, "Improved Feedstock for Polishing."

**Pei, Zhijian**, MEMC Electronic Materials Inc., \$15,000, "Modeling of Wafering Processes."

**Pei, Zhijian**, National Science Foundation, \$41,285, "Fundamental Research on Silicon Wafer Fine Grinding to Foster a Quantum Leap in Manufacturing of Silicon Wafers."

**Pei, Zhijian**, US Department of Energy, \$15,000, "Elastic Optical Scattering."

**Pei, Zhijian**, and **Xin, Xiao J.** (Mechanical and Nuclear Engineering), National Science Foundation, \$10,000, "Soft-Pad Grinding of Wire-Sawn Silicon Wafers."

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

## **INSTITUTE FOR ENVIRONMENTAL RESEARCH**

**Eckels, Steven J.**, (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

**Eckels, Steven J.**, (see **Hosni, Mohammad H.**, Institute for Environmental Research).

**Hosni, Mohammad H.**, Multisponsor, \$141,060, "Institute for Environmental Research Support."

**Hosni, Mohammad H.**, **Beck, B. Terry** (Mechanical and Nuclear Engineering), and **Eckels, Steven J.**, Visteon, \$81,900, "Particle Image Velocimetry/Laser Doppler Velocimetry Measurements of Air Distribution Around a Heated Manikin."

**Jones, Byron W.**, **Beck, B. Terry** (Mechanical and Nuclear Engineering), **Hosni, Mohammad H.** (Mechanical and Nuclear Engineering), and **Zheng, Zhongquan** (Mechanical and Nuclear Engineering), US Department of Transportation, \$252,857, "Contaminant Transport in Airliner Cabins."

**Jones, Byron W.**, and **Hosni, Mohammad H.** (Mechanical and Nuclear Engineering), US Department of Transportation, \$100,000, "FAA Center of Excellence Airliner Cabin Environment."

**Jones, Byron W.**, (see **Hosni, Mohammad H.**, Mechanical and Nuclear Engineering).

**McCullough, Elizabeth A.**, US Department of Defense, \$69,451, "Evaluation of New Clothing Technologies for Military Applications."

**McCullough, Elizabeth A.**, US Department of Defense, \$14,454, "Evaluation of the New Modular Sleeping Bag System."

**McCullough, Elizabeth A.**, US Department of Defense, \$24,090, "Heat Transfer Characteristics of T-Shirt Fabrics for Military Applications."



## KANSAS INDUSTRIAL EXTENSION SERVICES

**Hanson, Brian R.**, (see **Snead, Bruce C.**, Kansas Industrial Extension Services).

**Larson, Nancy J.**, US Environmental Protection Agency, \$385,000, "Comprehensive Small Business Environmental Assistance Program - FY 06."

**Larson, Nancy J.**, US Environmental Protection Agency, \$45,354 (includes \$11,350 from Kansas Healthcare Engineers Association, Kansas Department of Health and Environment, Kansas Hospital Association and Pollution Prevention Regional Information Center), "Kansas Healthcare for a Healthy Environment."

**Larson, Nancy J.**, (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

**Nelson, Richard G.**, Kansas Department of Commerce, \$10,000, "Renewable Energy Economic Impact Analysis for Kansas—Phase 1."

**Nelson, Richard G.**, US Department of Energy, \$12,629, "Renewable Energy and Environmental and Pollution Trading Credits—Effect on Kansas Renewable Energy Development."

**Nelson, Richard G.**, **Larson, Nancy J.**, and **Rogers, Danny H.** (Biological and Agricultural Engineering), US Environmental Protection Agency, \$100,000, "Pollution Prevention Incentives for State Program."

**Nelson, Richard G.**, **Rice, Charles W.** (Agronomy), **Staggenborg, Scott A.** (Northeast Area Office), and **Williams, Jeffery R.** (Agricultural Economics), US Department of Energy, \$19,463, "National Carbon Sequestration Database and Geographic Information System."

**Nelson, Richard G.**, and **Snead, Bruce C.**, Kansas Corporation Commission, \$61,425, "Kansas Energy Extension Service."

**Snead, Bruce C.**, US Environmental Protection Agency, \$17,700 (includes \$7,500 from various participants), "Indoor Radon Workshops."

**Snead, Bruce C.**, US Environmental Protection Agency, \$234,574 (includes \$28,683 from Kansas County Health and Extension Departments, and \$48,000 from various other consultants), "Radon Projects for Kansas."

**Snead, Bruce C.**, US Environmental Protection Agency, \$5,958, "Radon Training for Michigan Department of Environmental Quality."

**Snead, Bruce C.**, US Environmental Protection Agency, \$42,750 (includes \$19,500 from various participants), "Radon Workshops for Nebraska."

**Snead, Bruce C.**, US Environmental Protection Agency, \$5,806, "Radon Workshops for the State of Michigan."

**Snead, Bruce C.**, US Environmental Protection Agency, \$27,266, "Regional Radon Training Center."

**Snead, Bruce C.**, and **Hanson, Brian R.**, Kansas Health Foundation, \$10,000, "Radon Awareness and Testing Promotion by Kansas Based Media."

**Snead, Bruce C.**, (see **Nelson, Richard G.**, Kansas Industrial Extension Services).

## MECHANICAL AND NUCLEAR ENGINEERING

**Babin, Bruce R.**, Catalytic Industrial Group, \$1,775, "Water Heater for Liquefied Natural Gas Storage."

**Babin, Bruce R.**, US Department of Defense, \$49,544, "Experimental Characterization of an Ammonia Cooling System."

**Beck, B. Terry**, (see **Jones, Byron W.**, Institute for Environmental Research).

**Beck, B. Terry**, (see **Hosni, Mohammad H.**, Institute for Environmental Research).

**Beck, B. Terry**, (see **Hosni, Mohammad H.**, Mechanical and Nuclear Engineering).

**Cai, Liang-Wu**, National Science Foundation, \$199,157, "Two-Dimensional Tunable Phononic Materials Research."

**Dunn, William L.**, National Academy for Nuclear Training, \$14,000, "National Academy for Nuclear Training Fellowship."

**Dunn, William L.**, and **McGregor, Douglas S.**, US Department of Energy, \$204,191, "High-Efficiency Thin-Film-Coated Semiconductor Neutron Detectors for Active Dosimetry Monitors."

**Dunn, William L.**, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

**Hosni, Mohammad H.**, **Beck, B. Terry**, and **Jones, Byron W.** (Institute for Environmental Research), Boeing Company, \$50,000, "Large Eddy Simulation Validation Lab Test-Gaseous Diffusion."

**Hosni, Mohammad H.**, (see **Jones, Byron W.**, Institute for Environmental Research).

**Krishnaswami, Prakash**, (see **Chapman, Kirby S.**, National Gas Machinery Laboratory).

**Lease, Kevin B.**, Kansas Technology Enterprise Corporation, \$74,334, "Effects of Cladding and Anodizing on the Fatigue Behavior of Varying Gage Aluminum Sheet."

**McGregor, Douglas S.**, US Department of Defense, \$109,641, "Coated SiC Neutron Detectors."

**McGregor, Douglas S.**, US Department of Defense, \$165,000, "Morphologically Optimized Neutron Detectors for Detection, Measurement and Dosimetry."

**McGregor, Douglas S.**, US Department of Energy, \$168,879, "Development of a Gadolinium Converter GEM Neutron Detector."

**McGregor, Douglas S.**, **Dunn, William L.**, and **Shultis, J. Kenneth**, National Science Foundation, \$661,601, "Instrumentation for Materials Research-Major Instrumentation Projects: High-Detection-Efficiency and High-Spatial-Resolution Thermal Neutron Imaging System for the Spallation Neutron Source Using Pixelated Semiconductor Neutron Detectors."

**McGregor, Douglas S.**, and **Schinstock, Dale E.**, US Department of Energy, \$233,647, "Semiconductor Radiation Detectors with Frisch Collars and Collimators for Gamma Ray Spectroscopy and Imaging."

**McGregor, Douglas S.**, **Shultis, J. Kenneth**, and **Whaley, Paul M.**, US Department of Energy, \$210,432, "Near-Core and In-Core Neutron Radiation Monitors for Real Time Neutron Flux Monitoring and Reactor Power Level Measurements."

**McGregor, Douglas S.**, (see **Dunn, William L.**, Mechanical and Nuclear Engineering).

**McGregor, Douglas S.**, (see **Shultis, J. Kenneth**, Mechanical and Nuclear Engineering).

**McGregor, Douglas S.**, (see **Singh, Gurdip**, Computing and Information Sciences).

**Schinstock, Dale E.**, Kansas Technology Enterprise Corporation, \$5,756, "Electromechanical Systems Laboratory—Infrastructure Improvement, KSU."

**Schinstock, Dale E.**, and **Thompson, J. Garth**, National Aeronautics and Space Administration, \$88,714, "Modular Wireless Avionics System for Autonomous UAVs."

**Schinstock, Dale E.**, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

**Shultis, J. Kenneth**, and **McGregor, Douglas S.**, US Department of Energy, \$199,796, "Electro-Optic Laser-Sampled Neutron Detector."

**Shultis, J. Kenneth**, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

**Swenson, Daniel V.**, US Department of Energy, \$92,000, "Creation of an Enhanced Geothermal System through Hydraulic and Thermal Stimulation."

**Thompson, J. Garth**, (see **Schinstock, Dale E.**, Mechanical and Nuclear Engineering).

**Wang, Youqi**, US Department of Defense, \$20,100, "Geometrical Modeling of Textile Composite Material."

**Wang, Youqi**, US Department of Defense, \$97,824, "High Speed Penetration Failure Mechanisms of Textile Fabrics and Armor-Grade Textile Composites."

**Whaley, Paul M.**, Electric Power Research Institute, \$60,000, "Electric Power Research Institute/US Department of Energy/Kansas State University Nuclear Engineering Education Program."

**Whaley, Paul M.**, US Department of Energy, \$199,000 (includes \$120,000 from Electric Power Research Institute), "Matching Grant Program."

**Whaley, Paul M.**, US Department of Energy, \$118,882, "University Reactor Instrumentation Grant."

**Whaley, Paul M.**, US Department of Energy, \$26,400, "University Reactor Sharing Program."

**Whaley, Paul M.**, (see **McGregor, Douglas S.**, Mechanical and Nuclear Engineering).

**White, Warren N.**, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., \$10,000, "ASHRAE Graduate Student Grant-in-Aid—Brandon S. Frink."

**Xin, Xiao J.**, (see **Pei, Zhijian**, Industrial and Manufacturing Systems Engineering).

**Zheng, Zhongquan**, National Aeronautics and Space Administration, \$74,955, "Investigation of Sound Generation Mechanisms in Aircraft Vortex Wakes."

**Zheng, Zhongquan**, National Aeronautics and Space Administration, \$50,794, "Vortex Dynamic Mechanisms and Innovative Modeling of Aerodynamic Noise Generation in Slats."

**Zheng, Zhongquan**, (see **Jones, Byron W.**, Institute for Environmental Research).

## **NATIONAL GAS MACHINERY LABORATORY**

**Chapman, Kirby S.**, and **Keshavarz, Ali**, US Department of Energy, \$225,204 (includes \$10,000 from Advanced Engine Technology Corporation), "Performance, Efficiency, and Emissions Characterization of Reciprocating Internal Combustion Engines Fueled with Hydrogen/Natural Gas Blends."

**Chapman, Kirby S.**, **Krishnaswami, Prakash** (Mechanical and Nuclear Engineering), and **Wallentine, Virgil E.** (Computing and Information Sciences), US Department of Energy, \$65,000, "Virtual Pipeline System Testbed to Optimize the U. S. Natural Gas Transmission Pipeline System."

**Keshavarz, Ali**, (see **Chapman, Kirby S.**, National Gas Machinery Laboratory).

## **NATIONAL INSTITUTE FOR LAND MANAGEMENT AND TRAINING**

**Biles, Bertram R.**, US Department of Defense, \$243,826, "Integrated Training Area Management FY 2005 Workshop."

**Steichen, James M.**, **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), and **Zhang, Naqian** (Biological and Agricultural Engineering), US Department of Defense, \$262,000, "Assessing the Impact of Maneuver Training on NPS Pollution and Water Quality."

## **COLLEGE OF HUMAN ECOLOGY**

### **APPAREL, TEXTILES, AND INTERIOR DESIGN**

**Dickson, Marsha A.**, and **Katz, Jeffrey P.** (Management), US Department of Agriculture, \$450,562 (includes \$60,000 from Colorado State University, and \$90,563 from Cornell University), "Social Responsibility in Textile, Apparel, and Footwear Industry Supply Chains: Development of a Post-Baccalaureate Core."

### **OFFICE OF THE DEAN OF THE COLLEGE OF HUMAN ECOLOGY**

**Doll, Gayle M.**, (see **Norris-Baker, Carolyn**, Dean of Human Ecology).

**Kellett, Carol E.**, and **Fink, Carol J.** (Human Nutrition), US Department of Agriculture, \$15,000, "National Family and Consumer Sciences Plan of Work Impact Reporting and Evaluation Assessment Project."

**Moxley, Virginia M.**, Great Plains IDEA Alliance, \$60,566, "Great Plains IDEA Lead Institution."

**Moxley, Virginia M.**, US Department of Health and Human Services, \$33,000, "Kansas Access to Early Childhood Higher Education Articulation Project."

**Moxley, Virginia M.**, and **Maes, Sue C.** (Regents' Educational Communications Center), US Department of Education, \$248,000, "Kansas State University Institute for Academic Alliances Congressionally Directed Grant for Enhancing Academic Programs."

**Moxley, Virginia M.**, and **Maes, Sue C.** (Regents' Educational Communications Center), US Department of Education, \$10,575, "NEXus-The Nursing Education Xchange: Partnering to Increase the Capacity of Nursing PhD Programs."

**Norris-Baker, Carolyn**, and **Doll, Gayle M.**, US Department of Health and Human Services, \$554,845 (includes \$177,873 from various professional consultants), "Promoting Excellent Alternatives in Kansas Nursing Homes."

### **HOTEL, RESTAURANT, INSTITUTION MANAGEMENT AND DIETETICS**

**Barrett, Elizabeth B.**, (see **Shanklin, Carol W.**, Hotel, Restaurant, Institution Management and Dietetics).

**Canter, Deborah D.**, (see **Shanklin, Carol W.**, Hotel, Restaurant, Institution Management and Dietetics).

**McKnight, Laura E.**, (see **Shanklin, Carol W.**, Hotel, Restaurant, Institution Management and Dietetics).

**Roberts, Kevin R.**, (see **Shanklin, Carol W.**, Hotel, Restaurant, Institution Management and Dietetics).

**Sauer, Kevin L.**, (see **Shanklin, Carol W.**, Hotel, Restaurant, Institution Management and Dietetics).

**Shanklin, Carol W.**, **Canter, Deborah D.**, **McKnight, Laura E.**, and **Sauer, Kevin L.**, American Dietetic Association, \$10,000, "Career Development Methodology."

**Shanklin, Carol W.**, **Barrett, Elizabeth B.**, **Brannon, Laura A.** (Psychology), and **Roberts, Kevin R.**, US Department of Agriculture, \$482,763, "Improving Food Safety Practices of Restaurant Employees Using the Theory of Planned Behavior."

## HUMAN NUTRITION

**Baybutt, Richard C.**, Kansas State University, \$500, "Mentoring an Undergraduate Student Participating in Cancer Research."

**Baybutt, Richard C.**, Kansas State University Foundation, \$8,000, "Modulation of Signaling Pathways by Retinoic Acid in a Cigarette Smoke-Induced Model for Tracheal Hyperplasia."

**Baybutt, Richard C.**, and **Wang, Weiqun**, Kansas State University, \$1,890, "Graduate Student Travel Award."

**Baybutt, Richard C.**, (see **Wang, Weiqun**, Human Nutrition).

**Chambers IV, Edgar**, Multisponsor, \$496,622, "Sensory Analysis Center Support."

**Chambers IV, Edgar**, SHS North America, \$31,650, "Flavor Formulation Development."

**Chambers, Delores H.**, US Department of Agriculture, \$99,970, "Characterizing Consumer Handling, Storage, and Use of Product Labels and Dates to Develop Risk Communication Messages for Ready-to-Eat Foods."

**Fink, Carol J.**, (see **Kellett, Carol E.**, Dean of Human Ecology).

**Fitzgerald, Karen D.**, and **Peters, Paula**, United Methodist Health Ministry Fund, \$19,998, "Pick a Better Snack."

**Haub, Mark D.**, American Heart Association, Heartland Affiliate, \$67,788, "Exercise on Postprandial Inflammation and Lipemia in Overweight Men."

**Haub, Mark D.**, Bally Total Fitness, \$15,000, "Protein Source on Post-Exercise Fractional Synthesis Rates in Skeletal Muscle."

**Haub, Mark D.**, (see **Wang, Weiqun**, Human Nutrition).

**Medeiros, Denis M.**, (see **Madl, Ronald L.**, Grain Science and Industry).

**Medeiros, Denis M.**, National Cattlemen's Beef Association, \$33,543, "Health Impact of Beef From Cattle Fed Flax Seed."

**Medeiros, Denis M.**, US Department of Health and Human Services, \$255,737, "Kansas Bridges to the Future."

**Melgarejo, L Tonatiuh**, Hill's Pet Nutrition, Inc., \$50,224, "Develop a Canine Intestinal Cell Line and Perform Selected Simulations and Incubations."

**Peters, Paula**, (see **Fitzgerald, Karen D.**, Human Nutrition).

**Wang, Weiqun**, (see **Baybutt, Richard C.**, Human Nutrition).

**Wang, Weiqun**, Kansas State University, \$1,000, "Mentoring Two Undergraduate Students Participating in Cancer Research."

**Wang, Weiqun**, **Baybutt, Richard C.**, **Deng, Youping** (Biology), **Haub, Mark D.**, and **Yang, Shie-Shien** (Statistics), US Department of Health and Human Services, \$229,950, "Weight Control, Cell Signaling and Cancer Prevention."

## SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES

**Bailey, Gwen L.**, (see **Bollman, Stephan R.**, School of Family Studies and Human Services).

**Bollman, Stephan R.**, and **Bailey, Gwen L.**, Kansas Child Care Training Opportunities, Inc, \$37,525, "Flint Hills Child Care Resource and Referral Project."

**Bollman, Stephan R.**, and **Bailey, Gwen L.**, Kansas Child Care Training Opportunities, Inc, \$42,396, "Infant/Toddler Initiative."

**Bollman, Stephan R.**, and **Bailey, Gwen L.**, Kansas Child Care Training Opportunities, Inc, \$42,165, "Kansas Child Care Training Opportunities."

**Bradshaw, Michael H.**, Kansas Health Foundation, \$295, "Health Promotion for Older Kansans."

**DeLuccie, Mary L.**, US Department of Agriculture, \$10,643, "Federal Aid in Support of the Child and Adult Care Food Program."

**DeLuccie, Mary L.**, USD 383, Manhattan, \$17,000, "Early Childhood Lab."

**Garcia, Robert**, Capper Foundation, \$48,769, "Capper - KSU Clinical Affiliation in Speech Pathology."

**Garcia, Robert**, USD 383, Manhattan, \$2,857, "Speech and Language Services."

**Glasscock, Marlene K.**, US Department of Agriculture, \$477,000, "Children, Youth and Families at Risk Supported Extension Staff Development."

**Glasscock, Marlene K.**, US Department of Agriculture, \$833,334, "USDA/Air Force Partnership for 4-H Opportunities."

**Glasscock, Marlene K.**, US Department of Agriculture, \$1,235,469, "USDA/Army Youth Development Project."

**Goff, Briana S.**, and **Griffin, Charles L.**, US Department of Health and Human Services, \$90,000, "Kansas All Hazards Behavioral Health Plan."

**Grable, John E.**, Int'l Association of Registered Financial Consultants, Inc., \$8,261, "Journal of Personal Finance."

**Griffin, Charles L.**, Kansas Department of Social & Rehabilitation Services, \$590,643, "SRS Organizational Development Training and Curriculum Development."

**Griffin, Charles L.**, US Department of Health and Human Services, \$34,000, "Kansas Farm and Ranch Family Assistance Program: Sowing the Seeds of Hope for Kansas."

**Griffin, Charles L.**, US Department of Health and Human Services, \$20,000, "Kansas Rural Family Helpline."

**Griffin, Charles L.**, and **Olsen, Charlotte S.**, US Department of Agriculture, \$149,970, "Family Farm Business Planning."

**Griffin, Charles L.**, (see **Goff, Briana S.**, School of Family Studies and Human Services).

**Murray, Ann D.**, Tobacco Settlement, \$12,000, "Smart Start Local Evaluation Plan."

**Olsen, Charlotte S.**, US Department of Health and Human Services, \$20,000, "Building Strong Families Curriculum Development Project."

**Olsen, Charlotte S.**, (see **Griffin, Charles L.**, School of Family Studies and Human Services).

**Parsons, Kerri**, American Association of Retired Persons, \$12,780, "Tenderhearts: Caregiving Support for Home and Community."

**Parsons, Kerri**, US Department of Health and Human Services, \$7,508, "Tenderhearts: Caregiving Support for Home and Community."

## COLLEGE OF VETERINARY MEDICINE

### ANATOMY AND PHYSIOLOGY

**Blecha, Frank**, (see **Freeman, Lisa C.**, Anatomy and Physiology).

**Blecha, Frank**, (see **Kenney, Michael J.**, Anatomy and Physiology).

**Epp, Tammi S.**, (see **Erickson, Howard H.**, Anatomy and Physiology).

**Erickson, Howard H.**, **Biller, David S.** (Clinical Sciences), **Bulmer, Barret J.** (Clinical Sciences), **Epp, Tammi S.**, and **Poole, David C.**, Kansas Racing and Gaming Commission, \$60,158, "Does Left Ventricular Mass Heart Size, and the Presence of Valvular Regurgitation Affect Performance in Racing Greyhounds?"



**Erickson, Howard H., Epp, Tammi S., and Poole, David C.,** Kansas Racing and Gaming Commission, \$10,089, "Role of Pulmonary Leukocytes in Reducing EIPH with Concentrated Equine Serum—Phase II."

**Erickson, Howard H.,** (see **Andresen, Daniel A.,** Computing and Information Sciences).

**Erickson, Howard H.,** (see **Poole, David C.,** Anatomy and Physiology).

**Freeman, Lisa C., and Blecha, Frank,** Merck Company Foundation, \$20,000, "Veterinary Research Scholars."

**Freeman, Lisa C., and Blecha, Frank,** US Department of Health and Human Services, \$29,322, "Basic Research Immersion Training Experience (BRITE) Veterinary Student Program."

**Kenney, Michael J.,** American Heart Association, Heartland Affiliate, \$83,000, "Interleukin-6 Receptor Expression and Sympathetic Nerve Discharge in Chronic Heart Failure—Bryan G. Helwig."

**Kenney, Michael J.,** US Department of Health and Human Services, \$80,400, "Effect of Vertebral Loading on Sympathetic Nerve Regulation."

**Kenney, Michael J., and Blecha, Frank,** US Department of Health and Human Services, \$218,250, "Sympathetic-Immune Interface: Central Sites and Function."

**Kumari, Meena,** Alcoholic Beverage Medical Research Foundation, \$50,000, "Effect of Chronic Ethanol Exposure on In Vivo Regulation of NR1 mRNA Binding Trans-acting Proteins."

**Marcus, Daniel C.,** US Department of Health and Human Services, \$2,182,508, "Epithelial Function in Health and Disease."

**Musch, Timothy I.,** (see **Poole, David C.,** Anatomy and Physiology).

**Poole, David C.,** US Department of Health and Human Services, \$22,226, "Minority Predoctoral Fellowship—Danielle J. Padilla."

**Poole, David C., and Erickson, Howard H.,** Lonza, Inc., \$62,214, "Effects of L-Carnitine Supplementation on Performance, Metabolic Regulation and Indicators of Muscle Damage in Racing Greyhounds."

**Poole, David C., and Musch, Timothy I.,** Proctor & Gamble Company, \$70,404, "Gustavus Adolphus College Agreement."

**Poole, David C.,** (see **Andresen, Daniel A.,** Computing and Information Sciences).

**Poole, David C.,** (see **Erickson, Howard H.,** Anatomy and Physiology).

**Ross, Chris R.,** US Department of Health and Human Services, \$7,583, "Cerebral Protection and Recovery After Circulatory Arrest."

**Ross, Chris R.,** (see **Bulmer, Barret J.,** Clinical Sciences).

**Schultz, Bruce D.,** American Physiological Society, \$7,500, "Research Program Support."

**Schultz, Bruce D.,** (see **Tomich, John M.,** Biochemistry).

**Wangemann, A. Philine,** US Department of Health and Human Services, \$331,013, "Cytosolic Regulation of Inner Ear Ion Transport."

**Wangemann, A. Philine,** (see **Garrett, Karen A.,** Plant Pathology).

**Weiss, Mark L.,** US Department of Health and Human Services, \$270,100, "Neural Circuitry of the Kidney."

## CLINICAL SCIENCES

**Arnold, Carolyn E.,** Kansas Racing and Gaming Commission, \$10,089, "Effects of Shock Wave Therapy on Synovial Fluid Parameters in Normal Equine Joints and in a Model of Synovitis."

**Billr, David S.,** (see **Erickson, Howard H.,** Anatomy and Physiology).

**Bulmer, Barret J., and Heaney, Allison L.** (Veterinary Medical Teaching Hospital), American College of Veterinary Internal Medicine, \$5,000, "Role of Endothelin and Oxidative Stress in Canine Chronic Degenerative Valvular Disease."

**Bulmer, Barret J., Heaney, Allison L., and Ross, Chris R.** (Anatomy and Physiology), Waltham Center for Pet Nutrition, \$14,040, "Antioxidants and Canine Chronic Degenerative Valve Disease."

**Bulmer, Barret J.,** (see **Erickson, Howard H.,** Anatomy and Physiology).

**Fingland, Roger B.,** Friends of the Sunset Zoo, \$4,000, "Sunset Zoo Internship Program."

**Gnad, David P.,** (see **Sanderson, Michael W.,** Clinical Sciences).

**Grauer, Gregory F.,** St. George's University, \$67,090, "Clinical Training for St. George University."

**Graves, Harriet J.,** (see **Takemoto, Dolores J.,** Biochemistry).

**Heaney, Allison L.,** (see **Bulmer, Barret J.,** Clinical Sciences).

**Renberg, Walter C.,** Novartis, \$178,831, "Multi-Center Clinical Study of the Effect of Deracoxib Administered Subcutaneously for Post-Operative Orthopedic Pain in Dogs."

**Sanderson, Michael W.,** US Department of Agriculture, \$53,000, "Kansas John's Work Plan."

**Sanderson, Michael W., De Groot, Bradley D.** (Diagnostic Medicine/Pathobiology), and **Spire, Mark F.** (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$152,888, "Biosecurity Risk Assessment Tool (BRAT) for Feedlots."

**Sanderson, Michael W., Gnad, David P., and Jones, Rodney D.** (Agricultural Economics), US Department of Agriculture, \$251,900, "Biosecurity Risk Analysis for Beef Cow-Calf Producers."

**Sanderson, Michael W.,** (see **Nagaraja, Tiruvor G.,** Diagnostic Medicine/Pathobiology).

**Schermerhorn, Thomas,** Great Plains Diabetes Research, Inc., \$10,000, "Lipid Composition of SNARE-Containing Lipid Rafts in Insulin-Secreting HIT Cells."

**Schermerhorn, Thomas,** Morris Animal Foundation, \$35,073, "Role of Glucokinase in Feline Hepatic Glucose Metabolism."

## OFFICE OF THE DEAN OF THE COLLEGE OF VETERINARY MEDICINE

**Logan, Cynthia L.,** (see **Willard, Gayle K.,** Dean of Veterinary Medical Center).

**Richardson, Ralph C.,** US Department of Agriculture, \$658,650, "WR2 Tissue Digester for the Disposal of Carcasses."

**Willard, Gayle K., and Logan, Cynthia L.,** Kansas Library Network, \$7,250, "Animals in Society."

## DIAGNOSTIC MEDICINE/PATHOBIOLOGY

**Chowdhury, Shafiqul I.,** Fort Dodge Animal Health, \$40,000, "Fort Dodge Animal Health Innovation Award."

**Chowdhury, Shafiqul I.,** US Department of Agriculture, \$350,000, "Directional Spread of Bovine Herpesvirus Type 1 (BHV-1) within the Nervous System."

**Chowdhury, Shafiqul I.**, US Department of Agriculture, \$74,073, "Identification and Characterization of PRRSV Immunogenic Subunits Using Viral Vectors."

**De Groot, Bradley D.**, (see **Sanderson, Michael W.**, Clinical Sciences).

**De Groot, Bradley D.**, (see **Spire, Mark F.**, Diagnostic Medicine/Pathobiology).

**Dritz, Steven S.**, (see **Tokach, Michael D.**, Animal Sciences and Industry).

**Dryden, Michael W.**, Bayer Corporation, \$40,224, "Evaluation of an Imidacloprid 10% w/v/ Permethrin 50% w/v/ Spot-On and a Fipronil 10% w/v/(s) - Methoprene 9% w/v/ Spot-On Repel, Prevent Attachment and Kill Ambloymma Americanum."

**Dryden, Michael W.**, Bayer Corporation, \$55,392, "Evaluation of an Imidacloprid 10% w/v/Permethrin 50% w/v Spot-On and a Fipronil 10% w/v/(s)-methoprene 9% w/v Spot-On to Repel, Prevent Attachment and Kill Ticks."

**Dryden, Michael W.**, Bayer Corporation, \$52,504, "Evaluation of K9 Advantix to Repel, Prevent Attachment, and Kill Ticks in a Natural Tick Exposure Model."

**Dryden, Michael W.**, Bayer Corporation, \$18,301, "Imidacloprid Flea Susceptibility Monitoring Program."

**Dryden, Michael W.**, Bayer Corporation, \$4,219, "Imidacloprid Flea Susceptibility Monitoring Project."

**Dryden, Michael W.**, Fort Dodge Animal Health, \$52,111, "Efficacy of a Topically Applied Spot-on Formulation of Metaflumizone Against Fipronil Resistant Fleas on Cats."

**Dryden, Michael W.**, Fort Dodge Animal Health, \$50,212, "Efficacy of a Topically Applied Spot-on Formulation of Metaflumizone on Cats Against the Adult Cat Flea, Ctenocephalides felis, Flea Egg Hatch and Adult Flea Emergence."

**Erickson, Howard H.**, (see **Minton, J. Ernest**, Animal Sciences and Industry).

**Fenwick, Bradley W.**, US Department of Agriculture, \$71,942, "Intergovernmental Personnel Act Assignment."

**Fortney, William D., Kapil, Sanjay, Nietfeld, Jerome C.**, and **Oberst, Richard D.**, Kansas Racing and Gaming Commission, \$103,000, "Developing Reliable Screening and Confirmatory Diagnostic Procedures for Kennel Cough Agents Including Canine 'Influenza Virus'."

**Ganta, Roman Reddy R.**, US Department of Health and Human Services, \$15,000, "American Society for Rickettsiology Conference."

**Ganta, Roman Reddy R.**, US Department of Health and Human Services, \$49,000, "West Nile-Analysis Laboratory."

**Ganta, Roman Reddy R., Chapes, Stephen K.** (Biology), and **Wilkerson, Melinda**, US Department of Health and Human Services, \$365,000, "Cellular Immunity Against Ehrlichia chaffeensis."

**Kapil, Sanjay**, US Department of Agriculture, \$27,500, "Pseudorabies Laboratory Testing."

**Kapil, Sanjay**, (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

**Kastner, Justin J.**, Canadian Embassy, \$4,000, "Mad Cows and Smart Borders: Trade and Security at the Canada-U.S. Frontier."

**Moro, Manuel H.**, US Department of Health and Human Services, \$141,862, "Lyme Borreliosis and Babesial Coinfection."

**Nagaraja, Tiruvoor G.**, Pfizer Inc., \$72,404, "E. coli O157 Cattle."

**Nagaraja, Tiruvoor G., Oberst, Richard D., Sanderson, Michael W.** (Clinical Sciences), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$178,716, "Ecology of E. coli O157:H7 in Beef Cow-Calf Operations from Ranch to Feedlot."

**Nietfeld, Jerome C.**, (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

**Oberst, Richard D.**, US Department of Energy, \$53,600, "Inactivation of Influenza with Various Disinfectants."

**Oberst, Richard D.**, (see **Fortney, William D.**, Diagnostic Medicine/Pathobiology).

**Oberst, Richard D.**, (see **Nagaraja, Tiruvoor G.**, Diagnostic Medicine/Pathobiology).

**Oberst, Richard D.**, (see **Vanier, Martha A.**, National Agricultural Biosecurity Center).

**Pickrell, John A.**, (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

**Rowland, Raymond R. R.**, General Services Administration, \$11,387, "Modification to Rinderpest Report."

**Rowland, Raymond R. R.**, National Pork Board, \$38,000, "Emerging European-Like Porcine Reproductive and Respiratory Syndrome Virus in the U.S.: Implications for Diagnosis."

**Rowland, Raymond R. R.**, US Department of Agriculture, \$12,871, "Management of Porcine Reproductive and Respiratory Syndrome Persistence: Identification of Persistently Infected Swine."

**Rowland, Raymond R. R.**, US Department of Health and Human Services, \$131,227, "Midwest Regional Center of Excellence for Biodefense and Emerging Infectious Diseases (Development Project)."

**Rowland, Raymond R. R.**, US Department of Health and Human Services, \$73,000, "Structure and Nucleolar Function of SARS N Protein."

**Rowland, Raymond R. R.**, (see **Wyatt, Carol R.**, Diagnostic Medicine/Pathobiology).

**Spire, Mark F.**, and **De Groot, Bradley D.**, US Department of Agriculture, \$159,311, "Rapid Syndrome Validation Program for Animals."

**Spire, Mark F.**, (see **Andresen, Daniel A.**, Computing and Information Sciences).

**Spire, Mark F.**, (see **Blasi, Dale A.**, Animal Sciences and Industry).

**Spire, Mark F.**, (see **Sanderson, Michael W.**, Clinical Sciences).

**Wilkerson, Melinda**, (see **Ganta, Roman Reddy R.**, Diagnostic Medicine/Pathobiology).

**Wyatt, Carol R.**, and **Rowland, Raymond R. R.**, US Department of Agriculture, \$169,930, "Development of Methodologies for Understanding Epitope-Specific T Cell Responses Involved in Immune Protection and Pathogenesis."

## **VETERINARY MEDICAL TEACHING HOSPITAL**

**Arck, Shirley T.**, University of Kansas, \$3,600, "Pharm.D. Clerkship."

**Fingland, Roger B.**, US Department of Defense, \$3,250, "US Army Veterinary Command, Fort Riley Commanding General's Color Guard."

**Heaney, Allison L.**, (see **Bulmer, Barret J.**, Clinical Sciences).



## KANSAS COOPERATIVE EXTENSION SERVICE

### AGRICULTURAL ECONOMICS

**Barnaby Jr, Glenn A.**, (see **Mintert, James R.**, Agricultural Economics).

**Darling, David L.**, Institute of Museum and Library Services, \$3,000, "Community Development at Your Library: A New Alliance for Progress."

**Dhuyvetter, Kevin C.**, (see **Mintert, James R.**, Agricultural Economics).

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

**Leatherman, John C.**, (see **Peterson, Jeffrey M.**, Agricultural Economics).

**Leatherman, John C.**, US Environmental Protection Agency, \$13,327, "Kansas Urban Water Quality Restoration and Protection Initiative."

**Mintert, James R.**, (see **Bernardo, Daniel J.**, Agricultural Economics).

**Mintert, James R.**, **Barnaby Jr, Glenn A.**, **Dhuyvetter, Kevin C.**, and **Simons, Clay J.**, US Department of Agriculture, \$149,962, "Combining Livestock Risk Protection Insurance with Private Market Tools for Effective Cow-Calf Risk Management."

**Simons, Clay J.**, (see **Mintert, James R.**, Agricultural Economics).

### AGRICULTURE AND NATURAL RESOURCES

**Buchholz, Daryl D.**, Kansas Farm Service Agency, \$870, "Memorandum of Understanding between Kansas Agricultural Mediation Service and Kansas Farm Service Agency."

**Buchholz, Daryl D.**, US Department of Agriculture, \$120, "Memorandum of Understanding between Kansas Agricultural Mediation Services and Kansas Natural Resources Conservation Service."

**Buchholz, Daryl D.**, US Department of Agriculture, \$155,100, "Natural Resources Conservation Service Technical Service Provider Training."

**Buchholz, Daryl D.**, US Department of Agriculture, \$92,656, "North Central Region Sustainable Agridulture Research and Education Professional Development Program Coordinator."

**Buchholz, Daryl D.**, and **Slocombe, John W.** (Biological and Agricultural Engineering), US Department of Agriculture, \$13,732, "Farm Safety Program."

**Murphy, James P.**, US Department of Agriculture, \$425,015, "Kansas Agricultural Mediation Service."

### AGRONOMY

**Devlin, Daniel L.**, and **McVay, Kent A.**, US Department of Agriculture, \$56,903, "Cheney Lake Watershed."

**Devlin, Daniel L.**, and **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Department of Agriculture, \$10,000, "Kansas Conservation Resources and Services Website."

**Devlin, Daniel L.**, and **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$10,127, "Implementing Best Management Practices in the Smoky Hill—Kanopolis Lake Watershed."

**Devlin, Daniel L.**, and **Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$85,140, "Little Arkansas Watershed Restoration and Protection Strategy (WRAPS)."

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

**Eberle, William M.**, Kansas Department of Health and Environment, \$14,992, "Compost Site Development and Operation and Compost Operator Educational and Technical Assistance."

**Fjell, Dale L.**, Kansas Grain Sorghum Commission, \$3,000, "Grain Sorghum Production in Kansas: Extension and Applied Research."

**Fick, Walter H.**, and **Jones, Rodney D.** (Agricultural Economics), US Environmental Protection Agency, \$176,000, "Implementing Total Maximum Daily Load's Using Water Quality Financial Analysis and Resource Evaluation Program—Part 2."

**McVay, Kent A.**, (see **Devlin, Daniel L.**, Agronomy).

**Peterson, Dallas E.**, (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

### ANIMAL SCIENCES AND INDUSTRY

**Aramouni, Fadi M.**, and **Herald, Thomas J.**, Kansas Department of Commerce, \$66,580, "Food and Feed Value Added Program."

**Aramouni, Fadi M.**, (see **Boyle, Elizabeth**, Animal Sciences and Industry).

**Boyle, Elizabeth**, Kansas Department of Commerce, \$12,600, "Value Added Meats Program for Kansas Companies and Entrepreneurs."

**Boyle, Elizabeth**, US Department of Agriculture, \$45,000, "Food Safety Consortium for Small and Very Small Meat Processors."

**Boyle, Elizabeth**, and **Aramouni, Fadi M.**, US Department of Agriculture, \$203,332, "Validating and Implementing Listeria Monocytogenes Controls in Ready-to-Eat Meat Products Produced by Rural Meat and Poultry Operations in the Great Plains."

**Boyle, Elizabeth**, (see **Getty, Kelly J. K.**, Food Science Institute).

**Brouk, Micheal J.**, Pioneer Hi-Bred International, Inc., \$92,476, "Nutritional Equivalency Study of Cry34/35Ab1 Maize for Lactating Dairy Cows."

**Lee, Charles D.**, Kansas Department of Wildlife and Parks, \$30,411, "Extension Education Position Support."

**Lee, Charles D.**, US Department of Agriculture, \$500, "North Central Regional Aquaculture Center Extension Project."

### BIOLOGICAL AND AGRICULTURAL ENGINEERING

**Ebert, Kerri L.**, (see **Slocombe, John W.**, Biological and Agricultural Engineering).

**Harner III, Joseph P.**, US Environmental Protection Agency, \$48,004, "KSU Livestock Waste Management Rainfall Simulator Information."

**Harner III, Joseph P.**, US Environmental Protection Agency, \$108,570, "Waste Management Water Quality Protection Learning Center—Part 3."

**Harner III, Joseph P.**, (see **Maghirang, Ronaldo G.**, Biological and Agricultural Engineering).

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

**Powell, G. Morgan**, Kansas Department of Health and Environment, \$41,656, "On-Site Wastewater Treatment and Household Water Supply Technical Services."

**Powell, G. Morgan**, US Environmental Protection Agency, \$106,343, "Kansas Environmental Leadership Program."

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

**Powell, G. Morgan**, (see **Janke, Rhonda R.**, Horticulture, Forestry and Recreation Resources).

**Rogers, Danny H.**, Kansas Water Office, \$50,000, "Technical Assistance to Water Users: K-State Mobile Irrigation Lab."

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

**Slocombe, John W.**, US Department of Agriculture, \$422,111 (includes \$126,614 from Southeast Kansas Independent Living), "Kansas AgriAbility Project."

**Slocombe, John W.**, and **Ebert, Kerri L.**, Kansas Health Foundation, \$6,322, "Kansas AgriAbility Project."

**Slocombe, John W.**, (see **Buchholz, Daryl D.**, Agriculture and Natural Resources).

**Willingham, Judith M.**, (see **Powell, G. Morgan**, Biological and Agricultural Engineering).

## COMMUNICATIONS

**Knapp, Mary C.**, and **Chumley, Forrest G.** (Agricultural Experiment Station), Kansas Water Office, \$8,000, "Technical Assistance to Water Users: Evapotranspiration/Weather Station."

**Terry, Roger V.**, US Department of Agriculture, \$2,000, "Children, Youth and Families Education and Research Network Technology."

## COMMUNITY HEALTH INSTITUTE

**Dzewaltowski, David A.**, US Department of Agriculture, \$900,000, "Healthy Out-of-School Places Overweight Prevention Project."

**Dzewaltowski, David A.**, US Department of Health and Human Services, \$22,109, "Individual and Environmental Mechanisms of PA Change."

**Trost, Stewart G.**, Sunflower Foundation, \$14,627, "Kansas Child Health Assessment and Monitoring Project Survey."

## DIRECTOR OF COOPERATIVE EXTENSION

**Lindquist, Jack W.**, Kansas Agriculture and Rural Leadership, Inc., \$71,638, "Kansas Agriculture and Rural Leadership, Inc."

## ENTOMOLOGY

**Ramaswamy, Sonny B.**, Manhattan Convention and Visitors Bureau, \$1,000, "Butterfly Conservatory and Insect Zoo Publicity Brochures."

**Ramaswamy, Sonny B.**, and **Dobesh, Sharon**, US Department of Agriculture, \$164,871, "Integrated Pest Management."

## EXTENSION FAMILY AND CONSUMER SCIENCES

**Peters, Paula**, **Fitzgerald, Karen D.** (Extension Human Nutrition), and **Hudson, Karen S.** (Extension Human Nutrition), US Department of Agriculture, \$3,484,151 (includes \$910,124 from Kansas counties), "Kansas Food Stamp Nutrition Education Plan."

## 4-H YOUTH DEVELOPMENT

**Fink, Carol J.**, (see **Johannes, Elaine M.**, 4-H Youth Development).

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

## HORTICULTURE, FORESTRY AND RECREATION RESOURCES

**Janke, Rhonda R.**, and **Powell, G. Morgan** (Biological and Agricultural Engineering), US Environmental Protection Agency, \$72,461, "Volunteer Soil and Water Monitoring for Enhanced Natural Resource Stewardship for Meeting Kansas Total Maximum Daily Load Goals, Part 2."

## HUMAN NUTRITION

**Fitzgerald, Karen D.**, (see **Peters, Paula**, Extension Family and Consumer Sciences).

**Hudson, Karen S.**, (see **Peters, Paula**, Extension Family and Consumer Sciences).

## KANSAS FOREST SERVICE

**Aslin, Raymond G.**, US Department of Agriculture, \$4,461, "Conservation Reserve 2004."

**Aslin, Raymond G.**, US Department of Agriculture, \$2,535,382 (includes \$965,506 from various rural fire departments), "Consolidated Payment Grant 2004."

**Aslin, Raymond G.**, US Department of Agriculture, \$64,640, "Forest Inventory Analysis—Kansas Forest Inventory."

**Aslin, Raymond G.**, US Department of Agriculture, \$25,000, "Forest Land Enhancement Program 2005."

**Aslin, Raymond G.**, US Department of Agriculture, \$40,000 (includes \$20,000 from Kansas Department of Agriculture), "Forest Pest Management/Monitoring 2004."

**Aslin, Raymond G.**, US Department of the Interior, \$18,219 (includes \$1,822 from rural fire departments), "Assistance to Rural Firefighters."

**Aslin, Raymond G.**, US Environmental Protection Agency, \$55,500, "Marais des Cygnes Basin Watershed Restoration and Protection Strategy Implementation Riparian Forestry—Year 2."

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

**Hargrove, William L.**, US Environmental Protection Agency, \$33,895 (includes \$11,860 from Sedgwick County Extension Council), "No-Till Farming to Protect Ground and Surface Water."

**Hargrove, William L.**, US Environmental Protection Agency, \$167,230 (includes \$25,000 from minigrant awardees), "Water Quality Improvement Through Service Learning."

**Hargrove, William L.**, US Environmental Protection Agency, \$19,088 (includes \$2,175 from Sedgwick County Extension Council), "Water Quality Protection from Nitrogen Using Subsurface Drip Irrigation."

**Hargrove, William L.**, and **Devlin, Daniel L.** (Extension Agronomy), US Environmental Protection Agency, \$111,617, "Abatement of Fecal Coliform Bacteria—Part 5A."

**Hargrove, William L.**, and **Devlin, Daniel L.** (Extension Agronomy), US Environmental Protection Agency, \$99,793, "Neosho Basin Watershed Restoration and Protection Strategy Development."

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

**Hargrove, William L.**, (see **Lindquist, James L.**, Northeast Area Office).

## NORTHEAST AREA OFFICE

**Cramer, Gary L.**, (see **Lindquist, James L.**, Northeast Area Office).

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

**Lindquist, James L., Cramer, Gary L., and Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$68,483, "No-Till Farming to Protect Ground and Surface Water—Part 2."

**Lindquist, James L., Cramer, Gary L., and Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$31,011 (includes \$6,651 from Sedgwick County), "Protecting Groundwater Through Subsurface Drip Irrigation—Part 2."

**Lindquist, James L., and Hargrove, William L.** (Kansas Center for Agriculture Resources and the Environment/Kansas Water Resources Research Institute), US Environmental Protection Agency, \$128,931 (includes \$38,500 from Sedgwick County Extension Council), "E.A.R.T.H. Program—Part IV."

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

## **NORTHWEST AREA OFFICE**

**Olson, Brian L.**, Kansas Crop Improvement Association, \$5,450, "Wheat Planting Survey."

**Olson, Brian L., and Staggenborg, Scott A.** (Agronomy), US Department of Agriculture, \$26,500, "Characterization of Teff Accession Lines for the High Plains."

## **SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES**

**Bradshaw, Michael H.**, US Department of Agriculture, \$3,000, "Healthy Homes—Kansas."

## **SOUTHEAST AREA OFFICE**

**Allen, Ben W.**, Kansas Department of Commerce, \$33,600, "Agri Tourism."

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

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

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

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

## **SOUTHWEST AREA OFFICE**

**Dumler, Troy**, (see **Hale, Ronald L.**, Southwest Area Office).

**Dumler, Troy**, (see **Klocke, Norman L.**, Southwest Research Extension Center).

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

**Hale, Ronald L., Dumler, Troy, Herrman, Timothy J.** (Grain Science and Industry), **Schlegel, Alan J.** (Southwest Research Extension Center), and **Thompson, Curtis R.**, Kansas Wheat Commission, \$11,503, "Hard White Winter Wheat for Dual-Purpose Use."

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

**Thompson, Curtis R.**, Multisponsor, \$27,000, "Chemical Evaluation."

**Thompson, Curtis R.**, (see **Hale, Ronald L.**, Southwest Area Office).

**Thompson, Curtis R.**, (see **Stahlman, Phillip W.**, Agricultural Research Center-Hays).

**Witt, Merle D.**, (see **Buschman, Larry L.**, Entomology).

## **SOUTHWEST RESEARCH EXTENSION CENTER**

**Willson, Thomas C.**, US Environmental Protection Agency, \$29,790, "Fecal Coliform Abatement in Southwest Kansas Part 2."

## **OFFICE OF THE PRESIDENT**

### **AUDITORIUM**

**Martin, Richard P.**, National Foundation on the Arts and the Humanities, \$61,016 (includes \$5,000 from Capitol Federal Savings and Loan; \$4,000 from Commerce Bank/W. T. Kemper; \$36,679 from Fine Arts Fee; \$3,300 from Meadowlark Hills; and \$4,000 from Mercy Regional Health Center), "2004-2005 Performance Series."

**Martin, Richard P.**, National Foundation on the Arts and the Humanities, \$5,000, "Prague Symphony Orchestra."

**Martin, Richard P.**, National Foundation on the Arts and the Humanities, \$15,000 (includes \$10,000 from local corporate sponsors), "St. Petersburg Ballet Theatre: Romeo and Juliet."

### **BEACH ART MUSEUM**

**Render, Lorne E.**, National Foundation on the Arts and the Humanities, \$9,357, "Beach Museum of Art General Operating Support."

**Render, Lorne E., and Schlageck, Kathrine W.**, National Foundation on the Arts and the Humanities, \$7,800 (includes \$300 from private contributions), "An Eye on Our Town."

**Render, Lorne E., and Schlageck, Kathrine W.**, National Foundation on the Arts and the Humanities, \$7,750 (includes \$250 from private contributions), "Beach Museum of Art ARTStart Early Childhood Grant."

**Schlageck, Kathrine W.**, (see **Render, Lorne E.**, Beach Art Museum).

## **OFFICE OF THE PRESIDENT**

**Reagan, Charles**, Institute of Museum and Library Services, \$396,800, "20th Century Soldier Project."

**Reagan, Charles**, US Department of Defense, \$1,000,000, "Kansas State University Graduate Degree Program Development and Implementation for U. S. Army Command and General Staff College Leadership and Security Studies; Enhance Cooperative Degree Program in History."

**Reagan, Charles**, US Department of Education, \$992,000, "American Soldier Project."

## **OFFICE OF THE PROVOST**

### **INTERNATIONAL PROGRAMS**

**Holland, Kenneth M.**, Canadian Department of Foreign Affairs and International Trade, \$5,379, "2004 Canadian Studies Program Enhancement."

**Holland, Kenneth M.**, US Department of Education, \$358,236, "Teaching American History."

**Michie, Barry H.**, US Department of Education, \$72,200 (includes \$7,200 from participant fees), "Kansas-Czech Heritage: Renewing Connections."

**Wood, Mary**, NCN Institute, \$33,020, "English Training Sponsorship."



## KANSAS CENTER FOR RURAL INITIATIVES

**Gould, Carol A.**, Corporation for National and Community Service, \$61,422, "Kansas Campus Compact."

**Gould, Carol A.**, and **Tolar, Mary H.**, Brown University, \$4,000, "Raise Your Voice—Month of Action."

**Gould, Carol A.**, and **Tolar, Mary H.**, Corporation for National and Community Service, \$11,719 (includes \$1,690 from Fort Hays State University), "Youth Leadership AmeriCorps Planning Grant."

**Gould, Carol A.**, and **Tolar, Mary H.**, United Nations Foundation, \$6,480, "People Speak: America's Role in the World."

**Tolar, Mary H.**, (see **Gould, Carol A.**, Kansas Center for Rural Initiatives).

## LIBRARY

**Allen, David B.**, Kansas Board of Regents, \$44,278, "Kansas Digital Library: Access for all Kansans."

**Haddock, Michael J.**, and **Fick, Walter H.** (Agronomy), US Department of Agriculture, \$4,000, "Building Knowledge of Sustainable Rangeland Management Using Information Technology-Northern Great Plains Partnership."

**Haddock, Michael J.**, and **Ramaswamy, Mohan**, US Department of Agriculture, \$7,765, "Grain Sorghum Disease Image Collection: Optimizing the Digitization Protocol."

**Ramaswamy, Mohan**, (see **Haddock, Michael J.**, Library).

**Ratliff, Ron**, Kansas Library Network, \$1,600, "Graphic Novels."

**Watts, Tim J.**, Kansas Library Network, \$900, "Film Titles on the National Film Registry."

## OFFICE OF THE PROVOST

**Dyer, Ruth A.**, (see **Montelone, Beth A.**, Dean of Arts and Sciences).

## VICE PRESIDENT FOR ADMINISTRATION AND FINANCE

## KSU POLICE DEPARTMENT

**Grice, Ronnie D.**, US Department of Homeland Security, \$100,000, "Critical Infrastructure Protection Grant."

## VICE PRESIDENT FOR INSTITUTIONAL ADVANCEMENT

## DEPARTMENT OF HOUSING

**Kohl, Deborah L.**, Robert R. McCormick Tribune Foundation, \$1,000, "Jardine Tutoring Program."

## EDUCATIONAL AND PERSONAL DEVELOPMENT

**Arck Jr, William**, City of Manhattan, Kansas, \$22,500, "Youth Oriented Alcohol Abuse Prevention Program."

**Greene, Kathleen V.**, National Science Foundation, \$15,025, "Kansas EPSCoR Summer Research Program."

**Greene, Kathleen V.**, US Department of Education, \$240,043, "Ronald E. McNair Post-Baccalaureate Achievement Program."

**Greene, Kathleen V.**, US Department of Education, \$541,423, "Student Support Services." (2 awards)

**Greene, Kathleen V.**, US Department of Education, \$416,795, "Student Support Services—KSU-Salina." (2 awards)

**McGowan, Reginland**, US Department of Education, \$255,743, "Upward Bound Math and Science Program."

**McGowan, Reginland**, US Department of Education, \$828,232, "Upward Bound Program."

**McGowan, Reginland**, US Department of Education, \$220,000, "Upward Bound Program Salina Campus."

**McGowan, Reginland**, and **McNair, Jr., Robert L.**, US Department of Education, \$196,846, "Kansas State University/Gear Up."

**McGowan, Reginland**, and **McNair, Jr., Robert L.**, US Department of Education, \$429,744 (includes \$214,872 from various local non-profit organizations and local businesses), "Kansas State University Gear Up Program #2."

**McNair, Jr., Robert L.**, (see **McGowan, Reginland**, Educational and Personal Development).

## UNIVERSITY COUNSELING SERVICES

**Newton, Fred B.**, Sunflower Foundation, \$112,209, "Healthy PAC CATS: (Personal Assessment Challenge—Chosen Activities for Today's Success) A Project to Introduce Students to Healthy Lifestyle—Reducing the Risk of Obesity in the Future."

**Rathbun, Arthur J.**, City of Manhattan, Kansas, \$6,000, "Targeted Intervention with KSU Residence Hall Judicial-Board Referred Alcohol and/or Drug Use/Abuse Students."

## VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY

## DEAN OF CONTINUING EDUCATION

**Retzlaff, Deanna D.**, (see **Kastner, Curtis L.**, Food Science Institute).

## REGENTS' EDUCATIONAL COMMUNICATIONS CENTER

**Chastain, Melvin L.**, Kansas Board of Regents, \$29,974, "Foreign Language Workshop for Interactive Distance Learning Instructors."

**Chastain, Melvin L.**, Kansas Board of Regents, \$25,000, "Kan-Ed Enhancing Technology Grant Program."

**Chastain, Melvin L.**, Kansas Board of Regents, \$44,229, "Project BLEND—Building Learning Environments for New Directions."

**Chastain, Melvin L.**, US Environmental Protection Agency, \$11,000, "Broadcast Training Session for Spill Prevention, Control and Countermeasure (SPCC) Regulations."

**Maes, Sue C.**, US Department of Agriculture, \$33,448, "Masters in Community Development."

**Maes, Sue C.**, (see **Moxley, Virginia M.**, Dean of Human Ecology).

## REGENTS TELENET

**Allard, John W.**, Kansas Board of Regents, \$14,149, "Kan-Ed Enhancing Technology Grant Program - Priority One."

## VICE PROVOST FOR ACADEMIC SERVICES AND TECHNOLOGY

**Gould, Rebecca A.**, US Department of Agriculture, \$24,800, "Conversion of First Choice to First Choice Online."

**Unger, Elizabeth A.**, (see **Montelone, Beth A.**, Dean of Arts and Sciences).



## **VICE PROVOST FOR RESEARCH AND DEAN OF THE GRADUATE SCHOOL**

### **NATIONAL AGRICULTURAL BIOSECURITY CENTER**

**Vanier, Martha A., Fung, Daniel Y.C.** (Animal Sciences and Industry), **Oberst, Richard D.** (Diagnostic Medicine/ Pathobiology), and **Phebus, Randall K.** (Animal Sciences and Industry), US Department of Defense, \$2,556,400, "Biosecurity Research Institute at Kansas State University: Facilities, Methods and Technologies to Determine Real-Time Biohazards in Foods and to Validate Technology Readiness."

**Vanier, Martha A.**, US Department of Defense, \$1,380,000, "Situational Competency, Simulations and Lessons Learned for Food/Ag Bioterrorism."

### **OFFICE OF THE VICE PROVOST FOR RESEARCH AND DEAN OF THE GRADUATE SCHOOL**

**Guikema, James A.**, Kansas Technology Enterprise Corporation, \$5,000, "Kansas NASA EPSCoR 2000 Program."

**Guikema, James A.**, (see **Erickson, Larry E.**, Center for Hazardous Substance Research).

**Guikema, James A.**, and **Murray, John P.**, US Department of Health and Human Services, \$492,080, "Purchase Equipment for the Plant Science Facility."

**Jaax, Nancy K.**, General Services Administration, \$17,037, "Update of the Battelle Select Agent Monographs."

**Trewyn, R. W.**, Kansas State University Research Foundation, \$210,443, "KSU Research Foundation Staff Compensation."

**Trewyn, R. W.**, Kansas Board of Regents, \$8,000, "Kansas Minority Graduate Fellowship Awards."

**Trewyn, R. W.**, US Department of Defense, \$6,525,000, "Infrastructure Support for the KSU Biosecurity Research Institute Facility."

### **BIOTECHNOLOGY CORE LABORATORY**

**Tomich, John M.**, Multisponsor, \$49,375, "Biotechnology Laboratory Support."

### **ELECTRONICS DESIGN LABORATORY**

**Sobering, Timothy J.**, Multisponsor, \$142,160, "Electronics Design Laboratory Support."

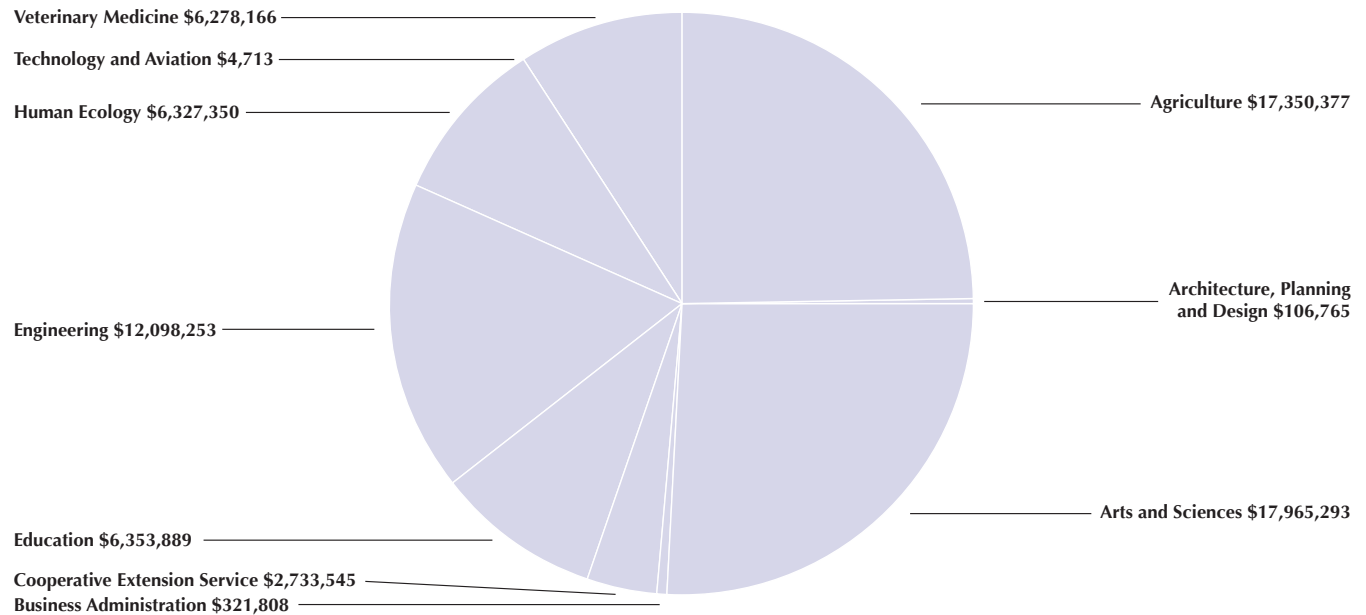
**Sobering, Timothy J.**, (see **Taylor, Russell D.**, Vice Provost Electronics Design Laboratory).

**Taylor, Russell D.**, and **Sobering, Timothy J.**, Kintec, Inc., \$8,606, "General Maintenance for Digital Brake Controller." (2 awards)

# SECTION 2: EXPENDITURES

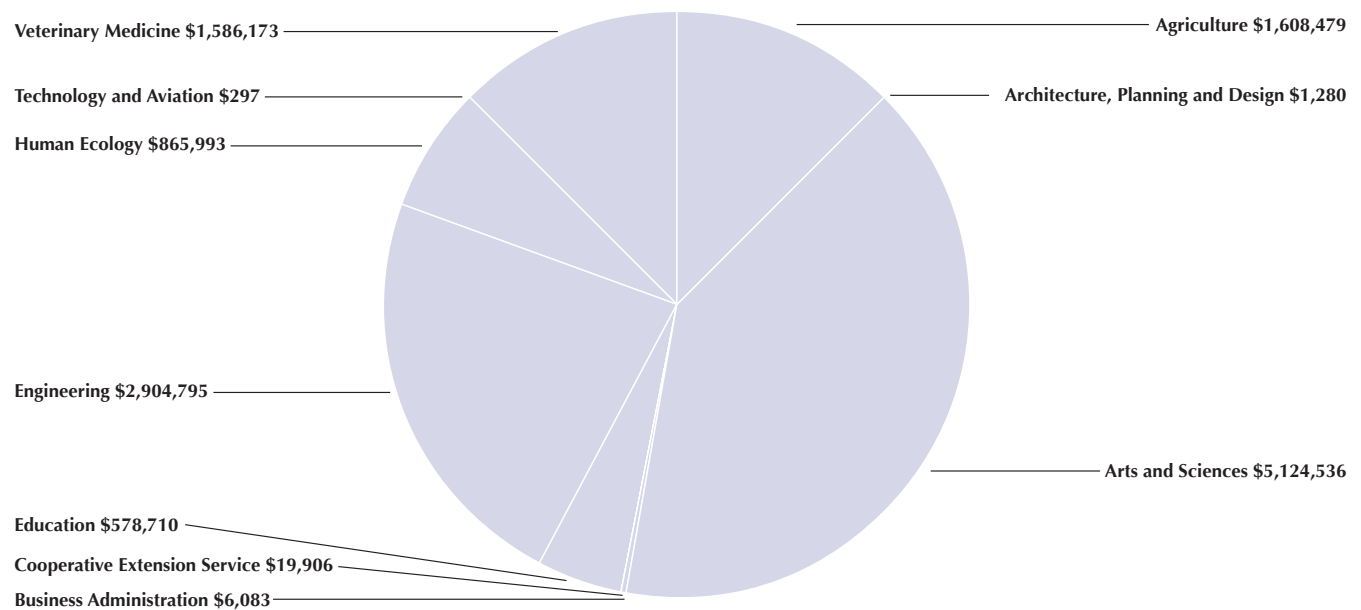
## DIRECT COST EXPENDITURES BY COLLEGE AND EXTENSION\*

*Fiscal Year 2005*



## FACILITIES AND ADMINISTRATIVE COST RECOVERY BY COLLEGE AND EXTENSION\*

*Fiscal Year 2005*



\*Note: Data provided by the KSU Controller's Office, Sponsored Projects Accounting

# EXPENDITURES FOR SPONSORED EXTRAMURAL FUNDING BY COLLEGE AND EXTENSION DEPARTMENT\*

**Fiscal Year 2005**

<b>COLLEGE OF AGRICULTURE</b>	<b>DIRECT COSTS</b>	<b>FACILITIES AND ADMINISTRATIVE COSTS</b>	<b>TOTAL</b>
Dean of Agriculture and Director of AES . . . . .	17,740.36	0.00	17,740.36
Agricultural Economics . . . . .	1,369,829.77	117,422.21	1,487,251.98
Agronomy . . . . .	2,639,334.77	314,244.01	2,953,578.78
Animal Sciences and Industry . . . . .	878,644.65	68,915.74	947,560.39
Communications . . . . .	10,171.21	1,830.27	12,001.48
Entomology . . . . .	1,562,144.57	228,572.93	1,790,717.50
Grain Science and Technology . . . . .	1,485,194.74	212,326.39	1,697,521.13
Horticulture, Forestry and Recreation Resources . . . . .	379,807.22	37,759.03	417,566.25
International Agricultural Programs . . . . .	12,696.77	0.00	12,696.77
Plant Pathology . . . . .	4,099,562.71	448,599.10	4,548,161.81
Kansas Center for Ag. Resource & Env. . . . .	799,879.43	71,063.70	870,943.13
Agricultural Experiment Station . . . . .	3,300,005.14	100,181.70	3,400,186.84
Northwest Research Extension Center . . . . .	137,629.86	1,232.35	138,862.21
Agricultural Research Center-Hays. . . . .	406,950.74	0.00	406,950.74
Southwest Research Extension Center . . . . .	216,278.66	6,091.88	222,370.54
Southeast Agricultural Research Center . . . . .	26,043.68	0.00	26,043.68
Food Science Institute . . . . .	8,462.67	239.74	8,702.41
<b>Total-College of Agriculture . . . . .</b>	<b>17,350,376.95</b>	<b>1,608,479.05</b>	<b>18,958,856.00</b>
<b>COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN</b>			
Architecture. . . . .	21,211.78	1,218.16	22,429.94
Landscape Architecture/Regional and Community Planning . . . . .	85,553.52	61.54	85,615.06
<b>Total-College of Architecture , Planning and Design . . . . .</b>	<b>106,765.30</b>	<b>1,279.70</b>	<b>108,045.00</b>
<b>COLLEGE OF ARTS AND SCIENCES</b>			
Dean of Arts and Sciences . . . . .	99,836.87	7,278.02	107,114.89
Biochemistry . . . . .	1,595,875.99	596,726.34	2,192,602.33
Biology . . . . .	7,195,662.92	1,913,542.87	9,109,205.79
Chemistry . . . . .	1,618,308.83	582,682.22	2,200,991.05
Economics. . . . .	47,487.89	0.00	47,487.89
Geography. . . . .	526,012.32	64,969.64	590,981.96
Geology . . . . .	154,196.77	28,910.70	183,107.47
History . . . . .	168,405.42	0.00	168,405.42
James R. MacDonald Laboratory . . . . .	1,906,230.96	763,545.00	2,669,775.96
School of Journalism and Mass Communication . . . . .	211,952.28	25,545.05	237,497.33
Mathematics . . . . .	233,657.69	92,496.89	326,154.58
Music . . . . .	6,828.96	0.00	6,828.96
Kinesiology . . . . .	73,265.55	10,065.34	83,330.89
Physics . . . . .	2,308,694.71	601,406.09	2,910,100.80
High Energy Physics . . . . .	1,068,064.25	233,808.33	1,301,872.58
Political Science . . . . .	15,515.16	0.00	15,515.16
Psychology . . . . .	428,364.43	157,008.67	585,373.10
Sociology, Anthropology, and Social Work . . . . .	221,303.22	24,621.14	245,924.36
Statistics . . . . .	85,629.08	21,929.23	107,558.31
<b>Total-College of Arts and Sciences . . . . .</b>	<b>17,965,293.30</b>	<b>5,124,535.53</b>	<b>23,089,828.83</b>

<b>COLLEGE OF BUSINESS ADMINISTRATION</b>	<b>DIRECT COSTS</b>	<b>FACILITIES AND ADMINISTRATIVE COSTS</b>	<b>TOTAL</b>
Dean of Business Administration . . . . .	308,059.26	3,551.14	311,610.40
Management . . . . .	13,748.92	2,531.82	16,280.74
<b>Total-College of Business Administration . . . . .</b>	<b>321,808.18</b>	<b>6,082.96</b>	<b>327,891.14</b>

### **COOPERATIVE EXTENSION SERVICES**

Director of Cooperative Extension . . . . .	68,290.58	0.00	68,290.58
4-H Youth Development . . . . .	85,605.16	0.00	85,605.16
Extension Family and Consumer Sciences . . . . .	753.51	0.00	753.51
Extension Communication . . . . .	10,480.86	0.00	10,480.86
Kansas Forest Service . . . . .	1,750,038.37	4,563.80	1,754,602.17
Agriculture and Natural Resources . . . . .	597,322.10	3,380.60	600,702.70
Northwest Area Office . . . . .	29,474.30	0.00	29,474.30
Southwest Area Office . . . . .	12,326.60	0.00	12,326.60
Northeast Area Office . . . . .	3,286.05	0.00	3,286.05
Southeast Area Office . . . . .	29,465.04	0.00	29,465.04
Extension Office of Community Health . . . . .	146,502.42	11,961.68	158,464.10
<b>Total-Cooperative Extension Services . . . . .</b>	<b>2,733,544.99</b>	<b>19,906.08</b>	<b>2,753,451.07</b>

### **COLLEGE OF EDUCATION**

Dean of Education . . . . .	5,404,145.31	379,438.18	5,783,583.49
Special Education . . . . .	29,091.15	1,454.81	30,545.96
Elementary Education . . . . .	451,709.49	86,871.65	538,581.14
Secondary Education . . . . .	468,942.92	110,945.04	579,887.96
<b>Total-College of Education . . . . .</b>	<b>6,353,888.87</b>	<b>578,709.68</b>	<b>6,932,598.55</b>

### **COLLEGE OF ENGINEERING**

Dean of Engineering . . . . .	31,489.45	0.00	31,489.45
Biological and Agricultural Engineering . . . . .	1,224,575.12	117,430.42	1,342,005.54
Architectural Engineering and Construction Science . . . . .	23,668.06	21,331.94	45,000.00
Chemical Engineering . . . . .	435,786.14	185,896.43	621,682.57
Civil Engineering . . . . .	1,103,392.30	258,857.60	1,362,249.90
Computing and Information Sciences . . . . .	1,946,983.90	452,855.17	2,399,839.07
Electrical & Computer Engineering . . . . .	425,919.16	153,080.35	578,999.51
Engineering Experiment Station . . . . .	1,818.00	182.00	2,000.00
Institute for Environmental Research . . . . .	212,387.75	61,238.16	273,625.91
Industrial & Manufacturing Systems Engineering . . . . .	358,170.98	135,169.33	493,340.31
Mechanical and Nuclear Engineering . . . . .	1,151,770.23	324,086.61	1,475,856.84
Advanced Manufacturing Institute . . . . .	1,415,739.17	109,047.97	1,524,787.14
Kansas Industrial Extension Services . . . . .	913,511.02	132,392.42	1,045,903.44
Center for Hazardous Substance Research . . . . .	1,948,647.39	661,698.22	2,610,345.61
National Institute for Land Management and Training . . . . .	383,824.08	132,095.82	515,919.90
National Gas Machinery Laboratory . . . . .	520,569.76	159,432.66	680,002.42
<b>Total-College of Engineering . . . . .</b>	<b>12,098,252.51</b>	<b>2,904,795.10</b>	<b>15,003,047.61</b>

### **COLLEGE OF HUMAN ECOLOGY**

Dean of Human Ecology . . . . .	3,685,184.34	531,440.21	4,216,624.55
Apparel, Textiles and Interior Design . . . . .	67,130.11	14,970.60	82,100.71
Hotel, Restaurant, Institution Management and Dietetics . . . . .	45,182.25	10,086.32	55,268.57
Human Nutrition . . . . .	773,260.57	167,091.44	940,352.01
School of Family Studies and Human Services . . . . .	1,756,592.73	142,404.27	1,898,997.00
<b>Total-College of Human Ecology . . . . .</b>	<b>6,327,350.00</b>	<b>865,992.84</b>	<b>7,193,342.84</b>



<b>COLLEGE OF TECHNOLOGY</b>	<b>DIRECT COSTS</b>	<b>FACILITIES AND ADMINISTRATIVE COSTS</b>	<b>TOTAL</b>
Dean of College of Technology and Aviation . . . . .	4,661.15	0.00	4,661.15
Salina Arts, Science and Business . . . . .	52.00	296.78	348.78
<b>Total-College of Technology . . . . .</b>	<b>4,713.15</b>	<b>296.78</b>	<b>5,009.93</b>
<b>VETERINARY MEDICAL CENTER</b>			
Dean of Veterinary Medical Center . . . . .	549,810.15	1,604.89	551,415.04
Anatomy and Physiology . . . . .	3,116,416.73	847,623.35	3,964,040.08
Diagnostic Medicine/Pathobiology . . . . .	2,163,761.20	605,391.16	2,769,152.36
Clinical Sciences . . . . .	428,722.95	131,553.33	560,276.28
Veterinary Medical Teaching Hospital . . . . .	19,455.01	0.00	19,455.01
<b>Total-Veterinary Medical Center . . . . .</b>	<b>6,278,166.04</b>	<b>1,586,172.73</b>	<b>7,864,338.77</b>
<b>GRAND TOTAL . . . . .</b>	<b>69,540,159.29</b>	<b>12,696,250.45</b>	<b>82,236,409.74</b>

# UNIVERSITY SMALL RESEARCH GRANTS

University Small Research Grants are awarded by the Office of Research and Sponsored Programs to support research, scholarly activity and other creative efforts of the tenure-track faculty members.

## Fall 2004 Awards

**An, Soontae**, School of Journalism and Mass Communications, \$1,000. Study "Advertiser Pressure on News Content: A Survey of Advertising Directors."

**Baillargeon, Tara**, Library, \$1,000. Study "The Troubles" in Northern Ireland: Developing a Collection on Alternative Dispute Resolution.

**Barstow, Thomas**, Kinesiology, \$4,000. Collect pilot data for an NIH proposal to Examine Relationships between Endothelial Function and Exercise Tolerance.

**Bossmann, Stefan**, Chemistry, \$1,500. Teach, research, and recruit at the University of Urbino, Italy.

**Cain, Mary**, Psychology, \$1,000. Study the "Effects of Environmental Enrichment on Conditioned Hyperactivity in an Amphetamine-Associated Environment."

**Dodd, Elizabeth**, English, \$3,000. Essay Collection Research: Paleolithic Art.

**Grame, Robert**, Art, \$1,795. Purchase of an Epson Stylus Pro 4000 Large-format Digital Archival Inkjet Printer to produce archival prints in various sizes for use in "Visual Communication Design."

**Hedrick, Donald**, English, \$500. Conduct theater research at the Folger Shakespeare Library.

**Kidwell, Blair**, Marketing, \$2,000. Develop a Scale of Salesperson Emotional Intelligence and Assessment of its Impact on Performance.

**Kim, Seok-Eun**, Political Science, \$1,000. Develop a survey questionnaire to measure the impact of "Public Trust, Charitable Giving, and Volunteer Involvement in nonprofit organizations."

**Liu, Kelly**, Geology, \$600. Collect additional data from the Global Seismographic Network.

**Loschky, Lester**, Psychology, \$2,200. Conduct experiments to determine Eye Movement and Memory for Scenes.

**Martin, Charles**, Geography, \$1,190. Obtain Accelerated Mass Spectrometer (AMS) radiocarbon ages on charcoal from valley fill of the Lahn River, Germany and provide guidance in collecting additional samples.

**McFarland II, Richard**, Marketing, \$2,000. Collect data on the Emotional Perceiving as a Determinant of Adaptive Selling via mail survey.

**Melis, Rachel**, Art, \$1,850. Purchase of equipment and supplies to "Integrate Contemporary Technologies with Traditional Methods for Making Artist's Books."

**Mora Fayos, Silvia**, Biology, \$2,600. Identify "Target Proteins Downstream of Protein Kinase B-beta."

**Nel, Philip**, English, \$500. Conduct research on the Dr. Seuss Collection at the University of California at San Diego to complete "The Annotated Cat in the Hat."

**Potts, Donna**, English, \$418. Complete "Pastoral in Contemporary Irish Poetry," a book-length manuscript.

**Saucier, Donald**, Psychology, \$1,000. Survey "Examining Implicit and Explicit Racism."

**Schmidt, Teresa**, Art, \$2,500. Framing, shipping, and travel expenses for an exhibition of art works "Environmental Abstractions of the Konza Prairie: 18 New Works on Paper," held by invitation from Columbia Basin College in Pasco, Washington.

**Webster, Dane**, Art, \$680. Software to enable production of future computer animation short films.

**Zacharakis, Jeffrey**, Educational Leadership, \$2,000. Conduct survey on "How Leadership Reproduces and Replenishes itself in Kansas Public School Administration."

## Spring 2005 Awards

**Arana, Andrew**, Philosophy, \$1,250. Purchase equipment to assist research in logic and the philosophy of mathematics.

**Britton, Dana M**, Sociology, Anthropology, and Social Work, \$2,500. Produce a pilot study of "Prison Dog Training Programs in the Kansas Department of Corrections."

**Bossmann, Stefan**, Chemistry, \$1,600. Establish "Mycobacterial Porin Technology" at Kansas State University.

**Chae, Bongsug**, Management, \$1,250. Data collection and analysis of "Enterprise Resource Planning Systems and Software Piracy in Vietnam."

**Davis, Elizabeth**, Clinical Sciences, \$1,500. Establish the "Lymphocyte Proliferative Responses in Horses following Vaccination for West Nile Virus" using commercially available killed vaccine.

**Ehie, Ike**, Management, \$2,500. Conduct "The Global Manufacturing Research Group" survey with Nigerian manufacturing companies.

**Gabbard, R. Todd**, Architecture, \$1,800. Determine "Long Term Effectiveness of LEED certified buildings."

**Gao, Stephen**, Geology, \$1,250. Analyze additional earthquake data in China, to extend the scope of an NSF-funded project.

**Garavito, C. L.**, Modern Languages, \$500. Attend a six-week study at the 29th School of Criticism and Theory at Cornell University.

**Hubbell, Amy**, Modern Languages, \$1,550. Conduct colonial memory research in Senegal through literature, archival research, and personal interviews.

**Ito, Takashi**, Chemistry, \$1,500. Develop two methods of fabrication of potentiometric ion-selective sensors based on thin films within microfluidic devices.

**Kim, Seok-Eun**, Political Science, \$1,500. Develop a model of employee turnover intention in nonprofit human services agencies.

**Kong, Xiaofei**, Finance, \$1,200. Conduct a study of "Mutual Fund Board Independence."

**Marzluf, Phillip**, English, \$1,000. Prepare a study and collect data on home-schooled students to track their attitude and academic progress.

**Melis, Rachel**, Art, \$1,365. Purchase equipment and supplies to continue integrating contemporary technologies with traditional methods for making artists' books.

**Mora Fayos, Silvia**, Biology, \$3,000. Structural study of the intracellular amino terminal domain of the insulin-responsive aminopeptidase (IRAP).

**Morrow, Nancy**, Art, \$1,600. Mat and frame 26 new mixed media paintings and drawings for exhibit at the Kansas City Artist Coalition's Mallin Gallery in Kansas City, Missouri.

**Nguyen, Thu Annelise**, Diagnostic Medicine/Pathobiology, \$2,000. Purchase equipment and supplies for research on the regulation of Gap Junction by TCDD in Breast Cancer Cells.

**Rodgers, Susan**, English, \$1,299. Purchase equipment to complete a collection of stories titled "What Happens Next."

**Sauter, Silvia E**, Modern Languages, \$1,200. Research and complete interview for the "Theory and Practice of the Creative Process."

**Schermerhorn, Thomas**, Clinical Sciences, \$1,400. Conduct research and experiments to test the "Molecular and Cellular Mechanisms that Regulate Insulin Secretion."

**Tummala, Krishna**, Political Science, \$800. Gather documents and conduct interviews to complete a book titled "Politics of Preference: A Comparative Study of India, the United States, and South Africa."

**Turnley Jr, William**, Management, \$600. Examine the extent to which a formal course in business ethics influences moral development of several cohorts of business students.

**Von Ohlen, Tonia**, Biology, \$2,000. Purchase supplies and study the "genetic screen for modifiers of a gain of function phenotype for the CG10479 gene in *Drosophila*."

**Zacharakis, Jeffrey**, Educational Leadership, \$1,250. Survey and determine "Leadership Profiles in K-State's Leadership Studies and Programs, and Implications on Cultural Production of Leadership within University Leadership Programs."

# FACULTY DEVELOPMENT AWARDS

Faculty Development Awards are awarded by the Office of Research and Sponsored Programs and serve primarily as travel awards. They can be used for travel to international meetings, travel for foreign exchange, travel to office of potential external funding sponsors, and as matching funds on certain fellowships. They cannot be used for research travel.

## Fall 2004 Awards

**Arana, Andrew**, Philosophy, \$1,000. "Systematicity in Descartes' Geometry" presented at the National Center for Scientific Research Seminar in Paris, France.

**Arens, Robert**, Architecture, \$1,200. Toured the work of Hiroshi Hara, Regnier Visiting Professor of Architecture in Osaka, Nara, Kyoto and Tokyo, Japan.

**Asano, Katsura**, Biology, \$1,700. "Translational control of gene expression using yeasts *Saccharomyces cerevisiae* and *Schizosaccharomyces pombe* as a model organism" presented at the 58th Japan Society for Cell Biology Conference, Saitama, Japan.

**Barnes, Philip**, Biological and Agricultural Engineering, \$1,200. "Agricultural Practices Impact on Surface Water Quality" presented at the 2004 International Commission of Agricultural Engineering Conference held in Beijing, China; and served as part of a delegation developing a collaborative research relationship with Jilin University in Changchun, Henan University in Zhengzhou, and South China Agricultural University in Guangzhou.

**Behlman, Lee**, English, \$700. "Augusta Webster and Motherhood in Nineteenth-Century Women's Poetry" and "Walter Pater and Victorian Stoicism" presented at Charles University, Prague, Czech Republic.

**Blankenau, William**, Economics, \$1,500. "Public Spending on Education and the Incentives for Student Achievement" presented at the annual Society for Economic Dynamics meeting, Central European University, Budapest, Hungary, and at the Biennial Advancement of Economic Theory meeting in Vigo, Spain.

**Chae, Bongsug**, Management, \$1,200. "Global Variety and Multinational Enterprise Resource Planning Project Management" presented at the 9th International Conference on Global Business and Economic Development: Management Challenges in Times of Global Change and Uncertainty, Seoul, Korea.

**Clark, Gary**, Biological and Agricultural Engineering, \$1,200. "Physical and Electronic Tools to Enhance On-Farm Irrigation Systems Management" presented at the Commission of Agricultural Engineering International Conference, Beijing, China, and served as part of a delegation developing a collaborative research relationship with Jilin University in Changchun; Henan University in Zhengzhou; and South China Agricultural University in Guangzhou.

**Garrett, Karen**, Plant Pathology, \$1,700. Keynote speaker at the 9th International Workshop on Plant Disease Epidemiology, Brittany, France.

**Goodin, Douglas**, Geography, \$875. Participated in a joint initiative between K-State faculty in geography and geology and the Senegalese faculty from the Universite Cheikh Anta Diop to begin discussion on developing a "Digital Geoscience Atlas of Senegal" and met with authorities from governmental offices including USAID, US Embassy, and the Senegalese National Academy of Sciences in Dakar, Senegal.

**Harrington Jr, John**, Geography, \$875. Participated in a joint initiative between K-State faculty in geography and geology and the Senegalese faculty from the Universite Cheikh Anta Diop to begin discussion on developing a "Digital Geoscience Atlas of Senegal" and met with authorities from governmental offices including USAID, US Embassy, and the Senegalese National Academy of Sciences in Dakar, Senegal.

**Holland, Kenneth**, Political Science, \$500. Collaborated with Blaise-Pascal University in France, Colorado State University, and the University of Memphis to produce two "Tourism Education" grant proposals.

**Hubbard, Mary**, Geology, \$875. Participated in a joint initiative between K-State faculty in geography and geology and the Senegalese faculty from the Universite Cheikh Anta Diop to begin discussion on developing a "Digital Geoscience Atlas of Senegal" and met with authorities from governmental offices including USAID, US Embassy, and the Senegalese National Academy of Sciences in Dakar, Senegal.

**Hutchinson, J. M. Shawn**, Geography, \$1,575. "Soil Moisture Estimation Using Satellite Image Data" presented at the 2004 International Commission of Agricultural Engineering Conference held in Beijing, China and participated in a joint initiative between K-State geography and geology faculty and the Senegalese faculty from the Universite Cheikh Anta Diop to begin discussion on developing a "Digital Geoscience Atlas of Senegal" and meet with authorities from governmental offices including USAID, US Embassy, and the Senegalese National Academy of Sciences in Dakar, Senegal.

**Hutchinson, Stacy**, Biological and Agricultural Engineering, \$1,200. "Vegetated Systems for NPS Pollution Control" presented at the 2004 International Commission of Agricultural Engineering Conference, Beijing, China, and served as part of a delegation developing a collaborative research relationship with Jilin University in Changchun; Henan University in Zhengzhou; and South China Agricultural University in Guangzhou.

**Lease, Kevin**, Mechanical and Nuclear Engineering, \$1,700. "Application of CTOA/CTOD Concepts to Fracture of Aerospace Structures" presented at the 11th International Conference on Fracture in Turin, Italy.

**Maddux, Estoria (Esther)**, School of Family Studies and Human Services, \$500. "Empowering Families and Strengthening Communities through Financial Planning Education" presented at the First International Home Economics Conference, Government College of Home Economics, Gulberg, Lahore, Pakistan.

**Mathews, Alexander**, Civil Engineering, \$2,000. "Process Engineering and Product Substitution to Minimize Adverse Impacts: A Case Study of Road and Highway Deicing Operations" presented at the 5th Asia-Pacific Conference on Sustainable Energy and Environmental Technologies, Wellington, New Zealand.

**Moyer, Joseph**, Agricultural Research Center-Hays, \$1,000. "Allocating grazing resources with KansasGrazer® and making management decisions in a stocker operation" presented at the 20th International Grassland Congress in Dublin and Cork, Ireland.



**Natarajan, Balasubramaniam**, Electrical and Computer Engineering, \$1,400. "Ant Colony-based Optimal MC-CDMA Multi-user Detector" presented at the Institute of Electrical and Electronics Engineers International Conference on Communications in Korea.

**Pentz, Julie**, Speech Communication, Theatre, and Dance, \$1,600. Taught Dance masters classes and performed concerts in the China Dance Tour hosted by Shenandoah University and several other schools in China and Taiwan.

**Pierzynski, Gary**, Agronomy, \$2,000. "Quantifying reduction in bioavailability and human and ecological risk in treated heavy metal contaminated soils using in vitro methods and bioassays" presented at the 8th International Conference on the Biogeochemistry of Trace Elements, Adelaide, Australia.

**Rowland, Raymond R. R.**, Diagnostic Medicine/Pathobiology, \$500. "Is SARS CoVN a nucleolar protein?" presented at the 10th International Nidovirus Symposium: Towards a cure for SARS and other nidoviruses, Colorado Springs.

**Stone, David**, History, \$500. "Dictatorships and the Fabrication of Control" presented at the Power and Principle Humboldt Foundation Conference at the University of Cambridge, St. John's College, United Kingdom.

**\*Tummala, Krishna K**, \$500. South Africa trip.

**Wang, Youqi**, Mechanical and Nuclear Engineering, \$1,000. "Application of Atomistic Element Analysis in Nano-Simulations" presented at the 15th International Conference on Composite Materials, and to visit the School of Mechanical Engineering, University of KwaZulu, and Durban, South Africa.

**Westman, Karin**, English, \$500. "Lost in Translation: Philip Pullman's His Dark Materials on Stage" presented at the Children's Literature Association Conference, Winnipeg, Manitoba, Canada.

## Spring 2005 Awards

**Arnds, Peter**, Modern Languages, \$2,200. "Teaching Race through World Fiction" presented at the 12th International Conference on Learning, Granada, Spain.

**Back, Ki-Joon**, Hotel, Restaurant, Institution Management and Dietetics, \$1,500. "An Empirical Examination of the Structural Antecedents of Member Loyalty in the Country Club Industry" presented at the Asian Pacific Tourism Association (APTA) 11th Annual Conference, Goyang, Korea.

**Bloodgood, James**, Management, \$700. Enable travel to conduct a study on "Competitiveness and Ethics Training".

**Bremer, Dale**, Horticulture, Forestry and Recreation Resources, \$1,400. "Results in Turf grass Science Conducted at Rocky Ford Turf grass Research Center" presented at the 10th International Turf grass Research Conference 2005; North Wales Conference Centre, Llandudno, Wales, UK.

**Clark, Robert**, Modern Languages, \$325. "The Anagogical Image/The Moralized Text Conference" presented at the International Studies Abroad conference held in Angers, France.

**Dissanayake, Sunanda**, Civil Engineering, \$1,200. "Identification of Factors Contributing to High Severity Crashes in Rural Areas" presented at the 13th International Conference on Road Safety in Four Continents, Warsaw, Poland.

**Frey, Marsha**, History, \$4,200. "The French Revolution and International Law" presented at the 20th International Conference of Historical Sciences, Sydney, Australia.

**Hall, Dean**, English, \$1,700. "Strand B: Childhood and Morality; Message and Medium" presented at the 17th Biennial Congress of International Research Society for Children's Literature, Dublin, Ireland.

**Hsu, William**, Computing and Information Sciences, \$1,800. "Bayesian Network Tools in Java Software Library" Workshop held at the International Joint Conference on Artificial Intelligence/International Conference on Uncertainty in Artificial Intelligence, Edinburgh, Scotland.

**Janda, Swinder**, Marketing, \$1,600. "An Empirical Test of Factors Affecting Likelihood of Making Online Purchases" and "Exploring the Role of Death Anxiety in the Context of an End-of-Life Product" both presented at the Academy of Marketing Science World Marketing Congress, Muenster, Germany.

**Kambhampati, Srinivas**, Entomology, \$2,000. Foreign Exchange Visit: Faculty Development and Collaborative Research in Thailand and India.

**Keiser, George**, English, \$1,350. "Two Centuries of Illustrating Thomas Norton's Ordinal of Alchemy" presented at the 9th Biennial Conference of Early Book Society, Queen's University, Belfast, Northern Ireland, and "Vernacular Herbals: A Growth Industry in Late Medieval England" presented at the 10th York Manuscripts Conference, University of York, York, England.

**Kolonosky, Walter**, Modern Languages, \$500. "Sinyavsky's Game of Cat and Mouse: Nabokovian Correlatives" presented at the All-Russian State Library of Foreign Literature Conference, Moscow.

**Kramer, Kimberly**, Architectural Engineering and Construction Science, \$500. "Aesthetics of Concrete Structures – Beauty is in the Mind of the Beholder" presented at the First International Federation for Structural Concrete Symposium, Budapest, Hungary.

**Mahoney, Jon**, Philosophy, \$1,250. "Rules of Moral Salience and the Problem of Rigorism in Kantian Ethics" presented at the 10th International Kant Congress, Sao Paulo, Brazil.

**Melhem, Hani**, Civil Engineering, \$1,100. "Application of Fuzzy Case-Based Reasoning to Bridge Management" presented at the American Society of Civil Engineers 2005 International Conference on Computing in Civil Engineering, Cancun, Mexico.

**Michaud, John P**, Entomology, \$2,100. "Characterizing ecological divergence in a novel biotype of Russian wheat aphid in the High Plains, U.S.A." presented at the International Symposium on Aphids, Freemantle in WA, Australia.

**Moro, Manuel**, Diagnostic Medicine/Pathobiology, \$700. "PCR Detection of Tick-borne Pathogens" presented at the First Conference of Molecular Detection of Microbial Pathogens, Lima, Peru.

**Oropesa, Salvador**, Modern Languages, \$900. "Eres mi heroe (You're my Hero)" presented at the International Conference of Association of University Professors from Spain in the United States.

**Parker, Craig**, Music, \$2,160. "Sousa's Band in Great Britain: The Transmission of American Culture" held at the 5th Annual Music in Nineteenth-Century Britain Conference, Nottingham, Great Britain.

**Paul, Bimal**, Geography, \$2,300. "Forced Eviction and Relocation of Squatter and Slum Dwellers in Dhaka, Bangladesh" presented at the 8th Asian Urbanization Conference, Kobe, Japan.

**Peric, Dunja**, Civil Engineering, \$2,200. "Geotechnology in Harmony with the Global Environment" 16th International Conference on Soil Mechanics and Geotechnical Engineering, Osaka, Japan.

**Ramm, Alexander**, Mathematics, \$1,400. "Dynamical Systems Method for Solving Nonlinear Problems" presented at the International Conference on Applied Mathematics held at the Institute of Technology, Bandung, Indonesia.

**Ratliff, Ron**, Library, \$2,800. "C.S. Lewis in the University: His Life and Faith as a Guide to Us" presented at the Oxbridge 2005, C.S. Lewis Summer Institute: Making All Things New: The Good, the True, and the Beautiful in the 21st Century held in Oxford and then in Cambridge, England.

**Sandercock, Brett**, Biology, \$1,300. "Estimation of Survival Rates and Other Demographic Parameters for Shorebird Populations" presented at the Annual Conference of the International Wader Study Group at the Knockadoon Head Field Centre, Cork, Ireland.

**Shah, Jyoti**, Biology, \$1,000. "Arabidopsis-Green Peach Aphid Interaction: Novel Role for the Arabidopsis PAD4 Gene in Insect Defense" presented at the XII International Congress on Molecular-Plant-Microbe Interactions, Cancun, Mexico.

**Shanteau, James**, Psychology, \$1,200. "Four Successes and a Failure: Training Decision Making Skills to Experts" presented at the 20th Biennial Meeting of the International Research Conference on Subjectivity Probability, Utility, and Decision Making, Stockholm, Sweden.

**Smith, Jeffrey**, Geography, \$720. Research results presented at the Conference of Latin Americanist Geographers, Morelia, Michoacan, Mexico.

**Staples, Kimberly**, Elementary Education, \$500. "The Effects of Integrating GLOBE Instrumentation and Protocols in Elementary and Middle Level Science Methods Courses" presented at the 9th Annual Globe 2005 International Conference, Prague, Czech Republic.

**Kolonosky, Walter**, Modern Languages, \$500. "Sinyavsky's Game of Cat and Mouse: Nabokovian Correlatives" presented at the All-Russian State Library of Foreign Literature Conference, Moscow.

**Wang, Weiqun**, Human Nutrition, \$2,000. Institute for Nutritional Sciences, Findings of NIH-Funded Weight Control Project given; professors and directors visited regarding collaborative efforts; recruitment of graduate students pursued at the Chinese Academy of Sciences, Shanghai, China; Medical College, Xian Jiaotong University, China; Department of Biological Sciences and Biotechnology, Tsinghua University, China; and College of Veterinary Medicine, Nanjing Agricultural University, China.

**White, Frank**, Plant Pathology, \$1,800. "Regulation of host transcription by *Xanthomonas oryzae* pv" presented at the XII International Congress on Molecular Plant-Microbe Interactions, Cancun, Mexico.

**Wilson, Donald**, Philosophy, \$500. 10th International Kant Congress: Right and Peace in Kant's Philosophy, Sao Paulo, Brazil.

**Wood, Naomi**, English, \$1,700. "The Lion, Witches, and the Alethiometer: Religious Faith and Moral Agency in C.S. Lewis, Diana Wynne Jones, and Philip Pullman" presented at the 17th Biennial Congress of International Research Society for Children's Literature, Dublin, Ireland.

**Yetter, David**, Mathematics, \$1,500. "Categories with Structure for 3- and 4-Manifold Topology" presented at the Categories in Algebra, Geometry and Mathematical Physics: Conference in honor of Ross Street's 60th birthday, Sydney, Australia.

# UNIVERSITY DISTINGUISHED PROFESSORS

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**FRANK BLECHA**, Anatomy and Physiology (2001)  
**M. CHENGAPPA**, Diagnostic Medicine/Pathobiology (2003)  
**C. LEWIS COCKE**, Physics (1997)  
**GARY W. CONRAD**, Biology (1998)  
**ROBIN DENELL**, Biology, (2000)  
**L. T. FAN**, Chemical Engineering (1987)  
**BIKRAM S. GILL**, Plant Pathology (1997)  
**DAVID HARTNETT**, Biology (2004)  
**JONATHAN HOLDEN**, English (1988)  
**YOSHIRO IKEDA**, Art (2004)  
**HONGXING JIANG**, Physics (2004)  
**MICHAEL R. KANOST**, Biochemistry (2005)  
**KENNETH KLABUNDE**, Chemistry (1988)  
**ALAN KNAPP**, Biology (2002)  
**CHII-DONG LIN**, Physics (1990)  
**ROBERT D. LINDER**, History (2003)  
**DAVID LITTRELL**, Music (2001)  
**JAMES L. MARSDEN**, Regents Distinguished Professor of Animal Sciences (1994)  
**E. WAYNE NAFZIGER**, Economics (1999)  
**VINCENT ORTIZ**, Chemistry (2004)  
**HARALD E.L. PRINS**, Anthropology (2005)  
**TALAT RAHMAN**, Physics (2001)  
**SONNY RAMASWAMY**, Entomology (2004)  
**PATRICK RICHARD**, Cortelyou-Rust Distinguished Professor of Physics (1988)  
**TOM ROCHE**, Biochemistry (2002)  
**SADAHIRO SAEKI**, Mathematics (1988)  
**DAVID A. SCHMIDT**, Computing and Information Sciences (2003)  
**JAMES SHANTEAU**, Psychology (2005)  
**TED SCHROEDER**, Agricultural Economics (2004)  
**CHRISTOPHER SORENSEN**, Physics, (2000)  
**BRIAN S. SPOONER**, Biology (1999)  
**MICHAEL W. SULEIMAN**, Political Science (1990)  
**LARRY TAKEMOTO**, Biology (2001)  
**BARBARA VALENT**, Plant Pathology (2002)  
**DEAN ZOLLMAN**, Physics (2001)

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# RECIPIENTS OF THE DISTINGUISHED GRADUATE FACULTY AWARD

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The Distinguished Graduate Faculty Award is made annually to those faculty members who have distinguished themselves nationally and internationally for their excellence in research and graduate education. Normally, up to two faculty members are selected annually by a group of faculty peers. Recipients receive an honorarium and deliver a public lecture following selection for this award.

**JOHN F. HELM** Architecture and Applied Arts 1955-56  
**HILMER H. LAUDE** Agronomy 1955-56

**ALVIN B. CARDWELL** Physics 1956-57  
**CHARLES H. SCHOLER** Applied Mechanics 1956-57

**HOWARD T. HILL** Speech 1957-58  
**ARTHUR D. WEBER** College of Agriculture 1957-58

**CHARLES M. CORRELL** History 1958-59  
**LEON R. QUINLAN** Landscape Architecture 1958-59

**FRANCIS D. FARRELL** President Emeritus 1959-60  
**FRED L. PARRISH** History 1959-60

**KLING L. ANDERSON** Agronomy 1960-61  
**HOLLY C. FRYER** Statistics 1960-61

**A. M. GUHL** Zoology 1961-62  
**H. HENLEY HAYMAKER** Botany 1961-62

**ROBERT KATZ** Physics 1962-63

**ERLE E. BARTLEY** Dairy and Poultry Science 1963-64

**ROY LANGFORD** Psychology 1964-65

**V. D. FOLTZ** Bacteriology 1965-66

**BREWSTER ROGERSON** English 1966-67

**JOHN A. JOHNSON** Grain Science and Industry 1967-68

**R. KENNETH BURKHARD** Biochemistry 1968-69

**CLIFTON E. MELOAN** Chemistry 1969-70

**ROBIN HIGHAM** History 1970-71

**ANGELO C. GARZIO** Art 1971-72

**L. T. FAN** Chemical Engineering 1972-73

**IVAN D. TEARE** Agronomy 1973-74

**STANLEY E. LELAND** Veterinary Pathology 1974-75

**RICHARD CONSIGLI** Biology 1975-76

**DUDLEY WILLIAMS** Physics 1976-77

**FREDERICK W. OEHME** Surgery and Medicine 1977-78

**ELMER G. HEYNE** Agronomy 1978-79

**DONALD W. SETSER** Chemistry 1979-80

**JAMES F. SHEPARD** Plant Pathology 1980-81

**ROGER FEDDE** Anatomy and Physiology 1981-82

**NASIR AHMED** Electrical Engineering 1982-83

**WILLIAM FATELEY** Chemistry 1983-84

**BURTON I. KAUFMAN** History 1984-85

**PATRICK RICHARD** Physics 1984-85

**JONATHAN HOLDEN** English 1985-86

**HORST LEIPOLD** Pathology 1985-86

**TERRY C. JOHNSON** Biology 1986-87

**MICHAEL W. SULEIMAN** Political Science 1986-87

**CORNELIA BUTLER FLORA** Sociology 1987-88

**RICHARD N. McDONALD** Chemistry 1987-88

**MARGO KREN** Art 1988-89

**GERALD R. REECK** Biochemistry 1988-89

**BIKRAM S. GILL** Plant Pathology 1989-90

**PATRICIA J. O' BRIEN** Sociology, Anthropology and Social Work 1989-90

**BRIAN S. SPOONER** Biology 1990-91

**BENJAMIN R. TILGHMAN** Philosophy 1990-91

**ALBERT N. HAMSCHER** History 1991-92

**KENNETH J. KLABUNDE** Chemistry 1991-92

**C. LEWIS COCKE** Physics 1992-93

**JANE A. WESTFALL** Anatomy and Physiology 1992-93

**ROBIN E. DENELL** Biology 1993-94

**JOHN J. IANDOLO** Pathology and Microbiology 1993-94

**DONALD J. MROZEK** History 1993-94

**THEODORE L. HOPKINS** Entomology 1994-95

**THOMAS E. ROCHE** Biochemistry 1994-95

**GARY W. CONRAD** Biology 1995-96

**JAN E. LEACH** Plant Pathology 1995-96

**E. WAYNE NAFZIGER** Economics 1995-96

**ALEXANDER G. RAMM** Mathematics 1996-97

**CHRISTOPHER M. SORENSEN** Physics 1996-97

**FRANK BLECHA** Anatomy and Physiology 1997-98

**TALAT RAHMAN** Physics 1997-98

**ROLLIN SEARS** Agronomy 1997-98

**LARRY TAKEMOTO** Biology 1998-99

**MARSHA FREY** History 1999-2000

**ERIC MAATA** Chemistry 1999-2000

**GEORGE KEISER** English 2000-01

**PAUL SEIB** Grain Science and Industry 2000-01

**SCOT H. HULBERT** Plant Pathology 2001-02

**JOSEPH VINCENT ORTIZ** Chemistry 2001-02

**LARRY E. ERICKSON** Chemical Engineering 2002-03

**JAMES SHANTEAU** Psychology 2002-03

**DALE HERSPRING** Political Science 2003-04

**DAVID NORMAN** Agricultural Economics 2003-04

**DALLAS JOHNSON** Statistics 2004-05

**DUY HUA** Chemistry 2004-05



# U.S. PATENTS

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**Issued from July 1, 2004 to June 30, 2005 to the KSU Research Foundation**

(Listed in reverse chronological order)

**Kenneth J. Klabunde, Aleksandr F. Bedilo, Olga B. Koper and Michael Sigel** "Carbon-coated Metal Oxide Nanoparticles" (#6,843,919)

**Duy Hua and Jean-Pierre Perchellet** "Triptycene Analogs" (#6,828,450)

**Gordon A. Andrews, Katie L. Smith for Joseph E. Smith** "Method and Kit for Typing Feline Blood" (#6,830,895)

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efforts involving this property. Licensing and entrepreneurial initiatives are carried out by the National Institute for Strategic Technology Acquisition and Commercialization (NISTAC) in conjunction with KSURF.

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***Metalsmithing: Art at the  
Crossroads of Science  
and Engineering***

