

Approved: 2-11-99
Date

MINUTES OF THE SENATE COMMITTEE ON AGRICULTURE.

The meeting was called to order by Chairperson Steve Morris at 10:00 a.m. on February 10, 1999 in Room 423-S of the Capitol.

All members were present except: Senator Tim Huelskamp
Senator Dwayne Umbarger (E)

Committee staff present: Raney Gilliland, Legislative Research Department
Bruce Kinzie, Revisor of Statutes
Nancy Kippes, Committee Secretary

Conferees appearing before the committee:

Dan Nagengast, Kansas Rural Center
Diana Endicott, Rainbow Coop
David Duress, Public Policy and Business Research, Kansas University
Paul Johnson, Rolling Prairie Farmers Alliance

Others attending: (See Attached)

Senator Stephens made a motion to approve the minutes of the February 9, 1999 meeting as submitted. Senator Clark seconded. The motion carried.

Dan Nagengast, Kansas Rural Center, began the committee presentation on Alternative Agriculture by noting that although Kansas is a state known for its production agriculture, vast quantities of beef and grains, the number of farms is steadily decreasing. He stated presently there are about 62,000 farms and that a Kansas State University economist estimates that only about 12,000 of these are actually generating all the income needed by the families which farm them. Mr. Nagengast listed some ways the State of Kansas might encourage more local production and direct marketing of certain agricultural products (Attachment 1).

Diana Endicott, who along with her husband owns and operates a 400-acre certified organic farm as well as a conventional family farm, presented information on alternative opportunities for farmers (Attachment 2). Ms. Endicott listed some recommendations for grant and loan awards system.

David Duress, Public Policy and Business Research, Kansas University, mentioned the goals of the Kaw Valley Environmentally Identified Products Project and the project phases now in progress and those phases proposed. The research being conducted indicated that 40% of the people surveyed purchased produce at a farmer's market in the last year and 36% purchased organic food at least "occasionally, and 56% did one or both. The Project would like to show in the future that local organic produce can be a significant value-added product in the Kaw Valley, can be a relatively low-capitalization easy-entry farm niche, and can ameliorate the atrazine problem (Attachment 3).

Paul Johnson came before the Committee as a market gardener and a member of the Rolling Prairie Farmers Alliance (RPFA). He stated RPFA is an incorporated group of eight gardeners that started in 1994 selling fresh, seasonal vegetables, fruit and farm produce. They operate a vegetable subscription service, for which Mr. Johnson states there is a great demand. He stated there is tremendous opportunity for production, especially of fruits and vegetables, that are consumed in Kansas but not produced within the state. Mr. Johnson believes Kansas has the climate, natural resources and capabilities to greatly diversify our food system. (Attachment 4).

Written material was distributed from Kansas State University upon request of Senator Biggs concerning State and Federal General Use Funds, AES projects coded by farm size and cost split, and Cooperative Extension sponsored projects and Agriculture Experiment Station sponsored projects (Attachment 5).

The presentation of Alternative Agriculture was closed and the meeting was adjourned.

The next meeting is February 11, 1999.

Testimony from the Kansas Rural Center
Regarding Direct Marketed Agriculture
February 10, 1999

Kansas is a state known for its production agriculture, vast quantities of beef & grains. And while we often seem to surpass old production records, the number of farms is steadily decreasing, down to around 62,000 at present. One KSU economist has estimated that only about 12,000 of these are actually generating all the income needed by the families which farm them. The last ten years or so, we have witnessed decreasing margins in agriculture. Most farms hover right on the edge of profitability, some years profitable, often not.

Yet agriculture remains the largest segment of the Kansas economy. The profits from agriculture are increasingly flowing to the input sector, finance, and the marketing sector. Because Kansas is a commodity state, we have attempted to put more profit in agriculture by bumping up the production of commodities, in hopes of opening overseas markets. This sometimes works fine, but can also be risky, as witnessed by the recent Southeast Asian collapse. And always, the margin flowing to the producer grows slimmer.

What we are presenting to you today, is information on a totally different economy, a regional one. Many of the farmers and ranchers engaged in this economy have eliminated other profit takers. They have linked directly with the final consumer, and are receiving retail prices. In other instances, they have differentiated their products, taken them out of the global commodity price market, and retain ownership as far down the middleman chain as possible. Much of their activities take place in and around urban areas.

According to a study by the American Farmland Trust, using census data:

- 56% of Gross Ag. Sales in the U.S. are from Metropolitan Statistical areas or the counties immediately adjacent to them.*
- 91% of Total Specialty Crop Sales take place in the same areas*
- According to the same study, Metropolitan areas of Kansas are clearly underserved by local, direct marketing farmers.*
- Specialty crops can provide a gross return of up to \$20,000 per farmed acre. Specialty crops can include vegetables, herbs, fruit & flowers.
- Net returns on direct marketed specialty crops are in the 50-60% range.**

* *American Farmland*, Summer 1993.

** *Growing for Market*, January, 1997.

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Attachment 1

Larry Swain, a community development specialist at the University of Wisconsin, surveyed about 5,000 residents in 18 communities in Wisconsin and Minnesota, and found that small farmers spend 75 percent of their money locally, compared with people in a medium-sized city who spend only 54% locally.

For his study, Swain devised a formula to account for the number of times money spent locally gets respent in the community. By this calculation, a farm with a gross income of \$200,000 that is then multiplied through the local economy is worth \$720,000 to the community. By the same formula, a family with an income of \$40,000 is worth \$86,000 to the local economy. Thus, to replace one farm, it will take eight \$40,000 incomes. (summer 1998, *Orion Afield*, The Orion Society, 195 Main St., Great Barrington, MA 01230).

Mean Deviation - Gross Revenue\$/acre. Figures appeared in *Summary of Kansas Specialty Crop Enterprise Data*, KSU, Coltrain, Boland, Delano & Marr

Corn	\$124.40
Milo	\$115.00
Soybeans	\$160.15
Wheat	\$96.01

Vegetables

Beets	\$5,239.85
Peppers	\$5,367.39
Tomatoes	\$4,446.24
Potatoes	\$2,625.57
Broccoli	\$4,687.65
Zucchini	\$12,494.56

Fruits

Apples	\$1,266.53
Plums	\$395.77
Watermelon	\$1,990.78
Cantaloupe	\$2,479.79
Strawberries	\$2,583.99

Some ways that the State of Kansas might encourage more local production and direct marketing:

- Target efforts of KDOCH towards direct marketing cooperatives rather than commodity based cooperatives.

- Encourage more purchase of local commodities by institutions (schools, prisons, feeding programs, etc.)

- Establish the Farmers Market Nutrition Program which targets federal WIC dollars for disbursement in the form of coupons redeemable only at farmers markets.

- Increase the exemption for farm slaughtered and marketed poultry above the current 1,000 bird limit.

- Establish reciprocity with surrounding states on meat inspections so that Kansas meat might cross over into Missouri, etc.

- Help to establish, and promote venues where farmers might direct market, (for example; the produce auctions of Missouri and Pennsylvania; the combination terminal and farmers markets of Tennessee and North Carolina).

- Promote agri-tourism by funding regional marketing associations such as those in the counties of Northern California.

Final Report
1994 Kansas Farmers Market Fruits And Vegetables Program
Test Project Results

What is the Program?

The WIC Farmers Market Nutrition Program (FMNP) is a federally funded program which provides nutritionally-at-risk women and their children with coupons for fresh fruits and vegetables, redeemable only at approved farmers markets. The program is the newest of the U.S. Department of Agriculture's food assistance programs, and was established by act of Congress in July 1992.

The FMNP is associated with the Special Supplemental Food Program for Women, Infants and Children, popularly known as WIC, which is administered in cooperation with the States by the Food and Nutrition Service of USDA. WIC provides supplemental foods, health care referrals and nutrition education at no cost to low-income pregnant, breastfeeding and non-breastfeeding post-partum women, and to infants and children up to 5 years of age, who are found to be at nutritional risk.

In Fiscal Year 1994, the number of sites with operating programs increased from 11 to 26, including 24 states, the District of Columbia and the Cherokee Nation of Oklahoma. During Fiscal Year 1993, 342,000 recipients received benefits. As of October 12, 1994, 782,630 individuals were served through 801 participating farmers markets and 214 participating farmstands, by 6,612 participating farmers. Federal funding amounted to \$5,608,173. State and private or other funding sources amounted to \$3,907,501 and \$157,370 respectively.

In Kansas

The Kansas Rural Center (KRC) began meeting in early 1993 with representatives of the Kansas Department of Health and Environment (KDHE) and the Kansas State Department of Agriculture (KSDA) to determine the feasibility of expanding the program to Kansas. At that time the Rural Center agreed to pursue funding for a pilot program of the FMNP. Funding was finally procured from the United Presbyterian Church Hunger Program and the United Church of Christ's Board for Homeland Ministries.

At that time the decision was made to proceed with a test project during the summer of 1994. In the intervening period, KDHE, for internal reasons, decided to no longer participate in the project. Since no State agency had funding available to administer the project, it could not serve as an official "Pilot Project" within the meaning of the Federal enabling statute. However, because there was such little knowledge of the program within the state of Kansas, KRC and the KSDA decided to conduct a "Test Project of the Kansas Farmers Market Fruits and Vegetables Program" which would provide essentially the same services at the FMNP. The goals of the Project were:

1. To provide fresh fruits and vegetables to nutritionally-at-risk mothers with infants and children.

2. To increase sales of locally grown fruits and vegetables at the targeted farmers market, (Lawrence).
3. To build awareness in Kansas of the similar federal program known as the Farmers Market Nutrition Program, with the thought of establishing that program in the state.

The decision was made to provide \$5,000 worth of coupons in \$2 denominations. The coupons were printed by the KSDA and distributed through the Salvation Army office in Lawrence. Of that total, \$2,800 in coupons were actually distributed to 140 women in booklets totaling \$20, redeemable from June 20, 1994 through July 30, 1994. A total of \$2,382 in coupons were redeemed, or 85.07% of those in circulation.

The program was received positively by practically everyone involved, recipients, farmers and the Salvation Army caseworker:

Quotes:

WIC Mothers

“It helped me to purchase fruits and vegetables that I would not have been able to afford otherwise. I wasn’t even aware that there was a farmers market.”

“The quality here was better than at (another town where she used to live). I wouldn’t have even tried the market in Lawrence.”

“The program was really good. I wish this was more than a one time thing.”

“Farmers were very helpful in telling us how to prepare foods. What can you do with a zucchini?”

Farmers

“I had customers that came back after the coupon program was over.”

“One lady came with a whole fistful of coupons and bought nothing but eggplant.”

“I had one woman who bought \$20 worth of tomatoes for canning.”

“We were adding people to the farmers market (as customers) who were really good to add.”

“Some of them were afraid. They didn’t know what they were walking in to.”

“Some were surprised that we would accept the coupons.”

“These got to people who weren’t working the welfare system.”

“Its a good program. Do it again.”

Betsy Anderson-Caseworker at the Salvation Army

“Some of the mothers were afraid they would be treated differently, but they said they were treated like everyone else, or even better. In some cases they were given better deals when the farmer found they were using the coupons.

A lot of recipients were young mothers and the farmers were helpful with recipes.

I think it is a wonderful program and I think it should be continued. It is beneficial not only to WIC mothers and their children, but also to farmers. I hope it can become permanent.”

Other States

Surveys have been conducted in other states which have a longer history with the program. In New York State in 1991, 79.8% of all WIC families redeemed coupons. Of these, 96% indicated they bought a lot more fresh fruits and vegetables than they normally would have purchased. Over half, 51%, had never shopped at a Farmers Market prior to the program and a large percentage continued to do so. In addition, 62% continued to shop using some of their own funds after using all the coupons.

During that year there were 644 farmers at 83 different markets who accepted the coupons. Farmers reported that the coupon program increased their total sales by 21%, in coupons alone, or \$1,488.99 per farmer. This does not include purchases made by the WIC mothers using their own funds.

Conclusions are that the program brought a whole new group of customers to the farmers markets, improved nutrition, and benefited farmers incomes.

Next Steps

FMNP funds are provided through a legislatively mandated set-aside in the WIC program appropriation. Federal funds support 70 percent of the total cost of the program. States operating the FMNP must match the Federal funds allocated to them by contributing at least 30 percent of the cost of the program. The matching funds can come from State, local, or private sources. A State agency can also count funds used to support similar farmers markets operating in the State in meeting the match requirement. States may issue Farmers Market coupons to other groups, such as elderly person or older children, with the matching funds they provide.

Interim rules for the program were published in the Federal Register, Vol. 59, No. 48, Friday, March 11, 1994, Rules and Regulations. States desiring Federal funding must submit a State Plan which details the estimated cost of their FMNP, the estimated number of individuals to be served, a description of how the program will be administered, and the criteria for the authorization of farmers. Since Federal funds are limited, the State Plans are ranked according to the following criteria: a State’s prior experiences with this or similar programs; a State’s operation of a similar

program with State or local funds that can present data concerning the value of the program; require that if the State is already operating a similar program, it not reduce it upon receiving Federal funds; if the state has a high concentration of eligible persons with access to farmers markets, in a broad geographical area; the State will adequately fund its portion of the project.

Kansas, through the Legislature, could appropriate the funds and direct either the Kansas Department of Agriculture or the Kansas Department of Health and Environment to set up a Farmers Market Nutrition Program. It is also possible that some of the State's costs could be covered by private fundraising activities.

It is our hope that the Legislature will consider this worthwhile program, which serves to both increase farming opportunities and provide improved nutrition to our most at-risk population, with one appropriation.

For further information, please contact:

The Kansas Rural Center
Attn: Dan Nagengast
P.O. Box 133
Whiting, KS 66552
(913) 873-3431
(913) 873-3432 fax

AGRICULTURE NICHE MARKETING OPPORTUNITIES

Brief Biography-Diana Endicott Rt. 1 Box 117 Bronson, KS 66716
316-939-4933 Fax 316-939-4980
Email allnatural@ckt.net

My husband, Gary, and I own and operate a 400-acre certified organic farm in southeast Kansas. We raise hydroponic vegetables, grain crops, have a cow/calf herd, and a small feed-out operation. A conventional family farm is located in Fort Scott. We returned home to farm in 1994.

Greenhouse Vegetables-

We raise primarily hydroponic tomatoes for Balls Food Stores. We also sell to whole food stores and upscale restaurants in KC. A marketing pool was formed in 1995 with three other local growers. This allows us to increase product volume and consistency, combine supply orders, and decrease marketing cost. We have established on-farm grading and packing criteria, delivery scheduling, and pricing. The products are trademarked '*Healthy Harvest*'.

All-Natural Beef-

In 1996 Rainbow Organic Farms formed an informal group of beef producers. In March 1998, this group of 20 producers organized as the all-natural beef producers cooperative. A test market for *Natures Premium* all-natural beef was conducted with Hen House Markets in KC. The test market proved successful and Natures Premium was introduced into the market in May 1996. The co-op was provided the opportunity to provide approximately 200-300 head of beef per week. However, the lack of financial support resulted in the market opportunity being filled with another branded program. Only a portion of the beef is Kansas raised and the beef is fed-out and processed in Nebraska and Iowa. Nevertheless, we continue to make progress. We maintain retail shelf space, R&D five value-added products for commercialization, and continue to be innovative in our marketing approach.

Grant and Loan Award Recommendations-

'Agriculture Products Development Division'

1. Establish a grant portion for feasibility studies, business plans, and value-added R&D and a guaranteed loan portion.
2. Define the application guidelines and point allocations.
3. Specify application proposal dates and deadlines.
4. A board should determine Grant and loan awards.
5. The loans awarded should be guaranteed loans through a financial institution.
 - a. This would increase the community awareness of the efforts and support of the Agriculture Products Development Division.
 - b. Provide more time for the staff to assist other projects requiring nonfinancial needs.
6. Provide workshops throughout the state on completing the application.
'A grant writing workshop for adding value agripreneurs'
7. If a business plan and feasibility study are required as part of the application, this needs to be stated.

Senate Agriculture
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Attachment 2

EXPANDING THE NICHE

LOCAL MARKETS FOR LOCAL AND ORGANIC PRODUCE IN THE KAW VALLEY

12/5/98

IPPBR Kaw Valley EIP Project

1

presented to
**THE KANSAS HOUSE AND SENATE
AGRICULTURAL COMMITTEES**

February 10, 1999

presented by
David Burress

for the
Kaw Valley Project on Local and Organic Produce
University of Kansas

12/5/98

IPPBR Kaw Valley EIP Project

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*Senate Agriculture
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Attachment 3 1*

Study team

- Institute for Public Policy and Business Research (IPPBR) and KU
 - David Burress, Principal Investigator
 - Pat Oslund, Research Economist
 - Brian Harris, Research Economist
 - Dennis Rosen, Professor of Business

12/5/98

IPPBR Kaw Valley EIP Project

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Study team, continued

- Consultants
 - Diana Endicott, Rainbow Greenhouses
 - Dan Nagengast, Kansas Rural Center
 - Paul Johnson, Rolling Prairie Farmers Alliance
 - Mara Miele, University of Pisa
 - Luanne Lohr, University of Georgia

12/5/98

IPPBR Kaw Valley EIP Project

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Focus on specialty products

- “Environmentally Identified Products” (EIPs) include agricultural products such as:
 - certified organic produce
 - locally grown products
 - low-impact products
 - integrated pest management (IPM) products
 - grass-fed beef

12/5/98

IPPBR Kaw Valley EIP Project

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The KAW Valley EIP project

- Goals
 - action research/pilot project
 - increased local farm income
 - increased local sales of EIP produce
 - reduced environmental burdens
 - increased consumer sovereignty
 - amelioration, not revolution

12/5/98

IPPBR Kaw Valley EIP Project

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The KAW Valley EIP project

- Project Phases
 - 1. The demand side (in progress)
 - 2. The supply side (proposed)
 - 3. Intermediaries and market growth (proposed)

12/5/98

IPPBR Kaw Valley EIP Project

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The KAW Valley EIP project (continued)

- The “Action Research/Pilot Project” idea
 - Apply scientific research to local markets
 - communicate results to local market participants
 - test the results in local markets
 - evaluate outcomes
 - communicate outcomes to potential change agents in other markets

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IPPBR Kaw Valley EIP Project

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The KAW Valley EIP project (continued)

- Funding for Phase 1
 - Fund For Rural America (now out of business)
- Defining “the Kaw Valley”
 - Demand side: Manhattan to Kansas City SMSA
 - 800,000 household units
 - est. \$700M annual sales of produce
 - Supply side: in Kansas and within easy driving distance

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Survey results

- A majority of Kaw valley consumers claim to consume local and/or organic produce.
 - 40% purchased produce at a farmer’s market in the last year
 - 36% purchased organic food at least “occasionally”
 - 56% did one or both.

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Survey results (continued)

- Main barrier volunteered by non-purchasers
 - no answer or uninterpretable 33%
 - high price, cost, or cost/benefit 20%
 - availability, convenience 19%
 - habit, haven't thought about it 10%
 - don't like them, don't believe in them 8%
 - lack of knowledge 4%
 - have a garden 3%
 - don't trust certification 2%
 - poor appearance, low quality 1%

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Implications for potential market

- Estimated long-run potential market for locally grown organic produce: 10% of all produce sold in Kaw Valley (\$80M/year)
- Assumptions:
 - local organics will dominate the EIP market
 - persistent and effective marketing
 - prices no more than 20% above non-EIPs
 - equivalent quality to non-EIPs
 - local produce available on average 30% of year

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Implications for future research and action

- We want to show that:
 - local organic produce can be a significant value-added product in the Kaw Valley
 - local organic produce can be a relatively low-capitalization, easy-entry farm niche in the Kaw Valley
 - local organic produce can ameliorate the atrazine problem in the Kaw Valley

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Next steps

- Complete research on consumers
- Find new funding sources
- Study the Kaw Valley farm potential
- Study Kaw Valley intermediaries and marketing methods
- Intervene to help solve the “chicken and egg” problem

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FIN

Comments or questions? Contact:

David Burress

Institute for Public Policy and Business Research

607 Blake Hall

University of Kansas

Lawrence KS 66045

Email: d-burress@ukans.edu

Phone: (785)864-9116

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TESTIMONY
PAUL JOHNSON
SENATE AND HOUSE AGRICULTURE COMMITTEE
FEBRUARY 10, 1999
ALTERNATIVE AGRICULTURE AND NICHE MARKETING

My name is Paul Johnson and today I come before this committee as a market gardener and a member of the Rolling Prairie Farmers Alliance. Rolling Prairie Farmers Alliance (RPFA) is an incorporated group of eight gardeners who live in Douglas, Jefferson and Leavenworth Counties. RPFA was started in 1994 and we are now entering our sixth season of selling fresh, seasonal vegetable, fruit and farm produce.

RPFA operates a vegetable subscription service weekly from mid-May to the end of October which is approximately 25 weeks. This season we are planning to provide 360 households with a bag of produce weekly. We use three sites for pick-up of this produce. One site is on Monday at the Community Mercantile Cooperative Grocery in Lawrence which is where RPFA started in 1994. The other two sites are on Thursdays in Kansas City at the Franklin Center which is in Kansas City, Kansas and The Food Bin in Shawnee Mission, Kansas. RPFA is a group of eight small family farms, all of which are committed to farming organically and sustainably. We believe our customers deserve the best in locally grown seasonal produce.

RPFA is a version of what is known as community supported agriculture (CSA). There are several hundred CSA's in the United States especially in the upper midwest, the northeast and in California. RPFA is one of the largest of these CSA's and unique in drawing several gardeners together in this cooperative arrangement. Most CSA's are operated off of one farm. By working together RPFA can provide a wider range of produce than any one of our growers could manage alone. Over six years there have been many times when one of our gardeners was hailed out or flooded and we were able to cover that loss with the production from our other farms. The micro-climates are really quite different from the Clinton Lake area to central Leavenworth County. We offer over seventy different food items over the course of the growing season. A typical bag of produce will have nine to eleven items where every customer will get four items and have a choice for the other items. Each week we include a newsletter on growing conditions or a history of a certain food as well as a recipe to use some of the produce in that weeks bag. RPFA now has its own cookbook written by Nancy O'Conner the nutrition educator at the Community Mercantile Cooperative Grocery. Nancy has worked with and provided recipes for RPFA since we started. On Mondays, Nancy provides samples of the recipe of the week to our customers and other shoppers at the Community Mercantile.

There are food items that RPFA buys from other local producers. Such items include asparagus, apples and shiitake mushrooms. RPFA sells several items as extras for the bag if customers are interested. Such items include cut flowers, eggs, frozen meat (pork, lamb and beef), honey, extra berries and large quantities of herbs or tomatoes for processing purposes. All of these extras are produced on RPFA farms. Special orders for large quantities are always welcome.

Overall there is a great demand for this type of vegetable subscription service. RPFA has had a waiting list for the last few years. There are only a handful of such services in the Kansas City area. Compared to farmers markets where a grower may or may not be able to sell their produce that week, a CSA works on selling larger volume and having the customers lined up before a grower puts that seed in the ground. Maintaining the highest quality is the real key to maintaining maximum customer satisfaction. RPFA uses customer surveys and continual discussion to find out how our quality is doing and what food items do our customers most favor. Our prices are very good for the organic market and somewhat higher than the normal seasonal price for conventional produce. By selling direct to the customer at retail prices, our farms become more economically viable.

Senate Agriculture
2-11-99
Attachment 4

I serve as a board member for the Kansas Rural Center. The Kansas Rural Center(KRC) is committed to economically viable, environmentally sound and socially sustainable rural culture. KRC has been analyzing the Kansas food system by comparing what is consumed within Kansas and what is produced in Kansas. It is apparent that there is tremendous opportunity for production, especially for fruits and vegetables. Kansas is seeing a reduction in the diversity of crops and are increasingly relying on imported food as our source of fruits, vegetables and other specialty crops.

Most of the food commodities that Kansas imports are high value fruit and vegetable crops. Among crops well suited for Kansas agriculture, Kansas only produces 10% of the asparagus consumed within the state. (Kansans consume 1250 acres of asparagus annually but only produces 125 acres.) In 1996, Kansas produced 5% of the Irish potatoes that were consumed in Kansas. By supplying this other 95%, Kansas could generate over \$20 million in retail sales. In 1996, Kansas consumed 25 times more tomatoes than it produced. Kansas only produces four percent of the onions consumed in the state and less than one percent of the peppers consumed. From 1980 to 1996, Kansas apple production declined by over 18 million pounds which is worth over \$7 million in retail value. Other fresh fruit production such as peaches, strawberries and raspberries have also declined even though the economic opportunities for these crops are great.

This type of analysis could be done for several other food items. There are greater gaps today in the quantity and quality of production data for specialty crops and consumption patterns are subject to proprietary market sales. For those of us who want a regional based sustainable meat supply, the plight of the 100 or so remaining meatlockers and their immediate future is of great concern. There is only one state inspected meatlocker (in Bronson) where one can take chickens to be processed in a state inspected plant and sold in the retail market. I do not believe there are any independent milk processors in Kansas where a small dairy could have milk pasteurized, bottled and sold to niche markets under that farmers label. The organic milk and butter market trade has had tremendous success in the last few years. Kansans have to import Organic Valley milk from Wisconsin or Horizon milk from Colorado.

RPFA and KRC would welcome the opportunity to study these issues in greater depth. Such discussions would center around marketing opportunities, research needs of niche marketers, credit programs for small/beginning farmers and consumer education programs to publicize local food production. This discussion would explore the role of farmers markets and what Kansas could do to promote such markets. Economic analysis would determine how much of a multiplying effect there is in producing and keeping a food dollar local. Kansas does much to promote small business centers. Niche, agricultural market business planning should be integrated into the curriculum of some of these small business development centers. Overall, Kansas has the climate, the natural resources and the capabilities to greatly diversify our food system and pride ourselves in creating such a cornucopia.

STATE OF KANSAS

DONALD E. BIGGS
SENATOR, 3RD DISTRICT
LEAVENWORTH & JEFFERSON COUNTIES



TOPEKA

SENATE CHAMBER

COMMITTEE ASSIGNMENTS
RANKING MINORITY MEMBER:
ENERGY AND NATURAL RESOURCES
MEMBER:
AGRICULTURE
ARTS AND CULTURAL RESOURCES
FEDERAL AND STATE AFFAIRS
FINANCIAL INSTITUTIONS AND
INSURANCE

LEGISLATIVE HOTLINE
1-800-432-3924
(DURING SESSION)

January 25, 1999

RECEIVED

JAN 27 1999

DEAN OF AGRICULTURE

Dr. Marc A. Johnson
Dean of Agriculture
Kansas State University
Manhattan, Kansas 66506

Dear Dean Johnson:

You are well aware of the challenges facing smaller farm operations in our state and the trend toward the larger and often corporate enterprises. This trend often works to the detriment of family farmers and rural communities. A number of midwest universities have done research studies to document these adverse impacts.

I have constituents who are questioning the role of K-State agriculture research. They particularly wonder if too much of this research is largely for the benefit of agri-business and corporate conglomerates and too little for the benefit of smaller farm operations.

For a discussion and consideration of this issue, it would be helpful to develop an abbreviated listing of the current agriculture research grants at K-State. Important information to include would be the purpose and size of the grant, the primary researchers, the length of the grant, the funding sources, and the scale of the farming operations to benefit from such research.

This may be a somewhat massive project that you will want to discuss with Senator Steve Morris, our Agriculture Committee chairman, as to the timing for a presentation to the committee. Thanks for your consideration.

Sincerely,

Donald E. Biggs,
State Senator, Third District

cc: Senator Steve Morris
Senator Harry Stephens

Senate Agriculture
2-11-99
Attachment 5

February 1, 1999

Donald E. Biggs
State Senator, Third District
State Capitol, Room 144-N
Topeka, KS 66612-1504

Dean of Agriculture
Director of Agricultural
Experiment Station and
Cooperative Extension Service
113 Waters Hall
Manhattan, KS 66506-4008
785-532-6147
Fax: 785-532-6563
<http://www.oznet.ksu.edu>

Dear Senator Biggs:

I have received your letter of January 25 asking for a listing of agricultural research grants by title (descriptive purpose), size, principal investigators, term of grant, funding source, and scale of farm operations benefitting from this research. We will devote staff to answering your request.

However, I believe in final analysis you will find that most agricultural research is farm size neutral. As we develop best management practices to prevent soil sediment and chemical runoff, test grain ~~for~~ varieties for productivity in various areas of the state, study farm management practices to control price and business risk, study ways to keep pathogenic organisms out of the food supply, develop alternative uses to create additional economic value from Kansas-produced commodities, and hundreds of other research projects, the results of research can help farms of all size become more efficient, environmentally sound, and contribute to the economic development of Kansas. I will respond as soon as possible.

Sincerely,



Marc A. Johnson
Dean and Director

cc: Senator Steve Morris
Senator Harry Stephens
Sue Peterson

KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
			DER CATTLE AND IMPROVING GRAIN SORGHUM UTILIZATION IN KANSAS (NEW)			09-30-1999		
H481	SN	WC CP	WATER MANAGEMENT FOR INCREASED WATER USE-EFFICIENCY IN SOUTHWEST KANSAS (REPLACES R834)	TRODIEN	SWK RES EXT	CT10-01-1997 09-30-2002	0174914	
R726	SN	CP HQ	IMPACT OF CONSERVATION COMPLIANCE ON NITROGEN RECOMMENDATIONS FOR DRYLAND WINTER WHEAT (FERTILIZER REPLACES R085)	SCHLEGEL HAVLIN, DHUYVETTER	SWK RES EXT AGRONOMY	CT05-01-1995 12-31-1999	0168005	*
H967	SN	DL SA	DRYLAND CROPPING SYSTEMS FOR SOUTHWEST KANSAS (REPLACES R621)	NORWOOD	SWK RES EXT	CT07-01-1991 09-30-1999	0154229	
H969	SN	SA	CROP IMPROVEMENT FOR SOUTHWEST KANSAS (REPLACES R605)	WITT	SWK RES EXT	CT07-01-1991 09-30-1999	0154347	
H973	SN	SA CP	DEVELOPING WEED MANAGEMENT SYSTEMS FOR SOUTHWEST KANSAS	CURRIE	SWK RES EXT	CT06-01-1991 09-30-1994	0154349	
R174	SN	AH AP FG	BEEF CATTLE PRODUCTION & MANAGEMENT IN SOUTHEAST KANSAS (REPLACES R856)	COFFEY, LOMAS & MOYER	SEK BRANCH	07-01-1980 06-30-1999	0081561	
H312	SN	WC HQ	SOIL AND WATER MANAGEMENT FOR CROP PRODUCTION IN SOUTHEASTERN KANSAS (REPLACES H031)	SWEENEY	SEK BRANCH	10-01-1995 09-30-2000	0167816	
H332	SN	FG	FORAGE MANAGEMENT IN SOUTHEASTERN KANSAS (REPLACES H030)	MOYER, COFFEY SWEENEY	SEK BRANCH SEK BRANCH	10-01-1995 09-30-2000	0167994	
H414	SN	CP SA AC	EVALUATION OF CROP ROTATION AND TILLAGE SYSTEMS FOR SOUTHEAST KANSAS (REPLACES H015)	KELLEY	SEK BRANCH	10-01-1996 09-30-2001	0171430	
H444	SN	CP SA AC	SOYBEAN PRODUCTION RESEARCH FOR SOUTHEASTERN KANSAS (REPLACES H109)	LONG	SEK BRANCH	10-01-1996 09-30-2001	0171460	
R729	SN		SHORT-SEASON CORN GROWTH AND YIELD RESPONSE TO N FERTILIZATION AND TILLAGE (NEW FERTILIZER PROJECT)	SWEENEY	SEK BRANCH	05-01-1996 06-30-1998	0171166	
F142	MB, AH	NC-142	REGULATION OF PHOTOSYNTHETIC PROCESS	GUIKEMA	BIOLOGY	10-01-1997	0176997	*

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		ES		MUELLER	BIOCHEMISTRY	09-30-2002		
R170	FG		STUDIES ON THE FLORA OF THE GRASSLANDS	BARKLEY	BIOLOGY	01-01-1979 06-30-1999	0081031	
D249			BIOLOGY DEPARTMENT HEAD PROJECT	SPOONER	BIOLOGY	07-01-1994 INDEFINITE		
H313	MB		MEMBRANE LIPID INTERACTION WITH THE EGF RECEPTOR PERSONNEL (REPLACES H057)	RINTOUL	BIOLOGY	10-01-1995 09-30-2000	0167976	
H324	WQ		APPLICATION OF IODINATED RESINS TO PORTABLE WATER AND CLEAN AIR PRODUCTION (REPLACES H054)	MARCHIN	BIOLOGY	10-01-1995 09-30-1998	0167986	
H327			STUDIES ON S. AUREUS EXOTOXIN-MEDIATED MACROPHAGE ACTIVATION REPLACES H852	CHAPES	BIOLOGY	10-01-1994 09-30-1999	0163919	
H343	MB RD		GENOMIC SEQUENCES OF SPOROZOITE SURFACE MOLECULES OF CRYPTO SPORIDIUM PARVUM (REPLACES H788)	UPTON	BIOLOGY	10-01-1995 09-30-2000	0168094	
H355	AH		D-3 PHOSPHOINOSITIDE METABOLISM IN PDGF-TREATED CELLS (REPLACES H996)	ULUG	BIOLOGY	10-01-1995 09-30-2000	0168186	
H360			TRIBOLIUM CASTANEUM AS A MODEL GENETIC SYSTEM FOR THE COLEOPTERA (REPLACES H078)	DENELL	BIOLOGY	10-01-1995 09-30-2000	0168208	
H388	MB		TEMPORAL AND SPATIAL CONTROL OF PHYTOHORMONE OVERPRODUCTION IN TRANSGENIC PLANTS (NEW)	YI LI	BIOLOGY	10-01-1996 09-30-1998	0171258	
H401	AH RD		DENSELY METHYLATED DNA ISLANDS AND THE CONTROL OF EUKARYOTIC CELL DIVISION REPLACES H011	ROUFA	BIOLOGY	10-01-1994 09-30-1999	0164323	
H429			GLUTAMINE SYNTHETASE FROM LEGUMES REPLACES H002	WONG	BIOLOGY	10-01-1994 09-30-1999	0164373	
H433	BC SA		THE ECOLOGY OF PUCCINIA RECONDITA AND P. GRAMINIS ON WHEAT IN KANSAS REPLACES H971	KRAMER, EVERSMEYER	BIOLOGY	10-01-1994 09-30-1999	0164419	
H435	PG		AN ANALYSIS OF NATURAL AND MANAGED PRAIRIE ECOSYSTEMS	HARNETT, DODDS, BLAIR	BIOLOGY	10-01-1994 09-30-1999	0164414	

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
			REPLACES H048					
H440	AH RD		MOLECULAR REQUIREMENTS OF MHC-RESTRICTED TH1 AND TH2 SELECTION IN VIVO REPLACES H008	MURRAY	BIOLOGY	10-01-1994 09-30-1999	0164423	
F709	HQ	NRS-03	THE NATIONAL ATMOSPHERIC DEPOSITION PROGRAM	KNAPP	BIOLOGY	10-01-1987 09-30-2002	0133457	
481895	AH		ROLE OF LPS AND MHCII GENES IN STAPHYLOCCAL PATHOGENESIS	CHAPES STEWART IANDOLO	BIOLOGY VET DIAGNOSIS VET DIAGNOSIS	10-01-1995 09-30-1998	0170367	*
		SPONSOR:	1433 ANIMAL HEALTH					
481899	AH		IN VITRO CULTIVATION OF CRYPTOSPORIDIUM	UPTON OBERST	BIOLOGY VET DIAGNOSIS	10-01-1995 09-30-1998	0170356	*
		SPONSOR:	1433 ANIMAL HEALTH					
R927			TRANSMISSION ELECTRON MICROSCOPE SERVICE FACILITY	SPOONER PAULSEN	BIOLOGY AGRONOMY	07-01-1974 INDEFINITE	0067427	*
G9645	CG MB DV		GRAZING SYSTEM EFFECTS ON PLANT COMMUNITY BIODIVERSITY AND STABILITY USDA COMP GRANT #9502643 (CORRES W/5-27645)	HARTNETT COCHRAN	BIOLOGY ANIMAL SCI	07-01-1995 06-30-1998	0168845	*
G9651	CG MB CP		HIGH PERFORMANCE LIQUID CHROMATOGRAPHY FOR PLANT MOLECULAR RESEARCH USDA COMP GRANT #95-04315 CORR(5-26651)	YI	BIOLOGY	09-15-1995 08-15-1998	0170095	
G9670	CG RG CP		EXPERIMENTAL MANIPULATION OF VARIABILITY IN PRECIPITATION IN A GRASSLAND USDA COMP GRANT #9600713 CORR(5-26670) #96-35101-3160	KNAPP, BLAIR	BIOLOGY	09-01-1996 08-31-1999	0173467	
G9677	CG		TEMPORAL & SPATIAL CONTROL OF PHYTOHORMONE OVERPRODUCTION OF TRANSGENIC PLANTS, USDA #9602656, CORR W/5-26677, #96-35304-3706	LI	BIOLOGY	10-15-1996 10-31-1998	0173148	
G9678	CG		ACQUISITION OF TWO CONTROLLED ENVIRONMENT CHAMBERS USDA GRANT #9603805, CORR W/5-26678 #96-35106-3760	JOHNSON, KNAPP, BLAIR RICE TODD	BIOLOGY AGRONOMY PLANT PATH	11-15-1996 11-30-1997	0173149	*
G9689	CG		PRODUCTION OF SEEDLESS WATERMELONS VIA A GENE TRANSFER APPROACH SUBCONT W/USDA FLOW-THROUGH: PURDUE UNIV, CORRES W/5-26689	LI	BIOLOGY	07-01-1997 06-30-1999		

KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
G9725	CG		FUNCTION OF TOSLED PROTEIN KINASE I IN ARABIDOPSIS DEVELOPMENT CORR# 5-26725 USDA GRANT	ROE	BIOLOGY	07-01-1998 06-30-2000		
H013	AH	RD	SERINE PROTEINASE INHIBITORS IN INSE CTS	KANOST	BIOCHEMISTRY	01-28-1992 09-30-1999	0157270	
H133			BIOTECHNOLOGY INSTRUMENTATION LABORA TORY	TOMICH	BIOCHEMISTRY	10-01-1993 09-30-1998	0162636	
H134			HIGHFIELD NUCLEAR MAGNETIC RESONANCE LABORATORY FOR MACROMOLE- CULES	PRAKASH	BIOCHEMISTRY	10-01-1993 09-30-1998	0162637	
H311	RD	AH	STRUCTURES AND DYNAMICS OF BLOOD COA GULATION FACTOR INHIBIT ORS BY NMR SPECTROSCOPY (REPLACES HO 47)	KRISHNAMOORTHY	BIOCHEMISTRY	10-01-1995 09-30-2000	0167815	
H321	MC		ENZYMIC CONTROL OF MEMBRANE DETERIOR ATION IN PLANT SENESCENCE (REPLACES H006)	WANG	BIOCHEMISTRY	10-01-1995 09-30-2000	0167983	
H373	RD		MUTATIONAL ANALYSIS OF NITROGENASE I RON PROTEIN (NEW)	DAVIS	BIOCHEMISTRY	10-01-1996 09-30-2001	0171132	
H382	MB		FUNCTION AND REGULATION OF MAMMALIAN PYRUVATE DEHYDROGENASE COMP LEX (REPLACES H918)	ROCHE	BIOCHEMISTRY	10-01-1996 09-30-2001	0171252	
H395			LOCATING THE ALLOSTERIC BINDING SITE ON A HIGHER PLANT RUBISCO (REPLACES H100)	MUELLER	BIOCHEMISTRY	10-01-1996 09-30-2001	0171324	
H410	CP	MB	BIOCHEMICAL BASIS FOR CYTOPLASMIC MA LE STERILITY IN WHEAT (REPLACES H104)	HEDGCOTH	BIOCHEMISTRY	10-01-1996 09-30-2001	0171428	
H416	AC	SA CP	GENETIC ENGINEERING OF WHEAT AND SOR GHUM FOR RESISTANCE TO FUNGI AND INSECTS (REPLACES H045)	MUTHUKRISHNAN LIANG	BIOCHEMISTRY AGRONOMY	10-01-1996 09-30-2001	0171431	*
H430	SA	CP HQ	PLANT BASED BIOREMEDIATION OF SOIL A ND WATER (REPLACES H906)	DAVIS	BIOCHEMISTRY	10-01-1996 09-30-2001	0171453	
H434			BIOCHEMISTRY OF CYCLIC 3', 5' GUANOS INE MONOPHOSPHATE	TAKEMOTO	BIOCHEMISTRY	10-01-1996 09-30-2001	0171454	

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
			(REPLACES H541)					
H491	MR		BIOCHEMISTRY OF GENETIC SYSTEMS	REECK	BIOCHEMISTRY	10-01-1997 09-30-2002	0175125	
			(REPLACES H744)					
H500	BC	IP	PROTEIN FOLDING STUDIES: TOWARD A REALISTIC FREE ENERGY SURFACE FOR PROTEINS(NEW)	SMITH	BIOCHEMISTRY	10-01-1997 09-30-2000		
H672			HESSIAN FLY PECTINASE: A TARGET FOR GENETICALLY ENGINEERING IN WHEAT	REECK	BIOCHEMISTRY	02-17-1997 09-30-1998	0174223	
H683			MITOCHONDRIAL FACTORS ASSOCIATED WITH FERTILITY RESTORATION IN WHEAT (98 NEW BIOTECHNOLOGY PROJECT)	HEDGCOTH	BIOCHEMISTRY	07-01-1997 09-30-1999	0175509	
G9223	CG		APHID PECTINASES IN INSECT-PLANT INTERACTIONS AND BIOTYPE EVOLUTION COORESPONSES (5-27223) # 95-37302-1837	REECK REESE	BIOCHEMISTRY ENTOMOLOGY	07-01-1995 06-30-1999	0170306	*
G9229	CG		ROLE OF PHOPHOLIPASE D IN PLANT MEMBRANE DETERIORATION AND SENESCENCE COORESPONSES (5-27229) # 95-02807	WANG	BIOCHEMISTRY	09-15-1995 09-14-1998	0170091	
G9245	CG		ROLES OF MULTIPLE PHOSPHOLIPASE DS IN PLANT REPRODUCTION CONTRACT #9701692, CORRESPONDS WITH 5-27245	WANG	BIOCHEMISTRY	10-01-1997 09-30-2000	0176044	
R400			DESIGN, DEVELOPMENT, CONSTRUCTION & MAINTENANCE OF RESEARCH EQUIPMENT	LEGG	PHYSICS	06-16-1954 INDEFINITE	0029460	
R825			STATISTICAL LABORATORY	MILLIKEN	STATISTICS	07-01-1970 INDEFINITE	0060489	
F185		NE-185	COMMODITIES, CONSUMERS, AND COMMUNITIES: LOCAL FOOD SYSTEMS IN A GLOBALIZING ENVIRONMENT (REPLACES NE-173)	BLOOMQUIST	SOCIOLOGY	01-10-1997 09-30-2002	0175136	
F259	SA	S-259	RURAL LABOR MARKETS IN THE GLOBAL ECONOMY	GOE	SOCIOLOGY	10-01-1994 09-30-1999	0171425	
H386	RR		FARM-RELATED FATALITIES AMONG KANSAS YOUTH AND ADULTS, 1987-1993	FREY	SOCIOLOGY	10-01-1996 09-30-2001	0171256	

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			(REPLACES H034)				
G9625	CG RR		THE EFFECTS OF ECONOMIC AND SOCIAL R ESTRUCTURING ON RURAL LOC ALITIES USDA COMP GRANT # CORR(5-27625)	BLOOMQUIST,GOE	SOCIOLOGY	09-01-1995 08-31-1998	0170093
H316	VA QL		WET PROCESSING OF KANSAS WHEAT AND G RAIN SORGHUM (REPLACES H962)	CHUNG SEIB	AGRIC ENGG GRAIN SCIENCE	10-01-1995 09-30-2000	0167978 *
H362	SA HQ		SUSTAINABILITY OF TILLAGE SYSTEMS IN AN IRRIGATED CORN-SOYBEAN CROP ROTATION (REPLACES H946)	BARNES,CLARK SLOCOMBE	AGRIC ENGG AGRIC ENGG	10-01-1995 09-30-2000	0168210
H381	AH AP		VENTILATION AND AIR QUALITY IN ENCLD SED BUILDINGS (REPLACES H053)	MAGHIRANG	AGRIC ENGG	10-01-1996 09-30-1999	0171251
H452	SA CP		FIELD-SCALE SPATAL VARIATION FOR GRA IN QUALITY (REPLACES H066)	SCHROCK,ZHANG STEELE,CHUNG	AGRIC ENGG AGRIC ENGG	10-01-1996 09-30-2000	0171496
H469	VA		LABORATORY MILL FOR WHEAT GRINDING T ESTS REPLACES H893	SPILLMAN	AGRIC ENGG	10-01-1994 09-30-1998	0164637
H470	HQ NR		MONITORING AND MODELING NITROGEN MAN AGEMENT TRANSPORT AND LEACHI NG IN AND BELOW CROP ROOT ZONE REPL ACES R728	KALITA	AGRIC ENGG	10-01-1996 09-30-1999	0171796
H496	NR		REAL-TIME DIGITAL IMAGE AND SIGNAL P ROCESSING FOR ON-THE-GO SENS ING CONTROL (REPALCES H123)	ZHANG	AGRIC ENGG	10-01-1997 09-30-2000	0175364
H505	QE,WC,HQ		EVALUATING GRASS FILTERS EFFICIENCY IN REMOVING CONTAMINANTS FROM SURFACE RUNOFF	BARNES	AGRIC ENGG	10-28-1997 09-30-2001	0176838
H376			PRODUCTION OF ACTIVATED CARBON FROM GRAIN (REPLACES H113)	HALAWENDER FAN	CHEM ENGG CHEM ENGG	10-01-1996 09-30-1999	0171261
H451	AI		A SYSTEMATIC METHOD FOR THE SYNTHESI S OF AZEOTROPIC DISTILLATION PROCESSES FOR SEPARATING SOLVENTS (REPLACES H898)	FAN SEIB	CHEM ENGG GRAIN SCIENCE	10-01-1996 09-30-2001	0171464 *
H478	HQ NR		SOIL QUALITY OF PETROLEM CONTAMINATE	BANKS	CIVIL ENGG	10-01-1997	0174911

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
			D SOIL: CHANGES DUE TO CONTAMINATED AGENT (REPLACES H132)			09-30-2000		
H489	WQ NR		CONTAINMENT BARRIERS FOR AGRICULTURAL WASTE (REPLACES H314)	REDDI	CIVIL ENGG	10-01-1997 09-30-2002	0175123	
D250			HUMAN ECOLOGY DEPARTMENT HEAD PROJECT	KELLET	DEAN HUMAN EC	07-01-1995 INDEFINITE		
F272		S-272	DEVELOPMENT OF TEXTILE MATERIALS FOR ENVIRONMENTAL COMPATIBILITY AND HUMAN AND HEALTH SAFETY	GATEWOOD	CLOTH & TEXT	10-01-1996 09-30-2001	0173321	
G9019	CG		OBJECTIVE CHARACTERIZATION OF TEXTURE PROPERTIES OF CRUNCHY FOODS DURING CHEWING CORRES. 5-23019 GRANT #98-015827	SUN	GRAIN SCIENCE	09-01-1998 09-30-2000		
H462	RR QL		RELATIONSHIP COMPETENCIES OF RURAL ADOLESCENTS AND YOUNG ADULTS REPLACES H931	WRIGHT	HUMAN DEV & FA	10-01-1994 09-30-1999	0164572	
R131	QE		SENSORY ANALYSIS CONSULTING FOR KAES SCIENTISTS	CHAMBERS	FOODS & NUTR	07-01-1993 01-01-1999	0164263	
F136		NC-136	IMPROVEMENT OF THERMAL PROCESSES FOR FOOD REPLACES PROJECT F195 (TERMINATES 9-30-95)	ZAYAS	FOODS & NUTR	10-01-1995 09-30-2000	0169525	
F167		NC-167	ROLE OF N-3/N-6 POLYUNSATURATED FATTY ACIDS IN HEALTH MAINTENANCE REPLACES F945	REEVES	FOODS & NUTR	01-30-1991 09-30-2002	0153770	
F219		NC-219	USING STAGES OF CHANGE MODEL TO PROMOTE CONSUMPTION OF GRAINS, VEGETABLES & FRUITS BY YOUNG ADULTS (REPLACES F072-NC200)	PETERS	FOODS & NUTR	10-01-1995 09-30-2001	0172686	
D251			HEAD PROJECT	MILLER	FOODS & NUTR	07-01-1997 INDEFINITE		
H333	HN		DIETARY INTAKE OF ANTIOXIDANTS AND AGE-RELATED MACULAR DEGENERATION (REPLACES R017)	HOLCOMB	FOODS & NUTR	10-01-1995 09-30-2000	0167993	
H335	HN		VITAMIN A, POLYAMINES AND TYPE II PHENOLIC ACID REPAIR	BAYBUTT	FOODS & NUTR	10-01-1995 09-30-2000	0167992	

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
H351	HN		EFFECT OF ESTROGEN REPLACEMENT ON THE METABOLISM OF DIETARY FAT IN A RAT MODEL REPLACES H934	KOO	FOODS & NUTR	07-01-1994 06-30-1999	0164321	
H379	HN		CHARACTERIZATION OF FLAVORS CONTRIBUTED BY PHENOLIC ACIDS AND FAVONOLS WITH ANTIOXIDANT PROPERTIES (REPLACES H130)	SETSER	FOODS & NUTR	10-01-1996 09-30-2001	0171249	
H406	HN		NUTRITIONAL DETERMINANTS OF MUSCULAR HYPERTROPHY REPLACES H070	GRUNEWALD	FOODS & NUTR	07-01-1994 06-30-1999	0164325	
G9148	CG		ZINC DEFICIENCY - ITS EFFECTS ON VITAMIN A TRANSPORT USDA (PROPOSAL #960108) CORRESPONDS WITH 5-28148	KOO	FOODS & NUTR	09-01-1996 08-31-1999	0172122	
H338	HN		COMPOSITION AND ALTERNATIVE USES OF FOOD BYPRODUCTS FROM FOOD SERVICE OPERATIONS (REPLACES H012)	SHANKLIN, MILLER LAMONT	HOTEL RES & INST HORT & FOREST	10-01-1995 09-30-1998	0168065	*
H370	AI		APPLYING ARTIFICIAL INTELLIGENCE TECHNOLOGY IN FOODSERVICE FORECASTING (NEW)	MILLER	HOTEL RES & INST	10-01-1996 09-30-2001	0171067	
H465	RR		PREDICTORS OF SUCCESS AND ECONOMIC IMPACT OF RURAL TOURISM VENTURES REPLACES H069	MILLER	HOTEL RES & INST	10-01-1996 09-30-2001	0171799	
C650	AH		EXPLORATORY RESEARCH IN ANIMAL HEALTH AND DISEASE	MARLER, ERICKSON, MINOCHA, RUCKENBERG, DEHME, PHILLIPS, & SMITH	DEAN VET MED SE AREA EXT DEAN VET MED	07-01-1986 INDEFINITE	0131140	
F644	AH	W-102	INTEGRATED METHODS OF PARASITIC CONTROL FOR IMPROVED LIVESTOCK PRODUCTION	RIDLEY	LAB MEDICINE	10-01-1986 09-30-1999	0131093	
F831	AH	NC-107	BOVINE RESPIRATORY DISEASES: RISK FACTORS, PATHOGENS, DIAGNOSIS AND MANAGEMENT	MINOCHA, MCVEY MOSIER, CHOWDHURY MOORE	LAB MEDICINE PATHOLOGY PATHOLOGY	07-01-1972 09-30-2001	0061434	*
H345	AH AP RD		BOVINE HERPESVIRUS TYPES 1 & 5 MOLECULAR PATHOGENESIS AND BHV-5 SEROPREVALENCE REPLACES H010	CHOWDURY	PATHOLOGY	10-01-1994 09-30-1999	0164250	
H353	AH		ODOR, MASKS, PARTICLES AND ANIMAL-HUMAN HEALTH IN CONFINEMENTS FACILITIES (REPLACES H074)	PICKRELL, DEHME CHENGAPPA MAGHIRANG	PATHOLOGY PATHOLOGY AGRIC ENGG	10-01-1995 09-30-2000	0168184	*

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
H418	RD	AH	RESPIRATORY IMMUNITY IN LARGE ANIMALS WITH PROPELLANT-DRIVEN AEROSOL VACCINES REPLACES H055	BROWN	PATHOLOGY	10-01-1994 09-30-1997	0164355	
H439	AH	RD	ROLE OF IRON ACQUISITION IN THE VIRULENCE OF ACTINOBACILLUS PLEUROPNEUMONIAE REPLACES H958	FENWICK	PATHOLOGY	10-01-1994 09-30-1999	0164424	
H450	AH		SERUM AMYLOID A AS AN ACUTE PHASE RESPONSE IN FOOD-PRODUCING ANIMALS REPLACES H907	SMITH	PATHOLOGY	10-01-1994 09-30-1999	0164489	
H463	RD	AH	ASSESSING WATERSHED CONTAMINATION DUE TO AGRICULTURAL WASTE: AMPLIFYING CRYPTOSPORIDIUM DNA REPLACES H050	OBERST	PATHOLOGY	10-01-1994 09-30-1999	0164573	
H487	AH		EVALUATION OF PORCINE PK-120 AS AN ACUTE PHASE PROTEIN (REPLACES H125)	SMITH	PATHOLOGY	10-01-1996 09-30-2002	0175122	
481822	AH		ROLE OF DERMONECROTOXIN IN PASTEURELLA MULTOCIDA PNEUMONIA OF CATTLE SPONSOR: 1433 ANIMAL HEALTH	DEBEY, BASARABA, MOSIER	PATHOLOGY	10-01-1997 09-30-2000	0176571	
481824	H	RD MB	DEVELOPMENT AND APPLICATION OF A MOLECULAR DIAGNOSTIC TEST FOR EMERGING EHRLICHIAL DISEASES SPONSOR: USDA-CSRS-1433 FUNDS (ANIMAL HEALTH)	GANTA, MOCK, DRYDEN CULLY	PATHOLOGY PATHOLOGY	10-01-1998 09-30-2001		*
481826			MECHANISMS OF IMMUNE SUPPRESSION INDUCED BY BOVINE VIRAL DIARRHEA VIRUS SPONSOR: USDA-CSRS-1433 FUNDS (ANIMAL HEALTH)	WILKERSON, MINOCHA, KAPIL VAN METRE, CLEM	PATHOLOGY CLINICAL SCI. BIOLOGY	10-01-1998 09-30-2001		*
481827	H	RD	PASTEURILLA HAEMOLYTICA SEROTYPE 1 LEUKOTOXIN: PREVALENCE AND PATHOGENESIS SPONSOR: USDA-CSRS-1433 FUNDS (ANIMAL HEALTH)	BASARABA, MOSIER, DEBEY OBERST, STEWART NAGARAJA	PATHOLOGY PATHOLOGY PATHOLOGY	10-01-1998 09-30-2001		*
G9386	CG	RD AH	ROLE OF BHV-1 AND 5 GLYCOPROTEINS IN PATHOGENESIS GRANT (CORR #5-28386) 95-01830	CHOWDHURY MOSIER	PATHOLOGY PATHOLOGY	09-01-1995 08-31-1998	0169537	
G9401	CG	RD AH	BHV-1 & BHV-5 NEUROPATHOGENESIS STUDIES, COMP GRANT #9401, (CORR. 5-28401) SPONSOR: AWARD #97-35204-4700	CHOWDHURY MOSIER	PATHOLOGY PATHOLOGY	09-15-1997 09-30-2000	0176715	

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
F210	AH, RD	NC-210	POSITIONAL AND FUNCTIONAL IDENTIFICATION OF ECONOMICALLY IMPORTANT GENES IN THE PIG	TROYER	ANAT & PHYSIO	10-01-1997 09-30-2002	0176998	
F299	AH	NRSP-8	NATIONAL ANIMAL GENOME RESEARCH PROGRAM	TROYER	ANAT & PHYSIO	03-27-1997 09-30-1998	0174811	
H356	AH		MORPHOMETRY OF THE BLOOD-GAS BARRIER IN THE EXERCISE STRESSED & PNEUMONIC CALVES (REPLACES H004)	WESTFALL ANDERSON	ANAT & PHYSIO CLINICAL SCI.	10-01-1995 09-30-1998	0168204	*
H392	AH, RD		DEVELOPMENT, REGULATION, AND EFFICACY OF THE ANTIBACTERIAL PEPTIDE, PR-39 (REPLACES H077)	BLECHA, ROSS CHENGAPPA OBERST	ANAT & PHYSIO VET DIAGNOSIS FOOD ANI HEAL	10-01-1996 09-30-2001	0171426	*
H499	AH		UTERINE K+ CHANNELS AS THERAPEUTIC TARGETS FOR PARTURITION INDUCTION(NEW)	FREEMAN	ANAT & PHYSIO	10-01-1997 09-30-2000	0175367	
H503	AH, AP		MODULATION OF REPERFUSION INJURY BY A PIG NEUTROPHIL PEPTIDE	ROSS	ANAT & PHYSIO	10-22-1997 09-30-2002	0176661	
C653	AH		ANATOMICAL, PHYSIOLOGICAL, & PHARMACOLOGICAL MECHANISMS IN HEALTH & DISEASE	FREY, KLEMM, BLECHA WESTFALL	ANAT & PHYSIO ANAT & PHYSIO	07-01-1986 06-30-2002	0131143	
481820	AH		SPONSOR: PORCINE CATELHICIDINS:INDUCTION & REGULATION OF EXPRESSION ANIMAL HEALTH	BLECHA, ROSS	ANAT & PHYSIO	10-01-1997 09-30-2000	0176568	
481825	H, RD		SPONSOR: REGULATION OF CORONAVIRUS PERSISTENCE AND REACTIVATION IN CALVES USDA-CSRS-1433 FUNDS (ANIMAL HEALTH)	KAPIL, MOSIER, VESTWEBER LOUGHLIN	ANAT & PHYSIO ANAT & PHYSIO	10-01-1998 09-30-2001		*
G9598	CG, RD, AH		PORCINE ANTIBACTERIAL PEPTIDES CORRESPONDENCES WITH 5-28598 #95-37204-2141	BLECHA, ROSS OBERST	ANAT & PHYSIO ANAT & PHYSIO	09-15-1995 09-30-1999	0170092	*
G9607	CG, AH, RD		HIGH RESOLUTION REGIONAL MAPS OF SWINE CHROMOSOMAL SEGMENTS CONTAINING QTL (PROP #9603401) CORRESPONDING WITH #5-28607 #96-35205-384	TROYER, ROHRER ALEXANDER, BEATTIE	ANAT & PHYSIO ANAT & PHYSIO	11-15-1996 11-30-1999	0173975	*
G9612	CG, AH, RD		PORCINE ANTIMICROBIAL PEPTIDES USDA (AGREEMENT #98-35204-6397) / (C	BLECHA, ROSS	ANAT & PHYSIO	11-15-1998 11-30-2001	0181019	

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
			ORR. 5-28612)					
481828	H RD		AN IN VITRO MODEL FOR ANALYSIS OF THE MECHANISM OF INFECTIOUS BOVINE KERATOCONJUNCTIVITIS	DAVIDSON, FENWICK BRIGHTMAN STOKKA	CLINICAL SCI. CLINICAL SCI. CLINICAL SCI.	10-01-1998 09-30-2001		*
			SPONSOR: USDA-CSRS-1433 FUNDS (ANIMAL HEALTH)					
69784	SP AH RD		ECOLOGY OF E-COLI 0157:H7 IN BEEF COW-CALF OPERATIONS FROM RANCH THROUGH FEEDLOT CORRESPONDING 5-2878 4 CONTRACT #	GILLESPIE, GALLAND, OBERST ANDERSON, SPIRE PHEBUS	CLINICAL SCI. CLINICAL SCI. CLINICAL SCI.	01-01-1996 03-31-1999	0171715	*
F062	AH RD	NC-062	ENTERIC DISEASES OF SWINE AND CATTLE : PREVENTION, CONTROL AND FOOD SAFETY	NIETFELD KAPIL	VET DIAGNOSIS VET DIAGNOSIS	10-01-1997 09-30-2002	0177001	
C655	AH		DIAGNOSTIC PATHOGENESIS & EPIDEMIOLOGY OF LIVESTOCK AND POULTRY DISEASES	VORHIES, KENNEDY, STRAFUSS PHILLIPS, MAAS, C	VET DIAGNOSIS VET DIAGNOSIS SE AREA EXT	07-01-1986 06-30-2002	0131145	
481823	H RD		DEVELOPMENT OF NEW GENERATION DNA VACCINES FOR ANIMAL DISEASE CONTROL	ZHEN, BRIGGS, CHOWHURY PONTIUS	VET DIAGNOSIS VET DIAGNOSIS	10-01-1998 09-30-2001		*
			SPONSOR: USDA-CSRS-1433 FUNDS (ANIMAL HEALTH)					
481894	AH		DISTRIBUTION OF EXTRACELLULAR ACTIN IN PNEUMONIC PASTENURELLOSIS	BASARABA	VET DIAGNOSIS	10-01-1995 09-30-1998	0170352	
			SPONSOR: 1433 ANIMAL HEALTH					
481896	AH		BIOLOGICAL AND GENETIC SIGNIFICANCE OF STREPTOCOCCUS SUIIS TYPE 2 HEMOLYSIN	CHENGAPPA	VET DIAGNOSIS	10-01-1995 09-30-1998	0170353	
			SPONSOR: 1433 ANIMAL HEALTH					
481897	AH		EVALUATING DISEASE POTENTIAL OF CRYPTOSPORIDIUM IN ECOSYSTEMS IMPACTED BY LIVESTOCK	OBERST UPTON	VET DIAGNOSIS BIOLOGY	10-01-1995 09-30-1998	0170354	*
			SPONSOR: 1433 ANIMAL HEALTH					
481898	AH		VIRULENCE SIGNAL TRANSDUCTION IN SYNHYLOCOCCUS AUREUS	STEWART CHAPES	VET DIAGNOSIS BIOLOGY	10-01-1995 09-30-1998	0170355	*
			SPONSOR: 1433 ANIMAL HEALTH					
F990	AH	NC-62	PREVENTION & CONTROL OF ENTERIC DISEASES OF SWINE	PHILLIPS, NIETFELD	VET DIAGNOSIS	10-17-1977 09-30-2002	0073714	*
H437	AH MB RD		CHARACTERIZATION AND ANTIBIOTIC SUSCEPTIBILITY OF BACTERIA IN LIVESTOCK (REPLACES H082)	GALLAND	FOOD ANI HEAL	10-01-1996 09-30-2001	0171455	

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KS NO.	SPECIALTY CODE	REGION NO.	TITLE	INVESTIGATOR	DEPARTMENT	BEG. DATE TERM DATE	ACCESS NO.	COOP. PROJ.
H506	AH		THE APPLICATION OF EPIDEMIOLOGICAL TECHNIQUES TO FOOD ANIMAL HEALTH	SARGEANT	FOOD ANI HEAL	03-02-1998 09-30-2001	0177830	
C654	AH		MEDICAL, SURGICAL, AND PATHOPHYSIOLOGICAL ASPECTS OF ANIMAL DISEASE	GILLESPIE, VESTWEBER ANDERSON, EDWARDS & DEBOWES	FOOD ANI HEAL FOOD ANI HEAL FOOD ANI HEAL	07-01-1986 06-30-2002	0131144	
G9781	CG AH RD		EMERGENCE AND SPREAD OF ANTIBIOTIC-RESISTANT BACTERIA IN CATTLE CORRESPONDING 5-28781 CONTRACT #95-03208	GALLAND, STOKKA ANDERSON	FOOD ANI HEAL FOOD ANI HEAL	06-01-1995 06-30-1998	0170094	
G9413	CG RR QL		FEDERAL AGRICULTURAL POLICY IMPACTS TO KANSAS RURAL COMMUNITIES AND HOUSEHOLDS (CORR. 536413) SPONSOR: (GRANT #98-35401-6156)	LEATHERMAN, FEATHERSTONE STIEGERT, KASTENS	COOPERATIVE EXT AG ECON	07-15-1998 06-30-2000	0180449	*

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Shroyer	James	AGRON	EX	07/01/92	06/30/99	On-Farm Wheat Action Research: An Educational Program	Kansas Wheat Commission	\$93,825
Barton	David	AGECO	AG	10/01/85	06/30/99	Arthur Capper Cooperative Center	Arthur Capper Cooperative Center (Multi-sponsor)	\$306,684
Shroyer	James	AGRON	EX	07/01/92	06/30/99	On-Farm Wheat Action Research: An Educational Program	Finnup Foundation	\$61,000
Jackson	William	COMMU	AG	10/01/93	09/30/99	National Program Production and Acquisition Grant	Corporation for Public Broadcasting	\$65,614
Waters	Jean	ENERG	EX	07/01/94	09/30/99	Pollution Prevention Project	Kansas Department of Health and Environment	\$545,103
Buchholz	Daryl	PMNRD	EX	07/01/95	09/30/99	Farmers Assistance Counseling and Training Service (FACTS) Including the Agricultural Mediation Program	US Department of Agriculture	\$1,037,913
Powell	G. Morgan	AGENG	EX	07/01/96	06/30/99	Kansas Environmental Leadership Program (KELP)	US Environmental Protection Agency	\$399,999
Kilgore	Gary	SEAOF	EX	07/01/95	06/30/99	Soybean Extension Educational Program in Southeast Kansas	Kansas Department of Agriculture	\$44,772
Rolf	Jon	CHLTH	EX	05/24/96	06/30/99	Cooperative Agreement Between Kansas Department of Health and Environment and Cooperative Extension Service, Kansas State University	Kansas Department of Health and Environment	\$229,678
Ohlisch	Paul	AGRON	AG	01/01/97	09/30/01	Developing a Grazing Land Water Quality Education Program	US Environmental Protection Agency	\$141,258
Ponte	Christine	CHLTH	EX	10/01/96	06/30/99	Cooperative Agreement Between Kansas State Board of Education and Kansas State University	US Department of Agriculture	\$99,000
Schmidt	John	AGRON	AG	07/01/96	09/30/00	Variable Nitrogen Management for Improving Groundwater Quality	US Environmental Protection Agency	\$319,374
Buchholz	Daryl	CMDEV	EX	10/01/99	09/30/00	Kansas Rural Development Council	US Department of Agriculture	\$11,374
Barnaby	Glenn	AGECO	EX	07/01/97	06/30/99	Managing Marketing and Production Risk in the Post Deficiency Payment Period	Kansas Department of Agriculture	\$25,933
Barnaby	Glenn	AGECO	EX	07/01/97	06/30/99	Managing Marketing and Production Risk in the Post Deficiency Payment Period	Kansas Department of Agriculture	\$20,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Alam	Mahbub	SWAOF	EX	07/01/97	06/30/99	Irrigation Scheduling Demonstration of Efficient Water Use by Corn in Western Kansas	Kansas Department of Agriculture	\$50,865
Janke	Rhonda	AGRON	AG	07/15/97	07/14/99	Yesterday's Research for Tomorrow's Needs	US Department of Agriculture	\$63,500
Harner III	Joseph	AGENG	EX	07/01/97	06/30/00	Black Vermillion Dairy Environmental Cooperative	US Environmental Protection Agency	\$150,000
Ha III	Joseph	AGENG	EX	07/01/97	12/31/99	Wetland Cell for Treating Milk Parlor Wash Water	US Environmental Protection Agency	\$4,950
Marr	Charles	HFARR	AG	03/01/97	02/28/99	NC Region IR-4 Leader Lab Program to Clear Pest Control Agents for Minor Uses	US Department of Agriculture	\$2,000
Aramouni	Fadi	ASIND	AG	07/01/97	06/30/99	Food and Feed Value Added Program	Kansas Department of Commerce & Housing	\$126,000
Boyle	Elizabeth	ASIND	EX	07/01/97	06/30/99	Food and Feed Value Added Program	Kansas Department of Commerce & Housing	\$14,000
Boyle	Elizabeth	ASIND	AG	04/07/97	06/30/99	Development Award for Marketing All-Natural Beef	Kansas Department of Commerce & Housing	\$5,000
Flinchbaugh	Barry	AGECO	EX	09/01/97	08/31/99	Establishment of Risk Management Clubs	US Department of Agriculture	\$62,500
Harner III	Joseph	AGENG	EX	01/01/97	06/30/99	Nichols Dairy Livestock Pollution Control Demonstration Project	US Environmental Protection Agency	\$27,000
Aslin	Raymond	EXFOR	EX	09/24/97	09/30/99	Environmental Quality Incentives Program	US Department of Agriculture	\$19,475
Buchholz	Daryl	PMNRD	EX	09/01/97	08/31/99	North Central Sustainable Agriculture Education Program	US Department of Agriculture	\$11,500
Leatherman	John	AGECO	EX	07/01/97	06/30/99	Kansas Local Government Water Quality Planning and Management Guide and Education Program	Kansas Department of Health and Environment	\$55,000
Leatherman	John	AGECO	EX	07/15/98	07/31/00	Federal Agricultural Policy Impacts to Kansas Rural Communities and Households	US Department of Agriculture	\$120,000
Aramouni	Fadi	ASIND	EX	02/01/98	07/31/99	Quick Reference Guide for Food Processors	Kansas Department of Commerce & Housing	\$16,000
Aslin	Raymond	EXFOR	EX	11/07/97	03/31/99	Conservation Reserve Program (CRP-15)	US Department of Agriculture	\$7,800
Aslin	Raymond	EXFOR	EX	10/01/97	03/31/99	Consolidated Grants Program - Cooperative Forestry Assistance	US Department of Agriculture	\$687,200
Aslin	Raymond	EXFOR	EX	05/13/98	05/12/99	Forestry Incentives Program	US Department of Agriculture	\$1,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Aslin	Raymond	EXFOR	EX	05/13/98	06/30/99	Natural Resource Conservation Education	US Department of Agriculture	\$6,000
Flinchbaugh	Barry	AGECO	EX	07/01/98	06/30/99	Risk Management Education: A Risk Management Club Approach	US Department of Agriculture	\$150,000
Aslin	Raymond	EXFOR	EX	05/13/98	09/30/99	Rural Development Program	US Department of Agriculture	\$5,000
Johannes	Elaine	CHLTH	EX	09/30/97	09/29/99	Rural Network Development Grant Program	US Department of Health & Human Services	\$36,463
Blasi	Dale	ASIND	EX	07/01/98	06/30/99	Adding Value to Kansas Flour Milling Byproducts	Kansas Department of Commerce & Housing	\$5,000
Barton	David	AGECO	EX	09/30/98	09/30/99	Kansas Cooperative Development Center: Education and Assistance Program	US Department of Agriculture	\$100,000
Hayter	Richard	ENERG	EX	07/01/98	03/31/99	Technical Assistance and Training for the Kansas Weatherization Assistance Programs	Kansas Building Science Institute	\$10,026
Tokach	Michael	NEAOF	EX	07/01/98	06/30/99	Influence of Feeding Duration and Pelleting of Diets Containing Spirulina Platensis on Starter Pig Performance	Earthrise Animal Health	\$19,444
Bollman	Stephan	FAMST	HE	09/01/98	12/31/99	Expanding Access to USDA and Land-Grant University Child Care Information, Programs and Services	US Department of Agriculture	\$40,000
Boyle	Elizabeth	ASIND	AG	07/01/98	06/30/99	KSU Meat Extension and Pilot Plant	Kansas Department of Commerce & Housing	\$15,500
Buchholz	Daryl	PMNRD	EX	09/01/98	08/31/00	Sustainable Agriculture Research and Education Program	US Department of Agriculture	\$12,000
Total Amount of Grants								\$5,224,750

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Ham	George	AESTA	AG	05/01/94	04/30/99	Development and Management of Canola in the Great Plains Region	US Department of Agriculture	\$395,676
Johnson	Marc	AESTA	AG	07/01/97	06/30/99	Farmland/KSU Research Alliance (Multi-sponsor)	Farmland/KSU Research Alliance (Multi-sponsor)	\$101,707
Boland	Michael	AGECO	AG	09/15/97	09/14/99	Evaluating Food Marketing Industry Attitudes Towards a State-Grown Labeling Program	US Department of Agriculture	\$52,800
Fond	Michael	AGECO	AG	09/01/99	08/31/00	Valuing Marketing Rights in New Generation Cooperatives	US Department of Agriculture	\$86,330
Featherstone	Allen	AGECO	AG	02/11/98	04/01/99	Environmental and Economic Impacts of Soil Erosion and Soil Fertility Mining in Wheat Farms of Northern Tanzania	Conservation, Food and Health Foundation	\$7,900
Fox	John	AGECO	AG	08/15/97	08/31/00	Benefits and Costs of Pre- and Post-Harvest HACCP for the Pork Industry	US Department of Agriculture	\$145,000
Langemeier	Michael	AGECO	AG	07/01/97	09/30/00	Water Quality Profit Optimization Project	Kansas Department of Health and Environment	\$81,000
Schroeder	Ted	AGECO	AG	01/01/98	08/31/99	Consumer Willingness to Pay for Steak Tenderness	Chicago Mercantile Exchange	\$21,600
Stiegert	Kyle	AGECO	AG	09/30/99	08/31/99	Quality Oriented Marketing of Hard Winter Wheat	US Department of Agriculture	\$182,934
Williams	Jeffery	AGECO	AG	09/25/97	09/30/99	Analysis of Farm-Level Risk Management	US Department of Agriculture	\$20,000
Barnes	Philip	AGENG	EG	07/01/97	06/03/99	Atrazine Monitoring Project: Joint Nebraska/Kansas Blue River Study	Novartis	\$53,233
Les	Philip	AGENG	EG	04/01/98	03/31/00	Pesticide Application Timing Used as a Best Management Practice to Improve Water Quality	Kansas Corn Growers Association	\$78,256
Barnes	Philip	AGENG	EG	07/01/98	12/31/99	Joint State Atrazine Big Blue River Monitoring Project	US Environmental Protection Agency	\$19,800
Clark	Gary	AGENG	EG	07/01/97	06/30/99	Field Verification of Irrigation Scheduling for Corn (South Central Kansas Irrigation Scheduling and Water Management Demonstration)	Kansas Department of Agriculture	\$40,000
Clark	Gary	AGENG	EG	10/01/98	12/31/99	South Central Kansas Irrigation Scheduling and Water Management Project	Kansas Water Office	\$38,500

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Kalita	Prasanta	AGENG	EG	05/01/97	07/31/99	Horseshoe Creek Watershed Assessment Project Kansas	Kansas Department of Health and Environment	\$55,109
Kalita	Prasanta	AGENG	EG	08/01/98	06/30/99	Using LandSat Imagery and AGNPS Model for Water Quality Assessment in the Cheney Lake Watershed	Kansas Department of Health and Environment	\$24,000
Kolliker	James	AGENG	EG	11/01/98	06/30/99	Evaluation of the Wet Walnut Water Supply Availability	Kansas Water Office	\$40,000
Schrock	Mark	AGENG	EG	10/01/97	12/31/99	Grain Combine Sampler and Sensor Development	Case Corporation	\$42,356
Spillman	Charles	AGENG	EG	09/30/96	09/19/00	Automatic Control of an Instrumented Two-Roll Mill	US Department of Agriculture	\$75,000
Spillman	Charles	AGENG	EG	05/01/97	04/30/99	Development and Evaluation of Optimum Guar Grinding Technology	Halliburton Energy Services, Inc.	\$596,600
Taylor	Randal	AGENG	EX	07/01/99	06/30/99	Using Georeferenced Data to Optimize Soybean Production	Kansas Department of Agriculture	\$18,500
Zhang	Naiqian	AGENG	EG	09/30/96	08/31/99	Identification of Wheat Quality Characteristics Using Single Kernel Spectral Analysis	US Department of Agriculture	\$50,000
Johnson	Marc	AGRIC	AG	01/05/90		USDA Research Apprenticeship Program	US Department of Agriculture	\$25,777
Al-Khatib	Kassim	AGRON	AG	05/01/98	04/30/99	Gene Flow, Distribution, Growth and Competitiveness of Pursuit-Resistant Common Sunflower	National Sunflower Association	\$17,375
Buchholz	Daryl	AGRON	AG	09/26/97	09/30/99	Site-Specific No-Till Information	US Department of Agriculture	\$28,354
Brett	Lowell	AGRON	AG	07/01/90	06/30/99	Seed and Plant Parts Certification	Kansas Crop Improvement Association	\$453,009
Devlin	Daniel	AGRON	EX	07/01/97	06/30/99	Reducing Atrazine Runoff - Blue River and Delaware River	US Environmental Protection Agency	\$80,000
Gordon	Walter	AGRON	AG	07/01/97	06/30/99	Influence of Row Spacing and Plant Population on Corn Production	Kansas Department of Agriculture	\$16,040
Gordon	Walter	AGRON	AG	07/01/98	06/30/99	Use of Early Maturing Soybean Production Systems in Crop Rotations	Kansas Department of Agriculture	\$4,250

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Ham	Jay	AGRON	AG	07/01/97	06/30/99	Carbon, Water, and Energy Fluxes from a Tallgrass Prairie: The Effect of Land Management and Environmental Factors on Surface-Atmosphere Exchange	US Department of Energy	\$80,000
Ham	Jay	AGRON	AG	12/01/97	04/01/99	Animal Waste Lagoon Water Quality Study	Kansas Water Office	\$100,000
Irwin	Michael	AGRON	AG	08/15/96	03/31/99	Pesticide Residue Data for Registration in Minor Crops (IR-4 Program)	US Department of Agriculture	\$14,058
Horak	Michael	AGRON	AG	07/01/97	06/30/00	Pigweed (Amaranthus spp.) Identification, Hybridization, and Introgression	US Department of Agriculture	\$120,000
Horak	Michael	AGRON	AG	07/01/97	06/30/99	Integrated Weed Management	Kansas Department of Agriculture	\$30,190
Horak	Michael	AGRON	AG	07/01/98	06/30/99	Ecological Consequences of Repeated Glyphosate Applications on Weed Populations	Novartis	\$20,000
Janke	Rhonda	AGRON	AG	07/15/97	07/14/99	Cluster Use of Whole-Farm Planning, with Decision Cases and Evaluation	US Department of Agriculture	\$109,400
Janke	Rhonda	AGRON	AG	09/18/97	06/30/99	Speakers for In-State Sustainable Agriculture Training	US Department of Agriculture	\$1,000
Janssen	Keith	AGRON	AG	07/01/93	06/30/99	Double-Crop Soybean Performance Tests - Agronomy	Double-Crop Soybean Perform Tests (Multi-sponsor)	\$950
Lamond	Ray	AGRON	AG	07/01/90	06/30/99	Soil Fertility and Soil Management Investigations	Soil Fertility & Soil Mgmt Invest (Multi-sponsor)	\$401,710
Liang	George	AGRON	AG	07/01/98	06/30/99	Addition of Genes Encoding Thaumatin-Like Protein and Late Embryogenesis Abundant Protein to Jaggar Wheat for Resistance to Fungal Pathogen and Tolerance to Water Deficit	Kansas Crop Improvement Association	\$5,000
Maddux	Larry	AGRON	AG	07/01/98	06/30/99	Environmental Stress Impacts on High Oil Corn Yields	Kansas Department of Agriculture	\$6,000
Martin	Victor	AGRON	AG	07/01/97	06/30/99	Effect of Irrigation Rate, Planting Date and Tillage on Varied Maturity Corn Production	Kansas Department of Agriculture	\$14,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Martin	Victor	AGRON	AG	07/01/98	06/30/99	Evaluation of Early Planting and Cold Tolerance in Grain Sorghum	Kansas Department of Agriculture	\$30,250
Mengel	David	AGRON	AG	01/02/86	01/01/00	Pioneer Plant Breeding Fellowship	Pioneer Hi-Bred International, Inc.	\$280,000
Mengel	David	AGRON	AG	09/01/94	08/31/99	Simulation of Erosion-Induced Plant Stresses and PM-10 Production	US Department of Agriculture	\$419,667
Mengel	David	AGRON	AG	09/30/98	09/24/03	Wind Erosion Assessment and Control	US Department of Agriculture	\$114,000
Mengel	David	AGRON	AG	09/30/98	09/24/03	Wind Erosion Model for Military Lands	US Department of Agriculture	\$43,000
Owensby	Clenton	AGRON	AG	03/15/95	03/14/99	Processes Affecting Carbon Fluxes of Grassland Ecosystems Under Elevated Atmospheric CO2	US Department of Energy	\$884,814
Paulsen	Gary	AGRON	AG	07/01/95	06/30/99	Agronomic and Physiological Traits from Wild Relatives for Developing Improved Wheat Cultivars	Kansas Crop Improvement Association	\$20,275
Pierzynski	Gary	AGRON	AG	04/25/96	04/24/99	Enhancing the Role of Fluid Fertilizers in Precision Farming	Fluid Fertilizer Foundation	\$5,000
Pierzynski	Gary	AGRON	AG	04/25/96	04/24/99	Corn and Sorghum Hybrid Responsiveness to Starter Fertilizers	Fluid Fertilizer Foundation	\$12,000
Pierzynski	Gary	AGRON	AG	09/01/97	08/31/99	Phosphorus in Surface Runoff: Best Management Practices and Soil Dynamics	US Department of the Interior	\$45,000
Ransom	Michel	AGRON	AG	10/05/95	09/30/99	Providing Soil Sample Analyses for Soil Survey Activities	US Department of Agriculture	\$35,000
Regehr	David	AGRON	AG	07/01/94	06/30/99	Weed Control and Atrazine Best Management Practices for Grain Sorghum	Kansas Department of Agriculture	\$82,250
Regehr	David	AGRON	AG	07/01/94	06/30/99	Weed Control and Atrazine Best Management Practices for Corn	Kansas Department of Agriculture	\$139,250
Regehr	David	AGRON	AG	07/01/94	06/30/99	Field Herbicidal Evaluations	Field Herbicidal Evaluations (Multi-sponsor)	\$655,583
Rice	Charles	AGRON	AG	07/01/95	06/30/99	Sequestration of Carbon Dioxide into Soil Organic Carbon Pools Under Elevated Carbon Dioxide Environment	US Department of Energy	\$159,835
Rice	Charles	AGRON	AG	10/16/95	12/31/99	Terrestrial Carbon Processes, II	US Department of Energy	\$40,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Rice	Charles	AGRON	AG	02/23/98	02/22/00	Kansas EPA EPSCoR: Enhancement of Environmental Remediation Research	US Environmental Protection Agency	\$493,778
Rice	Charles	AGRON	AG	02/15/98	02/28/01	Implementation of Best Management Practices in the Blue River Basin of Kansas and Nebraska	US Department of Agriculture	\$400,000
Rice	Charles	AGRON	AG	07/01/98	06/30/99	Belowground Carbon Allocation and Cycling in Tallgrass Prairie and Wheat Ecosystems	US Department of Energy	\$49,951
Rice	Charles	AGRON	AG	01/01/98	06/30/99	Fecal Coliform Contamination in Kansas River Basins: Source, Monitoring and Development and Demonstration of Best Management Practices	Kansas Department of Agriculture	\$50,000
Rice	Charles	AGRON	AG	01/01/98	06/30/99	Fecal Coliform Contamination in Kansas River Basins: Source, Monitoring and Development and Demonstration of Best Management Practices	Kansas Conservation Commission	\$74,309
Rice	Charles	AGRON	AG	02/23/98	02/22/99	Kansas EPA EPSCoR: Enhancement of Environmental Remediation Research	Kansas Technology Enterprise Corporation	\$246,889
Roozeboom	Kraig	AGRON	AG	07/01/90	06/30/99	Crop Performance	Crop Performance (Multi-sponsor)	\$2,144,933
Schaffer	Vernon	AGRON	AG	07/01/93	06/03/99	Foundation Seed Maintenance	Foundation Seed Maintenance (Multi-sponsor)	\$33,630
Schapaugh	William	AGRON	AG	07/01/97	06/30/99	Development of Improved Soybean Varieties for Kansas	Kansas Crop Improvement Association	\$16,000
Schmidt	John	AGRON	AG	09/15/95	09/30/99	Predicting Potential Mineralizable Nitrogen by Remote Sensing	US Department of Agriculture	\$250,000
Schmidt	John	AGRON	AG	07/01/96	06/30/99	Variable Nitrogen Management for Protecting Groundwater Quality	Kansas Department of Agriculture	\$77,300
Schmidt	John	AGRON	AG	01/01/98	12/31/01	Site-Specific Lime Applications to Reduce Phosphorus Loading in the Cheney Watershed	US Environmental Protection Agency	\$41,556
Sears	Rollin	AGRON	AG	07/01/91	06/30/99	Development of Hard White Winter Wheats for Kansas	Kansas Wheat Commission	\$328,280
Sears	Rollin	AGRON	AG	07/01/94	06/30/99	Improvement of Hard Red Winter Wheat for Kansas	Kansas Wheat Commission	\$365,533

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Sears	Rollin	AGRON	AG	07/01/95	06/30/99	Improvement of Yield and Quality in Hybrid Wheat	Kansas Crop Improvement Association	\$30,000
Sears	Rollin	AGRON	AG	07/01/98	06/30/99	Development of Wheat Germplasm with Multiple Disease and Insect Resistance for the Southern Great Plains	Kansas Wheat Commission	\$6,000
Amand	Paul	AGRON	AG	07/01/98	06/30/99	Development of Acid-Tolerant Alfalfa Germplasm for Kansas	Kansas Crop Improvement Association	\$3,400
Tatarko	John	AGRON	AG	04/14/98	11/30/02	Educational Tools for Wind Erosion Control	US Department of Agriculture	\$53,425
Thien	Stephen	AGRON	AG	03/30/98	01/31/00	Impact of Golf Courses on Soil Quality	US Golf Association	\$20,000
Tuinstra	Mitchell	AGRON	AG	07/01/94	06/30/99	Breeding Grain Sorghum for Improved Dryland Production	Kansas Department of Agriculture	\$174,550
Tuinstra	Mitchell	AGRON	AG	06/10/98	05/14/99	Breeding for Ergot Avoidance in Sorghum: Mid-Season Cold Tolerance	US Department of Agriculture	\$15,000
Vanderlip	Richard	AGRON	AG	07/01/95	06/30/99	Managing Corn Planting Decisions to Reduce Risks	Kansas Department of Agriculture	\$67,168
Vanderlip	Richard	AGRON	AG	02/28/97	03/31/99	Sorghum Research	US Department of Agriculture	\$198,154
Welch	Stephen	AGRON	AG	04/01/96	03/31/99	Instrument Combining Computerized 3D Plant Photogrammetry with Automated Physiological Monitoring	National Science Foundation	\$438,543
Welch	Stephen	AGRON	AG	01/11/99	09/30/99	Integrating Genetics and Precision Farming Information into Decision Support Systems	United Soybean Board	\$75,000
Xia	Kang	AGRON	AG	09/15/98	11/30/01	Assessing Absorption and Uptake of Ethylene Dibromide (EDB) in Mature Cranberry Fruit and Plants at Harvest in Massachusetts Military Reservation, Cape Cod, Massachusetts	US Department of Defense	\$227,694
Blecha	Frank	ANPHY	VM	09/15/95	09/30/99	Porcine Antibacterial Peptides	US Department of Agriculture	\$185,000
Blecha	Frank	ANPHY	VM	07/01/97	06/30/99	Modulation of Reperfusion Injury by a Neutrophil Peptide	American Heart Assoc., KS Affiliate, Inc.	\$54,449
Blecha	Frank	ANPHY	VM	08/15/98	11/30/01	Porcine Antimicrobial Peptides	US Department of Agriculture	\$240,000
Freeman	Lisa	ANPHY	VM	12/01/98	11/30/99	Functional Significance of IKS and IKUR in Granulosa Cells	US Department of Health & Human Services	\$176,624
Freeman	Lisa	ANPHY	VM	10/05/98	10/04/99	Patch Clamp Using 293B	Hoechst Marion Roussel	\$10,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Kenney	Michael	ANPHY	VM	04/01/94	03/31/00	Control of Rhythmic Sympathetic Activity in Acute Stress	US Department of Health & Human Services	\$497,825
Troyer	Deryl	ANPHY	VM	11/15/96	11/30/99	High Resolution Regional Maps of Swine Chromosomal Segments Containing QTL	US Department of Agriculture	\$223,672
Westfall	Jane	ANPHY	VM	03/01/96	02/28/00	Neurons and Neuropeptides in Sea Anemones	National Science Foundation	\$173,852
P	Dale	ASIND	EX	07/01/97	06/30/99	Wheat Middling Evaluations (Multi-Sponsor)	Wheat Middling Evaluations (Multi-sponsor)	\$11,700
Boyle	Elizabeth	ASIND	AG	08/10/97	08/09/99	Position for HACCP Assessment Development and Implementation	Kansas Department of Commerce & Housing	\$30,000
Drouillard	James	ASIND	AG	07/10/97	07/09/03	ZO Resources Project	ZO Resources, LLC	\$3,000
Drouillard	James	ASIND	AG	07/01/98	06/30/99	Replacing Roughage in Growing Cattle Diets with Corn and Corn Gluten Feed	Kansas Department of Agriculture	\$29,800
Drouillard	James	ASIND	AG	07/01/98	06/30/99	Whole Soybeans and Soy Whey as Constituents of Protein Blocks for Cattle	Kansas Department of Agriculture	\$26,500
Goodband	Robert	ASIND	AG	04/15/98	04/14/99	Effects of Increasing Pantothenic Acid on Growth Performance of High Health, Segregated Early Weaned Pigs	Daiichi Pharmaceutical Company LTD	\$10,302
Hancock	Joe	ASIND	AG	07/01/98	06/30/99	Extruder/Expander/Expeller Conditions to Optimize Utilization of Full-Fat Soybeans in Nursery and Finishing Pigs	Kansas Department of Agriculture	\$20,700
Hancock	Joe	ASIND	AG	07/01/98	06/30/99	New and Improved Genotypes and Processing Technologies for Sorghum in Diets for Swine and Poultry	Kansas Department of Agriculture	\$26,250
Hancock	Joe	ASIND	AG	07/01/98	06/30/99	Effect of a High Oil Corn on Feed Processing	Optimum Quality Grains, L.L.C.	\$46,419
Hancock	Joe	ASIND	AG	06/01/98	05/31/99	Evaluating the Ileal Digestibility of Amino Acids in Soybean Meal from Different Soy Processors	National Soybean Research Laboratory	\$35,000
Herald	Thomas	ASIND	AG	07/01/98	06/30/99	Characterizing the Structural and Functional Properties of Soybean Protein Fractions	Kansas Department of Agriculture	\$22,366

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Hines	Robert	ASIND	AG	07/01/98	06/30/99	Ergot: Is it Really a Problem for Livestock Fed Commercially Produced Sorghum Grain	Kansas Department of Agriculture	\$17,200
Hunt	Melvin	ASIND	AG	05/12/97	05/11/99	Evaluation of Tenneco Packaging System on Beef Rebloom and Display Color Stability Studies I, II and III	Tenneco Packaging, Inc.	\$56,794
Hunt	Melvin	ASIND	AG	10/31/97	07/31/99	Effects of Endpoint Temperature on Internal Cooked Color Development in Ground Pork and Pork Loins	National Pork Producers Council	\$39,450
Kastner	Curtis	ASIND	AG	07/01/97	06/30/99	Animal Sciences and Industry Food Safety Consortium - Kansas State University	US Department of Agriculture	\$734,358
Kastner	Curtis	ASIND	AG	02/15/98	01/31/01	HACCP Implementation and Evaluation in Small and Very Small Meat/Poultry Plants	US Department of Agriculture	\$440,000
Lee	Charles	ASIND	EX	05/01/98	05/01/99	Grazing Cattails: Cattle Performance and Vegetative Response	US Department of the Interior	\$41,850
Marsden	James	ASIND	AG	07/06/98	07/31/99	Salmonella Risk Assessment for Blade Tenderized, Immersion Marinated, Needle Injected and Fibrinogen Processed Pork Cuts During Processing, Storage and Cooking	National Pork Producers Council	\$39,435
M... ..	J. Ernest	ASIND	AG	10/01/97	09/30/99	Regulation and Function of Interleukin 6 in the Porcine Anterior Pituitary	US Department of Agriculture	\$154,000
Nagaraja	Tiruvoo	ASIND	AG	08/01/94	07/31/99	Evaluation of the Effectiveness of Monensin in Controlling Bloat in Feedlot Cattle	Eli Lilly & Company	\$25,000
Nagaraja	Tiruvoo	ASIND	AG	01/01/95	05/31/99	Virginiamycin Effects on Rumen Metabolism in Cattle During Adaptation to a High Concentrate Diet	Pfizer Inc.	\$32,037
Nagaraja	Tiruvoo	ASIND	AG	12/01/95	11/30/99	Quantification and Factors Affecting Fusobacterium Necrophorum on the Ruminal Wall	Eli Lilly & Company	\$31,250

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Nagaraja	Tiruvoor	ASIND	AG	11/15/97	11/14/99	Effect of Monensin on Frothy Bloat in Cattle Fed Bloat-Provocative, High-Grain Diet	Eli Lilly & Company	\$25,000
Phebus	Randall	ASIND	AG	07/09/98	07/08/99	Reactive Nanoparticles as Destructive Adsorbents for Biological and Chemical Decontamination	US Department of Defense	\$30,000
Phebus	Randall	ASIND	AG	10/01/98	05/31/99	Escherichia coli O157:H7 Risk Assessment for Production and Cooking of Blade Tenderized and Fibrinogen Process Beef Steaks	US Department of Agriculture	\$40,000
Phebus	Randall	ASIND	AG	07/01/98	08/31/00	Steam Pasteurization Assessment and Microbial Analysis	Kansas Department of Commerce & Housing	\$24,000
Riley	Jack	ASIND	AG	04/01/94	03/31/99	Support of Regents Distinguished Professorship in Animal Sciences	Kansas Beef Council	\$1,018,490
Schmidt	Karen	ASIND	AG	07/01/95	06/30/99	Modification of the Flavor and Color of Extruded Mozzarella Soy Cheese Analogs	Kansas Department of Agriculture	\$104,357
Schmidt	Karen	ASIND	AG	07/01/98	06/30/99	Wheat Starches Used as Stabilizers in Yogurt	Kansas Wheat Commission	\$24,403
Schmidt	Karen	ASIND	AG	07/01/98	06/30/99	Corn Starches Used as Stabilizers in Yogurt	Kansas Department of Agriculture	\$23,909
Titgemeyer	Evan	ASIND	AG	02/02/98	12/31/99	Effect of Virginiamycin on Ruminal Protein (Nitrogen) Metabolism	Pfizer Inc.	\$27,685
Kanost	Michael	BIOCH	AS	07/01/92	02/28/00	Biochemistry of Insect Hemocytes	US Department of Health & Human Services	\$689,861
kanost	Michael	BIOCH	AS	09/01/94	08/31/99	Serine Proteinase Inhibitors in Insects	US Department of Health & Human Services	\$1,029,843
Kanost	Michael	BIOCH	AS	10/01/98	09/30/99	University of Giessen Unrestricted Gift	University of Giessen	\$1,500
Krishnamoorthi	Ramasway	BIOCH	AS	07/01/97	08/31/99	Solution NMR Structure of Putative Ca ²⁺ -Binding C2-Domain in Phospholipase D	American Chemical Society	\$55,000
Krishnamoorthi	Ramasway	BIOCH	AS	08/15/97	08/14/99	Effect of Glucose of Blood Coagulation Factor XIIa Activity	Great Plains Diabetes Research, Inc.	\$5,000
Krishnamoorthi	Ramasway	BIOCH	AS	07/01/98	06/30/99	NMR Studies of Inactive and Active Forms of Blood Coagulation Factor XII	American Heart Assoc., KS Affiliate, Inc.	\$31,800

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Muthukrishnan	Subbarat	BIOCH	AS	09/01/95	08/31/99	Biotechnology Career Fellowship for Dr. R. Samiyappan	Rockefeller Foundation	\$38,700
Muthukrishnan	Subbarat	BIOCH	AS	07/01/97	06/30/99	Construct Agronomically Useful Genes for Sorghum Plant Transformation	Kansas Department of Agriculture	\$61,100
Muthukrishnan	Subbarat	BIOCH	AS	05/01/97	04/30/00	Rockefeller Biotechnology Career Fellowship for Dr. Natarajan Sakhivel	Rockefeller Foundation	\$45,500
Prakash	Om	BIOCH	AS	08/01/96	05/31/99	Molecular Analysis of Mucin-Type O-Glycosylation	US Department of Health & Human Services	\$15,761
Reeck	Gerald	BIOCH	AS	07/01/95	06/30/99	Aphid Pectinases in Insect-Plant Interaction and Biotype Evolution	US Department of Agriculture	\$120,000
Reeck	Gerald	BIOCH	AS	07/01/98	06/30/99	Cyclic Peptide Inhibitors of Enzymes of the Contact System	American Heart Assoc., KS Affiliate, Inc.	\$31,800
Roche	Thomas	BIOCH	AS	04/05/95	02/28/00	Regulation of Mammalian Pyruvate Dehydrogenase	US Department of Health & Human Services	\$751,536
Smith	Paul	BIOCH	AS	01/01/99	08/31/01	Effects of Cosolvents on Hydrophobic Hydration	American Chemical Society	\$60,000
Takemoto	Dolores	BIOCH	AS	07/01/98	06/30/99	Visiting Professor of Biochemistry/Molecular Biology	Burroughs Wellcome Fund	\$5,000
Tomich	John	BIOCH	AS	12/01/92	07/31/99	Role of Ordered Helical Segments in Membrane Proteins	US Department of Health & Human Services	\$646,930
Tomich	John	BIOCH	AS	08/01/93	03/31/99	Studies of Human Lysosomal Glucocerebrosidase	US Department of Health & Human Services	\$105,001
Wang	Xuemin	BIOCH	AS	09/15/97	09/30/00	Roles of Multiple Phospholipase Ds in Plant Reproduction and Senescence	US Department of Agriculture	\$210,000
Wang	Xuemin	BIOCH	AS	09/01/98	08/31/99	Regulation and Function of Membrane Lipid Hydrolysis in Lipid-Based Signaling of Plants	National Science Foundation	\$110,000
Zolkiewska	Anna	BIOCH	AS	09/01/98	08/31/99	Role of ADAM 12 Disintegrin Domain in Myoblast Fusion	US Department of Health & Human Services	\$65,700
Zolkiewski	Michal	BIOCH	AS	12/01/98	09/30/99	Structure and Function of Hsp100 Proteins	National Science Foundation	\$46,486
Chapes	Stephen	BIOLO	AS	12/01/98	02/28/99	Differentiation of Bone Marrow Macrophages in Space	National Aeronautics and Space Administration	\$19,999
Clem	Rollie	BIOLO	AS	07/01/98	04/30/99	Functional Analysis of Anti-Apoptotic IAP Proteins	US Department of Health & Human Services	\$97,325

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Dodds	Walter	BIOLO	AS	09/01/97	08/31/99	Nitrogen Uptake, Retention and Cycling in Stream Ecosystems: An Intersite N-15 Tracer Experiment	National Science Foundation	\$51,684
Gipson	Philip	BIOLO	AS	12/04/90		Establishment and Operation of the Kansas Cooperative Fish and Wildlife Research Unit	Kansas Department of Wildlife and Parks	\$170,000
Okema	James	BIOLO	AS	07/21/94	09/30/99	Starch Concentration, Metabolism, and Localization in Space-Grown Soybean Seedlings	National Aeronautics and Space Administration	\$325,372
Hartnett	David	BIOLO	AS	01/01/96	12/31/99	Konza Prairie Documentary Film	Kansas State University Research Foundation	\$477,967
Hartnett	David	BIOLO	AS	10/01/97	09/30/99	FSML: Enhancement of Support Facilities for Visiting Scientists at Konza Prairie Research Natural Area	National Science Foundation	\$151,434
Hartnett	David	BIOLO	AS	07/01/98	06/30/00	Tallgrass Prairie of the Flint Hills of Kansas	National Science Foundation	\$383,780
Hartnett	David	BIOLO	AS	07/01/98	06/30/99	Tallgrass Prairie of the Flint Hills of Kansas	US Environmental Protection Agency	\$17,500
Johnson	Loretta	BIOLO	AS	06/15/96	05/31/99	Role of Amino Acid Uptake by Mycorrhizal Ericaceous Shrubs in the Nitrogen Economy of Nutrient-Deficient Peat Bogs	National Science Foundation	\$251,653
Johnson	Loretta	BIOLO	AS	04/01/97	03/31/99	Belowground Sinks for Carbon in Arctic Ecosystems	National Science Foundation	\$76,702
Johnson	Loretta	BIOLO	AS	08/01/97	01/31/00	Land-Cover Change in the Great Plains: Predicting Impacts of Regional Forest Expansion on Biogeochemical Processes	National Aeronautics and Space Administration	\$426,880
Knapp	Alan	BIOLO	AS	09/15/96	09/30/99	Experimental Manipulation of Variability in Precipitation in a Grassland	US Department of Agriculture	\$288,915
Knapp	Alan	BIOLO	AS	11/01/96	10/31/99	Long-Term Ecological Research in Tallgrass Prairie: The Konza LTER Program	National Science Foundation	\$1,765,000
Knapp	Alan	BIOLO	AS	02/01/97	07/31/00	Evaluating the Role of Resource Heterogeneity in Restoring Grasslands	National Science Foundation	\$183,196

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Rintoul	David	BIOLO	AS	07/14/98	08/31/99	Lipid Analysis of Migratory Sandhill Cranes	US Department of the Interior	\$14,663
Robel	Robert	BIOLO	AS	07/22/96	07/31/99	Movements and Productivity of Lesser Prairie-Chickens in Southwest Kansas	Kansas Department of Wildlife and Parks	\$156,650
Roe	Judith	BIOLO	AS	11/01/98	10/31/00	Function of TOUSLED Protein Kinase in Arabidopsis Development	US Department of Agriculture	\$100,000
.fa	Donald	BIOLO	AS	07/01/95	06/30/99	Densely Methylated DNA and Mammalian Replication Origins	US Department of Health & Human Services	\$820,583
Takemoto	Larry	BIOLO	AS	06/01/92	05/31/99	Lens Membrane in Relation to Human Cataractogenesis	US Department of Health & Human Services	\$1,859,634
Upton	Steve	BIOLO	AS	08/01/95	08/31/99	Coccidia of the World	National Science Foundation	\$112,714
Upton	Steve	BIOLO	AS	09/01/96	05/31/99	In vitro Assay for Cryptosporidiosis	US Department of Health & Human Services	\$164,849
Upton	Steve	BIOLO	AS	09/23/96	09/22/99	Genomic Database for Cryptosporidium spp.	US Environmental Protection Agency	\$304,755
Upton	Steve	BIOLO	AS	06/15/98	05/31/99	dsRNAs of Cryptosporidium parvum	US Department of Health & Human Services	\$159,876
Upton	Steve	BIOLO	AS	10/01/98	04/01/99	Evaluating Parasitocidal Activity of Compounds Provided by Merck Against Cryptosporidium parvum in vitro	Merck & Company, Inc.	\$10,000
Wong	Peter	BIOLO	AS	05/01/97	04/30/99	Production of Seedless Watermelons via a Gene Transfer Approach	US Department of Agriculture	\$110,097
Ughan	Earl	CLSCI	VM	09/15/93	05/31/99	Effects of Intravenous Sodium Hyaluronate on Tendon Healing and Adhesion Formation in Horses	Bayer Ag VT-V-GF-HOB	\$26,117
Oehme	Frederick	CLSCI	VM	07/15/93	08/01/01	Safety Study of Glade Carpet and Rug Deodorizer in Cats and Dogs	S.C. Johnson & Sons, Inc.	\$92,799
Oehme	Frederick	CLSCI	VM	06/01/94	06/12/00	Safety Study of a Benzyl Benzoate-containing Household Product in Cats	S.C. Johnson & Sons, Inc.	\$32,190
Gateway	Barbara	CTIND	HE	11/14/97	08/31/99	Soybean Alkyd Resins in Pigment Printing of Textiles and Materials	United Soybean Board	\$83,500
Chengappa	M. M.	DMPH	VM	07/01/98	06/30/99	Detection of Toxin Genes in Escherichia coli Recovered from Normal Greyhounds and Greyhounds with Diarrhea	Kansas Racing and Gaming Commission	\$18,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Chowdhury	Shafiqul	DMPH	VM	09/01/95	08/31/99	Role of BHV-1 and 5 Glycoproteins in Pathogenesis	US Department of Agriculture	\$106,500
Chowdhury	Shafiqul	DMPH	VM	03/13/96	03/12/99	Construction and In Vitro Characterization of a Multiple Gene-Deleted Recombinant Bovine Herpesvirus 1	Fort Dodge Laboratories	\$81,000
Chowdhury	Shafiqul	DMPH	VM	09/15/97	09/30/00	BHV-1 and BHV-5 Neuropathogenesis Studies	US Department of Agriculture	\$180,000
Fenwick	Bradley	DMPH	VM	07/01/96	06/30/99	Why Do Current Vaccines Fail to Reliably Prevent Kennel Cough in Racing Greyhounds?	Kansas Racing and Gaming Commission	\$141,000
Fenwick	Bradley	DMPH	VM	12/01/97	11/30/99	Development of a Canine Model of E. coli Induced Hemorrhagic Colitis and Hemolytic Uremic Syndrome	US Department of Health & Human Services	\$176,785
Fenwick	Bradley	DMPH	VM	07/01/98	06/30/99	Establishing a Greyhound DNA-Fingerprinting Laboratory: "Putting the Research to Work"	Kansas Racing and Gaming Commission	\$50,000
Kapil	Sanjay	DMPH	VM	04/01/98	02/28/99	Development of a Bovine Coronavirus Challenge Model in Nursing Calves	Schering Plough Animal Health	\$34,803
Oehme	Frederick	DMPH	VM	09/14/98	05/01/99	Health from the Office to the Field	Kansas Department of Agriculture	\$12,500
Broce	Alberto	ENTOM	AG	07/01/92	06/30/99	Methods for Control of Livestock Insects	Method for Control of Lvsk Insects (Multi-sponsor)	\$10,500
Buschman	Larry	ENTOM	AG	07/01/90	06/30/99	Insecticide Management of Field Crop Insects in Southwestern Kansas	Insect Mgmt Fld Crop Insect, SW KS (Multi-sponsor)	\$141,802
Buschman	Larry	ENTOM	AG	07/01/97	06/30/99	Evaluating Corn Borer Resistance and Resistance Management Strategies for Bt-Corn	Kansas Department of Agriculture	\$32,400
Buschman	Larry	ENTOM	AG	10/01/97	09/30/99	Evaluation of Refuge Planting Patterns for Corn Bore Resistance Management in Bt Corn	DeKalb Genetics Corporation	\$7,500
Buschman	Larry	ENTOM	AG	07/01/97	06/30/99	Evaluation of Refuge Planting Patterns for Corn Borer Resistance Management in Bt Corn	Novartis	\$15,500
Buschman	Larry	ENTOM	AG	07/01/97	06/30/99	Evaluation of Refuge Planting Patterns for Corn Borer Resistance Management in Bt-Corn	Mycogen Corporation	\$6,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Charlton	Ralph	ENTOM	AG	07/01/97	06/30/99	Isolation and Identification of Semiochemicals that Mediate Attraction and Mating of the Cat Flea (<i>Ctenocephalides felis felis</i>)	Heska Corporation	\$104,555
Con	Ralph	ENTOM	AG	12/15/97	03/14/99	Biotic Inventory to Support Land Condition Trend Analysis for KSARNG Training Area, Salina, Kansas	Kansas Army National Guard	\$114,909
Charlton	Ralph	ENTOM	AG	01/01/99	12/31/99	Smoky Hills II - Integrated Natural Resource Management Plan and Land Condition-Trend Analysis	Kansas Army National Guard	\$119,026
Dover	Barry	ENTOM	AG	09/01/94	08/31/99	Suppression of JH Esterase During Parasitism	US Department of Agriculture	\$180,000
Dover	Barry	ENTOM	AG	09/03/98	07/15/00	Factors Influencing Flight and dispersal of Lesser Grain Borere Adults	US Department of Agriculture	\$5,400
Harvey	Tom	ENTOM	AG	07/01/92	06/30/99	Insecticide Management of Field Crop Insects at Hays, KS	Insect Mgmt Fld Crop - Hays, KS (Multi-sponsor)	\$1,032
Higgins	Randall	ENTOM	AG	07/01/97	06/30/99	Second Generation European Corn Borer/Southwestern Corn Borer Research	Zeneca, Inc.	\$4,400
Higgins	Randall	ENTOM	AG	07/01/97	06/30/99	First and Second Generation European Corn Borer/Southwestern Corn Borer Research	Elf Atochem North America, Inc.	\$9,150
Higgins	Randall	ENTOM	AG	07/01/98	06/30/99	BT Corn: Evaluation, Resistance Prevention, and Education	Kansas Department of Agriculture	\$66,300
Higgins	Randall	ENTOM	AG	04/30/98	06/30/99	Alfalfa Weevil Insecticide Efficacy Research	Bayer Corporation	\$1,500
Higgins	Randall	ENTOM	AG	06/10/98	12/31/99	Mycotech Trial 98-084, European Corn Borer Field Test Protocol	Mycotech Corporation	\$6,000
Higgins	Randall	ENTOM	AG	05/01/98	04/30/99	Efficacy of Lead cry1Ab and IRM Events Alone and in Stacks Against Key Lepidopteran Insect Pests	Monsanto Company	\$6,000
Higgins	Randall	ENTOM	AG	04/15/98	10/30/99	Alfalfa Weevil Efficacy and Spray/No-Spray Bt Corn Trial	FMC Corporation	\$2,500
Higgins	Randall	ENTOM	AG	06/01/98	05/31/00	Testing of Bts Against the Kansas State University Dipel-Resistant European Corn Borer Colony	Monsanto Company	\$9,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Higgins	Randall	ENTOM	AG	11/01/98	10/31/00	Survival of Resistant European Cornborer on Transgenic Corn Lines	Monsanto Company	\$6,000
Kambhampati	Srinivas	ENTOM	AG	07/01/94	06/30/99	Molecular Phylogenetics, Speciation and Evolution of Host Range in Aphidiid Wasps	US Department of Agriculture	\$114,000
Kambhampati	Srinivas	ENTOM	AG	07/15/97	07/31/99	Molecular Basis of Wing Polymorphism in the Pea Aphid	US Department of Agriculture	\$23,000
Kambhampati	Srinivas	ENTOM	AG	08/01/98	08/31/01	Species Boundaries in the Wood Roach, <i>Cryptocercus</i>	National Science Foundation	\$150,000
Kambhampati	Srinivas	ENTOM	AG	06/01/98	06/30/01	<i>Bactrocera dorsalis</i> Complex: Species Boundaries and Diagnostic Markers	California, State of	\$163,057
Nechols	James	ENTOM	AG	09/01/98	08/31/99	Evaluating Nontarget Thistle Utilization in the Flea Beetle <i>Psylliodes chalcamera</i>	US Department of Agriculture	\$12,600
Nechols	James	ENTOM	AG	09/01/98	08/31/99	Evaluating the Potential for Organic Apple Production in Kansas	US Department of Agriculture	\$10,000
Ramaswamy	Sonny	ENTOM	AG	01/01/98	04/30/99	Gonadotropic Imperative for Polyandry in Higher Lepidoptera	US Department of Agriculture	\$57,451
Ramaswamy	Sonny	ENTOM	AG	12/01/98	11/30/00	<i>Heliothis virescens</i> : Model to Study Mating-Induced Allotropy in Lepidoptera	US Department of Agriculture	\$100,000
Ramaswamy	Sonny	ENTOM	AG	09/30/98	09/30/01	Monoclonal-Antibody-Based Identification Kit for <i>Cotesia flavipes</i>	US Agency for International Development	\$199,334
Ramaswamy	Sonny	ENTOM	AG	07/01/98	06/30/01	Tougaloo College Project	Tougaloo College	\$12,000
aswamy	Sonny	ENTOM	AG	09/29/98	09/30/99	Facilitate Multiple Pest Resistant Wheat Germplasm Research	US Department of Agriculture	\$100,000
Smith	C. Michael	ENTOM	AG	01/01/98	01/31/01	Exchange of Triticeae Germplasm and Molecular Biochemical Techniques for Enhanced Aphid Resistance in Wheat	US Department of Agriculture	\$11,900
Smith	C. Michael	ENTOM	AG	07/01/98	06/30/99	Evaluation of a Synthetic Hexaploid Wheat Germplasm Collection in the KSU Wheat Genetic Resources Center for Resistance to Greenbug Biotypes I and K	Kansas Crop Improvement Association	\$6,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Wilde	Gerald	ENTOM	AG	07/01/94	06/30/99	Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage	Chem Ctrl Insects Pests Corn/Field (Multi-sponsor)	\$398,105
Wilde	Gerald	ENTOM	AG	07/15/96	01/15/01	Areawide Management of Corn Rootworms Using Semiochemical Baits	US Department of Agriculture	\$675,623
	Kun Yan	ENTOM	AG	07/24/98	06/01/00	Monitoring Insect Population Dynamics and Movement Using Molecular Markers	US Department of Agriculture	\$23,500
Dritz	Steven	FAHMC	VM	05/01/96	05/31/99	Effect of Chromium Picolinate on Parity One Sow Reproduction and Farrowing Performance	Prince Agri-Products	\$6,300
Gillespie	Jerry	FAHMC	VM	04/01/96	11/01/99	Ecology of E.Coli 0157:H7 in Beef Cow-Calf Operations from Ranch Through Feedlot	US Department of Agriculture	\$595,537
Borsdorf	Roe	FEEDS	AG	09/30/93	09/29/99	Food and Feed Grains Institute Program for the Collaborative Agribusiness Support Project	US Agency for International Development	\$1,405,042
Lea	John	FEEDS	AG	06/01/95	12/11/99	Haiti Productive Land Use Systems Project	US Agency for International Development	\$486,502
Reed	Carl	FEEDS	AG	08/24/98	05/30/02	Grain Storage and Management Project for Hot and Tropical Environments	US Feed Grains Council	\$297,474
Chambers IV	Edgar	FOODS	HE	06/01/96	05/31/02	Consumer Perception of Products Under Extended Use	Frito Lay, Inc.	\$540,002
Chambers IV	Edgar	FOODS	HE	02/01/98	01/31/00	Product Methods Testing	Coca-Cola Company	\$14,000
Chambers IV	Edgar	FOODS	HE	04/01/98	03/01/00	Evaluation of Product Characteristics	Peryam & Kroll Research Corporation	\$30,000
Chambers IV	Edgar	FOODS	HE	08/04/98	08/03/00	Evaluation of Products	Abbott Laboratories	\$20,000
Chambers IV	Edgar	FOODS	HE	10/01/98	08/31/01	Elder's Use of Portion-Size Aids	US Department of Agriculture	\$17,047
Koo	Sung	FOODS	HE	09/01/96	08/31/99	Zinc Deficiency - Its Effect on Vitamin A Transport	US Department of Agriculture	\$179,116
Koo	Sung	FOODS	HE	07/01/97	07/01/01	Role of Carnitine in Fatty Acid Metabolism	Hill's Pet Nutrition, Inc.	\$253,135
Koo	Sung	FOODS	HE	09/01/98	08/31/00	Effect of a Bovine Plasma IgG Fraction (BPI) on the Lymphatic Absorption of Cholesterol in a Rat Model	AMPC, Inc.	\$73,255

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Behnke	Keith	GRAIN	AG	12/17/96	12/16/99	Determining the Effect of Grain Kernel Physical Properties on Feed Processing Operations	Optimum Quality Grains, L.L.C.	\$11,680
Behnke	Keith	GRAIN	AG	05/01/98	03/31/99	Processing and Stability Studies with Four Tiamulin Compounds and Two Valnemulin Formulations in Typical U. S. Grower Pig Diets	Novartis	\$14,892
Brent	John	GRAIN	AG	07/01/98	06/30/99	Extruded Foods from White Grain Sorghum	Kansas Department of Agriculture	\$23,130
Deyoe	Charles	GRAIN	AG	09/26/97	08/31/99	Utilization of Single Kernel Characterization System Data for Evaluation of Commercial Milling of Soft Red Winter, Soft White and Hard Red Spring Wheat	US Department of Agriculture	\$70,180
Donnelly	Brendan	GRAIN	AG	07/01/90	06/30/99	International Grains Program Support Project	Kansas Wheat Commission	\$1,440,500
Donnelly	Brendan	GRAIN	AG	07/01/93	06/30/99	Quality Evaluation of Materials from KAES Wheat Breeding Programs	Kansas Wheat Commission	\$213,000
Donnelly	Brendan	GRAIN	AG	08/09/94	09/08/99	Effects of Wheat Processing on Integrity and Distribution of TCK Spores	US Department of Agriculture	\$98,500
Donnelly	Brendan	GRAIN	AG	09/26/97	08/01/99	Development of a Stored Wheat Areawide Management Program in Kansas	US Department of Agriculture	\$296,596
Donnelly	Brendan	GRAIN	AG	07/01/97	06/30/99	International Grains Program Advisory Board	Nebraska Wheat Board	\$150,000
Donnelly	Brendan	GRAIN	AG	01/01/98	06/30/99	Quality of Hard White Winter Wheat for Bread, Tortillas and Asian Noodles	Kansas Wheat Commission	\$100,450
Donnelly	Brendan	GRAIN	AG	07/01/98	06/30/99	Support for the Research in Milling Science Laboratory	Kansas Wheat Commission	\$10,000
Donnelly	Brendan	GRAIN	AG	09/01/98	08/31/99	International Grains Program Advisory Board	Oklahoma Wheat Commission	\$15,000
Donnelly	Brendan	GRAIN	AG	10/15/98	10/14/99	International Grains Program Advisory Board	Colorado Wheat Administrative Committee	\$15,000
Donnelly	Brendan	GRAIN	AG	10/01/98	09/30/99	International Grains Program Advisory Board	Texas Wheat Producers Board	\$15,000
Fairchild	Fred	GRAIN	AG	10/01/98	12/31/00	Pellet Mash Conditioning: A Study to Better Understand the Process	Bliss Industries	\$65,114

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Flores	Rolando	GRAIN	AG	07/01/97	06/30/99	Development of a Dry/Wet Milling Method to Increase Starch Recovery from Sorghum	Kansas Department of Agriculture	\$25,500
Herrman	Timothy	GRAIN	AG	07/01/98	06/30/99	Quality-Based Marketing on Wheat, Pilot-Scale Evaluation	Kansas Department of Commerce & Housing	\$11,000
Johnson	Marc	GRAIN	AG	10/01/98	09/30/99	USDA/ARS Research Support Agreement Task Order #T95430004	US Department of Agriculture	\$181,847
Klopfenstein	Carol	GRAIN	AG	07/01/97	06/30/99	Extrusion Processing to Enhance the Cholesterol Lowering Activity of Common Dietary Fibers	American Heart Assoc., KS Affiliate, Inc.	\$55,120
Klopfenstein	Carol	GRAIN	AG	07/01/98	06/30/99	Over-the-Counter, Cholesterol-Lowering, Extruded Soy Fiber Dietary Supplements	Kansas Department of Agriculture	\$42,500
Reed	Carl	GRAIN	AG	10/01/98	06/30/99	Improving Efficacy and Safety of Fumigation in Kansas Grain Elevators	Kansas Department of Agriculture	\$7,000
Seib	Paul	GRAIN	AG	09/15/96	09/30/99	Partial-Waxy Starch Mutants of Hard Wheats and Their Use in Oriental Noodles	US Department of Agriculture	\$204,343
Seib	Paul	GRAIN	AG	07/15/96	09/30/99	Biochemical Properties that Relate to Quality of Wheat Grain and Functional Performance of Flours	US Department of Agriculture	\$161,511
Seib	Paul	GRAIN	AG	07/01/98	06/30/99	Gluten Proteins that Improve Bread Quality	Kansas Wheat Commission	\$30,150
S	X. Susan	GRAIN	AG	07/01/96	06/30/99	Characterizing Flavors of Sorghum Cultivars Potentially Useful for Foods	Kansas Department of Agriculture	\$86,315
Sun	X. Susan	GRAIN	AG	11/22/96	06/30/99	Molecular Structure, Dynamic Behavior and Functional Properties of Soy Proteins	Kansas Department of Agriculture	\$115,600
Sun	X. Susan	GRAIN	AG	07/01/97	06/30/99	Enhancement of Dimension Stability and Mold Resistance of Reinforced Natural Fiber Boards	Kansas Technology Enterprise Corporation	\$52,305
Sun	X. Susan	GRAIN	AG	07/01/98	06/30/99	Compatibility of Starch and Polylactic Acid	Kansas Wheat Commission	\$22,625
Sun	X. Susan	GRAIN	AG	05/15/98	05/14/00	Texture Characterization of Crunchy Foods During Chewing	Keebler Company	\$20,000
Sun	X. Susan	GRAIN	AG	04/01/98	03/31/99	Texture Characterization of Crunchy Foods During Chewing	Proctor & Gamble Company	\$20,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Sun	X. Susan	GRAIN	AG	09/15/98	12/31/00	Objective Characterization of Texture Properties of Crunchy Foods During Chewing	US Department of Agriculture	\$120,000
Sun	X. Susan	GRAIN	AG	06/30/98	06/30/99	Development of Biodegradable Composite for Military Applications	US Department of Defense	\$21,170
Sun	X. Susan	GRAIN	AG	10/01/98	06/30/99	Edible/Biodegradable Composites for Feed Supplement Containers	Kansas Technology Enterprise Corporation	\$10,500
Tilley	Katherine	GRAIN	AG	01/01/97	06/30/99	Evaluations of Waffle Quality	Kellogg USA, Inc.	\$152,257
Kofoed	Kenneth	HAYRC	AG	07/01/95	06/30/99	Breeding Sorghum with Improved Grain Yield, Greenbug and Virus Resistance, and Pre-Flowering Drought Tolerance	Kansas Department of Agriculture	\$221,800
Martin	Terry	HAYRC	AG	07/01/90	06/30/99	Operation of Disease-screening Nurseries in Support of the KSU Wheat Breeding Program	Kansas Crop Improvement Association	\$70,000
Martin	Terry	HAYRC	AG	07/01/98	06/30/99	Kansas Dual Purpose Pest Resistant White Wheats	Kansas Wheat Commission	\$76,000
Stahlman	Phillip	HAYRC	AG	07/01/94	06/30/99	Weed Research (Multi-sponsor)	Weed Research (Multi-sponsor)	\$124,650
Stahlman	Phillip	HAYRC	AG	04/05/95	03/31/99	Jointed Goatgrass Competition and Integrated Management in Western U. S. Winter Wheat	US Department of Agriculture	\$17,000
Stahlman	Phillip	HAYRC	AG	04/01/96	03/31/00	Integrated Management Systems for Jointed Goatgrass in the Central Great Plains	US Department of Agriculture	\$46,000
Stahlman	Phillip	HAYRC	AG	07/01/97	06/30/99	Weed Control in Solid-Seeded Versus Row-Planted Glyphosate-Resistant Soybean	Kansas Department of Agriculture	\$30,000
Stahlman	Phillip	HAYRC	AG	05/01/98	04/30/99	Evaluating Experimental and Non-Labeled Herbicides for Weed Control in Sunflower	National Sunflower Association	\$2,500
Stahlman	Phillip	HAYRC	AG	07/28/98	02/01/99	HAYRC Sulfentrazone Tank Mixtures for Weed Control in Sunflowers	National Sunflower Association	\$2,000
Thompson	Carlyle	HAYRC	AG	07/01/95	06/30/99	HAYRC Crop Culture (Multi-sponsor)	HAYRC Crop Culture (Multi-sponsor)	\$7,500
Thompson	Carlyle	HAYRC	AG	11/01/97	12/31/99	Effect of Stockosorb Agro on Winter Wheat Grown in Central Kansas	Stockhausen, Inc.	\$25,822

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Erb	William	HFARR	AG	02/01/98	02/01/02	National Turfgrass Evaluation Program (National Bermudagrass Test)	National Turfgrass Federation	\$6,000
Fry	Jack	HFARR	AG	09/01/93	02/01/01	National Turfgrass Evaluation Program	National Turfgrass Federation	\$12,000
Fry	Jack	HFARR	AG	09/01/95	02/02/00	National Turfgrass Evaluation - Kentucky Bluegrass	National Turfgrass Federation	\$6,000
	Jack	HFARR	AG	07/01/98	06/30/03	Turfgrass Testing	National Turfgrass Federation	\$3,000
Huang	Bingru	HFARR	AG	01/01/97	12/31/99	Environmental and Physiological Factors Influencing Bentgrass Summer Decline	Golf Course Superintendents Association of America	\$48,000
Huang	Bingru	HFARR	AG	03/30/98	01/31/00	Importance of Carbon Balance and Root Activity in Creeping Bentgrass Tolerance to Summer Stresses	US Golf Association	\$50,000
Marr	Charles	HFARR	AG	07/01/89	06/30/99	Efficacy of Insecticides Against Vegetable Feeding Insect Pests	Eff Insecticides Ag Veg Feed Pests (Multi-sponsor)	\$25,300
Pair	John	HFARR	AG	09/01/92	02/01/01	National Turfgrass Evaluation Program	National Turfgrass Federation	\$24,000
Reid	William	HFARR	AG	03/01/94	02/28/99	Pecan Cultivar Evaluation	Kansas Nut Growers Association	\$7,000
Warner	Thomas	HFARR	AG	07/28/97	06/30/00	Environmental Impacts of Reducing Pesticide Uses on Fort Riley	US Department of the Interior	\$66,981
Warner	Thomas	HFARR	AG	09/30/98	09/29/99	Evaluation of Ornamental Species for the Great Plains	Schmidt, J. Frank, Family Charitable Trust	\$2,500
Williams	Kimberly	HFARR	AG	09/01/98	08/31/99	Use of Pre-Charged Zeolites to Provide Aluminum for Blue Sepal Coloration During the Hydrangia Production	Gloeckner Foundation, Inc. (Fred C.)	\$8,800
Hargrove	William	KCARE	AG	01/01/98	06/30/99	Integrated Agricultural Management Systems (IAMS): Using Best Management Practices (BMPS) to Improve the Quality of Kansas Surface Waters	Kansas Department of Agriculture	\$50,000
Hargrove	William	KCARE	AG	01/01/98	06/30/99	Integrated Agricultural Management Systems (IAMS): Using Best Management Practices (BMPS) to Improve the Quality of Kansas Surface Waters	Kansas Department of Agriculture	\$50,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Hargrove	William	KCARE	AG	01/01/98	06/30/99	Integrated Agricultural Management Systems (IAMS): Using Best Management Practices (BMPs) to Improve the Quality of Kansas Surface Waters	Kansas Department of Agriculture	\$50,000
Hargrove	William	KWRRRI	AG	01/01/98	06/30/99	Integrated Agricultural Management Systems (IAMS): Using Best Management Practices (BMPs) to Improve the Quality of Kansas Surface Waters	Kansas Wheat Commission	\$12,500
Hargrove	William	KWRRRI	AG	09/01/98	08/31/00	State Water Institute Program	US Department of the Interior	\$55,000
Staggenborg	Scott	NEAOF	EX	07/01/98	06/30/99	Assessing the Role of Infrared Images and Yield Maps in Corn Production	Kansas Department of Agriculture	\$15,000
Staggenborg	Scott	NEAOF	EX	07/01/98	06/30/99	Evaluating Roundup-Ready Soybean Yields Under Different Management Strategies	Kansas Department of Agriculture	\$8,000
Coyne	Patrick	NWREC	AG	02/01/86	06/30/99	NWREC Sunflower Performance Testing Program	Sunflower Performance Testing (Multi-sponsor)	\$226,522
Lamm	Freddie	NWREC	AG	06/01/97	05/31/99	Water Conservation--Increased Efficiency in Usage	US Department of Agriculture	\$73,834
Lamm	Freddie	NWREC	AG	08/01/98	07/31/99	Water Conservation--Increased Efficiency in Usage	US Department of Agriculture	\$73,847
Lamm	Freddie	NWREC	AG	07/20/98	05/31/99	Effect of Sprinkler Height on Corn Production	Nelson Irrigation Corporation	\$6,500
Buchholz	Daryl	PMNRD	EX	09/01/96	08/31/99	Response to Weather Related Disasters	US Department of Agriculture	\$22,000
Buchholz	William	PPATH	AG	07/01/92	06/30/99	Seed Treatment	Seed Treatment (Multi-sponsor)	\$170,315
Bockus	William	PPATH	AG	07/01/97	06/30/99	Control of Residue-Borne Winter Wheat Diseases	Kansas Wheat Commission	\$59,400
Bockus	William	PPATH	AG	07/01/98	06/30/99	Seed Splitter for More Efficient Planting of Disease Screening Nurseries	Kansas Crop Improvement Association	\$2,800
Bowden	Robert	PPATH	AG	07/01/91	06/30/99	Winter Wheat Seed Treatment Tests	Winter Wheat Seed Treatment Test (Multi-sponsor)	\$10,790
Bowden	Robert	PPATH	AG	07/01/97	06/30/99	Development of New Sources of Resistance to Wheat Scab	Kansas Crop Improvement Association	\$11,796

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Clafin	Larry	PPATH	AG	07/01/96	06/30/99	Agroecology and Biotechnology of Fungal Pathogens of Sorghum and Millet From the Greater Horn of Africa	US Agency for International Development	\$243,000
Clafin	Larry	PPATH	AG	06/17/98	05/14/99	Determine the Survivability of Micro- and Macro-conidia of <i>Claviceps africana</i>	US Department of Agriculture	\$20,250
Clafin	Larry	PPATH	AG	09/01/98	08/31/01	International Scholarship Fund - Dario Narvaez	Pioneer Hi-Bred International, Inc.	\$49,625
Friebe	Bernd	PPATH	AG	07/13/98	04/12/99	Fellowship for Mr. Moha Ferrahi	National Research Council	\$6,000
Gill	Bikram	PPATH	AG	09/01/92	08/31/99	Research Collaboration Group on Molecular Mapping in Wheat and Its Relatives	US Department of Agriculture	\$52,056
Gill	Bikram	PPATH	AG	03/01/95	06/30/01	Collaborative Crop Research Program (China)	McKnight Foundation	\$692,000
Gill	Bikram	PPATH	AG	05/01/97	04/30/99	Wheat Genetics Resource Center at Kansas State University	US Department of Agriculture	\$408,467
Heaton	Louis	PPATH	AG	07/01/94	06/30/99	Engineering Resistance to Wheat Streak Mosaic Virus	Kansas Crop Improvement Association	\$15,000
Heaton	Louis	PPATH	AG	08/01/97	08/31/99	Analyses of the Roles of Viral and Host Proteins in Virus Movement in Planta	US Department of Agriculture	\$120,000
Hulbert	Scot	PPATH	AG	07/01/97	06/30/99	Novel Approach Identifying Durable Genetic Resistance to Greenbug in Sorghum	Kansas Department of Agriculture	\$27,699
Hulbert	Scot	PPATH	AG	01/01/98	12/31/99	Molecular Characterization of Novel Rp1 Alleles	National Science Foundation	\$242,000
Jardine	Douglas	PPATH	AG	07/01/90	06/30/99	Soybean Foliar Fungicide and Seed Treatment Tests	Soybean Foliar Fung & Seed Trtmt (Multi-sponsor)	\$35,100
Jardine	Douglas	PPATH	AG	03/01/97	02/28/99	Assembling of Data for the IR-4 Program	US Department of Agriculture	\$8,700
Leach	Jan	PPATH	AG	07/01/96	12/31/00	Biotechnology Career Fellowship (Dr. Seong-Ho Choi)	Rockefeller Foundation	\$37,400
Leach	Jan	PPATH	AG	07/01/96	06/30/99	Biotechnology Career Fellowship - Dr. He Chenyang	Rockefeller Foundation	\$39,700
Leach	Jan	PPATH	AG	09/01/97	08/31/99	Regulated Secretion of Defense Response Compounds: Role of Phospholipase D	US Department of Agriculture	\$150,000

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Leach	Jan	PPATH	AG	04/01/97	03/31/99	Rockefeller Postdoctoral Fellow (Edna Ardales)	Rockefeller Foundation	\$20,000
Leach	Jan	PPATH	AG	03/15/98	03/14/00	Research Expenses for Kamlesh Kukreja	Rockefeller Foundation	\$10,000
Leslie	John	PPATH	AG	07/01/89	06/30/99	Fusarium Research	Fusarium Research (Multi-sponsor)	\$27,223
Leslie	John	PPATH	AG	05/15/97	05/15/01	Genetic Diversity in Cephalosporium Maydis and Other Stalk Rotting Fungi of Maize in Egypt	US Department of Agriculture	\$66,139
Leslie	John	PPATH	AG	07/01/97	06/30/99	Fusarium Metabolites	Ivy Laboratories, Inc.	\$94,950
Schwenk	Fred	PPATH	AG	11/01/88	06/30/99	Non-conventional Plant Improvement Technology	Kansas State University Foundation	\$128,000
Tang	Xiaoyan	PPATH	AG	12/15/98	12/31/01	Using Tomato R Gene Pto to Promote Race-Nonspecific Resistance	US Department of Agriculture	\$150,000
Tisserat	Ned	PPATH	AG	07/01/93	06/30/99	Evaluation and Testing of Fungicides and Nematicides on Horticultural Crops	Eval, Test-Fung, Nematicides Crops (Multi-sponsor)	\$141,516
Tisserat	Ned	PPATH	AG	03/30/98	01/31/00	Biology and Management of Spring Dead Spot in Bermudagrass	US Golf Association	\$43,205
Todd	Timothy	PPATH	AG	07/01/94	06/30/99	Integrated Management of the Soybean Cyst Nematode and Charcoal Rot	Kansas Department of Agriculture	\$174,640
White	Frank	PPATH	AG	09/15/98	09/30/00	Transcription Activation by AvrXa10 and AvrXa7 in Resistance and Pathogenicity	US Department of Agriculture	\$145,000
Zhang	Jianmin	PPATH	AG	09/01/98	08/31/00	Signal Transduction in Tomato Disease Resistance	National Science Foundation	\$196,268
Bloomquist	Leonard	SANSW	AS	09/01/95	08/31/99	Effects of Economic and Social Restructuring on Rural Localities	US Department of Agriculture	\$245,702
Duncan	Stewart	SCAOF	EX	07/01/98	06/30/99	Soybeans in the Central Corridor of Kansas - An Extension Education Program	Kansas Department of Agriculture	\$7,500
Duncan	Stewart	SCAOF	EX	07/01/98	06/30/99	Grain Sorghum in the Central Corridor of Kansas - An Extension Education Program	Kansas Department of Agriculture	\$7,500
Kilgore	Gary	SEAOF	EX	07/01/94	06/30/99	Short Season Corn Educational Program in Southeast Kansas	Kansas Department of Agriculture	\$16,902

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Employee Last Name	Employee First Name	Department	College	Start Date	End Date	Title	Sponsor Name	Total Award
Kelley	Kenneth	SEKES	AG	07/01/88	06/30/99	Weed Control in Farm Crops	Weed Control in Farm Crops (Multi-sponsor)	\$5,905
Kelley	Kenneth	SEKES	AG	07/01/97	06/30/99	Effects of Crop Rotation and Tillage Systems on Soybean Yield in Southeastern Kansas	Kansas Department of Agriculture	\$13,000
I	James	SEKES	AG	07/01/96	06/30/99	Testing Bt Hybrids and Other Cultural Practices to Reduce Corn Ear Diseases	Kansas Department of Agriculture	\$15,000
Thompson	Curtis	SWAOF	EX	05/20/97	04/19/99	Weed Control/No-Till Weed Control (Evaluation of New Herbicides for Weed Control in No-Till/Reduced Till Sunflower)	National Sunflower Association	\$12,875
Thompson	Curtis	SWAOF	EX	07/01/96	06/30/99	Chemical Evaluation (Multi-sponsor)	Chemical Evaluation (Multi-sponsor)	\$18,000
Thompson	Curtis	SWAOF	EX	07/31/98	02/01/99	Weed Control on Sunflowers	National Sunflower Association	\$1,000
Currie	Randall	SWREC	AG	07/01/94	06/30/99	Weed Control Research in Southwest Kansas	Weed Control Research in SW KS (Multi-sponsor)	\$339,665
Schlegel	Alan	SWREC	AG	07/01/90	06/30/99	SWREC Soil Fertility and Soil Management Research for Western Kansas	Soil Fert & Mgmt Res, Western KS (Multi-sponsor)	\$67,330
Schlegel	Alan	SWREC	AG	10/01/87	06/30/99	Variety Testing of Alternative Crops	Variety Tests of Alternative Crops (Multi-sponsor)	\$25,625
Schlegel	Alan	SWREC	AG	03/01/96	02/01/99	Impact of Polyacrylamide on Irrigated Crop Production	Stockhausen, Inc.	\$39,763
Total Amount of Grants								\$47,659,148