



RSCAD Success

**Research, scholarly, and
creative activity and discovery at
Kansas State University**

July 1, 2015–June 30, 2016



September 6, 2016

Dear Colleague:

The Office of the Vice President for Research is pleased to provide the attached proposal/award activity report for the period July 1, 2015–June 30, 2016. These reports document faculty efforts to obtain extramural support, along with a summary of their respective successes to date. A monthly listing of awards is available at <http://www.k-state.edu/research/our-research/reports/>

Congratulations to K-State faculty members for submitting a record number of external funding proposals during this period requesting \$480,683,848. The 2,075 proposals faculty submitted marked a 25 percent increase over the previous year. We received a record number of awards — 1,336, or a 39 percent increase over the previous year — for a total of \$129,234,132.

If you have any questions regarding the contents of the attached report, please contact Paul Lowe at plowe@ksu.edu or 2-6804 or Cecelia Scaler at cscaler@k-state.edu or 2-6804.

Thank you for your continued support and hard work.

Sincerely,

A handwritten signature in black ink, appearing to be 'Peter Dorhout', with a large, sweeping initial 'P'.

Peter Dorhout, Ph.D.
Vice President for Research

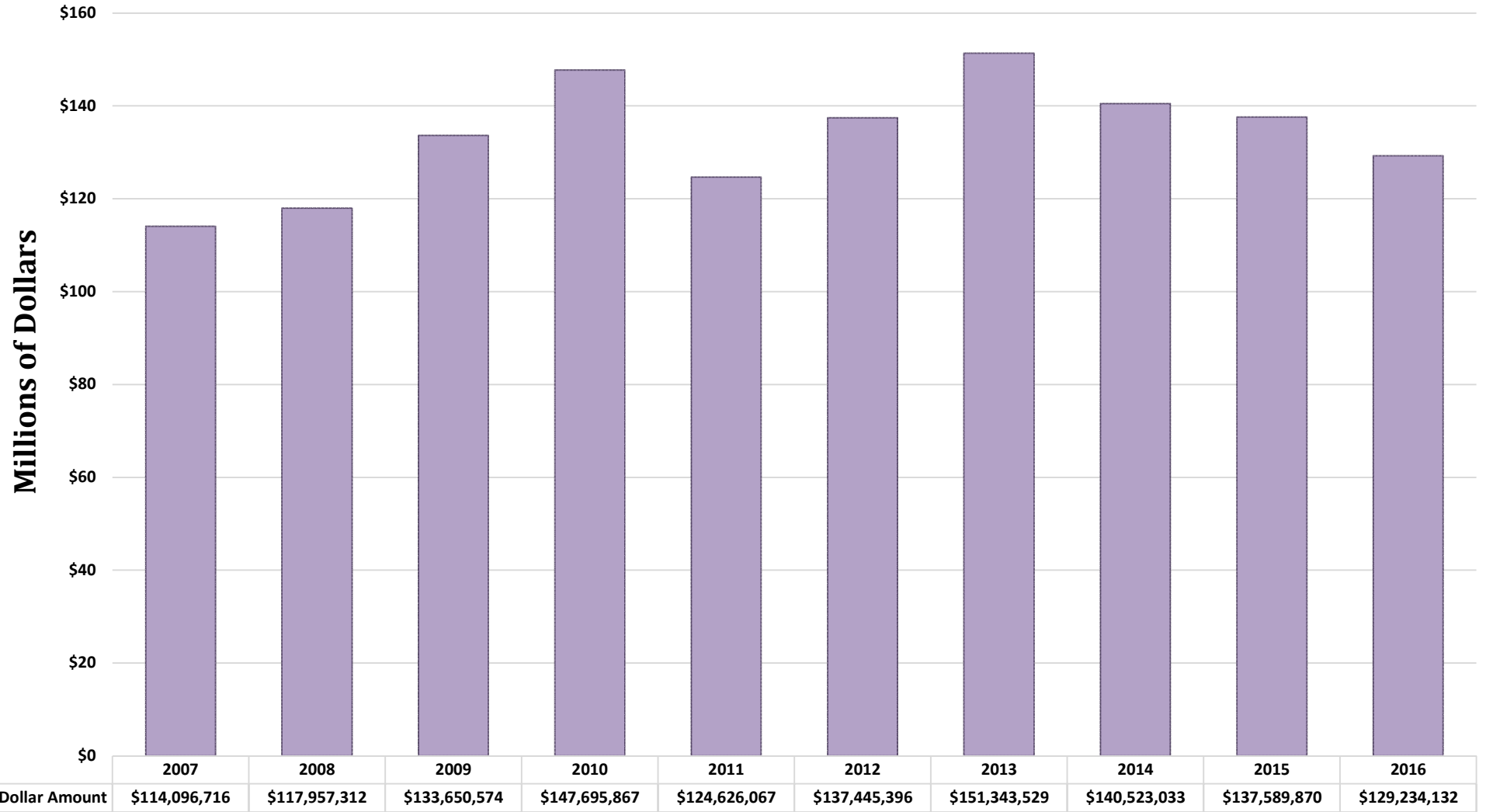
FY16 ANNUAL REPORT
RESEARCH/SCHOLARLY ACTIVITY FUNDING BASE
KANSAS STATE UNIVERSITY

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

I. Sponsored		\$129,234,132
II. Appropriated		
Main Campus State Appropriation	\$23,328,784	
Experiment Station Programs and Extension Services		
Federal Appropriation	\$10,322,653	
State Appropriation	\$47,253,323	
Veterinary Medical Center State Appropriation	\$0	
College of Technology and Aviation	\$696,033	
State Appropriation		
SUBTOTAL		\$81,600,793
III. Donated**		\$80,664,872
RESEARCH/SCHOLARLY ACTIVITY BASE GRAND TOTAL		\$291,499,797

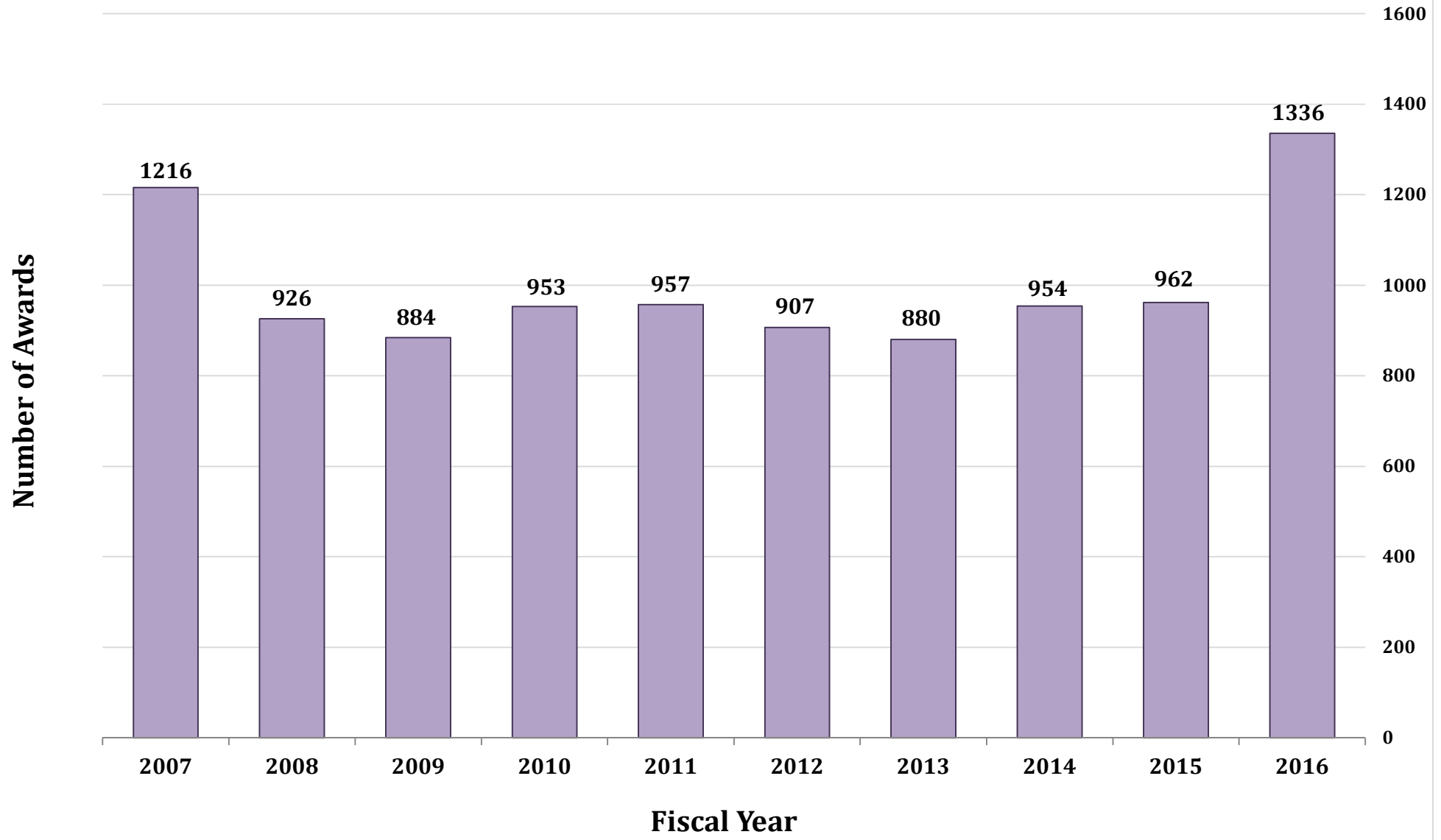
**KSU Foundation funds transferred to KSU in support of research/scholarly activity (excludes transfers to Athletics).

Kansas State University Total Dollars of Extramural Awards Received

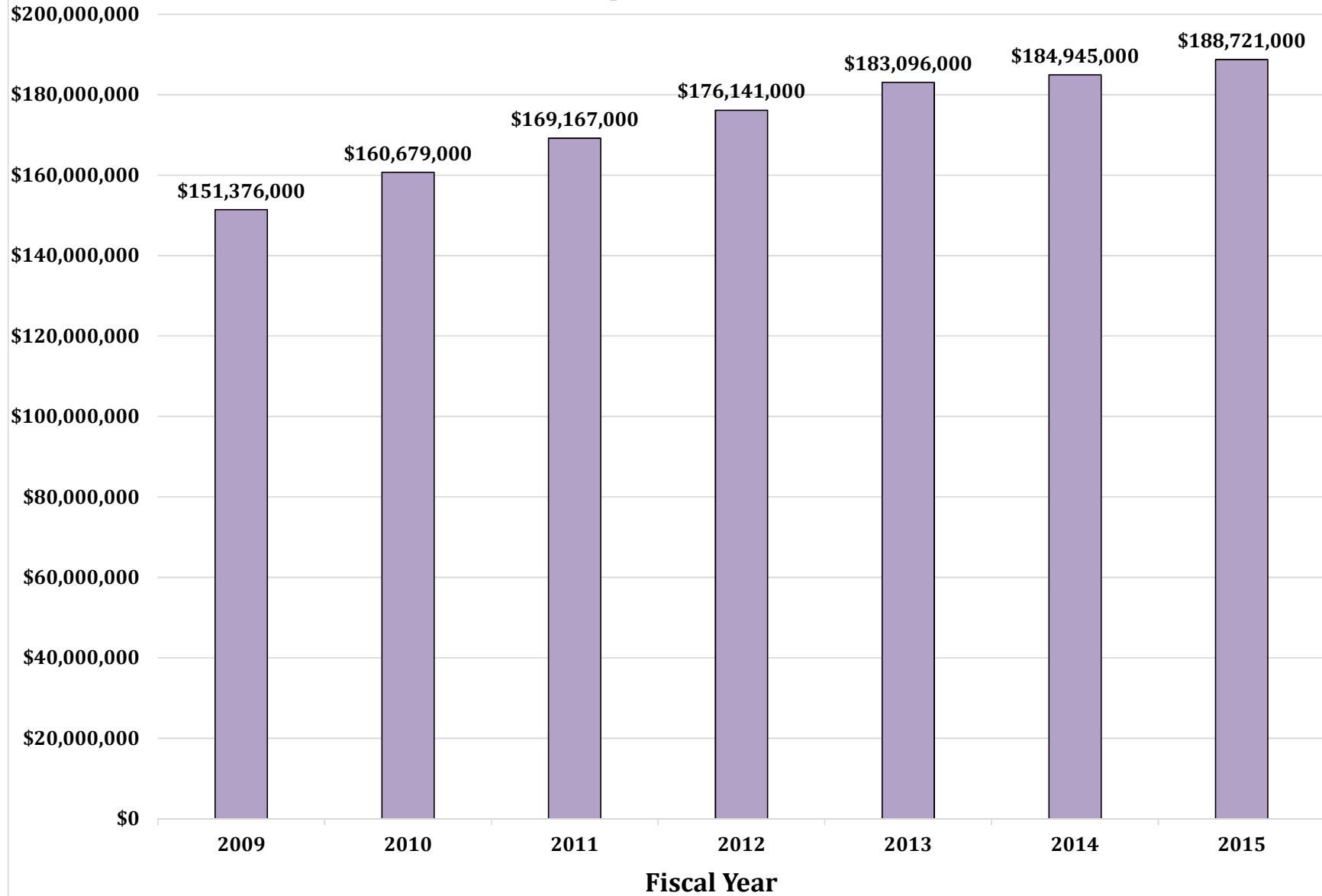


Fiscal Year

**Kansas State University
Total Number of Extramural Awards Received**



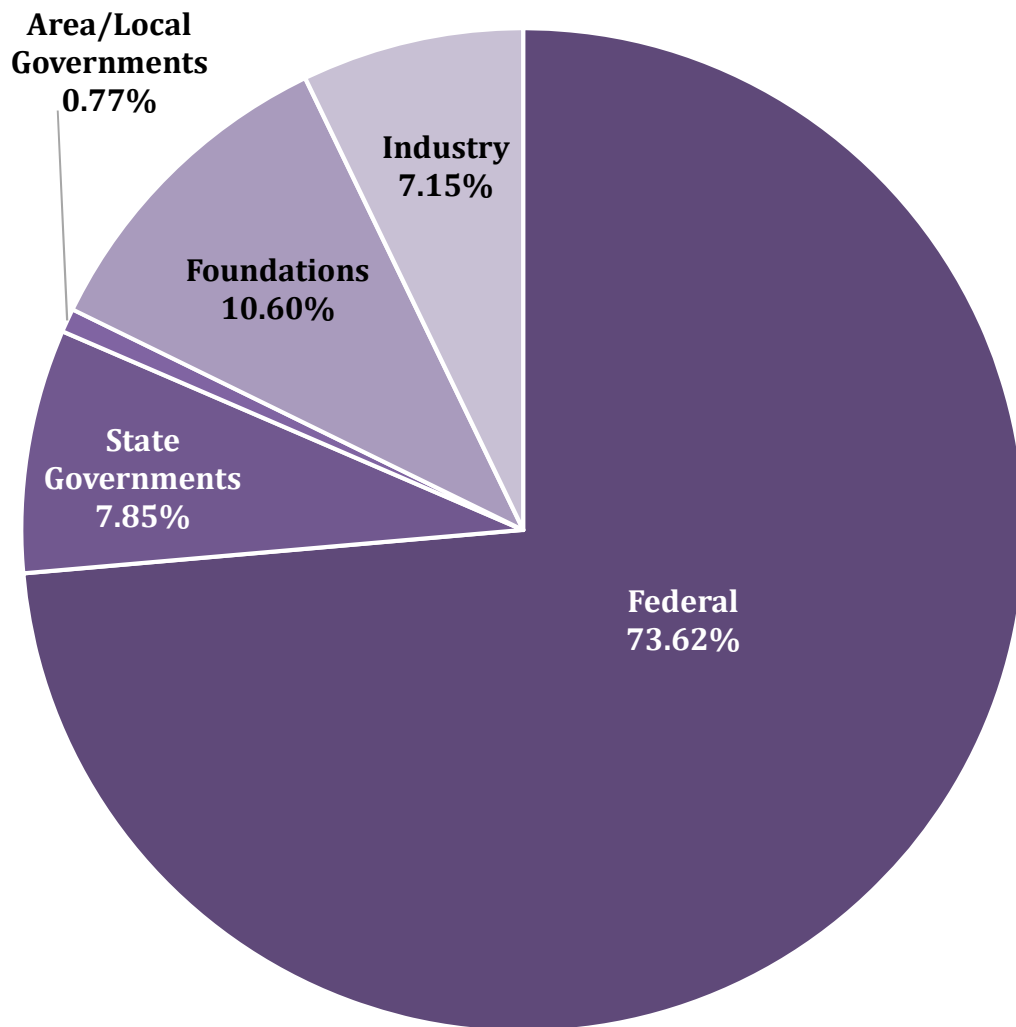
Kansas State University Expenditures



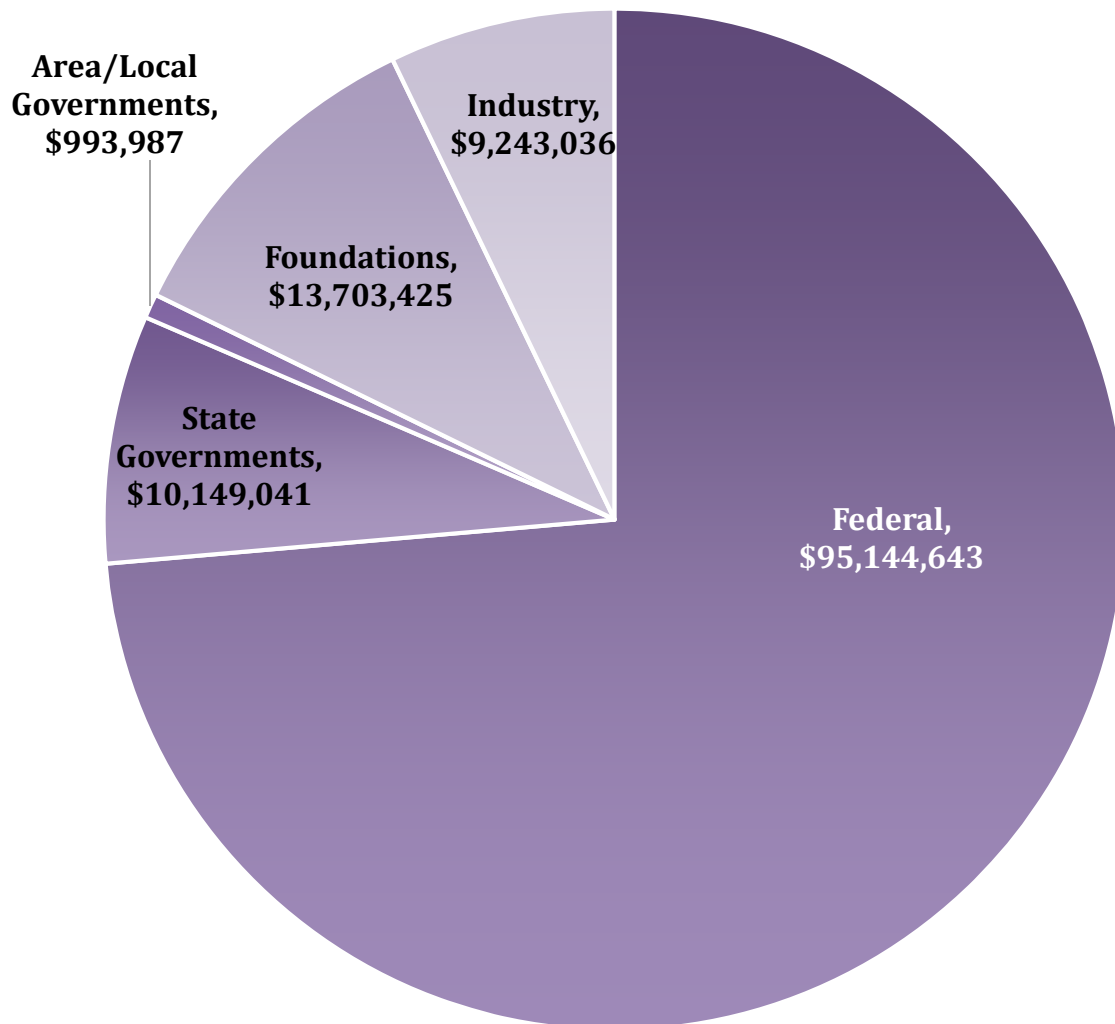
Kansas State University
Sources of Awards
Fiscal Year 2016

Source	Number of Awards	Dollar Value	Percentage
Government:			
Area/Local Governments	11	993,987	0.77%
State Governments	65	10,149,041	7.85%
Federal:			
Department of Agriculture	210	30,207,139	23.37%
Department of Defense	38	5,270,872	4.08%
Department of Education	25	3,028,392	2.34%
Department of Energy	47	8,367,502	6.47%
Department of Health and Human Services	109	12,406,332	9.60%
Department of Homeland Security	12	4,102,711	3.17%
Department of the Interior	24	2,597,421	2.01%
Department of Transportation	22	2,209,801	1.71%
Environmental Protection Agency	30	2,128,911	1.65%
National Aeronautics and Space Administration	5	300,715	0.23%
National Science Foundation	98	12,627,942	9.77%
US Agency for International Development	24	10,048,858	7.78%
Other Federal	29	1,848,047	1.43%
Private:			
Foundations	384	13,703,425	10.60%
Industry (Including Foreign)	203	9,243,036	7.15%
TOTAL	1336	129,234,132	100.00%

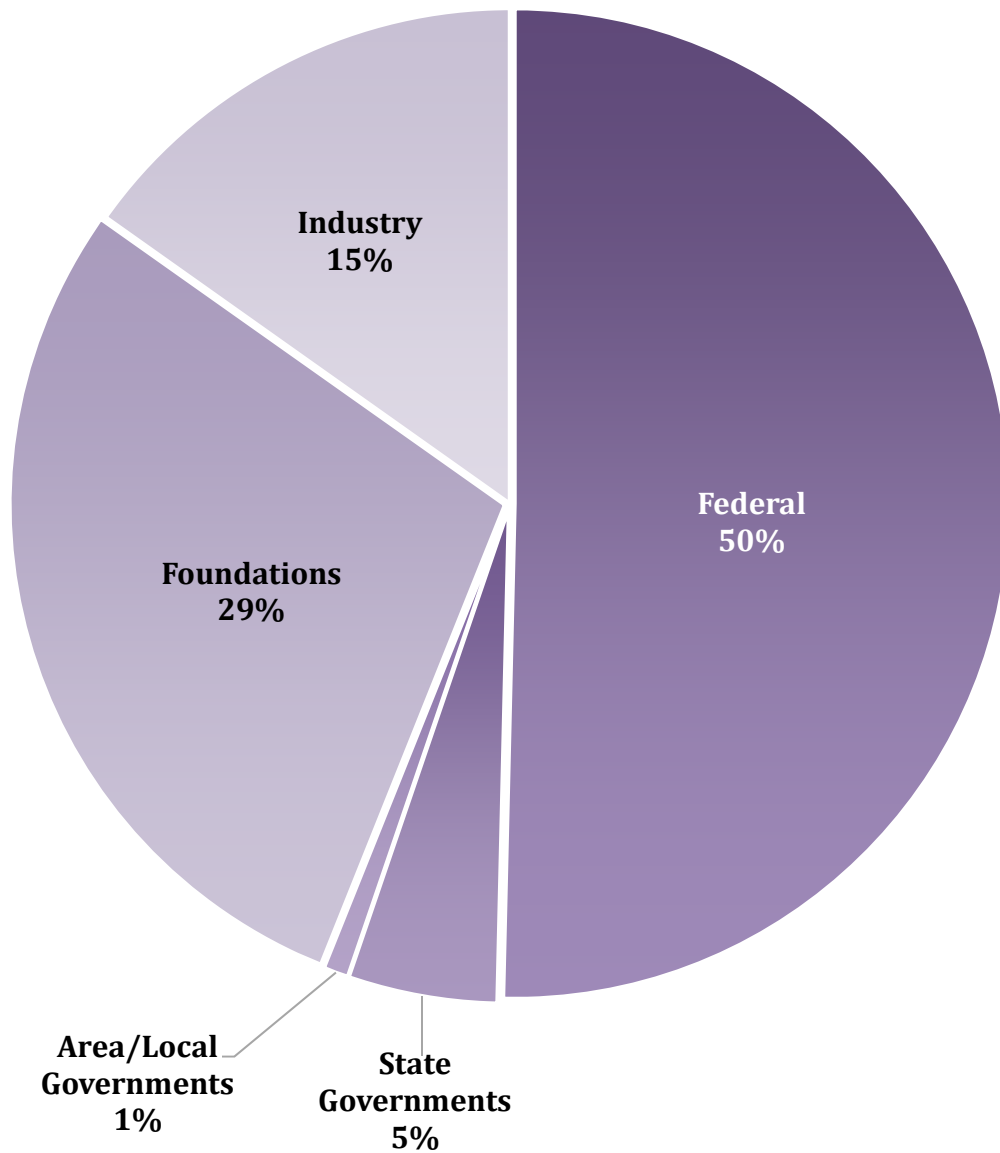
**FY2016 Percentage of Total
Dollar Amount of
Extramural Awards
by Source**



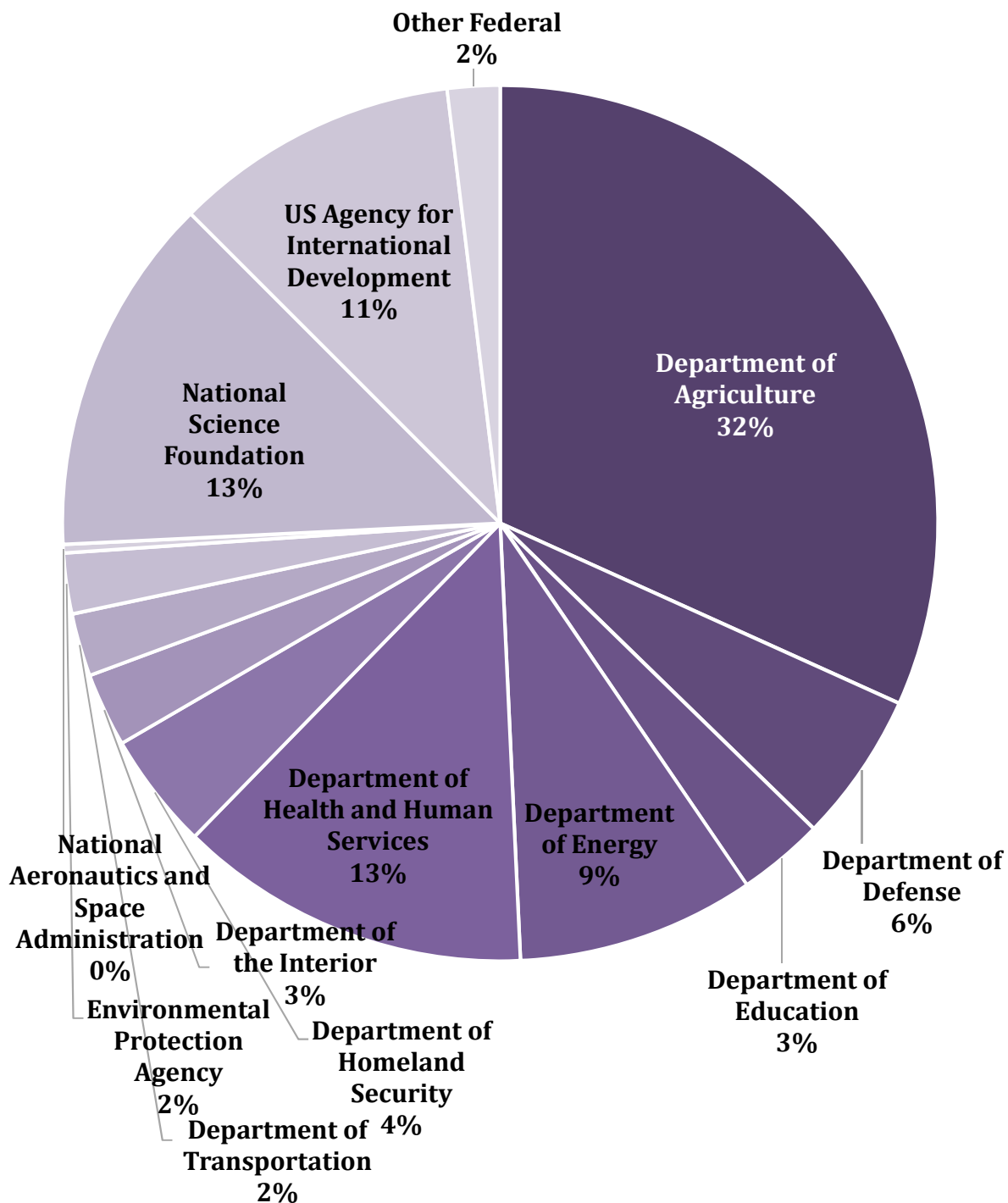
FY2016 Extramural Award Sources by Dollar Amount



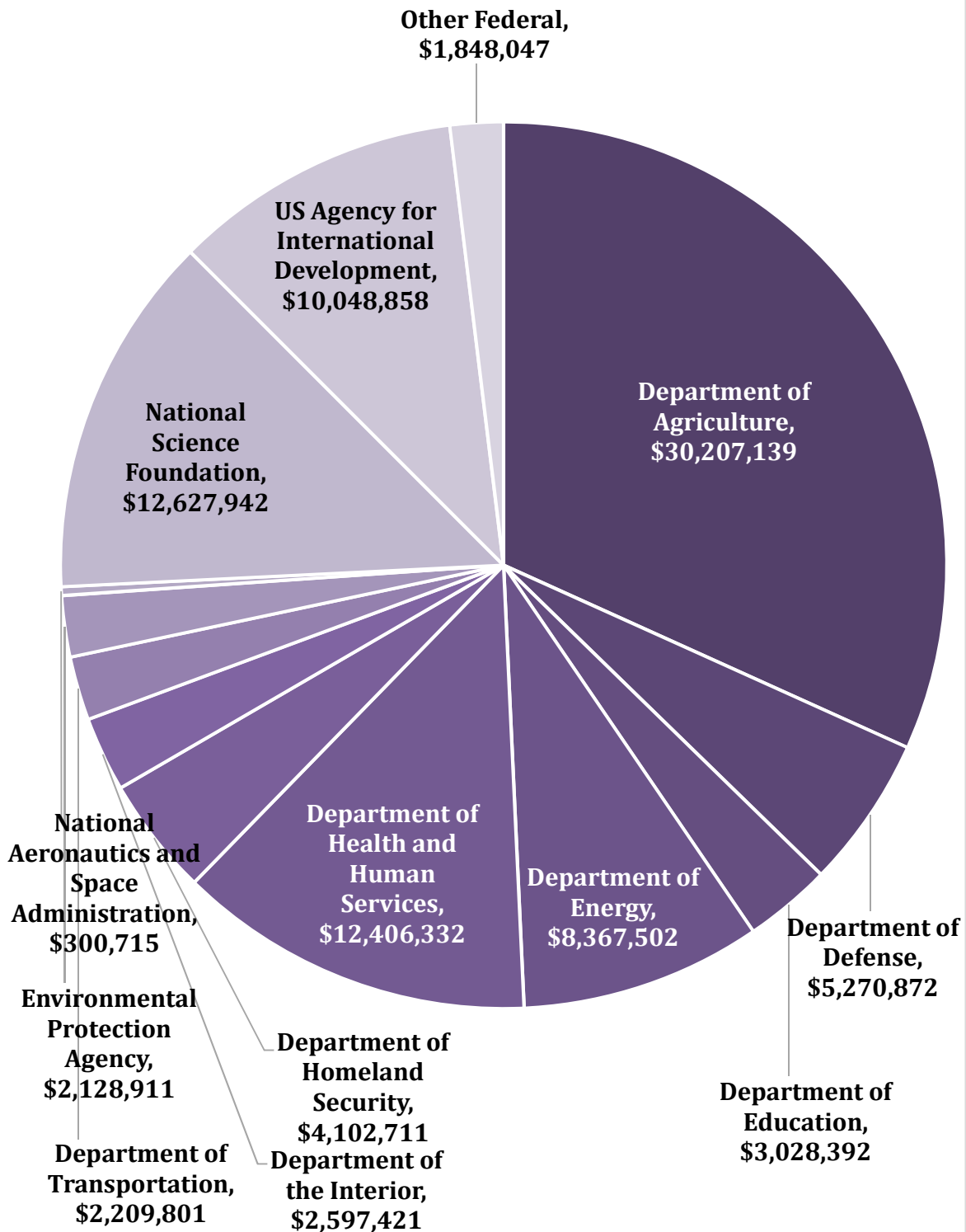
**FY2016 Percentage of Total
Number of
Extramural Awards
by Source**



FY2016 Extramural Award Federal Sources by Percentage



**FY2016 Extramural Award
Federal Sources by
Dollar Amount**



Distribution of New Awards Among
Colleges and Offices of the University
Fiscal Year 2016

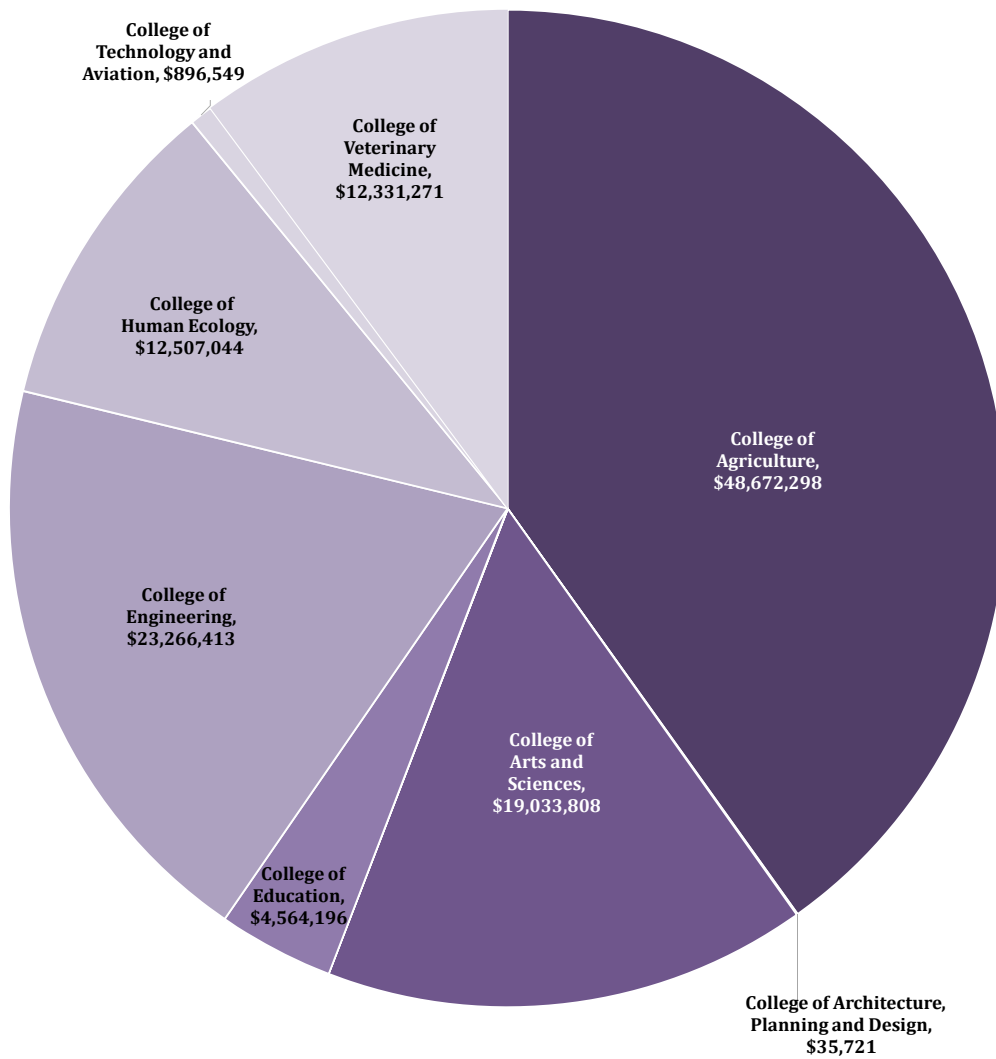
College/Office	Number of Awards	Dollar Value	Percentage
College of Agriculture	651	\$48,672,298 *	40.12%
College of Architecture, Planning and Design	7	\$35,721	0.03%
College of Arts and Sciences	175	\$19,033,808	15.69%
College of Business Administration	0	\$0	0.00%
College of Education	36	\$4,564,196	3.76%
College of Engineering	213	\$23,266,413	19.18%
College of Human Ecology	66	\$12,507,044 **	10.31%
College of Technology and Aviation	8	\$896,549	0.74%
College of Veterinary Medicine	126	\$12,331,271	10.17%
Office of the President	0	\$0	
Office of the Provost	17	\$1,482,311	
Vice President for Administration and Finance	2	\$19,605	
Vice President for Research	15	\$4,568,457	
Vice President for Student Life and Dean of Students	20	\$1,856,459	
UNIVERSITY TOTAL	1336	\$129,234,132	100.00%

*Includes Cooperative Extension Projects in College of Agriculture

**Includes Cooperative Extension Projects in College of Human Ecology

NOTE: See 5 Year Summary of Extramural Support for Individual College Unit Details

**FY2016 Extramural
Award Dollars
by College**



**FY2016 Cumulative
Proposal/Award Summary
07/01/15 - 06/30/16**

Department/College	Proposals			Awards	
	**** Submitted	*Period	**Total	**** Received	***Total
<u>COLLEGE OF AGRICULTURE</u>					
Agricultural Economics	69	\$3,310,285	\$11,151,479	40	\$4,987,123
Agricultural Experiment Station	1	\$200,000	\$2,000,000	1	\$2,200,000
Agricultural Research Center-Hays	28	\$698,096	\$910,154	30	\$905,459
Agriculture and Natural Resources	0	\$0	\$0	0	\$0
Agronomy	225	\$7,903,961	\$22,764,706	135	\$7,460,995
Animal Sciences and Industry	64	\$2,739,722	\$3,496,838	79	\$3,124,814
Communications	5	\$67,318	\$135,065	2	\$204,843
Dean of Agriculture and Director of AES	4	\$844,354	\$1,483,495	4	\$7,936,931
Entomology	53	\$1,907,050	\$6,545,443	50	\$2,099,381
Food Science Institute	0	\$0	\$0	1	\$262,267
Grain Science and Industry	46	\$2,304,856	\$6,014,525	84	\$4,755,228
Horticulture, Forestry and Recreation Resources	53	\$1,643,191	\$4,448,238	40	\$1,153,206
International Agricultural Programs	1	\$116,636	\$692,886	1	\$2,798
Kansas Industrial Extension Services	0	\$0	\$0	0	\$0
KS Ctr for Agri & the Env./KS Water Resource Res. Inst.	17	\$1,193,806	\$4,363,409	14	\$3,172,778
Northwest Research Extension Center	12	\$128,633	\$332,872	9	\$98,224
Office of Academic Programs	1	\$75,427	\$75,427	1	\$75,427
Plant Biotechnology Center	3	\$76,723	\$500,539	1	\$62,887
Plant Pathology	90	\$6,462,965	\$18,391,337	86	\$7,442,382
Southeast Agricultural Research Center	9	\$75,703	\$159,869	5	\$48,065
Southwest Research Extension Center	21	\$553,207	\$1,569,018	17	\$664,725
Total Agriculture	702	\$30,301,933	\$85,035,300	600	\$46,657,533
<u>COLLEGE OF ARCHITECTURE, PLANNING & DESIGN</u>					
Architecture	1	\$12,694	\$24,740	0	\$0
Dean of Architecture, Planning and Design	0	\$0	\$0	0	\$0
Interior Architecture and Product Design	0	\$0	\$0	1	\$3,745
Landscape Architecture/Regional & Community Planning	13	\$900,693	\$3,691,093	6	\$31,976
Total Architecture, Planning and Design	14	\$913,387	\$3,715,833	7	\$35,721
<u>COLLEGE OF ARTS AND SCIENCES</u>					
American Ethnic Studies	0	\$0	\$0	0	\$0
Art	1	\$59,637	\$59,637	0	\$0
Biochemistry	46	\$4,180,348	\$16,679,704	22	\$2,616,972
Biology	83	\$8,971,233	\$20,602,524	62	\$6,835,361
Chemistry	53	\$6,403,212	\$19,755,963	17	\$1,680,835
Communication Studies	5	\$597,920	\$648,135	2	\$65,740
Dean of Arts and Sciences	0	\$0	\$0	1	\$150,000
Economics	1	\$2,214	\$7,000	2	\$50,000
English	5	\$153,603	\$153,603	0	\$0
Geography	17	\$669,828	\$1,775,444	9	\$302,448
Geology	12	\$674,531	\$2,255,553	2	\$102,033
History	1	\$40,067	\$77,153	2	\$160,800
Mathematics	31	\$1,432,545	\$4,664,447	10	\$673,452
Modern Languages	0	\$0	\$0	0	\$0

**FY2016 Cumulative
Proposal/Award Summary
07/01/15 - 06/30/16**

Department/College	Proposals			Awards	
	**** Submitted	*Period	**Total	**** Received	***Total
Music, Theatre, and Dance	4	\$58,943	\$58,943	1	\$15,950
Philosophy	4	\$179,346	\$352,094	0	\$0
Physics	42	\$6,506,029	\$21,489,099	26	\$5,092,355
Political Science	8	\$338,520	\$877,563	0	\$0
Psychological Sciences	11	\$1,526,074	\$5,498,735	7	\$684,705
School of Journalism and Mass Communications	3	\$700,001	\$800,001	2	\$155,435
Sociology, Anthropology and Social Work	19	\$698,684	\$2,217,339	9	\$442,722
Statistics	8	\$153,192	\$322,585	1	\$5,000
Women Studies	0	\$0	\$0	0	\$0
Total Arts and Sciences	354	\$33,345,927	\$98,295,522	175	\$19,033,808
<u>COLLEGE OF BUSINESS ADMINISTRATION</u>					
Finance	0	\$0	\$0	0	\$0
Accounting	0	\$0	\$0	0	\$0
Dean of Business Administration	0	\$0	\$0	0	\$0
Management	1	\$103,791	\$323,809	0	\$0
Marketing	0	\$0	\$0	0	\$0
Total Business Administration	1	\$103,791	\$323,809	0	\$0
<u>COLLEGE OF EDUCATION</u>					
Curriculum and Instruction	13	\$630,856	\$1,699,348	9	\$560,223
Dean of Education	53	\$9,114,599	\$39,126,789	25	\$3,983,009
Educational Leadership	3	\$252,890	\$679,537	2	\$20,964
Elementary Education	0	\$0	\$0	0	\$0
Secondary Education	0	\$0	\$0	0	\$0
Special Education, Counseling and Student Affairs	0	\$0	\$0	0	\$0
Total Education	69	\$9,998,345	\$41,505,674	36	\$4,564,196
<u>COLLEGE OF ENGINEERING</u>					
Advanced Manufacturing Institute	6	\$268,340	\$836,597	5	\$454,715
Architectural Engineering and Construction Science	2	\$147,500	\$290,000	1	\$630,000
Biological and Agricultural Engineering	48	\$2,406,313	\$6,949,554	30	\$1,741,129
Center for Hazardous Substance Research	8	\$2,015,681	\$10,015,681	4	\$650,460
Chemical Engineering	40	\$3,551,194	\$14,159,274	6	\$1,178,431
Civil Engineering	46	\$5,886,040	\$8,235,086	31	\$2,674,909
Computing and Information Sciences	51	\$4,394,437	\$10,725,259	27	\$2,933,327
Dean of Engineering	2	\$24,773	\$139,991	3	\$1,405,000
Electrical and Computer Engineering	47	\$4,532,936	\$12,726,061	27	\$2,348,088
Engineering Experiment Station	0	\$0	\$0	1	\$630,000
Industrial and Manufacturing Systems Engineering	29	\$1,435,341	\$4,824,744	11	\$1,582,484
Institute for Environmental Research	5	\$204,846	\$700,876	6	\$486,087
Kansas Industrial Extension Service	27	\$1,412,501	\$2,285,322	18	\$1,198,158
Mechanical and Nuclear Engineering	73	\$14,513,676	\$51,087,828	42	\$5,303,479
National Gas Machinery Laboratory	1	\$57,479	\$57,479	1	\$50,146
National Institute for Land Management and Training	0	\$0	\$0	0	\$0
Total Engineering	385	\$40,851,057	\$123,033,752	213	\$23,266,413

**FY2016 Cumulative
Proposal/Award Summary
07/01/15 - 06/30/16**

Department/College	Proposals			Awards	
	**** Submitted	*Period	**Total	**** Received	***Total
<u>COLLEGE OF HUMAN ECOLOGY</u>					
Apparel, Textiles, and Interior Design	6	\$198,570	\$421,461	5	\$115,702
Communication Studies, Theatre, Dance	0	\$0	\$0	0	\$0
Communications	0	\$0	\$0	0	\$0
Dean of Human Ecology	7	\$393,103	\$1,276,672	9	\$746,412
Hospitality Management and Dietetics	4	\$6,868	\$866,868	3	\$865,776
Human Nutrition	37	\$4,759,948	\$6,710,348	23	\$3,381,174
Kinesiology	25	\$1,948,067	\$5,327,237	7	\$697,233
School of Family Studies and Human Services	37	\$8,716,139	\$32,186,955	19	\$6,700,747
Total Human Ecology	116	\$16,022,695	\$46,789,541	66	\$12,507,044
<u>COLLEGE OF TECHNOLOGY AND AVIATION</u>					
Academic Services	0	\$0	\$0	0	\$0
Applied Aviation Research Center	4	\$528,094	\$534,094	5	\$554,280
Arts, Science and Business	2	\$4,393	\$103,375	0	\$0
Aviation	0	\$0	\$0	0	\$0
Dean of College of Technology and Aviation	2	\$319,019	\$319,019	3	\$342,269
Engineering Technology	0	\$0	\$0	0	\$0
Fiscal Affairs	0	\$0	\$0	0	\$0
Total Technology and Aviation	8	\$851,506	\$956,488	8	\$896,549
<u>COLLEGE OF VETERINARY MEDICINE</u>					
Anatomy and Physiology	74	\$5,988,338	\$16,445,182	23	\$2,083,780
Clinical Sciences	30	\$506,342	\$1,556,215	13	\$339,520
Dean of Veterinary Medical Center	9	\$566,892	\$1,273,804	3	\$486,947
Diagnostic Medicine/Pathobiology	177	\$15,006,551	\$38,730,296	72	\$9,069,125
Veterinary Diagnostic Laboratory	18	\$771,007	\$1,314,350	11	\$323,865
Veterinary Medical Teaching Hospital	3	\$11,604	\$14,230	4	\$28,034
Total Veterinary Medical Center	311	\$22,850,734	\$59,334,077	126	\$12,331,271
<u>COOPERATIVE EXTENSION</u>					
Cooperative Extension - Agriculture					
Agricultural Economics	0	\$0	\$0	0	\$0
Agriculture and Natural Resources	5	\$34,000	\$969,315	5	\$469,326
Agronomy	0	\$0	\$0	1	\$10,837
Biological and Agricultural Engineering	0	\$0	\$0	0	\$0
Communications	0	\$0	\$0	0	\$0
County Agents	2	\$6,600	\$9,800	0	\$0
County Agents-Metropolitan Sector	0	\$0	\$0	2	\$6,600
County Agents-Northwest Sector	0	\$0	\$0	0	\$0

**FY2016 Cumulative
Proposal/Award Summary
07/01/15 - 06/30/16**

Department/College	Proposals			Awards	
	**** Submitted	*Period	**Total	**** Received	***Total
Director of Cooperative Extension	10	\$1,132,057	\$1,177,913	3	\$565,629
Four-H Youth Development	2	\$20,000	\$40,000	2	\$20,000
Kansas Forest Service	8	\$2,495,328	\$2,693,977	7	\$460,444
KS Ctr for Agri & the Env./KS Water Resource Res. Inst.	0	\$0	\$0	0	\$0
Northeast Area Office	6	\$11,264	\$39,064	3	\$16,037
Northeast/Metro Area Office	0	\$0	\$0	0	\$0
Northwest Area Office	5	\$20,038	\$20,038	5	\$76,424
Southeast Area Office	9	\$15,861	\$45,774	6	\$69,067
Southwest Area Office	24	\$357,326	\$498,949	17	\$320,401
Subtotal Cooperative Ext - Agriculture	71	\$4,092,474	\$5,494,830	51	\$2,014,765
Cooperative Extension - Human Ecology					
Family and Consumer Sciences	0	\$0	\$0	0	\$0
Human Nutrition	0	\$0	\$0	0	\$0
Nutrition Program	0	\$0	\$0	0	\$0
Subtotal Cooperative Ext - Human Ecology	0	\$0	\$0	0	\$0
Total Cooperative Extension	71	\$4,092,474	\$5,494,830	51	\$2,014,765
<u>OFFICE OF THE PRESIDENT</u>					
Auditorium Performances	0	\$0	\$0	0	\$0
Beach Art Museum	0	\$0	\$0	0	\$0
Office of the President	0	\$0	\$0	0	\$0
Total Office of the President	0	\$0	\$0	0	\$0
<u>OFFICE OF THE PROVOST</u>					
Assessment and Program Review	0	\$0	\$0	0	\$0
Center for Engagement and Community Development	1	\$36,363	\$36,363	3	\$416,123
Center for the Advancement of Teaching & Learning	0	\$0	\$0	0	\$0
Dean of Continuing Education	0	\$0	\$0	0	\$0
Dean of Graduate School	3	\$62,625	\$177,430	5	\$584,955
Information Security & Compliance	0	\$0	\$0	0	\$0
Information Technology Assistance Center	0	\$0	\$0	0	\$0
International Programs	0	\$0	\$0	1	\$48,851
Kansas Center for Rural Initiatives	0	\$0	\$0	0	\$0
Library	2	\$22,169	\$22,169	2	\$22,169
Office of Diversity and Dual Career Development	0	\$0	\$0	1	\$108,085
Office of the Provost	1	\$28,760	\$87,352	2	\$133,380
School of Leadership Studies	6	\$564,312	\$564,312	2	\$146,248
Office of Vice President for Communications and Marketing	0	\$0	\$0	1	\$22,500
Vice Provost for Undergraduate Studies	2	\$2,026,803	\$10,137,098		
Total Office of the Provost	15	\$2,741,032	\$11,024,724	17	\$1,482,311

**FY2016 Cumulative
Proposal/Award Summary
07/01/15 - 06/30/16**

Department/College	Proposals			Awards	
	**** Submitted	*Period	**Total	**** Received	***Total
<u>OFFICE OF THE VICE PRESIDENT FOR ADMINISTRATION AND FINANCE</u>					
Budget Office	0	\$0	\$0	0	\$0
KSU Police Department	4	\$77,785	\$77,785	2	\$19,605
Public Safety	0	\$0	\$0	0	\$0
Vice President for Administration and Finance	0	\$0	\$0	0	\$0
Total Administration and Finance	4	\$77,785	\$77,785	2	\$19,605
<u>OFFICE OF THE VICE PRESIDENT FOR RESEARCH</u>					
Biosecurity Research Institute	7	\$516,064	\$1,134,054	4	\$599,562
Comparative Medicine	0	\$0	\$0	0	\$0
K-State Olathe Innovation Campus	6	\$147,259	\$147,259	3	\$6,700
National Agricultural Biosecurity Center	4	\$745,683	\$748,192	2	\$3,128,243
Office of the Vice President for Research	0	\$0	\$0	1	\$10,000
University Research Compliance & Animal Care	1	\$13,200	\$13,200	1	\$13,200
Vice President Biotech Laboratory	0	\$0	\$0	1	\$141,199
Vice President Electronics Design Laboratory	1	\$549,963	\$2,748,251	3	\$669,553
Total Vice President for Research	19	\$1,972,169	\$4,790,956	15	\$4,568,457
<u>OFFICE OF THE VICE PRESIDENT FOR STUDENT LIFE AND DEAN OF STUDENTS</u>					
Department of Housing	0	\$0	\$0	0	\$0
Educational and Personal Development	0	\$0	\$0	6	\$772,717
KSU Child Development Center, Inc.	1	\$40,800	\$122,400	7	\$862,307
New Student Services	0	\$0	\$0	3	\$56,351
Office of Student Life	4	\$82,263	\$96,263	2	\$70,263
University Counseling Services	1	\$86,894	\$86,894	1	\$40,321
Vice President for Student Life	0	\$0	\$0	1	\$54,500
Total Student Life and Dean of Students	6	\$209,957	\$305,557	20	\$1,856,459
University Totals	**** 2,075	\$164,332,792	\$480,683,848	**** 1,336	\$129,234,132

PROPOSALS

*Period = Initial budget period amount requested

**Total = Total funds requested for entire project period

AWARDS

***Total = Reflects the sum total of all awards actually received during the specified reporting period.

NOTE: Previous year awards received (i.e. in the case of incrementally funded awards) are not included if received in a previous award/reporting period. Only those award amounts received through specific award transactions processed during the specified reporting period are included.

(All totals are cumulative throughout the fiscal year.)

****These numbers include the collaborative count for proposals and awards and reflect the contributions of and credit granted to all project personnel based on the E% indicated on the Sponsored Programs Transmittal Sheet. During FY 2015 a new credit/reporting allocation capture strategy, referred to as "E%" on the Transmittal Sheet, was developed. The deployment of this more uniform credit allocation method streamlines and makes it easier for campus units to consistently report collaborative activities, that may not be reflected in previous year's totals.

KANSAS STATE UNIVERSITY
SUMMARY OF EXTRAMURAL SUPPORT

FY2016

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
AGRICULTURE					
Dean of Agriculture & Director of AES	\$81,958	\$0	\$4,080,119	\$7,028,301	\$7,936,931
Agricultural Economics	\$3,275,769	\$1,879,073	\$2,701,748	\$4,499,667	\$4,987,123
Agronomy	\$6,135,014	\$6,317,145	\$9,047,246	\$4,282,708	\$7,460,995
Animal Sciences & Industry	\$1,463,992	\$3,264,082	\$4,160,941	\$2,330,114	\$3,124,814
Communications	\$49,639	\$28,948	\$572,825	\$273,151	\$204,843
Entomology	\$1,361,623	\$1,641,243	\$2,951,497	\$1,926,270	\$2,099,381
Food Science Institute	\$117,175	\$860,581	\$351,396	\$417,494	\$262,267
Grain Science & Industry	\$2,165,610	\$10,118,056	\$4,881,064	\$2,999,474	\$4,755,228
Hort., Forestry & Recreation Resources	\$755,787	\$610,161	\$1,212,934	\$528,216	\$1,153,206
International Agriculture Programs	\$125,945	\$453,714	\$473,742	\$135,843	\$2,798
KS Ctr for Agri & the Env/KS Water Res. Res. Inst.	\$1,514,499	\$886,934	\$1,237,346	\$2,471,533	\$3,172,778
Office of Academic Programs	\$74,134	\$150,737	\$223,774	\$160,203	\$75,427
Plant Biotechnology Center	\$0	\$72,000	\$72,000	\$73,902	\$62,887
Plant Pathology	\$7,375,691	\$9,373,376	\$8,563,872	\$8,040,595	\$7,442,382
Agricultural Experiment Station	\$165,000	\$0	\$10,000	\$0	\$2,200,000
Northwest Research Extension Center	\$231,733	\$387,423	\$167,220	\$106,297	\$98,224
Agricultural Research Center-Hays	\$432,201	\$341,647	\$536,961	\$520,094	\$905,459
Southeast Agricultural Res. Ctr.	\$39,607	\$60,928	\$26,385	\$0	\$48,065
Southwest Research Extension Ctr.	\$453,934	\$232,481	\$231,245	\$572,365	\$664,725
Extension Director	\$3,376,842	\$385,035	\$283,589	\$273,167	\$565,629
Extension Agricultural Economics	\$0	\$0	\$0	\$0	\$0
Extension Agronomy	\$10,368	\$10,609	\$21,677	\$0	\$10,837
Extension Animal Sciences & Industry	\$0	\$0	\$0	\$0	\$0
Extension Biological & Agricultural Engineering	\$0	\$0	\$0	\$0	\$0
Extension Communications	\$0	\$0	\$0	\$0	\$0
Extension Community Health Institute	\$0	\$0	\$0	\$0	\$0
Extension County Agents - Metropolitan Sector	\$0	\$0	\$0	\$0	\$6,600
Extension Entomology	\$0	\$0	\$0	\$0	\$0
Extension Four-H Youth Development	\$295,157	\$390,367	\$307,433	\$109,905	\$20,000
Extension Grain Science and Industry	\$0	\$0	\$0	\$0	\$0
Extension Hort., Forestry & Rec. Res.	\$0	\$0	\$0	\$0	\$0
Extension KS Ctr. for Agriculture & the Environ.	\$0	\$0	\$0	\$0	\$0
Extension Kansas Forest Service	\$6,522,887	\$420,967	\$3,442,665	\$20,287,123	\$460,444
Extension Kansas Water Resource Res. Inst.	\$0	\$0	\$0	\$0	\$0
Extension Northeast Area Office	\$17,137	\$10,235	\$56,784	\$13,900	\$16,037
Extension Northwest Area Office	\$91,685	\$9,360	\$1,575	\$39,465	\$76,424
Extension Plant Pathology	\$0	\$0	\$0	\$0	\$0
Extension Agriculture and Natural Resources	\$383,458	\$493,018	\$562,308	\$997,142	\$469,326
Extension South Central Area Office	\$0	\$0	\$0	\$0	\$0
Extension Southeast Area Office	\$12,532	\$32,699	\$42,263	\$33,485	\$69,067
Extension Southwest Area Office	\$7,638	\$23,662	\$64,677	\$120,868	\$320,401
College Totals	\$36,537,015	38,454,478	\$46,285,286	\$58,241,282	\$48,672,298

ARCHITECTURE, PLANNING AND DESIGN

Dean of Architecture, Planning & Design	\$0	\$0	\$0	\$0	\$0
Architecture	\$0	\$0	\$25,000	\$28,500	\$0
Interior Architecture and Product Design	\$33,982	\$0	\$0	\$0	\$3,745
Landscape Arch/Regional & Comm Plan	\$261,936	\$0	\$71,571	\$7,210	\$31,976
College Totals	\$295,918	\$0	\$96,571	\$35,710	\$35,721

ARTS AND SCIENCES

Dean of Arts & Sciences	\$0	\$0	\$200,000	\$150,000	\$150,000
Biochemistry	\$1,383,653	\$1,446,113	\$2,463,717	\$2,737,009	\$2,616,972
Biology	\$10,262,919	\$7,793,383	\$8,162,164	\$11,506,539	\$6,835,361
Chemistry	\$1,673,244	\$2,491,458	\$2,243,577	\$1,530,901	\$1,680,835
Communication Studies	\$0	\$0	\$0	\$0	\$65,740
Economics	\$0	\$0	\$0	\$0	\$50,000
English	\$0	\$0	\$0	\$9,982	\$0
Geography	\$423,393	\$478,709	\$1,118,409	\$323,397	\$302,448
Geology	\$486,811	\$162,184	\$229,475	\$292,622	\$102,033

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
History	\$43,000	\$234,342	\$0	\$148,000	\$160,800
Kinesiology	\$268,607	\$179,012	\$178,084	\$0	\$0 *
Mathematics	\$539,233	\$418,469	\$861,187	\$383,781	\$673,452
Modern Languages	\$0	\$0	\$6,000	\$0	\$0
Music	\$15,950	\$15,950	\$15,950	\$17,355	\$0 **
Philosophy	\$0	\$0	\$0	\$0	\$0
Physics	\$6,921,664	\$5,231,021	\$5,694,471	\$8,741,477	\$5,092,355
Political Science	\$87,469	\$171,028	\$4,000	\$0	\$0
Psychological Sciences	\$1,181,142	\$841,284	\$934,052	\$688,600	\$684,705
School of Journalism & Mass Communications	\$388,368	\$379,467	\$835,043	\$152,992	\$155,435
School of Music, Theatre, and Dance	\$0	\$0	\$0	\$0	\$15,950 **
Sociology, Anthropology, & Social Work	\$87,277	\$227,879	\$488,048	\$362,336	\$442,722
Statistics	\$36,953	\$260,908	\$85,842	\$87,141	\$5,000
Woman Studies	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$23,799,683</u>	<u>\$20,331,206</u>	<u>\$23,520,019</u>	<u>\$27,132,132</u>	<u>\$19,033,808</u>

BUSINESS ADMINISTRATION

Dean of Business Administration	\$0	\$0	\$0	\$0	\$0
Accounting	\$0	\$41,416	\$0	\$0	\$0
Marketing	\$0	\$0	\$10,000	\$21,780	\$0
Management	<u>\$38,002</u>	<u>\$5,000</u>	<u>\$1,000</u>	<u>\$0</u>	<u>\$0</u>
College Totals	<u>\$38,002</u>	<u>\$46,416</u>	<u>\$11,000</u>	<u>\$21,780</u>	<u>\$0</u>

EDUCATION

Curriculum and Instruction	\$4,014	\$295,178	\$0	\$130,268	\$560,223
Dean of Education	\$5,678,838	\$4,568,448	\$4,913,616	\$10,151,287	\$3,983,009
Educational Leadership	\$66,106	\$87,771	\$19,500	\$0	\$20,964
Elementary Education	\$0	\$0	\$0	\$0	\$0
Secondary Education	\$0	\$0	\$0	\$0	\$0
Special Education, Counseling and Student Affairs	<u>\$0</u>	<u>\$0</u>	<u>\$27,026</u>	<u>\$27,020</u>	<u>\$0</u>
College Totals	<u>\$5,748,958</u>	<u>\$4,951,397</u>	<u>\$4,960,142</u>	<u>\$10,308,575</u>	<u>\$4,564,196</u>

ENGINEERING

Dean of Engineering	\$3,862,252	\$7,045,581	\$200,378	\$75,000	\$1,405,000
Advanced Manufacturing Institute	\$1,390,487	\$2,787,818	\$1,372,000	\$1,352,989	\$454,715
Architectural Engg & Construction Sci	\$60,722	\$0	\$37,730	\$0	\$630,000
Biological & Agricultural Engineering	\$1,746,929	\$1,526,681	\$794,204	\$595,754	\$1,741,129
Center for Hazardous Substance Research	\$595,543	\$288,727	\$2,274,343	\$48,000	\$650,460
Chemical Engineering	\$1,767,029	\$1,120,526	\$1,475,765	\$1,084,436	\$1,178,431
Civil Engineering	\$1,505,432	\$2,753,232	\$1,193,043	\$1,630,957	\$2,674,909
Computing & Information Sciences	\$2,902,450	\$3,782,564	\$2,908,196	\$1,128,108	\$2,933,327
Electrical & Computer Engineering	\$2,105,802	\$874,793	\$1,426,653	\$1,125,422	\$2,348,088
Engineering Experiment Station	\$173,276	\$0	\$0	\$0	\$630,000
Institute for Environmental Research	\$898,846	\$611,763	\$421,049	\$397,738	\$486,087
Extension Engineering	\$0	\$0	\$0	\$0	\$0
Industrial & Manufacturing Sys Engg	\$787,941	\$1,330,252	\$903,179	\$261,640	\$1,582,484
Kansas Industrial Extension Service	\$672,125	\$1,004,228	\$849,510	\$982,346	\$1,198,158
Mechanical and Nuclear Engineering	\$3,549,961	\$2,029,180	\$2,245,934	\$3,694,879	\$5,303,479
National Gas Machinery Laboratory	\$58,216	\$201,149	\$37,730	\$0	\$50,146
Nat'l Institute for Land Mgmt & Training	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
College Totals	<u>\$22,077,011</u>	<u>\$25,356,493</u>	<u>\$16,139,714</u>	<u>\$12,377,269</u>	<u>\$23,266,413</u>

HUMAN ECOLOGY

Dean of Human Ecology	\$428,501	\$110,461	\$491,557	\$408,764	\$746,412
Apparel, Textiles & Interior Design	\$28,854	\$713,847	\$0	\$51,190	\$115,702
Human Nutrition	\$2,564,729	\$1,716,444	\$1,506,520	\$1,287,316	\$3,381,174
Hospitality Mgmt & Dietetics	\$145,168	\$500,000	\$827,642	\$648,372	\$865,776
Kinesiology	\$0	\$100,454	\$124,866	\$1,423,210	\$697,233 *
School of Family Studies & Human Services	\$15,630,852	\$6,524,106	\$7,537,520	\$8,292,408	\$6,700,747
Extension Apparel, Textiles & Interior Design	\$0	\$0	\$0	\$0	\$0
Extension Family & Consumer Sciences	\$2,359,722	\$1,757,763	\$2,489,822	\$2,547,558	\$0
Extension Human Nutrition	\$0	\$0	\$0	\$0	\$0
Extension Nutrition Program	\$0	\$0	\$0	\$0	\$0
Ext. Family Studies & Human Services	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
College Totals	<u>\$21,157,826</u>	<u>\$11,423,074</u>	<u>\$12,977,927</u>	<u>\$14,658,818</u>	<u>\$12,507,044</u>

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
TECHNOLOGY AND AVIATION					
Dean, College of Technology	\$0	\$0	\$0	\$0	\$342,269
Academic Services	\$0	\$12,276	\$0	\$0	\$0
College Advancement	\$0	\$0	\$1,500	\$0	\$0
Salina Applied Aviation Research Center	\$0	\$10,000	\$157,993	\$215,808	\$554,280
Salina Arts, Science and Business	\$4,500	\$0	\$500	\$68,274	\$0
Salina Aviation	\$14,066	\$0	\$0	\$0	\$0
Engineering Technology	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$18,566</u>	<u>\$22,276</u>	<u>\$159,993</u>	<u>\$284,082</u>	<u>\$896,549</u>
VETERINARY MEDICINE					
Dean of Veterinary Medicine	\$287,167	\$199,401	\$206,431	\$996,018	\$486,947
Anatomy & Physiology	\$3,090,238	\$7,747,515	\$2,997,688	\$986,331	\$2,083,780
Clinical Sciences	\$1,219,405	\$1,164,922	\$771,662	\$651,561	\$339,520
Diagnostic Medicine/Pathobiology	\$8,882,207	\$10,496,241	\$8,910,119	\$8,156,890	\$9,069,125
Veterinary Diagnostic Laboratory	\$61,860	\$231,875	\$50,127	\$271,401	\$323,865
Veterinary Medical Teaching Hospital	\$22,405	\$2,000	\$2,000	\$16,950	\$28,034
College Totals	<u>\$13,563,282</u>	<u>\$19,841,954</u>	<u>\$12,938,027</u>	<u>\$11,079,151</u>	<u>\$12,331,271</u>
PRESIDENT					
Beach Art Museum	\$75,000	\$0	\$8,872	\$13,000	\$0
McCain Auditorium	\$0	\$0	\$0	\$0	\$0
Office of the President	<u>\$1,500,000</u>	<u>\$0</u>	<u>\$5,000,000</u>	<u>\$0</u>	<u>\$0</u>
Totals	<u>\$1,575,000</u>	<u>\$0</u>	<u>\$5,008,872</u>	<u>\$13,000</u>	<u>\$0</u>
PROVOST					
Office of the Provost	\$53,051	\$1,527	\$341,067	\$162,534	\$133,380
Assessment & Program Review	\$39,078	\$14,421	\$0	\$0	\$0
Center for Engagement, Community Development	\$471,045	\$101,648	\$264,757	\$33,660	\$416,123
Dean of Continuing Education	\$75,000	\$15,871,917	\$9,987,444	\$0	\$0
Dean of the Graduate School	\$295,157	\$579,565	\$320,741	\$0	\$584,955
Enterprise Server Technologies	\$0	\$0	\$0	\$0	\$0
Information Security & Compliance	\$0	\$0	\$139,969	\$3,200	\$0
Information Systems	\$0	\$0	\$0	\$0	\$0
Information Technology Assistance Center	\$0	\$0	\$3,850	\$0	\$0
International Programs	\$10,224	\$0	\$0	\$0	\$48,851
Kansas Center for Rural Initiatives	\$0	\$0	\$0	\$0	\$0
Library	\$750	\$0	\$0	\$0	\$22,169
Network and Telecommunications Services	\$0	\$0	\$0	\$0	\$0
Office of Diversity and Dual Career Dev.	\$35,002	\$0	\$0	\$257,299	\$108,085
Office of Mediated Education	\$0	\$0	\$0	\$0	\$0
Planning and Analysis	\$0	\$0	\$0	\$0	\$0
Regents Educational Communications Ctr.	\$0	\$0	\$0	\$0	\$0
School of Leadership Studies	\$180,314	\$94,847	\$61,048	\$54,080	\$146,248
Vice President for Communications and Marketing	\$0	\$0	\$0	\$23,000	\$22,500
Totals	<u>\$1,159,621</u>	<u>\$16,663,925</u>	<u>\$11,118,876</u>	<u>\$533,773</u>	<u>\$1,482,311</u>
V. P. ADMINISTRATION AND FINANCE					
Vice President for Administration and Finance	\$0	\$0	\$0	\$0	\$0
Budget Office	\$0	\$0	\$0	\$0	\$0
KSU Police Department	\$205,271	\$2,500	\$1,500	\$0	\$19,605
Public Safety	\$2,600,000	\$0	\$0	\$0	\$0
Physical Facilities	\$0	\$0	\$0	\$0	\$0
Totals	<u>\$2,805,271</u>	<u>\$2,500</u>	<u>\$1,500</u>	<u>\$0</u>	<u>\$19,605</u>
V. P. INSTITUTIONAL ADVANCEMENT					
Department of Housing	\$0	\$0	\$0	\$0	\$0
Educational & Personal Development	\$0	\$0	\$0	\$0	\$0
KSU Child Development Center	\$0	\$0	\$0	\$0	\$0
Office of Diversity & Dual Career Dev.	\$0	\$0	\$0	\$0	\$0
University Counseling Services	\$0	\$0	\$0	\$0	\$0
Vice President for Institutional Advancement	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Totals	\$0	\$0	\$0	\$0	\$0
VICE PRESIDENT FOR RESEARCH					
Vice President for Research	\$5,081,000	\$5,180,466	\$237,058	\$152,333	\$10,000
Biosecurity Research Institute	\$752,521	\$5,226,382	\$5,033,555	\$499,995	\$599,562
K-State Olathe Innovation Campus	\$0	\$500	\$0	\$0	\$6,700
National Agricultural Biosecurity Center	\$812,000	\$1,753,544	\$148,134	\$199,041	\$3,128,243
University Research Compliance & Animal Care	\$0	\$0	\$0	\$0	\$13,200
Biotechnology Laboratory	\$57,054	\$0	\$0	\$0	\$141,199
Electronics Design Lab	\$330,790	\$334,864	\$616,545	\$192,706	\$669,553
Totals	\$7,033,365	\$12,495,755	\$6,035,292	\$1,044,075	\$4,568,457
V.P. FOR STUDENT LIFE AND DEAN OF STUDENTS					
Office of Vice President for Student Life	\$0	\$15,000	\$61,000	\$26,000	\$54,500
Department of Housing	\$0	\$0	\$1,000	\$0	\$0
Educational & Personal Development	\$1,288,752	\$1,118,279	\$986,068	\$1,267,874	\$772,717
KSU Child Development Center	\$310,126	\$586,442	\$137,806	\$480,285	\$862,307
New Student Services	\$0	\$0	\$49,940	\$51,351	\$56,351
Office of Diversity & Dual Career Dev.	\$0	\$0	\$0	\$0	\$0
Office of Student Life	\$0	\$0	\$0	\$0	\$70,263
University Counseling Services	\$37,000	\$34,333	\$34,000	\$34,713	\$40,321
Totals	\$1,635,878	\$1,754,054	\$1,269,814	\$1,860,223	\$1,856,459
UNIVERSITY TOTALS	\$137,445,396	\$151,343,528	\$140,523,033	\$137,589,870	\$129,234,132

*Kinesiology moved to Human Ecology in 2013. Only previously awarded grants continue to be listed in Arts and Sciences.

**Music is now Included with School of Music, Theatre, and Dance.

During FY 2015 a new credit/reporting allocation capture strategy, referred to as "E%" on the Sponsored Project Transmittal Sheet, was developed. The deployment of this more uniform allocation method streamlines and makes it easier for campus units to consistently report collaborative activities, that may not be necessarily reflected in previous year's totals.

EXTRAMURAL AWARDS

Fiscal Year 2016 Cumulative (July 1, 2015 – June 30, 2016)

COLLEGE OF AGRICULTURE

AGRICULTURAL ECONOMICS

Amanor-Boadu, Vincent R., Featherstone, Allen M., and Ross, Kara, US Agency for International Development, \$422,313, "Pulse Value Chain Initiative-Zambia (PVCIZ)."

Amanor-Boadu, Vincent R., Ross, Kara, Shanoyan, Aleksan, and Zereyesus, Yacob, US Department of Agriculture, \$1,273,430, "METSS Ghana Implementation (Sustaining Growth Through Effective Management and Collaboration)."

Bergtold, Jason S., and Rezac, Mary E. (Chemical Engineering), National Science Foundation, "REU Site: Summer Academy in Sustainable BioEnergy."

Bergtold, Jason S., and Stamm, Michael J. (Agronomy), US Department of Agriculture, \$79,688, "Oilseed to Jet-Fuel Economics, Outreach, and Extension."

Featherstone, Allen M., Amanor-Boadu, Vincent R., and Ross, Kara, US Agency for International Development, "Pulse Value Chain Initiative-Zambia (PVCIZ)."

Featherstone, Allen M., and Taylor, Mykel R., US Department of Agriculture, \$30,000, "ERS Ag Econ Scholars Mentoring Program."

Fox, John "Sean" A., Bai, Jianfa (Diagnostic Medicine/Pathobiology), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), **Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), **Schroeder, Ted C., Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), **Tonsor, Glynn T., and Zurek, Ludek** (Entomology), US Department of Agriculture, \$43,711, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Golden, Bill B., Cramer, Gary L. (Agronomy), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$7,500, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Golden, Bill B., and Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), Kansas Water Office, "Monitoring the Impacts of Sheridan County 6 Local Enhanced Management Area."

Golden, Bill B., Aguilar, Jonathan P. (Southwest Area Office), **Barnes, Philip L.** (Biological and Agricultural Engineering), **Bolton, Debra** (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, \$2,798, "On-Farm Water Management Trainings - Pakistan Part 2."

Golden, Bill B., Kisekka, Isaya (Southwest Research Extension Center), **Rice, Charles W.** (Agronomy), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Sanderson, Matthew R.** (Sociology, Anthropology, and Social Work), US Department of Agriculture, \$136,424, "Sustaining Agriculture through Adaptive Management to Preserve the Ogallala Aquifer under a Changing Climate."

Griffin, Terry W., Cotton, Inc., \$20,000, "Analysis System and Tools for Community Data."

Griffin, Terry W., Adee, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), **Lin, Xiaomao** (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$1,495, "The Quest of 100-Bushel Soybean: On-Farm Approach."

Hendricks, Nathan P., and Villoria, Nelson, US Department of Agriculture, \$323,957, "The Role of US Agriculture in Global Food and Environmental Security: An Analysis Based on Global Supply Response in the Long Run."

Hund, Duane M., Buhler, Forrest A. (Agriculture and Natural Resources), **Hadley, Gregg L.** (Agriculture and Natural Resources), **Henton, Charlene M.** (Agriculture and Natural Resources), **Koons, Janel K.** (Agriculture and Natural Resources), and **Olsen, Charlotte S.** (School of Family Studies and Human Services), US Department of Agriculture, \$8,000, "Planning for the Future: Transferring Management and Assets in Challenging Times."

Ibendahl, Gregory, Cotton, Inc., \$30,000, "Kansas Production Costs and Value of Water."

Lambert, David, and Lilja, Nina K. (International Agricultural Programs), US Agency for International Development, \$176,602, "BHEARD Program: Bangladesh."

Leatherman, John C., Kansas Department of Health and Environment, \$183,811 (includes \$48,820 from Third Party Match - BMP implementation), "KS WRAPS - Cottonwood SFY 2014 - 2016."

Leatherman, John C., Kansas Department of Health and Environment, \$133,968 (includes \$40,900 from Third Party Match), "Milford WRAPS Implementation SFY 2014 - 2016."

Leatherman, John C., US Department of Health and Human Services, \$55,542, "Community Assessment and Education to Promote Behavioral Health Planning and Evaluation (CAPE): Curriculum Development and Rollout Workshops."

Leatherman, John C., US Environmental Protection Agency, \$31,385 (includes \$11,385 from Third Party Match), "Hillsdale WRAPS Implementation FY 2014 - 2016."

Leatherman, John C., US Environmental Protection Agency, \$122,118 (includes \$37,280 from Third Party Match), "KS WRAPS - Upper Neosho SFY14 Yr 1, Yr 2 & Yr 3."

Leatherman, John C., and Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), US Environmental Protection Agency, \$169,168 (includes \$34,111 from Watershed Stakeholders), "NPS Management Plan Technical Assistance SPF16."

Li, Xianghong, and Xia, Tian, Kansas Wheat Commission, "Consumer Preference for HRW-based Asian-style and Instant Noodles."

Pendell, Dustin L., Schroeder, Ted C., and Tonsor, Glynn T., US Department of Agriculture, \$79,500, "Addressing National Needs in the Economics of Food Security through Animal Health and Biosecurity."

Pendell, Dustin L., US Department of Agriculture, \$30,000, "Economic Analyses of Highly Pathogenic Avian Influenza Modeling."

Pendell, Dustin L., US Department of Agriculture, \$104,940, "Economic Analysis of HPAI Issues."

Pendell, Dustin L., US Department of Agriculture, \$42,331, "Economic Impact of Bovine Respiratory Disease in US Beef Cattle Feedlots Modeling Application and Review."

Pendell, Dustin L., and **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), US Department of Homeland Security, \$268,336, "Assessing the Epidemiological and Economic Impacts of Countermeasures and Vaccination Strategies in Disease Outbreaks at the National Scale."

Ross, Kara, Amanor-Boadu, Vincent R., and **Featherstone, Allen M.**, US Agency for International Development, "Pulse Value Chain Initiative-Zambia (PVCIZ)."

Ross, Kara, Amanor-Boadu, Vincent R., Shanoyan, Aleksan, and **Zereyesus, Yacob**, US Department of Agriculture, "METSS Ghana Implementation (Sustaining Growth Through Effective Management and Collaboration)."

Schroeder, Ted C., Pendell, Dustin L., and **Tonsor, Glynn T.**, US Department of Agriculture, "Addressing National Needs in the Economics of Food Security through Animal Health and Biosecurity."

Schroeder, Ted C., Bai, Jianfa (Diagnostic Medicine/Pathobiology), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John "Sean" A., Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvor G.** (Diagnostic Medicine/Pathobiology), **Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), **Tonsor, Glynn T.**, and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$21,856, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Schwab, Benjamin B., and **Campabadal Teran, Carlos** (Grain Science and Industry), US Agency for International Development, \$33,976, "Appropriate-Scale Mechanization Consortium for Sustainable Intensification."

Shanoyan, Aleksan, Amanor-Boadu, Vincent R., Ross, Kara, and **Zereyesus, Yacob**, US Department of Agriculture, "METSS Ghana Implementation (Sustaining Growth Through Effective Management and Collaboration)."

Taylor, Mykel R., Aiken, Robert M. (Northwest Research Extension Center), **Bradford, Barry J.** (Animal Sciences and Industry), **Harrington Jr, John A.** (Geography), **Lin, Xiaomao** (Agronomy), and **Min, Doohong** (Agronomy), Kansas Board of Regents, \$10,500, "Evaluating Teff as a Dryland Forage Crop for Water-Limited Areas in Kansas."

Taylor, Mykel R., US Department of Agriculture, \$30,000, "Enhancing Feed Grain Food Use Estimates."

Taylor, Mykel R., and **Featherstone, Allen M.**, US Department of Agriculture, \$30,000, "ERS Ag Econ Scholars Mentoring Program."

Taylor, Mykel R., and **Tonsor, Glynn T.**, US Department of Agriculture, \$241,000, "Meeting the Need for M.S. and Ph.D's Trained in the Tesa of Agricultural Management and Economics."

Taylor, Mykel R., Griffin, Jason (Horticulture, Forestry and Recreation Resources), **Pliakoni, Eleni** (Horticulture, Forestry and Recreation Resources), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$19,597, "Strengthening Organic Sweet Potato Propagation Systems in the North Central Region."

Tonsor, Glynn T., US Department of Agriculture, \$123,926, "A Human Behavioral Approach to Reducing the Impact of Livestock Pest or Disease Incursions of Socio-economic Importance."

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Villoria, Nelson, National Science Foundation, \$25,274, "CIF21 DIBBs: Integrating Geospatial Capabilities into HUBzero."

Villoria, Nelson, US Department of Agriculture, \$434,199, "The Role of International Trade in Adapting US Agriculture to Increased Global Climate Variability."

Villoria, Nelson, and Hendricks, Nathan P., US Department of Agriculture, \$174,439, "The Role of US Agriculture in Global Food and Environmental Security: An Analysis Based on Global Supply Response in the Long Run."

Williams, Jeffery R., Kluitenberg, Gerard J. (Agronomy), **Nelson, Nathan O.** (Agronomy), **Roozeboom, Kraig L.** (Agronomy), and **Tomlinson, Peter J.** (Agronomy), Kansas Corn Commission, \$250, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Xia, Tian, Florida Strawberry Research and Education Foundation, \$11,881, "Optimal Licensing Design for New Varieties to Expand the Market Share of Florida Strawberries."

Xia, Tian, and Li, Xianghong, Kansas Wheat Commission, \$9,500, "Consumer Preference for HRW-based Asian-style and Instant Noodles."

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Minton, J. Ernest, United Sorghum Checkoff Program, \$2,200,000 (includes \$200,000 from Kansas Grain Sorghum Commission), "Center for Sorghum Checkoff Program Agreement."

AGRICULTURAL RESEARCH CENTER-HAYS

Gillen, Robert L., Multi-Sponsor, \$13,760, "AHY Multi Sponsor Research 36."

Harmoney, Keith R., Haag, Lucas A. (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Jaeger, John R., Johnson, Sandra K.** (Northwest Area Office), and **Obour, Augustine K.**, US Department of Agriculture, \$5,400, "Demonstrating the Potential of Cover Crop and Forage Mixtures to Improve Soil Quality, Productivity, and Profitability in Water-Limited Regions."

Jaeger, John R., Haag, Lucas A. (Northwest Area Office), **Harmoney, Keith R., Holman, Johnathon D.** (Southwest Research Extension Center), **Johnson, Sandra K.** (Northwest Area Office), and **Obour, Augustine K.**, US Department of Agriculture, \$5,400, "Demonstrating the Potential of Cover Crop and Forage Mixtures to Improve Soil Quality, Productivity, and Profitability in Water-Limited Regions."

Martin, Terry J., and Fritz, Allan K. (Agronomy), Kansas Wheat Commission, "Improvement of Hard Winter Wheat for Kansas."

Obour, Augustine K., Perumal, Ramasamy, Ruiz Diaz Suarez, Dorivar A. (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$22,694, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

Obour, Augustine K., and Zhang, Guorong, Kansas Wheat Commission, \$24,420, "Improving Winter Wheat Production in Dryland Croppioong Systems: Role of Tillage, Varietal Selection and Nitrogen Fertilization."

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Perumal, Ramasamy, Aiken, Robert M. (Northwest Research Extension Center), and **Little, Christopher R.** (Plant Pathology), Kansas Grain Sorghum Commission, \$79,200, "Development of Sorghum Germplasm with Enhanced Drought Tolerance and Higher Grain Yield."

Perumal, Ramasamy, Obour, Augustine K., Ruiz Diaz Suarez, Dorivar A. (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

Perumal, Ramasamy, Little, Christopher R. (Plant Pathology), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$4,264, "Germplasm Screening, Host- Plant Interactions, and Inoculation Techniques for Sorghum Stalk Rot Diseases in Kansas."

Perumal, Ramasamy, Morris, Geoffrey (Agronomy), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$7,900, "Improved Genomic Mapping and Marker- Assisted Selection for Cold Tolerance in Grain Sorghum."

Perumal, Ramasamy, Jagadish, Krishna (Agronomy), **Morris, Geoffrey** (Agronomy), **Pagadala, P. V. Vara** (Dean of Agriculture and Director of AES), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$5,500, "Physiological and Genetic Characterization of Grain Sorghum for Enhancing Terminal Heat and Drought Stress Resilience."

Perumal, Ramasamy, Tesso, Tesfaye (Agronomy), and **Yu, Jianming** (Agronomy), United Sorghum Checkoff Program, \$34,320, "Genomic Selection to Enhance Heterosis in Sorghum."

Perumal, Ramasamy, and Tesso, Tesfaye (Agronomy), US Department of Agriculture, \$43,750, "Development of a Sorghum Doubled Haploid Breeding System."

Sharp, Ryan L., US Department of the Interior, \$143,445, "Temporal and Spatial Distribution of Visitor Use and Associated Impacts on Natural and Social Conditions at Buffalo National River."

Stahlman, Phillip W., Dow AgroSciences, LLC, \$3,000, "2016 University Cooperator Agreement for Enlist Corn and Enlist Soybean - Protocol No. NA16P2E002."

Stahlman, Phillip W., Monsanto Company, \$8,160, "Service Order #25."

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Zhang, Guorong, Bayer CropScience, LP, \$4,080, "2015 Field Trial Agreement for conventional or deregulated material."

Zhang, Guorong, Fritz, Allan K. (Agronomy), **Poland, Jesse A.** (Plant Pathology), and **Regan, Rebecca A.** (Grain Science and Industry), General Mills, Inc., \$41,626, "Applied Genomics for Functional Foods in Wheat: Connecting Wheat Variety Development with Targeted, Novel Consumer Quality."

Zhang, Guorong, Fritz, Allan K. (Agronomy), and **Poland, Jesse A.** (Plant Pathology), Kansas Wheat Alliance, Inc., \$9,000, "Applying Genomic Selection in KSU Wheat Breeding Programs."

Zhang, Guorong, Kansas Wheat Alliance, Inc., \$30,000, "Germplasm Screening for Wheat Triticum Mosaic Virus Resistance."

Zhang, Guorong, Aiken, Robert M. (Northwest Research Extension Center), **Fritz, Allan K.** (Agronomy), and **Jagadish, Krishna** (Agronomy), Kansas Wheat Alliance, Inc., \$840, "New Selection Strategies for Drought-Tolerant Wheat."

Zhang, Guorong, Kansas Wheat Commission, \$128,500, "Development of New Hard Red and Hard White Winter Wheat Varieties with Improved Levels of Disease Resistance for Western Kansas."

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Zhang, Guorong, Bockus, William W. (Plant Pathology), **DeWolf, Erick D.** (Plant Pathology), **Friebe, Bernd** (Plant Pathology), **Fritz, Allan K.** (Agronomy), and **Gill, Bikram S.** (Plant Pathology), Kansas Wheat Commission, \$3,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Zhang, Guorong, DeWolf, Erick D. (Plant Pathology), **Friebe, Bernd** (Plant Pathology), **Fritz, Allan K.** (Agronomy), and **Gill, Bikram S.** (Plant Pathology), Kansas Wheat Commission, \$3,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Zhang, Guorong, Kansas Wheat Commission, \$65,000, "Genetic Improvement for Hard White Wheat."

Zhang, Guorong, and **Obour, Augustine K.**, Kansas Wheat Commission, "Improving Winter Wheat Production in Dryland Cropping Systems: Role of Tillage, Varietal Selection and Nitrogen Fertilization."

Zhang, Guorong, Kansas Wheat Commission, \$32,000, "Pyramiding Wheat Streak Mosaic Virus Resistance Genes and Development of High Temperature Resistance."

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Adee, Eric A., Ciampitti, Ignacio, Cramer, Gary L., and Ruiz Diaz Suarez, Dorivar A., Kansas Grain Sorghum Commission, "Best Management Practices for Top- Yields in Sorghum."

Adee, Eric A., Little, Christopher R. (Plant Pathology), and **Presley, DeAnn R.**, Kansas Soybean Commission, \$3,657, "Influences of Irrigation Regimes, Planting Date, and Soil Compaction Upon SDS in Kansas."

Adee, Eric A., Ciampitti, Ignacio, Duncan, Stewart R. (Northeast Area Office), **Griffin, Terry W.** (Agricultural Economics), **Lin, Xiaomao**, and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$1,495, "The Quest of 100-Bushel Soybean: On-Farm Approach."

Asebedo, Antonio R., Esser, Andrew R., Jagadish, Krishna, Roozeboom, Kraig L., Ruiz Diaz Suarez, Dorivar A., and Schapaugh Jr, William T., Kansas Soybean Commission, \$19,706, "Breaking Barriers: Developing Tools for Moving Kansas Irrigated Soybeans Beyond 70 Bushels per Acre."

Asebedo, Antonio R., Lollato, Romulo P., and Poland, Jesse A. (Plant Pathology), Kansas Wheat Alliance, Inc., \$36,837, "Developing Massive-parallel Phenotyping Systems for Winter Wheat."

Asebedo, Antonio R., Dille, Johanna A., Du, Juan (Statistics), **Hettiarachchi, Ganga M.**, and **Kluitenberg, Gerard J.**, US Department of Agriculture, \$30,000, "Precision Crop Protection: Soil Management Zones for Optimizing Weed Control Efficacy."

Ciampitti, Ignacio, Kansas Corn Commission, \$11,444, "Extension and Applied Research Programs for Kansas Corn Production."

Ciampitti, Ignacio, Adee, Eric A., Cramer, Gary L., and Ruiz Diaz Suarez, Dorivar A., Kansas Grain Sorghum Commission, \$16,704, "Best Management Practices for Top-Yields in Sorghum."

Ciampitti, Ignacio, Ruiz Diaz Suarez, Dorivar A., and Thompson, Curtis R., Kansas Grain Sorghum Commission, \$12,541, "Sorghum Production Schools for Kansas."

Ciampitti, Ignacio, Duncan, Stewart R. (Northeast Area Office), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$11,558, "2016 K-State Soybean Production Schools for Kansas."

Ciampitti, Ignacio, Presley, DeAnn R., Sassenrath, Gretchen F. (Southeast Agricultural Research Center), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$4,270, "Cover Crop Effects on Soybean Yield."

Ciampitti, Ignacio, Adee, Eric A., Duncan, Stewart R. (Northeast Area Office), **Griffin, Terry W.** (Agricultural Economics), **Lin, Xiaomao**, and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$22,421, "The Quest of 100-Bushel Soybean: On-Farm Approach."

Ciampitti, Ignacio, North Central Soybean Research Program, \$30,000, "Benchmarking Soybean Production Systems in the North Central USA."

Ciampitti, Ignacio, Sassenrath, Gretchen F. (Southeast Agricultural Research Center), and **Shoup, Douglas E.** (Southeast Area Office), North Central Soybean Research Program, \$25,536, "Improving Soybean Yield in the Double Crop Soybean Production System."

Ciampitti, Ignacio, PrecisionHawk USA, Inc., \$239,729 (includes \$76,930 from Global Food Systems), "Advancing an End-to-End Solution for Agricultural Applications of Unmanned Aerial Systems and Remote Sensing."

Ciampitti, Ignacio, and **Simon, Zachary G.** (County Agents - Metropolitan Sector), United Sorghum Checkoff Program, \$5,000, "Sorghum Fungicide Research - Kansas."

Cramer, Gary L., Dow AgroSciences, LLC, \$7,200, "2015 Cotton Yield Trial."

Cramer, Gary L., **Adee, Eric A.**, **Ciampitti, Ignacio**, and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Grain Sorghum Commission, "Best Management Practices for Top- Yields in Sorghum."

Cramer, Gary L., **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$7,500, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Cramer, Gary L., **Fritz, Allan K.**, and **Lollato, Romulo P.**, Kansas Wheat Alliance, Inc., "Keeping up with Breeding: Improved Management Recommendations at Time of Wheat Variety Release."

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Cramer, Gary L., **Foster, Anserd J.** (Southwest Area Office), **Lollato, Romulo P.**, and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Wheat Commission, \$5,820, "Kansas Yield-Enhancing Strategies (KYES). The Partial Contribution of Management Practices."

Dille, Johanna A., United Sorghum Checkoff Program, \$160,000, "Ecology of Grass Weeds in Grain Sorghum: Critical Period Weed Control."

Dille, Johanna A., **Asebedo, Antonio R.**, **Du, Juan** (Statistics), **Hettiarachchi, Ganga M.**, and **Kluitenberg, Gerard J.**, US Department of Agriculture, \$30,000, "Precision Crop Protection: Soil Management Zones for Optimizing Weed Control Efficacy."

Esser, Andrew R., Agrinos, Inc., \$10,000, "Wheat Trials at Scandia Fields."

Esser, Andrew R., **Asebedo, Antonio R.**, **Jagadish, Krishna**, **Roozeboom, Kraig L.**, **Ruiz Diaz Suarez, Dorivar A.**, and **Schapaugh Jr, William T.**, Kansas Soybean Commission, \$4,927, "Breaking Barriers: Developing Tools for Moving Kansas Irrigated Soybeans Beyond 70 Bushels per Acre."

Esser, Andrew R., **Cramer, Gary L.**, **Lollato, Romulo P.**, and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Wheat Commission, \$5,820, "Kansas Yield-Enhancing Strategies (KYES). I) The Partial Contribution of Management Practices."

Fritz, Allan K., **Poland, Jesse A.** (Plant Pathology), **Regan, Rebecca A.** (Grain Science and Industry), and **Zhang, Guorong** (Agricultural Research Center-Hays), General Mills, Inc., \$41,626, "Applied Genomics for Functional Foods in Wheat: Connecting Wheat Variety Development with Targeted, Novel Consumer Quality."

Fritz, Allan K., **Poland, Jesse A.** (Plant Pathology), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$9,000, "Applying Genomic Selection in KSU Wheat Breeding Programs."

Fritz, Allan K., Kansas Wheat Alliance, Inc., \$50,000, "Germplasm Development using Wild Relatives of Wheat."

Fritz, Allan K., Kansas Wheat Alliance, Inc., \$45,000, "Implementation of Advanced Breeding Technologies."

Fritz, Allan K., Cramer, Gary L., and Lollato, Romulo P., Kansas Wheat Alliance, Inc., "Keeping up with Breeding: Improved Management Recommendations at Time of Wheat Variety Release."

Fritz, Allan K., Aiken, Robert M. (Northwest Research Extension Center), **Jagadish, Krishna**, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$13,104, "New Selection Strategies for Drought-Tolerant Wheat."

Fritz, Allan K., Bockus, William W. (Plant Pathology), **DeWolf, Erick D.** (Plant Pathology), **Friebe, Bernd** (Plant Pathology), **Gill, Bikram S.** (Plant Pathology), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$3,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Fritz, Allan K., DeWolf, Erick D. (Plant Pathology), **Friebe, Bernd** (Plant Pathology), **Gill, Bikram S.** (Plant Pathology), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$3,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Fritz, Allan K., Kansas Wheat Commission, \$50,000, "Implementation of Advanced Breeding Technologies."

Fritz, Allan K., and **Martin, Terry J.** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$235,000, "Improvement of Hard Winter Wheat for Kansas."

Fritz, Allan K., Kansas Wheat Commission, \$255,000, "Improvement of Hard Winter Wheat for Kansas."

Fritz, Allan K., Jagadish, Krishna, and **Pagadala, P. V. Vara** (Dean of Agriculture and Director of AES), Kansas Wheat Commission, "Strategies to Develop Wheat Genotypes to Beat Post-Flowering Heat and Drought Stress."

Fritz, Allan K., Fellers, John P. (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Wheat Commission, \$7,833, "Transgenic Approaches for Trait Enhancement in Wheat."

Fritz, Allan K., Fellers, John P. (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Wheat Commission, \$10,000, "Transgenic Approaches for Trait Enhancement in Wheat."

Fritz, Allan K., Lollato, Romulo P., and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Wheat Commission, \$2,105, "Wheat Nutrient Uptake and Partitioning as Affected by Era of Variety Release and Balanced Nutrition."

Fritz, Allan K., Pioneer Hi-Bred International, Inc., \$281,460, "Hybrid Wheat Seed Production Agreement."

Fritz, Allan K., Mengel, David B., and **Pagadala, P. V. Vara**, US Agency for International Development, \$29,062, "Development and Enhancing Heat Tolerance in Wheat Using Genomics, Molecular and Physiiological Tools."

Fritz, Allan K., and **Akhunov, Eduard D.** (Plant Pathology), US Department of Agriculture, \$147,717, "Empowering Wheat Breeding Using the Genomic Signals of Eco- Geographical Adaptation."

Fritz, Allan K., US Department of Agriculture, \$24,295, "Multiple Rust-Resistant Wheat - Kansas State University."

Hettiarachchi, Ganga M., Nutrient Technologies, LLC, \$89,699, "Understanding Role of Fertilizer Enhancement Products and their Effects on Phosphorus Fertilizer Reaction Products in Soils."

Hettiarachchi, Ganga M., Asebedo, Antonio R., Dille, Johanna A., Du, Juan (Statistics), and **Kluitenberg, Gerard J.**, US Department of Agriculture, \$5,000, "Precision Crop Protection: Soil Management Zones for Optimizing Weed Control Efficacy."

Jagadish, Krishna, and Pagadala, P. V. Vara (Dean of Agriculture and Director of AES), International Crops Research Institute for the Semi-Arid Tropics, \$30,000, "Improving Pearl Millet Productivity for Smallholder Resilience to Climate Change in Niger."

Jagadish, Krishna, Morris, Geoffrey, Pagadala, P. V. Vara (Dean of Agriculture and Director of AES), **Perumal, Ramasamy** (Agricultural Research Center- Hays), and **Tesso, Tesfaye**, Kansas Grain Sorghum Commission, \$22,000, "Physiological and Genetic Characterization of Grain Sorghum for Enhancing Terminal Heat and Drought Stress Resilience."

Jagadish, Krishna, Asebedo, Antonio R., Esser, Andrew R., Roozeboom, Kraig L., Ruiz Diaz Suarez, Dorivar A., and Schapaugh Jr, William T., Kansas Soybean Commission, \$9,853, "Breaking Barriers: Developing Tools for Moving Kansas Irrigated Soybeans Beyond 70 Bushels per Acre."

Jagadish, Krishna, Aiken, Robert M. (Northwest Research Extension Center), **Fritz, Allan K.**, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., "New Selection Strategies for Drought-Tolerant Wheat."

Jagadish, Krishna, Fritz, Allan K., and **Pagadala, P. V. Vara** (Dean of Agriculture and Director of AES), Kansas Wheat Commission, \$45,000, "Strategies to Develop Wheat Genotypes to Beat Post-Flowering Heat and Drought Stress."

Jagadish, Krishna, US Department of Agriculture, \$30,000, "Impact of Heat and Drought Stress on Sorghum and Wheat Grain Composition and Chemistry."

Jugulam, Mithila, and Thompson, Curtis R., Kansas Grain Sorghum Commission, \$38,000, "Efficacy of Atrazine, Huskie, and Dicamba on Palmer Amaranth under Temperature Stress."

Jugulam, Mithila, Pagadala, P. V. Vara, and Thompson, Curtis R., Kansas Grain Sorghum Commission, \$30,000, "Evaluation of Sorghum Germplasm for Herbicide Tolerance."

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Kluitenberg, Gerard J., Nelson, Nathan O., Roozeboom, Kraig L., Tomlinson, Peter J., and Williams, Jeffery R. (Agricultural Economics), Kansas Corn Commission, \$500, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

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Knapp, Mary C., DeWolf, Erick D. (Plant Pathology), and **Redmond, Christopher A.**, Kansas Crop Improvement Association, \$3,800, "Kansas Wheat Dashboard: Information about Emerging Stripe Rust Epidemics and Other Threats to Wheat Production."

Lin, Xiaomao, Aiken, Robert M. (Northwest Research Extension Center), **Bradford, Barry J.** (Animal Sciences and Industry), **Harrington Jr, John A.** (Geography), **Min, Doohong**, and **Taylor, Mykel R.** (Agricultural Economics), Kansas Board of Regents, \$10,500, "Evaluating Teff as a Dryland Forage Crop for Water- Limited Areas in Kansas."

Lin, Xiaomao, Little, Christopher R. (Plant Pathology), **Presley, DeAnn R.**, **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$154, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Lin, Xiaomao, Adey, Eric A., Ciampitti, Ignacio, Duncan, Stewart R. (Northeast Area Office), **Griffin, Terry W.** (Agricultural Economics), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$1,495, "The Quest of 100-Bushel Soybean: On-Farm Approach."

Lin, Xiaomao, National Oceanic and Atmosphere Administration, \$105,000, "Weather Data Library Data Sets."

Lin, Xiaomao, Baker, Lauri M. (Communications), and **Tomlinson, Peter J.**, US Department of Agriculture, "Building the Climate Science Capacity of Extension Professionals."

Lollato, Romulo P., Asebedo, Antonio R., and **Poland, Jesse A.** (Plant Pathology), Kansas Wheat Alliance, Inc., "Developing Massive-parallel Phenotyping Systems for Winter Wheat."

Lollato, Romulo P., Cramer, Gary L., and **Fritz, Allan K.**, Kansas Wheat Alliance, Inc., \$9,000, "Keeping up with Breeding: Improved Management Recommendations at Time of Wheat Variety Release."

Lollato, Romulo P., Duncan, Stewart R. (Northeast Area Office), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Wheat Alliance, Inc., \$15,500, "K-State Wheat Demonstration Plots: Enhanced Uniformity for Improved Outreach."

Lollato, Romulo P., Cramer, Gary L., Esser, Andrew R., and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Wheat Commission, \$5,820, "Kansas Yield-Enhancing Strategies (KYES). I) The Partial Contribution of Management Practices."

Lollato, Romulo P., Cramer, Gary L., Foster, Anserd J. (Southwest Area Office), and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Wheat Commission, \$5,820, "Kansas Yield-Enhancing Strategies (KYES). The Partial Contribution of Management Practices."

Lollato, Romulo P., Kansas Wheat Commission, \$6,720, "K-State Wheat Extension Program: Wheat Management by Growth Stage Guide and General Extension Activities."

Lollato, Romulo P., Kansas Wheat Commission, \$6,720, "K-State Wheat Extension Program: Wheat Management by Growth Stage Guide and General Extension Activities."

Lollato, Romulo P., Fritz, Allan K., and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Wheat Commission, \$37,889, "Wheat Nutrient Uptake and Partitioning as Affected by Era of Variety Release and Balanced Nutrition."

Lollato, Romulo P., and **Foster, Anserd J.** (Southwest Area Office), Monsanto Company, \$10,425, "Service Order No. 39."

Lollato, Romulo P., National Crop Insurance Services, \$10,000, "NCIS Gift."

Mengel, David B., Fritz, Allan K., and **Pagadala, P. V. Vara**, US Agency for International Development, \$29,062, "Development and Enhancing Heat Tolerance in Wheat Using Genomics, Molecular and Physiological Tools."

Min, Doohong, Aiken, Robert M. (Northwest Research Extension Center), **Bradford, Barry J.** (Animal Sciences and Industry), **Harrington Jr, John A.** (Geography), **Lin, Xiaomao**, and **Taylor, Mykel R.** (Agricultural Economics), Kansas Board of Regents, \$14,000, "Evaluating Teff as a Dryland Forage Crop for Water- Limited Areas in Kansas."

Min, Doohong, Multi-Sponsor, \$52,700, "AGR Multi-Sponsor Research 50."

Morris, Geoffrey, Perumal, Ramasamy (Agricultural Research Center-Hays), and **Tesso, Tesfaye**, Kansas Grain Sorghum Commission, \$63,200, "Improved Genomic Mapping and Marker-Assisted Selection for Cold Tolerance in Grain Sorghum."

Morris, Geoffrey, Jagadish, Krishna, Pagadala, P. V. Vara (Dean of Agriculture and Director of AES), **Perumal, Ramasamy** (Agricultural Research Center- Hays), and **Tesso, Tesfaye**, Kansas Grain Sorghum Commission, \$13,750, "Physiological and Genetic Characterization of Grain Sorghum for Enhancing Terminal Heat and Drought Stress Resilience."

Morris, Geoffrey, and **Poland, Jesse A.** (Plant Pathology), US Department of Energy, \$235,917, "A Reference Phenotyping System for Energy Sorghum."

Nelson, Nathan O., Kluitenberg, Gerard J., Roozeboom, Kraig L., Tomlinson, Peter J., and Williams, Jeffery R. (Agricultural Economics), Kansas Corn Commission, \$3,000, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Nelson, Nathan O., DeRouchey, Joel M. (Animal Sciences and Industry), and **Sweeney, Daniel W.** (Southeast Agricultural Research Center), US Department of Agriculture, \$8,942, "Validate, Improve and Regionalize Phosphorus Indices to Reduce P Loss Across the Heartland Region."

Pagadala, P. V. Vara, International Crops Research Institute for the Semi-Arid Tropics, \$19,800, "High Temperature Tolerance and Association Mapping in Finger Millet."

Pagadala, P. V. Vara, Jugulam, Mithila, and **Thompson, Curtis R.**, Kansas Grain Sorghum Commission, "Evaluation of Sorghum Germplasm for Herbicide Tolerance."

Pagadala, P. V. Vara, Jugulam, Mithila, and **Thompson, Curtis R.**, United Sorghum Checkoff Program, "Evaluation of Sorghum Germplasm for Herbicide Tolerance."

Pagadala, P. V. Vara, and **Schapaugh Jr, William T.**, United Soybean Board, "Breeding and Physiological Approaches to Develop Stress Tolerant Soybean Varieties for Kansas (USB Project 1420-532-5613)."

Pagadala, P. V. Vara, Fritz, Allan K., and **Mengel, David B.**, US Agency for International Development, \$58,123, "Development and Enhancing Heat Tolerance in Wheat Using Genomics, Molecular and Physiiological Tools."

Peterson, Dallas E., Dow AgroSciences, LLC, \$4,000, "2015 University Cooperator Agreement for Enlist Corn and Enlist Soybean."

Peterson, Dallas E., Schlegel, Alan J. (Southwest Research Extension Center), and **Thompson, Curtis R.**, Kansas Grain Sorghum Commission, \$1,900, "Sorghum Response to Postemergence Applied Huskie following a Pre-emergence Applied Lexar EZ, Lumax EZ or Zemas."

Peterson, Dallas E., Monsanto Company, \$7,500, "Service Order #32."

Peterson, Dallas E., Monsanto Company, \$31,500, "Service Order No. 36."

Peterson, Dallas E., Monsanto Company, \$21,000, "Service Order No. 41."

Peterson, Dallas E., Syngenta Seeds, Inc., \$24,000, "Herbicide Research."

Peterson, Dallas E., United Soybean Board, \$25,000, "Glyphosate Resistant Weed Project in Kansas."

Peterson, Dallas E., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy** (Entomology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Thompson, Curtis R., Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$22,240, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Pierzynski, Gary M., Multi-Sponsor, \$115,770, "AGR Multi-Sponsor Experiment Field 26."

Pierzynski, Gary M., Multi-Sponsor, \$217,650, "AGR Multi-Sponsor Public Service 35."

Pierzynski, Gary M., Multi-Sponsor, \$29,250, "Fluid Fertilizer Foundation."

Pierzynski, Gary M., Lilja, Nina K. (International Agricultural Programs), and **Pagadala, P. V. Vara** (Dean of Agriculture and Director of AES), US Agency for International Development, "Innovation Lab on Sustainable Intensification."

Pierzynski, Gary M., US Department of Agriculture, \$196,263, "Develop High-Throughput Markers for Genetic Improvement of Wheat for Multiple Traits."

Pierzynski, Gary M., US Department of Agriculture, \$263,185, "Tolerance to Environmental Stress in Wheat."

Poland, Jesse A., and **Price, Kevin**, National Science Foundation, \$871,561, "A Field-Based High Throughput Phenotyping Platform for Plant Genetics."

Presley, DeAnn R., Ciampitti, Ignacio, Sassenrath, Gretchen F. (Southeast Agricultural Research Center), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$4,270, "Cover Crop Effects on Soybean Yield."

Presley, DeAnn R., Adee, Eric A., and **Little, Christopher R.** (Plant Pathology), Kansas Soybean Commission, \$3,657, "Influences of Irrigation Regimes, Planting Date, and Soil Compaction Upon SDS in Kansas."

Presley, DeAnn R., Lin, Xiaomao, Little, Christopher R. (Plant Pathology), **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$154, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Presley, DeAnn R., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), **Rice, Charles W., Ruiz Diaz Suarez, Dorivar A., Shoup, Douglas E.** (Southeast Area Office), **Swamy, Aavudai Anandhi, Tomlinson, Peter J.**, and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Presley, DeAnn R., Cloyd, Raymond A. (Entomology), **Kennelly, Megan** (Plant Pathology), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$9,646, "Soil Health

Bootcamp and Applications to Sustainable Vegetable Cropping: Professional Development for Local Agriculture Educators."

Price, Kevin, and **Poland, Jesse A.**, National Science Foundation, "A Field- Based High Throughput Phenotyping Platform for Plant Genetics."

Redmond, Christopher A., **DeWolf, Erick D.** (Plant Pathology), and **Knapp, Mary C.**, Kansas Crop Improvement Association, \$3,800, "Kansas Wheat Dashboard: Information about Emerging Stripe Rust Epidemics and Other Threats to Wheat Production."

Rice, Charles W., Kansas State University Foundation, \$200,000, "Mary L. Vanier Endowed Professorship."

Rice, Charles W., **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), **Presley, DeAnn R.**, **Ruiz Diaz Suarez, Dorivar A.**, **Shoup, Douglas E.** (Southeast Area Office), **Swamy, Aavudai Anandhi**, **Tomlinson, Peter J.**, and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, \$935,035, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Rice, Charles W., **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Sanderson, Matthew R.** (Sociology, Anthropology, and Social Work), US Department of Agriculture, \$357,300, "Sustaining Agriculture through Adaptive Management to Preserve the Ogallala Aquifer under a Changing Climate."

Roozeboom, Kraig L., **Ruiz Diaz Suarez, Dorivar A.**, and **Tomlinson, Peter J.**, Agronomic Science Foundation, \$19,900, "Influence of Cover Crops on Nitrous Oxide Dynamics and Nutrient Stratification in an Established No-Till Wheat-Sorghum-Soybean Cropping System."

Roozeboom, Kraig L., **Kluitenberg, Gerard J.**, **Nelson, Nathan O.**, **Tomlinson, Peter J.**, and **Williams, Jeffery R.** (Agricultural Economics), Kansas Corn Commission, \$750, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Roozeboom, Kraig L., **Little, Christopher R.** (Plant Pathology), and **Tesso, Tesfaye**, Kansas Grain Sorghum Commission, "Breeding Sorghum for Improved Production and Utilization."

Roozeboom, Kraig L., **Asebedo, Antonio R.**, **Esser, Andrew R.**, **Jagadish, Krishna**, **Ruiz Diaz Suarez, Dorivar A.**, and **Schapaugh Jr, William T.**, Kansas Soybean Commission, \$7,390, "Breaking Barriers: Developing Tools for Moving Kansas Irrigated Soybeans Beyond 70 Bushels per Acre."

Roozeboom, Kraig L., National Crop Insurance Services, \$8,000, "Unrestricted Gift."

Ruiz Diaz Suarez, Dorivar A., **Roozeboom, Kraig L.**, and **Tomlinson, Peter J.**, Agronomic Science Foundation, "Influence of Cover Crops on Nitrous Oxide Dynamics and Nutrient Stratification in an Established No-Till Wheat-Sorghum-Soybean Cropping System."

Ruiz Diaz Suarez, Dorivar A., **Adee, Eric A.**, **Ciampitti, Ignacio**, and **Cramer, Gary L.**, Kansas Grain Sorghum Commission, "Best Management Practices for Top- Yields in Sorghum."

Ruiz Diaz Suarez, Dorivar A., **Obour, Augustine K.** (Agricultural Research Center-Hays), **Perumal, Ramasamy** (Agricultural Research Center-Hays), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$4,863, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

Ruiz Diaz Suarez, Dorivar A., Ciampitti, Ignacio, and Thompson, Curtis R., Kansas Grain Sorghum Commission, "Sorghum Production Schools for Kansas."

Ruiz Diaz Suarez, Dorivar A., Asebedo, Antonio R., Esser, Andrew R., Jagadish, Krishna, Roozeboom, Kraig L., and Schapaugh Jr, William T., Kansas Soybean Commission, \$4,927, "Breaking Barriers: Developing Tools for Moving Kansas Irrigated Soybeans Beyond 70 Bushels per Acre."

Ruiz Diaz Suarez, Dorivar A., Cramer, Gary L., Esser, Andrew R., and Lollato, Romulo P., Kansas Wheat Commission, \$5,820, "Kansas Yield-Enhancing Strategies (KYES). I) The Partial Contribution of Management Practices."

Ruiz Diaz Suarez, Dorivar A., Cramer, Gary L., Foster, Anserd J. (Southwest Area Office), and **Lollato, Romulo P.,** Kansas Wheat Commission, \$5,820, "Kansas Yield-Enhancing Strategies (KYES). The Partial Contribution of Management Practices."

Ruiz Diaz Suarez, Dorivar A., Fritz, Allan K., and Lollato, Romulo P., Kansas Wheat Commission, \$2,105, "Wheat Nutrient Uptake and Partitioning as Affected by Era of Variety Release and Balanced Nutrition."

Ruiz Diaz Suarez, Dorivar A., Devlin, Daniel L. (Ks Ctr for Ag Rsrcs & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), **Presley, DeAnn R., Rice, Charles W., Shoup, Douglas E.** (Southeast Area Office), **Swamy, Aavudai Anandhi, Tomlinson, Peter J., and Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Schapaugh Jr, William T., Asebedo, Antonio R., Esser, Andrew R., Jagadish, Krishna, Roozeboom, Kraig L., and Ruiz Diaz Suarez, Dorivar A., Kansas Soybean Commission, \$2,463, "Breaking Barriers: Developing Tools for Moving Kansas Irrigated Soybeans Beyond 70 Bushels per Acre."

Schapaugh Jr, William T., Todd, Timothy C. (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$170,000, "Breeding and Management of Soybean for Improved Performance."

Schapaugh Jr, William T., McCornack, Brian P. (Entomology), **Smith, C. Michael** (Entomology), and **Whitworth, Robert "Jeff" J.** (Entomology), Kansas Soybean Commission, \$16,015, "Development of Genetic, Chemical and Population-based Tactics to Manage Key Kansas Soybean Insect Pests."

Schapaugh Jr, William T., Todd, Timothy C. (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$7,583, "Enhancement of Soybean Through Genetic Engineering."

Schapaugh Jr, William T., North Central Soybean Research Program, \$44,040, "Genomic Selection in Soybean."

Schapaugh Jr, William T., and Pagadala, P. V. Vara, United Soybean Board, \$92,000, "Breeding and Physiological Approaches to Develop Stress Tolerant Soybean Varieties for Kansas (USB Project 1420-532-5613)."

Stamm, Michael J., Great Plains Canola Association, Inc., \$5,000, "Promoting Canola Production in the Southern Great Plains through Innovative Extension Education."

Stamm, Michael J., Kansas Crop Improvement Association, \$5,000, "Enhancing Winter Survival of Canola."

Stamm, Michael J., Monsanto Company, \$3,000, "Material Transfer Agreement - National Winter Canola Variety Trials."

Stamm, Michael J., National Crop Insurance Services, \$12,000, "NCIS Gift."

Stamm, Michael J., US Department of Agriculture, \$200,000, "Development and Management of Canola in the Great Plains Region."

Stamm, Michael J., and **Bergtold, Jason S.** (Agricultural Economics), US Department of Agriculture, \$26,563, "Oilseed to Jet-Fuel Economics, Outreach, and Extension."

Swamy, Aavudai Anandhi, Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), **Presley, DeAnn R., Rice, Charles W., Ruiz Diaz Suarez, Dorivar A., Shoup, Douglas E.** (Southeast Area Office), **Tomlinson, Peter J.**, and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Tesso, Tesfaye, Little, Christopher R. (Plant Pathology), and **Roozeboom, Kraig L.**, Kansas Grain Sorghum Commission, \$78,160, "Breeding Sorghum for Improved Production and Utilization."

Tesso, Tesfaye, Little, Christopher R. (Plant Pathology), and **Perumal, Ramasamy** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$4,264, "Germplasm Screening, Host-Plant Interactions, and Inoculation Techniques for Sorghum Stalk Rot Diseases in Kansas."

Tesso, Tesfaye, Morris, Geoffrey, and **Perumal, Ramasamy** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$7,900, "Improved Genomic Mapping and Marker-Assisted Selection for Cold Tolerance in Grain Sorghum."

Tesso, Tesfaye, Jagadish, Krishna, Morris, Geoffrey, Pagadala, P. V. Vara (Dean of Agriculture and Director of AES), and **Perumal, Ramasamy** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$13,750, "Physiological and Genetic Characterization of Grain Sorghum for Enhancing Terminal Heat and Drought Stress Resilience."

Tesso, Tesfaye, Perumal, Ramasamy (Agricultural Research Center-Hays), and **Yu, Jianming**, United Sorghum Checkoff Program, \$69,680, "Genomic Selection to Enhance Heterosis in Sorghum."

Tesso, Tesfaye, and **Perumal, Ramasamy** (Agricultural Research Center-Hays), US Department of Agriculture, \$81,250, "Development of a Sorghum Doubled Haploid Breeding System."

Thompson, Curtis R., and **Jugulam, Mithila**, Kansas Grain Sorghum Commission, "Efficacy of Atrazine, Huskie, and Dicamba on Palmer Amaranth under Temperature Stress."

Thompson, Curtis R., Jugulam, Mithila, and **Pagadala, P. V. Vara**, Kansas Grain Sorghum Commission, "Evaluation of Sorghum Germplasm for Herbicide Tolerance."

Thompson, Curtis R., Ciampitti, Ignacio, and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Grain Sorghum Commission, "Sorghum Production Schools for Kansas."

Thompson, Curtis R., Peterson, Dallas E., and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$15,200, "Sorghum Response to Postemergence Applied Huskie following a Pre-emergence Applied Lexar EZ, Lumax EZ or Zemas."

Thompson, Curtis R., Monsanto Company, \$8,400, "Service Order No. 43."

Thompson, Curtis R., United Sorghum Checkoff Program, \$10,000, "2016 Weed Control Research (KSU-Thompson)."

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Thompson, Curtis R., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy** (Entomology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E., Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$13,900, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Thompson, Curtis R., Valent USA Corporation, \$7,500, "Field Trial Contract Protocol VALORSX Trial No. MD68.02 2016LSAN2205."

Tomlinson, Peter J., Roozeboom, Kraig L., and Ruiz Diaz Suarez, Dorivar A., Agronomic Science Foundation, "Influence of Cover Crops on Nitrous Oxide Dynamics and Nutrient Stratification in an Established No-Till Wheat-Sorghum-Soybean Cropping System."

Tomlinson, Peter J., Kluitenberg, Gerard J., Nelson, Nathan O., Roozeboom, Kraig L., and Williams, Jeffery R. (Agricultural Economics), Kansas Corn Commission, \$500, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Tomlinson, Peter J., and George, Herschel C. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), Kansas Department of Agriculture, \$80,000, "Effectiveness of Short-term Poultry Litter Storage Option for Protecting Kansas Water Quality."

Tomlinson, Peter J., Baker, Lauri M. (Communications), and **Lin, Xiaomao**, US Department of Agriculture, \$29,999, "Building the Climate Science Capacity of Extension Professionals."

Tomlinson, Peter J., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), **Presley, DeAnn R., Rice, Charles W., Ruiz Diaz Suarez, Dorivar A., Shoup, Douglas E.** (Southeast Area Office), **Swamy, Aavudai Anandhi**, and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

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Amamcharla, Jayendra K., Dairy Management, Inc., \$23,625, "Use of Micro and Nanobubbles in Dairy Processing Applications."

Amamcharla, Jayendra K., Gragg, Sara E., Phebus, Randall K., and Schmidt, Karen A., Dairy Management, Inc., \$11,731, "Use of Nano-scale Aqueous Oxone to Remove Biofilms from Selected Dairy Product Contact Surfaces."

Amamcharla, Jayendra K., Dairy Research Institute, \$4,520, "Understanding the Effects of Electromagnetic Fluid Conditioning on Physical, Chemical and Functional Properties of Milk and Milk Products."

Amamcharla, Jayendra K., Dairy Research Institute, \$12,200, "Use of Novel Surface Modification Techniques to Reduce Biofilms on Plate Heat Exchanger Plates."

Amamcharla, Jayendra K., Midwest Dairy Association, \$25,000, "Use of Micro and Nanobubbles in Dairy Processing Applications."

Amamcharla, Jayendra K., and **Bradford, Barry J.**, Zinpro Corporation, \$10,792, "Effects of Zinc Amino Acid Complex on Mammary Epithelium and Dairy Food Chemistry."

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

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Aramouni, Fadi M., **Bates, Marlin A.** (County Agents - Metropolitan Sector), **Gragg, Sara E.**, **Nwadike, Londa S.** (Director of Cooperative Extension), **Phebus, Randall K.**, **Pliakoni, Eleni** (Horticulture, Forestry and Recreation Resources), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Food and Drug Administration, \$400, "Strategy for Successful Implementation of FSMA in the North Central Region through Adoption of a Systems Approach and Stakeholder Engagement Framework."

Beyer, R. Scott, **Campabadal Teran, Carlos** (Grain Science and Industry), **Miller, Brandi M.** (Grain Science and Industry), and **O'Neil III, Howard J.** (Grain Science and Industry), US Soybean Export Council, Inc., \$4,750, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01M54B."

Blasi, Dale A., Bayer Corporation, \$57,078, "BRD Therapy in High Risk Feeder Calves."

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Bradford, Barry J., and **Brouk, Micheal J.**, Deltavit, CCPA Group, \$21,752, "Effect of Dietary Supplementation of Scutellaria Extract during Early Lactation on Milk Production."

Bradford, Barry J., Diamond V Mills, Inc., \$194,645, "Impact of NutroTek on Immune Function, Metabolic Status, and Performance of Transition Dairy Cattle."

Bradford, Barry J., **Aiken, Robert M.** (Northwest Research Extension Center), **Harrington Jr, John A.** (Geography), **Lin, Xiaomao** (Agronomy), **Min, Doohong** (Agronomy), and **Taylor, Mykel R.** (Agricultural Economics), Kansas Board of Regents, \$10,500, "Evaluating Teff as a Dryland Forage Crop for Water-Limited Areas in Kansas."

Bradford, Barry J., National Science Foundation, \$428,117, "Collaborative Research: Inflammation as a Key Component of the Metabolic Adaptations to the Lactating State."

Bradford, Barry J., POET, LLC, \$5,000, "Analysis of Crude Protein Availability Following Pelleting of Dried Distiller's Grains with Solubles."

Bradford, Barry J., and **Amamcharla, Jayendra K.**, Zinpro Corporation, \$32,375, "Effects of Zinc Amino Acid Complex on Mammary Epithelium and Dairy Food Chemistry."

Brouk, Micheal J., Chr. Hansen A/S, \$7,844, "Evaluation of SiloSolve FC Treated Silage on Fermentation and Aerobic Stability in Ag Bags."

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Brouk, Micheal J., and Delamanha Mendonca, Luis G., Kansas Dairy Commission, \$4,750, "Assessment of Sorghum Silage Berry Processing on Ruminant Starch Availability."

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Davis, Duane L., Gonzalez, John M., Houser, Terry A., and Nelssen, Jim L., Eli Lilly & Company, \$43,125, "Pilot Efficacy Study: Effect of a Long-acting Growth Hormone Releasing Factor on Fetal Development in the Pig."

Delamanha Mendonca, Luis G., and Brouk, Micheal J., Kansas Dairy Commission, \$250, "Assessment of Sorghum Silage Berry Processing on Ruminant Starch Availability."

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Delamanha Mendonca, Luis G., and Stevenson, Jeffrey S., Kansas Dairy Commission, \$5,000, "Estrus Interval and Concentration of Estradiol after GnRH- or hCG-induced Ovulation in Dairy Heifers."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.,** Ajinomoto Heartland LLC, "Amino Acid Ratios in Diets for 15 to 25 lb Pigs."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.,** Ajinomoto Heartland LLC, "Effect of High Trp:Lys Ratio for Late Finishing Pigs (Task Order #4372)."

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DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.,** BASF Corporation, "Efficacy of New BASF Phytase in Swine."

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DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.,** Hamlet Protein, Inc., \$30,000, "Effect of Feeding Increasing Levels of HP 300 on Growth Performance of Nursery Pigs."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.,** Kemin Industries, "Comparing the Influence of ButiPearl Source and Inclusion Level on Growth Performance of Nursery Pigs."

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Baker, Lauri M., Lin, Xiaomao (Agronomy), and **Tomlinson, Peter J.** (Agronomy), US Department of Agriculture, \$29,999, "Building the Climate Science Capacity of Extension Professionals."

Ellis, Jason D., Bai, Jianfa (Diagnostic Medicine/Pathobiology), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), **Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), **Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), **Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$174,844, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

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Dalton, Timothy J., US Agency for International Development, \$3,039,460, "The Management Entity of the Sorghum and Millet Innovation Lab."

Floros, John D., and **Peters, Paula** (Director of Cooperative Extension), University of Missouri, "Memorandum of Agreement."

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Lilja, Nina K., and **Smith, C. Michael** (Entomology), US Agency for International Development, "BHEARD Program: Liberia."

Pagadala, P. V. Vara, and **Jagadish, Krishna** (Agronomy), International Crops Research Institute for the Semi-Arid Tropics, "Improving Pearl Millet Productivity for Smallholder Resilience to Climate Change in Niger."

Pagadala, P. V. Vara, Jagadish, Krishna (Agronomy), **Morris, Geoffrey** (Agronomy), **Perumal, Ramasamy** (Agricultural Research Center-Hays), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, "Physiological and Genetic Characterization of Grain Sorghum for Enhancing Terminal Heat and Drought Stress Resilience."

Pagadala, P. V. Vara, Fritz, Allan K. (Agronomy), and **Jagadish, Krishna** (Agronomy), Kansas Wheat Commission, "Strategies to Develop Wheat Genotypes to Beat Post- Flowering Heat and Drought Stress."

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Wiley, Zelia Z., Grauer, Bette (Dean of Engineering), **Mason, April** (Office of the Provost), **Montelone, Beth A.** (Dean of Arts and Sciences), **Morales, Amanda I.** (Curriculum and Instruction), and **Thurston, Linda P.** (Dean of Education), National Science Foundation, \$25,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

ENTOMOLOGY

Chen, Ming-Shun, Schwarting, Holly N., Smith, C. Michael, and **Whitworth, Robert "Jeff" J.**, Kansas Wheat Commission, \$12,500, "Impact of Temperature on Genetic Resistance to Hessian Fly, Wheat Curl Mite and Russian Wheat Aphid."

Cloyd, Raymond A., Association of Specialty Cut Flower Growers Research Foundation, \$5,000, "Determine the Effect of Foliar Applications of Entomopathogenic Nematodes and Water Sprays on Western Flower Thrips, *Frankliniella Occidentalis* populations."

Cloyd, Raymond A., Dow AgroSciences, LLC, \$5,000, "Evaluation Agreement."

Cloyd, Raymond A., Gloeckner Foundation, Inc. (Fred C.), \$15,000, "Effect of the Entomopathogenic Fungus, *Beauveria Bassiana*, and the Rove Beetle, *Dalotia Coriatria*, in Suppressing Populations of the Western Flower Thrips, *Franliniella Accidental*is."

Cloyd, Raymond A., Gloeckner Foundation, Inc. (Fred C.), \$1,500, "eGRO Instructional Videos."

Cloyd, Raymond A., US Department of Agriculture, \$3,000, "2015 NCR IR-4 Ornamental Horticulture Project."

Cloyd, Raymond A., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy, Kennelly, Megan** (Plant Pathology), **McCornack, Brian P., Miller, Frannie L., Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.**, and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$22,240, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Cloyd, Raymond A., Kennelly, Megan (Plant Pathology), **Presley, DeAnn R.** (Agronomy), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$6,431, "Soil Health Bootcamp and Applications to Sustainable Vegetable Cropping: Professional Development for Local Agriculture Educators."

Cloyd, Raymond A., Valent USA Corporation, \$56,000, "Greenhouse Evaluation of Experimental Insecticide."

Cohnstaedt, Lee, and **Ruberson, John R.**, Vestergaard Frandsen S.A., \$15,000, "Vestergaard Animal Health Impact Fellowship."

Johnson, Wendy, McCornack, Brian P., Poland, Jesse A. (Plant Pathology), **Rotenberg, Dorith** (Plant Pathology), and **Smith, C. Michael**, Kansas Wheat Commission, "Integrative and Innovative Approaches to Diminish Barley Yellow Dwarf Epidemics in Kansas Wheat."

Johnson, Wendy, Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P., Miller, Frannie L., Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.**, and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$19,460, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

McCormack, Gregory D., Kansas Soybean Commission, \$48,750, "Agricultural Research Experiences for Teachers (RET) - Using Soybean as a Model System."

McCornack, Brian P., Brokesh, Edwin L. (Biological and Agricultural Engineering), **Flippo, Daniel** (Biological and Agricultural Engineering), **Sharda, Ajay** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.** (Southwest Research Extension Center), Kansas Corn Commission, \$7,394, "Comprehensive Study of Light Wavelength and Image Processing to Automatically Identify Corn Pests."

McCornack, Brian P., and **Zolnerowich, Gregory**, Kansas Department of Wildlife and Parks, \$2,500, "Pollinator Responses to Rangeland Management Practices in the Flint Hills Ecoregion."

McCornack, Brian P., Schapaugh Jr, William T. (Agronomy), **Smith, C. Michael**, and **Whitworth, Robert "Jeff" J.**, Kansas Soybean Commission, \$16,015, "Development of Genetic, Chemical and Population-based Tactics to Manage Key Kansas Soybean Insect Pests."

McCornack, Brian P., Johnson, Wendy, Poland, Jesse A. (Plant Pathology), **Rotenberg, Dorith** (Plant Pathology), and **Smith, C. Michael**, Kansas Wheat Commission, \$60,000, "Integrative and Innovative Approaches to Diminish Barley Yellow Dwarf Epidemics in Kansas Wheat."

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McCornack, Brian P., North Central Soybean Research Program, \$30,000, "Soybean Entomology in the North Central Region: Management and Outreach for New and Existing Pests."

McCornack, Brian P., United Sorghum Checkoff Program, \$31,000, "2016 Sugarcane Aphid (SCA) Research - Best Management Practices."

McCornack, Brian P., US Department of Agriculture, \$25,000, "Development of a User- Friendly, Rapid Scouting Procedure for the Invasive Sugarcane Aphid, *Melanaphis Sacchari*, in Sorghum."

McCornack, Brian P., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy, Kennelly, Megan** (Plant Pathology), **Miller, Frannie L., Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.**, and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$22,240, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Michaud, John P., National Sunflower Association, \$10,302, "Efficacy and Economics of Insecticide Seed Treatments for Management of Wireworms and Seed Corn Maggots in Sunflowers."

Miller, Frannie L., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy, Kennelly, Megan** (Plant Pathology), **McCornack, Brian P., Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.**, and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$33,360, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Park, Yoonseong, US Department of Agriculture, \$94,202, "Development of Honey bee- safe Acaricidal Peptidomimetics."

Phillips, Thomas W., and Campabadal Teran, Carlos (Grain Science and Industry), Kansas Crop Improvement Association, \$1,000, "Demonstrating a New Stored Wheat Cooling Technology for Improved Pest Control during On-Farm Storage."

Phillips, Thomas W., US Department of Agriculture, \$90,420, "Development of New Treatment Options for Khapra Beetle, *Trogoderma Granarium* (Everts)."

Phillips, Thomas W., US Department of Agriculture, \$89,997, "Improved Trapping and Control Tools for Khapra Beetle."

Phillips, Thomas W., US Department of Agriculture, \$153,287, "Optimization of Food Grade Coatings, Environmental Conditions, and Fumigation of Dry Cured Ham."

Phillips, Thomas W., and Zhu, Kun Yan, US Department of Agriculture, \$30,000, "Postharvest Pest Control using Oxygenated Phosphine Fumigation and Nitric Oxide Fumigation."

Ragland, Gregory, National Science Foundation, \$128,671, "Collaboration Research: Testing for Physiological and Genetic Independence of Rapidly Evolving Lifecycle Components in the Apple Maggot, a Model for Seasonal Adaptation."

Ruberson, John R., Multi-Sponsor, \$59,500, "AEN Multi-Sponsor Off-Campus 26."

Ruberson, John R., US Department of Agriculture, \$60,000, "Biology of Dipteran Vectors of diseases Impacting Livestock and Humans."

Ruberson, John R., US Department of Agriculture, \$55,000, "Wheat-Hessian Fly Interaction and Plant Resistance Mechanisms."

Ruberson, John R., and Cohnstaedt, Lee, Vestergaard Frandsen S.A., \$15,000, "Vestergaard Animal Health Impact Fellowship."

Schwarting, Holly N., Chen, Ming-Shun, Smith, C. Michael, and Whitworth, Robert "Jeff" J., Kansas Wheat Commission, \$12,500, "Impact of Temperature on Genetic Resistance to Hessian Fly, Wheat Curl Mite and Russian Wheat Aphid."

Smith, C. Michael, McCornack, Brian P., Schapaugh Jr, William T. (Agronomy), and **Whitworth, Robert "Jeff" J.**, Kansas Soybean Commission, \$16,015, "Development of Genetic, Chemical and Population-based Tactics to Manage Key Kansas Soybean Insect Pests."

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Smith, C. Michael, and Lilja, Nina K. (Dean of Agriculture and Director of AES), US Agency for International Development, \$171,463, "BHEARD Program: Liberia."

Smith, C. Michael, US Department of Agriculture, \$265,461, "Principles Underlying the Spread of Sorghum Halepense, Toward its Containment and Mitigation."

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Whitworth, Robert "Jeff" J., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy, Kennelly, Megan** (Plant Pathology), **McCornack, Brian P., Miller, Frannie L., Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), and **Zukoff, Sarah N.**

(Southwest Area Office), US Department of Agriculture, \$13,900, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Zhu, Kun Yan, TechAccel, LLC, \$30,000, "Development of Novel RNAi-Based Baits for Managing the German Cockroach."

Zhu, Kun Yan, TechAccel, LLC, \$30,000, "Evaluation and Possible Improvement of Solubility and Suspension Stability of Chitosan-based dsRNA Nanoparticles in Water."

Zhu, Kun Yan, US Department of Agriculture, \$150,000, "Improvement of Aerosol Insecticide Efficiency Against Stored Product Insects."

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Zolnerowich, Gregory, and **McCornack, Brian P.**, Kansas Department of Wildlife and Parks, \$2,500, "Pollinator Responses to Rangeland Management Practices in the Flint Hills Ecoregion."

Zurek, Ludek, TechAccel, LLC, \$1,600, "Project Nightcrawler."

Zurek, Ludek, US Department of Agriculture, \$13,671, "Genomics and Metagenomics of Antimicrobial-resistance in the Poultry Production Ecosystem."

Zurek, Ludek, Bai, Jianfa (Diagnostic Medicine/Pathobiology), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), **Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), **Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), and **Tonsor, Glynn T.** (Agricultural Economics), US Department of Agriculture, \$43,711, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

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Kastner, Curtis L., Bai, Jianfa (Diagnostic Medicine/Pathobiology), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), **Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), **Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), **Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$262,267, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

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Alavi, Sajid, United Sorghum Checkoff Program, \$149,900, "Sustainability, Oxidative Stress Mitigation and Sensory Characteristics of Sorghum-based Canine Diets Designed for the International Market."

Aldrich, Greg, 3D Corporate Solutions, LLC, \$70,605, "Evaluation of Faba Beans (*Vicia faba* L.) as a Dietary Ingredient in Dog Diets."

Aldrich, Greg, and **Koppel, Kadri** (Human Nutrition), Camlin Fine Sciences, \$23,760, "Evaluation of Antioxidant Preservatives Applied to Chicken Fat and Fish Oil."

Aldrich, Greg, Fats and Proteins Research Foundation, Inc., \$56,595, "Flow Behavior and Spray Coating Efficiency during the Production of Rendered Protein Meals."

Aldrich, Greg, Campabadal Teran, Carlos, and Miller, Brandi M., Hill's Pet Nutrition, Inc., \$11,138, "Commercial Pet Food Industry for Veterinary Clinical Nutritionists Program."

Aldrich, Greg, Renew Biomass, \$207,345, "Evaluation of Miscanthus as a Source of Fiber in Dog and Cat Diets."

Bhadriraju, Subramanyam, Floros, John D. (Dean of Agriculture and Director of AES), **Leslie, John F.** (Plant Pathology), **Lilja, Nina K.** (International Agricultural Programs), **Lindshield, Brian L.** (Human Nutrition), and **Washburn, Shannon G.** (Communications), US Agency for International Development, "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

Bhadriraju, Subramanyam, US Department of Agriculture, \$42,391, "Pakistan Phytosanitary Risk Management Short-Course: Khapra Beetle."

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Campabadal Teran, Carlos, and Phillips, Thomas W. (Entomology), Kansas Crop Improvement Association, \$9,000, "Demonstrating a New Stored Wheat Cooling Technology for Improved Pest Control during On-Farm Storage."

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Campabadal Teran, Carlos, Miller, Brandi M., O'Neil III, Howard J., and Smith, Gordon L., Kansas Soybean Commission, "Market Development Grant - International Grains Program."

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Campabadal Teran, Carlos, and Schwab, Benjamin B. (Agricultural Economics), US Agency for International Development, \$50,963, "Appropriate-Scale Mechanization Consortium for Sustainable Intensification."

Campabadal Teran, Carlos, Jones, Cassandra K., and Stark, Charles, US Department of Agriculture, \$657,690, "AMPLIFIES Ghana: Assisting Management in the Poultry and Layer Industries by Feed Improvement and Efficiency Strategies in Ghana."

Campabadal Teran, Carlos, Miller, Brandi M., and O'Neil III, Howard J., US Department of Agriculture, \$60,724, "Cochran Program on Cereals and Feed Management."

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Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and O'Neil III, Howard J., US Soybean Export Council, Inc., \$36,000, "Customer Support on Purchasing."

Campabadal Teran, Carlos, Brouk, Micheal J. (Animal Sciences and Industry), **Jones, Cassandra K., Miller, Brandi M., O'Neil III, Howard J., and Stark, Charles,** US Soybean Export Council, Inc., \$14,300, "Feed/Dairy Study Team - China."

Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$24,456, "Poultry and Swine Short Courses - Japan."

Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$35,750, "USSEC Addendum to Independent Contractor Master Agreement: I6KA01M54A."

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Campabadal Teran, Carlos, Beyer, R. Scott (Animal Sciences and Industry), **Miller, Brandi M., and O'Neil III, Howard J.,** US Soybean Export Council, Inc., \$23,750, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01M54B."

Campabadal Teran, Carlos, Miller, Brandi M., and O'Neil III, Howard J., US Soybean Export Council, Inc., \$16,200, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01U54C."

Fowler, Mark, Campabadal Teran, Carlos, O'Neil III, Howard J., and Smith, Gordon L., Kansas Grain Sorghum Commission, "Market Development Grant - International Grains Program."

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Huss, Anne R., Jones, Cassandra K., and Stark, Charles, BASF Corporation, "Evaluation of Amasil NA and Pelleting to Mitigate Salmonella in a Broiler Diet."

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Huss, Anne R., DeRouchey, Joel M. (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Jones, Cassandra K., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, "Evaluating the Effects of Chemical Treatments to Reduce the Likelihood of PEDV Transmission by Feed Manufacturing Equipment."

Jones, Cassandra K., Huss, Anne R., and Stark, Charles, BASF Corporation, \$44,570, "Evaluation of Amasil NA and Pelleting to Mitigate Salmonella in a Broiler Diet."

Jones, Cassandra K., and Stark, Charles, Kay Dee LLC, \$5,625, "Evaluating the Effects of Conditioning Temperature and Probiotic Levels on Resulting Probiotic Stability."

Jones, Cassandra K., and Huss, Anne R., Metabolic Technologies Inc., \$26,250, "Preliminary Evaluation of a Chemical Additive to Mitigate Salmonella in Kibble."

Jones, Cassandra K., and Stark, Charles, Micro-Lite LLC, \$9,000, "Evaluating the Effects Magnesium-Mica on Pellet Quality and Aflatoxin Concentration in Animal Feeds."

Jones, Cassandra K., DeRouchey, Joel M. (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Huss, Anne R., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, \$82,353, "Assessing the Effects of Medium Chain Fatty Acids and Fat Sources on PEDV by qRT-PCR and Bioassay."

Jones, Cassandra K., DeRouchey, Joel M. (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Huss, Anne R., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, "Evaluating the Effects of Chemical Treatments to Reduce the Likelihood of PEDV Transmission by Feed Manufacturing Equipment."

Jones, Cassandra K., National Pork Board, \$1,000, "PEDV Feed and Feed Systems Fact Sheet Development."

Jones, Cassandra K., and Miller, Brandi M., National Renderers Association, \$5,000, "Rendering Code of Practice Online Curriculum."

Jones, Cassandra K., Campabadal Teran, Carlos, and Stark, Charles, US Department of Agriculture, \$657,690, "AMPLIFIES Ghana: Assisting Management in the Poultry and Layer Industries by Feed Improvement and Efficiency Strategies in Ghana."

Jones, Cassandra K., Miller, Brandi M., and Stark, Charles, US Department of Health and Human Services, \$84,655, "Compilation of a Food Safety Preventive Controls Animal Food Training Curriculum."

Jones, Cassandra K., Brouk, Micheal J. (Animal Sciences and Industry), **Campabadal Teran, Carlos, Miller, Brandi M., O'Neil III, Howard J., and Stark, Charles**, US Soybean Export Council, Inc., \$2,860, "Feed/Dairy Study Team - China."

Jones, Cassandra K., Campabadal Teran, Carlos, Miller, Brandi M., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$4,076, "Poultry and Swine Short Courses - Japan."

Jones, Cassandra K., Campabadal Teran, Carlos, Miller, Brandi M., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$7,150, "USSEC Addendum to Independent Contractor Master Agreement: I6KA01M54A."

Jones, Cassandra K., Campabadal Teran, Carlos, Miller, Brandi M., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$2,100, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01F74A."

Li, Yonghui, and Smith, Gordon L., JM Smucker Company, \$6,597, "Literature Compilation and Expert Technical Opinion in Support of Ingredient and Product Claims Around Sorghum."

Maier, Dirk E., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J., US Soybean Export Council, Inc., "Customer Support on Purchasing."

Miller, Brandi M., Aldrich, Greg, and Campabadal Teran, Carlos, Hill's Pet Nutrition, Inc., \$14,850, "Commercial Pet Food Industry for Veterinary Clinical Nutritionists Program."

Miller, Brandi M., Campabadal Teran, Carlos, O'Neil III, Howard J., and Smith, Gordon L., Kansas Corn Commission, \$18,750, "Market Development Grant - International Grains Program."

Miller, Brandi M., Campabadal Teran, Carlos, O'Neil III, Howard J., and Smith, Gordon L., Kansas Soybean Commission, "Market Development Grant - International Grains Program."

Miller, Brandi M., Campabadal Teran, Carlos, O'Neil III, Howard J., and Smith, Gordon L., Kansas Wheat Commission, "Market Development Grant - IGP Institute."

Miller, Brandi M., and Jones, Cassandra K., National Renderers Association, \$5,000, "Rendering Code of Practice Online Curriculum."

Miller, Brandi M., Campabadal Teran, Carlos, and O'Neil III, Howard J., US Department of Agriculture, "Cochran Program on Cereals and Feed Management."

Miller, Brandi M., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J., US Department of Agriculture, "Cochran Program on US Wheat Classification and Standards."

Miller, Brandi M., Jones, Cassandra K., and Stark, Charles, US Department of Health and Human Services, \$5,644, "Compilation of a Food Safety Preventive Controls Animal Food Training Curriculum."

Miller, Brandi M., Brouk, Micheal J. (Animal Sciences and Industry), Campabadal Teran, Carlos, Jones, Cassandra K., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$2,860, "Feed/Dairy Study Team - China."

Miller, Brandi M., Campabadal Teran, Carlos, Jones, Cassandra K., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$4,076, "Poultry and Swine Short Courses - Japan."

Miller, Brandi M., Campabadal Teran, Carlos, Jones, Cassandra K., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$14,300, "USSEC Addendum to Independent Contractor Master Agreement: I6KA01M54A."

Miller, Brandi M., Campabadal Teran, Carlos, Jones, Cassandra K., O'Neil III, Howard J., and Stark, Charles, US Soybean Export Council, Inc., \$2,100, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01F74A."

Miller, Brandi M., Beyer, R. Scott (Animal Sciences and Industry), Campabadal Teran, Carlos, and O'Neil III, Howard J., US Soybean Export Council, Inc., \$9,500, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01M54B."

Miller, Brandi M., Campabadal Teran, Carlos, and O'Neil III, Howard J., US Soybean Export Council, Inc., \$3,600, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01U54C."

O'Neil III, Howard J., Campabadal Teran, Carlos, Miller, Brandi M., and Smith, Gordon L., Kansas Corn Commission, \$18,750, "Market Development Grant - International Grains Program."

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Smith, Gordon L., Kansas Grain Sorghum Commission, "Market Development Grant - International Grains Program."

O'Neil III, Howard J., Campabadal Teran, Carlos, Miller, Brandi M., and Smith, Gordon L., Kansas Soybean Commission, "Market Development Grant - International Grains Program."

O'Neil III, Howard J., Campabadal Teran, Carlos, Miller, Brandi M., and Smith, Gordon L., Kansas Wheat Commission, "Market Development Grant - IGP Institute."

O'Neil III, Howard J., Campabadal Teran, Carlos, and Miller, Brandi M., US Department of Agriculture, "Cochran Program on Cereals and Feed Management."

O'Neil III, Howard J., and Campabadal Teran, Carlos, US Department of Agriculture, \$16,860, "Cochran Program on Grain Management for Feed and Milling."

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Miller, Brandi M., US Department of Agriculture, "Cochran Program on US Wheat Classification and Standards."

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Maier, Dirk E., US Soybean Export Council, Inc., "Customer Support on Purchasing."

O'Neil III, Howard J., Brouk, Micheal J. (Animal Sciences and Industry), **Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., and Stark, Charles**, US Soybean Export Council, Inc., \$2,860, "Feed/Dairy Study Team - China."

O'Neil III, Howard J., Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., and Stark, Charles, US Soybean Export Council, Inc., \$4,076, "Poultry and Swine Short Courses - Japan."

O'Neil III, Howard J., US Soybean Export Council, Inc., \$32,000, "U.S. Soy Crop Quality Team."

O'Neil III, Howard J., Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., and Stark, Charles, US Soybean Export Council, Inc., \$7,150, "USSEC Addendum to Independent Contractor Master Agreement: I6KA01M54A."

O'Neil III, Howard J., Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., and Stark, Charles, US Soybean Export Council, Inc., \$2,100, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01F74A."

O'Neil III, Howard J., Beyer, R. Scott (Animal Sciences and Industry), **Campabadal Teran, Carlos, and Miller, Brandi M.**, US Soybean Export Council, Inc., \$9,500, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01M54B."

O'Neil III, Howard J., Campabadal Teran, Carlos, and Miller, Brandi M., US Soybean Export Council, Inc., \$16,200, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01U54C."

Regan, Rebecca A., Fritz, Allan K. (Agronomy), **Poland, Jesse A.** (Plant Pathology), and **Zhang, Guorong** (Agricultural Research Center-Hays), General Mills, Inc., \$41,626, "Applied Genomics for Functional Foods in Wheat: Connecting Wheat Variety Development with Targeted, Novel Consumer Quality."

Regan, Rebecca A., Kansas Wheat Alliance, Inc., \$1,000, "Use of Solvent Retention Capacity as a Potential Early Screening Technique for the KSU Hard Winter Wheat Breeding Program."

Regan, Rebecca A., Kansas Wheat Commission, \$120,000, "Kansas Wheat Quality Lab: KAES Wheat Breeding Quality Evaluation Program 2016."

Regan, Rebecca A., Kansas Wheat Commission, \$4,000, "Preferred Hard Winter Wheat Varieties for Kansas 2016: Milling and Bread Baking Quality Rankings."

Regan, Rebecca A., Kansas Wheat Commission, \$4,000, "Preferred Hard Winter Wheat Varieties for Kansas: Milling & Bread Baking Quality Rankings."

Shi, Yong Cheng, Kansas Department of Commerce / Kansas Bioscience Authority, \$50,000, "Agreement with Kansas Bioscience Authority."

Shi, Yong Cheng, Tate & Lyle Ingredients Americas LLC, \$128,262, "Developing Clean- label Starches with Improved Cold-storage Stability."

Shi, Yong Cheng, The National Engineering Research Center of Corn Deep Processing, \$187,441, "Development and Application of Converting Starch to Glucose and Non-cooking Fermentation Technology."

Smith, Gordon L., and **Li, Yonghui**, JM Smucker Company, "Literature Compilation and Expert Technical Opinion in Support of Ingredient and Product Claims Around Sorghum."

Smith, Gordon L., **Campabadal Teran, Carlos**, **Miller, Brandi M.**, and **O'Neil III, Howard J.**, Kansas Corn Commission, \$18,750, "Market Development Grant - International Grains Program."

Smith, Gordon L., **Campabadal Teran, Carlos**, **Fowler, Mark**, and **O'Neil III, Howard J.**, Kansas Grain Sorghum Commission, \$30,000, "Market Development Grant - International Grains Program."

Smith, Gordon L., **Campabadal Teran, Carlos**, **Miller, Brandi M.**, and **O'Neil III, Howard J.**, Kansas Soybean Commission, \$200,000, "Market Development Grant - International Grains Program."

Smith, Gordon L., Kansas State University Foundation, \$60,000, "Grain Science & Industry NAMA Instructor of Milling."

Smith, Gordon L., Kansas State University Foundation, \$95,000, "Grain Science and Industry Buhler Instructor of Milling."

Smith, Gordon L., Kansas State University Foundation, \$50,000, "Walker Fellowship - GRA Funding."

Smith, Gordon L., **Campabadal Teran, Carlos**, **Miller, Brandi M.**, and **O'Neil III, Howard J.**, Kansas Wheat Commission, \$100,000, "Market Development Grant - IGP Institute."

Smith, Gordon L., and **Thiele, Shawn M.**, Praxair, Inc., "Testing and Evaluation of Pneumatic Conveying System."

Stark, Charles, **Huss, Anne R.**, and **Jones, Cassandra K.**, BASF Corporation, \$44,570, "Evaluation of Amasil NA and Pelleting to Mitigate Salmonella in a Broiler Diet."

Stark, Charles, and **Jones, Cassandra K.**, Kay Dee LLC, \$5,625, "Evaluating the Effects of Conditioning Temperature and Probiotic Levels on Resulting Probiotic Stability."

Stark, Charles, and **Jones, Cassandra K.**, Micro-Lite LLC, \$9,000, "Evaluating the Effects Magnesium-Mica on Pellet Quality and Aflatoxin Concentration in Animal Feeds."

Stark, Charles, DeRouchey, Joel M. (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Huss, Anne R., Jones, Cassandra K., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, "Assessing the Effects of Medium Chain Fatty Acids and Fat Sources on PEDV by qRT-PCR and Bioassay."

Stark, Charles, DeRouchey, Joel M. (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Huss, Anne R., Jones, Cassandra K., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, "Evaluating the Effects of Chemical Treatments to Reduce the Likelihood of PEDV Transmission by Feed Manufacturing Equipment."

Stark, Charles, POET, LLC, \$29,700, "DDGS Fat Level and Its Influence on Pellet Quality."

Stark, Charles, and **Drouillard, James S.** (Animal Sciences and Industry), Syngenta Crop Protection, LLC, \$45,154, "Steam Flaking."

Stark, Charles, Campabadal Teran, Carlos, and **Jones, Cassandra K.,** US Department of Agriculture, \$677,620, "AMPLIFIES Ghana: Assisting Management in the Poultry and Layer Industries by Feed Improvement and Efficiency Strategies in Ghana."

Stark, Charles, Jones, Cassandra K., and **Miller, Brandi M.,** US Department of Health and Human Services, \$22,575, "Compilation of a Food Safety Preventive Controls Animal Food Training Curriculum."

Stark, Charles, Brouk, Micheal J. (Animal Sciences and Industry), **Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M.,** and **O'Neil III, Howard J.,** US Soybean Export Council, Inc., \$2,860, "Feed/Dairy Study Team - China."

Stark, Charles, Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., and **O'Neil III, Howard J.,** US Soybean Export Council, Inc., \$4,076, "Poultry and Swine Short Courses - Japan."

Stark, Charles, Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., and **O'Neil III, Howard J.,** US Soybean Export Council, Inc., \$7,150, "USSEC Addendum to Independent Contractor Master Agreement: I6KA01M54A."

Stark, Charles, Campabadal Teran, Carlos, Jones, Cassandra K., Miller, Brandi M., and **O'Neil III, Howard J.,** US Soybean Export Council, Inc., \$2,100, "USSEC Addendum to Independent Contractor Master Agreement: 16KA01F74A."

Thiele, Shawn M., and **Smith, Gordon L.,** Praxair, Inc., \$20,000, "Testing and Evaluation of Pneumatic Conveying System."

Vadlani, Praveen V., Kansas State University Foundation, \$40,000, "Grain Science & Industry Lortscher Professorship."

Vadlani, Praveen V., and **Hohn, Keith L.** (Chemical Engineering), US Department of Defense, \$37,500, "Novel Biomass Conversion Process for Production of Butylenes."

HORTICULTURE, FORESTRY AND RECREATION RESOURCES

Barden, Charles J., US Department of Agriculture, \$15,000, "Great Plains Windbreak Crop Yield Study."

Barden, Charles J., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), US Department of the Interior, \$23,805 (includes \$11,802 from In-Kind), "Kansas Water Resources Research Institute 2016."

Blocksome, Carolyn E., Hoyle, Jared, and Shaw McBee, Peg, Kansas Department of Transportation, \$17,688, "Preliminary Evaluation of Perennial Ryegrass and Buffalograss Blends for Seeded Roadside Establishment to Comply with Storm Water Control Regulations."

Blocksome, Carolyn E., US Department of the Interior, "Great Plains Fire Science Exchange."

Boyer, Cheryl R., Cloyd, Raymond A. (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared, Johnson, Wendy** (Entomology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S., Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$22,240, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Bremer, Dale J., Braun, Ross C., and Hoyle, Jared, Golf Course Superintendents Association of America, \$3,965, "Performance and Recovery of Four Turfgrass Species Subjected to Golf Cart Traffice during Prolonged Drought.."

Fry, Jack D., CJ BIO America, \$9,999, "CJ BioAmerica Research."

Fry, Jack D., Hoyle, Jared, and Kennelly, Megan (Plant Pathology), Heart of America GCSA, \$1,700, "Turf Research."

Fry, Jack D., and Kennelly, Megan (Plant Pathology), National Turfgrass Evaluation Program, Inc., \$750, "2012 National Tall Fescue Test Ancillary Trial-Brown Patch Tolerance (TF-12-16)."

Fry, Jack D., National Turfgrass Evaluation Program, Inc., \$1,000, "2014 National Bentgrass (Fairway/Tee) Test; BTF-14-01."

Fry, Jack D., National Turfgrass Evaluation Program, Inc., \$1,500, "2014 National Bentgrass (Putting Green) Test; BTG-14-10."

Fry, Jack D., National Turfgrass Evaluation Program, Inc., \$1,500, "Research Support Agreement (Grant-in-Aid) for the 2013 National Bermudagrass Test BG-13-04."

Fry, Jack D., National Turfgrass Evaluation Program, Inc., \$2,500, "Research Support Agreement (Grant-in-Aid) for the 2013 National Zoysiagrass Test ZG-13-04."

Fry, Jack D., National Turfgrass Evaluation Program, Inc., \$600, "Turfgrass Testing - Kentucky Bluegrass."

Griffin, Jason, Schmidt, J. Frank, Family Charitable Foundation, \$4,000, "Evaluation of Ornamental Species for the Great Plains."

Griffin, Jason, Pliakoni, Eleni, Rivard, Cary L., and Taylor, Mykel R. (Agricultural Economics), US Department of Agriculture, \$58,790, "Strengthening Organic Sweet Potato Propagation Systems in the North Central Region."

Hoyle, Jared, Braun, Ross C., and Bremer, Dale J., Golf Course Superintendents Association of America, \$3,965, "Performance and Recovery of Four Turfgrass Species Subjected to Golf Cart Traffice during Prolonged Drought.."

Hoyle, Jared, Fry, Jack D., and Kennelly, Megan (Plant Pathology), Heart of America GCSA, \$1,650, "Turf Research."

Hoyle, Jared, Blocksome, Carolyn E., and Shaw McBee, Peg, Kansas Department of Transportation, \$17,688, "Preliminary Evaluation of Perennial Ryegrass and Buffalograss Blends for Seeded Roadside Establishment to Comply with Storm Water Control Regulations."

Hoyle, Jared, Multi-Sponsor, \$10,500, "AHF Multi-Sponsor Research 26."

Hoyle, Jared, Boyer, Cheryl R., Cloyd, Raymond A. (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Johnson, Wendy** (Entomology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S., Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$22,240, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Miller, Chad T., and Williams, Kimberly A., Gloeckner Foundation, Inc. (Fred C.), \$3,500, "Understanding and Abating Intumescence Development in Cuphea spp.."

Park, Sunghun, Kansas Corn Commission, \$35,930, "A Genetic Engineering Strategy to Develop Heat, Drought, and Cold Tolerant Kansas Corn."

Park, Sunghun, Pliakoni, Eleni, Rajashekar, Channa B., and Rivard, Cary L., US Department of Agriculture, \$70,405, "Characterizing and Managing Light Factors during Pre- and Post Harvest Stages to Improve Nutritive Value of Vegetables Grown in High Tunnels."

Park, Sunghun, Bockus, William W. (Plant Pathology), **DeWolf, Erick D.** (Plant Pathology), **Stack, James P.** (Plant Pathology), **Trick, Harold N.** (Plant Pathology), and **Valent, Barbara S.** (Plant Pathology), US Department of Agriculture, \$11,000, "Novel Strategies for Managing Blast Diseases on Rice and Wheat."

Pliakoni, Eleni, Park, Sunghun, Rajashekar, Channa B., and Rivard, Cary L., US Department of Agriculture, \$46,937, "Characterizing and Managing Light Factors during Pre- and Post Harvest Stages to Improve Nutritive Value of Vegetables Grown in High Tunnels."

Pliakoni, Eleni, Griffin, Jason, Rivard, Cary L., and Taylor, Mykel R. (Agricultural Economics), US Department of Agriculture, \$58,790, "Strengthening Organic Sweet Potato Propagation Systems in the North Central Region."

Pliakoni, Eleni, Aramouni, Fadi M. (Animal Sciences and Industry), **Bates, Marlin A.** (County Agents - Metropolitan Sector), **Gragg, Sara E.** (Animal Sciences and Industry), **Nwadike, Londa S.** (Director of Cooperative Extension), **Phebus, Randall K.** (Animal Sciences and Industry), and **Rivard, Cary L.**, US Food and Drug Administration, \$400, "Strategy for Successful Implementation of FSMA in the North Central Region through Adoption of a Systems Approach and Stakeholder Engagement Framework."

Rajashekar, Channa B., Park, Sunghun, Pliakoni, Eleni, and Rivard, Cary L., US Department of Agriculture, \$234,683, "Characterizing and Managing Light Factors during Pre- and Post Harvest Stages to Improve Nutritive Value of Vegetables Grown in High Tunnels."

Rivard, Cary L., Park, Sunghun, Pliakoni, Eleni, and Rajashekar, Channa B., US Department of Agriculture, \$117,342, "Characterizing and Managing Light Factors during Pre- and Post Harvest Stages to Improve Nutritive Value of Vegetables Grown in High Tunnels."

Rivard, Cary L., Cloyd, Raymond A. (Entomology), **Kennelly, Megan** (Plant Pathology), and **Presley, DeAnn R.** (Agronomy), US Department of Agriculture, \$9,646, "Soil Health Bootcamp and Applications to Sustainable Vegetable Cropping: Professional Development for Local Agriculture Educators."

Rivard, Cary L., Griffin, Jason, Pliakoni, Eleni, and **Taylor, Mykel R.** (Agricultural Economics), US Department of Agriculture, \$58,790, "Strengthening Organic Sweet Potato Propagation Systems in the North Central Region."

Rivard, Cary L., Aramouni, Fadi M. (Animal Sciences and Industry), **Bates, Marlin A.** (County Agents - Metropolitan Sector), **Gragg, Sara E.** (Animal Sciences and Industry), **Nwadike, Londa S.** (Director of Cooperative Extension), **Phebus, Randall K.** (Animal Sciences and Industry), and **Pliakoni, Eleni**, US Food and Drug Administration, \$2,000, "Strategy for Successful Implementation of FSMA in the North Central Region through Adoption of a Systems Approach and Stakeholder Engagement Framework."

Sharp, Ryan L., US Department of the Interior, \$37,367, "Conduct Visitor Use Study at Cumberland Island National Seashore (CUIS) to Support Visitor Experience and Resource Protection Plan."

Sharp, Ryan L., and **Skibins, Jeffrey**, US Department of the Interior, \$61,686, "Monitoring Horseback Ridership in Ozark National Scenic Riverways."

Shaw McBee, Peg, Blocksome, Carolyn E., and **Hoyle, Jared**, Kansas Department of Transportation, \$18,224, "Preliminary Evaluation of Perennial Ryegrass and Buffalograss Blends for Seeded Roadside Establishment to Comply with Storm Water Control Regulations."

Shoemaker, Candice A., Multi-Sponsor, \$2,000, "AHF Multi Sponsor Extension 0."

Shoemaker, Candice A., Multi-Sponsor, \$76,000, "AHF Multi-Sponsor Research 0."

Skibins, Jeffrey, and **Sharp, Ryan L.**, US Department of the Interior, \$61,686, "Monitoring Horseback Ridership in Ozark National Scenic Riverways."

Upham, Ward S., Boyer, Cheryl R., Cloyd, Raymond A. (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared, Johnson, Wendy** (Entomology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$22,240, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Williams, Kimberly A., and **Miller, Chad T.**, Gloeckner Foundation, Inc. (Fred C.), \$3,500, "Understanding and Abating Intumescence Development in Cuphea spp.."

INTERNATIONAL AGRICULTURAL PROGRAMS

Lilja, Nina K., and **Lambert, David** (Agricultural Economics), US Agency for International Development, "BHEARD Program: Bangladesh."

Lilja, Nina K., Bhadriraju, Subramanyam (Grain Science and Industry), **Floros, John D.** (Dean of Agriculture and Director of AES), **Leslie, John F.** (Plant Pathology), **Lindshield, Brian L.** (Human Nutrition), and **Washburn, Shannon G.** (Communications), US Agency for International Development, "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

Lilja, Nina K., Pagadala, P. V. Vara (Dean of Agriculture and Director of AES), and **Pierzynski, Gary M.** (Agronomy), US Agency for International Development, "Innovation Lab on Sustainable Intensification."

Lilja, Nina K., Aguilar, Jonathan P. (Southwest Area Office), **Barnes, Philip L.** (Biological and Agricultural Engineering), **Bolton, Debra** (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrcs & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, \$2,798, "On- Farm Water Management Trainings - Pakistan Part 2."

KS CTR FOR AG RSRCES & THE ENV / KS WATER RSRCE RSRCH INST

Blocksome, Carolyn E., US Department of the Interior, \$649,998, "Great Plains Fire Science Exchange."

Devlin, Daniel L., City of Hays, KS, \$9,000, "Storm Water Educational Outreach Efforts."

Devlin, Daniel L., Kansas Department of Health and Environment, \$243,752, "Kansas Watershed Specialists."

Devlin, Daniel L., Kansas Department of Health and Environment, \$202,273, "KS WRAPS: Little Arkansas River Watershed - Implementation."

Devlin, Daniel L., and **Golden, Bill B.** (Agricultural Economics), Kansas Water Office, \$6,250, "Monitoring the Impacts of Sheridan County 6 Local Enhanced Management Area."

Devlin, Daniel L., Aguilar, Jonathan P. (Southwest Area Office), **Barnes, Philip L.** (Biological and Agricultural Engineering), **Bolton, Debra** (Southwest Area Office), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, \$5,596, "On-Farm Water Management Trainings - Pakistan Part 2."

Devlin, Daniel L., Middendorf, Gerad D. (Sociology, Anthropology, and Social Work), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), **Shoup, Douglas E.** (Southeast Area Office), **Swamy, Aavudai Anandhi** (Agronomy), **Tomlinson, Peter J.** (Agronomy), and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, \$1,065,505, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Devlin, Daniel L., US Department of Agriculture, \$511,508, "Water Management to Sustain the Economic Activity from the Ogallala Aquifer on the Southern High Plains - KSU."

Devlin, Daniel L., US Department of the Interior, \$45,000, "Direction of Peer Review and Selection Panel Activities."

Devlin, Daniel L., Barden, Charles J. (Horticulture, Forestry and Recreation Resources), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), US Department of the Interior, \$137,337 (includes \$68,086 from In-Kind), "Kansas Water Resources Research Institute 2016."

Devlin, Daniel L., Hutchinson, Stacy L. (Biological and Agricultural Engineering), and **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), US Department of the Interior, \$13,350, "Water Research for the Fort Riley Net Zero Initiative."

Devlin, Daniel L., US Environmental Protection Agency, \$192,870 (includes \$48,580 from Third Party Match / In-Kind), "KS WRAPS - Big Creek Middle Smoky Hill River Watershed WRAPS (Kanopolis Reservoir) Implementation Years 5 - 7 SFY 2014 - 2016."

Devlin, Daniel L., US Environmental Protection Agency, \$60,486 (includes \$10,486 from Third Party Match), "KS WRAPS: Lower Smoky Hill River Watershed (Upper Portion) - Implementation."

Devlin, Daniel L., and **Leatherman, John C.** (Agricultural Economics), US Environmental Protection Agency, \$29,853 (includes \$6,020 from Watershed Stakeholders), "NPS Management Plan Technical Assistance SPF16."

George, Herschel C., and **Tomlinson, Peter J.** (Agronomy), Kansas Department of Agriculture, "Effectiveness of Short-term Poultry Litter Storage Option for Protecting Kansas Water Quality."

NORTHWEST RESEARCH EXTENSION CENTER

Aiken, Robert M., **Bradford, Barry J.** (Animal Sciences and Industry), **Harrington Jr, John A.** (Geography), **Lin, Xiaomao** (Agronomy), **Min, Doohong** (Agronomy), and **Taylor, Mykel R.** (Agricultural Economics), Kansas Board of Regents, \$14,000, "Evaluating Teff as a Dryland Forage Crop for Water-Limited Areas in Kansas."

Aiken, Robert M., **Little, Christopher R.** (Plant Pathology), and **Perumal, Ramasamy** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$9,900, "Development of Sorghum Germplasm with Enhanced Drought Tolerance and Higher Grain Yield."

Aiken, Robert M., **Fritz, Allan K.** (Agronomy), **Jagadish, Krishna** (Agronomy), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$2,856, "New Selection Strategies for Drought-Tolerant Wheat."

Aiken, Robert M., Monsanto Company, \$21,760, "Service Order No. 30."

Aiken, Robert M., and **Lamm, Freddie R.**, National Sunflower Association, \$10,000, "Timing of Irrigation for Tall and Short Stature Sunflower Hybrids to Help Improve Land Allocation Decisions."

Aiken, Robert M., West Central, Inc., \$8,160, "XLRate Trial."

Lamm, Freddie R., **Cramer, Gary L.** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$18,750, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Lamm, Freddie R., and **Aiken, Robert M.**, National Sunflower Association, \$10,000, "Timing of Irrigation for Tall and Short Stature Sunflower Hybrids to Help Improve Land Allocation Decisions."

Lamm, Freddie R., **Aguilar, Jonathan P.** (Southwest Area Office), **Barnes, Philip L.** (Biological and Agricultural Engineering), **Bolton, Debra** (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, \$2,798, "On- Farm Water Management Trainings - Pakistan Part 2."

OFFICE OF ACADEMIC PROGRAMS

Kane, Mary R., US Department of Education, \$75,427, "FFA-YF/YFW Organization."

PLANT BIOTECHNOLOGY CENTER

Akhunova, Alina, **Akhunov, Eduard D.** (Plant Pathology), **Friebe, Bernd** (Plant Pathology), and **Gill, Bikram S.** (Plant Pathology), Kansas Wheat Commission, "Whole Exome Re-sequencing of Grass Species Valuable for Wheat Breeding in Kansas."

Akhunova, Alina, Akhunov, Eduard D. (Plant Pathology), and **Gill, Bikram S.** (Plant Pathology), Kansas Wheat Commission, "Whole Exome Re-sequencing of Grass Species Valuable for Wheat Breeding in Kansas."

DeWolf, Erick D., US Department of Agriculture, \$62,887, "A Predictive Model to Increase Adoption of IPM of a Mite-Virus Disease Complex in Wheat."

PLANT PATHOLOGY

Akhunov, Eduard D., Heartland Plant Innovations, Inc., \$81,070, "Collaborative Research to Enhance the Flavor and Nutrition of Whole Wheat Foods."

Akhunov, Eduard D., Akhunova, Alina (Plant Biotechnology Center), **Friebe, Bernd**, and **Gill, Bikram S.**, Kansas Wheat Commission, \$60,000, "Whole Exome Re-sequencing of Grass Species Valuable for Wheat Breeding in Kansas."

Akhunov, Eduard D., Akhunova, Alina (Plant Biotechnology Center), and **Gill, Bikram S.**, Kansas Wheat Commission, \$60,000, "Whole Exome Re-sequencing of Grass Species Valuable for Wheat Breeding in Kansas."

Akhunov, Eduard D., and **Fritz, Allan K.** (Agronomy), US Department of Agriculture, \$153,746, "Empowering Wheat Breeding Using the Genomic Signals of Eco-Geographical Adaptation."

Bockus, William W., DeWolf, Erick D., Friebe, Bernd, Fritz, Allan K. (Agronomy), **Gill, Bikram S.**, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$24,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Bockus, William W., US Department of Agriculture, \$104,300, "Improvement of Hard Winter Wheat for FHB Resistance."

Bockus, William W., DeWolf, Erick D., Park, Sunghun (Horticulture, Forestry and Recreation Resources), **Stack, James P., Trick, Harold N.**, and **Valent, Barbara S.**, US Department of Agriculture, "Novel Strategies for Managing Blast Diseases on Rice and Wheat."

DeWolf, Erick D., Knapp, Mary C. (Agronomy), and **Redmond, Christopher A.** (Agronomy), Kansas Crop Improvement Association, \$11,400, "Kansas Wheat Dashboard: Information about Emerging Stripe Rust Epidemics and Other Threats to Wheat Production."

DeWolf, Erick D., Bockus, William W., Friebe, Bernd, Fritz, Allan K. (Agronomy), **Gill, Bikram S.**, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

DeWolf, Erick D., Friebe, Bernd, Fritz, Allan K. (Agronomy), **Gill, Bikram S.**, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$24,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

DeWolf, Erick D., US Department of Agriculture, \$71,500, "Acquisition of Goods and Services."

DeWolf, Erick D., US Department of Agriculture, \$36,300, "Acquisition of Goods and Services."

DeWolf, Erick D., Bockus, William W., Park, Sunghun (Horticulture, Forestry and Recreation Resources), **Stack, James P., Trick, Harold N.**, and **Valent, Barbara S.**, US Department of Agriculture, "Novel Strategies for Managing Blast Diseases on Rice and Wheat."

DeWolf, Erick D., US Department of Agriculture, \$86,424, "Prediction Models and Improved Pre-Harvest Estimates of Deoxynivalenol."

DeWolf, Erick D., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy** (Entomology), **Kennelly, Megan, McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$13,900, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

DeWolf, Erick D., US Department of Agriculture, \$190,062, "Wheat Rust Resistance Research."

Dobesh, Sharon, and **Stack, James P.**, US Department of Agriculture, \$19,800, "Implementing the ETKnet SOP Sample Tracking System into the NPDN Exercise Module."

Fellers, John P., Fritz, Allan K. (Agronomy), and **Trick, Harold N.**, Kansas Wheat Commission, "Transgenic Approaches for Trait Enhancement in Wheat."

Friebe, Bernd, Gill, Bikram S., and **Koo, Dalhoe**, Kansas Wheat Commission, \$43,200, "Chromosome Engineering and Development of Wheat Germplasm Resistant to Barley Yellow Dwarf Virus."

Friebe, Bernd, Bockus, William W., DeWolf, Erick D., Fritz, Allan K. (Agronomy), **Gill, Bikram S.**, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Friebe, Bernd, DeWolf, Erick D., Fritz, Allan K. (Agronomy), **Gill, Bikram S.**, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Friebe, Bernd, Gill, Bikram S., and **Koo, Dalhoe**, Kansas Wheat Commission, \$43,200, "Identification and Evaluation of Novel Sources of Barley Yellow Dwarf Resistance."

Friebe, Bernd, Akhunov, Eduard D., Akhunova, Alina (Plant Biotechnology Center), and **Gill, Bikram S.**, Kansas Wheat Commission, "Whole Exome Re-sequencing of Grass Species Valuable for Wheat Breeding in Kansas."

Friebe, Bernd, and **Gill, Bikram S.**, US Department of Agriculture, \$9,754, "New Sources of Resistance to FHB and DON in Wheat."

Gill, Bikram S., Bayer CropScience, LP, \$50,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., General Mills, Inc., \$50,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., Heartland Plant Innovations, Inc., \$50,000, "Partner Agreement for I/UCR."

Gill, Bikram S., Kansas Department of Agriculture, \$210,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., Kansas Wheat Alliance, Inc., \$9,090, "Partner Agreement for I/UCRC."

Gill, Bikram S., Friebe, Bernd, and **Koo, Dalhoe**, Kansas Wheat Commission, "Chromosome Engineering and Development of Wheat Germplasm Resistant to Barley Yellow Dwarf Virus."

Gill, Bikram S., Bockus, William W., DeWolf, Erick D., Friebe, Bernd, Fritz, Allan K. (Agronomy), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Gill, Bikram S., DeWolf, Erick D., Friebe, Bernd, Fritz, Allan K. (Agronomy), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Gill, Bikram S., Friebe, Bernd, and Koo, Dalhoe, Kansas Wheat Commission, "Identification and Evaluation of Novel Sources of Barley Yellow Dwarf Resistance."

Gill, Bikram S., Kansas Wheat Commission, \$50,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., Akhunov, Eduard D., Akhunova, Alina (Plant Biotechnology Center), and **Friebe, Bernd**, Kansas Wheat Commission, "Whole Exome Re-sequencing of Grass Species Valuable for Wheat Breeding in Kansas."

Gill, Bikram S., Akhunov, Eduard D., and Akhunova, Alina (Plant Biotechnology Center), Kansas Wheat Commission, "Whole Exome Re-sequencing of Grass Species Valuable for Wheat Breeding in Kansas."

Gill, Bikram S., Limagrain Cereal Seeds, LLC, \$50,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., and Poland, Jesse A., National Science Foundation, \$46,250, "I/UCRC: Collaborative Research: Wheat Genetics Resource Center: A Public-Private Consortium."

Gill, Bikram S., Pioneer Hi-Bred International, Inc., \$50,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., Syngenta Seeds, Inc., \$50,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., and Friebe, Bernd, US Department of Agriculture, \$9,754, "New Sources of Resistance to FHB and DON in Wheat."

Jardine, Douglas J., and Little, Christopher R., North Central Soybean Research Program, \$1,000, "Understanding the Role of Fungicide Programs on Soybean Health and Charcoal Rot Development."

Kennelly, Megan, Fry, Jack D. (Horticulture, Forestry and Recreation Resources), and **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), Heart of America GCSA, \$1,650, "Turf Research."

Kennelly, Megan, and Fry, Jack D. (Horticulture, Forestry and Recreation Resources), National Turfgrass Evaluation Program, Inc., \$750, "2012 National Tall Fescue Test Ancillary Trial-Brown Patch Tolerance (TF-12-16)."

Kennelly, Megan, Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D., Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy** (Entomology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$22,240, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Kennelly, Megan, Cloyd, Raymond A. (Entomology), **Presley, DeAnn R.** (Agronomy), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$38,584, "Soil Health

Bootcamp and Applications to Sustainable Vegetable Cropping: Professional Development for Local Agriculture Educators."

Koo, Dalhoe, Friebe, Bernd, and Gill, Bikram S., Kansas Wheat Commission, "Chromosome Engineering and Development of Wheat Germplasm Resistant to Barley Yellow Dwarf Virus."

Koo, Dalhoe, Friebe, Bernd, and Gill, Bikram S., Kansas Wheat Commission, "Identification and Evaluation of Novel Sources of Barley Yellow Dwarf Resistance."

Laney, Alma G., Rotenberg, Dorith, and Whitfield, Anna E., US Department of Agriculture, "Functional Analysis of Barley Yellow Dwarf Virus Isolates Containing A Novel Insertion In The Aphid Transmission Protein (Alma Laney)."

Lei, Li, and Toomajian, Christopher, US Department of Health and Human Services, "Alternative Polyadenylation Site Usage Variation and its Genetic Basis (Li Lei)."

Leslie, John F., Multi-Sponsor, \$18,000, "APP Multi-Sponsor Public Service 35."

Leslie, John F., Multi-Sponsor, \$18,550, "APP Multi-Sponsor Research 50."

Leslie, John F., Bhadriraju, Subramanyam (Grain Science and Industry), **Floros, John D.** (Dean of Agriculture and Director of AES), **Lilja, Nina K.** (International Agricultural Programs), **Lindshield, Brian L.** (Human Nutrition), and **Washburn, Shannon G.** (Communications), US Agency for International Development, "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

Leslie, John F., and Toomajian, Christopher, US Department of Agriculture, \$4,734, "Population Genomics to Identify Fusarium graminearum Genes to Target."

Leslie, John F., and McCluskey, Kevin, US Department of Health and Human Services, \$57,479, "Cryptococcus Neoformans Knockout Resource."

Little, Christopher R., Roozeboom, Kraig L. (Agronomy), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$19,540, "Breeding Sorghum for Improved Production and Utilization."

Little, Christopher R., Aiken, Robert M. (Northwest Research Extension Center), and **Perumal, Ramasamy** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, \$9,900, "Development of Sorghum Germplasm with Enhanced Drought Tolerance and Higher Grain Yield."

Little, Christopher R., Perumal, Ramasamy (Agricultural Research Center-Hays), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$34,111, "Germplasm Screening, Host-Plant Interactions, and Inoculation Techniques for Sorghum Stalk Rot Diseases in Kansas."

Little, Christopher R., Adey, Eric A. (Agronomy), and **Presley, DeAnn R.** (Agronomy), Kansas Soybean Commission, \$29,254, "Influences of Irrigation Regimes, Planting Date, and Soil Compaction Upon SDS in Kansas."

Little, Christopher R., Lin, Xiaomao (Agronomy), **Presley, DeAnn R.** (Agronomy), **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$6,465, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Little, Christopher R., North Central Soybean Research Program, \$16,050, "Seeding Disease: Biology, Management and Education."

Little, Christopher R., and Jardine, Douglas J., North Central Soybean Research Program, \$9,000, "Understanding the Role of Fungicide Programs on Soybean Health and Charcoal Rot Development."

Little, Christopher R., United Soybean Board, \$34,261, "Seedling Diseases of Soybean: Characterization and Education."

Liu, Sanzhen, Bill and Melinda Gates Foundation, \$66,294, "Transformative Strategy for Controlling Rice Disease in Developing Countries."

Liu, Sanzhen, Kansas Corn Commission, \$12,000, "Identification of Morphological Traits Correlated with Performance of Hybrid Corn under Drought Stress through Time-lapse Imaging."

McCluskey, Kevin, National Science Foundation, \$10,000, "RCN: A Community of ex Situ Microbial Germplasm Collections."

McCluskey, Kevin, and Leslie, John F., US Department of Health and Human Services, "Cryptococcus Neoformans Knockout Resource."

Poland, Jesse A., Fritz, Allan K. (Agronomy), **Regan, Rebecca A.** (Grain Science and Industry), and **Zhang, Guorong** (Agricultural Research Center-Hays), General Mills, Inc., \$83,252, "Applied Genomics for Functional Foods in Wheat: Connecting Wheat Variety Development with Targeted, Novel Consumer Quality."

Poland, Jesse A., Fritz, Allan K. (Agronomy), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$27,000, "Applying Genomic Selection in KSU Wheat Breeding Programs."

Poland, Jesse A., Asebedo, Antonio R. (Agronomy), and **Lollato, Romulo P.** (Agronomy), Kansas Wheat Alliance, Inc., \$1,939, "Developing Massive-parallel Phenotyping Systems for Winter Wheat."

Poland, Jesse A., Johnson, Wendy (Entomology), **McCornack, Brian P.** (Entomology), **Rotenberg, Dorith**, and **Smith, C. Michael** (Entomology), Kansas Wheat Commission, "Integrative and Innovative Approaches to Diminish Barley Yellow Dwarf Epidemics in Kansas Wheat."

Poland, Jesse A., Kansas Wheat Commission, \$50,000, "Small Plot Research for Wheat Genetics at KSU."

Poland, Jesse A., Monsanto Company, \$38,977, "Monsanto Beachell-Borlaug International Scholars Program (Mr. Jared I. Crain's PhD Study)."

Poland, Jesse A., and Gill, Bikram S., National Science Foundation, \$46,250, "I/UCRC: Collaborative Research: Wheat Genetics Resource Center: A Public-Private Consortium."

Poland, Jesse A., The Land Institute, \$132,513, "Application of Molecular Breeding in Kernza Improvement (Traci Kantarski)."

Poland, Jesse A., The Land Institute, \$233,141, "Development of Genomics Resources to Accelerate Thinopyrum Intermedium Improvement (Kevin Dorn)."

Poland, Jesse A., US Agency for International Development, \$1,016,218, "Rapid Development of Climate Resilient Wheat Varieties for South Asia using Genomic Selection."

Poland, Jesse A., and Morris, Geoffrey (Agronomy), US Department of Energy, \$116,198, "A Reference Phenotyping System for Energy Sorghum."

Rotenberg, Dorith, and Whitfield, Anna E., Kansas Wheat Alliance, Inc., \$20,000, "Identification of Efficient Aphid Vectors of Barley Yellow Dwarf Virus (BYDV) and Screening for Barley Yellow Dwarf (BYD) Resistance/Tolerance in Kansas Winter Wheat."

Rotenberg, Dorith, Johnson, Wendy (Entomology), **McCornack, Brian P.** (Entomology), **Poland, Jesse A.**, and **Smith, C. Michael** (Entomology), Kansas Wheat Commission, \$90,000, "Integrative and Innovative Approaches to Diminish Barley Yellow Dwarf Epidemics in Kansas Wheat."

Rotenberg, Dorith, Johnson, Wendy (Entomology), **McCornack, Brian P.** (Entomology), **Poland, Jesse A.**, and **Smith, C. Michael** (Entomology), Kansas Wheat Commission, \$79,165, "Integrative and Innovative Approaches to Diminish Barley Yellow Dwarf Epidemics in Kansas Wheat."

Rotenberg, Dorith, and Whitfield, Anna E., US Department of Agriculture, \$53,893, "Advancing Innovative Technologies and Integrated Strategies for Sustainable Management of Thrips-transmitted Tospoviruses."

Rotenberg, Dorith, Laney, Alma G., and **Whitfield, Anna E.**, US Department of Agriculture, \$142,500, "Functional Analysis of Barley Yellow Dwarf Virus Isolates Containing A Novel Insertion In The Aphid Transmission Protein (Alma Laney)."

Rotenberg, Dorith, and Whitfield, Anna E., US Department of Agriculture, \$250,000, "Molecular Mechanisms of Transmission Inhibition by a Viral Glycoprotein."

Stack, James P., CRC Plant Biosecurity, \$303,428, "Deployment of Validated Genome- Informed Bacterial Diagnostics."

Stack, James P., US Department of Agriculture, \$535,223, "Great Plains Plant Diagnostic Network."

Stack, James P., and **Dobesh, Sharon**, US Department of Agriculture, "Implementing the ETKnet SOP Sample Tracking System into the NPDN Exercise Module."

Stack, James P., **Bockus, William W.**, **DeWolf, Erick D.**, **Park, Sunghun** (Horticulture, Forestry and Recreation Resources), **Trick, Harold N.**, and **Valent, Barbara S.**, US Department of Agriculture, "Novel Strategies for Managing Blast Diseases on Rice and Wheat."

Stack, James P., US Department of Agriculture, \$60,000, "Plant Diagnostic Information System, Michigan State University (North Central Plant Diagnostic Network)."

Stack, James P., US Department of Agriculture, \$45,000, "Plant Diagnostics Information System, Cornell University."

Todd, Timothy C., **Schapaugh Jr, William T.** (Agronomy), and **Trick, Harold N.**, Kansas Soybean Commission, \$40,000, "Breeding and Management of Soybean for Improved Performance."

Todd, Timothy C., **Schapaugh Jr, William T.** (Agronomy), and **Trick, Harold N.**, Kansas Soybean Commission, \$30,331, "Enhancement of Soybean Through Genetic Engineering."

Todd, Timothy C., and **Trick, Harold N.**, North Central Soybean Research Program, \$68,089, "Engineering Resistance to Soybean Cyst Nematodes via Induced Gene Silencing (RNA)."

Toomajian, Christopher, and **Leslie, John F.**, US Department of Agriculture, \$42,605, "Population Genomics to Identify Fusarium graminearum Genes to Target."

Toomajian, Christopher, and Lei, Li, US Department of Health and Human Services, \$5,000, "Alternative Polyadenylation Site Usage Variation and its Genetic Basis (Li Lei)."

Trick, Harold N., Schapaugh Jr, William T. (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$40,000, "Breeding and Management of Soybean for Improved Performance."

Trick, Harold N., Schapaugh Jr, William T. (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$113,742, "Enhancement of Soybean Through Genetic Engineering."

Trick, Harold N., Fellers, John P., and Fritz, Allan K. (Agronomy), Kansas Wheat Commission, \$31,333, "Transgenic Approaches for Trait Enhancement in Wheat."

Trick, Harold N., Fellers, John P., and Fritz, Allan K. (Agronomy), Kansas Wheat Commission, \$40,000, "Transgenic Approaches for Trait Enhancement in Wheat."

Trick, Harold N., and Todd, Timothy C., North Central Soybean Research Program, \$68,089, "Engineering Resistance to Soybean Cyst Nematodes via Induced Gene Silencing (RNA)."

Trick, Harold N., US Department of Agriculture, \$57,784, "A Centralized Wheat Transformation Facility for the Fusarium Community."

Trick, Harold N., US Department of Agriculture, \$24,000, "Harnessing the Power of Basal Defense to Improve Resistance to Fusarium Head Blight."

Trick, Harold N., Bockus, William W., DeWolf, Erick D., Park, Sunghun (Horticulture, Forestry and Recreation Resources), **Stack, James P.**, and **Valent, Barbara S.**, US Department of Agriculture, "Novel Strategies for Managing Blast Diseases on Rice and Wheat."

Valent, Barbara S., Bockus, William W., DeWolf, Erick D., Park, Sunghun (Horticulture, Forestry and Recreation Resources), **Stack, James P.**, and **Trick, Harold N.**, US Department of Agriculture, \$1,089,000, "Novel Strategies for Managing Blast Diseases on Rice and Wheat."

Whitfield, Anna E., and Rotenberg, Dorith, Kansas Wheat Alliance, Inc., "Identification of Efficient Aphid Vectors of Barley Yellow Dwarf Virus (BYDV) and Screening for Barley Yellow Dwarf (BYD) Resistance/Tolerance in Kansas Winter Wheat."

Whitfield, Anna E., and Rotenberg, Dorith, US Department of Agriculture, \$53,893, "Advancing Innovative Technologies and Integrated Strategies for Sustainable Management of Thrips-transmitted Tospoviruses."

Whitfield, Anna E., US Department of Agriculture, \$38,708, "Collaborative Research to Control Thrips and Tospovirus."

Whitfield, Anna E., Laney, Alma G., and Rotenberg, Dorith, US Department of Agriculture, \$7,500, "Functional Analysis of Barley Yellow Dwarf Virus Isolates Containing A Novel Insertion In The Aphid Transmission Protein (Alma Laney)."

Whitfield, Anna E., and Rotenberg, Dorith, US Department of Agriculture, \$250,000, "Molecular Mechanisms of Transmission Inhibition by a Viral Glycoprotein."

SOUTHEAST AGRICULTURAL RESEARCH CENTER

Sassenrath, Gretchen F., DeWolf, Erick D., Lollato, Romulo P., and Shoup, Douglas E., Kansas Crop Improvement Association, \$10,000, "Reducing the Impact of Fusarium Head Blight."

Sassenrath, Gretchen F., Ciampitti, Ignacio (Agronomy), **Presley, DeAnn R.** (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$2,135, "Cover Crop Effects on Soybean Yield."

Sassenrath, Gretchen F., Lin, Xiaomao (Agronomy), **Little, Christopher R.** (Plant Pathology), **Presley, DeAnn R.** (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$8,159, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Sassenrath, Gretchen F., Ciampitti, Ignacio (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), North Central Soybean Research Program, \$25,536, "Improving Soybean Yield in the Double Crop Soybean Production System."

Sweeney, Daniel W., DeRouchey, Joel M. (Animal Sciences and Industry), and **Nelson, Nathan O.** (Agronomy), US Department of Agriculture, \$2,235, "Validate, Improve and Regionalize Phosphorus Indices to Reduce P Loss Across the Heartland Region."

SOUTHWEST RESEARCH EXTENSION CENTER

Currie, Randall S., Kisekka, Isaya, and Zukoff, Sarah N. (Southwest Area Office), Kansas Corn Commission, \$9,633, "Developing Integrated Pest Management Strategies for Drought Tolerant Corn under Deficit Irrigation Scenarios."

Gillen, Robert L., Multi-Sponsor, \$138,551, "ASW Multi-Sponsor Research 36."

Holman, Johnathon D., Agrinos, Inc., \$10,000, "Wheat Trials."

Holman, Johnathon D., Multi-Sponsor, \$90,304, "ASW Testing of Forage Cultivars."

Holman, Johnathon D., Haag, Lucas A. (Northwest Area Office), **Harmoney, Keith R.** (Agricultural Research Center-Hays), **Jaeger, John R.** (Agricultural Research Center-Hays), **Johnson, Sandra K.** (Northwest Area Office), and **Obour, Augustine K.** (Agricultural Research Center-Hays), US Department of Agriculture, \$242,999, "Demonstrating the Potential of Cover Crop and Forage Mixtures to Improve Soil Quality, Productivity, and Profitability in Water-Limited Regions."

Kisekka, Isaya, Currie, Randall S., and Zukoff, Sarah N. (Southwest Area Office), Kansas Corn Commission, \$9,633, "Developing Integrated Pest Management Strategies for Drought Tolerant Corn under Deficit Irrigation Scenarios."

Kisekka, Isaya, Cramer, Gary L. (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), and **Schlegel, Alan J.,** Kansas Grain Sorghum Commission, \$18,750, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Kisekka, Isaya, Aguilar, Jonathan P. (Southwest Area Office), **Foster, Anserd J.** (Southwest Area Office), and **Rogers, Danny H.** (Biological and Agricultural Engineering), Kansas Water Office, \$7,500, "On-Farm Demonstration of Water Management Technologies and Mobile Trip Irrigation."

Kisekka, Isaya, Monsanto Company, \$12,000, "Service Order No. 31."

Kisekka, Isaya, Monsanto Company, \$12,240, "Service Order No. 35."

Kisekka, Isaya, Aguilar, Jonathan P. (Southwest Area Office), **Barnes, Philip L.** (Biological and Agricultural Engineering), **Bolton, Debra** (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Lamm, Freddie R.** (Northwest Research

Extension Center), **Lilja, Nina K.** (International Agricultural Programs), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, \$2,798, "On- Farm Water Management Trainings - Pakistan Part 2."

Kisekka, Isaya, Golden, Bill B. (Agricultural Economics), **Rice, Charles W.** (Agronomy), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Sanderson, Matthew R.** (Sociology, Anthropology, and Social Work), US Department of Agriculture, \$77,956, "Sustaining Agriculture through Adaptive Management to Preserve the Ogallala Aquifer under a Changing Climate."

Schlegel, Alan J., Cramer, Gary L. (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya, Lamm, Freddie R.** (Northwest Research Extension Center), and **O'Brien, Daniel M.** (Northwest Area Office), Kansas Grain Sorghum Commission, \$18,750, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Schlegel, Alan J., Obour, Augustine K. (Agricultural Research Center-Hays), **Perumal, Ramasamy** (Agricultural Research Center-Hays), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Grain Sorghum Commission, \$4,863, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

Schlegel, Alan J., Peterson, Dallas E. (Agronomy), and **Thompson, Curtis R.** (Agronomy), Kansas Grain Sorghum Commission, \$1,900, "Sorghum Response to Postemergence Applied Huskie following a Pre-emergence Applied Lexar EZ, Lumax EZ or Zemas."

Zukoff, Sarah N., Brokesh, Edwin L. (Biological and Agricultural Engineering), **Flipppo, Daniel** (Biological and Agricultural Engineering), **McCornack, Brian P.** (Entomology), and **Sharda, Ajay** (Biological and Agricultural Engineering), Kansas Corn Commission, \$3,697, "Comprehensive Study of Light Wavelength and Image Processing to Automatically Identify Corn Pests."

Zukoff, Sarah N., Monsanto Company, \$3,150, "Service Order No. 34."

COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN

INTERIOR ARCHITECTURE AND PRODUCT DESIGN

Manzo, Christopher, Day, Julia K. (Apparel, Textiles, and Interior Design), **Eckels, Steven J.** (Institute for Environmental Research), and **Kim, Jooyoun** (Apparel, Textiles, and Interior Design), US Environmental Protection Agency, \$3,745, "Net Zero Energy Air Filtration: Innovative Filter Media Applications for Improved Indoor Air Quality and Energy Efficiency."

LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING

Beamish, Anne E., City of Grandview Plaza, \$936, "Grandview Plaza City Park Design Project."

Canfield, Jessica, Hutchinson, Stacy L. (Biological and Agricultural Engineering), **Kingery-Page, Mary C.**, and **Skabelund, Lee R.**, US Environmental Protection Agency, \$6,000, "Green Infrastructure Demonstration and Training: Evaluating Two Sites on the S-State Campus."

Hahn, Howard D., Landscape Architecture Foundation, \$7,840, "2016 Case Study Investigation (CSI) Program."

Kingery-Page, Mary C., Canfield, Jessica, Hutchinson, Stacy L. (Biological and Agricultural Engineering), and **Skabelund, Lee R.**, US Environmental Protection Agency, \$4,600, "Green Infrastructure Demonstration and Training: Evaluating Two Sites on the S-State Campus."

Nesse, Katherine, US Department of Health and Human Services, \$8,000, "Illinois Early Childhood Demographics."

Skabelund, Lee R., Canfield, Jessica, Hutchinson, Stacy L. (Biological and Agricultural Engineering), and **Kingery-Page, Mary C.**, US Environmental Protection Agency, \$4,600, "Green Infrastructure Demonstration and Training: Evaluating Two Sites on the S-State Campus."

COLLEGE OF ARTS AND SCIENCES

BIOCHEMISTRY

Chen, Jianhan, US Department of Health and Human Services, \$24,000, "Modulation of p53 Structure and Function by Cancer-Associated Mutations."

Chen, Jianhan, Prakash, Om, and Zolkiewski, Michal, US Department of Health and Human Services, \$216,563, "Multi-scale Enhanced Sampling of Disordered Proteins."

Chen, Jianhan, and Schmit, Jeremy D. (Physics), US Department of Health and Human Services, \$95,342, "Theoretical and Computational Modeling of Amyloid Aggregation."

Durrett, Timothy P., US Agency for International Development, \$44,334, "Targeted Engineering of Brassica juncea Seed Biochemistry to produce Reduced-viscosity Plant Oils for direct use as Biofuel."

Durrett, Timothy P., US Department of Energy, \$129,206, "Sustainable Biofuel from the Great Plains to the Semi-arid West: Improved Germplasm for Camelina Oilseed."

Geisbrecht, Brian V., US Department of Health and Human Services, \$187,500, "Inhibition of the Classical & Lectin Complement Pathways by Staphylococcus Aureus Eap."

Geisbrecht, Brian V., and Li, Ping (Chemistry), US Department of Health and Human Services, \$67,509, "Molecular Study of PHA Biosynthesis: Production of Biodegradable Polymers for Medical Applications."

Geisbrecht, Brian V., US Department of Health and Human Services, \$167,405, "The Multiple States of IpaB Shigella Type III Secretion."

Geisbrecht, Erika R., US Department of Health and Human Services, \$331,542, "Mechanisms Underlying Muscle Development in Drosophila AR060788."

Geisbrecht, Erika R., US Department of Health and Human Services, \$80,940, "Protein Tyrosine Phosphatase Signaling in Muscle Maintenance."

Geisbrecht, Erika R., and Vishal, Kumar, US Department of Health and Human Services, \$5,000, "The Role of Drosophila Trim32 in Progressive Muscle Wasting (Kumar Vishal)."

Kanost, Michael R., US Department of Health and Human Services, \$389,972, "Proteinase Systems in Insect Hemolymph."

Klebba, Phillip E., Kansas State University Foundation, \$39,406, "Cancer Center Research Core."

Klebba, Phillip E., and Newton, Salete M., US Department of Health and Human Services, \$193,750, "High-throughput Fluorescence Screening for Inhibitors of TonB-dependent Iron Transport."

Newton, Salete M., and Klebba, Phillip E., US Department of Health and Human Services, \$193,750, "High-throughput Fluorescence Screening for Inhibitors of TonB-dependent Iron Transport."

Prakash, Om, US Department of Agriculture, \$29,211, "Integrated Strategies to Control Equine Herpesvirus 1 Infection."

Prakash, Om, Chen, Jianhan, and Zolkiewski, Michal, US Department of Health and Human Services, \$28,875, "Multi-scale Enhanced Sampling of Disordered Proteins."

Tomich, John M., and Fang, Ying (Diagnostic Medicine/Pathobiology), SmartVet USA, Inc, \$15,840, "Surface Absorption of BAPC's in Porcine Model."

Tomich, John M., and Li, Ping (Chemistry), US Department of Health and Human Services, \$7,865, "Engineering Human NRMT1 for its Substrate Profiling (Mentor)."

Vishal, Kumar, and Geisbrecht, Erika R., US Department of Health and Human Services, "The Role of Drosophila Trim32 in Progressive Muscle Wasting (Kumar Vishal)."

Zolkiewska, Anna, US Department of Health and Human Services, \$311,250, "ADAM12 in Breast Tumor Initiating Cells."

Zolkiewski, Michal, and Ganta, Roman Reddy R. (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$14,400, "Molecular Chaperones of Ehrlichia Chaffeensis."

Zolkiewski, Michal, Chen, Jianhan, and Prakash, Om, US Department of Health and Human Services, \$43,313, "Multi-scale Enhanced Sampling of Disordered Proteins."

BIOLOGY

Asano, Katsura, National Science Foundation, \$299,925, "Studies on the Novel 5MP-ATR4 Pathway using Insects as the Model System."

Blair, John M., National Science Foundation, \$102,018, "Collaborative Research: Rhizosphere Priming and C-N dynamics in Grassland Ecosystems in Transition."

Blair, John M., Dodds, Walter K., Joern, Anthony, and Nippert, Jesse B., National Science Foundation, \$619,850, "LTER: Long-Term Research on Grassland Dynamics - Assessing Sensitivity and Resilience to Global Change."

Boyle, Alice, National Science Foundation, \$77,712, "Consequences of Climate Variability for Prairie Birds."

Boyle, Alice, National Science Foundation, \$7,626, "RCN: Enabling Comparative Studies of the Process and Products of Sexual Selection in a Genomic Context."

Brown, Susan J., Lillich, James D. (Anatomy and Physiology), and **Silver, Kristopher S.** (Anatomy and Physiology), Morris Animal Foundation, \$16,274, "Filling in the Gaps of the Canine Genome."

Bryant, William B., Michel, Kristin, and Olson, Bradley J., US Department of Health and Human Services, \$175,200, "Somatic Gene Therapy for Mosquitoes."

Chapes, Stephen K., National Aeronautics and Space Administration, \$100,000, "Collection of Immune/Stress-related Tissues from Mice Flown on ISS."

Chapes, Stephen K., National Aeronautics and Space Administration, \$123,715, "Impact of Spaceflight on Primary and Secondary Antibody Responses."

Chapes, Stephen K., US Department of Health and Human Services, \$2,800, "K-INBRE Star Trainees: Peters, Sensenich."

Chapes, Stephen K., US Department of Health and Human Services, \$4,800, "KINBRE Summer Scholar/Translational Scholar Awards: Colter; Feuerborn; Hodge; Meier; Vontz; Lloyd; Troupe."

Chapes, Stephen K., US Department of Health and Human Services, \$2,000, "K-INBRE Undergraduate Coordinator Office Campus Coordinator Award - S.K. Chapes."

Chapes, Stephen K., US Department of Health and Human Services, \$26,180, "Undergraduate Coordinator Office - KINBRE."

Culumber, Zachary W., and **Tobler, Michael**, US Department of Health and Human Services, "Molecular Pathways Mediating Responses to Toxic Hydrogen Sulfide Exposure (Zachary Culumber)."

Dodds, Walter K., Missouri Department of Conservation, \$13,000, "Ecological Integrity of Prairie Streams as Influenced by Patchburn Grazing and Riparian Protection."

Dodds, Walter K., National Science Foundation, \$371,669, "Collaborative Research" Hierarchical Functioning of River Macrosystems in Temperate Steppes-from Continental to Hydrogeomorphic Patch Scales."

Dodds, Walter K., **Blair, John M.**, **Joern, Anthony**, and **Nippert, Jesse B.**, National Science Foundation, \$169,050, "LTER: Long-Term Research on Grassland Dynamics - Assessing Sensitivity and Resilience to Global Change."

Ferguson, Carolyn J., National Science Foundation, \$6,250, "COLLABORATIVE RESEARCH: Polyploidy in Phlox and its Effects on Diversity."

Fleming, Sherry D., US Department of Health and Human Services, \$69,581, "Complement Activation in Pregnancy and Hypertension."

Gido, Keith B., Kansas Academy of Science, \$1,500, "Kansas Academy of Science Award for Garrett Hooper Project Entitled "Treating the Niche Packing Hypothesis in Kansas Stream Fish Communities"."

Gido, Keith B., New Mexico Department of Game and Fish, \$56,692, "Effects of the Whitewater-baldy Complex Fire on Warmwater Fishes in the Gila River Basin, New Mexico."

Gido, Keith B., US Department of the Interior, \$23,760, "Assess Geomorphological Condition of Tallgrass Prairie NP Upland Prairie Stream Reaches."

Gido, Keith B., US Department of the Interior, \$22,770, "Determine Implications of Non-native Stock Pond Fish at TAPR on Native Stream Communities."

Gido, Keith B., US Department of the Interior, \$24,750, "Management Plan for the Federally Endanger Topeka Shiner (*Notropis topek*) within Tallgrass Prairie National Preserve."

Govind, Revathi, US Department of Health and Human Services, \$437,156, "Alternate Roles of *Clostridium difficile* TcdR."

Haukos, David A., Kansas Department of Wildlife and Parks, \$40,000, "Establishment and Operation of the Kansas Cooperative Fish and Wildlife Research Unit."

Haukos, David A., US Department of Agriculture, \$85,728, "CEAP Assessments of the Effects of NRCS Leser Prairie Chicken Initiative."

Haukos, David A., US Department of the Interior, \$33,019, "Multi Scale Examination of the Distribution and Habitat Use Patterns of the Regal Fritillary (*Speyeria idalia*) within the Fort Riley Military Reservation."

Herman, Michael A., US Department of Health and Human Services, \$13,959, "Molecular Analysis of Disease Pathways (mentor for Dr. Veeman)."

Joern, Anthony, Blair, John M., Dodds, Walter K., and Nippert, Jesse B., National Science Foundation, \$169,050, "LTER: Long-Term Research on Grassland Dynamics - Assessing Sensitivity and Resilience to Global Change."

Johnson, Loretta C., Kansas Academy of Science, \$1,500, "Kansas Academy of Science Award for Matthew Galliart for project entitled "Experimental Natural Selection of Big Bluestem Ecotypes Across the Great Plains: A Novel Test for the Strength of Local Adaptation."

Johnson, Loretta C., Kansas Academy of Science, \$1,500, "Kansas Academy of Science Award for Samantha Sharpe for Project Entitled: "Rapid Adaptation in a Disturbed Environment: Evolutionary Adaptive Response of Old Field Grass *Andropogon virginicus* to Heavy Metals in an Abandoned Mine Site".

Johnson, Loretta C., Kansas Native Plant Society, \$1,000, "Kansas Native Plant Society Award for Matthew Galliart for Project Entitled "Experimental Natural Selection of Big Blue Ecotypes Across the Great Plains".

Johnson, Loretta C., Sigma Xi Scientific Research Society, \$1,000, "Matthew Galliart GIAR Award."

Johnson, Loretta C., Sigma Xi, KSU Chapter, \$400, "Samantha Sharpe GIAR Award."

Jumpponen, Ari M., National Science Foundation, \$244,210, "Collaborative Research: Parsing the Effects of Host Specificity and Geography on Plant-Fungal Symbioses Under Climate Change."

McDonald, Jocelyn A., National Science Foundation, \$510,000, "Phosphatase Control of Collective Cell Migration during Development."

McDonald, Jocelyn A., US Department of Health and Human Services, \$73,160, "Consequence of Collective Cell Invasion in Glioblastoma."

Meekins, David A., and Michel, Kristin, US Department of Health and Human Services, "Serpins-6 Protein-Protein Interactions in Mosquito Immunity Against Malaria (David Meekins)."

Michel, Kristin, and Meekins, David A., US Department of Health and Human Services, \$5,000, "Serpins-6 Protein-Protein Interactions in Mosquito Immunity Against Malaria (David Meekins)."

Michel, Kristin, Bryant, William B., and Olson, Bradley J., US Department of Health and Human Services, \$21,900, "Somatic Gene Therapy for Mosquitoes."

Nippert, Jesse B., and Ungerer, Mark, National Science Foundation, \$785, "Dimensions NASA: Collaborative Research: The Biogeography and Evolution of Drought Tolerance in Grasses."

Nippert, Jesse B., Blair, John M., Dodds, Walter K., and Joern, Anthony, National Science Foundation, \$169,050, "LTER: Long-Term Research on Grassland Dynamics - Assessing Sensitivity and Resilience to Global Change."

Nippert, Jesse B., National Science Foundation, \$31,074, "MEETING: Phys-Fest: Advancing the Field of Plant Physiological Ecology; Konza Prairie, June 6 - 10, 2016."

Nippert, Jesse B., Pioneer Hi-Bred International, Inc., \$3,468, "Service Project 1."

Olson, Bradley J., National Science Foundation, \$473,668, "Collaborative Research: The Genomic Basis of Multicellularity and Developmental Complexity in the Volvocine Algae."

Olson, Bradley J., Bryant, William B., and Michel, Kristin, US Department of Health and Human Services, \$21,900, "Somatic Gene Therapy for Mosquitoes."

Rhodes, Ashley E., and Rozell, Timothy G. (Animal Sciences and Industry), Kansas Dairy Commission, \$1,250, "Comparison of Exercise Programs in Dairy Heifers to Reduce Heat Stress."

Roelofs, Jeroen, US Department of Health and Human Services, \$290,229, "Mechanism of Degradation of the Proteasome through Autophagy."

Rothenburg, Stefan, US Department of Health and Human Services, \$365,000, "Importance of Species-Specific Interactions of PKR with Poxvirus Inhibitors for Virus Replication and Host Range."

Snyder, Bruce, Scotts Company, LLC, \$11,264, "Viability of Cocoons in Earthworm Castings in Milan Particle or Growing Media as Part of Root-tries Enhancement Package."

Spooner, Brian S., Kansas State University Foundation, \$272,885, "Biology Research Career Development Core."

Spooner, Brian S., Kansas State University Foundation, \$127,482, "Cancer Center Research Awards."

Tobler, Michael, Friends of the Sunset Zoo, \$2,000, "Friends of Sunset Zoo Conservation Scholar Award for Ryan Greenway entitled "Conserving Three Highly Endemic Fish Populations Inhibiting a Unique and Highly Threatened Environment in Tropical Mexico"."

Tobler, Michael, National Science Foundation, \$163,573, "Collaborative Research: Physiological Adaptation to Extreme Environments: Genes, Function, and Evolutionary Patterns."

Tobler, Michael, US Department of Defense, \$69,807, "A Comparative Approach to Understanding the Physiological Effects and Processing of Hydrogen Sulfide."

Tobler, Michael, US Department of Defense, \$127,312, "An Integrated Laboratory System for the Study of Physiological Effects and Processing of Hydrogen Sulfide."

Tobler, Michael, and Culumber, Zachary W., US Department of Health and Human Services, \$4,992, "Molecular Pathways Mediating Responses to Toxic Hydrogen Sulfide Exposure (Zachary Culumber)."

Ungerer, Mark, and Nippert, Jesse B., National Science Foundation, \$1,832, "Dimensions NASA: Collaborative Research: The Biogeography and Evolution of Drought Tolerance in Grasses."

Vediyappan, Govindsamy, American Heart Association, Inc., \$77,000, "Candida Albicans Hyphal Growth and Virulence Inhibition."

Veeman, Michael, National Science Foundation, \$200,000, "Linking Cell Shape and Asymmetric Division in Ciona Notochord Tapering."

Veeman, Michael, US Department of Health and Human Services, \$290,500, "Morphogenetic Effector Networks in Ciona Notochord."

Veeman, Michael, US Department of Health and Human Services, \$165,000, "Morphogenetic Effector Networks in the Ciona Notochord."

Yang, Zhilong, Clavijo, Alfonso (Diagnostic Medicine/Pathobiology), **Ma, Wenjun** (Diagnostic Medicine/Pathobiology), **Richt, Juergen** (Diagnostic Medicine/Pathobiology), and **Rowland, Raymond R. R.** (Diagnostic Medicine/Pathobiology), National Pork Board, \$9,586 (includes \$9,586 from AAHL & UMN Cost Share/Matching), "National Pork Board Agreement 2015 - 2016."

CHEMISTRY

Aakeroy, Christer B., US Department of Defense, \$148,400, "Theory and Experiment of Cocrystals: Principles, Synthesis and Properties."

Aikens, Christine M., National Science Foundation, \$280,000, "Collaborative Research: Excited State Dynamics of Structurally Precise Metal Nanoclusters."

Aikens, Christine M., US Department of Defense, \$69,684, "Foundations of Nanoscale Energy Transfer in Molecular Plasmonics."

Aikens, Christine M., US Department of Energy, \$124,328, "Understanding Electron Transfer in Plasmon-Enhanced Photocatalysis using Nonadiabatic Electron Dynamics."

Bossmann, Stefan, and **Troyer, Deryl L.** (Anatomy and Physiology), Children's Mercy Hospital, \$7,050, "Novel in vivo and in vitro 3D Tumor Models for Testing of Cancer Chemotherapy and Complex Biologics."

Bossmann, Stefan, University of Texas Medical Branch at Galveston, \$47,000, "OCH Memorandum of Agreement."

Bossmann, Stefan, US Department of Health and Human Services, \$60,000, "The Necrosis- Inducing Toxin of Mycobacterium Tuberculosis."

Chikan, Viktor, National Science Foundation, \$345,000, "Exploring Controlled Drug Release from Magneto-Liposomes via Ultrasound Generation in High Frequency Pulsed Magnetic Fields."

Culbertson, Christopher T., National Science Foundation, \$60,000, "Microanalytical Methods for Investigation of the Inflammatory Response."

Higgins, Daniel A., Kansas Soybean Commission, \$5,790, "Analytical Testing of KSU Biodiesel Product in an Environmental Science Teaching Laboratory."

Higgins, Daniel A., National Science Foundation, \$17,924, "Collaborative Research: Characterization of Functionally-Graded Sol-Gel-Derived Silica Films on Multiple Length Scales, from Single Molecules to Macroscopic Properties."

Li, Ping, US Department of Health and Human Services, \$78,000, "Engineering Human NRMT1 for its Substrate Profiling."

Li, Ping, and **Tomich, John M.** (Biochemistry), US Department of Health and Human Services, \$7,865, "Engineering Human NRMT1 for its Substrate Profiling (Mentor)."

Li, Ping, and **Geisbrecht, Brian V.** (Biochemistry), US Department of Health and Human Services, \$270,038, "Molecular Study of PHA Biosynthesis: Production of Biodegradable Polymers for Medical Applications."

Li, Ping, US Department of Health and Human Services, \$6,000, "Protein Structure and Function."

Li, Ping, and Liu, Weiwei, US Department of Health and Human Services, \$5,000, "Target Profiling of NRMTs for Potential Cancer Therapeutics (Wei Liu)."

Liu, Weiwei, and Li, Ping, US Department of Health and Human Services, "Target Profiling of NRMTs for Potential Cancer Therapeutics (Wei Liu)."

Maatta, Eric A., Kansas State University Foundation, \$148,757, "Center for Basic Cancer Research: Fraternal Order of Eagles Fund."

COMMUNICATION STUDIES

Paul, Gregory, Kettering Foundation, \$40,000, "Study of the Relationship Between Citizens and Government."

Shaffer, Timothy J., Kettering Foundation, \$25,740, "Planning, Development and Implementation Agreement."

DEAN OF ARTS AND SCIENCES

Montelone, Beth A., Grauer, Bette (Dean of Engineering), **Mason, April** (Office of the Provost), **Morales, Amanda I.** (Curriculum and Instruction), **Thurston, Linda P.** (Dean of Education), and **Wiley, Zelia Z.** (Dean of Agriculture and Director of AES), National Science Foundation, \$150,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

ECONOMICS

Babcock, Michael W., US Department of Agriculture, \$43,000, "Profile of Short Line Railroads in High Grain Production States."

Gayle, Philip G., Das, Sanjoy (Electrical and Computer Engineering), **DeLoach, Scott A.** (Computing and Information Sciences), **Natarajan, Balasubramaniam** (Electrical and Computer Engineering), and **Pahwa, Anil** (Electrical and Computer Engineering), National Science Foundation, \$7,000, "CPS: Synergy: Architecture for Future Distribution Systems Including Active Consumers with Rooftop Solar Generation."

GEOGRAPHY

Goodin, Douglas G., National Science Foundation, \$25,244, "CNH: The Coupled Dynamics of Human, Wildlife, and Climate Interactions in Botswana: Impacts on Water Quality and Environmental Health in a Water Scarce Environment."

Goodin, Douglas G., US Department of Defense, \$27,293, "UP-2 CBR Project in Ukraine."

Goodin, Douglas G., US Department of Defense, \$37,817, "UP-2 CBR Project in Ukraine."

Harrington Jr, John A., F. Price Cossman Memorial Trust, \$21,500 (includes \$1,500 from NGEF (BG4510)), "Plants, Peoples, Places and Patterns: An Institute for K-12 Teachers on Kansas Ecological Culture."

Harrington Jr, John A., Aiken, Robert M. (Northwest Research Extension Center), **Bradford, Barry J.** (Animal Sciences and Industry), **Lin, Xiaomao** (Agronomy), **Min, Doohong** (Agronomy), and **Taylor, Mykel R.** (Agricultural Economics), Kansas Board of Regents, \$10,500, "Evaluating Teff as a Dryland Forage Crop for Water-Limited Areas in Kansas."

Harrington Jr, John A., National Geographic Education Foundation, \$37,415, "Kansas 2015/2016 Alliance Grant."

McLauchlan, Kendra K., National Science Foundation, \$11,267, "Doctoral Dissertation Research: Investigating the Influence of Biotic and Abiotic Factors on Grasslands in the Great Plains Region (USA) (Julie Commerford)."

McLauchlan, Kendra K., National Science Foundation, \$82,467, "RCN: The Novus Project for Integrating Paleo- and Neo-ecosystem Ecology."

Paul, Bimal K., National Science Foundation, \$48,945, "Contribution of Linking Networks in Nepalese Earthquake Response: A Case Study."

GEOLOGY

Brueseke, Matthew E., Peterman, Robert J. (Civil Engineering), and **Riding, Kyle** (Civil Engineering), US Department of Transportation, \$14,999, "Field Investigation of Concrete Tie Abrasion Wear Prevalence and Contributing Environmental Factors."

Oviatt, Charles G., National Science Foundation, \$87,034, "Collaborative Research: New Constraints on the Geodynamics of the Lake Bonneville Basin."

HISTORY

Krysko, Michael, Kansas State University Foundation, \$13,800, "Kenneth Davis Professorship."

Lynn-Sherow, Bonnie, Kansas State University Foundation, \$147,000, "Chapman Center for Personnel."

MATHEMATICS

Albin, Nathan, Poggi-Corradini, Pietro, and **Scoglio, Caterina M.** (Electrical and Computer Engineering), National Science Foundation, \$171,553, "p-Modulus on Networks with Applications to the Study of Epidemics."

Auckly, David R., US Department of Defense, \$45,000, "The Navajo Nation Math Circles Project."

Bennett, Andrew G., Allen, David B. (Curriculum and Instruction), **Benson, Brian A., Jaber-Douraki, Majid, Martinie, Sherri L.** (Curriculum and Instruction), and **Spencer, Craig**, US Department of Education, \$9,000, "Achieving the Vision of Excellent Mathematics Teaching and Learning (ACHIEVE)."

Bennett, Andrew G., Allen, David S. (Curriculum and Instruction), **Martinie, Sherri L.** (Curriculum and Instruction), and **Spencer, Craig**, US Department of Education, \$51,446 (includes \$2,550 from USD 457), "Bridging Conceptual Understanding and Procedural Fluency in Mathematics."

Bennett, Andrew G., Allen, David B. (Curriculum and Instruction), **Martinie, Sherri L.** (Curriculum and Instruction), and **Rumsey, Chepina W.** (Curriculum and Instruction), US Department of Education, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Benson, Brian A., Allen, David B. (Curriculum and Instruction), **Bennett, Andrew G., Jaber-Douraki, Majid, Martinie, Sherri L.** (Curriculum and Instruction), and **Spencer, Craig**, US Department of Education, \$10,500, "Achieving the Vision of Excellent Mathematics Teaching and Learning (ACHIEVE)."

Jaber-Douraki, Majid, Allen, David B. (Curriculum and Instruction), **Bennett, Andrew G., Benson, Brian A., Martinie, Sherri L.** (Curriculum and Instruction), and **Spencer, Craig**, US Department of Education, \$9,000, "Achieving the Vision of Excellent Mathematics Teaching and Learning (ACHIEVE)."

Poggi-Corradini, Pietro, Albin, Nathan, and **Scoglio, Caterina M.** (Electrical and Computer Engineering), National Science Foundation, \$166,507, "p-Modulus on Networks with Applications to the Study of Epidemics."

Soibelman, Yan S., National Science Foundation, \$150,000, "Algebra of the Infrared, Fukaya-Seidel Categories and Wall-Crossing Formulas."

Spencer, Craig, Allen, David B. (Curriculum and Instruction), **Bennett, Andrew G., Benson, Brian A., Jaber-Douraki, Majid, and Martinie, Sherri L.** (Curriculum and Instruction), US Department of Education, \$9,000, "Achieving the Vision of Excellent Mathematics Teaching and Learning (ACHIEVE)."

Spencer, Craig, Allen, David S. (Curriculum and Instruction), **Bennett, Andrew G., and Martinie, Sherri L.** (Curriculum and Instruction), US Department of Education, \$51,446 (includes \$2,550 from USD 457), "Bridging Conceptual Understanding and Procedural Fluency in Mathematics."

MUSIC, THEATRE, AND DANCE

Pinkall, Bryan R., and Oppenheim, Joshua, Master Teacher, Inc., \$15,950, "Summer Choral Institute."

PHILOSOPHY

Terlazzo, Rosa, Tulane University, \$65,000, "Adaptive Preferences, Transformative Experience, and Well-being."

PHYSICS

Ben-Itzhak, Itzhak, National Science Foundation, \$41,166, "."

Ben-Itzhak, Itzhak, US Department of Energy, \$2,650,000, "Structure and Dynamics of Atoms. Ions, Molecules, and Surfaces."

Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., Maravin, Yuri, and Ratra, Bharat, US Department of Energy, \$123,000, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Corwin, Kristan L., and Washburn, Brian R., US Department of Defense, \$160,000, "Hollow Core Optical Fiber Gas Lasers (HOFGLAS): Toward Novel and Practical Systems in Fused Silica."

Flanders, Bret N., National Science Foundation, \$9,743, "Integration of Conducting Polymers with Living Cells."

Flanders, Bret N., US Department of Health and Human Services, \$103,957, "Conducting Polymer Nanowires for Neural Modulation."

Horton-Smith, Glenn A., US Department of Energy, \$38,755, "Deep Underground Neutrino Experiment (DUNE)."

Horton-Smith, Glenn A., Bolton, Timothy A., Ivanov, Andrew G., Maravin, Yuri, and Ratra, Bharat, US Department of Energy, \$123,000, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Ivanov, Andrew G., US Department of Energy, \$101,804, "LHC CMS Detector Upgrade FPIX Subsystem for 2014."

Ivanov, Andrew G., US Department of Energy, \$300,000, "Quest for a Top Quart Partner and Upgrade of the Pixel Detector Readout Chain at the CMS."

Ivanov, Andrew G., Bolton, Timothy A., Horton-Smith, Glenn A., Maravin, Yuri, and Ratra, Bharat, US Department of Energy, \$123,000, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Kaadze, Ketino, US Department of Energy, \$57,934, "Fellowship for 2016 Senior CMS LPC Distinguished Researcher."

Kaadze, Ketino, US Department of Energy, \$114,267, "LHC CMS Detector Upgrade HCAL Subsystem."

Lin, Chii-Dong, US Department of Defense, \$80,000, "Isolated Soft-X-ray Attosecond Pulse Generation Using Synthesized Strong-Field Infrared Pulses."

Maravin, Yurii, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., and Ratra, Bharat, US Department of Energy, \$123,000, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Ratra, Bharat, National Science Foundation, \$5,000, "Quarknet."

Ratra, Bharat, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., and Maravin, Yurii, US Department of Energy, \$123,000, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Samushia, Lado, US Department of Defense, \$20,000, "Euclid Consortium and Euclid Science Team Research Support Agreement (RSA)."

Sayre, Eleanor C., Rebello, Nobel S., and Zollman, Dean A., National Science Foundation, \$147,866, "Foundational Research on Problem Mathematization in Undergraduate Physics."

Schmit, Jeremy D., and Chen, Jianhan (Biochemistry), US Department of Health and Human Services, \$185,075, "Theoretical and Computational Modeling of Amyloid Aggregation."

Sorensen, Christopher M., CRC Plant Biosecurity, \$20,000, "Phase 1 Physical Evaluation of Novel Silica Nanoparticles for Development of Insect Control Technology."

Thumm, Uwe, National Science Foundation, \$65,000, "Attosecond Time-resolved Quantum Dynamics in Atoms and Surfaces."

Thumm, Uwe, National Science Foundation, \$90,000, "Attosecond Time-resolved Quantum Dynamics: From Atoms Towards Nanostructures."

Trallero, Carlos A., US Department of Energy, \$77,500, "Probing Electron-Molecule Scattering with HHG: Theory and Experiment."

Washburn, Brian R., and Corwin, Kristan L., US Department of Defense, \$160,000, "Hollow Core Optical Fiber Gas Lasers (HOFGLAS): Toward Novel and Practical Systems in Fused Silica."

Zollman, Dean A., Rebello, Nobel S., and Sayre, Eleanor C., National Science Foundation, \$49,289, "Foundational Research on Problem Mathematization in Undergraduate Physics."

PSYCHOLOGICAL SCIENCES

Adams, Stephanie A., and Monaco, Gregory E., National Science Foundation, \$5,000, "Proposal for Student Funds to Attend Software Carpentry Workshop in Kansas City, MO."

Kirkpatrick, Kimberly, American Psychological Association, \$1,000, "A Reinforcement- learning Approach to Understanding Loss-chasing Behavior in Rats (Andrew Marshall)."

Kirkpatrick, Kimberly, US Department of Health and Human Services, \$337,500, "Timing, Reward Processing and Choice."

Monaco, Gregory E., and Young, Michael, Great Plains Network Consortium, \$15,875, "Funding for Executive Director - Great Plains Network."

Monaco, Gregory E., and Young, Michael, Great Plains Network Consortium, \$270,332, "Funding for Executive Director - Great Plains Network."

Monaco, Gregory E., and Adams, Stephanie A., National Science Foundation, \$5,000, "Proposal for Student Funds to Attend Software Carpentry Workshop in Kansas City, MO."

Monaco, Gregory E., National Science Foundation, \$49,998, "The Role of Regional Organizations in Improving Access to the National Computational Infrastructure."

Young, Michael, and Monaco, Gregory E., Great Plains Network Consortium, "Funding for Executive Director - Great Plains Network."

SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS

Muturi, Nancy W., and Kidd, Tandalayo (Human Nutrition), US Department of Agriculture, \$100,000, "Community-Based Participatory Research (CBPR) Model in Preventing Overweight and Obesity Among 6th-8th Grade Youth in Low-Income Racial/Ethnic Communities."

Wolgast, Stephen L., Collegian Media Group, \$55,435, "Student Publications Positions."

SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

Briggs, Jeremy, and Williams, L. Susan, Riley County, KS Police Department, \$1,500, "Community Focus Groups to Determine Public Attitudes."

Kulcsar, Laszlo, Crossland Construction Company, Inc., \$12,000, "Cherokee County Migration Study."

Kulcsar, Laszlo, Cornelison, Laci J. (Dean of Human Ecology), **Doll, Gayle** (Dean of Human Ecology), **Gfeller, Stephanie** (Dean of Human Ecology), and **Kaup, Migette L.** (Apparel, Textiles, and Interior Design), US Department of Health and Human Services, \$13,763, "PEAK 2.0 Evaluation."

Middendorf, Gerad D., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), **Shoup, Douglas E.** (Southeast Area Office), **Swamy, Aavudai Anandhi** (Agronomy), **Tomlinson, Peter J.** (Agronomy), and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, \$130,470, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Middendorf, Gerad D., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), and **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), US Department of the Interior, \$13,350, "Water Research for the Fort Riley Net Zero Initiative."

Ritterbush, Lauren W., and Allen, David B. (Library), Wenner-Gren Foundation for Anthropological Research, \$7,465, "Curation of Dr. Donna Roper's Archaeological Research."

Roper, Donna C., National Science Foundation, \$191,214, "A Pre-treatment Routine for Correcting Age-offsets on AMS Radiocarbon Dated Ceramic Residue."

Sanderson, Matthew R., Golden, Bill B. (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Rice, Charles W.** (Agronomy), and **Rogers, Danny H.** (Biological and Agricultural Engineering), US Department of Agriculture, \$71,460, "Sustaining Agriculture through Adaptive Management to Preserve the Ogallala Aquifer under a Changing Climate."

Williams, L. Susan, and Briggs, Jeremy, Riley County, KS Police Department, \$1,500, "Community Focus Groups to Determine Public Attitudes."

STATISTICS

Du, Juan, Asebedo, Antonio R. (Agronomy), **Dille, Johanna A.** (Agronomy), **Hettiarachchi, Ganga M.** (Agronomy), and **Kluitenberg, Gerard J.** (Agronomy), US Department of Agriculture, \$5,000, "Precision Crop Protection: Soil Management Zones for Optimizing Weed Control Efficacy."

COLLEGE OF EDUCATION

CURRICULUM AND INSTRUCTION

Allen, David B., Bennett, Andrew G. (Mathematics), **Benson, Brian A.** (Mathematics), **Jaberi-Douraki, Majid** (Mathematics), **Martinie, Sherri L.**, and **Spencer, Craig** (Mathematics), US Department of Education, \$7,500, "Achieving the Vision of Excellent Mathematics Teaching and Learning (ACHIEVE)."

Allen, David B., Bennett, Andrew G. (Mathematics), **Martinie, Sherri L.**, and **Rumsey, Chepina W.**, US Department of Education, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Allen, David S., Bennett, Andrew G. (Mathematics), **Martinie, Sherri L.**, and **Spencer, Craig** (Mathematics), US Department of Education, \$51,446 (includes \$2,550 from USD 457), "Bridging Conceptual Understanding and Procedural Fluency in Mathematics."

Burenheide, Bradley, and **Vontz, Thomas**, US Department of Education, \$68,750, "James Madison Legacy Project (JMLP) of the We the People Program (WTP)."

Goodson, F. Todd, and **Vontz, Thomas**, Kansas Board of Regents, \$91,165, "Transitions to Teaching."

Martinie, Sherri L., Allen, David B., Bennett, Andrew G. (Mathematics), **Benson, Brian A.** (Mathematics), **Jaberi-Douraki, Majid** (Mathematics), and **Spencer, Craig** (Mathematics), US Department of Education, \$105,000, "Achieving the Vision of Excellent Mathematics Teaching and Learning (ACHIEVE)."

Martinie, Sherri L., Allen, David S., Bennett, Andrew G. (Mathematics), and **Spencer, Craig** (Mathematics), US Department of Education, \$51,446 (includes \$2,550 from USD 457), "Bridging Conceptual Understanding and Procedural Fluency in Mathematics."

Martinie, Sherri L., Allen, David B., Bennett, Andrew G. (Mathematics), and **Rumsey, Chepina W.**, US Department of Education, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Morales, Amanda I., Grauer, Bette (Dean of Engineering), **Mason, April** (Office of the Provost), **Montelone, Beth A.** (Dean of Arts and Sciences), **Thurston, Linda P.** (Dean of Education), and **Wiley, Zelia Z.** (Dean of Agriculture and Director of AES), National Science Foundation, \$25,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

Rumsey, Chepina W., Allen, David B., Bennett, Andrew G. (Mathematics), and **Martinie, Sherri L.**, US Department of Education, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Vontz, Thomas, and **Goodson, F. Todd**, Kansas Board of Regents, \$91,165, "Transitions to Teaching."

Vontz, Thomas, and **Burenheide, Bradley**, US Department of Education, \$68,750, "James Madison Legacy Project (JMLP) of the We the People Program (WTP)."

DEAN OF EDUCATION

Dalton, Andrew, US Department of Education, \$423,180, "KANCO 2."

Havlicek, Barbara J., Kansas Foundation for Agriculture in the Classroom, \$143,665, "Kansas Foundation for Agriculture in the Classroom."

Havlicek, Barbara J., Multi-Sponsor, \$70,487, "Educational Computer Assistance."

Havlicek, Barbara J., Multi-Sponsor, \$26,957, "Educational Computing Consortium (ECC)."

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

Herrera, Socorro G., AMEXCID, \$147,000, "Training Program for Students and Teachers Proyecto 100,000 Estado de Meixico."

Herrera, Socorro G., Mexican Ministry of Education, \$1,223,823, "SUMMIT."

Herrera, Socorro G., US Department of Education, \$28,617, "DESTINY 2."

Herrera, Socorro G., US Department of Education, \$399,937, "Project KORE."

Herrera, Socorro G., USD 512, Shawnee Mission, \$20,000, "Shawnee Mission, Multi- Campus Professional Development for Teachers of CLD Students."

Middendorf, B. Jan, US Department of Labor, \$90,600, "National Aviation Consortium."

Rankin, Charles I., US Department of Education, \$648,947, "Midwest Equity Assistance Center."

Rumsey, Chepina W., Allen, David B. (Curriculum and Instruction), **Bennett, Andrew G.** (Mathematics), and **Martinie, Sherri L.** (Curriculum and Instruction), US Department of Education, \$44,732, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Shuman, Cindy, National Science Foundation, \$26,272, "External Evaluation of Iowa NSF EPSCoR."

Shuman, Cindy, National Science Foundation, \$104,000, "RII Track-1: Louisiana Consortium for Innovation in Manufacturing and Materials."

Shuman, Cindy, National Science Foundation, \$30,000, "Track-2: The Smart MATerial Design, Analysis, and Processing (SMATDAP) Consortium: Building Next-generation Polymers and the Tools to Accelerate Cost-effective Commercial Production Accelerate Cost-effective Commercial Production - Evaluation."

Shuman, Cindy, US Department of Defense, \$150,000, "Achieving Excellence through STEM - Evaluation."

Shuman, Cindy, US Department of Education, \$22,000, "Minority Science and Engineering Program: Undergraduate Research as a Tool to Engage, Retain and Graduate - Evaluation."

Shuman, Cindy, US Department of Health and Human Services, \$103,500, "Building Integrated Pathways to Independence for Diverse Biomedical Researchers (Project Pathways) - Evaluation."

Shuman, Cindy, US Department of Health and Human Services, \$12,075, "Medicare Rural Hospital Flexibility Program (FLEX)."

Shuman, Cindy, US Department of Labor, \$115,989, "Johnson County Community College: Accelerated, Collaborative Technology Training Services (JCCC-ACTTS) - Evaluation."

Spears, Jacqueline D., National Science Foundation, \$11,900, "Teacher Workshop Program."

Thurston, Linda P., National Science Foundation, \$5,328, "Evaluating Broadening Participation in Computing Alliances (BPC) Program."

Thurston, Linda P., Grauer, Bette (Dean of Engineering), **Mason, April** (Office of the Provost), **Montelone, Beth A.** (Dean of Arts and Sciences), **Morales, Amanda I.** (Curriculum and Instruction), and **Wiley, Zelia Z.** (Dean of Agriculture and Director of AES), National Science Foundation, \$100,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

Yunk, Dan C., US Department of Education, \$27,000, "Kansas Educational Leadership Institute (KELI)."

EDUCATIONAL LEADERSHIP

Yelich Biniecki, Susan M., Adult Education Research Conference, \$10,464, "Adult Education Research Conference (AERC)."

Zacharakis, Jeffrey T., American Association for Adult & Continuing Education, \$10,500, "Adult Education Quarterly Editorship."

COLLEGE OF ENGINEERING

ADVANCED MANUFACTURING INSTITUTE

Bloomfield, John J., and **Miller, Ruth D.** (Electrical and Computer Engineering), Dakota Turbines, \$9,715, "Certification Testing of Dakota DT-36 Wind Turbine."

Kramer, Bradley A., and **Tucker, Jeffrey W.**, US Department of Commerce, \$38,500 (includes \$3,500 from In Kind Contribution KSU Olathe, and \$10,000 from In Kind Contribution KSUIC), "Kansas State University Olathe Innovation Accelerator University Center Program Grant."

Tucker, Jeffrey W., Kansas Department of Commerce, \$40,000, "KDOC Innovation Growth Program."

Tucker, Jeffrey W., Multi-Sponsor, \$20,000, "Advanced Manufacturing Institute - Manufacturing Learning Center."

Tucker, Jeffrey W., and **Kramer, Bradley A.**, US Department of Commerce, \$346,500 (includes \$31,500 from In Kind Contribution KSU Olathe, and \$90,000 from In Kind Contribution KSUIC), "Kansas State University Olathe Innovation Accelerator University Center Program Grant."

ARCHITECTURAL ENGINEERING AND CONSTRUCTION SCIENCE

Yunk, Raphael A., Clark, Gary A. (Dean of Engineering), **Dawson, Darren M.** (Engineering Experiment Station), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), and **Stokes, Robert W.** (Civil Engineering), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

BIOLOGICAL AND AGRICULTURAL ENGINEERING

Barnes, Philip L., Aguilar, Jonathan P. (Southwest Area Office), **Bolton, Debra** (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrcs & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), **Rogers, Danny H.**, and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, \$2,798, "On-Farm Water Management Trainings - Pakistan Part 2."

Brokesh, Edwin L., Flippo, Daniel, McCornack, Brian P. (Entomology), **Sharda, Ajay**, and **Zukoff, Sarah N.** (Southwest Research Extension Center), Kansas Corn Commission, \$5,546, "Comprehensive Study of Light Wavelength and Image Processing to Automatically Identify Corn Pests."

Brokesh, Edwin L., Kansas Soybean Commission, \$21,987, "KSU Biodiesel Initiative Collaboration, Process and Organizational Development Project."

Brokesh, Edwin L., Kansas Soybean Commission, \$9,840, "KSU Biodiesel Product Monitoring and Exploration Project."

Flippo, Daniel, Brokesh, Edwin L., McCornack, Brian P. (Entomology), **Sharda, Ajay**, and **Zukoff, Sarah N.** (Southwest Research Extension Center), Kansas Corn Commission, \$11,091, "Comprehensive Study of Light Wavelength and Image Processing to Automatically Identify Corn Pests."

Harner III, Joseph P., Clark, Gary A. (Dean of Engineering), **Dawson, Darren M.** (Dean of Engineering), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes, Robert W.** (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

Harner III, Joseph P., and **He, Mei**, US Department of Health and Human Services, \$1,547, "Start-up Package Support - Mei He."

He, Mei, Kansas State University Foundation, \$30,910, "Cancer Research - Olathe."

He, Mei, and **Harner III, Joseph P.**, US Department of Health and Human Services, \$1,547, "Start-up Package Support - Mei He."

Hutchinson, Stacy L., and **Derby, Melanie M.** (Mechanical and Nuclear Engineering), National Science Foundation, \$47,048, "EPRI: Flexible Flapping Surfaces for Water Collection and Condensation."

Hutchinson, Stacy L., and **Parameswaran, Prathap** (Civil Engineering), US Department of Defense, \$50,500, "Anaerobic Membrane Bioreactor (AnMBR) for Sustainable Wastewater Treatment."

Hutchinson, Stacy L., Devlin, Daniel L. (Ks Ctr for Ag Rsrcs & the Env / Ks Water Rsrce Rsrch Inst), and **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), US Department of the Interior, \$26,699, "Water Research for the Fort Riley Net Zero Initiative."

Hutchinson, Stacy L., Canfield, Jessica (Landscape Architecture/Regional and Community Planning), **Kingery-Page, Mary C.** (Landscape Architecture/Regional and Community Planning), and **Skabelund, Lee R.** (Landscape Architecture/Regional and Community Planning), US Environmental Protection Agency, \$4,800, "Green Infrastructure Demonstration and Training: Evaluating Two Sites on the S-State Campus."

Maghirang, Ronaldo G., US Department of Agriculture, \$50,000, "Field Measurements of Interactions between Stored Grain Aeration and Pack Factors."

Maghirang, Ronaldo G., US Department of Agriculture, \$30,085, "Mechanistic Modeling of Wind Barriers and Grain Commingling Using CFD and DEM."

Maghirang, Ronaldo G., US Department of Agriculture, \$66,900, "Modeling of Stored Product Packing and Fumigation."

Maghirang, Ronaldo G., Erickson, Larry E. (Center for Hazardous Substance Research), and **Griswold, Wendy M.** (Center for Hazardous Substance Research), US Environmental Protection Agency, \$33,409, "Shared Air/Shared Action (SA2): Community Empowerment through Low-Cost Air Pollution Monitoring."

Rogers, Danny H., Aguilar, Jonathan P. (Southwest Area Office), **Foster, Anserd J.** (Southwest Area Office), and **Kisekka, Isaya** (Southwest Research Extension Center), Kansas Water Office, \$7,500, "On-Farm Demonstration of Water Management Technologies and Mobile Trip Irrigation."

Rogers, Danny H., Aguilar, Jonathan P. (Southwest Area Office), **Barnes, Philip L., Bolton, Debra** (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, \$13,990, "On-Farm Water Management Trainings - Pakistan Part 2."

Rogers, Danny H., and Aguilar, Jonathan P. (Southwest Area Office), US Department of Agriculture, \$25,211, "Promoting Sensor-based Technology to Improve Land and Water Resources Conservation."

Rogers, Danny H., Golden, Bill B. (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Rice, Charles W.** (Agronomy), and **Sanderson, Matthew R.** (Sociology, Anthropology, and Social Work), US Department of Agriculture, \$6,496, "Sustaining Agriculture through Adaptive Management to Preserve the Ogallala Aquifer under a Changing Climate."

Sharda, Ajay, Brokesh, Edwin L., Flippo, Daniel, McCornack, Brian P. (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), Kansas Corn Commission, \$5,546, "Comprehensive Study of Light Wavelength and Image Processing to Automatically Identify Corn Pests."

Sheshukov, Aleksey Y., Barden, Charles J. (Horticulture, Forestry and Recreation Resources), and **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), US Department of the Interior, \$21,974 (includes \$10,894 from In- Kind), "Kansas Water Resources Research Institute 2016."

Slocombe, John W., US Department of Agriculture, \$189,000, "Kansas AgrAbility Project."

Wang, Donghai, Deines, Timothy W. (Industrial and Manufacturing Systems Engineering), and **Zhang, Meng** (Industrial and Manufacturing Systems Engineering), National Science Foundation, \$119,988, "Increasing Sugar Yield in Biofuel Manufacturing through Control of Cellulosic Biomass Particle Size."

Wang, Donghai, United Sorghum Checkoff Program, \$180,000, "Evaluation of the Potential of Pedigreed Sorghum Mutants for Biofuel Production."

Wang, Donghai, US Department of Agriculture, \$5,000, "Accelerating Genetic Improvement for Oat Milling and Nutritional Quality."

Wang, Donghai, US Department of Agriculture, \$11,000, "Acquisition of Goods and Services."

Wang, Donghai, US Department of Agriculture, \$100,000, "Spectroscopic Measurement of Biological Materials."

Zhang, Naiqian, US Department of Agriculture, \$30,718, "Development of Moisture Sensors and a Field Phenotyping System for Grain."

CENTER FOR HAZARDOUS SUBSTANCE RESEARCH

Erickson, Larry E., US Department of Health and Human Services, \$13,696, "Phytotechnologies for Sustainable Development."

Erickson, Larry E., Griswold, Wendy M., and Maghirang, Ronaldo G. (Biological and Agricultural Engineering), US Environmental Protection Agency, \$233,861, "Shared Air/Shared Action (SA2): Community Empowerment through Low-Cost Air Pollution Monitoring."

Griswold, Wendy M., Erickson, Larry E., and Maghirang, Ronaldo G. (Biological and Agricultural Engineering), US Environmental Protection Agency, \$400,904, "Shared Air/Shared Action (SA2): Community Empowerment through Low-Cost Air Pollution Monitoring."

Leven, Blase A., US Environmental Protection Agency, \$2,000, "ICF Basic Ordering Agreement - Task Order #1."

CHEMICAL ENGINEERING

Amama, Placidus B., National Science Foundation, \$75,010, "Nanocarbon Hybrid Structures for Fast and Reversible Lithium Ion Storage."

Burg, Karen, Burg, Timothy C. (Electrical and Computer Engineering), and **Potter, Richard M.** (Research Vice President), National Science Foundation, \$30,000, "I-Corps L: A Commercial Approach to Distribute Fused Research Mentoring Modules."

Edgar, James H., Clark, Gary A. (Dean of Engineering), **Dawson, Darren M.** (Dean of Engineering), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes, Robert W.** (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

Edgar, James H., National Science Foundation, \$297,321, "Hexagonal Boron Nitride Crystal Growth from Solution: A Study of Fundamentals."

Hohn, Keith L., and Vadlani, Praveen V. (Grain Science and Industry), US Department of Defense, \$37,500, "Novel Biomass Conversion Process for Production of Butylenes."

Rezac, Mary E., and Bergtold, Jason S. (Agricultural Economics), National Science Foundation, \$108,600, "REU Site: Summer Academy in Sustainable BioEnergy."

CIVIL ENGINEERING

Albahtiti, Mohammed T., and Riding, Kyle, US Department of Transportation, \$26,216, "Concrete Pavement Quality Control Testing Requirements Needed Using the Super Air Meter."

Dissanayake, Sunanda, Kansas Department of Transportation, \$2,628, "Development of a Microsoft Access Database for Tracking KDOT Research."

Dissanayake, Sunanda, Kansas Department of Transportation, \$58,000, "Safety Evaluation of Raised Speed Limits on Kansas Freeways and Other Roadways."

Dissanayake, Sunanda, and Fitzsimmons, Eric J., Kansas Department of Transportation, \$27,072, "Updating the Lane Closure Guide for Urban Highways in Kansas: Phase 1."

Dissanayake, Sunanda, US Department of Transportation, \$50,000, "Crash Modification Factors for Lane Departure Countermeasures in Kansas."

Fitzsimmons, Eric J., Johnson County Public Works, \$800, "Johnson County, KS Safety Study."

Fitzsimmons, Eric J., and **Kulesza, Stacey E.**, Kansas Department of Transportation, \$27,500, "Class III / Short Line System Inventory to Determine 129, 844 kg. (286,000 lb) Railcar Operational Status in Kansas."

Fitzsimmons, Eric J., and **Dissanayake, Sunanda**, Kansas Department of Transportation, \$33,089, "Updating the Lane Closure Guide for Urban Highways in Kansas: Phase 1."

Fitzsimmons, Eric J., National Academy of Sciences, \$3,640, "Self De-Icing LED Signals for Railroads and Highway Intersections."

Hossain, Mustaque A., City of Salina, KS, \$6,645, "Distress Survey and Pavement Condition Reporting for Microsurfacing Test Sections in the City of Salina."

Hossain, Mustaque A., and **Riding, Kyle**, Kansas Department of Transportation, \$42,000, "Evaluation of Lower Quality Recycled PCCP for Paving Applications."

Hossain, Mustaque A., US Department of Transportation, \$700,985, "Implementation of the AASHTO Mechanistic-Empirical Design Guide (AASHTOWare Pavement me Design) for Pavement Rehabilitation."

Kulesza, Stacey E., and **Fitzsimmons, Eric J.**, Kansas Department of Transportation, \$22,500, "Class III / Short Line System Inventory to Determine 129, 844 kg. (286,000 lb) Railcar Operational Status in Kansas."

Kulesza, Stacey E., Kansas Department of Transportation, \$52,750, "Galvanized and Aluminized Pipe Durability Field Review and Evaluation."

Mathews, Alexander P., National Science Foundation, \$113,339, "Eager: A Novel Bioprocess for the Valorization of Waste and Biomass."

Parameswaran, Prathap, National Science Foundation, \$13,552, "Modeling Wastewater Sludge Hydrolysis Aided by High Temporal Resolution Measurements through Microbial Electrochemistry."

Parameswaran, Prathap, and **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), US Department of Defense, \$50,500, "Anaerobic Membrane Bioreactor (AnMBR) for Sustainable Wastewater Treatment."

Peterman, Robert J., **Beck, B. Terry** (Mechanical and Nuclear Engineering), and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), BNSF Railway Foundation, \$31,140, "Determining the Transfer Length and Prestress in Concrete Railroad Ties."

Peterman, Robert J., **Beck, B. Terry** (Mechanical and Nuclear Engineering), **Riding, Kyle**, and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), US Department of Transportation, \$76,726, "Developing Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

Peterman, Robert J., **Brueseke, Matthew E.** (Geology), and **Riding, Kyle**, US Department of Transportation, \$67,496, "Field Investigation of Concrete Tie Abrasion Wear Prevalence and Contributing Environmental Factors."

Peterman, Robert J., Beck, B. Terry (Mechanical and Nuclear Engineering), and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), US Department of Transportation, \$9,184, "Quantifying the Effect of Prestressing Steel and Concrete Variables on the Transfer Length in Pretensioned Concrete Crossties."

Rasheed, Hayder A., Kansas Department of Transportation, \$225,840, "KSU S4M: Settlement Stabilization through Structural Strengthening and Monitoring of KDOT Bridge 059045 Shawnee Drive over I-135."

Rasheed, Hayder A., US Department of Transportation, \$49,937, "Intelligent Data Driven Health Monitoring and Damage Detection of Concrete Bridge Girders using Hand-held Mobile Devices."

Riding, Kyle, and Hossain, Mustaque A., Kansas Department of Transportation, \$42,000, "Evaluation of Lower Quality Recycled PCCP for Paving Applications."

Riding, Kyle, Lafarge North America, Inc., \$4,920, "Freeze-Thaw Testing of Concrete Prisms Containing 38 MM Maximum Size Aggregates."

Riding, Kyle, and Albahtiti, Mohammed T., US Department of Transportation, \$26,216, "Concrete Pavement Quality Control Testing Requirements Needed Using the Super Air Meter."

Riding, Kyle, US Department of Transportation, \$36,014, "Determination of Need for Water Soaking Period in Measurement of Concrete Volume of Permeable Voids."

Riding, Kyle, Beck, B. Terry (Mechanical and Nuclear Engineering), **Peterman, Robert J.**, and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), US Department of Transportation, \$76,726, "Developing Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

Riding, Kyle, Brueseke, Matthew E. (Geology), and **Peterman, Robert J.**, US Department of Transportation, \$67,496, "Field Investigation of Concrete Tie Abrasion Wear Prevalence and Contributing Environmental Factors."

Stokes, Robert W., Clark, Gary A. (Dean of Engineering), **Dawson, Darren M.** (Engineering Experiment Station), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

Stokes, Robert W., US Department of Transportation, \$100,000, "Traffic Assistance Services for Kansas (TASK) Program (FY 2015 - 2017)."

COMPUTING AND INFORMATION SCIENCES

Andresen, Daniel A., DeLoach, Scott A., Hatcliff, John M., and **Vasserman, Eugene**, National Science Foundation, \$89,445, "Building the National Cyber Workforce: New SFS Program at Kansas State University."

Bean, Nathan, and DeLoach, Scott A., North American Sportsman Show, LLC, \$64,883, "Vexpos Phase I: A Platform for Virtual Expositions."

DeLoach, Scott A., Clark, Gary A. (Dean of Engineering), **Dawson, Darren M.** (Engineering Experiment Station), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes,**

Robert W. (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

DeLoach, Scott A., Andresen, Daniel A., Hatcliff, John M., and Vasserman, Eugene, National Science Foundation, \$149,075, "Building the National Cyber Workforce: New SFS Program at Kansas State University."

DeLoach, Scott A., Das, Sanjoy (Electrical and Computer Engineering), **Gayle, Philip G.** (Economics), **Natarajan, Balasubramaniam** (Electrical and Computer Engineering), and **Pahwa, Anil** (Electrical and Computer Engineering), National Science Foundation, \$161,000, "CPS: Synergy: Architecture for Future Distribution Systems Including Active Consumers with Rooftop Solar Generation."

DeLoach, Scott A., and Bean, Nathan, North American Sportsman Show, LLC, \$7,209, "Vexpos Phase I: A Platform for Virtual Expositions."

DeLoach, Scott A., US Army, \$115,610, "CREACT: Advanced Network Security Metrics for Cyber RESilience and Asset CriTicality Measurement in Mission Success."

DeLoach, Scott A., US Department of Defense, \$210,795, "Understanding and Quantifying the Impact of Moving Target Defenses on Computer Networks."

Hatcliff, John M., Andresen, Daniel A., DeLoach, Scott A., and Vasserman, Eugene, National Science Foundation, \$59,630, "Building the National Cyber Workforce: New SFS Program at Kansas State University."

Hatcliff, John M., Ranganath, Venkatesh, and Vasserman, Eugene, US Department of Defense, \$18,400, "Methodologies and Tools for Securing Medical Device Systems in Integrated Clinical Environments (ICE)."

Hatcliff, John M., Ranganath, Venkatesh, and Vasserman, Eugene, US Department of Homeland Security, \$60,547, "Cyber Physical System Security (CPSSEC)."

Hatcliff, John M., Mizuno, Masaaki, and Neilsen, Mitchell L., US Department of the Interior, \$60,503, "Modeling Security/Safety Interactions in Buildings for Compositional Security/Safety Control."

Hsu, William H., US Department of Energy, \$45,000, "Capability Inference based on Dynamic Topic Modeling and Text Information Extraction."

Mizuno, Masaaki, Hatcliff, John M., and Neilsen, Mitchell L., US Department of the Interior, \$62,337, "Modeling Security/Safety Interactions in Buildings for Compositional Security/Safety Control."

Neilsen, Mitchell L., US Department of Agriculture, \$35,000, "Enhancement of Software Tools for Predicting Embankment Erosion of Earthen Dams."

Neilsen, Mitchell L., US Department of Energy, \$30,000, "SN-Pb or Pb-free Solder Interconnect Predictor Model Development."

Neilsen, Mitchell L., US Department of Energy, \$25,000, "Thermal Battery Model Interface Development."

Neilsen, Mitchell L., Hatcliff, John M., and Mizuno, Masaaki, US Department of the Interior, \$60,503, "Modeling Security/Safety Interactions in Buildings for Compositional Security/Safety Control."

Prabhakar, Pavithra, National Science Foundation, \$150,668, "CAREER: Robust Verification of Cyber-Physical Systems."

Ranganath, Venkatesh, Hatcliff, John M., and Vasserman, Eugene, US Department of Defense, \$9,200, "Methodologies and Tools for Securing Medical Device Systems in Integrated Clinical Environments (ICE)."

Ranganath, Venkatesh, Hatcliff, John M., and Vasserman, Eugene, US Department of Homeland Security, \$20,182, "Cyber Physical System Security (CPSSEC)."

Singh, Gurdip, National Science Foundation, \$330,107, "National Science Foundation - Intergovernmental Personnel Act."

Vasserman, Eugene, Andresen, Daniel A., DeLoach, Scott A., and Hatcliff, John M., National Science Foundation, \$298,150, "Building the National Cyber Workforce: New SFS Program at Kansas State University."

Vasserman, Eugene, National Science Foundation, \$144,995, "CAREER: Safety and Security for Next-generation World-scale Real-time Medical Systems."

Vasserman, Eugene, Hatcliff, John M., and Ranganath, Venkatesh, US Department of Defense, \$18,400, "Methodologies and Tools for Securing Medical Device Systems in Integrated Clinical Environments (ICE)."

Vasserman, Eugene, US Department of Defense, \$22,870, "Methodologies and Tools for Securing Medical Device Systems to Integrated Clinical Environments."

Vasserman, Eugene, Hatcliff, John M., and Ranganath, Venkatesh, US Department of Homeland Security, \$53,819, "Cyber Physical System Security (CPSSEC)."

DEAN OF ENGINEERING

Clark, Gary A., Dawson, Darren M. (Engineering Experiment Station), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes, Robert W.** (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

Dawson, Darren M., Clark, Gary A., DeLoach, Scott A. (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes, Robert W.** (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$700,000, "University Engineering Initiative Act (UEIA)."

Grauer, Bette, Mason, April (Office of the Provost), **Montelone, Beth A.** (Dean of Arts and Sciences), **Morales, Amanda I.** (Curriculum and Instruction), **Thurston, Linda P.** (Dean of Education), and **Wiley, Zelia Z.** (Dean of Agriculture and Director of AES), National Science Foundation, \$75,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

ELECTRICAL AND COMPUTER ENGINEERING

Burg, Timothy C., Burg, Karen (Chemical Engineering), and **Potter, Richard M.** (Research Vice President), National Science Foundation, \$10,000, "I-Corps L: A Commercial Approach to Distribute Fused Research Mentoring Modules."

Darabi Sahneh, Faryad, and Scoglio, Caterina M., National Science Foundation, \$11,250, "CIF: Small: Spreading Processes over Multilayer and Interconnected Networks."

Darabi Sahneh, Faryad, and Scoglio, Caterina M., US Department of Agriculture, \$1,500, "Long-distance Dispersal and Disease Outbreaks: Effects of Initial Prevalence, Basic Reproduction Number, and Control Tactics."

Das, Sanjoy, DeLoach, Scott A. (Computing and Information Sciences), **Gayle, Philip G.** (Economics), **Natarajan, Balasubramaniam**, and **Pahwa, Anil**, National Science Foundation, \$154,000, "CPS: Synergy: Architecture for Future Distribution Systems Including Active Consumers with Rooftop Solar Generation."

Fund, Andrew D., and **Kuhn, William B.**, Honeywell Federal Manufacturing & Technologies, LLC, \$993, "Summer Packaging and Radio Frequency Research Symposium."

Fund, Andrew D., and **Kuhn, William B.**, US Department of Energy, \$59,732, "RF Design/Layout of High-Frequency Electronics in Advanced PC Board Technologies."

Gruenbacher, Don M., **Clark, Gary A.** (Dean of Engineering), **Dawson, Darren M.** (Engineering Experiment Station), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes, Robert W.** (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

Gruenbacher, Don M., Kansas State University Foundation, \$80,514, "Power Affiliates."

Kuhn, William B., and **Fund, Andrew D.**, Honeywell Federal Manufacturing & Technologies, LLC, \$993, "Summer Packaging and Radio Frequency Research Symposium."

Kuhn, William B., and **Fund, Andrew D.**, US Department of Energy, \$89,598, "RF Design/Layout of High-Frequency Electronics in Advanced PC Board Technologies."

Miller, Ruth D., and **Bloomfield, John J.** (Advanced Manufacturing Institute), Dakota Turbines, \$38,859, "Certification Testing of Dakota DT-36 Wind Turbine."

Miller, Ruth D., and **White, Warren J.** (Mechanical and Nuclear Engineering), National Renewable Energy Laboratory, \$5,743, "Kansas State University Wind Turbine Design Team 2016."

Miller, Ruth D., US Department of Energy, \$23,000, "Wind for Schools (WIS) Wind Application Center (WAC) Operation."

Mirafzal, Behrooz, National Science Foundation, \$50,000, "I-Corps Teams: A Novel Direct Drive Wind Energy System."

Natarajan, Balasubramaniam, Das, Sanjoy, DeLoach, Scott A. (Computing and Information Sciences), **Gayle, Philip G.** (Economics), and **Pahwa, Anil**, National Science Foundation, \$154,000, "CPS: Synergy: Architecture for Future Distribution Systems Including Active Consumers with Rooftop Solar Generation."

Natarajan, Balasubramaniam, Prakash, Punit, Thompson, David C., and **Warren, Steven**, National Science Foundation, \$91,991, "UNS: GARDE: Research to Quantify the Health and Development of Children with Disabilities Around the Clock."

Pahwa, Anil, Das, Sanjoy, DeLoach, Scott A. (Computing and Information Sciences), **Gayle, Philip G.** (Economics), and **Natarajan, Balasubramaniam**, National Science Foundation, \$224,000, "CPS: Synergy: Architecture for Future Distribution Systems Including Active Consumers with Rooftop Solar Generation."

Prakash, Punit, Broncus Medical Inc, \$108,919, "Broncoschopic Microwave Ablation of Lung Tumors: Antenna Design and Characterization towards Pilot Clinical Study."

Prakash, Punit, Hologic, Inc., \$28,655, "Computer Modeling of GYN Microwave Ablation."

Prakash, Punit, Natarajan, Balasubramaniam, Thompson, David C., and Warren, Steven, National Science Foundation, \$91,991, "UNS: GARDE: Research to Quantify the Health and Development of Children with Disabilities Around the Clock."

Prakash, Punit, National University of Ireland Galway, \$27,614, "Proof-of-principle Assessment of Microwave Ablation for Treating Esophageal Varices."

Scoglio, Caterina M., and Darabi Sahneh, Faryad, National Science Foundation, \$11,250, "CIF: Small: Spreading Processes over Multilayer and Interconnected Networks."

Scoglio, Caterina M., Albin, Nathan (Mathematics), and **Poggi-Corradini, Pietro** (Mathematics), National Science Foundation, \$166,507, "p-Modulus on Networks with Applications to the Study of Epidemics."

Scoglio, Caterina M., and Darabi Sahneh, Faryad, US Department of Agriculture, \$6,000, "Long-distance Dispersal and Disease Outbreaks: Effects of Initial Prevalence, Basic Reproduction Number, and Control Tactics."

Scoglio, Caterina M., US Department of Agriculture, \$65,000, "Modeling Japanese Encephalitis in US using Interconnected Networks."

Thompson, David C., Natarajan, Balasubramaniam, Prakash, Punit, and Warren, Steven, National Science Foundation, \$91,991, "UNS: GARDE: Research to Quantify the Health and Development of Children with Disabilities Around the Clock."

Warren, Steven, Natarajan, Balasubramaniam, Prakash, Punit, and Thompson, David C., National Science Foundation, \$123,988, "UNS: GARDE: Research to Quantify the Health and Development of Children with Disabilities Around the Clock."

ENGINEERING EXPERIMENT STATION

Dawson, Darren M., Clark, Gary A. (Dean of Engineering), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes, Robert W.** (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

Ben-Arieh, David H., and Wu, Chih-Hang, SORA Medical Solutions LLC, \$22,098, "Data Analysis of the ApolloMED Mobile App."

Deines, Timothy W., Wang, Donghai (Biological and Agricultural Engineering), and **Zhang, Meng**, National Science Foundation, \$59,994, "Increasing Sugar Yield in Biofuel Manufacturing through Control of Cellulosic Biomass Particle Size."

Kramer, Bradley A., Clark, Gary A. (Dean of Engineering), **Dawson, Darren M.** (Engineering Experiment Station), **DeLoach, Scott A.** (Computing and Information Sciences), **Dunn, William L.** (Mechanical and Nuclear Engineering), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Stokes, Robert W.** (Civil

Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

Kramer, Bradley A., National Science Foundation, \$38,000, "Workshop: 2016 NSF CAREER Proposal Writing Workshop."

Lei, Shuting, National Science Foundation, \$309,159, "High Performance Machining of Brittle Materials by Controlled Crack Propagation."

Pei, Zhijian, National Science Foundation, \$283,241, "National Science Foundation - Intergovernmental Personnel Act."

Wu, Chih-Hang, Beck, B. Terry (Mechanical and Nuclear Engineering), and **Peterman, Robert J.** (Civil Engineering), BNSF Railway Foundation, \$15,570, "Determining the Transfer Length and Prestress in Concrete Railroad Ties."

Wu, Chih-Hang, and **Ben-Arieh, David H.**, SORA Medical Solutions LLC, \$22,098, "Data Analysis of the ApolloMED Mobile App."

Wu, Chih-Hang, Beck, B. Terry (Mechanical and Nuclear Engineering), **Peterman, Robert J.** (Civil Engineering), and **Riding, Kyle** (Civil Engineering), US Department of Transportation, \$76,726, "Developing Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

Wu, Chih-Hang, Beck, B. Terry (Mechanical and Nuclear Engineering), and **Peterman, Robert J.** (Civil Engineering), US Department of Transportation, \$5,612, "Quantifying the Effect of Prestressing Steel and Concrete Variables on the Transfer Length in Pretensioned Concrete Crossties."

Zhang, Meng, Deines, Timothy W., and **Wang, Donghai** (Biological and Agricultural Engineering), National Science Foundation, \$119,988, "Increasing Sugar Yield in Biofuel Manufacturing through Control of Cellulosic Biomass Particle Size."

INSTITUTE FOR ENVIRONMENTAL RESEARCH

Eckels, Steven J., Multi-Sponsor, \$9,648, "Evaluation of Human Thermal Comfort and Textile Properties."

Eckels, Steven J., and **McCullough, Elizabeth A.**, Multi-Sponsor, \$23,799, "Thermal Properties of Textile Products."

Eckels, Steven J., Day, Julia K. (Apparel, Textiles, and Interior Design), **Kim, Jooyoun** (Apparel, Textiles, and Interior Design), and **Manzo, Christopher** (Interior Architecture and Product Design), US Environmental Protection Agency, \$3,745, "Net Zero Energy Air Filtration: Innovative Filter Media Applications for Improved Indoor Air Quality and Energy Efficiency."

Jones, Byron W., US Department of Health and Human Services, \$24,999, "Induced Contaminant Transport from Aisle Movement in a Commercial Airliner."

Jones, Byron W., US Department of Health and Human Services, \$25,000, "The Effect of Off-design Flow Conditions in Aircraft Cabins."

McCullough, Elizabeth A., and **Eckels, Steven J.**, Multi-Sponsor, "Thermal Properties of Textile Products."

KANSAS INDUSTRIAL EXTENSION SERVICES

Carter, David A., and Snead, Bruce C., US Department of Energy, \$44,100, "Kansas Corporation Commission Energy Program Evaluation."

Carter, David A., US Department of Energy, \$51,200, "Kansas Corporation Commission: Energy Education Services."

Carter, David A., and Snead, Bruce C., US Department of Energy, \$33,740, "The Kansas Corporation Commission and Kansas State University."

Carter, David A., and Larson, Nancy J., US Environmental Protection Agency, \$149,224 (includes \$54,552 from Industry Match), "Partnering to Foster Pollution Prevention in Kansas."

Goode, Barbara L., and Larson, Nancy J., US Environmental Protection Agency, \$37,500, "Development and Management of the National Small Business Ombudsman/Small Business Environmental Assistance Provider 507 Program Website."

Goode, Barbara L., US Environmental Protection Agency, \$5,000, "Environmental Sustainability for the Salina, Kansas Community Level II."

Hanson, Brian R., Snead, Bruce C., and Snyder, Kristina E., US Environmental Protection Agency, \$57,750, "National Radon Program Services (NRPS)."

Hanson, Brian R., and Snead, Bruce C., US Environmental Protection Agency, \$115,450 (includes \$40,450 from Contractual / In Kind Costs), "Radon Projects for Kansas."

Larson, Nancy J., Kansas Department of Health and Environment, \$229,181, "Small Business Environmental Assistance Program 2016."

Larson, Nancy J., Kansas Health Foundation, \$25,000, "Retail Food Donations Feed People, Not Landfills."

Larson, Nancy J., and Goode, Barbara L., US Environmental Protection Agency, \$112,500, "Development and Management of the National Small Business Ombudsman/Small Business Environmental Assistance Provider 507 Program Website."

Larson, Nancy J., and Carter, David A., US Environmental Protection Agency, \$63,953 (includes \$23,379 from Industry Match), "Partnering to Foster Pollution Prevention in Kansas."

Snead, Bruce C., and Carter, David A., US Department of Energy, \$18,900, "Kansas Corporation Commission Energy Program Evaluation."

Snead, Bruce C., and Carter, David A., US Department of Energy, \$14,460, "The Kansas Corporation Commission and Kansas State University."

Snead, Bruce C., US Environmental Protection Agency, \$7,500, "Kansas State University - Missouri Radon Training."

Snead, Bruce C., Hanson, Brian R., and Snyder, Kristina E., US Environmental Protection Agency, \$91,000, "National Radon Program Services (NRPS)."

Snead, Bruce C., and Hanson, Brian R., US Environmental Protection Agency, \$115,450 (includes \$40,450 from Contractual / In Kind Costs), "Radon Projects for Kansas."

Snyder, Kristina E., Hanson, Brian R., and Snead, Bruce C., US Environmental Protection Agency, \$26,250, "National Radon Program Services (NRPS)."

MECHANICAL AND NUCLEAR ENGINEERING

Beck, B. Terry, Peterman, Robert J. (Civil Engineering), and **Wu, ChihHang** (Industrial and Manufacturing Systems Engineering), BNSF Railway Foundation, \$31,140, "Determining the Transfer Length and Prestress in Concrete Railroad Ties."

Beck, B. Terry, US Department of Commerce, \$9,565, "SURF Gaithersburg."

Beck, B. Terry, Peterman, Robert J. (Civil Engineering), **Riding, Kyle** (Civil Engineering), and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), US Department of Transportation, \$76,726, "Developing Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

Beck, B. Terry, Peterman, Robert J. (Civil Engineering), and **Wu, ChihHang** (Industrial and Manufacturing Systems Engineering), US Department of Transportation, \$5,612, "Quantifying the Effect of Prestressing Steel and Concrete Variables on the Transfer Length in Pretensioned Concrete Crossties."

Bellinger, Steven L., McGregor, Douglas S., and Shultis, J. Kenneth, US Department of Defense, \$178,057, "Advanced Trenched Structure for Solid-State Neutron Detectors."

Bindra, Hitesh, National Science Foundation, \$78,719, "A Novel Method to Simultaneously Separate CO₂ and Recover Thermal Energy from Flue Gases."

Bindra, Hitesh, Geuther, Jeffrey A., McGregor, Douglas S., and Roberts, Jeremy A., US Department of Energy, \$199,800, "A Transient Reactor Physics Experiment with High-Fidelity, 3-D Flux Measurements for Validation and Verification."

Bindra, Hitesh, US Department of Energy, \$76,635, "Experimental Investigation of Forced Convection and Natural Circulation Cooling of a VHTR Core under Normal Operation and Accident Scenario."

Bindra, Hitesh, US Department of Energy, \$2,250, "Nuclear Energy Senior Design Projects."

Bindra, Hitesh, Dunn, William L., and Roberts, Jeremy A., US Nuclear Regulatory Commission, \$65,924, "Kansas State University Nuclear Energy Scholarship Program."

Derby, Melanie M., and Hutchinson, Stacy L. (Biological and Agricultural Engineering), National Science Foundation, \$266,607, "EPRI: Flexible Flapping Surfaces for Water Collection and Condensation."

Dunn, William L., Clark, Gary A. (Dean of Engineering), **Dawson, Darren M.** (Engineering Experiment Station), **DeLoach, Scott A.** (Computing and Information Sciences), **Edgar, James H.** (Chemical Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Harner III, Joseph P.** (Biological and Agricultural Engineering), **Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), **Stokes, Robert W.** (Civil Engineering), and **Yunk, Raphael A.** (Architectural Engineering and Construction Science), Kansas Department of Commerce, \$630,000, "University Engineering Initiative Act (UEIA)."

Dunn, William L., Shultis, J. Kenneth, and **Ugorowski, Philip B.**, US Department of Energy, \$150,000, "Proposal for a Consortium for Nonproliferation-Enabling Capabilities."

Dunn, William L., Bindra, Hitesh, and **Roberts, Jeremy A.**, US Nuclear Regulatory Commission, \$67,922, "Kansas State University Nuclear Energy Scholarship Program."

Geuther, Jeffrey A., Bindra, Hitesh, McGregor, Douglas S., and Roberts, Jeremy A., US Department of Energy, \$199,800, "A Transient Reactor Physics Experiment with High-Fidelity, 3-D Flux Measurements for Validation and Verification."

Geuther, Jeffrey A., McGregor, Douglas S., and Roberts, Jeremy A., US Department of Energy, \$67,682, "Advanced Instrumentation for Transient Reactor Testing."

Geuther, Jeffrey A., US Department of Energy, \$1,495,945, "Control Panel Modernization at the KSU Triga Reactor Facility."

Geuther, Jeffrey A., McGregor, Douglas S., and Roberts, Jeremy A., US Department of Energy, \$77,575, "Develop an Active Sensor Array Prototype for Knolls Atomic Power Laboratory."

Hosni, Mohammad H., US Department of Defense, \$10,000, "2015 University Engineering Alliance Summit."

Hosni, Mohammad H., US Department of Energy, \$7,500, "Nuclear Energy University Programs Fellowship and Scholarship Support."

Lease, Kevin B., National Aeronautics and Space Administration, \$7,000, "Competitive Programs: Research Experience: Charles Balkenbusch Internship - NASA Ames 2016."

McGregor, Douglas S., Defense Threat Reduction Agency, \$59,952, "Development of Neutron Spectrometer with Directional Sensitivity - NEUKOPIS: Portable Neutron Spectrometer."

McGregor, Douglas S., Bellinger, Steven L., and Shultis, J. Kenneth, US Department of Defense, \$178,057, "Advanced Trenched Structure for Solid-State Neutron Detectors."

McGregor, Douglas S., US Department of Defense, \$70,000, "Portable System with Li Foil MWPC Neutron Detectors."

McGregor, Douglas S., and Shultis, J. Kenneth, US Department of Defense, \$88,211, "Wearable Detection Device (WDD) - Low Visibility Gamma Neutron Sensor."

McGregor, Douglas S., Bindra, Hitesh, Geuther, Jeffrey A., and Roberts, Jeremy A., US Department of Energy, \$199,800, "A Transient Reactor Physics Experiment with High-Fidelity, 3-D Flux Measurements for Validation and Verification."

McGregor, Douglas S., Geuther, Jeffrey A., and Roberts, Jeremy A., US Department of Energy, \$67,682, "Advanced Instrumentation for Transient Reactor Testing."

McGregor, Douglas S., Geuther, Jeffrey A., and Roberts, Jeremy A., US Department of Energy, \$79,926, "Develop an Active Sensor Array Prototype for Knolls Atomic Power Laboratory."

McGregor, Douglas S., and Ugorowski, Philip B., US Department of Energy, \$50,000, "Technical Assistance on High Temperature MPFD Development."

Roberts, Jeremy A., Bindra, Hitesh, Geuther, Jeffrey A., and McGregor, Douglas S., US Department of Energy, \$199,800, "A Transient Reactor Physics Experiment with High-Fidelity, 3-D Flux Measurements for Validation and Verification."

Roberts, Jeremy A., Geuther, Jeffrey A., and McGregor, Douglas S., US Department of Energy, \$69,733, "Advanced Instrumentation for Transient Reactor Testing."

Roberts, Jeremy A., Geuther, Jeffrey A., and McGregor, Douglas S., US Department of Energy, \$77,575, "Develop an Active Sensor Array Prototype for Knolls Atomic Power Laboratory."

Roberts, Jeremy A., Bindra, Hitesh, and Dunn, William L., US Nuclear Regulatory Commission, \$65,924, "Kansas State University Nuclear Energy Scholarship Program."

Shultis, J. Kenneth, Bellinger, Steven L., and McGregor, Douglas S., US Department of Defense, \$39,568, "Advanced Trenched Structure for Solid-State Neutron Detectors."

Shultis, J. Kenneth, and McGregor, Douglas S., US Department of Defense, \$22,053, "Wearable Detection Device (WDD) - Low Visibility Gamma Neutron Sensor."

Shultis, J. Kenneth, Dunn, William L., and Ugorowski, Philip B., US Department of Energy, \$60,000, "Proposal for a Consortium for Nonproliferation-Enabling Capabilities."

Singh, Gurpreet, Kansas State University Research Foundation, \$10,000, "Synthesis of Boron-Modified Polyureasilazane for Synthesis of Si (B) CN Ceramic."

Ugorowski, Philip B., Dunn, William L., and Shultis, J. Kenneth, US Department of Energy, \$90,000, "Proposal for a Consortium for Nonproliferation-Enabling Capabilities."

Ugorowski, Philip B., and McGregor, Douglas S., US Department of Energy, \$50,000, "Technical Assistance on High Temperature MPFD Development."

Wang, Youqi, US Department of Defense, \$100,000, "Real Scale Numerical Simulation of Ballistic Tests for Multi-layer Fabric Body Armor."

Wanklyn, Kevin M., Kansas Department of Transportation, \$15,000, "Proposal to Evaluate the Effectiveness of High Friction Surfaces to Mitigate Highway Tire Noise."

White, Warren J., and Miller, Ruth D. (Electrical and Computer Engineering), National Renewable Energy Laboratory, \$5,743, "Kansas State University Wind Turbine Design Team 2016."

NATIONAL GAS MACHINERY LABORATORY

Jones, Byron W., Pipeline Research Council International, Inc., \$50,146, "Evaluation of a Low Cost Engine Balance System."

COLLEGE OF HUMAN ECOLOGY

APPAREL, TEXTILES, AND INTERIOR DESIGN

Day, Julia K., National Science Foundation, \$38,158, "Wireless Sensor Network Architecture for Monitoring and Control in Buildings."

Day, Julia K., Eckels, Steven J. (Institute for Environmental Research), **Kim, Jooyoun,** and **Manzo, Christopher** (Interior Architecture and Product Design), US Environmental Protection Agency, \$3,745, "Net Zero Energy Air Filtration: Innovative Filter Media Applications for Improved Indoor Air Quality and Energy Efficiency."

Kaup, Migette L., Cornelison, Laci J. (Dean of Human Ecology), **Doll, Gayle** (Dean of Human Ecology), **Gfeller, Stephanie** (Dean of Human Ecology), and **Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), US Department of Health and Human Services, \$55,054, "PEAK 2.0 Evaluation."

Kim, Jooyoun, Kansas State University Foundation, \$15,000, "Multi-drug-loaded Nanofibers for Postsurgical Local Treatment of Melanoma Skin Cancer."

Kim, Jooyoun, Day, Julia K., Eckels, Steven J. (Institute for Environmental Research), and **Manzo, Christopher** (Interior Architecture and Product Design), US Environmental Protection Agency, \$3,745, "Net Zero Energy Air Filtration: Innovative Filter Media Applications for Improved Indoor Air Quality and Energy Efficiency."

DEAN OF HUMAN ECOLOGY

Buckwalter, John, and **Gould, Carol A.**, AG*IDEA, \$56,874, "AG*IDEA Lead Institute."

Buckwalter, John, and **Gould, Carol A.**, Great Plains IDEA Alliance, \$164,987, "Comprehensive Fiscal Sponsorship Agreement - Great Plains Interactive Distance Education Alliance."

Cornelison, Laci J., Doll, Gayle, Gfeller, Stephanie, Kaup, Migette L. (Apparel, Textiles, and Interior Design), and **Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), US Department of Health and Human Services, \$137,635, "PEAK 2.0 Evaluation."

Doll, Gayle, and **Poey, Judith**, Retirement Research Foundation, "Independent Contractor Agreement."

Doll, Gayle, Cornelison, Laci J., Gfeller, Stephanie, Kaup, Migette L. (Apparel, Textiles, and Interior Design), and **Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), US Department of Health and Human Services, \$55,054, "PEAK 2.0 Evaluation."

Gfeller, Stephanie, Cornelison, Laci J., Doll, Gayle, Kaup, Migette L. (Apparel, Textiles, and Interior Design), and **Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), US Department of Health and Human Services, \$13,763, "PEAK 2.0 Evaluation."

Gould, Carol A., and **Buckwalter, John**, AG*IDEA, \$56,874, "AG*IDEA Lead Institute."

Gould, Carol A., and **Buckwalter, John**, Great Plains IDEA Alliance, \$164,987, "Comprehensive Fiscal Sponsorship Agreement - Great Plains Interactive Distance Education Alliance."

Poey, Judith, and **Doll, Gayle**, Retirement Research Foundation, \$20,000, "Independent Contractor Agreement."

Toews, Michelle L., US Department of Health and Human Services, \$76,239, "Strengthening Relationships/Strengthening Families (SR/SF)."

HOSPITALITY MANAGEMENT AND DIETETICS

Hanson, Jennifer, and **VerBrugge (Glasscock), Marlene K.** (School of Family Studies and Human Services), US Department of Agriculture, \$500,000, "Army/4-H Military Partnership and Outreach and Support."

Jang, Jichul, Kwon, Junehee, and **VerBrugge (Glasscock), Marlene K.** (School of Family Studies and Human Services), US Department of Defense, "Navy/4-H Military Partnership and Outreach and Support."

Kwon, Junehee, Kansas State University Foundation, \$5,776, "Improving the Elder's Dining Experience: Factors Affecting Older Adults' Dining Behaviors and Preferences in the US. (GRA - Chen-wei Tao)."

Roberts, Kevin R., Gragg, Sara E. (Animal Sciences and Industry), **Sauer, Kevin L.** (Human Nutrition), and **Shanklin, Carol W.** (Dean of Graduate School), US Department of Agriculture, \$360,000, "Center of Excellence for Food Safety Research in Child Nutrition Programs."

HUMAN NUTRITION

Chambers IV, Edgar, National Cattlemen's Beef Association, \$22,500, "Collaborator II - Flavor of Ground Beef."

Chambers IV, Edgar, Chambers, Delores H., and Koppel, Kadri, PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., "Salty Snacks, Cookies and Crackers Training."

Chambers IV, Edgar, Chambers, Delores H., and Koppel, Kadri, PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., "Sensory Panel Certification Project."

Chambers IV, Edgar, Chambers, Delores H., and Koppel, Kadri, PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., "Snacks 2."

Chambers IV, Edgar, US Department of Agriculture, \$10,000, "Collaborator II - Flavor of Ground Beef - Phase II."

Chambers IV, Edgar, and **Chambers, Delores H.**, US Department of Agriculture, \$99,576, "Development and Evaluation of Science-Based Messages to Improve Consumers' Storage, Handling, and Preparation of Poultry and Poultry Products."

Chambers, Delores H., Chambers IV, Edgar, and Koppel, Kadri, PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., \$19,500, "Salty Snacks, Cookies and Crackers Training."

Chambers, Delores H., Chambers IV, Edgar, and Koppel, Kadri, PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., \$4,450, "Sensory Panel Certification Project."

Chambers, Delores H., Chambers IV, Edgar, and Koppel, Kadri, PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., \$35,500, "Snacks 2."

Chambers, Delores H., and **Chambers IV, Edgar**, US Department of Agriculture, \$99,576, "Development and Evaluation of Science-Based Messages to Improve Consumers' Storage, Handling, and Preparation of Poultry and Poultry Products."

Haub, Mark D., Lindshield, Brian L., and Rosenkranz, Sara, American Association of Nurse Practitioners, "Food Inhibitors and Iron Absorption: Adaptability of Iron Availability with Food Inhibitors Over Time (Nicole Delimont)."

Haub, Mark D., Isagenix International, LLC, \$2,700, "Glycemic Index of Food and Dietary Supplements."

Kidd, Tandalayo, US Department of Agriculture, \$70,888, ""Get Fruved:" A Peer-Led, Train-the-Trainer Social Marketing Intervention to Increase Fruit and Vegetable Intake and Prevent Childhood Obesity."

Kidd, Tandalayo, and **Muturi, Nancy W.** (School of Journalism and Mass Communications), US Department of Agriculture, \$400,000, "Community-Based Participatory Research (CBPR) Model in Preventing Overweight and Obesity Among 6th-8th Grade Youth in Low- Income Racial/Ethnic Communities."

Koppel, Kadri, and **Aldrich, Greg** (Grain Science and Industry), Camlin Fine Sciences, \$19,440, "Evaluation of Antioxidant Preservatives Applied to Chicken Fat and Fish Oil."

Koppel, Kadri, Chambers IV, Edgar, and Chambers, Delores H., PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., \$19,500, "Salty Snacks, Cookies and Crackers Training."

Koppel, Kadri, Chambers IV, Edgar, and Chambers, Delores H., PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., \$4,450, "Sensory Panel Certification Project."

Koppel, Kadri, Chambers IV, Edgar, and Chambers, Delores H., PEPSICO INTERNATIONAL MEXICO, S. DE R.L. DE C.V., \$35,500, "Snacks 2."

Koppel, Kadri, United Sorghum Checkoff Program, \$9,500, "Pet Food Feeding Guide."

Lindshield, Brian L., Haub, Mark D., and Rosenkranz, Sara, American Association of Nurse Practitioners, \$2,500, "Food Inhibitors and Iron Absorption: Adaptability of Iron Availability with Food Inhibitors Over Time (Nicole Delimont)."

Lindshield, Brian L., Bhadriraju, Subramanyam (Grain Science and Industry), **Floros, John D.** (Dean of Agriculture and Director of AES), **Leslie, John F.** (Plant Pathology), **Lilja, Nina K.** (International Agricultural Programs), and **Washburn, Shannon G.** (Communications), US Agency for International Development, "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

Procter, Sandra B., and **Peters, Paula** (Director of Cooperative Extension), US Department of Agriculture, \$2,010,415, "Kansas Food Assistance Nutrition Education Plan 2016."

Rosenkranz, Richard R., and **Dzewaltowski, David A.** (Kinesiology), US Department of Agriculture, \$39,760, "Dissemination of the Evidence-Based SWITCH Program for Childhood Obesity Prevention."

Rosenkranz, Sara, Haub, Mark D., and Lindshield, Brian L., American Association of Nurse Practitioners, "Food Inhibitors and Iron Absorption: Adaptability of Iron Availability with Food Inhibitors Over Time (Nicole Delimont)."

Sauer, Kevin L., Gragg, Sara E. (Animal Sciences and Industry), **Roberts, Kevin R.** (Hospitality Management and Dietetics), and **Shanklin, Carol W.** (Dean of Graduate School), US Department of Agriculture, \$360,000, "Center of Excellence for Food Safety Research in Child Nutrition Programs."

Swaney-Stueve, Marianne, Gallo, Katherine E. (K-State Olathe), and **Jepsen, Tegan M.** (K-State Olathe), Hill's Pet Nutrition, Inc., \$11,200, "Study Agreement 1."

Swaney-Stueve, Marianne, and **Jepsen, Tegan M.** (K-State Olathe), Hill's Pet Nutrition, Inc., \$7,600, "Study Agreement 3."

Vardiman, John P., US Department of Defense, \$76,620, "Establishing Optimal Training Intervals for the Marine Corps Martial Arts Program (MCMAP) for Improvement in Physical Performance and Warrior Mindset."

Wang, Weiqun, US Department of Agriculture, \$20,000, "Determining the Bioavailability of Sorghum Phenolic Compounds."

KINESIOLOGY

Barstow, Thomas J., National Aeronautics and Space Administration, \$40,000, "Determining the Effect of Space Flight on the Incidence of Cardiovascular Risk Factors and Disease - Continuation."

Barstow, Thomas J., National Aeronautics and Space Administration, \$30,000, "Identification of Aerobic Fitness Standards for Exploration Mission Tasks."

Dzewaltowski, David A., and **Rosenkranz, Richard R.** (Human Nutrition), US Department of Agriculture, \$39,760, "Dissemination of the Evidence-Based SWITCH Program for Childhood Obesity Prevention."

Harms, Craig A., and Heinrich, Katie M., US Department of Health and Human Services, \$51,247, "HIFT for Obesity Prevention, Fitness and Health Promotion in Military Personnel."

Heinrich, Katie M., and Harms, Craig A., US Department of Health and Human Services, \$461,226, "HIFT for Obesity Prevention, Fitness and Health Promotion in Military Personnel."

Musch, Timothy I., Fong, Peking (Anatomy and Physiology), **Kenney, Michael J.** (Anatomy and Physiology), **Poole, David C.** (Anatomy and Physiology), and **Thomason, Justin D.** (Clinical Sciences), US Department of Health and Human Services, \$37,500, "Heart Failure & Aging: Mechanistic Bases of Muscle Vascular Dysfunction."

Poole, David C., Fong, Peking (Anatomy and Physiology), **Kenney, Michael J.** (Anatomy and Physiology), **Musch, Timothy I.**, and **Thomason, Justin D.** (Clinical Sciences), US Department of Health and Human Services, \$37,500, "Heart Failure & Aging: Mechanistic Bases of Muscle Vascular Dysfunction."

SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES

Anderson, Jared R., Durtschi, Jared A., Stith, Sandra M., and Vennum, Amber V., US Department of Agriculture, \$357,197, "KSU-USAF 2015 FAP Research Project."

Durtschi, Jared A., Anderson, Jared R., Stith, Sandra M., and Vennum, Amber V., US Department of Agriculture, \$357,197, "KSU-USAF 2015 FAP Research Project."

Griffin, Charles L., and Jager, Shanna K., US Department of Health and Human Services, \$273,753, "Technical Support for the Department for Children and Families Strategic Development, Faith-Based and Community Initiatives."

Jager, Shanna K., and Griffin, Charles L., US Department of Health and Human Services, \$273,753, "Technical Support for the Department for Children and Families Strategic Development, Faith-Based and Community Initiatives."

Johannes, Elaine M., Points of Light Foundation, \$1,250, "The Theater of War Production."

Johannes, Elaine M., Bolton, Debra (Southwest Area Office), **Kiss, D. Elizabeth**, and **Wiles, Bradford B.**, US Department of Health and Human Services, \$100,423, "Connecting Kids to Coverage Outreach and Enrollment Cooperative Agreement."

Kiss, D. Elizabeth, Bolton, Debra (Southwest Area Office), **Johannes, Elaine M.**, and **Wiles, Bradford B.**, US Department of Health and Human Services, \$150,635, "Connecting Kids to Coverage Outreach and Enrollment Cooperative Agreement."

O'Conner, Nancy T., US Department of Health and Human Services, \$206,359, "Program for Training and Consultation of CMHC Practitioners Delivering Intensive Home Based Family Therapy Services."

Olsen, Charlotte S., Buhler, Forrest A. (Agriculture and Natural Resources), **Hadley, Gregg L.** (Agriculture and Natural Resources), **Henton, Charlene M.** (Agriculture and Natural Resources), **Hund, Duane M.** (Agricultural Economics), and **Koons, Janel K.** (Agriculture and Natural Resources), US Department of Agriculture, \$8,000, "Planning for the Future: Transferring Management and Assets in Challenging Times."

Schumm, Walter R., Witherspoon Institute, \$28,552, "Further Analyses of NFSS and Other Data."

Stith, Sandra M., Anderson, Jared R., Durtschi, Jared A., and Vennum, Amber V., US Department of Agriculture, \$714,394, "KSU-USAF 2015 FAP Research Project."

Vennum, Amber V., Experiment.com Crowdfunding Platform, \$5,625, "The Power of Highlighting the Positive: Testing the Impact of WOWW on School Engagement."

Vennum, Amber V., Indiegogo Crowdfunding Platform, \$6,850, "Relevate Development."

Vennum, Amber V., Anderson, Jared R., Durtschi, Jared A., and Stith, Sandra M., US Department of Agriculture, \$357,197, "KSU-USAF 2015 FAP Research Project."

VerBrugge (Glasscock), Marlene K., US Department of Agriculture, \$1,636,364, "Air Force/4-H Military Partnership and Outreach and Support."

VerBrugge (Glasscock), Marlene K., and Hanson, Jennifer (Hospitality Management and Dietetics), US Department of Agriculture, \$500,000, "Army/4-H Military Partnership and Outreach and Support."

VerBrugge (Glasscock), Marlene K., US Department of Agriculture, \$406,700, "Children, Youth, and Families At-Risk 4-H Military Partnership Project."

VerBrugge (Glasscock), Marlene K., Jang, Jichul (Hospitality Management and Dietetics), and **Kwon, Junehee**, US Department of Defense, \$1,165,862, "Navy/4-H Military Partnership and Outreach and Support."

Wiles, Bradford B., Bolton, Debra (Southwest Area Office), **Johannes, Elaine M.**, and **Kiss, D. Elizabeth**, US Department of Health and Human Services, \$150,635, "Connecting Kids to Coverage Outreach and Enrollment Cooperative Agreement."

COLLEGE OF VETERINARY MEDICINE

ANATOMY AND PHYSIOLOGY

Blecha, Frank, Richardson, Ralph C. (Dean of Veterinary Medical Center), **Shi, Jishu N.**, and **Wang, Lei**, Zoetis LLC, "International Veterinary Collaboration for China DVM Program."

DeLong, Robert K., US Department of Health and Human Services, \$162,997, "Anti-Cancer RNA Nanoconjugates."

Fong, Peking, Kenney, Michael J., Musch, Timothy I., Poole, David C. (Kinesiology), and **Thomason, Justin D.** (Clinical Sciences), US Department of Health and Human Services, \$41,250, "Heart Failure & Aging: Mechanistic Bases of Muscle Vascular Dysfunction."

Gehring, Ronette, National Pork Board, \$2,000, "Professional Services Agreement."

Gehring, Ronette, and **Riviere, Jim**, US Department of Agriculture, \$198,000, "Food Animal Residue Avoidance Databank (FARAD)."

Kenney, Michael J., Fong, Peking, Musch, Timothy I. (Kinesiology), **Poole, David C.**, and **Thomason, Justin D.** (Clinical Sciences), US Department of Health and Human Services, \$45,000, "Heart Failure & Aging: Mechanistic Bases of Muscle Vascular Dysfunction."

Kenney, Michael J., US Department of Health and Human Services, \$294,298, "Sympathetic Neural Regulation and Aging: Medullary Mechanisms and Strategies."

Lillich, James D., Brown, Susan J. (Biology), and **Silver, Kristopher S.**, Morris Animal Foundation, \$16,274, "Filling in the Gaps of the Canine Genome."

Marcus, Daniel C., and Wangemann, A. Philine, US Department of Health and Human Services, \$74,725, "Fluid Transport in Inner Ear Development."

Musch, Timothy I., Fong, Peking, Kenney, Michael J., Poole, David C., and Thomason, Justin D. (Clinical Sciences), US Department of Health and Human Services, \$97,500, "Heart Failure & Aging: Mechanistic Bases of Muscle Vascular Dysfunction."

Poole, David C., Fong, Peking, Kenney, Michael J., Musch, Timothy I. (Kinesiology), and **Thomason, Justin D.** (Clinical Sciences), US Department of Health and Human Services, \$97,500, "Heart Failure & Aging: Mechanistic Bases of Muscle Vascular Dysfunction."

Riviere, Jim, and Gehring, Ronette, US Department of Agriculture, \$198,000, "Food Animal Residue Avoidance Databank (FARAD)."

Sang, Yongming, US Department of Agriculture, \$18,000, "Swine Immune Toolkit: Development of new Immune Reagents for Swine health, vaccine and Disease Studies."

Schultz, Bruce D., and Wangemann, A. Philine, US Department of Health and Human Services, \$19,878, "BRITE Veterinary Student Program."

Schultz, Bruce D., Davis, Elizabeth G. (Clinical Sciences), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$17,720, "Short Term Training in Health Professional Schools."

Shi, Jishu N., US Department of Agriculture, \$124,385, "Characterization of Mammalian Inflammatory and Innate Immune Responses to Culicoides Somerensis Cellular Lipids and Evaluate use of Adjuvants."

Shi, Jishu N., Blecha, Frank, Richardson, Ralph C. (Dean of Veterinary Medical Center), and **Wang, Lei**, Zoetis LLC, "International Veterinary Collaboration for China DVM Program."

Silver, Kristopher S., Brown, Susan J. (Biology), and **Lillich, James D.**, Morris Animal Foundation, \$16,767, "Filling in the Gaps of the Canine Genome."

Tamura, Masaaki, Kansas State University Foundation, \$18,500, "Local Chemotherapy with a Hyaluronan-cisplatin Aerosol Formulation for the Treatment of Human Lung Cancer."

Troyer, Deryl L., and Bossmann, Stefan (Chemistry), Children's Mercy Hospital, \$63,453, "Novel in vivo and in vitro 3D Tumor Models for Testing of Cancer Chemotherapy and Complex Biologics."

Wangemann, A. Philine, and **Schultz, Bruce D.**, US Department of Health and Human Services, \$19,878, "BRITE Veterinary Student Program."

Wangemann, A. Philine, and **Marcus, Daniel C.**, US Department of Health and Human Services, \$298,901, "Fluid Transport in Inner Ear Development."

Xiong, Yulan, US Department of Health and Human Services, \$128,520, "The Role of Aging in LRRK2-Associated Parkinsons Disease."

Xiong, Yulan, William N. and Bernice E. Bumpus Foundation, \$102,735, "Identification and Characterization of the LRRK2 Guanine Nucleotide-Exchange Factor (GEF)."

Yu, Jianzhong, Kansas State University Foundation, \$27,500, "Molecular and Functional Characterization of the Kibra Tumor Suppressor Protein."

CLINICAL SCIENCES

Apley, Michael D., National Cattlemen's Beef Association, \$37,500, "Antibiotic Resistance Literature Review and Database Building."

Apley, Michael D., National Cattlemen's Beef Association, \$22,500, "Literature Evaluation and Resource Gathering for Antibiotic Resistance Risk Assessment."

Apley, Michael D., **Houser, Terry A.** (Animal Sciences and Industry), **McCoy, Elsie J.** (Diagnostic Medicine/Pathobiology), **O'Quinn, Travis G.** (Animal Sciences and Industry), **Reinhardt, Christopher D.** (Animal Sciences and Industry), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), National Cattlemen's Beef Association, "The Effects of Liver Abscess Prevalence on Beef Quality in Commercial Finished Cattle."

Armbrust, Laura J., and **Tucker Mohl, Katherine** (Veterinary Medical Teaching Hospital), American College of Veterinary Radiology, \$2,430, "Use of Shear Wave Elastography to Evaluate Renal Stiffness in Cats with Naturally Occurring Chronic Kidney Disease."

Davis, Elizabeth G., **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), and **Schultz, Bruce D.** (Anatomy and Physiology), US Department of Health and Human Services, \$17,199, "Short Term Training in Health Professional Schools."

Higginbotham, Mary Lynn, **Hocker, Samuel E.** (Veterinary Medical Teaching Hospital), and **Wouda, Raelene**, MediVet America, \$1,719, "Use of an Autologous Tumor Vaccine (K9-ACV, Medivet Biologics) in the Treatment of Dogs with Naturally-occurring Tumors: An Extended Pilot Study."

Higginbotham, Mary Lynn, **Hocker, Samuel E.** (Veterinary Medical Teaching Hospital), and **Wouda, Raelene**, Morris Animal Foundation, \$16,848, "D16CA-518: A Contemporaneous Controlled Study of the Standard of Care (SOC) in Dogs with Appendicular Osteosarcoma."

Higginbotham, Mary Lynn, **Hocker, Samuel E.** (Veterinary Medical Teaching Hospital), and **Wouda, Raelene**, Morris Animal Foundation, \$42,865, "D16CA-519: Evaluation of Orally Administered mTOR Inhibitor Rapamycin in Dogs in the Adjuvant Setting with Osteosarcoma."

Rush, Bonnie R., Maddie's Fund, \$6,000, "Maddie's Shelter Medicine Externship."

Thomason, Justin D., **Fong, Peying** (Anatomy and Physiology), **Kenney, Michael J.** (Anatomy and Physiology), **Musch, Timothy I.** (Kinesiology), and **Poole, David C.** (Anatomy and Physiology), US Department of Health and Human Services, \$18,750, "Heart Failure & Aging: Mechanistic Bases of Muscle Vascular Dysfunction."

White, Bradley J., **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), **Renter, David G.** (Diagnostic Medicine/Pathobiology), and **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$124,132, "Exposure Heterogeneity and Environmental Transmission Dynamics of Escherichia coli: Linking Mechanisms and Patterns."

Wouda, Raelene, **Higginbotham, Mary Lynn**, and **Hocker, Samuel E.** (Veterinary Medical Teaching Hospital), MediVet America, \$13,750, "Use of an Autologous Tumor Vaccine (K9-ACV, Medivet Biologics) in the Treatment of Dogs with Naturally-occurring Tumors: An Extended Pilot Study."

Wouda, Raelene, **Higginbotham, Mary Lynn**, and **Hocker, Samuel E.** (Veterinary Medical Teaching Hospital), Morris Animal Foundation, \$10,109, "D16CA-518: A Contemporaneous Controlled Study of the Standard of Care (SOC) in Dogs with Appendicular Osteosarcoma."

Wouda, Raelene, Higginbotham, Mary Lynn, and Hocker, Samuel E. (Veterinary Medical Teaching Hospital), Morris Animal Foundation, \$25,719, "D16CA-519: Evaluation of Orally Administered mTOR Inhibitor Rapamycin in Dogs in the Adjuvant Setting with Osteosarcoma."

DEAN OF VETERINARY MEDICAL CENTER

Bartle, Steven J., Hagenmaier, Jacob A., Reinhardt, Christopher D. (Animal Sciences and Industry), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), Eli Lilly & Company, \$1,434, "The Effects of Aggressive Versus Low- stress Cattle Handling at the Time of Shipping to Slaughter on Physiological Responses in Cattle Fed Ractopamine Hydrochloride."

Hagenmaier, Jacob A., Bartle, Steven J., Reinhardt, Christopher D. (Animal Sciences and Industry), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), Eli Lilly & Company, "The Effects of Aggressive Versus Low-stress Cattle Handling at the Time of Shipping to Slaughter on Physiological Responses in Cattle Fed Ractopamine Hydrochloride."

Hamilton, Keith, World Organisation for Animal Health, \$457,213, "OIE Veterinary Education Establishment Twinning Project: 'A Smart Partnership Between Sokoine University of Agriculture Faculty of Veterinary Medicine and Kansas State University College of Veterinary Medicine'."

Richardson, Ralph C., Blecha, Frank (Anatomy and Physiology), **Shi, Jishu N.** (Anatomy and Physiology), and **Wang, Lei,** Zoetis LLC, \$28,300, "International Veterinary Collaboration for China DVM Program."

DIAGNOSTIC MEDICINE/PATHOBIOLOGY

Bai, Jianfa, Cernicchiaro, Natalia, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvor G., Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G., Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U., Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$131,133, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Beckham, Tammy R., and Holmstrom, Lindsey K., US Department of Health and Human Services, \$24,987, "Preventing Zoonotic Diseases in Kenya."

Cernicchiaro, Natalia, Bai, Jianfa, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvor G., Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G., Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U., Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$131,133, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Cernicchiaro, Natalia, US Department of Agriculture, \$120,000, "Use of Epidemiological Approaches to Investigate the Risk of Emergence of the Japanese Encephalitis Virus in USA."

Chang, Kyeong-Ok, Enanta Pharmaceuticals, Inc., \$8,000, "Testing Antiviral Activities against Norovirus."

Chang, Kyeong-Ok, and **Kim, Yunjeong,** Genzada Pharmaceuticals, LLC, \$30,000, "Testing Antiviral Effects of Compounds from Genzada Pharmaceuticals."

Chang, Kyeong-Ok, US Department of Health and Human Services, \$734,295, "Norovirus 3CL Protease-Based Anti-Norovirus Therapeutics."

Clavijo, Alfonso, Ma, Wenjun, Richt, Juergen, Rowland, Raymond R. R., and Yang, Zhilong (Biology), National Pork Board, \$71,895 (includes \$71,895 from AAHL & UMN Cost Share/Matching), "National Pork Board Agreement 2015 - 2016."

Clavijo, Alfonso, Faburay, Bonto, and Richt, Juergen, US Department of Homeland Security, \$75,000, "Development and Evaluation of DIVA Diagnostics for RVFV."

Clavijo, Alfonso, US Department of Homeland Security, \$35,796, "Pen-side Multiplex Detection of Foot-and-mouth Disease Virus and Bovine Papular Stomatitis Virus by a Portable Microfluidics PCR System for Rapid Clinical Disease Differentiation."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Ajinomoto Heartland LLC, "Amino Acid Ratios in Diets for 15 to 25 lb Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Ajinomoto Heartland LLC, "Effect of High Trp:Lys Ratio for Late Finishing Pigs (Task Order #4372)."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Ajinomoto Heartland LLC, "Effect of Monosodium Glutamate on Nursery Pig Performance."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), BASF Corporation, "Efficacy of New BASF Phytase in Swine."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Biomim USA, Inc., "Phytogenic Feed Additives on the Growth Performance and Carcass Characteristics of Growing-Finishing Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Hamlet Protein, Inc., "Effect of Feeding Increasing Levels of HP 300 on Growth Performance of Nursery Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Kemin Industries, "Comparing the Influence of ButiPearl Source and Inclusion Level on Growth Performance of Nursery Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Micronutrients, "4360 Effects of Increasing Levels of Zn from Zinc Sulfate or Intellibond Z on Finishing Pig Growth Performance, Carcass Characteristics, and Economic Return."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Micronutrients, "5470-1 Effects of Feeding Increasing Levels of CU from Either Intellibond C or Mintrex Cu on Growth Performance of Nursery Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Micronutrients, "5470-2 Effects of Feeding Increasing Levels of Cu from either Intellibond C or Mintrex Cu on Growth Performance of Nursery Pigs."

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Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Huss, Anne R.** (Grain Science and Industry), **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, "Evaluating the Effects of Chemical Treatments to Reduce the Likelihood of PEDV Transmission by Feed Manufacturing Equipment."

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Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Nutraferma, Inc., "Effect of NF8 and/or LactoPlan on Nursery Pig Performance."

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Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Trouw Nutrition USA, \$22,000, "Evaluation of Elarom-F Plus in Nursery Diets with or without the Inclusion of High Zinc Oxide Levels and/or Antibiotics."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Zinpro Corporation, "The Effects of Increasing Levels of Cu from Combinations of Availa Cu and CuSO₄ or CuSO₄ Alone on Growth Performance, Carcass Characteristics, and Economics of Finishing Pigs."

Dryden, Michael W., Zoetis LLC, \$111,432, "Evaluation of Sarolaner and Spinosad to Control Flea Populations on Naturally Infested Dogs in Private Residences in Tampa FL 2016."

Faburay, Bonto, Clavijo, Alfonso, and **Richt, Juergen**, US Department of Homeland Security, \$75,000, "Development and Evaluation of DIVA Diagnostics for RVFV."

Faburay, Bonto, US Department of the Interior, \$172,073, "Development of a Novel Subunit Vaccine for Heartwater: A Proof-of-principle Study."

Fang, Ying, and **Hause, Benjamin M.** (Veterinary Diagnostic Laboratory), National Pork Board, \$3,454, "Determination of the PRRSV Miner Glycoproteins Contribution to Antigenicity and Protection."

Fang, Ying, and **Tomich, John M.** (Biochemistry), SmartVet USA, Inc, \$3,960, "Surface Absorption of BAPC's in Porcine Model."

Fang, Ying, US Department of Agriculture, \$165,686, "Developing a Parainfluenza Virus 5 (PIV5)-based PRRS Vaccine."

Ganta, Roman Reddy R., US Department of Health and Human Services, \$18,147, "Mentor for Dr. Jodi McGill - KU COBRE CMADP Award."

Ganta, Roman Reddy R., and **Zolkiewski, Michal** (Biochemistry), US Department of Health and Human Services, \$9,600, "Molecular Chaperones of Ehrlichia Chaffeensis."

Ganta, Roman Reddy R., US Department of Health and Human Services, \$441,044, "Vector and Host Contributions to the Regulation of E. chaffeensis Gene Expression."

Goncalves, Marcio A., DeRouchey, Joel M. (Animal Sciences and Industry), **Dritz, Steven S., Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Midori USA, Inc., "Determining the Effects of Gluco-oligosaccharide on Growth Performance of Nursery Pigs."

Hardwidge, Philip R., US Department of Health and Human Services, \$375,000, "Bacterial Effectors Targeting the IKK/NF- κ B Pathway."

Holmstrom, Lindsey K., US Department of Agriculture, \$131,810, "Animal Disease Simulation Model Cooperative Agreement."

Holmstrom, Lindsey K., and **Beckham, Tammy R.**, US Department of Health and Human Services, \$74,961, "Preventing Zoonotic Diseases in Kenya."

Kastner, Justin J., Bai, Jianfa, Cernicchiaro, Natalia, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Nagaraja, Tiruvor G., Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G., Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U., Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$131,133, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Kim, Yunjeong, and Chang, Kyeong-Ok, Genzada Pharmaceuticals, LLC, \$30,000, "Testing Antiviral Effects of Compounds from Genzada Pharmaceuticals."

Kim, Yunjeong, Morris Animal Foundation, \$262,784, "Field Evaluation of the Efficacy of a Viral Protease Inhibitor in Cats with Naturally Occurring FIP."

Ma, Wenjun, and Richt, Juergen, Bill and Melinda Gates Foundation, \$88,464, "Efficacy Test of Influenza Vaccines in the Pig Model."

Ma, Wenjun, Embassy of the Arab Republic of Egypt, \$7,500, "Development of an Efficacious Avian Influenza Vaccine for Equptian Martket."

Ma, Wenjun, Clavijo, Alfonso, Richt, Juergen, Rowland, Raymond R. R., and Yang, Zhilong (Biology), National Pork Board, \$33,551 (includes \$33,551 from AAHL & UMN Cost Share/Matching), "National Pork Board Agreement 2015 - 2016."

Ma, Wenjun, and Richt, Juergen, US Department of Health and Human Services, \$75,469, "Syndromic Surveillance of Swine Influenza Viruses in the United States."

McCoy, Elsie J., Apley, Michael D. (Clinical Sciences), **Houser, Terry A.** (Animal Sciences and Industry), **O'Quinn, Travis G.** (Animal Sciences and Industry), **Reinhardt, Christopher D.** (Animal Sciences and Industry), and **Thomson, Daniel U.**, National Cattlemen's Beef Association, "The Effects of Liver Abscess Prevalence on Beef Quality in Commercial Finished Cattle."

McGill, Jodi L., US Department of Health and Human Services, \$150,566, "Alternative Functions for yo T Cells in the Immune Response to Mycobacterium."

McGill, Jodi L., US Department of Health and Human Services, \$187,500, "Efficacy of a Novel Nanoparticle Vaccine and Nutrition during RSV Infection."

Nagaraja, Tiruvoor G., and Narayanan, Sanjeevkumar, Elanco Animal Health, \$35,413, "Development and Protection Assessment of Fusobacterial Leukotoxin-based Vaccines Augmented with Recombinant Leukotoxin and Recombinant Outer Membrane Protein against Bovine Liver Abscesses."

Nagaraja, Tiruvoor G., Bai, Jianfa, Cernicchiaro, Natalia, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G., Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U., Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$131,133, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Nagaraja, Tiruvoor G., Renter, David G., Sanderson, Michael W., and White, Bradley J. (Clinical Sciences), US Department of Health and Human Services, \$31,033, "Exposure Heterogeneity and Environmental Transmission Dynamics of Escherichia coli: Linking Mechanisms and Patterns."

Narayanan, Sanjeevkumar, and Nagaraja, Tiruvoor G., Elanco Animal Health, \$318,715, "Development and Protection Assessment of Fusobacterial Leukotoxin-based Vaccines Augmented with Recombinant Leukotoxin and Recombinant Outer Membrane Protein against Bovine Liver Abscesses."

Nguyen, Thu A., Kansas State University Foundation, \$56,525, "Johnson Center for Basic Cancer Research Funding - 3D Tissue/Tumor Model."

Nguyen, Thu A., Merial Limited, \$10,000, "2016 Merial Veterinary Scholars Research Program."

Nguyen, Thu A., Davis, Elizabeth G. (Clinical Sciences), and **Schultz, Bruce D.** (Anatomy and Physiology), US Department of Health and Human Services, \$17,199, "Short Term Training in Health Professional Schools."

Renter, David G., Bai, Jianfa, Cernicchiaro, Natalia, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvoor G., Phebus, Randall K.** (Animal Sciences and Industry), **Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U., Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$131,133, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Renter, David G., Nagaraja, Tiruvoor G., Sanderson, Michael W., and White, Bradley J. (Clinical Sciences), US Department of Health and Human Services, \$15,516, "Exposure Heterogeneity and Environmental Transmission Dynamics of Escherichia coli: Linking Mechanisms and Patterns."

Richt, Juergen, and Ma, Wenjun, Bill and Melinda Gates Foundation, \$22,116, "Efficacy Test of Influenza Vaccines in the Pig Model."

Richt, Juergen, Clavijo, Alfonso, Ma, Wenjun, Rowland, Raymond R. R., and Yang, Zhilong (Biology), National Pork Board, \$105,446 (includes \$105,446 from AAHL & UMN Cost Share/Matching), "National Pork Board Agreement 2015 - 2016."

Richt, Juergen, US Department of Agriculture, \$80,025, "Completion of the Evaluation of Rift Valley Fever Diagnostic Tests for Use in a DIVA Control Strategy."

Richt, Juergen, US Department of Defense, \$1,122,511, "Determining the Ability of rVSV-ZEBOV to Infect Domestic Livestock."

Richt, Juergen, and Ma, Wenjun, US Department of Health and Human Services, \$75,469, "Syndromic Surveillance of Swine Influenza Viruses in the United States."

Richt, Juergen, US Department of Homeland Security, \$6,500, "Develop and Verify Performance of Novel Screening, Surveillance and Diagnostic Tools."

Richt, Juergen, Clavijo, Alfonso, and Faburay, Bonto, US Department of Homeland Security, \$100,000, "Development and Evaluation of DIVA Diagnostics for RVFV."

Rowland, Raymond R. R., Iowa Pork Producers Association, \$7,220, "MOA-ISU Dekkers Field Samples Project."

Rowland, Raymond R. R., Clavijo, Alfonso, Ma, Wenjun, Richt, Juergen, and Yang, Zhilong (Biology), National Pork Board, \$19,172 (includes \$19,172 from AAHL & UMN Cost Share/Matching), "National Pork Board Agreement 2015 - 2016."

Rowland, Raymond R. R., National Pork Producers Council, \$80,000, "Consulting Agreement."

Rowland, Raymond R. R., PIC USA, \$145,784, "Use of Genetically Modified Pigs to Evaluate PRRS Virus Susceptibility."

Rowland, Raymond R. R., US Department of Agriculture, \$145,790, "Efficacy of Prototype Live-vectored Polyvalent African Swine Fever Virus Vaccines."

Rowland, Raymond R. R., US Department of Agriculture, \$51,428, "Genetically Improving Resistance of Pigs to PRRS Virus Infection."

Sanderson, Michael W., Boehringer Ingelheim Vetmedica, Inc., \$15,840, "Economic Decision Making in the Face of *Tritrichomonas Foetus* Herd Infection - an Economic Calculator."

Sanderson, Michael W., Kansas Department of Agriculture, \$30,000, "A Secure Beef Supply (SPS) Plan for Business Continuity in a Foot and Mouth Disease Outbreak."

Sanderson, Michael W., US Department of Agriculture, \$46,200, "A Secure Beef Supply (SBS) Plan for Business Continuity in a Foot and Mouth Disease Outbreak."

Sanderson, Michael W., Bai, Jianfa, Cernicchiaro, Natalia, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvoor G., Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G., Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U., Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$131,133, "Shiga-toxigenic *Escherichia coli* (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Sanderson, Michael W., Nagaraja, Tiruvoor G., Renter, David G., and White, Bradley J. (Clinical Sciences), US Department of Health and Human Services, \$139,648, "Exposure Heterogeneity and Environmental Transmission Dynamics of *Escherichia coli*: Linking Mechanisms and Patterns."

Sanderson, Michael W., and Pendell, Dustin L. (Agricultural Economics), US Department of Homeland Security, \$279,288, "Assessing the Epidemiological and Economic Impacts of Countermeasures and Vaccination Strategies in Disease Outbreaks at the National Scale."

Thomson, Daniel U., Bartle, Steven J. (Dean of Veterinary Medical Center), **Hagenmaier, Jacob A.** (Dean of Veterinary Medical Center), and **Reinhardt, Christopher D.** (Animal Sciences and Industry), Eli Lilly & Company, \$21,509, "The Effects of Aggressive Versus Low-stress Cattle Handling at the Time of Shipping to Slaughter on Physiological Responses in Cattle Fed Ractopamine Hydrochloride."

Thomson, Daniel U., National Cattlemen's Beef Association, \$13,500, "BQA Feedyard Assessment."

Thomson, Daniel U., Apley, Michael D. (Clinical Sciences), **Houser, Terry A.** (Animal Sciences and Industry), **McCoy, Elsie J., O'Quinn, Travis G.** (Animal Sciences and Industry), and **Reinhardt, Christopher D.** (Animal Sciences and Industry), National Cattlemen's Beef Association, \$19,738, "The Effects of Liver Abscess Prevalence on Beef Quality in Commercial Finished Cattle."

Thomson, Daniel U., Bai, Jianfa, Cernicchiaro, Natalia, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvoor G., Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G., Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), **Tonsor, Glynn T.** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$131,133, "Shiga-toxigenic *Escherichia coli* (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Trujillo, Jessie D., National Pork Board, \$41,477, "Development and Evaluation of a Standardized Protocol for Utilization of Swine Oral Fluids for PCR Detection of High Consequence Pathogens: FMD, CSF, and ASF."

Van Der Merwe, Deon, and Lubbers, Brian (Veterinary Diagnostic Laboratory), US Department of Health and Human Services, \$10,750, "KSVDL Vet-LRN Veterinary Diagnostic Laboratory Program."

Vanlandingham, Dana L., Cerus Corporation, \$135,000, "Inactivation of Chikungunya Virus in Platelet Concentrates in 100% Plasma."

Vanlandingham, Dana L., Higgs, Stephen (Biosecurity Research Institute), and **Webster, John E.** (Biosecurity Research Institute), US Department of the Interior, \$532,207, "Transboundary Animal Disease Workforce Development: Fellowship Training Program."

Zhang, Weiping, PATH Vaccine Solutions, \$350,153, "A Broadly Protective Subunit Vaccine Against Enterotoxigenic Escherichia Coli Diarrhea."

Zhang, Weiping, US Department of Health and Human Services, \$435,375, "A Broadly Protective Subunit Vaccine against Enterotoxigenic Escherichia coli (ETEC) Associated Diarrhea."

Zurek, Ludek, US Department of Agriculture, \$13,671, "Genomics and Metagenomics of Antimicrobial-resistance in the Poultry Production Ecosystem."

VETERINARY DIAGNOSTIC LABORATORY

Anderson, Gary A., Nebraska Department of Health, \$40,000, "Rabies Lab Testing Contract."

Anderson, Gary A., US Department of Agriculture, \$138,189, "NAHLN Support."

Anderson, Gary A., US Department of Agriculture, \$55,000, "NAHLN: KS."

Anderson, Gary A., US Department of Agriculture, \$1,925, "Swine Surveillance."

Anderson, Gary A., Hanzlicek, Gregg A., and Hesse, Richard, Zoetis LLC, \$1,819, "Bovine Virus Diarrhea Antigen Test Kit Suitability Study/WITNESS® BVDV (Zoetis Master Agreement Addendum Exhibit A-3; Zoetis Study D836Z-US-15-024)."

Anderson, Gary A., and Bai, Jianfa, Zoetis LLC, \$4,080, "Service Protocol Agreement: Bovine Virus Diarrhea Antigen Test Kit Suitability Study Protocol."

Bai, Jianfa, and Anderson, Gary A., Zoetis LLC, \$1,020, "Service Protocol Agreement: Bovine Virus Diarrhea Antigen Test Kit Suitability Study Protocol."

Hanzlicek, Gregg A., Anderson, Gary A., and Hesse, Richard, Zoetis LLC, \$3,638, "Bovine Virus Diarrhea Antigen Test Kit Suitability Study/WITNESS® BVDV (Zoetis Master Agreement Addendum Exhibit A-3; Zoetis Study D836Z-US-15-024)."

Hause, Benjamin M., and Fang, Ying (Diagnostic Medicine/Pathobiology), National Pork Board, \$65,626, "Determination of the PRRSV Miner Glycoproteins Contribution to Antigenicity and Protection."

Hesse, Richard, Anderson, Gary A., and Hanzlicek, Gregg A., Zoetis LLC, \$1,819, "Bovine Virus Diarrhea Antigen Test Kit Suitability Study/WITNESS® BVDV (Zoetis Master Agreement Addendum Exhibit A-3; Zoetis Study D836Z-US-15-024)."

Lubbers, Brian, and Van Der Merwe, Deon (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$10,750, "KSVDL Vet-LRN Veterinary Diagnostic Laboratory Program."

VETERINARY MEDICAL TEACHING HOSPITAL

Hocker, Samuel E., Higginbotham, Mary Lynn (Clinical Sciences), and **Wouda, Raelene** (Clinical Sciences), MediVet America, \$1,719, "Use of an Autologous Tumor Vaccine (K9-ACV, Medivet Biologics) in the Treatment of Dogs with Naturally-occurring Tumors: An Extended Pilot Study."

Hocker, Samuel E., Higginbotham, Mary Lynn (Clinical Sciences), and **Wouda, Raelene** (Clinical Sciences), Morris Animal Foundation, \$6,739, "D16CA-518: A Contemporaneous Controlled Study of the Standard of Care (SOC) in Dogs with Appendicular Osteosarcoma."

Hocker, Samuel E., Higginbotham, Mary Lynn (Clinical Sciences), and **Wouda, Raelene** (Clinical Sciences), Morris Animal Foundation, \$17,146, "D16CA-519: Evaluation of Orally Administered mTOR Inhibitor Rapamycin in Dogs in the Adjuvant Setting with Osteosarcoma."

Tucker Mohl, Katherine, and **Armbrust, Laura J.** (Clinical Sciences), American College of Veterinary Radiology, \$2,430, "Use of Shear Wave Elastography to Evaluate Renal Stiffness in Cats with Naturally Occurring Chronic Kidney Disease."

KANSAS COOPERATIVE EXTENSION SERVICE

AGRICULTURE AND NATURAL RESOURCES

Buhler, Forrest A., Hadley, Gregg L., Henton, Charlene M., Hund, Duane M. (Agricultural Economics), **Koons, Janel K.,** and **Olsen, Charlotte S.** (School of Family Studies and Human Services), US Department of Agriculture, \$10,000, "Planning for the Future: Transferring Management and Assets in Challenging Times."

Hadley, Gregg L., US Department of Agriculture, \$435,326, "Kansas Agricultural Mediation Service."

Hadley, Gregg L., Buhler, Forrest A., Henton, Charlene M., Hund, Duane M. (Agricultural Economics), **Koons, Janel K.,** and **Olsen, Charlotte S.** (School of Family Studies and Human Services), US Department of Agriculture, \$8,000, "Planning for the Future: Transferring Management and Assets in Challenging Times."

Henton, Charlene M., Buhler, Forrest A., Hadley, Gregg L., Hund, Duane M. (Agricultural Economics), **Koons, Janel K.,** and **Olsen, Charlotte S.** (School of Family Studies and Human Services), US Department of Agriculture, \$8,000, "Planning for the Future: Transferring Management and Assets in Challenging Times."

Koons, Janel K., Buhler, Forrest A., Hadley, Gregg L., Henton, Charlene M., Hund, Duane M. (Agricultural Economics), and **Olsen, Charlotte S.** (School of Family Studies and Human Services), US Department of Agriculture, \$8,000, "Planning for the Future: Transferring Management and Assets in Challenging Times."

AGRONOMY

Presley, DeAnn R., Kansas Department of Health and Environment, \$10,837, "Compost Site Development and Operation and Compost Operator Educational and Technical Assistance."

COUNTY AGENTS - METROPOLITAN SECTOR

Bates, Marlin A., Aramouni, Fadi M. (Animal Sciences and Industry), **Gragg, Sara E.** (Animal Sciences and Industry), **Nwadike, Londa S.** (Director of Cooperative Extension), **Phebus, Randall K.** (Animal Sciences and Industry), **Pliakoni, Eleni** (Horticulture, Forestry and Recreation Resources), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Food and Drug Administration, \$1,600, "Strategy for Successful Implementation of FSMA in the North Central Region through Adoption of a Systems Approach and Stakeholder Engagement Framework."

Simon, Zachary G., and **Ciampitti, Ignacio** (Agronomy), United Sorghum Checkoff Program, \$5,000, "Sorghum Fungicide Research - Kansas."

DIRECTOR OF COOPERATIVE EXTENSION

Nwadike, Londa S., Aramouni, Fadi M. (Animal Sciences and Industry), **Bates, Marlin A.** (County Agents - Metropolitan Sector), **Gragg, Sara E.** (Animal Sciences and Industry), **Phebus, Randall K.** (Animal Sciences and Industry), **Pliakoni, Eleni** (Horticulture, Forestry and Recreation Resources), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Food and Drug Administration, \$2,400, "Strategy for

Successful Implementation of FSMA in the North Central Region through Adoption of a Systems Approach and Stakeholder Engagement Framework."

Peters, Paula, and Floros, John D. (Dean of Agriculture and Director of AES), University of Missouri, \$60,625, "Memorandum of Agreement."

Peters, Paula, and Procter, Sandra B. (Human Nutrition), US Department of Agriculture, \$502,604, "Kansas Food Assistance Nutrition Education Plan 2016."

FOUR-H YOUTH DEVELOPMENT

Keatley, Sarah L., and Stone, Barbara J., Monsanto Company, \$10,000, "Challenging Kansas Youth to be the Solution to Feed the World Food Security."

Stone, Barbara J., and Keatley, Sarah L., Monsanto Company, \$10,000, "Challenging Kansas Youth to be the Solution to Feed the World Food Security."

KANSAS FOREST SERVICE

Atchison, Robert L., US Department of Agriculture, \$85,600, "NRCS Technical Service Provider."

Atchison, Robert L., US Department of Agriculture, \$65,000, "Windbreak Condition Assessment."

Biles, Larry E., US Department of Agriculture, \$9,044 (includes \$3,284 from Third Party Match), "2015 Consolidated Payment Grant."

Biles, Larry E., US Department of Agriculture, \$19,500, "2015 Forest Legacy Program."

Biles, Larry E., US Department of Agriculture, \$20,000, "2016 Forest Legacy Administration Program."

Biles, Larry E., US Department of Agriculture, \$225,000, "Middle and Lower Neosho River Basin Regional Conservation Partnership Program (RCPP) Project."

Biles, Larry E., US Environmental Protection Agency, \$36,300, "Riparian Forest Management Technical Assistance and Coordination SFY14-SFY16."

NORTHEAST AREA OFFICE

Duncan, Stewart R., Ciampitti, Ignacio (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$642, "2016 K-State Soybean Production Schools for Kansas."

Duncan, Stewart R., Adee, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Griffin, Terry W.** (Agricultural Economics), **Lin, Xiaomao** (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$1,495, "The Quest of 100-Bushel Soybean: On-Farm Approach."

Duncan, Stewart R., Lollato, Romulo P. (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Wheat Alliance, Inc., "K-State Wheat Demonstration Plots: Enhanced Uniformity for Improved Outreach."

Duncan, Stewart R., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy** (Entomology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), **Whitworth, Robert "Jeff" J.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$13,900, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

NORTHWEST AREA OFFICE

Haag, Lucas A., Multi-Sponsor, \$53,354, "XNW Multi-Sponsor Public Service 35."

Haag, Lucas A., Harmoney, Keith R. (Agricultural Research Center-Hays), **Holman, Johnathon D.** (Southwest Research Extension Center), **Jaeger, John R.** (Agricultural Research Center-Hays), **Johnson, Sandra K.**, and **Obour, Augustine K.** (Agricultural Research Center-Hays), US Department of Agriculture, \$5,400, "Demonstrating the Potential of Cover Crop and Forage Mixtures to Improve Soil Quality, Productivity, and Profitability in Water-Limited Regions."

Johnson, Sandra K., Haag, Lucas A., Harmoney, Keith R. (Agricultural Research Center-Hays), **Holman, Johnathon D.** (Southwest Research Extension Center), **Jaeger, John R.** (Agricultural Research Center-Hays), and **Obour, Augustine K.** (Agricultural Research Center-Hays), US Department of Agriculture, \$5,400, "Demonstrating the Potential of Cover Crop and Forage Mixtures to Improve Soil Quality, Productivity, and Profitability in Water-Limited Regions."

O'Brien, Daniel M., Cramer, Gary L. (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$3,750, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Onstad, Christen P., Multi-Sponsor, \$8,520, "XNW Multi-Sponsor Public Service Off Campus 26."

SOUTHEAST AREA OFFICE

Shoup, Douglas E., Ciampitti, Ignacio (Agronomy), and **Duncan, Stewart R.** (Northeast Area Office), Kansas Soybean Commission, \$642, "2016 K-State Soybean Production Schools for Kansas."

Shoup, Douglas E., Ciampitti, Ignacio (Agronomy), **Presley, DeAnn R.** (Agronomy), and **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$10,675, "Cover Crop Effects on Soybean Yield."

Shoup, Douglas E., Lin, Xiaomao (Agronomy), **Little, Christopher R.** (Plant Pathology), **Presley, DeAnn R.** (Agronomy), and **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$462, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Shoup, Douglas E., Adey, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), **Griffin, Terry W.** (Agricultural Economics), and **Lin, Xiaomao** (Agronomy), Kansas Soybean Commission, \$1,495, "The Quest of 100-Bushel Soybean: On-Farm Approach."

Shoup, Douglas E., Duncan, Stewart R. (Northeast Area Office), and **Lollato, Romulo P.** (Agronomy), Kansas Wheat Alliance, Inc., "K-State Wheat Demonstration Plots: Enhanced Uniformity for Improved Outreach."

Shoup, Douglas E., Ciampitti, Ignacio (Agronomy), and **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), North Central Soybean Research Program, \$34,048, "Improving Soybean Yield in the Double Crop Soybean Production System."

Shoup, Douglas E., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), **Swamy, Aavudai Anandhi** (Agronomy), **Tomlinson, Peter J.** (Agronomy), and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, \$21,745, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

SOUTHWEST AREA OFFICE

Aguilar, Jonathan P., Kansas Department of Agriculture, \$9,000, "Irrigation Water Probe Sensor Demonstration Project - Year Three."

Aguilar, Jonathan P., Kansas Department of Agriculture, \$8,419, "Irrigation Water Probe Sensor Demonstration Project - Year Two."

Aguilar, Jonathan P., Foster, Anserd J., Kisekka, Isaya (Southwest Research Extension Center), and **Rogers, Danny H.** (Biological and Agricultural Engineering), Kansas Water Office, \$12,000, "On-Farm Demonstration of Water Management Technologies and Mobile Trip Irrigation."

Aguilar, Jonathan P., Barnes, Philip L. (Biological and Agricultural Engineering), **Bolton, Debra, Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.**, US Agency for International Development, \$13,990, "On-Farm Water Management Trainings Pakistan Part 2."

Aguilar, Jonathan P., and **Rogers, Danny H.** (Biological and Agricultural Engineering), US Department of Agriculture, \$75,633, "Promoting Sensor-based Technology to Improve Land and Water Resources Conservation."

Bolton, Debra, Aguilar, Jonathan P., Barnes, Philip L. (Biological and Agricultural Engineering), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Zukoff, Sarah N.**, US Agency for International Development, \$5,596, "On-Farm Water Management Trainings - Pakistan Part 2."

Bolton, Debra, Johannes, Elaine M. (School of Family Studies and Human Services), **Kiss, D. Elizabeth** (School of Family Studies and Human Services), and **Wiles, Bradford B.** (School of Family Studies and Human Services), US Department of Health and Human Services, \$100,423, "Connecting Kids to Coverage Outreach and Enrollment Cooperative Agreement."

Foster, Anserd J., Aguilar, Jonathan P., Kisekka, Isaya (Southwest Research Extension Center), and **Rogers, Danny H.** (Biological and Agricultural Engineering), Kansas Water Office, \$3,000, "On-Farm Demonstration of Water Management Technologies and Mobile Trip Irrigation."

Foster, Anserd J., Cramer, Gary L. (Agronomy), **Lollato, Romulo P.** (Agronomy), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Wheat Commission, \$5,820, "Kansas Yield-Enhancing Strategies (KYES). The Partial Contribution of Management Practices."

Foster, Anserd J., and **Lollato, Romulo P.** (Agronomy), Monsanto Company, \$10,425, "Service Order No. 39."

Onstad, Christen P., Multi-Sponsor, \$17,960, "XSW Multi-Sponsor Public Service 35."

Waggoner, Justin, Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), **Shoup, Douglas E.** (Southeast Area Office), **Swamy, Aavudai Anandhi** (Agronomy), and **Tomlinson, Peter J.** (Agronomy), US Department of Agriculture, \$21,745, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Zukoff, Sarah N., Brokesh, Edwin L. (Biological and Agricultural Engineering), **Flippo, Daniel** (Biological and Agricultural Engineering), **McCornack, Brian P.** (Entomology), and **Sharda, Ajay** (Biological and Agricultural Engineering), Kansas Corn Commission, \$3,697, "Comprehensive Study of Light Wavelength and Image Processing to Automatically Identify Corn Pests."

Zukoff, Sarah N., Currie, Randall S. (Southwest Research Extension Center), and **Kisekka, Isaya** (Southwest Research Extension Center), Kansas Corn Commission, \$12,844, "Developing Integrated Pest Management Strategies for Drought Tolerant Corn under Deficit Irrigation Scenarios."

Zukoff, Sarah N., Monsanto Company, \$3,150, "Service Order No. 34."

Zukoff, Sarah N., Aguilar, Jonathan P., Barnes, Philip L. (Biological and Agricultural Engineering), **Bolton, Debra, Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Lilja, Nina K.** (International Agricultural Programs), and **Rogers, Danny H.** (Biological and Agricultural Engineering), US Agency for International Development, \$2,798, "On-Farm Water Management Trainings - Pakistan Part 2."

Zukoff, Sarah N., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Duncan, Stewart R.** (Northeast Area Office), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Johnson, Wendy** (Entomology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), **Thompson, Curtis R.** (Agronomy), **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), and **Whitworth, Robert "Jeff" J.** (Entomology), US Department of Agriculture, \$13,900, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

OFFICE OF THE PROVOST

CENTER FOR ENGAGEMENT AND COMMUNITY DEVELOPMENT

Procter, David E., Kansas Health Foundation, \$328,882, "Kansas Healthy Food Access Initiative."

Procter, David E., The Food Trust, \$20,000, "The Food Trust."

Steichen, Ethel M., Heartland Foundation, \$67,241, "Heartland Foundation emPowerU - Evaluation."

DEAN OF GRADUATE SCHOOL

Herman, Michael A., National Science Foundation, \$92,000, "National Science Foundation Graduate Research Fellowship Award."

Polson, Cheryl J., US Department of Defense, \$18,500, "Brigade Spouse Courses at Fort Leavenworth."

Polson, Cheryl J., US Department of Defense, \$371,830, "Brigade Spouse Courses at Fort Leavenworth 2015-2020."

Polson, Cheryl J., US Department of Defense, \$62,625, "Continuing Education for Senior Leaders (CESL) Seminar - Ft. Leavenworth."

Shanklin, Carol W., Gragg, Sara E. (Animal Sciences and Industry), **Roberts, Kevin R.** (Hospitality Management and Dietetics), and **Sauer, Kevin L.** (Human Nutrition), US Department of Agriculture, \$40,000, "Center of Excellence for Food Safety Research in Child Nutrition Programs."

INTERNATIONAL PROGRAMS

Chapman, Grant M., US Agency for International Development, \$48,851, "Peace Corps Recruiter."

LIBRARY

Allen, David B., and **Ritterbush, Lauren W.** (Sociology, Anthropology, and Social Work), Wenner-Gren Foundation for Anthropological Research, \$7,465, "Curation of Dr. Donna Roper's Archaeological Research."

Bengtson, Jason A., US Department of Health and Human Services, \$14,704, "Curation and Management of Electrophysiological Data Obtained from Outer Hair Cells Isolated from *Cavia Porcellus*."

OFFICE OF DIVERSITY AND DUAL CAREER DEVELOPMENT

Chavez, Mirta, and **Wiley, Zelia Z.**, US Department of Health and Human Services, "Project IMPACT Leadership Programs."

Wiley, Zelia Z., and **Chavez, Mirta**, US Department of Health and Human Services, \$108,085, "Project IMPACT Leadership Programs."

OFFICE OF THE PROVOST

Mason, April, **Grauer, Bette** (Dean of Engineering), **Montelone, Beth A.** (Dean of Arts and Sciences), **Morales, Amanda I.** (Curriculum and Instruction), **Thurston, Linda P.** (Dean of Education), and **Wiley, Zelia Z.** (Dean of Agriculture and Director of AES), National Science Foundation, \$125,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

Niehoff, Ruth A., Kansas State University Foundation, \$8,380, "Spainhour Faculty Chair for KAWSE."

SCHOOL OF LEADERSHIP STUDIES

Gott, Trisha C., US Department of State, \$144,998, "Mandela Washington Fellowship for Young African Leaders - 2016."

Tolar, Mary H., Points of Light Foundation, \$1,250, "Theatre of War: Soldier & Citizens Tour in Kansas."

VICE PRESIDENT FOR COMMUNICATIONS AND MARKETING

Nelson, Robert F., Country Stampede LLC, \$22,500, "Video Production Services."

SALINA COLLEGE OF TECHNOLOGY AND AVIATION

DEAN OF COLLEGE OF TECHNOLOGY AND AVIATION

Barnhart, Richard K., and **Carraway, Kurt J.** (Salina Applied Aviation Research Center), US Department of Transportation, \$48,519, "Certification Test Case to Validate sUAS Industry Consensus Standards."

Barnhart, Richard K., and **Carraway, Kurt J.** (Salina Applied Aviation Research Center), US Department of Transportation, \$289,750 (includes \$19,250 from Westar), "UAS Maintenance, Modification, Repair, Inspection, Training, and Certification Considerations."

Lawrence, John, Burrow Global Services, LLC, \$4,000, "Testing and Evaluation Services Agreement."

SALINA APPLIED AVIATION RESEARCH CENTER

Blanks, Mark T., Dow AgroSciences, LLC, \$17,277, "Sponsored Research Agreement."

Carraway, Kurt J., and **Barnhart, Richard K.** (Dean of College of Technology and Aviation), US Department of Transportation, \$98,508, "Certification Test Case to Validate sUAS Industry Consensus Standards."

Carraway, Kurt J., and Barnhart, Richard K. (Dean of College of Technology and Aviation), US Department of Transportation, \$289,750 (includes \$19,250 from Westar), "UAS Maintenance, Modification, Repair, Inspection, Training, and Certification Considerations."

Carraway, Kurt J., Westar Energy, \$35,000, "Westar-KSU Task Order 3."

Carraway, Kurt J., Westar Energy, \$113,745, "Westar-KSU Task Order 4 (CY 2016 Westar UAS Operations Team Support)."

VICE PRESIDENT FOR ADMINISTRATION AND FINANCE

KSU POLICE DEPARTMENT

Brooks, Jessica A., US Department of Transportation, \$16,605, "Impaired and Distracted Driving Education and Enforcement Grant."

Stubbings, Donald C., Kansas Department of Transportation, \$3,000, "Special Traffic Enforcement Program (STEP)."

VICE PRESIDENT FOR RESEARCH

BIOSECURITY RESEARCH INSTITUTE

Higgs, Stephen, US Department of Agriculture, \$120,000, "Use of ABSL3 Animal Laboratories and Other Space at BRI."

Higgs, Stephen, Vanlandingham, Dana L. (Diagnostic Medicine/Pathobiology), and **Webster, John E.,** US Department of the Interior, \$177,402, "Transboundary Animal Disease Workforce Development: Fellowship Training Program."

Webster, John E., US Department of Agriculture, \$124,758, "2016 High Containment Laboratory Practices and Techniques Course."

Webster, John E., Higgs, Stephen, and **Vanlandingham, Dana L.** (Diagnostic Medicine/Pathobiology), US Department of the Interior, \$177,402, "Transboundary Animal Disease Workforce Development: Fellowship Training Program."

K-STATE OLATHE

Gallo, Katherine E., Jepsen, Tegan M., and Swaney-Stueve, Marianne (Human Nutrition), Hill's Pet Nutrition, Inc., \$3,200, "Study Agreement 1."

Jepsen, Tegan M., Gallo, Katherine E., and Swaney-Stueve, Marianne (Human Nutrition), Hill's Pet Nutrition, Inc., \$1,600, "Study Agreement 1."

Jepsen, Tegan M., and Swaney-Stueve, Marianne (Human Nutrition), Hill's Pet Nutrition, Inc., \$1,900, "Study Agreement 3."

NATIONAL AGRICULTURAL BIOSECURITY CENTER

Burton, Kenneth R., US Department of Homeland Security, \$57,150, "Evaluation of State Plans and the Livestock Emergency Response Plan (LERP)."

Vanier, Martha A., US Department of Homeland Security, \$3,071,093, "IPA for Dr. Marty Vanier to DHS Science and Technology Directorate."

RESEARCH VICE PRESIDENT

Potter, Richard M., Burg, Karen (Chemical Engineering), and **Burg, Timothy C.** (Electrical and Computer Engineering), National Science Foundation, \$10,000, "I-Corps L: A Commercial Approach to Distribute Fused Research Mentoring Modules."

UNIVERSITY RESEARCH COMPLIANCE & ANIMAL CARE

Marlow, Denver D., US Department of Agriculture, \$13,200, "Research Support Agreement."

VICE PRESIDENT ELECTRONICS DESIGN LABORATORY

Sobering, Timothy J., US Department of Defense, \$167,000, "Extended Lifetime Electronics."

Taylor, Russell D., US Department of Energy, \$150,163, "1-D Linear Array Neutron Detector Electronics Development Phase II."

VICE PRESIDENT FOR STUDENT LIFE AND DEAN OF STUDENTS

EDUCATIONAL AND PERSONAL DEVELOPMENT

Booker, Monshonda, US Department of Agriculture, \$2,099, "Summer Food Service ProgramUB-SALINA."

Booker, Monshonda, US Department of Education, \$250,000, "Kansas State University - Salina Upward Bound Program-Central Kansas."

Bosco, Pat J., Kauffman Scholars, Inc., \$9,890, "IEP Kauffman Scholars Program - ISP."

Greene, Kathleen V., US Department of Education, \$1, "Ronald E. McNair PostBaccalaureate Achievement Program."

Greene, Kathleen V., US Department of Education, \$222,151, "Student Support Services K-State-Salina."

Greene, Kathleen V., US Department of Education, \$288,576, "Student Support Services KSU-Manhattan."

KSU CHILD DEVELOPMENT CENTER, INC.

Mitchell, Rose M., City of Manhattan, KS, \$40,800, "Social Services Advisory Board Funding - 2016."

Mitchell, Rose M., Kansas Child Care Training Opportunities, Inc, \$27,000, "Kansas Child Care Training Opportunities."

Mitchell, Rose M., Kansas Department for Children and Families, \$430,717, "Early Childhood Workforce Development Grant."

Mitchell, Rose M., Kansas Department for Children and Families, \$210,251, "KCCTO - Statewide Infant - Toddler Specialist Network."

Mitchell, Rose M., US Department of Defense, \$22,000, "Child Development Center Quality Improvement Plan."

Mitchell, Rose M., US Department of Defense, \$27,000, "Child Development Center Quality Improvement Plan."

Mitchell, Rose M., US Department of Education, \$104,539, "Child Care Access Means Parents at K-State."

NEW STUDENT SERVICES

Lehning, Emily M., Kansas State University Foundation, \$5,000, "Blue Key Strengths Quest Initiative."

Lehning, Emily M., Kansas State University Foundation, \$15,000, "Phillips 66 Shield Scholars Fund."

Lehning, Emily M., Kansas State University Foundation, \$36,351, "Suder Foundation FIRST SCHOLARS FUND."

OFFICE OF STUDENT LIFE

Haymaker, Jessica R., and **Tripodi, Jenna M.,** US Department of Justice, \$35,132, "FY16 VOCA Application for Kansas State University."

Tripodi, Jenna M., and **Haymaker, Jessica R.,** US Department of Justice, \$35,132, "FY16 VOCA Application for Kansas State University."

UNIVERSITY COUNSELING SERVICES

Mailey, Chaz D., City of Manhattan, KS, \$40,321, "Youth Oriented Alcohol Abuse Prevention Program."

VICE PRESIDENT FOR STUDENT LIFE AND DEAN OF STUDENTS

Bosco, Pat J., and **Cortez, Anita R.,** Kansas State University Foundation, \$54,500, "Edgerley-Franklin Urban Leadership Scholars Program."

Bosco, Pat J., Kauffman Scholars, Inc., "IEP Kauffman Scholars Program - ISP."