



RSCAD Success

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

July 1, 2014–June 30, 2015



October 23, 2015

Dear Colleague:

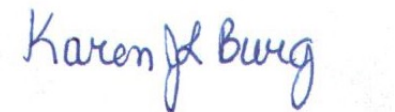
The Office of the Vice President for Research is pleased to provide the attached proposal/award activity report for the period July 1, 2014–June 30, 2015. These reports document faculty efforts to obtain extramural support, along with a summary of their respective successes to date. A monthly listing of awards is available at <http://www.k-state.edu/research/awards/>.

Congratulations to K-State faculty members for submitting a record number of external funding proposals during this period requesting an all-time record of \$533,580,888. We received a total of \$137,589,870 in awards, the third highest annual total in K-State history.

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 blue ink that reads "Karen J. L. Burg". The signature is written in a cursive, flowing style.

Karen J. L. Burg, Ph.D.
Vice President for Research

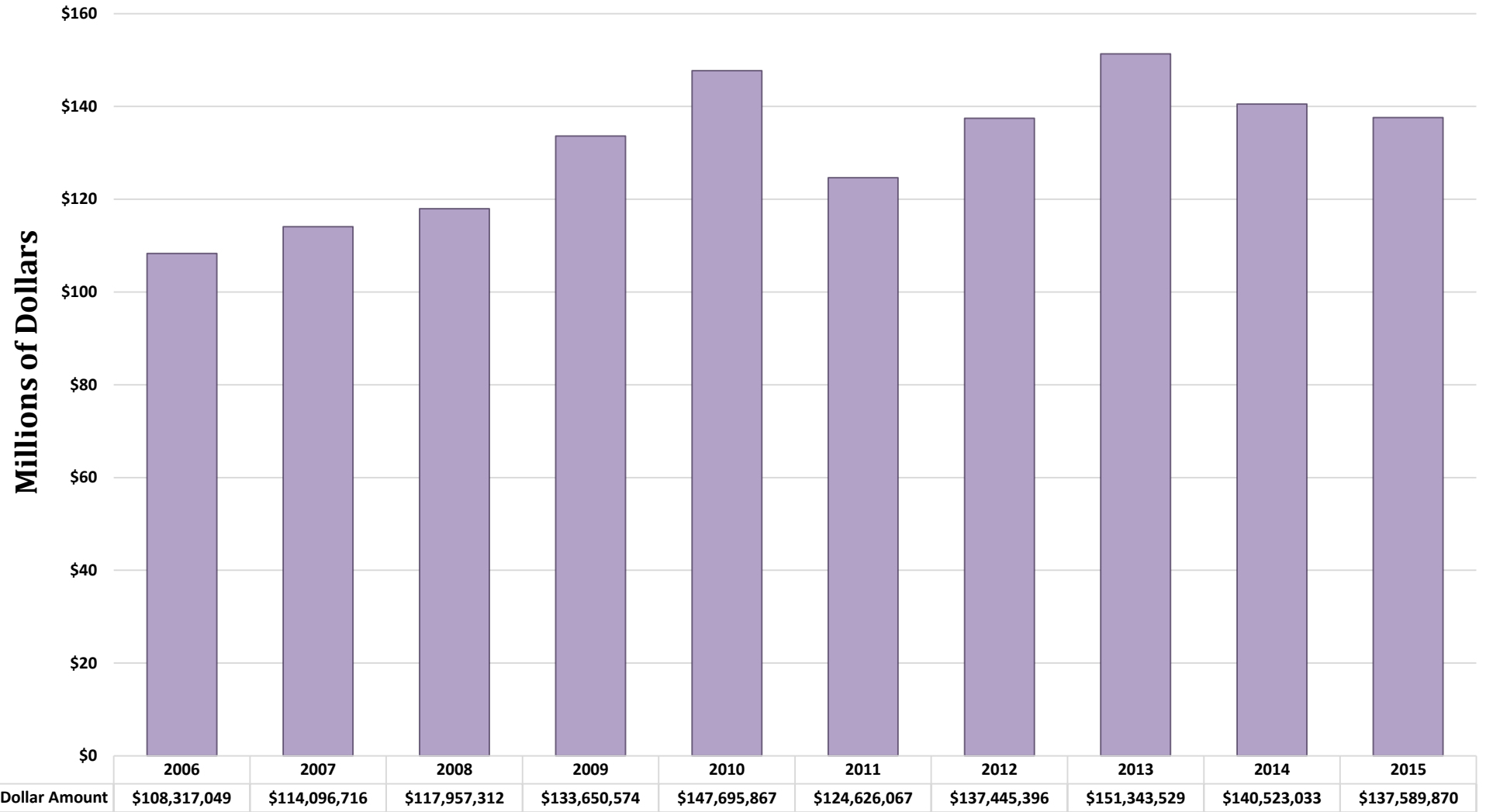
FY15 ANNUAL REPORT
RESEARCH/SCHOLARLY ACTIVITY FUNDING BASE
KANSAS STATE UNIVERSITY

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		\$137,589,870
II. Appropriated		
Main Campus State Appropriation	\$19,263,344	
Experiment Station Programs and Extension Services		
Federal Appropriation	\$10,345,098	
State Appropriation	\$47,718,863	
Veterinary Medical Center State Appropriation	\$0	
College of Technology and Aviation	\$160,605	
State Appropriation		
SUBTOTAL		\$77,487,910
III. Donated**		\$54,882,929
RESEARCH/SCHOLARLY ACTIVITY BASE GRAND TOTAL		\$269,960,709

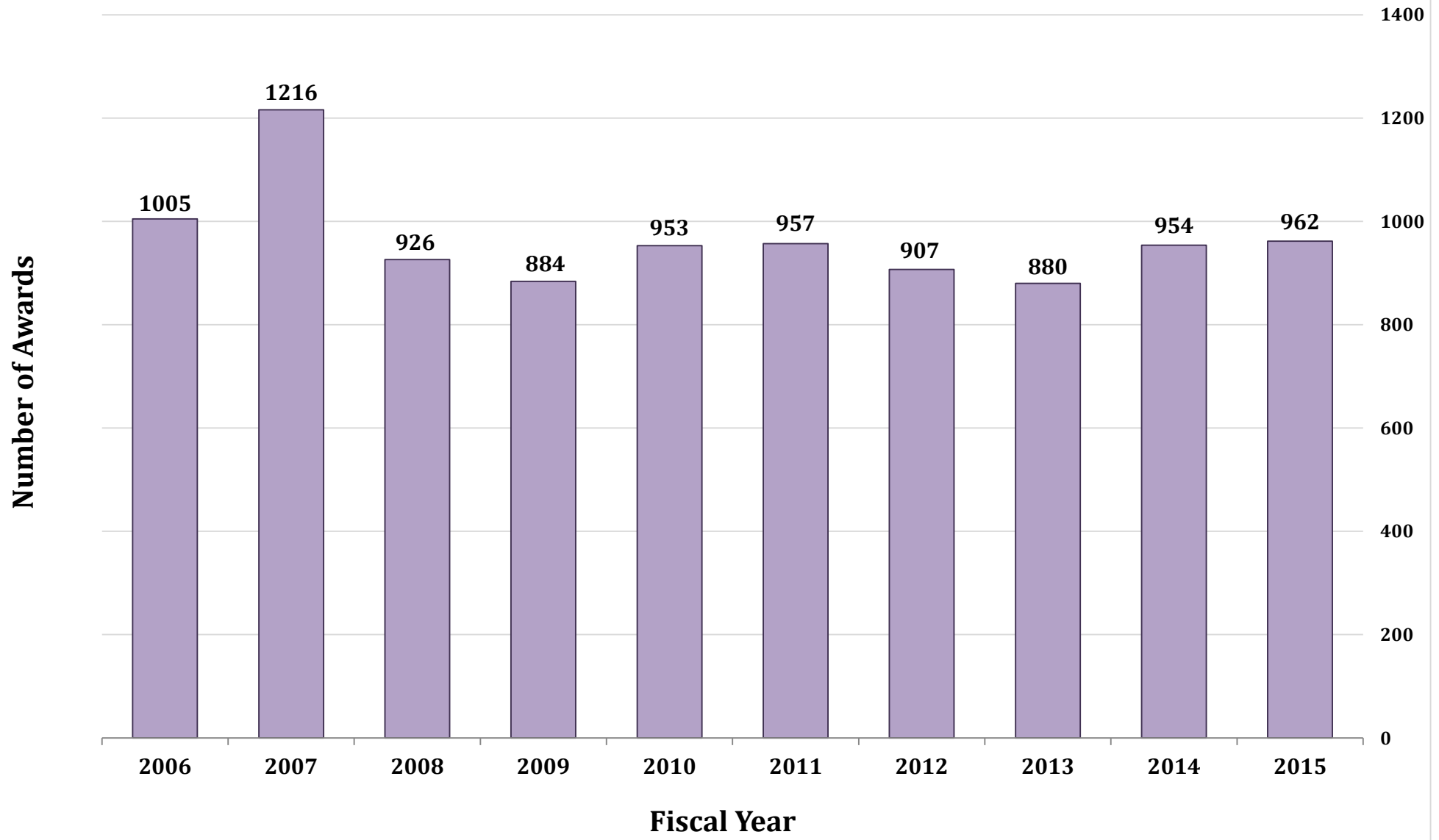
**KSU Foundation funds transferred to KSU in support of research/scholarly activity (excludes transfers to Athletics).

Kansas State University Total Dollars of Extramural Awards Received

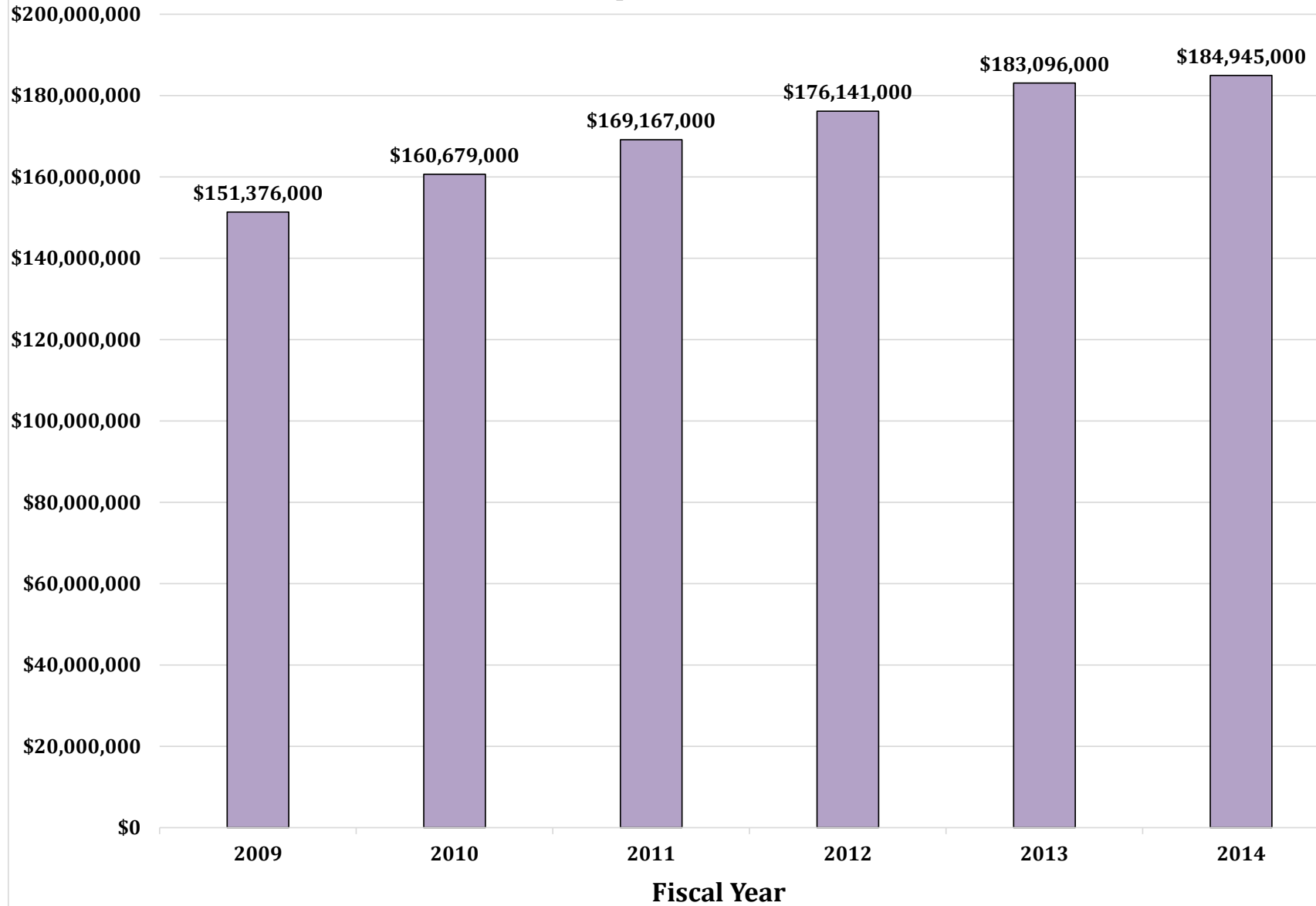


Fiscal Year

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



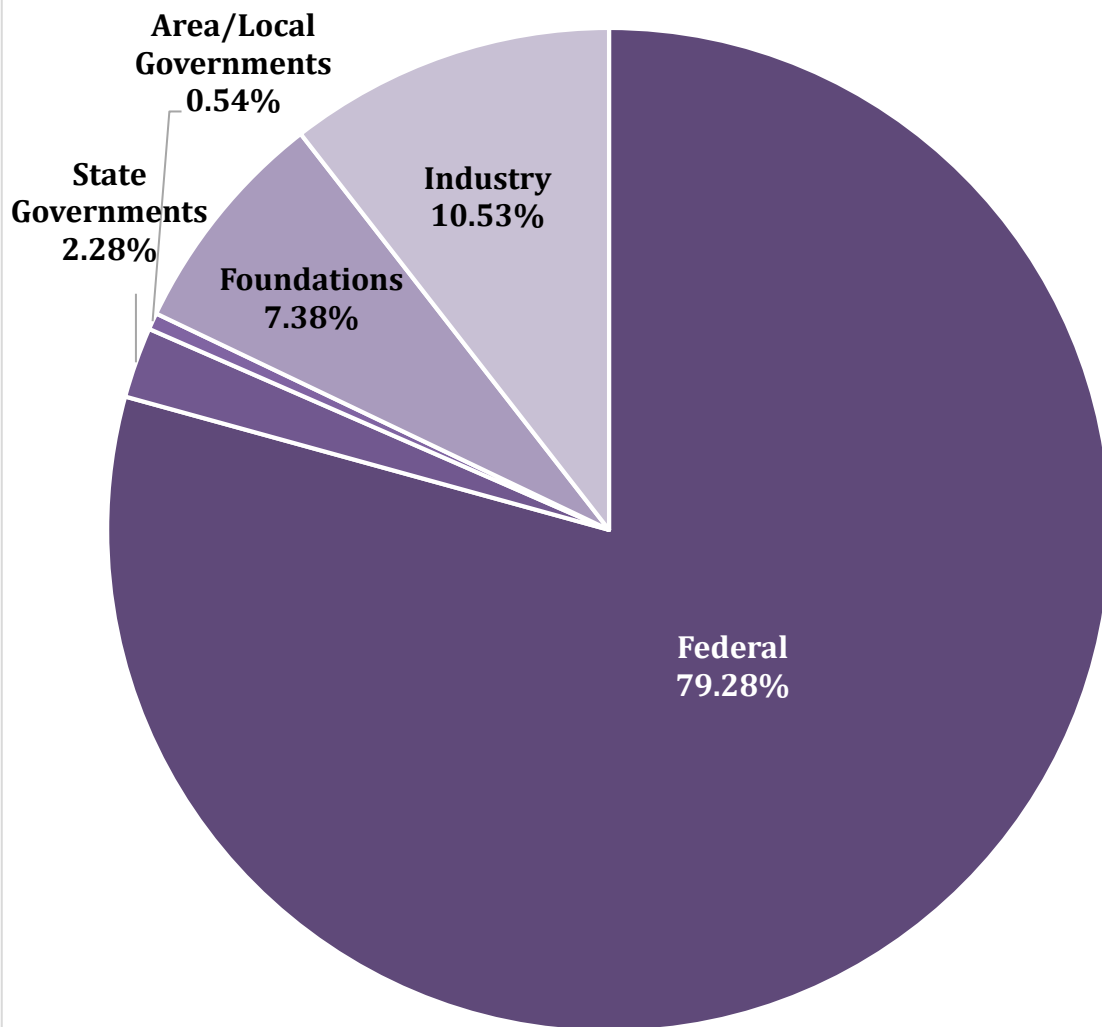
Kansas State University Expenditures



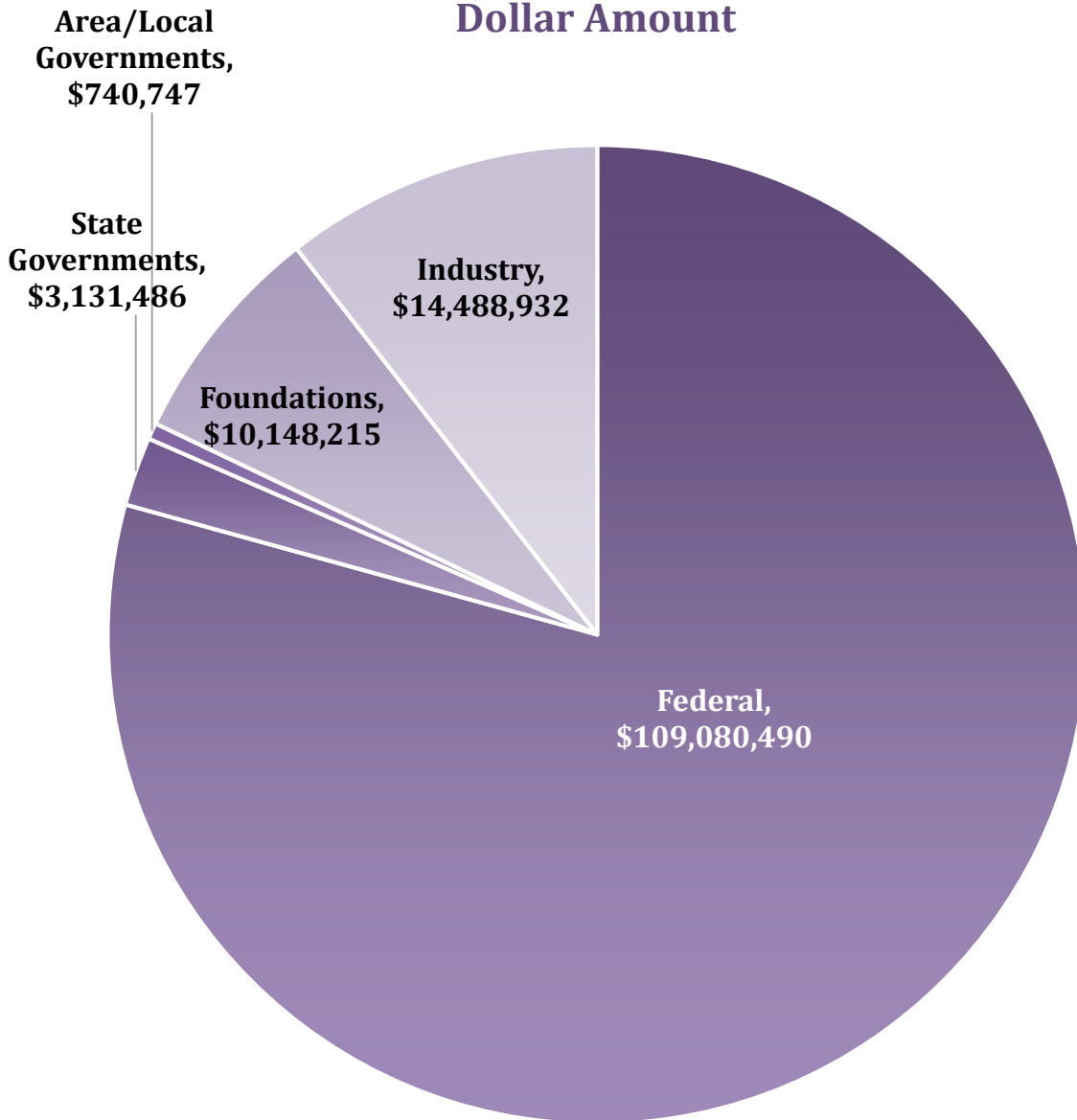
Kansas State University
Sources of Awards
Fiscal Year 2015

Source	Number of Awards	Dollar Value	Percentage
Government:			
Area/Local Governments	7	740,747	0.54%
State Governments	45	3,131,486	2.28%
Federal:			
Department of Agriculture	174	50,778,238	36.91%
Department of Defense	26	6,297,856	4.58%
Department of Education	17	3,691,638	2.68%
Department of Energy	31	5,864,413	4.26%
Department of Health and Human Services	60	9,537,563	6.93%
Department of Homeland Security	11	2,095,255	1.52%
Department of the Interior	15	1,001,943	0.73%
Department of Transportation	7	1,451,837	1.06%
Environmental Protection Agency	16	906,199	0.66%
National Aeronautics and Space Administration	6	155,491	0.11%
National Science Foundation	98	16,034,483	11.65%
US Agency for International Development	19	9,137,307	6.64%
Other Federal	20	2,128,267	1.55%
Private:			
Foundations	272	10,148,215	7.38%
Industry (Including Foreign)	138	14,488,932	10.53%
TOTAL	962	137,589,870	100.00%

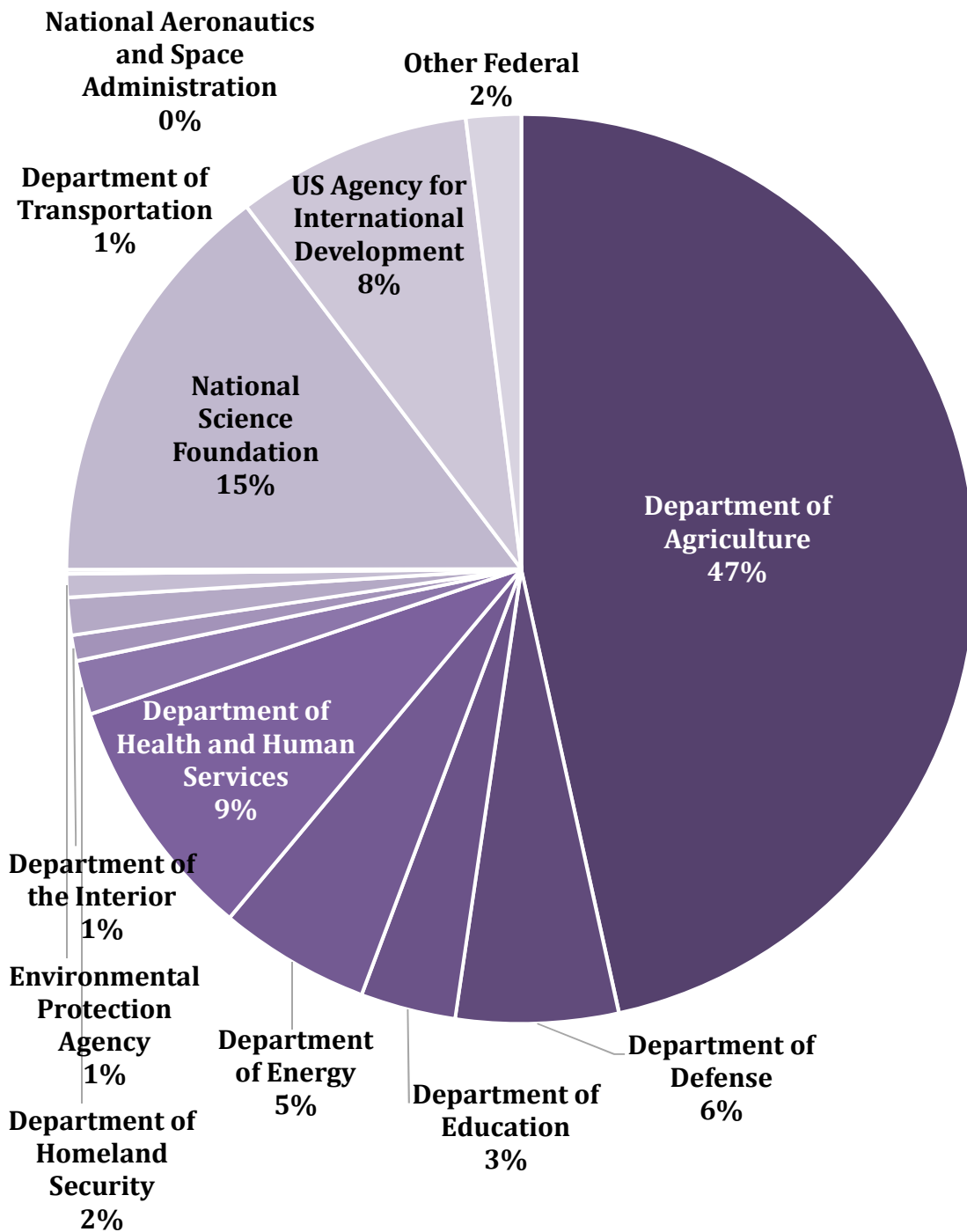
**FY2015 Dollar Amount of
Extramural Awards
by Source
(Percentage)**



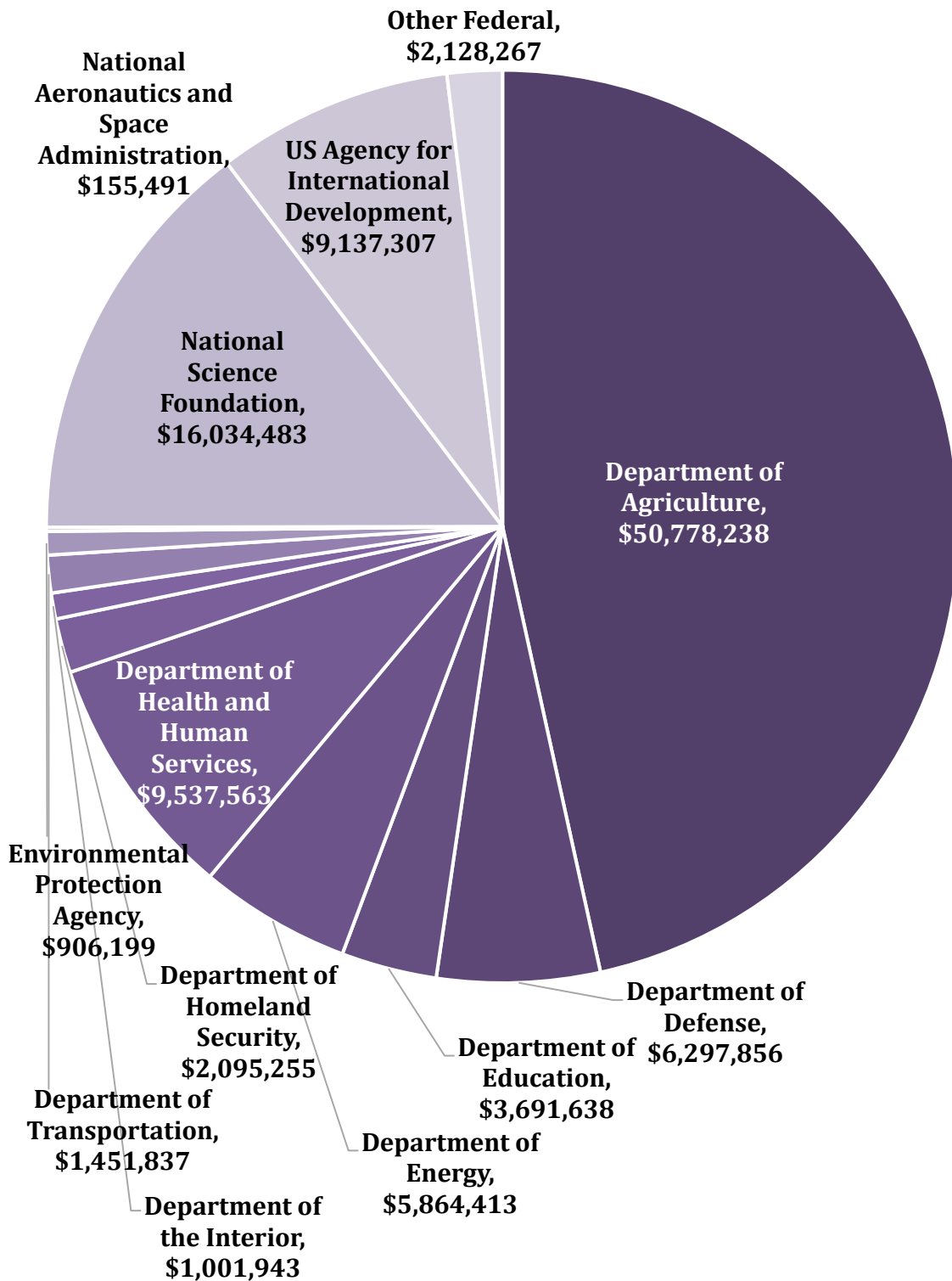
FY2015 Extramural Award Sources by Dollar Amount



FY2015 Extramural Award Federal Sources by Percentage



FY2015 Extramural Award Federal Sources by Dollar Amount



Distribution of New Awards Among
Colleges and Offices of the University
Fiscal Year 2015

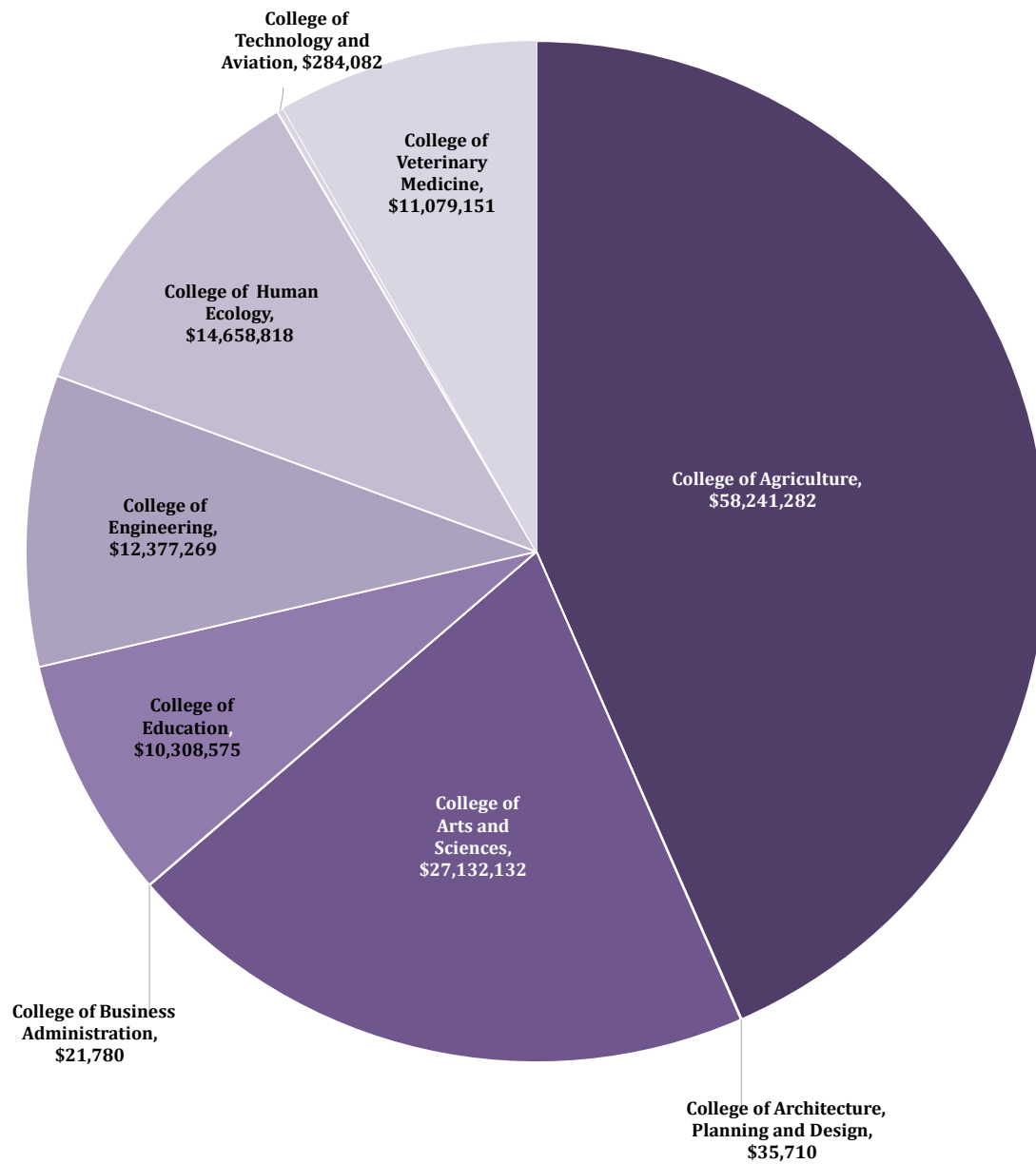
College/Office	Number of Awards	Dollar Value	Percentage
College of Agriculture	446	\$58,241,282 *	43.42%
College of Architecture, Planning and Design	2	\$35,710	0.03%
College of Arts and Sciences	169	\$27,132,132	20.23%
College of Business Administration	1	\$21,780	0.02%
College of Education	25	\$10,308,575	7.69%
College of Engineering	138	\$12,377,269	9.23%
College of Human Ecology	48	\$14,658,818 **	10.93%
College of Technology and Aviation	7	\$284,082	0.21%
College of Veterinary Medicine	91	\$11,079,151	8.26%
Office of the President	2	\$13,000	
Office of the Provost	12	\$533,773	
Vice President for Administration and Finance	0	\$0	
Vice President for Research	8	\$1,044,075	
Vice President for Student Life and Dean of Students	13	\$1,860,223	
UNIVERSITY TOTAL	962	\$137,589,870	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

FY2015 Extramural Award Dollars by College



**Fourth Quarter
Proposal/Award Summary
07/01/14 - 06/30/15**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
<u>COLLEGE OF AGRICULTURE</u>					
Agricultural Economics	57	\$2,983,077	\$9,277,323	29	\$4,499,667
Agricultural Experiment Station	0	\$0	\$0	0	\$0
Agricultural Research Center-Hays	30	\$885,538	\$3,313,038	18	\$520,094
Agriculture and Natural Resources	0	\$0	\$0	0	\$0
Agronomy	129	\$9,054,857	\$30,831,871	82	\$4,282,708
Animal Sciences and Industry	53	\$3,205,125	\$9,060,195	52	\$2,330,114
Communications	10	\$441,752	\$784,380	3	\$273,151
Dean of Agriculture and Director of AES	3	\$18,197,290	\$32,269,586	6	\$7,028,301
Entomology	57	\$3,327,959	\$9,667,075	35	\$1,926,270
Food Science Institute	3	\$211,430	\$1,100,107	1	\$417,494
Grain Science and Industry	67	\$6,344,257	\$12,810,223	48	\$2,999,474
Horticulture, Forestry and Recreation Resources	43	\$3,324,180	\$11,115,063	22	\$528,216
International Agricultural Programs	4	\$13,519,761	\$24,635,835	3	\$135,843
Kansas Industrial Extension Services	0	\$0	\$0	0	\$0
KS Ctr for Agri & the Env./KS Water Resource Res. Inst.	17	\$1,292,406	\$3,639,562	10	\$2,471,533
Northwest Research Extension Center	12	\$859,608	\$3,753,479	7	\$106,297
Office of Academic Programs	1	\$70,428	\$70,428	2	\$160,203
Plant Biotechnology Center	1	\$147,804	\$147,804	1	\$73,902
Plant Pathology	89	\$7,141,306	\$21,303,049	71	\$8,040,595
Southeast Agricultural Research Center	3	\$57,195	\$136,596	0	\$0
Southwest Research Extension Center	25	\$907,785	\$3,347,395	18	\$572,365
Total Agriculture	604	\$71,971,758	\$177,263,009	408	\$36,366,227
<u>COLLEGE OF ARCHITECTURE, PLANNING & DESIGN</u>					
Architecture	0	\$0	\$0	1	\$28,500
Dean of Architecture, Planning and Design	0	\$0	\$0	0	\$0
Interior Architecture and Product Design	1	\$3,745	\$3,745	0	\$0
Landscape Architecture/Regional & Community Planning	10	\$423,137	\$1,032,401	1	\$7,210
Total Architecture, Planning and Design	11	\$426,882	\$1,036,146	2	\$35,710
<u>COLLEGE OF ARTS AND SCIENCES</u>					
American Ethnic Studies	1	\$68,400	\$342,000	0	\$0
Art	1	\$25,424	\$25,424	0	\$0
Biochemistry	37	\$5,363,060	\$21,407,325	16	\$2,737,009
Biology	87	\$12,236,378	\$35,666,768	72	\$11,506,539
Chemistry	49	\$6,171,669	\$18,286,555	14	\$1,530,901
Communication Studies	1	\$314,941	\$314,941	0	\$0
Dean of Arts and Sciences	0	\$0	\$0	1	\$150,000
Economics	1	\$2,503	\$2,503	0	\$0
English	8	\$403,613	\$403,613	1	\$9,982
Geography	13	\$758,992	\$1,332,719	4	\$323,397
Geology	6	\$548,778	\$999,214	2	\$292,622
History	0	\$0	\$0	4	\$148,000
Kinesiology	0	\$0	\$0	0	\$0
Mathematics	24	\$1,275,914	\$4,835,757	7	\$383,781
Modern Languages	0	\$0	\$0	0	\$0

**Fourth Quarter
Proposal/Award Summary
07/01/14 - 06/30/15**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
Music	3	\$30,000	\$47,355	1	\$17,355
Philosophy	1	\$95,640	\$95,640	0	\$0
Physics	39	\$4,323,651	\$13,162,696	27	\$8,741,477
Political Science	0	\$0	\$0	0	\$0
Psychological Sciences	12	\$1,317,800	\$5,767,707	5	\$688,600
School of Journalism and Mass Communications	1	\$52,992	\$52,992	2	\$152,992
School of Music, Theatre, and Dance	0	\$0	\$0	0	\$0
Sociology, Anthropology and Social Work	24	\$1,449,361	\$4,205,410	10	\$362,336
Statistics	8	\$199,381	\$834,027	3	\$87,141
Women Studies	0	\$0	\$0	0	\$0
Total Arts and Sciences	316	\$34,638,497	\$107,782,646	169	\$27,132,132

COLLEGE OF BUSINESS ADMINISTRATION

Finance	0	\$0	\$0	0	\$0
Accounting	0	\$0	\$0	0	\$0
Dean of Business Administration	0	\$0	\$0	0	\$0
Management	0	\$0	\$0	0	\$0
Marketing	1	\$264,291	\$897,754	1	\$21,780
Total Business Administration	1	\$264,291	\$897,754	1	\$21,780

COLLEGE OF EDUCATION

Curriculum and Instruction	2	\$227,883	\$834,870	2	\$130,268
Dean of Education	42	\$3,770,234	\$12,141,474	22	\$10,151,287
Educational Leadership	2	\$97,349	\$199,633	0	\$0
Elementary Education	0	\$0	\$0	0	\$0
Secondary Education	0	\$0	\$0	0	\$0
Special Education, Counseling and Student Affairs	3	\$135,168	\$331,388	1	\$27,020
Total Education	49	\$4,230,634	\$13,507,365	25	\$10,308,575

COLLEGE OF ENGINEERING

Advanced Manufacturing Institute	3	\$381,657	\$631,657	7	\$1,352,989
Architectural Engineering and Construction Science	3	\$196,464	\$757,655	0	\$0
Biological and Agricultural Engineering	54	\$2,850,918	\$6,705,816	17	\$595,754
Center for Hazardous Substance Research	5	\$531,491	\$1,319,857	2	\$48,000
Chemical Engineering	34	\$4,697,710	\$11,121,687	8	\$1,084,436
Civil Engineering	33	\$2,635,228	\$6,341,968	18	\$1,630,957
Computing and Information Sciences	33	\$3,858,898	\$10,016,622	13	\$1,128,108
Dean of Engineering	1	\$3,500,000	\$3,500,000	1	\$75,000
Electrical and Computer Engineering	26	\$2,239,794	\$6,824,758	15	\$1,125,422
Engineering Experiment Station	0	\$0	\$0	0	\$0
Industrial and Manufacturing Systems Engineering	17	\$1,629,735	\$4,479,526	4	\$261,640
Institute for Environmental Research	5	\$301,507	\$559,638	4	\$397,738
Kansas Industrial Extension Service	13	\$1,560,063	\$4,688,052	13	\$982,346
Mechanical and Nuclear Engineering	45	\$11,527,612	\$34,836,241	36	\$3,694,879
National Gas Machinery Laboratory	0	\$0	\$0	0	\$0
National Institute for Land Management and Training	0	\$0	\$0	0	\$0
Total Engineering	272	\$35,911,077	\$91,783,477	138	\$12,377,269

**Fourth Quarter
Proposal/Award Summary
07/01/14 - 06/30/15**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
<u>COLLEGE OF HUMAN ECOLOGY</u>					
Apparel, Textiles, and Interior Design	4	\$901,110	\$1,124,188	1	\$51,190
Communication Studies, Theatre, Dance	0	\$0	\$0	0	\$0
Communications	0	\$0	\$0	0	\$0
Dean of Human Ecology	1	\$59,584	\$59,584	5	\$408,764
Hospitality Management and Dietetics	9	\$699,372	\$4,338,728	4	\$648,372
Human Nutrition	30	\$1,225,538	\$5,236,429	13	\$1,287,316
Kinesiology	16	\$1,723,484	\$4,003,074	6	\$1,423,210
School of Family Studies and Human Services	33	\$4,097,840	\$8,873,704	18	\$8,292,408
Total Human Ecology	93	\$8,706,928	\$23,635,707	47	\$12,111,260
<u>COLLEGE OF TECHNOLOGY AND AVIATION</u>					
Academic Services	0	\$0	\$0	0	\$0
Applied Aviation Research Center	5	\$135,981	\$150,674	6	\$215,808
Arts, Science and Business	3	\$120,706	\$199,152	0	\$0
Aviation	2	\$986,841	\$1,025,031	1	\$68,274
Dean of College of Technology and Aviation	0	\$0	\$0	0	\$0
Engineering Technology	0	\$0	\$0	0	\$0
Fiscal Affairs	0	\$0	\$0	0	\$0
Total Technology and Aviation	10	\$1,243,528	\$1,374,857	7	\$284,082
<u>COLLEGE OF VETERINARY MEDICINE</u>					
Anatomy and Physiology	58	\$4,993,698	\$13,076,554	10	\$986,331
Clinical Sciences	29	\$1,121,289	\$2,572,427	17	\$651,561
Dean of Veterinary Medical Center	2	\$53,403	\$568,335	3	\$996,018
Diagnostic Medicine/Pathobiology	111	\$27,761,637	\$65,624,173	50	\$8,156,890
Veterinary Diagnostic Laboratory	13	\$1,647,441	\$6,043,024	7	\$271,401
Veterinary Medical Teaching Hospital	1	\$3,750	\$3,750	4	\$16,950
Total Veterinary Medical Center	214	\$35,581,218	\$87,888,263	91	\$11,079,151
<u>COOPERATIVE EXTENSION</u>					
Cooperative Extension - Agriculture					
Agricultural Economics	0	\$0	\$0	0	\$0
Agriculture and Natural Resources	5	\$168,408	\$953,356	5	\$997,142
Agronomy	1	\$10,837	\$21,674	0	\$0
Biological and Agricultural Engineering	0	\$0	\$0	0	\$0
Communications	0	\$0	\$0	0	\$0
County Agents	1	\$31,208	\$155,269	0	\$0
County Agents-Metropolitan Sector	1	\$10,621	\$10,621	0	\$0
County Agents-Northwest Sector	0	\$0	\$0	0	\$0

**Fourth Quarter
Proposal/Award Summary
07/01/14 - 06/30/15**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
Director of Cooperative Extension	6	\$189,079	\$613,712	6	\$273,167
Four-H Youth Development	2	\$89,905	\$89,905	3	\$109,905
Kansas Forest Service	8	\$2,680,255	\$4,860,218	8	\$20,287,123
KS Ctr for Agri & the Env./KS Water Resource Res. Inst.	0	\$0	\$0	0	\$0
Northeast Area Office	0	\$0	\$0	1	\$13,900
Northeast/Metro Area Office	0	\$0	\$0	0	\$0
Northwest Area Office	9	\$141,039	\$271,631	3	\$39,465
Southeast Area Office	9	\$140,305	\$303,180	3	\$33,485
Southwest Area Office	16	\$710,477	\$2,154,713	9	\$120,868
Subtotal Cooperative Ext - Agriculture	58	\$4,172,134	\$9,434,279	38	\$21,875,055
Cooperative Extension - Human Ecology					
Family and Consumer Sciences	1	\$2,547,558	\$2,547,558	1	\$2,547,558
Human Nutrition	0	\$0	\$0	0	\$0
Nutrition Program	0	\$0	\$0	0	\$0
Subtotal Cooperative Ext - Human Ecology	1	\$2,547,558	\$2,547,558	1	\$2,547,558
Total Cooperative Extension	59	\$6,719,692	\$11,981,837	39	\$24,422,613
<u>OFFICE OF THE PRESIDENT</u>					
Auditorium Performances	0	\$0	\$0	0	\$0
Beach Art Museum	2	\$40,544	\$69,779	2	\$13,000
Office of the President	0	\$0	\$0	0	\$0
Total Office of the President	2	\$40,544	\$69,779	2	\$13,000
<u>OFFICE OF THE PROVOST</u>					
Assessment and Program Review	0	\$0	\$0	0	\$0
Center for Engagement and Community Development	2	\$14,701	\$14,701	1	\$33,660
Center for the Advancement of Teaching & Learning	1	\$50,000	\$50,000	0	\$0
Dean of Continuing Education	0	\$0	\$0	0	\$0
Dean of Graduate School	0	\$0	\$0	0	\$0
Information Security & Compliance	1	\$3,200	\$3,200	1	\$3,200
Information Technology Assistance Center	0	\$0	\$0	0	\$0
International Programs	1	\$24,083	\$126,086	0	\$0
Kansas Center for Rural Initiatives	0	\$0	\$0	0	\$0
Library	1	\$2,000,000	\$2,000,000	0	\$0
Office of Diversity and Dual Career Development	0	\$0	\$0	3	\$257,299
Office of the Provost	2	\$741,024	\$4,399,770	3	\$162,534
School of Leadership Studies	4	\$390,342	\$763,301	3	\$54,080
Office of Vice President for Communications and Marketing	0	\$0	\$0	1	\$23,000
Total Office of the Provost	12	\$3,223,350	\$7,357,058	12	\$533,773

OFFICE OF THE VICE PRESIDENT FOR

**Fourth Quarter
Proposal/Award Summary
07/01/14 - 06/30/15**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
<u>ADMINISTRATION AND FINANCE</u>					
Budget Office	0	\$0	\$0	0	\$0
KSU Police Department	3	\$63,311	\$147,870	0	\$0
Public Safety	0	\$0	\$0	0	\$0
Vice President for Administration and Finance	0	\$0	\$0	0	\$0
Total Administration and Finance	3	\$63,311	\$147,870	0	\$0
<u>OFFICE OF THE VICE PRESIDENT FOR RESEARCH</u>					
Biosecurity Research Institute	3	\$497,953	\$2,490,544	1	\$499,995
Comparative Medicine	0	\$0	\$0	0	\$0
K-State Olathe Innovation Campus	1	\$50,000	\$250,000	0	\$0
National Agricultural Biosecurity Center	6	\$1,135,382	\$3,283,740	4	\$199,041
Office of the Vice President for Research	0	\$0	\$0	1	\$152,333
Vice President Biotech Laboratory	0	\$0	\$0	0	\$0
Vice President Electronics Design Laboratory	0	\$0	\$0	2	\$192,706
Total Vice President for Research	10	\$1,683,335	\$6,024,284	8	\$1,044,075
<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	2	\$510,727	\$2,553,635	6	\$1,267,874
KSU Child Development Center, Inc.	0	\$0	\$0	3	\$480,285
New Student Services	0	\$0	\$0	2	\$51,351
Office of Vice President for Student Life	1	\$300,000	\$300,000	1	\$26,000
University Counseling Services	1	\$75,034	\$75,034	1	\$34,713
Total Student Life and Dean of Students	4	\$885,761	\$2,928,669	13	\$1,860,223
University Totals	1,660	\$205,590,806	\$533,678,721	962	\$137,589,870

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.)*

KANSAS STATE UNIVERSITY
SUMMARY OF EXTRAMURAL SUPPORT

FY2015

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
AGRICULTURE					
Dean of Agriculture & Director of AES	\$0	\$81,958	\$0	\$4,080,119	\$7,028,301
Agricultural Economics	\$2,179,162	\$3,275,769	\$1,879,073	\$2,701,748	\$4,499,667
Agronomy	\$4,911,685	\$6,135,014	\$6,317,145	\$9,047,246	\$4,282,708
Animal Sciences & Industry	\$2,425,820	\$1,463,992	\$3,264,082	\$4,160,941	\$2,330,114
Communications	\$0	\$49,639	\$28,948	\$572,825	\$273,151
Entomology	\$2,316,683	\$1,361,623	\$1,641,243	\$2,951,497	\$1,926,270
Food Science Institute	\$117,689	\$117,175	\$860,581	\$351,396	\$417,494
Grain Science & Industry	\$1,376,246	\$2,165,610	\$10,118,056	\$4,881,064	\$2,999,474
Hort., Forestry & Recreation Resources	\$368,293	\$755,787	\$610,161	\$1,212,934	\$528,216
International Agriculture Programs	\$3,982	\$125,945	\$453,714	\$473,742	\$135,843
KS Ctr for Agri & the Env/KS Water Res. Res. Inst.	\$647,659	\$1,514,499	\$886,934	\$1,237,346	\$2,471,533
Office of Academic Programs	\$150,210	\$74,134	\$150,737	\$223,774	\$160,203
Plant Biotechnology Center	\$0	\$0	\$72,000	\$72,000	\$73,902
Plant Pathology	\$5,451,762	\$7,375,691	\$9,373,376	\$8,563,872	\$8,040,595
Agricultural Experiment Station	\$210,000	\$165,000	\$0	\$10,000	\$0
Northwest Research Extension Center	\$410,701	\$231,733	\$387,423	\$167,220	\$106,297
Agricultural Research Center-Hays	\$575,798	\$432,201	\$341,647	\$536,961	\$520,094
Southeast Agricultural Res. Ctr.	\$49,937	\$39,607	\$60,928	\$26,385	\$0
Southwest Research Extension Ctr.	\$398,106	\$453,934	\$232,481	\$231,245	\$572,365
Extension Director	\$798,100	\$3,376,842	\$385,035	\$283,589	\$273,167
Extension Agricultural Economics	\$45,696	\$0	\$0	\$0	\$0
Extension Agronomy	\$12,571	\$10,368	\$10,609	\$21,677	\$0
Extension Animal Sciences & Industry	\$0	\$0	\$0	\$0	\$0
Extension Biological & Agricultural Engineering	\$25,000	\$0	\$0	\$0	\$0
Extension Communications	\$0	\$0	\$0	\$0	\$0
Extension Community Health Institute	\$0	\$0	\$0	\$0	\$0
Extension Entomology	\$0	\$0	\$0	\$0	\$0
Extension Four-H Youth Development	\$228,500	\$295,157	\$390,367	\$307,433	\$109,905
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.	\$17,500	\$0	\$0	\$0	\$0
Extension Kansas Forest Service	\$493,890	\$6,522,887	\$420,967	\$3,442,665	\$20,287,123
Extension Kansas Water Resource Res. Inst.	\$0	\$0	\$0	\$0	\$0
Extension Northeast Area Office	\$12,446	\$17,137	\$10,235	\$56,784	\$13,900
Extension Northwest Area Office	\$40,613	\$91,685	\$9,360	\$1,575	\$39,465
Extension Plant Pathology	\$0	\$0	\$0	\$0	\$0
Extension Agriculture and Natural Resources	\$503,211	\$383,458	\$493,018	\$562,308	\$997,142
Extension South Central Area Office	\$0	\$0	\$0	\$0	\$0
Extension Southeast Area Office	\$37,776	\$12,532	\$32,699	\$42,263	\$33,485
Extension Southwest Area Office	\$21,710	\$7,638	\$23,662	\$64,677	\$120,868
College Totals	\$23,830,745	\$36,537,015	38,454,478	\$46,285,286	\$58,241,282

ARCHITECTURE, PLANNING AND DESIGN

Dean of Architecture, Planning & Design	\$0	\$0	\$0	\$0	\$0
Architecture	\$0	\$0	\$0	\$25,000	\$28,500
Interior Architecture and Product Design	\$0	\$33,982	\$0	\$0	\$0
Landscape Arch/Regional & Comm Plan	\$60,008	\$261,936	\$0	\$71,571	\$7,210
College Totals	\$60,008	\$295,918	\$0	\$96,571	\$35,710

ARTS AND SCIENCES

Dean of Arts & Sciences	\$15,000	\$0	\$0	\$200,000	\$150,000
Biochemistry	\$1,457,390	\$1,383,653	\$1,446,113	\$2,463,717	\$2,737,009
Biology	\$8,471,140	\$10,262,919	\$7,793,383	\$8,162,164	\$11,506,539
Chemistry	\$3,784,835	\$1,673,244	\$2,491,458	\$2,243,577	\$1,530,901
Communication Studies	\$0	\$0	\$0	\$0	\$0
Economics	\$0	\$0	\$0	\$0	\$0
English	\$23,334	\$0	\$0	\$0	\$9,982
Geography	\$497,609	\$423,393	\$478,709	\$1,118,409	\$323,397
Geology	\$172,352	\$486,811	\$162,184	\$229,475	\$292,622
History	\$25,000	\$43,000	\$234,342	\$0	\$148,000

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Kinesiology	\$198,395	\$268,607	\$179,012	\$178,084	\$0 *
Mathematics	\$387,717	\$539,233	\$418,469	\$861,187	\$383,781
Modern Languages	\$0	\$0	\$0	\$6,000	\$0
Music	\$17,850	\$15,950	\$15,950	\$15,950	\$17,355
Philosophy	\$0	\$0	\$0	\$0	\$0
Physics	\$9,318,025	\$6,921,664	\$5,231,021	\$5,694,471	\$8,741,477
Political Science	\$0	\$87,469	\$171,028	\$4,000	\$0
Psychological Sciences	\$648,914	\$1,181,142	\$841,284	\$934,052	\$688,600
School of Journalism & Mass Communications	\$89,924	\$388,368	\$379,467	\$835,043	\$152,992
School of Music, Theatre, and Dance	\$0	\$0	\$0	\$0	\$0
Sociology, Anthropology, & Social Work	\$333,359	\$87,277	\$227,879	\$488,048	\$362,336
Statistics	\$45,164	\$36,953	\$260,908	\$85,842	\$87,141
Woman Studies	\$10,050	\$0	\$0	\$0	\$0
College Totals	<u>\$25,496,059</u>	<u>\$23,799,683</u>	<u>\$20,331,206</u>	<u>\$23,520,019</u>	<u>\$27,132,132</u>

BUSINESS ADMINISTRATION

Dean of Business Administration	\$0	\$0	\$0	\$0	\$0
Accounting	\$0	\$0	\$41,416	\$0	\$0
Marketing	\$3,250	\$0	\$0	\$10,000	\$21,780
Management	\$38,772	\$38,002	\$5,000	\$1,000	\$0
College Totals	<u>\$42,022</u>	<u>\$38,002</u>	<u>\$46,416</u>	<u>\$11,000</u>	<u>\$21,780</u>

EDUCATION

Curriculum and Instruction	\$0	\$4,014	\$295,178	\$0	\$130,268
Dean of Education	\$3,690,061	\$5,678,838	\$4,568,448	\$4,913,616	\$10,151,287
Educational Leadership	\$65,885	\$66,106	\$87,771	\$19,500	\$0
Elementary Education	\$32,370	\$0	\$0	\$0	\$0
Secondary Education	\$0	\$0	\$0	\$0	\$0
Special Education, Counseling and Student Affairs	\$0	\$0	\$0	\$27,026	\$27,020
College Totals	<u>\$3,788,316</u>	<u>\$5,748,958</u>	<u>\$4,951,397</u>	<u>\$4,960,142</u>	<u>\$10,308,575</u>

ENGINEERING

Dean of Engineering	\$20,106	\$3,862,252	\$7,045,581	\$200,378	\$75,000
Advanced Manufacturing Institute	\$2,550,702	\$1,390,487	\$2,787,818	\$1,372,000	\$1,352,989
Architectural Engg & Construction Sci	\$0	\$60,722	\$0	\$37,730	\$0
Biological & Agricultural Engineering	\$1,422,306	\$1,746,929	\$1,526,681	\$794,204	\$595,754
Center for Hazardous Substance Research	\$290,245	\$595,543	\$288,727	\$2,274,343	\$48,000
Chemical Engineering	\$4,715,020	\$1,767,029	\$1,120,526	\$1,475,765	\$1,084,436
Civil Engineering	\$2,279,751	\$1,505,432	\$2,753,232	\$1,193,043	\$1,630,957
Computing & Information Sciences	\$2,252,037	\$2,902,450	\$3,782,564	\$2,908,196	\$1,128,108
Electrical & Computer Engineering	\$1,835,404	\$2,105,802	\$874,793	\$1,426,653	\$1,125,422
Engineering Experiment Station	\$54,409	\$173,276	\$0	\$0	\$0
Institute for Environmental Research	\$1,080,237	\$898,846	\$611,763	\$421,049	\$397,738
Extension Engineering	\$0	\$0	\$0	\$0	\$0
Industrial & Manufacturing Sys Engg	\$863,656	\$787,941	\$1,330,252	\$903,179	\$261,640
Kansas Industrial Extension Service	\$1,359,975	\$672,125	\$1,004,228	\$849,510	\$982,346
Mechanical and Nuclear Engineering	\$3,376,890	\$3,549,961	\$2,029,180	\$2,245,934	\$3,694,879
National Gas Machinery Laboratory	\$125,667	\$58,216	\$201,149	\$37,730	\$0
Nat'l Institute for Land Mgmt & Training	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$22,226,404</u>	<u>\$22,077,011</u>	<u>\$25,356,493</u>	<u>\$16,139,714</u>	<u>\$12,377,269</u>

HUMAN ECOLOGY

Dean of Human Ecology	\$320,913	\$428,501	\$110,461	\$491,557	\$408,764
Apparel, Textiles & Interior Design	\$74,499	\$28,854	\$713,847	\$0	\$51,190
Human Nutrition	\$462,504	\$2,564,729	\$1,716,444	\$1,506,520	\$1,287,316
Hospitality Mgmt & Dietetics	\$2,282,480	\$145,168	\$500,000	\$827,642	\$648,372
Kinesiology	\$0	\$0	\$100,454	\$124,866	\$1,423,210 *
School of Family Studies & Human Services	\$11,156,617	\$15,630,852	\$6,524,106	\$7,537,520	\$8,292,408
Extension Apparel, Textiles & Interior Design	\$0	\$0	\$0	\$0	\$0
Extension Family & Consumer Sciences	\$591,157	\$2,359,722	\$1,757,763	\$2,489,822	\$2,547,558
Extension Human Nutrition	\$3,421,868	\$0	\$0	\$0	\$0
Extension Nutrition Program	\$0	\$0	\$0	\$0	\$0
Ext. Family Studies & Human Services	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$18,310,037</u>	<u>\$21,157,826</u>	<u>\$11,423,074</u>	<u>\$12,977,927</u>	<u>\$14,658,818</u>

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
TECHNOLOGY AND AVIATION					
Dean, College of Technology	\$0	\$0	\$0	\$0	\$0
Academic Services	\$0	\$0	\$12,276	\$0	\$0
College Advancement	\$0	\$0	\$0	\$1,500	\$0
Salina Applied Aviation Research Center	\$20,389	\$0	\$10,000	\$157,993	\$215,808
Salina Arts, Science and Business	\$4,500	\$4,500	\$0	\$500	\$68,274
Salina Aviation	\$20,288	\$14,066	\$0	\$0	\$0
Engineering Technology	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$45,177</u>	<u>\$18,566</u>	<u>\$22,276</u>	<u>\$159,993</u>	<u>\$284,082</u>
VETERINARY MEDICINE					
Dean of Veterinary Medicine	\$177,879	\$287,167	\$199,401	\$206,431	\$996,018
Anatomy & Physiology	\$3,661,475	\$3,090,238	\$7,747,515	\$2,997,688	\$986,331
Clinical Sciences	\$2,019,718	\$1,219,405	\$1,164,922	\$771,662	\$651,561
Diagnostic Medicine/Pathobiology	\$11,253,396	\$8,882,207	\$10,496,241	\$8,910,119	\$8,156,890
Veterinary Diagnostic Laboratory	\$465,217	\$61,860	\$231,875	\$50,127	\$271,401
Veterinary Medical Teaching Hospital	\$23,800	\$22,405	\$2,000	\$2,000	\$16,950
College Totals	<u>\$17,601,484</u>	<u>\$13,563,282</u>	<u>\$19,841,954</u>	<u>\$12,938,027</u>	<u>\$11,079,151</u>
PRESIDENT					
Beach Art Museum	\$26,860	\$75,000	\$0	\$8,872	\$13,000
McCain Auditorium	\$430,286	\$0	\$0	\$0	\$0
Office of the President	\$0	\$1,500,000	\$0	\$5,000,000	\$0
Totals	<u>\$457,146</u>	<u>\$1,575,000</u>	<u>\$0</u>	<u>\$5,008,872</u>	<u>\$13,000</u>
PROVOST					
Office of the Provost	\$3,186,621	\$53,051	\$1,527	\$341,067	\$162,534
Assessment & Program Review	\$0	\$39,078	\$14,421	\$0	\$0
Center for Engagement, Community Development	\$93,415	\$471,045	\$101,648	\$264,757	\$33,660
Dean of Continuing Education	\$225,000	\$75,000	\$15,871,917	\$9,987,444	\$0
Dean of the Graduate School	\$183,048	\$295,157	\$579,565	\$320,741	\$0
Enterprise Server Technologies	\$0	\$0	\$0	\$0	\$0
Information Security & Compliance	\$0	\$0	\$0	\$139,969	\$3,200
Information Systems	\$0	\$0	\$0	\$0	\$0
Information Technology Assistance Center	\$0	\$0	\$0	\$3,850	\$0
International Programs	\$101,214	\$10,224	\$0	\$0	\$0
Kansas Center for Rural Initiatives	\$0	\$0	\$0	\$0	\$0
Library	\$14,589	\$750	\$0	\$0	\$0
Network and Telecommunications Services	\$0	\$0	\$0	\$0	\$0
Office of Diversity and Dual Career Dev.	\$34,022	\$35,002	\$0	\$0	\$257,299
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	\$149,637	\$180,314	\$94,847	\$61,048	\$54,080
Vice President for Communications and Marketing	\$249,000	\$0	\$0	\$0	\$23,000
Totals	<u>\$4,236,546</u>	<u>\$1,159,621</u>	<u>\$16,663,925</u>	<u>\$11,118,876</u>	<u>\$533,773</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	\$7,097	\$205,271	\$2,500	\$1,500	\$0
Public Safety	\$0	\$2,600,000	\$0	\$0	\$0
Physical Facilities	\$0	\$0	\$0	\$0	\$0
Totals	<u>\$7,097</u>	<u>\$2,805,271</u>	<u>\$2,500</u>	<u>\$1,500</u>	<u>\$0</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	\$0	\$0	\$0	\$0	\$0
Totals	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
VICE PRESIDENT FOR RESEARCH					
Vice President for Research	\$0	\$5,081,000	\$5,180,466	\$237,058	\$152,333
Biosecurity Research Institute	\$340,842	\$752,521	\$5,226,382	\$5,033,555	\$499,995
K-State Olathe Innovation Campus	\$0	\$0	\$500	\$0	\$0
National Agricultural Biosecurity Center	\$6,028,149	\$812,000	\$1,753,544	\$148,134	\$199,041
Biotechnology Laboratory	\$50,005	\$57,054	\$0	\$0	\$0
Electronics Design Lab	\$233,893	\$330,790	\$334,864	\$616,545	\$192,706
Totals	\$6,652,888	\$7,033,365	\$12,495,755	\$6,035,292	\$1,044,075
V.P. FOR STUDENT LIFE AND DEAN OF STUDENTS					
Office of Vice President for Student Life	\$69,957	\$0	\$15,000	\$61,000	\$26,000
Department of Housing	\$0	\$0	\$0	\$1,000	\$0
Educational & Personal Development	\$1,635,762	\$1,288,752	\$1,118,279	\$986,068	\$1,267,874
KSU Child Development Center	\$129,420	\$310,126	\$586,442	\$137,806	\$480,285
New Student Services	\$0	\$0	\$0	\$49,940	\$51,351
Office of Diversity & Dual Career Dev.	\$0	\$0	\$0	\$0	\$0
University Counseling Services	\$37,000	\$37,000	\$34,333	\$34,000	\$34,713
Totals	\$1,872,139	\$1,635,878	\$1,754,054	\$1,269,814	\$1,860,223
UNIVERSITY TOTALS	\$124,626,067	\$137,445,396	\$151,343,528	\$140,523,033	\$137,589,870

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

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

Fourth Quarter of Fiscal Year 2015 (July 1, 2014 – June 30, 2015)

COLLEGE OF AGRICULTURE

AGRICULTURAL ECONOMICS

Amanor-Boadu, Vincent R., Featherstone, Allen M., and Ross, Kara, US Agency for International Development, \$399,272, "Pulse Value Chain Initiative-Zambia (PVCIZ)."

Amanor-Boadu, Vincent R., Ross, Kara, Shanoyan, Aleksan, and Zereyesus, Yacob, US Department of Agriculture, \$805,003, "METSS Ghana Implementation (Sustaining Growth Through Effective Management and Collaboration)."

Ariyaratne, Chatura, Featherstone, Allen M., O'Brien, Daniel M. (Northwest Area Office), and **Taylor, Mykel R.**, Grains Research and Development Corporation, "Proposed Scope of Work for GRDC Project."

Ariyaratne, Chatura, Briggeman, Brian C., Golden, Bill B., Hendricks, Nathan P., and Peterson, Jeffrey M., US Department of Agriculture, \$499,976, "Effects of Energy and Commodity Prices on Crop Patterns and the Ogallala Aquifer under Alternative Policy Scenarios."

Barnaby Jr, Glenn A., and Hadley, Gregg L. (Agriculture and Natural Resources), US Department of Agriculture, "2014 Farm Bill - Producer Education - Kansas State University Extension Services."

Barnaby Jr, Glenn A., Llewellyn, Richard V., and Taylor, Mykel R., US Department of Agriculture, \$34,801, "National Conference Addressing Wheat Drought Losses and Policy Issues."

Briggeman, Brian C., Ariyaratne, Chatura, Golden, Bill B., Hendricks, Nathan P., and Peterson, Jeffrey M., US Department of Agriculture, "Effects of Energy and Commodity Prices on Crop Patterns and the Ogallala Aquifer under Alternative Policy Scenarios."

Dalton, Timothy J., Dhuyvetter, Kevin C., Garrett, Karen A. (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina K.** (International Agricultural Programs), **Pagadala, P. V. Vara** (Agronomy), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), and **Staggenborg, Scott A.** (Agronomy), US Agency for International Development, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

Dhuyvetter, Kevin C., Dalton, Timothy J., Garrett, Karen A. (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina K.** (International Agricultural Programs), **Pagadala, P. V. Vara** (Agronomy), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), and **Staggenborg, Scott A.** (Agronomy), US Agency for International Development, \$3,919, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

Featherstone, Allen M., Ariyaratne, Chatura, O'Brien, Daniel M. (Northwest Area Office), and **Taylor, Mykel R.**, Grains Research and Development Corporation, \$74,167, "Proposed Scope of Work for GRDC Project."

Featherstone, Allen M., and Tsoodle, Leah J., Kansas Department of Agriculture, \$97,802, "Memorandum of Agreement."

Featherstone, Allen M., and Tsoodle, Leah J., Kansas Department of Revenue, \$289,782, "Modification of Agreement."

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

Featherstone, Allen M., US Department of Agriculture, \$15,000, "Effects of Farm and Off-Farm Income on Leverage of Farm Operator Households."

Fox, John "Sean" A., Drouillard, James S. (Animal Sciences and Industry), and **Schroeder, Ted C.,** US Department of Agriculture, "Determining Market Potential for Omega-3 Beef Products."

Fox, John "Sean" A., Bai, Jianfa (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvor G.** (Diagnostic Medicine/Pathobiology), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Oberst, Richard D.** (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, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Golden, Bill B., Aguilar, Jonathan P. (Southwest Area Office), **Ciampitti, Ignacio** (Agronomy), **Haag, Lucas A.** (Northwest Area Office), **Lin, Xiaomao** (Agronomy), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Roozeboom, Kraig L.** (Agronomy), Kansas Corn Commission, \$10,000, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

Golden, Bill B., Adey, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Cramer, Gary L.** (Agronomy), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenberg, Gerard J.** (Agronomy), **Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L.** (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$37,496, "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 Rsrcs & 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 Rsrcs & 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, "Training for Pakistan Proposal: On-Farm Water Management."

Golden, Bill B., Ariyaratne, Chatura, Briggeman, Brian C., Hendricks, Nathan P., and Peterson, Jeffrey M., US Department of Agriculture, "Effects of Energy and Commodity Prices on Crop Patterns and the Ogallala Aquifer under Alternative Policy Scenarios."

Golden, Bill B., Devlin, Daniel L. (Ks Ctr for Ag Rsrcs & the Env / Ks Water Rsrce Rsrch Inst), **Holman, Johnathon D.** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Pagadala, P. V. Vara** (Agronomy), **Schlegel, Alan J.** (Southwest Research Extension Center), **Steward, David R.** (Civil Engineering), and **Swamy, Aavudai Anandhi** (Agronomy), US Department of Agriculture, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

Hendricks, Nathan P., National Science Foundation, \$41,550, "Phase VI: Climate Change and Energy: Basic Science, Impacts, and Mitigation - Supplemental Funding."

Hendricks, Nathan P., Ariyaratne, Chatura, Briggeman, Brian C., Golden, Bill B., and Peterson, Jeffrey M., US Department of Agriculture, "Effects of Energy and Commodity Prices on Crop Patterns and the Ogallala Aquifer under Alternative Policy Scenarios."

Herbel, Kevin L., and Brouk, Micheal J. (Animal Sciences and Industry), Kansas Department of Agriculture, \$38,012, "Dairy Farm Profitability Evaluation Program."

Ibendahl, Gregory, Cotton, Inc., \$4,000, "Estimating the Profitability and Risk of Cotton Production in the Plains."

Leatherman, John C., Kansas Department of Health and Environment, \$109,934 (includes \$26,450 from Stockholder Leadership Team), "KS WRAPS - Cottonwood SFY 2014 - 2016."

Leatherman, John C., Kansas Department of Health and Environment, \$333,410 (includes \$41,300 from BMP Projects), "Milford WRAPS Implementation SFY 2014 - 2016."

Leatherman, John C., US Department of Health and Human Services, \$50,603, "Community Assessment and Education to Promote Behavioral Health Planning and Evaluation (CAPE) Phase 2."

Leatherman, John C., and Johannes, Elaine M. (School of Family Studies and Human Services), US Department of Health and Human Services, \$69,362, "Community Behavioral Health Early Warning Systems: Kansas State University and Pawnee Mental Health Services."

Leatherman, John C., US Environmental Protection Agency, \$32,018, "Development of Watershed Management Plan for Spring River Watershed and Development of Information for 319 Nonpoint Source Implementation Project in Carthage, Missouri."

Leatherman, John C., US Environmental Protection Agency, \$68,385 (includes \$20,885 from Cooperator Match), "Hillsdale WRAPS Implementation FY 2014 - 2016."

Leatherman, John C., US Environmental Protection Agency, \$80,635 (includes \$24,620 from BMP Projects), "KS WRAPS - Upper Neosho SFY14 Yr 1, Yr 2 & Yr 3."

Llewelyn, Richard V., Barnaby Jr, Glenn A., and Taylor, Mykel R., US Department of Agriculture, "National Conference Addressing Wheat Drought Losses and Policy Issues."

Peterson, Hikaru H., US Department of Agriculture, \$499,995, "Impacts of Values-based Supply Chains on Small and Medium-sized Farms."

Peterson, Jeffrey M., Ariyaratne, Chatura, Briggeman, Brian C., Golden, Bill B., and Hendricks, Nathan P., US Department of Agriculture, "Effects of Energy and Commodity Prices on Crop Patterns and the Ogallala Aquifer under Alternative Policy Scenarios."

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., Drouillard, James S. (Animal Sciences and Industry), and **Fox, John "Sean" A.**, US Department of Agriculture, \$105,890, "Determining Market Potential for Omega-3 Beef Products."

Schroeder, Ted C., Bello, Nora M. (Statistics), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Larson, Robert L.** (Clinical Sciences), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), and **White, Bradley J.** (Clinical Sciences), US Department of Agriculture, \$25,599, "Risk Management Strategies to Reduce the Impacts of Bovine Respiratory Disease Complex in Commercial Feeder Cattle."

Schroeder, Ted C., Bai, Jianfa (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), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Oberst, Richard D.** (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, \$104,374, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Schwab, Benjamin B., and Shanoyan, Aleksan, US Department of Agriculture, \$107,553, "A Deep-Dive Analysis of the Armenia Water to Market Farmer Training Program."

Shanoyan, Aleksan, and Schwab, Benjamin B., US Department of Agriculture, "A Deep-Dive Analysis of the Armenia Water to Market Farmer Training Program."

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., Ariyaratne, Chatura, Featherstone, Allen M., and O'Brien, Daniel M. (Northwest Area Office), Grains Research and Development Corporation, "Proposed Scope of Work for GRDC Project."

Taylor, Mykel R., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Pliakoni, Eleni** (Horticulture, Forestry and Recreation Resources), **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), and **Shoemaker, Candice A.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$4,862, "Development of an Instrument to Document Economic Impact of Fruit and Vegetable Growers in Kansas."

Taylor, Mykel R., Barnaby Jr, Glenn A., and Llewelyn, Richard V., US Department of Agriculture, "National Conference Addressing Wheat Drought Losses and Policy Issues."

Tonsor, Glynn T., US Department of Agriculture, \$500,000, "Causes and Consequences of the Unfounded Mandate Following Differences in Voting and Buying Behavior."

Tonsor, Glynn T., Bai, Jianfa (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), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Oberst, Richard D.** (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), and **Zurek, Ludek** (Entomology), US Department of Agriculture, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Tonsor, Glynn T., US Department of Agriculture, \$56,268, "Using Consumer Tracking Surveys to Understand and Forecast Changes in Consumer Demand for Disaggregated Meat Products."

Tsoodle, Leah J., and **Featherstone, Allen M.**, Kansas Department of Agriculture, "Memorandum of Agreement."

Tsoodle, Leah J., and **Featherstone, Allen M.**, Kansas Department of Revenue, "Modification of Agreement."

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

AGRICULTURAL RESEARCH CENTER-HAYS

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, \$34,034, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

Obour, Augustine K., and **Zhang, Guorong**, Kansas Wheat Commission, \$16,420, "Improving Winter Wheat Production in Dryland Cropping Systems: Role of Tillage, Varietal Selection and Nitrogen Fertilization."

Obour, Augustine K., US Department of Agriculture, \$10,000, "Evaluating Camelina Sativa as a Fallow Replacement Crop in Wheat Production Systems - Eric Obeng."

Perumal, Ramasamy, Aiken, Robert M. (Northwest Research Extension Center), and **Little, Christopher R.** (Plant Pathology), Kansas Grain Sorghum Commission, \$99,000, "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, \$3,987, "Germplasm Screening, Host- Plant Interactions, and Inoculation Techniques for Sorghum Stalk Rot Diseases in Kansas."

Perumal, Ramasamy, Morris, Geoffrey (Agronomy), **Pagadala, P. V. Vara** (Agronomy), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$15,800, "Improved Genomic Mapping and Marker-Assisted Selection for Cold Tolerance in Grain Sorghum."

Perumal, Ramasamy, Pagadala, P. V. Vara (Agronomy), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$10,400, "Improving Yield Potential of Grain Sorghum through Drought and Heat Tolerance."

Perumal, Ramasamy, Aiken, Robert M. (Northwest Research Extension Center), **Pagadala, P. V. Vara** (Agronomy), **Price, Kevin** (Agronomy), **Tesso, Tesfaye** (Agronomy), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Kansas Grain Sorghum Commission, "Remote Sensing Screening Tools for Sorghum Breeding Programs."

Perumal, Ramasamy, Dalton, Timothy J. (Dean of Agriculture and Director of AES), **Morris, Geoffrey** (Agronomy), and **Tesso, Tesfaye** (Agronomy), US Department of Agriculture, \$15,993, "Borlaug Fellowship

Program: Discovery of New Genes for Enhancing Grain and Forage Quality Traits through Association Mapping in Pearl Millet."

Perumal, Ramasamy, and Tesso, Tesfaye (Agronomy), US Department of Agriculture, \$9,900, "The Development of a Sorghum Doubled Haploid Breeding System."

Stahlman, Phillip W., Monsanto Company, \$10,880, "Service Order No. 1."

Stahlman, Phillip W., Monsanto Company, \$5,440, "Service Order No. 33."

Stahlman, Phillip W., Multi-Sponsor, \$13,000, "Weed Research."

Zhang, Guorong, Fritz, Allan K. (Agronomy), **Poland, Jesse A.** (Plant Pathology), and **Regan, Rebecca** (Grain Science and Industry), Kansas Wheat Alliance, Inc., \$5,750, "Quality Evaluation of Wheat for Molecular Marker Identification - 2014."

Zhang, Guorong, Aiken, Robert M. (Northwest Research Extension Center), and **Fritz, Allan K.** (Agronomy), Kansas Wheat Alliance, Inc., "Screening Tools to Identify Drought Resistance in Promising Wheat Lines."

Zhang, Guorong, Kansas Wheat Alliance, Inc., \$23,100, "Wheat Improvement through Double Haploid Technology."

Zhang, Guorong, Kansas Wheat Commission, \$134,000, "Development of New Hard Red and Hard White Winter Wheat Varieties with Improved Levels of Disease Resistance for Western Kansas."

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

Zhang, Guorong, and **Shi, Yong Cheng** (Grain Science and Industry), Kansas Wheat Commission, \$15,200, "Evaluating Hard Winter Wheat for Asian-style and Instant Noodles."

Zhang, Guorong, Kansas Wheat Commission, \$32,190, "Genetic Characterization of Wheat Streak Mosaic Virus Resistance at High Temperature."

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."

AGRONOMY

Adee, Eric A., Ciampitti, Ignacio, and Ruiz Diaz Suarez, Dorivar A., AGCO Corporation, "Investigating the Effect Plant Population and Placement of Fertilizer P in Corn."

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., Ciampitti, Ignacio, Cramer, Gary L., Golden, Bill B. (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenber, Gerard J., Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L., and Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, "Comparison of Yield, Water

Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Adee, Eric A., Little, Christopher R. (Plant Pathology), and **Presley, DeAnn R.**, Kansas Soybean Commission, \$7,031, "Influences of Irrigation Regimes, Planting Date, and Soil Compaction Upon SDS in Kansas."

Adee, Eric A., Monsanto Company, \$20,160, "Service Order No. 14."

Adee, Eric A., Maddux, Larry D., Marsh, Brian H., Nelson, Nathan O., and Pierzynski, Gary M., Multi-Sponsor, "Soil Fertility and Soil Management Investigations."

Alvarez Santos, Eduardo, National Science Foundation, \$122,791, "Investigating the CO₂ Exchange in a Tall-Grass Prairie Ecosystem using an Analytical Lagrangian Dispersion Analysis and Stable Isotopes."

Ciampitti, Ignacio, Adee, Eric A., and Ruiz Diaz Suarez, Dorivar A., AGCO Corporation, \$18,000, "Investigating the Effect Plant Population and Placement of Fertilizer P in Corn."

Ciampitti, Ignacio, AGCO Corporation, \$57,000, "Nitrogen (N) Fertilizer Impact on Maize Grain Yield and N Use Efficiency (NUE)."

Ciampitti, Ignacio, and **Stamm, Michael J.**, Caldbeck Consulting LLC, \$1,400, "Intellectual Property Agreement."

Ciampitti, Ignacio, John Deere World Headquarters, \$68,736, "Precise Planting, Seed Singulation, Versus Conventional Seeding for Wheat."

Ciampitti, Ignacio, Aguilar, Jonathan P. (Southwest Area Office), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Lin, Xiaomao, McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Roozeboom, Kraig L.**, Kansas Corn Commission, \$12,500, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

Ciampitti, Ignacio, Kansas Corn Commission, \$7,425, "Extension and Applied Research Programs for Kansas Corn Production."

Ciampitti, Ignacio, Kansas Corn Commission, \$12,500, "Genomes to the Field."

Ciampitti, Ignacio, Adee, Eric A., Cramer, Gary L., and Ruiz Diaz Suarez, Dorivar A., Kansas Grain Sorghum Commission, \$16,725, "Best Management Practices for Top-Yields in Sorghum."

Ciampitti, Ignacio, Adee, Eric A., Cramer, Gary L., Golden, Bill B. (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenberg, Gerard J., Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L.**, and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Ciampitti, Ignacio, Roozeboom, Kraig L., and Thompson, Curtis R., Kansas Grain Sorghum Commission, \$12,188, "Sorghum Production Schools for Kansas."

Ciampitti, Ignacio, Duncan, Stewart R. (Northeast Area Office), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$11,114, "2015 K-State Soybean Production Schools for Kansas."

Ciampitti, Ignacio, Duncan, Stewart R. (Southeast Area Office), **Peterson, Dallas E.**, and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, "Update for the Soybean Production Handbook (K-State)."

Ciampitti, Ignacio, Cramer, Gary L., Holman, Johnathon D. (Southwest Research Extension Center), and **Stamm, Michael J.**, US Department of Agriculture, "Extending Risk Management Education to New and Experienced Canola Producers in Kansas and Colorado."

Cramer, Gary L., Cotton, Inc., \$5,000, "Cotton Response to Planting Method, Planting Date, Cultivar, and Fertilizer Application."

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., Adee, Eric A., Ciampitti, Ignacio, Golden, Bill B. (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenber, Gerard J., Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L.,** and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$37,496, "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., Ciampitti, Ignacio, Holman, Johnathon D. (Southwest Research Extension Center), and **Stamm, Michael J.**, US Department of Agriculture, "Extending Risk Management Education to New and Experienced Canola Producers in Kansas and Colorado."

Fritz, Allan K., Poland, Jesse A., and **Zhang, Guorong,** Kansas Wheat Alliance, Inc., "Applying Genomic Selection in KSU Wheat Breeding Programs."

Fritz, Allan K., Chuang, Wenpo (Entomology), **Smith, C. Michael** (Entomology), and **Whitfield, Anna E.** (Plant Pathology), Kansas Wheat Alliance, Inc., \$9,800, "Evaluation of Kansas Germplasm for Resistance to Multiple Curl Mite-Vectored Viruses."

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

Fritz, Allan K., Poland, Jesse A. (Plant Pathology), **Regan, Rebecca** (Grain Science and Industry), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$5,750, "Quality Evaluation of Wheat for Molecular Marker Identification - 2014."

Fritz, Allan K., Aiken, Robert M. (Northwest Research Extension Center), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., "Screening Tools to Identify Drought Resistance in Promising Wheat Lines."

Fritz, Allan K., Bockus, William W. (Plant Pathology), **De Wolf, Erick D.** (Plant Pathology), **Friebe, Bernd** (Plant Pathology), **Gill, Bikram S.** (Plant Pathology), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$6,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Diseases."

Fritz, Allan K., Kansas Wheat Commission, \$95,000, "Implementation of Advanced Breeding Technologies."

Fritz, Allan K., and Martin, Terry J. (Agricultural Research Center-Hays), Kansas Wheat Commission, \$245,000, "Improvement of Hard Winter Wheat for Kansas."

Fritz, Allan K., and Poland, Jesse A. (Plant Pathology), Kansas Wheat Commission, "Screening and Improvement of Barley Yellow Dwarf Resistance."

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

Fritz, Allan K., US Department of Agriculture, \$42,680, "Wheat Stem Rust Cooperative Research - Kansas State University."

Hettiarachchi, Ganga M., National Science Foundation, \$79,250, "Understanding Process- level Physico and Biogeochemical Mechanisms Controlling Soil Carbon Stabilization."

Huss, Anne R., Aldrich, Greg (Grain Science and Industry), **Jones, Cassandra K.** (Grain Science and Industry), and **Stark, Charles** (Grain Science and Industry), Fats and Proteins Research Foundation, Inc., "Assessing the Efficacy of Chemical Treatment to Control Salmonella in Rendered Protein Meals."

Janssen, Keith A., Shoup, Douglas E., and Thompson, Curtis R., Multi- Sponsor, "Field Herbicidal Evaluations."

Jugulam, Mithila, Pagadala, P. V. Vara, and Thompson, Curtis R., Kansas Grain Sorghum Commission, \$60,000, "Evaluation of Sorghum Germplasm for Herbicide Tolerance."

Jugulam, Mithila, Pagadala, P. V. Vara, and Thompson, Curtis R., The United Sorghum Checkoff Program Board, \$30,000, "Evaluation of Sorghum Germplasm for Herbicide Tolerance."

Kirkham, Mary B., Margolies, David C. (Entomology), **Nechols, James R.** (Entomology), **Ruberson, John R.** (Entomology), **Swamy, Aavudai Anandhi,** and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, "Cotton Crop Risk in Changing Environments: Interaction of Drought Stress and Early Season Arthropod Pests."

Kluitenberg, Gerard J., Barnes, Philip L. (Biological and Agricultural Engineering), **Nelson, Nathan O., Roozeboom, Kraig L., and Tomlinson, Peter J.,** Kansas Corn Commission, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Kluitenberg, Gerard J., Adee, Eric A., Ciampitti, Ignacio, Cramer, Gary L., Golden, Bill B. (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L., and Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Kluitenberg, Gerard J., Nelson, Nathan O., Roozeboom, Kraig L., and Tomlinson, Peter J., Kansas Soybean Commission, "Cover Crops and Phosphorus Management to Protect Water Quality in Soybean Rotation."

Kluitenberg, Gerard J., Caragea, Doina (Computing and Information Sciences), **Das, Sanjoy** (Electrical and Computer Engineering), and **Welch, Stephen M.,** National Science Foundation, "TRMS: Agroecological Annotation of Gene Function and Computational Analysis of Gene Networks."

Knapp, Mary C., De Wolf, 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, Aguilar, Jonathan P. (Southwest Area Office), **Ciampitti, Ignacio, Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Roozeboom, Kraig L.**, Kansas Corn Commission, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

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

Lin, Xiaomao, National Oceanic and Atmosphere Administration, \$94,500, "Weather Data Library Data Sets."

Lin, Xiaomao, Aguilar, Jonathan P. (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), and **Kisekka, Isaya** (Southwest Research Extension Center), US Department of the Interior, "Kansas Water Resources Research Institute."

Maddux, Larry D., Adee, Eric A., Marsh, Brian H., Nelson, Nathan O., and Pierzynski, Gary M., Multi-Sponsor, "Soil Fertility and Soil Management Investigations."

Marsh, Brian H., Adee, Eric A., Maddux, Larry D., Nelson, Nathan O., and Pierzynski, Gary M., Multi-Sponsor, "Soil Fertility and Soil Management Investigations."

Morris, Geoffrey, Pagadala, P. V. Vara, 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, Dalton, Timothy J. (Dean of Agriculture and Director of AES), **Perumal, Ramasamy** (Agricultural Research Center-Hays), and **Tesso, Tesfaye**, US Department of Agriculture, "Borlaug Fellowship Program: Discovery of New Genes for Enhancing Grain and Forage Quality Traits through Association Mapping in Pearl Millet."

Nelson, Nathan O., Barnes, Philip L. (Biological and Agricultural Engineering), **Kluitenberg, Gerard J., Roozeboom, Kraig L., and Tomlinson, Peter J.**, Kansas Corn Commission, \$4,250, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Nelson, Nathan O., Kluitenberg, Gerard J., Roozeboom, Kraig L., and Tomlinson, Peter J., Kansas Soybean Commission, \$5,000, "Cover Crops and Phosphorus Management to Protect Water Quality in Soybean Rotation."

Nelson, Nathan O., Adee, Eric A., Maddux, Larry D., Marsh, Brian H., and Pierzynski, Gary M., Multi-Sponsor, \$155,923, "Soil Fertility and Soil Management Investigations."

Pagadala, P. V. Vara, Little, Christopher R., Roozeboom, Kraig L., and Tesso, Tesfaye, Kansas Grain Sorghum Commission, "Breeding Sorghum for Improved Production and Utilization."

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

Pagadala, P. V. Vara, Perumal, Ramasamy (Agricultural Research Center-Hays), and **Tesso, Tesfaye**, Kansas Grain Sorghum Commission, \$41,600, "Improving Yield Potential of Grain Sorghum through Drought and Heat Tolerance."

Pagadala, P. V. Vara, Aiken, Robert M. (Northwest Research Extension Center), **Perumal, Ramasamy** (Agricultural Research Center-Hays), **Price, Kevin, Tesso, Tesfaye**, and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Kansas Grain Sorghum Commission, "Remote Sensing Screening Tools for Sorghum Breeding Programs."

Pagadala, P. V. Vara, Kansas Wheat Alliance, Inc., \$45,000, "Exploring Wheat Germplasm for Drought and Heat Tolerance."

Pagadala, P. V. Vara, Jugulam, Mithila, and **Thompson, Curtis R.**, The United Sorghum Checkoff Program Board, "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, and **Lilja, Nina K.** (International Agricultural Programs), US Agency for International Development, \$161,296, "BHEARD Program: Ghana."

Pagadala, P. V. Vara, US Agency for International Development, \$16,000, "Heat-Tolerant Pearl Millet for Increased and Stable Production in Warmer Environments."

Pagadala, P. V. Vara, Dalton, Timothy J. (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina K.** (International Agricultural Programs), **Presley, DeAnn R., Rice, Charles W.**, and **Staggenborg, Scott A.**, US Agency for International Development, \$31,348, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

Pagadala, P. V. Vara, and **Akhunov, Eduard D.** (Plant Pathology), US Department of Agriculture, \$147,203, "Improving Barley and Wheat Germplasm for Changing Environments."

Pagadala, P. V. Vara, Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Holman, Johnathon D.** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Schlegel, Alan J.** (Southwest Research Extension Center), **Steward, David R.** (Civil Engineering), and **Swamy, Aavudai Anandhi**, US Department of Agriculture, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

Peterson, Dallas E., BASF Corporation, \$24,500, "Testing Services Agreement 20152016."

Peterson, Dallas E., Dow AgroSciences, LLC, \$4,000, "How Do Enlist Duo or Glufosinate/2.4-D Choline POST Programs with Sonic/Surveil PRE Compare to Conventional Glyphosate- or Glufosinate-based programs in HTMS Soybeans?."

Peterson, Dallas E., Ciampitti, Ignacio, Duncan, Stewart R. (Southeast Area Office), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$12,756, "Update for the Soybean Production Handbook (K-State)."

Peterson, Dallas E., Sharda, Ajay (Biological and Agricultural Engineering), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Lockheed Martin Corporation, \$851, "Develop a Plan for Experiments Relating to a Spectral Sensor for Weed Recognition Analysis."

Peterson, Dallas E., Monsanto Company, \$12,000, "Service Order #27."

Peterson, Dallas E., Monsanto Company, \$20,160, "Service Order No. 17."

Peterson, Dallas E., Monsanto Company, \$4,536, "Service Order No. 21."

Peterson, Dallas E., Syngenta Seeds, Inc., \$10,000, "Herbicide Research."

Peterson, Dallas E., United Soybean Board, \$29,778, "Glyphosate Resistant Weed Project in Kansas."

Peterson, Dallas E., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **De Wolf, 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, \$5,000, "AGR Multi-Sponsor Experiment Field 26."

Pierzynski, Gary M., Multi-Sponsor, \$45,000, "AGR Multi-Sponsor Public Service 35."

Pierzynski, Gary M., Multi-Sponsor, \$16,500, "Fluid Fertilizer Foundation."

Pierzynski, Gary M., Adee, Eric A., Maddux, Larry D., Marsh, Brian H., and Nelson, Nathan O., Multi-Sponsor, "Soil Fertility and Soil Management Investigations."

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, \$158,366, "Development of Abiotic Stress Resistant Wheat Germplasm."

Poland, Jesse A., Kansas Crop Improvement Association, \$10,000, "Confirmation of Genetic Identity and Purity of Certified Wheat Seed Lots."

Poland, Jesse A., Fritz, Allan K., and Zhang, Guorong, Kansas Wheat Alliance, Inc., \$30,000, "Applying Genomic Selection in KSU Wheat Breeding Programs."

Poland, Jesse A., and Leslie, John F. (Plant Pathology), Monsanto Company, "Monsanto's Beachell-Borlaug International Scholars Program (Sandra Dunkel's PhD Study)."

Presley, DeAnn R., Adee, Eric A., and Little, Christopher R. (Plant Pathology), Kansas Soybean Commission, "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.**, and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$5,262, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Presley, DeAnn R., Dalton, Timothy J. (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina K.** (International Agricultural Programs), **Pagadala, P. V. Vara, Rice, Charles W.**, and **Staggenborg, Scott A.**, US Agency for International Development, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

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."

Price, Kevin, Aiken, Robert M. (Northwest Research Extension Center), **Pagadala, P. V. Vara, Perumal, Ramasamy** (Agricultural Research Center-Hays), **Tesso, Tesfaye**, and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Kansas Grain Sorghum Commission, "Remote Sensing Screening Tools for Sorghum Breeding Programs."

Redmond, Christopher A., De Wolf, 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., National Science Foundation, \$90,000, "Phase VI: Climate Change and Energy: Basic Science, Impacts and Mitigation."

Rice, Charles W., Dalton, Timothy J. (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina K.** (International Agricultural Programs), **Pagadala, P. V. Vara, Presley, DeAnn R.**, and **Staggenborg, Scott A.**, US Agency for International Development, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

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, \$818,470, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Roozeboom, Kraig L., Ruiz Diaz Suarez, Dorivar A., and **Tomlinson, Peter J.**, Agronomic Science Foundation, \$19,997, "Influence of Cover Crops on Nitrous Oxide Dynamics and Nutrient Stratification in an Established No-Till Wheat-Sorghum-Soybean Cropping System."

Roozeboom, Kraig L., Barnes, Philip L. (Biological and Agricultural Engineering), **Kluitenberg, Gerard J., Nelson, Nathan O.**, and **Tomlinson, Peter J.**, Kansas Corn Commission, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Roozeboom, Kraig L., Aguilar, Jonathan P. (Southwest Area Office), **Ciampitti, Ignacio, Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Lin, Xiaomao, McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), and **Rogers, Danny H.** (Biological and

Agricultural Engineering), Kansas Corn Commission, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

Roozeboom, Kraig L., Little, Christopher R., Pagadala, P. V. Vara, and Tesso, Tesfaye, Kansas Grain Sorghum Commission, "Breeding Sorghum for Improved Production and Utilization."

Roozeboom, Kraig L., Adee, Eric A., Ciampitti, Ignacio, Cramer, Gary L., Golden, Bill B. (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenberg, Gerard J., 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, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Roozeboom, Kraig L., Ciampitti, Ignacio, and Thompson, Curtis R., Kansas Grain Sorghum Commission, "Sorghum Production Schools for Kansas."

Roozeboom, Kraig L., Kluitenberg, Gerard J., Nelson, Nathan O., and Tomlinson, Peter J., Kansas Soybean Commission, "Cover Crops and Phosphorus Management to Protect Water Quality in Soybean Rotation."

Ruiz Diaz Suarez, Dorivar A., Adee, Eric A., and Ciampitti, Ignacio, AGCO Corporation, "Investigating the Effect Plant Population and Placement of Fertilizer P in Corn."

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., Kansas Crop Improvement Association, \$8,500, "Nutrient Uptake and Partitioning in Current Kansas Wheat Varieties."

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, \$7,293, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

Ruiz Diaz Suarez, Dorivar A., 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., 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., Kusel, Kelly R. (Southeast Agricultural Research Center), **Todd, Timothy C.** (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$17,585, "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, \$12,842, "Development of Genetic, Chemical and Population-Based Tactics to Manage Key Kansas Soybean Pests."

Schapaugh Jr, William T., Todd, Timothy C. (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$3,817, "Enhancement of Soybean Through Genetic Engineering."

Schapaugh Jr, William T., and Pagadala, P. V. Vara, United Soybean Board, \$134,142, "Breeding and Physiological Approaches to Develop Stress Tolerant Soybean Varieties for Kansas (USB Project 1420-532-5613)."

Shroyer, James P., Smith, C. Michael (Entomology), and **Whitworth, Robert "Jeff" J.** (Entomology), Kansas Wheat Commission, "Aphid Vectors of Barley Yellow Dwarf Virus in Kansas Wheat."

Staggenborg, Scott A., Dalton, Timothy J. (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina K.** (International Agricultural Programs), **Pagadala, P. V. Vara, Presley, DeAnn R., and Rice, Charles W.,** US Agency for International Development, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

Stamm, Michael J., and Ciampitti, Ignacio, Caldbeck Consulting LLC, \$600, "Intellectual Property Agreement."

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

Stamm, Michael J., US Department of Agriculture, \$210,000, "Development and Management of Canola in the Great Plains."

Stamm, Michael J., Ciampitti, Ignacio, Cramer, Gary L., and Holman, Johnathon D. (Southwest Research Extension Center), US Department of Agriculture, \$90,999, "Extending Risk Management Education to New and Experienced Canola Producers in Kansas and Colorado."

Swamy, Aavudai Anandhi, Kirkham, Mary B., Margolies, David C. (Entomology), **Nechols, James R.** (Entomology), **Ruberson, John R.** (Entomology), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$48,397, "Cotton Crop Risk in Changing Environments: Interaction of Drought Stress and Early Season Arthropod Pests."

Swamy, Aavudai Anandhi, Devlin, Daniel L. (Ks Ctr for Ag Rsrcees & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Holman, Johnathon D.** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Pagadala, P. V. Vara, Schlegel, Alan J.** (Southwest Research Extension Center), and **Steward, David R.** (Civil Engineering), US Department of Agriculture, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

Swamy, Aavudai Anandhi, Devlin, Daniel L. (Ks Ctr for Ag Rsrcees & 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., Pagadala, P. V. Vara, and Roozeboom, Kraig L., Kansas Grain Sorghum Commission, \$89,700, "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, \$3,987, "Germplasm Screening, Host-Plant Interactions, and Inoculation Techniques for Sorghum Stalk Rot Diseases in Kansas."

Tesso, Tesfaye, Morris, Geoffrey, Pagadala, P. V. Vara, and Perumal, Ramasamy (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, "Improved Genomic Mapping and Marker-Assisted Selection for Cold Tolerance in Grain Sorghum."

Tesso, Tesfaye, Pagadala, P. V. Vara, and Perumal, Ramasamy (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, "Improving Yield Potential of Grain Sorghum through Drought and Heat Tolerance."

Tesso, Tesfaye, Aiken, Robert M. (Northwest Research Extension Center), **Pagadala, P. V. Vara, Perumal, Ramasamy** (Agricultural Research Center-Hays), **Price, Kevin, and Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Kansas Grain Sorghum Commission, \$32,400, "Remote Sensing Screening Tools for Sorghum Breeding Programs."

Tesso, Tesfaye, Dalton, Timothy J. (Dean of Agriculture and Director of AES), **Morris, Geoffrey, and Perumal, Ramasamy** (Agricultural Research Center-Hays), US Department of Agriculture, \$12,795, "Borlaug Fellowship Program: Discovery of New Genes for Enhancing Grain and Forage Quality Traits through Association Mapping in Pearl Millet."

Tesso, Tesfaye, and Perumal, Ramasamy (Agricultural Research Center-Hays), US Department of Agriculture, \$23,100, "The Development of a Sorghum Doubled Haploid Breeding System."

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 Roozeboom, Kraig L., Kansas Grain Sorghum Commission, "Sorghum Production Schools for Kansas."

Thompson, Curtis R., Monsanto Company, \$11,968, "Service Order No. 18."

Thompson, Curtis R., Monsanto Company, \$11,968, "Service Order No. 20."

Thompson, Curtis R., Monsanto Company, \$9,000, "Service Order No. 29."

Thompson, Curtis R., Janssen, Keith A., and Shoup, Douglas E., Multi- Sponsor, \$243,500, "Field Herbicidal Evaluations."

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

Thompson, Curtis R., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **De Wolf, 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."

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., Barnes, Philip L. (Biological and Agricultural Engineering), **Kluitenberg, Gerard J., Nelson, Nathan O., and Roozeboom, Kraig L.**, Kansas Corn Commission, "Cover Crops and Phosphorus Management to Protect Water Quality in Corn-Soybean Rotations."

Tomlinson, Peter J., Kluitenberg, Gerard J., Nelson, Nathan O., and Roozeboom, Kraig L., Kansas Soybean Commission, "Cover Crops and Phosphorus Management to Protect Water Quality in Soybean Rotation."

Tomlinson, Peter J., and Baker, Lauri M. (Communications), US Department of Agriculture, \$25,009, "Outreach Communication and Extension Project for the Southern Plains Regional Climate Hub."

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."

Welch, Stephen M., Akhunov, Eduard D. (Plant Pathology), **Andresen, Daniel A.** (Computing and Information Sciences), **Brown, Susan J.** (Biology), and **Poland, Jesse A.** (Plant Pathology), National Science Foundation, \$46,300, "CC-IIIE Networking Infrastructure: KGEN: Next-generation Networking Environments for Biological and Agricultural Data-driven Research at Kansas State University."

Welch, Stephen M., Caragea, Doina (Computing and Information Sciences), **Das, Sanjoy** (Electrical and Computer Engineering), and **Kluitenberg, Gerard J.**, National Science Foundation, \$74,025, "TRMS: Agroecological Annotation of Gene Function and Computational Analysis of Gene Networks."

ANIMAL SCIENCES AND INDUSTRY

Amamcharla, Jayendra K., Gragg, Sara E., Phebus, Randall K., and Schmidt, Karen A., Dairy Management, Inc., \$8,250, "Use of Nano-scale Aqueous Oxone to Remove Biofilms from Selected Dairy Product Contact Surfaces."

Amamcharla, Jayendra K., Dairy Research Institute, \$45,867, "Understanding the Effects of Electromagnetic Fluid Conditioning on Physical, Chemical and Functional Properties of Milk and Milk Products."

Amamcharla, Jayendra K., Dairy Research Institute, \$43,470, "Use of Novel Surface Modification Techniques to Reduce Biofilms on Plate Heat Exchanger Plates."

Amamcharla, Jayendra K., Land O'Lakes, Inc., \$30,000, "Screening and Quantification of Dairy Ingredient Streams for Phospholipid Content."

Amamcharla, Jayendra K., Midwest Dairy Association, \$8,965, "In-situ Monitoring of Lactose Crystallization using Focused Beam Reflectance Measurement."

Amamcharla, Jayendra K., and Alavi, Sajid (Grain Science and Industry), Midwest Dairy Association, \$28,198, "Selective Extraction and Characterization of Phospholipids from Pro-cream using Supercritical Carbon Dioxide."

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

Aramouni, Fadi M., US Department of Agriculture, \$60,360, "Shared Incubator Kitchen at Kansas State University Olathe Campus."

Aramouni, Fadi M., US Department of the Interior, \$29,000, "UH Regional Breadfruit Project."

Blasi, Dale A., and **Sexten, Andrea K.**, Merial Limited, \$25,200, "Evaluation of the Productivity of a Single Subcutaneous Injection of LongRange in Stocker Calves when Compared to a Positive (Dectomax) and a Negative (Saline) Control."

Blasi, Dale A., Micronutrients, \$40,000, "Evaluation of Inorganic and Organic Trace Mineral Supplementation for the Improvement of Performance and Health of Beef Stocker Steers."

Boyle, Elizabeth, Gonzalez, John M., Houser, Terry A., O Quinn, Travis G., and Unruh, John A., National Cattlemen's Beef Association, "Determination of the Repeatability and Accuracy of the Pressed Juice Percentage (PFP) Method at Sorting Beef Strip Loin Steaks into Categories of Known Juiciness."

Bradford, Barry J., and **Titgemeyer, Evan C.**, Lonza, Inc., \$87,900, "Bioavailability of Rumen-Protected Carnitine."

Bradford, Barry J., **Tonsor, Glynn T.** (Agricultural Economics), and **Comer, Jeffrey R.** (Anatomy and Physiology), State of Kansas - KSU Global Food Systems Program (Internal Project), "Tapping the Potential of RNA Interference for Agriculture."

Brouk, Micheal J., and **Herbel, Kevin L.** (Agricultural Economics), Kansas Department of Agriculture, \$47,988, "Dairy Farm Profitability Evaluation Program."

Burnett, Derris D., Davis, Duane L., Gonzalez, John M., and Woodworth, Jason, GBH Labs, LLC, "Exploring the Molecular Mechanisms of a Commercial Plasma Product on Fetal Growth and Postnatal Development."

Davis, Duane L., Gonzalez, John M., Houser, Terry A., and Nelssen, Jim L., Eli Lilly & Company, \$36,750, "Pilot Efficacy Study: Effect of a Long-acting Growth Hormone Releasing Factor on Fetal Development in the Pig."

Davis, Duane L., Burnett, Derris D., Gonzalez, John M., and Woodworth, Jason, GBH Labs, LLC, "Exploring the Molecular Mechanisms of a Commercial Plasma Product on Fetal Growth and Postnatal Development."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D.**, and **Woodworth, Jason**, Advanced Ag Products, "Determining the Impact of By-O-Reg+ in Diets with and without Feed Grade Antibiotic on Growth Performance of Nursery Pigs."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D.**, and **Woodworth, Jason**, Ajinomoto Heartland LLC, "Determining the Effects of AminoGut and Diet Formulation on Growth Performance of Nursery Pigs."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D.**, and **Woodworth, Jason**, Ajinomoto Heartland LLC, "Determining the Effects of Standardized Ileal Digestible Valine:Lysine Ratio in Low Crude Protein and Low Lysine Diets on the Growth Performance of Finishing Pigs from 60 to 95 lbs and influence of Low Crude Protein Diets for Pigs from 240 to 280 lbs."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D.**, and **Woodworth, Jason**, Church & Dwight Co., Inc., "Effects of Increasing Fermentation on Growth Performance of Weaning Pigs."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Jones, Cassandra K.** (Grain Science and Industry), **Tokach, Michael D., and Woodworth, Jason,** DSM Nutritional Products AG, "Determining the Impact of Vevovital and/or CRINA as Potential PEDv Mitigation Strategies as Determine by PCR Analysis and Bioassay."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason,** Hamlet Protein, Inc., \$25,000, "Effect of HP300 and NP600 Soy Protein Sources on Nursery Pig Performance."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason,** Kemin Americas, "Determining the Influence of KemTRACE Cr and/or Micro-Aid on Growth Performance, Carcass Composition and Economic Return of Pigs Housed in a Commercial Environment."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason,** Kemin Americas, "Influence of Chromium Dose and Feeding Regimen on Growth Performance, Carcass Composition, and Economic Return of Pigs Housed in a Commercial Enviroment."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason,** Micronutrients, "Comparing the Effects of Added Zn from IntelliBond® Z or ZnO on Nursery Pig Growth Performance."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason,** Micronutrients, "KSU Applied Swine Nutrition Fellowship."

DeRouchey, Joel M., National Pork Board, \$5,000, "Influence of Creep Feed Pellet Size on Suckling and Nursey Pig Performance - Annie Clark."

DeRouchey, Joel M., Ambrose, R. P. Kingsly (Grain Science 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., and Woodworth, Jason,** National Pork Board, "Novel Feed Processing Methods of Cold Pelleting and Fine Ground Corn Segregation to Maximize Feed Efficiency, Nutrient Utilization and Economic Return."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Frobose, Hyatt L., Goodband, Robert D., Nelssen, Jim L., Stephenson, Ethan W., Tokach, Michael D., and Woodworth, Jason,** Nutri-Quest, Inc., "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characterisitics of Nursey Pigs Fed DON-Contaminated Wheat."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason,** Tech-Mix, "Effect of Soy Protein Sources on Nursery Pig Performance."

Drouillard, James S., and Gonzalez, John M., Kyushu University, \$6,071, "Academic Student Exchange."

Drouillard, James S., Fox, John "Sean" A. (Agricultural Economics), and **Schroeder, Ted C.** (Agricultural Economics), US Department of Agriculture, \$18,687, "Determining Market Potential for Omega-3 Beef Products."

Drouillard, James S., Vi-Cor, \$88,992, "Effects of Chromium-enriched Yeast on Growth Performance and Carcass Quality of Feedlot Cattle."

Frobose, Hyatt L., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Nelssen, Jim L., Stephenson, Ethan W., Tokach, Michael D., and Woodworth, Jason**, Nutri-Quest, Inc., "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characteristics of Nursey Pigs Fed DON-Contaminated Wheat."

Gonzalez, John M., Davis, Duane L., Houser, Terry A., and Nelssen, Jim L., Eli Lilly & Company, \$36,750, "Pilot Efficacy Study: Effect of a Long-acting Growth Hormone Releasing Factor on Fetal Development in the Pig."

Gonzalez, John M., GBH Labs, LLC, \$27,500, "Effect of a Plasma Product on Fetal and Neonatal Myoblast Activity."

Gonzalez, John M., Burnett, Derris D., Davis, Duane L., and Woodworth, Jason, GBH Labs, LLC, \$13,800, "Exploring the Molecular Mechanisms of a Commercial Plasma Product on Fetal Growth and Postnatal Development."

Gonzalez, John M., and Drouillard, James S., Kyushu University, "Academic Student Exchange."

Gonzalez, John M., Boyle, Elizabeth, Houser, Terry A., O Quinn, Travis G., and Unruh, John A., National Cattlemen's Beef Association, "Determination of the Repeatability and Accuracy of the Pressed Juice Percentage (PFP) Method at Sorting Beef Strip Loin Steaks into Categories of Known Juiciness."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason**, Advanced Ag Products, "Determining the Impact of By-O-Reg+ in Diets with and without Feed Grade Antibiotic on Growth Performance of Nursery Pigs."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason**, Ajinomoto Heartland LLC, "Determining the Effects of AminoGut and Diet Formulation on Growth Performance of Nursery Pigs."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason**, Ajinomoto Heartland LLC, "Determining the Effects of Standardized Ileal Digestible Valine:Lysine Ratio in Low Crude Protein and Low Lysine Diets on the Growth Performance of Finishing Pigs from 60 to 95 lbs and influence of Low Crude Protein Diets for Pigs from 240 to 280 lbs."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason**, Church & Dwight Co., Inc., \$15,000, "Effects of Increasing Fermentation on Growth Performance of Weaning Pigs."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K.** (Grain Science and Industry), **Tokach, Michael D., and Woodworth, Jason**, DSM Nutritional Products AG, "Determining the Impact of Vevovital and/or CRINA as Potential PEDv Mitigation Strategies as Determine by PCR Analysis and Bioassay."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason**, Hamlet Protein, Inc., "Effect of HP300 and NP600 Soy Protein Sources on Nursery Pig Performance."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason**, Kemin Americas, "Determining the Influence of KemTRACE Cr and/or

Micro-Aid on Growth Performance, Carcass Composition and Economic Return of Pigs Housed in a Commercial Environment."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D.**, and **Woodworth, Jason**, Kemin Americas, "Influence of Chromium Dose and Feeding Regimen on Growth Performance, Carcass Composition, and Economic Return of Pigs Housed in a Commercial Environment."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D.**, and **Woodworth, Jason**, Micronutrients, "Comparing the Effects of Added Zn from IntelliBond® Z or ZnO on Nursery Pig Growth Performance."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D.**, and **Woodworth, Jason**, Micronutrients, "KSU Applied Swine Nutrition Fellowship."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Frobose, Hyatt L.**, **Nelssen, Jim L.**, **Stephenson, Ethan W.**, **Tokach, Michael D.**, and **Woodworth, Jason**, Nutri-Quest, Inc., "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characteristics of Nursery Pigs Fed DON-Contaminated Wheat."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D.**, and **Woodworth, Jason**, Tech-Mix, "Effect of Soy Protein Sources on Nursery Pig Performance."

Gragg, Sara E., Amamcharla, Jayendra K., Phebus, Randall K., and **Schmidt, Karen A.**, Dairy Management, Inc., \$8,250, "Use of Nano-scale Aqueous Oxone to Remove Biofilms from Selected Dairy Product Contact Surfaces."

Gragg, Sara E., 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."

Gragg, Sara E., Pliakoni, Eleni (Horticulture, Forestry and Recreation Resources), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$20,951, "Improving Shelf Life, Quality and Safety of Locally Growing Vegetables in Kansas."

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

Houser, Terry A., Davis, Duane L., Gonzalez, John M., and **Nelssen, Jim L.**, Eli Lilly & Company, \$36,750, "Pilot Efficacy Study: Effect of a Long-acting Growth Hormone Releasing Factor on Fetal Development in the Pig."

Houser, Terry A., Boyle, Elizabeth, Gonzalez, John M., O Quinn, Travis G., and **Unruh, John A.**, National Cattlemen's Beef Association, "Determination of the Repeatability and Accuracy of the Pressed Juice Percentage (PFP) Method at Sorting Beef Strip Loin Steaks into Categories of Known Juiciness."

Lattimer, James M. and **Drouillard, James S.**, State of Kansas - KSU Global Food Systems Program (Internal Project), "Applications for the Probiotic Bacterium, *Megasphaera elsdenii*, in Monogastric Farm Animals."

Lee, Charles D., Kansas Department of Wildlife and Parks, \$48,762, "Extension Education Position Support."

Lee, Charles D., US Department of Agriculture, \$1,700, "North Central Regional Aquacultural Center Extension Project."

Nelssen, Jim L., Davis, Duane L., Gonzalez, John M., and Houser, Terry A., Eli Lilly & Company, \$36,750, "Pilot Efficacy Study: Effect of a Long-acting Growth Hormone Releasing Factor on Fetal Development in the Pig."

Nelssen, Jim L., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Frobose, Hyatt L., Goodband, Robert D., Stephenson, Ethan W., Tokach, Michael D., and Woodworth, Jason,** Nutri-Quest, Inc., "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characteristics of Nursey Pigs Fed DON-Contaminated Wheat."

O Quinn, Travis G., Angus Foundation, \$27,500, "Determination of the Effect of Branding on Consumer Palatability Ratings of Beef Strip Loin Steaks of Various Quality Levels and Ground Beef of Various Lean Points from Different Subprimals."

O Quinn, Travis G., Certified Angus Beef, LLC, \$2,550, "Determination of the Effect of Branding on Consumer Palatability Ratings of Beef Strip Loin Steaks of Various Quality Levels and Ground Beef of Various Lean Points from Different Subprimals."

O Quinn, Travis G., Boyle, Elizabeth, Gonzalez, John M., Houser, Terry A., and Unruh, John A., National Cattlemen's Beef Association, \$55,093, "Determination of the Repeatability and Accuracy of the Pressed Juice Percentage (PFP) Method at Sorting Beef Strip Loin Steaks into Categories of Known Juiciness."

O Quinn, Travis G., National Cattlemen's Beef Association, \$5,000, "The Effect of Beef Strip Loin Enhancement, USDA Quality Grade and Degree of Doneness on Volatile Flavor Compounds."

Odde, Kenneth G., Merck & Company, Inc., \$200,000, "Capturing Value from Superior Livestock Data."

Phebus, Randall K., Amamcharla, Jayendra K., Gragg, Sara E., and Schmidt, Karen A., Dairy Management, Inc., \$8,250, "Use of Nano-scale Aqueous Oxone to Remove Biofilms from Selected Dairy Product Contact Surfaces."

Phebus, Randall K., Bai, Jianfa (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, Tiruvloor G.** (Diagnostic Medicine/Pathobiology), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Oberst, Richard D.** (Diagnostic Medicine/Pathobiology), **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, \$647,116, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Reinhardt, Christopher D., Bartle, Steven J. (Dean of Veterinary Medical Center), **Hagenmaier, Jacob A.** (Dean of Veterinary Medical Center), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), Eli Lilly & Company, \$70,734, "The Effects of Aggressive Versus Low-stress Cattle Handling at the Time of Shipping to Slaughter on Physiological Responses in Cattle Fed Ractopamine Hydrochloride."

Reinhardt, Christopher D., Bartle, Steven J. (Dean of Veterinary Medical Center), **Hagenmaier, Jacob A.** (Dean of Veterinary Medical Center), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), Merck & Company, Inc., "Blood Parameter Comparison of Slow-Moving and Non-Ambulatory Finished Cattle to Normal Cohorts in Harvest Facilities to Aid in Characterizing Fatigued Cattle Syndrom (FCS)."

Reinhardt, Christopher D., Multimin USA, Inc., \$18,300, "Injectable Trace Mineral Supplementation of Mexico-origin Stocker Calves Grazing Summer Double-stocked Flint Hills Native Pastures."

Schmidt, Karen A., Amamcharla, Jayendra K., Gragg, Sara E., and Phebus, Randall K., Dairy Management, Inc., \$8,250, "Use of Nano-scale Aqueous Oxone to Remove Biofilms from Selected Dairy Product Contact Surfaces."

Sexten, Andrea K., and Blasi, Dale A., Merial Limited, "Evaluation of the Productivity of a Single Subcutaneous Injection of LongRange in Stocker Calves when Compared to a Positive (Dectomax) and a Negative (Saline) Control."

Stephenson, Ethan W., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Frobose, Hyatt L., Goodband, Robert D., Nelssen, Jim L., Tokach, Michael D., and Woodworth, Jason**, Nutri-Quest, Inc., "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characteristics of Nursery Pigs Fed DON-Contaminated Wheat."

Titgemeyer, Evan C., and Bradford, Barry J., Lonza, Inc., "Bioavailability of Rumen-Protected Carnitine."

Titgemeyer, Evan C., Reinhardt, Christopher D., and Thompson, Daniel U. (Dean of Veterinary Medical Center), State of Kansas - KSU Global Food Systems Program (Internal Project), "Guanidinoacetic acid as a source of creatine for cattle."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason**, Advanced Ag Products, "Determining the Impact of By-O-Reg+ in Diets with and without Feed Grade Antibiotic on Growth Performance of Nursery Pigs."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason**, Ajinomoto Heartland LLC, \$10,000, "Determining the Effects of AminoGut and Diet Formulation on Growth Performance of Nursery Pigs."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason**, Ajinomoto Heartland LLC, \$30,000, "Determining the Effects of Standardized Ileal Digestible Valine:Lysine Ratio in Low Crude Protein and Low Lysine Diets on the Growth Performance of Finishing Pigs from 60 to 95 lbs and influence of Low Crude Protein Diets for Pigs from 240 to 280 lbs."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason**, Church & Dwight Co., Inc., "Effects of Increasing Fermentation on Growth Performance of Weaning Pigs."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Jones, Cassandra K.** (Grain Science and Industry), and **Woodworth, Jason**, DSM Nutritional Products AG, "Determining the Impact of Vevovital and/or CRINA as Potential PEDv Mitigation Strategies as Determine by PCR Analysis and Bioassay."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason**, Hamlet Protein, Inc., "Effect of HP300 and NP600 Soy Protein Sources on Nursery Pig Performance."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason**, Kemin Americas, "Determining the Influence of KemTRACE Cr and/or Micro-Aid on Growth Performance, Carcass Composition and Economic Return of Pigs Housed in a Commercial Environment."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason,** Kemin Americas, "Influence of Chromium Dose and Feeding Regimen on Growth Performance, Carcass Composition, and Economic Return of Pigs Housed in a Commercial Environment."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason,** Micronutrients, "Comparing the Effects of Added Zn from IntelliBond® Z or ZnO on Nursery Pig Growth Performance."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason,** Micronutrients, "KSU Applied Swine Nutrition Fellowship."

Tokach, Michael D., Amachawadi, Raghavendra G. (Diagnostic Medicine/Pathobiology), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), and **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), National Pork Board, "Do Probiotics, an Antibiotic Alternative, Mitigate or Contribute to Emergence and Persistence of Antimicrobial Resistance in Gut Bacteria?."

Tokach, Michael D., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Huss, Anne R.** (Grain Science and Industry), **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Woodworth, Jason,** National Pork Board, "Evaluating Alternative Chemical Mitigants to Prevent PEDv Recontamination of Swine Feed and Ingredients."

Tokach, Michael D., Ambrose, R. P. Kingsly (Grain Science and Industry), **DeRouchey, Joel M., Huss, Anne R.** (Grain Science and Industry), **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Woodworth, Jason,** National Pork Board, "Novel Feed Processing Methods of Cold Pelleting and Fine Ground Corn Segregation to Maximize Feed Efficiency, Nutrient Utilization and Economic Return."

Tokach, Michael D., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Woodworth, Jason,** National Pork Board, \$19,960, "Utilizing Feed Sequencing as a Biosecurity Intervention for Preventing PEDV Cross Contamination in the Feed Manufacturing Process."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Frobose, Hyatt L., Goodband, Robert D., Nelssen, Jim L., Stephenson, Ethan W., and Woodworth, Jason,** Nutri-Quest, Inc., \$43,500, "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characteristics of Nursery Pigs Fed DON-Contaminated Wheat."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason,** Tech-Mix, \$25,000, "Effect of Soy Protein Sources on Nursery Pig Performance."

Unruh, John A., Boyle, Elizabeth, Gonzalez, John M., Houser, Terry A., and O Quinn, Travis G., National Cattlemen's Beef Association, "Determination of the Repeatability and Accuracy of the Pressed Juice Percentage (PFP) Method at Sorting Beef Strip Loin Steaks into Categories of Known Juiciness."

Weaber, Robert L., Bormann, Jennifer M., and Bello, Nora M., State of Kansas - KSU Global Food Systems Program (Internal Project), "Development of National Genetic Evaluation System for Feet and Leg Conformation in Beef Cattle."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Advanced Ag Products, \$25,000, "Determining the Impact of By-O-Reg+ in Diets with and without Feed Grade Antibiotic on Growth Performance of Nursery Pigs."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Ajinomoto Heartland LLC, "Determining the Effects of AminoGut and Diet Formulation on Growth Performance of Nursery Pigs."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goncalves, Marcio A.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Ajinomoto Heartland LLC, "Determining the Effects of Standardized Ileal Digestible Valine:Lysine Ratio in Low Crude Protein and Low Lysine Diets on the Growth Performance of Finishing Pigs from 60 to 95 lbs and influence of Low Crude Protein Diets for Pigs from 240 to 280 lbs."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Church & Dwight Co., Inc., "Effects of Increasing Fermentation on Growth Performance of Weaning Pigs."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Jones, Cassandra K.** (Grain Science and Industry), and **Tokach, Michael D.**, DSM Nutritional Products AG, \$21,990, "Determining the Impact of Vevovital and/or CRINA as Potential PEDv Mitigation Strategies as Determine by PCR Analysis and Bioassay."

Woodworth, Jason, Burnett, Derris D., Davis, Duane L., and Gonzalez, John M., GBH Labs, LLC, "Exploring the Molecular Mechanisms of a Commercial Plasma Product on Fetal Growth and Postnatal Development."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Hamlet Protein, Inc., "Effect of HP300 and NP600 Soy Protein Sources on Nursery Pig Performance."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Kemin Americas, \$25,000, "Determining the Influence of KemTRACE Cr and/or Micro-Aid on Growth Performance, Carcass Composition and Economic Return of Pigs Housed in a Commercial Environment."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Kemin Americas, \$25,000, "Influence of Chromium Dose and Feeding Regimen on Growth Performance, Carcass Composition, and Economic Return of Pigs Housed in a Commercial Enviroment."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Micronutrients, \$20,000, "Comparing the Effects of Added Zn from IntelliBond® Z or ZnO on Nursery Pig Growth Performance."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Micronutrients, \$30,000, "KSU Applied Swine Nutrition Fellowship."

Woodworth, Jason, Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Huss, Anne R.** (Grain Science and Industry), **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.**, National Pork Board, "Evaluating Alternative Chemical Mitigants to Prevent PEDv Recontamination of Swine Feed and Ingredients."

Woodworth, Jason, Ambrose, R. P. Kingsly (Grain Science and Industry), **DeRouchey, Joel M., Huss, Anne R.** (Grain Science and Industry), **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.**, National Pork Board, "Novel Feed Processing Methods of Cold Pelleting and Fine Ground Corn Segregation to Maximize Feed Efficiency, Nutrient Utilization and Economic Return."

Woodworth, Jason, Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.**, National Pork Board, \$19,960, "Utilizing Feed Sequencing as a Biosecurity Intervention for Preventing PEDV Cross Contamination in the Feed Manufacturing Process."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Frobose, Hyatt L., Goodband, Robert D., Nelssen, Jim L., Stephenson, Ethan W., and Tokach, Michael D.**, Nutri-Quest, Inc., "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characteristics of Nursey Pigs Fed DON-Contaminated Wheat."

Woodworth, Jason, DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Tokach, Michael D.**, Tech-Mix, "Effect of Soy Protein Sources on Nursery Pig Performance."

COMMUNICATIONS

Baker, Lauri M., and Tomlinson, Peter J. (Agronomy), US Department of Agriculture, \$100,038, "Outreach Communication and Extension Project for the Southern Plains Regional Climate Hub."

Boone, Kristina M., and Edwards, Elaine H., US Department of Education, \$20,000, "Child Nutrition Hot Topics Videos."

Edwards, Elaine H., and Boone, Kristina M., US Department of Education, "Child Nutrition Hot Topics Videos."

Ellis, Jason D., and Brown, Susan J. (Biology), US Department of Agriculture, \$153,114, "Developing an Infrastructure and Product Test Pipeline to Deliver Novel Therapies for Citrus Greening Disease."

Ellis, Jason D., Bai, Jianfa (Diagnostic Medicine/Pathobiology), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvor G.** (Diagnostic Medicine/Pathobiology), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Oberst, Richard D.** (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, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

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

DEAN OF AGRICULTURE AND DIRECTOR OF AES

Dalton, Timothy J., US Agency for International Development, \$1,595,567, "The Management Entity of the Sorghum and Millet Innovation Lab."

Dalton, Timothy J., Morris, Geoffrey (Agronomy), **Perumal, Ramasamy** (Agricultural Research Center-Hays), and **Tesso, Tesfaye** (Agronomy), US Department of Agriculture, \$3,199, "Borlaug Fellowship Program:

Discovery of New Genes for Enhancing Grain and Forage Quality Traits through Association Mapping in Pearl Millet."

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

Floros, John D., Bhadriraju, Subramanyam (Grain Science and Industry), **Higgins, Mary L.** (Human Nutrition), **Leslie, John F.** (Plant Pathology), **Lilja, Nina K.** (International Agricultural Programs), and **Washburn, Shannon G.** (Communications), US Agency for International Development, \$1,920,535, "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

Pagadala, P. V. Vara, Lilja, Nina K. (International Agricultural Programs), and **Pierzynski, Gary M.** (Agronomy), US Agency for International Development, \$3,350,000, "Innovation Lab on Sustainable Intensification."

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."

Zhang, Guorong, Kansas Wheat Commission, \$134,000, "Development of New Hard Red and Hard White Winter Wheat Varieties with Improved Levels of Disease Resistance for Western Kansas."

ENTOMOLOGY

Chuang, Wenpo, Fritz, Allan K. (Agronomy), **Smith, C. Michael**, and **Whitfield, Anna E.** (Plant Pathology), Kansas Wheat Alliance, Inc., "Evaluation of Kansas Germplasm for Resistance to Multiple Curl Mite-Vectored Viruses."

Cloyd, Raymond A., Gloeckner Foundation, Inc. (Fred C.), \$14,000, "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., Phillips, Thomas W., Reese, John C., and Whitworth, Robert "Jeff" J., Multi-Sponsor, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

Cloyd, Raymond A., US Department of Agriculture, \$6,000, "2014 NCR IR-4 Ornamental Horticulture Project."

Cloyd, Raymond A., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **De Wolf, 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."

Cohnstaedt, Lee, and Ruberson, John R., Vestergaard Frandsen S.A., \$13,250, "Vestergaard Animal Health Impact Fellowship."

Harvey, Tom L., and Michaud, John P., Multi-Sponsor, \$2,000, "Insecticide Management of Field Crop Insects."

Johnson, Wendy, and McCornack, Brian P., Kansas Crop Improvement Association, "MyFields Certification."

Johnson, Wendy, Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., De Wolf, 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, \$13,900, "Promoting IPM and Enhancing Decision Making among Kansas Stakeholders through Innovative Programming."

Margolies, David C., Kirkham, Mary B. (Agronomy), **Nechols, James R., Ruberson, John R., Swamy, Aavudai Anandhi** (Agronomy), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, "Cotton Crop Risk in Changing Environments: Interaction of Drought Stress and Early Season Arthropod Pests."

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

McCornack, Brian P., and **Barnhart, Richard K.** (Salina Aviation), CRC Plant Biosecurity, \$552,395, "Optimizing Surveillance Protocols Using Unmanned Aerial Systems."

McCornack, Brian P., Aguilar, Jonathan P. (Southwest Area Office), **Ciampitti, Ignacio** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Lin, Xiaomao** (Agronomy), **O'Brien, Daniel M.** (Northwest Area Office), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Roozeboom, Kraig L.** (Agronomy), Kansas Corn Commission, \$2,500, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

McCornack, Brian P., and **Johnson, Wendy**, Kansas Crop Improvement Association, \$60,000, "MyFields Certification."

McCornack, Brian P., Smith, C. Michael, and **Whitworth, Robert "Jeff" J.**, Kansas Grain Sorghum Commission, "Effect of Chinch Bug Feeding and Drought on Sorghum Stand Establishment and Yield."

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

McCornack, Brian P., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., De Wolf, 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., Dow AgroSciences, LLC, \$8,000, "United Sorghum Checkoff Program."

Michaud, John P., Kansas Wheat Commission, \$3,037, "Survey for Wheat Stem Sawfly in Northwest Kansas."

Michaud, John P., and **Harvey, Tom L.**, Multi-Sponsor, "Insecticide Management of Field Crop Insects."

Michaud, John P., National Sunflower Association, \$10,000, "Efficacy and Economics of Insecticide Seed Treatments for Management of Wireworms and Seed Corn Maggots in Sunflowers."

Miller, Frannie L., CropLife Foundation, \$25,000, "Challenging Opportunities for the Kansas Pesticide Safety Education Program."

Miller, Frannie L., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., De Wolf, 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."

Miller, Frannie L., US Environmental Protection Agency, \$8,100, "Pesticide Safety Education Program Support."

Nechols, James R., Kirkham, Mary B. (Agronomy), **Margolies, David C., Ruberson, John R., Swamy, Aavudai Anandhi** (Agronomy), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$96,794, "Cotton Crop Risk in Changing Environments: Interaction of Drought Stress and Early Season Arthropod Pests."

Phillips, Thomas W., Ambrose, R. P. Kingsly (Grain Science and Industry), **Campabadal Teran, Carlos** (Grain Science and Industry), and **Maier, Dirk E.** (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., Cloyd, Raymond A., Reese, John C., and Whitworth, Robert "Jeff" J., Multi-Sponsor, \$85,462, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

Phillips, Thomas W., US Department of Agriculture, \$106,700, "Development of New Treatment Options for Khapra Beetle, Trogoderma Granarium (Everts)."

Phillips, Thomas W., US Department of Agriculture, \$5,000, "Factors Affecting Hemotophagous Arthropod Attraction to Infected and Uninfected Animals."

Ragland, Gregory, National Science Foundation, \$407,445, "Collaboration Research: Testing for Physiological and Genetic Independence of Rapidly Evolving Lifecycle Components in the Apple Maggot, a Model for Seasonal Adaptation."

Reese, John C., Cloyd, Raymond A., Phillips, Thomas W., and Whitworth, Robert "Jeff" J., Multi-Sponsor, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

Ruberson, John R., Multi-Sponsor, \$6,000, "AEN Multi-Sponsor Off-Campus 26."

Ruberson, John R., US Department of Agriculture, \$2,750, "Acquisition of Goods and Services #58-5430-4-010."

Ruberson, John R., US Department of Agriculture, \$45,333, "Biololgy of Dipteran Vectors of diseases Impacting Livestock and Humans."

Ruberson, John R., Kirkham, Mary B. (Agronomy), **Margolies, David C., Nechols, James R., Swamy, Aavudai Anandhi** (Agronomy), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of

Agriculture, "Cotton Crop Risk in Changing Environments: Interaction of Drought Stress and Early Season Arthropod Pests."

Ruberson, John R., US Department of Agriculture, \$110,000, "Wheat-Hessian Fly Interaction and Plant Resistance Mechanisms."

Ruberson, John R., and **Cohnstaedt, Lee**, Vestergaard Frandsen S.A., \$13,250, "Vestergaard Animal Health Impact Fellowship."

Smith, C. Michael, McCornack, Brian P., and **Whitworth, Robert "Jeff" J.**, Kansas Grain Sorghum Commission, \$22,344, "Effect of Chinch Bug Feeding and Drought on Sorghum Stand Establishment and Yield."

Smith, C. Michael, McCornack, Brian P., Schapaugh Jr, William T. (Agronomy), and **Whitworth, Robert "Jeff" J.**, Kansas Soybean Commission, \$51,368, "Development of Genetic, Chemical and Population-Based Tactics to Manage Key Kansas Soybean Pests."

Smith, C. Michael, Chuang, Wenpo, Fritz, Allan K. (Agronomy), and **Whitfield, Anna E.** (Plant Pathology), Kansas Wheat Alliance, Inc., \$29,400, "Evaluation of Kansas Germplasm for Resistance to Multiple Curl Mite-Vectored Viruses."

Smith, C. Michael, Shroyer, James P. (Agronomy), and **Whitworth, Robert "Jeff" J.**, Kansas Wheat Commission, \$41,503, "Aphid Vectors of Barley Yellow Dwarf Virus in Kansas Wheat."

Whitworth, Robert "Jeff" J., McCornack, Brian P., and **Smith, C. Michael**, Kansas Grain Sorghum Commission, "Effect of Chinch Bug Feeding and Drought on Sorghum Stand Establishment and Yield."

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

Whitworth, Robert "Jeff" J., Shroyer, James P. (Agronomy), and **Smith, C. Michael**, Kansas Wheat Commission, "Aphid Vectors of Barley Yellow Dwarf Virus in Kansas Wheat."

Whitworth, Robert "Jeff" J., Cloyd, Raymond A., Phillips, Thomas W., and **Reese, John C.**, Multi-Sponsor, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

Whitworth, Robert "Jeff" J., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., De Wolf, 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."

Zurek, Ludek, Bai, Jianfa (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, Tiruvor G.** (Diagnostic Medicine/Pathobiology), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Oberst, Richard D.** (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, \$41,749, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

FOOD SCIENCE INSTITUTE

Kastner, Curtis L., Bai, Jianfa (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), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Oberst, Richard D.** (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, \$417,494, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

GRAIN SCIENCE AND INDUSTRY

Alavi, Sajid, Hershey Company, \$15,090, "Extruded Snacks."

Alavi, Sajid, and **Amamcharla, Jayendra K.** (Animal Sciences and Industry), Midwest Dairy Association, \$7,050, "Selective Extraction and Characterization of Phospholipids from Pro-cream using Supercritical Carbon Dioxide."

Alavi, Sajid, **Aldrich, Greg**, and **Bhadriraju, Subramanyam**, Multi-Sponsor, "Grain Science."

Alavi, Sajid, and **Koppel, Kadri** (Human Nutrition), The United Sorghum Checkoff Program Board, \$98,020, "Use of Grain Sorghum as the Primary Grain Ingredient in Premium Extruded Foods Designed for Cats."

Alavi, Sajid, **Chambers IV, Edgar** (Human Nutrition), **Lilja, Nina K.** (International Agricultural Programs), **Lindshield, Brian L.** (Human Nutrition), and **Procter, Sandra B.** (Human Nutrition), US Department of Agriculture, \$619,794, "Novel Sorghum Based Fortified Food Blend for Infants and Young Children Nutrition."

Aldrich, Greg, **Huss, Anne R.** (Agronomy), **Jones, Cassandra K.**, and **Stark, Charles**, Fats and Proteins Research Foundation, Inc., "Assessing the Efficacy of Chemical Treatment to Control Salmonella in Rendered Protein Meals."

Aldrich, Greg, and **Koppel, Kadri** (Human Nutrition), Fats and Proteins Research Foundation, Inc., \$5,800, "The Impact of Rendered Protein Meal Level of Oxidation on Shelf Life and Acceptability in Extruded Pet Foods: Determining Sensory Limites for Oxidation Values."

Aldrich, Greg, **Alavi, Sajid**, and **Bhadriraju, Subramanyam**, Multi-Sponsor, "Grain Science."

Aldrich, Greg, Multi-Sponsor, \$10,000, "Pet Food Research."

Ambrose, R. P. Kingsly, **Bhadriraju, Subramanyam**, and **Maier, Dirk E.**, CRC Plant Biosecurity, "Modeling VaporPhos and ProFume Distribution in Bulk Storages to Improve Efficacy Against Insects."

Ambrose, R. P. Kingsly, and **Bhadriraju, Subramanyam**, CRC Plant Biosecurity, "New Non-chemical Technologies to Protect Grain during Storage and Transport - PhD Scholarship Award."

Ambrose, R. P. Kingsly, **Campabadal Teran, Carlos**, **Maier, Dirk E.**, and **Phillips, Thomas W.** (Entomology), Kansas Crop Improvement Association, \$1,000, "Demonstrating a New Stored Wheat Cooling Technology for Improved Pest Control during On-Farm Storage."

Ambrose, R. P. Kingsly, DeRouchey, Joel M. (Animal Sciences and Industry), **Huss, Anne R., Jones, Cassandra K., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, "Novel Feed Processing Methods of Cold Pelleting and Fine Ground Corn Segregation to Maximize Feed Efficiency, Nutrient Utilization and Economic Return."

Ambrose, R. P. Kingsly, Bhadra, Rumela (Biological and Agricultural Engineering), and **Boac, Josephine M.**, The Andersons, Inc., \$50,000, "Determining Time, Aeration, and Loading Cycle Effects on Grain Packing."

Bhadriraju, Subramanyam, Ambrose, R. P. Kingsly, and **Maier, Dirk E.**, CRC Plant Biosecurity, "Modeling VaporPhos and ProFume Distribution in Bulk Storages to Improve Efficacy Against Insects."

Bhadriraju, Subramanyam, and **Ambrose, R. P. Kingsly**, CRC Plant Biosecurity, \$209,541, "New Non-chemical Technologies to Protect Grain during Storage and Transport - PhD Scholarship Award."

Bhadriraju, Subramanyam, Alavi, Sajid, and **Aldrich, Greg**, Multi-Sponsor, \$75,142, "Grain Science."

Bhadriraju, Subramanyam, Floros, John D. (Dean of Agriculture and Director of AES), **Higgins, Mary L.** (Human Nutrition), **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."

Bhadriraju, Subramanyam, and **Frederick, Jennifer L.**, US Department of Agriculture, \$10,000, "The Influence of Elevated Temperatures on a Residual Insecticide and Inert Dust to Disinfest Empty Bins Prior to On-Farm Grain Storage - Jennifer Frederick."

Boac, Josephine M., Ambrose, R. P. Kingsly, and **Bhadra, Rumela** (Biological and Agricultural Engineering), The Andersons, Inc., "Determining Time, Aeration, and Loading Cycle Effects on Grain Packing."

Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and **O'Neil III, Howard J.**, Kansas Corn Commission, \$37,500, "Market Development Grant - International Grains Program."

Campabadal Teran, Carlos, Ambrose, R. P. Kingsly, Maier, Dirk E., and **Phillips, Thomas W.** (Entomology), Kansas Crop Improvement Association, \$1,000, "Demonstrating a New Stored Wheat Cooling Technology for Improved Pest Control during On-Farm Storage."

Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and **O'Neil III, Howard J.**, Kansas Grain Sorghum Commission, "Market Development Grant - International Grains Program."

Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and **O'Neil III, Howard J.**, Kansas Wheat Commission, "Market Development Grant - International Grains Program Support Project."

Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and **O'Neil III, Howard J.**, US Soybean Export Council, Inc., "Animal Production Certification Program 14KA03M54B."

Campabadal Teran, Carlos, US Soybean Export Council, Inc., \$71,500, "Animal Production Educational Assistance."

Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and **O'Neil III, Howard J.**, US Soybean Export Council, Inc., "Latin America Animal Production Training Program, Part 3."

Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and **O'Neil III, Howard J.**, US Soybean Export Council, Inc., "Swine Production and Soybean Meal Training Program U14CXNA078."

Faubion, Jon M., Kansas State University Foundation, \$30,000, "Charles D. Singleton Chair in Grain Science and Industry."

Fowler, Mark, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J., Kansas Corn Commission, \$37,500, "Market Development Grant - International Grains Program."

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

Fowler, Mark, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J., Kansas Wheat Commission, "Market Development Grant - International Grains Program Support Project."

Fowler, Mark, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J., US Soybean Export Council, Inc., "Animal Production Certification Program 14KA03M54B."

Fowler, Mark, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J., US Soybean Export Council, Inc., "Latin America Animal Production Training Program, Part 3."

Fowler, Mark, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J., US Soybean Export Council, Inc., "Swine Production and Soybean Meal Training Program U14CXNA078."

Frederick, Jennifer L., and Bhadriraju, Subramanyam, US Department of Agriculture, "The Influence of Elevated Temperatures on a Residual Insecticide and Inert Dust to Disinfest Empty Bins Prior to On-Farm Grain Storage - Jennifer Frederick."

Huss, Anne R., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, "Evaluating Alternative Chemical Mitigants to Prevent PEDv Recontamination of Swine Feed and Ingredients."

Huss, Anne R., Ambrose, R. P. Kingsly, DeRouchey, Joel M. (Animal Sciences and Industry), **Jones, Cassandra K., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, "Novel Feed Processing Methods of Cold Pelleting and Fine Ground Corn Segregation to Maximize Feed Efficiency, Nutrient Utilization and Economic Return."

Jones, Cassandra K., DeRouchey, Joel M. (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), DSM Nutritional Products AG, "Determining the Impact of Vevovital and/or CRINA as Potential PEDv Mitigation Strategies as Determine by PCR Analysis and Bioassay."

Jones, Cassandra K., Dyadic International, Inc., \$3,000, "Evaluating the Effects of Pelleting Temperature on Enzyme Stability."

Jones, Cassandra K., Aldrich, Greg, Huss, Anne R. (Agronomy), and **Stark, Charles**, Fats and Proteins Research Foundation, Inc., \$46,288, "Assessing the Efficacy of Chemical Treatment to Control Salmonella in Rendered Protein Meals."

Jones, Cassandra K., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Huss, Anne R., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, \$90,319 (includes \$13,200 from Anitox), "Evaluating Alternative Chemical Mitigants to Prevent PEDv Recontamination of Swine Feed and Ingredients."

Jones, Cassandra K., Ambrose, R. P. Kingsly, DeRouchey, Joel M. (Animal Sciences and Industry), **Huss, Anne R., Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, "Novel Feed Processing Methods of Cold Pelleting and Fine Ground Corn Segregation to Maximize Feed Efficiency, Nutrient Utilization and Economic Return."

Jones, Cassandra K., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, \$19,960, "Utilizing Feed Sequencing as a Biosecurity Intervention for Preventing PEDV Cross Contamination in the Feed Manufacturing Process."

Maier, Dirk E., Ambrose, R. P. Kingsly, and Bhadriraju, Subramanyam, CRC Plant Biosecurity, \$26,970, "Modeling VaporPhos and ProFume Distribution in Bulk Storages to Improve Efficacy Against Insects."

Maier, Dirk E., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J., Kansas Corn Commission, \$37,500, "Market Development Grant - International Grains Program."

Maier, Dirk E., Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, and Phillips, Thomas W. (Entomology), Kansas Crop Improvement Association, \$2,000, "Demonstrating a New Stored Wheat Cooling Technology for Improved Pest Control during On-Farm Storage."

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

Maier, Dirk E., Kansas State University Foundation, \$30,000, "Grain Science & Industry NAMA Instructor of Milling."

Maier, Dirk E., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J., Kansas Wheat Commission, \$200,000, "Market Development Grant - International Grains Program Support Project."

Maier, Dirk E., and Miller, Brandi M., Occupational Safety and Health Administration, \$15,000, "Grain Safety Education and Training."

Maier, Dirk E., US Department of Labor, \$13,750, "Grain Safety Education and Training."

Maier, Dirk E., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J., US Soybean Export Council, Inc., \$71,500, "Animal Production Certification Program 14KA03M54B."

Maier, Dirk E., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J., US Soybean Export Council, Inc., \$47,500, "Latin America Animal Production Training Program, Part 3."

Maier, Dirk E., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J., US Soybean Export Council, Inc., \$16,800, "Swine Production and Soybean Meal Training Program U14CXNA078."

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Maier, Dirk E., Kansas Corn Commission, \$37,500, "Market Development Grant - International Grains Program."

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

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Maier, Dirk E., Kansas Wheat Commission, "Market Development Grant - International Grains Program Support Project."

O'Neil III, Howard J., US Department of Agriculture, \$9,408, "Consultant to Implement Technical Assistance on Bulgaria Grain Markets and Risk Management."

O'Neil III, Howard J., US Department of Agriculture, \$22,000, "US Grain and Oilseed Marketing System Training."

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Maier, Dirk E., US Soybean Export Council, Inc., "Animal Production Certification Program 14KA03M54B."

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Maier, Dirk E., US Soybean Export Council, Inc., "Latin America Animal Production Training Program, Part 3."

O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Maier, Dirk E., US Soybean Export Council, Inc., "Swine Production and Soybean Meal Training Program U14CXNA078."

Regan, Rebecca, Fritz, Allan K. (Agronomy), **Poland, Jesse A.** (Plant Pathology), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$5,750, "Quality Evaluation of Wheat for Molecular Marker Identification - 2014."

Regan, Rebecca, Kansas Wheat Commission, \$230,000, "Kansas Wheat Quality Laboratory: Quality Evaluation from KAES Wheat Breeding Programs and Protein/Hardness Screening of Early Progeny Wheat."

Regan, Rebecca, Kansas Wheat Commission, \$4,900, "Preferred Hard Winter Wheat Varieties for Kansas: Milling & Bread Baking Quality Rankings."

Shi, Yong Cheng, General Mills (China) Holding Co. LTD, \$87,806, "Develop Crystal Dumpling Wrap that is as Transparent as Steamed "shrimp dumpling"."

Shi, Yong Cheng, and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$60,800, "Evaluating Hard Winter Wheat for Asian-style and Instant Noodles."

Shi, Yong Cheng, and **Haub, Mark D.** (Human Nutrition), State of Kansas - KSU Global Food Systems Program (Internal Project), "Developing Novel Starch-based Ingredients with Controlled Enzyme Digestibility and health Benefits."

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

Stark, Charles, ECO Animal Health, \$6,750, "Evaluation of Aivlosin 17 Compaction and Flowability through a Microbin and Uniformity of Mix."

Stark, Charles, Elanco Animal Health, \$4,200, "Dilution Rate of Paylean in Diets after a Feed Mill has Manufactured a Complete Feed from Paylean 2.25 gm/lb. Type B Premix, into Paylean 9 gm/ton Type C Feed."

Stark, Charles, Aldrich, Greg, Huss, Anne R. (Agronomy), and **Jones, Cassandra K.**, Fats and Proteins Research Foundation, Inc., "Assessing the Efficacy of Chemical Treatment to Control Salmonella in Rendered Protein Meals."

Stark, Charles, Kansas State University Foundation, \$60,000, "Jim and Carol Brown Endowed Professorship in Grain Science."

Stark, Charles, Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Huss, Anne R., Jones, Cassandra K., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry),

National Pork Board, "Evaluating Alternative Chemical Mitigants to Prevent PEDv Recontamination of Swine Feed and Ingredients."

Stark, Charles, Ambrose, R. P. Kingsly, DeRouchey, Joel M. (Animal Sciences and Industry), **Huss, Anne R., Jones, Cassandra K., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, \$55,428 (includes \$5,400 from In-Kind), "Novel Feed Processing Methods of Cold Pelleting and Fine Ground Corn Segregation to Maximize Feed Efficiency, Nutrient Utilization and Economic Return."

Stark, Charles, Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, \$19,960, "Utilizing Feed Sequencing as a Biosecurity Intervention for Preventing PEDV Cross Contamination in the Feed Manufacturing Process."

Sun, X. Susan, Nguyen, Thu A. (Diagnostic Medicine/Pathobiology), and **Weiss, Mark L.** (Anatomy and Physiology), National Science Foundation, \$7,921, "Novel Peptide Hydrogel for 3D Cell Culture."

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

Vadlani, Praveen V., US Department of Agriculture, \$367,529, "Lignocellulosic Biomass Conversion to Infrastructure Compatible Fuel, Products and Power."

HORTICULTURE, FORESTRY AND RECREATION RESOURCES

Blocksome, Carolyn E., and **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), US Department of the Interior, "Great Plains Fire Exchange - Outreach Specialist."

Blocksome, Carolyn E., US Environmental Protection Agency, \$10,000, "Kansas Flint Hills Smoke Management Plan."

Boyer, Cheryl R., Pliakoni, Eleni, Rivard, Cary L., Shoemaker, Candice A., and **Taylor, Mykel R.** (Agricultural Economics), US Department of Agriculture, "Development of an Instrument to Document Economic Impact of Fruit and Vegetable Growers in Kansas."

Boyer, Cheryl R., Cloyd, Raymond A. (Entomology), **De Wolf, 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., Kansas Turfgrass Foundation, \$4,000, "Evaluating Small Unmanned Aerial Systems for Detecting Turfgrass Stress with an Emphasis on Drought."

Bremer, Dale J., Kansas Turfgrass Foundation, \$9,000, "Nitrous Oxide Emission and Carbon Sequestration in Turfgrass: Effects of Irrigation and N Fertilization (Match for Proposal # 28575)."

Bremer, Dale J., Fry, Jack D., Hoyle, Jared, Keeley, Steven J., Kennelly, Megan (Plant Pathology), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), US Golf Association, Inc., \$60,000, "Evaluating Small Unmanned Aerial Systems for Detecting Turfgrass Stress with an Emphasis on Drought."

Bremer, Dale J., and Fry, Jack D., US Golf Association, Inc., \$25,000, "Nitrous Oxide Emissions and Carbon Sequestration in Turfgrass: Effects of Irrigation and N Fertilization."

Fry, Jack D., Hoyle, Jared, and Kennelly, Megan (Plant Pathology), Heart of America GCSA, \$3,750, "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., \$1,000, "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."

Fry, Jack D., and Kennelly, Megan (Plant Pathology), US Golf Association, Inc., \$7,482, "Development of Fine-Textured, Large Patch-Resistant Zoysiagrass Cultivars with Enhanced Cold Hardiness for the Transition Zone."

Fry, Jack D., Bremer, Dale J., Hoyle, Jared, Keeley, Steven J., Kennelly, Megan (Plant Pathology), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), US Golf Association, Inc., "Evaluating Small Unmanned Aerial Systems for Detecting Turfgrass Stress with an Emphasis on Drought."

Fry, Jack D., and Bremer, Dale J., US Golf Association, Inc., "Nitrous Oxide Emissions and Carbon Sequestration in Turfgrass: Effects of Irrigation and N Fertilization."

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

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

Hoyle, Jared, Boyer, Cheryl R., Cloyd, Raymond A. (Entomology), **De Wolf, 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."

Hoyle, Jared, Bremer, Dale J., Fry, Jack D., Keeley, Steven J., Kennelly, Megan (Plant Pathology), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), US Golf Association, Inc., "Evaluating Small Unmanned Aerial Systems for Detecting Turfgrass Stress with an Emphasis on Drought."

Keeley, Steven J., Bremer, Dale J., Fry, Jack D., Hoyle, Jared, Kennelly, Megan (Plant Pathology), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), US Golf Association, Inc., "Evaluating Small Unmanned Aerial Systems for Detecting Turfgrass Stress with an Emphasis on Drought."

Park, Sunghun, Bockus, William W. (Plant Pathology), **De Wolf, 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, Boyer, Cheryl R., Rivard, Cary L., Shoemaker, Candice A., and Taylor, Mykel R. (Agricultural Economics), US Department of Agriculture, "Development of an Instrument to Document Economic Impact of Fruit and Vegetable Growers in Kansas."

Pliakoni, Eleni, Gragg, Sara E. (Animal Sciences and Industry), and **Rivard, Cary L.**, US Department of Agriculture, \$48,886, "Improving Shelf Life, Quality and Safety of Locally Growing Vegetables in Kansas."

Pliakoni, Eleni, Rivard, Cary L., Shoemaker, Candice A., Gragg, Sara E., Nwadike, Londa S. (Director of Cooperative Extension), and **Favor, Judith F.** (Educational Leadership), State of Kansas - KSU Global Food Systems Program (Internal Project), "An International Symposium on Urban Food Systems: Changing the way we think about food to enhance global food security."

Reid, William R., University of Missouri, \$12,887, "Missouri Pecan Growers."

Rivard, Cary L., Boyer, Cheryl R., Pliakoni, Eleni, Shoemaker, Candice A., and Taylor, Mykel R. (Agricultural Economics), US Department of Agriculture, \$25,525, "Development of an Instrument to Document Economic Impact of Fruit and Vegetable Growers in Kansas."

Rivard, Cary L., US Department of Agriculture, \$232,616 (includes \$69,542 from Gieringer's Orchard - 3rd Party Match), "Development of Grafting Technologies to Improve Sustainability and Competitiveness of the US Fruiting Vegetable Industry."

Rivard, Cary L., Gragg, Sara E. (Animal Sciences and Industry), and **Pliakoni, Eleni**, US Department of Agriculture, "Improving Shelf Life, Quality and Safety of Locally Growing Vegetables in Kansas."

Shoemaker, Candice A., Boyer, Cheryl R., Pliakoni, Eleni, Rivard, Cary L., and Taylor, Mykel R. (Agricultural Economics), US Department of Agriculture, "Development of an Instrument to Document Economic Impact of Fruit and Vegetable Growers in Kansas."

Upham, Ward S., Boyer, Cheryl R., Cloyd, Raymond A. (Entomology), **De Wolf, 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."

INTERNATIONAL AGRICULTURAL PROGRAMS

Lilja, Nina K., and Poland, Jesse A. (Plant Pathology), US Agency for International Development, \$17,954, "BHEARD Program: Bangladesh."

Lilja, Nina K., and Pagadala, P. V. Vara (Agronomy), US Agency for International Development, \$17,922, "BHEARD Program: Ghana."

Lilja, Nina K., Bhadriraju, Subramanyam (Grain Science and Industry), **Floros, John D.** (Dean of Agriculture and Director of AES), **Higgins, Mary L.** (Human Nutrition), **Leslie, John F.** (Plant Pathology), 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., Dalton, Timothy J. (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Pagadala, P. V. Vara** (Agronomy), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), and **Staggenborg, Scott A.** (Agronomy), US Agency for International Development, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

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, "Training for Pakistan Proposal: On-Farm Water Management."

Lilja, Nina K., Alavi, Sajid (Grain Science and Industry), **Chambers IV, Edgar** (Human Nutrition), **Lindshield, Brian L.** (Human Nutrition), and **Procter, Sandra B.** (Human Nutrition), US Department of Agriculture, \$99,967, "Novel Sorghum Based Fortified Food Blend for Infants and Young Children Nutrition."

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

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

Devlin, Daniel L., Kansas Department of Health and Environment, \$319,859 (includes \$51,107 from Cooperative Match), "Kansas Watershed Specialists."

Devlin, Daniel L., Kansas Department of Health and Environment, \$214,490 (includes \$8,787 from Cooperator Match, and \$33,430 from McPherson County), "KS WRAPS: Little Arkansas River Watershed - Implementation."

Devlin, Daniel L., and **Golden, Bill B.** (Agricultural Economics), Kansas Water Office, \$9,000, "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, "Training for Pakistan Proposal: On-Farm Water Management."

Devlin, Daniel L., Golden, Bill B. (Agricultural Economics), **Holman, Johnathon D.** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Pagadala, P. V. Vara** (Agronomy), **Schlegel, Alan J.** (Southwest Research Extension Center), **Steward, David R.** (Civil Engineering), and **Swamy, Aavudai Anandhi** (Agronomy), US Department of Agriculture, \$443,886, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

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, \$932,675, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Devlin, Daniel L., and Blocksome, Carolyn E. (Horticulture, Forestry and Recreation Resources), US Department of the Interior, \$200,697, "Great Plains Fire Exchange - Outreach Specialist."

Devlin, Daniel L., Aguilar, Jonathan P. (Southwest Area Office), **Kisekka, Isaya** (Southwest Research Extension Center), and **Lin, Xiaomao** (Agronomy), US Department of the Interior, \$92,335, "Kansas Water Resources Research Institute."

Devlin, Daniel L., US Environmental Protection Agency, \$188,826 (includes \$46,125 from Stakeholders), "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, \$60,765 (includes \$10,765 from Stakeholders), "KS WRAPS: Lower Smoky Hill River Watershed (Upper Portion) - Implementation."

NORTHWEST RESEARCH EXTENSION CENTER

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

Aiken, Robert M., Pagadala, P. V. Vara (Agronomy), **Perumal, Ramasamy** (Agricultural Research Center-Hays), **Price, Kevin** (Agronomy), **Tesso, Tesfaye** (Agronomy), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Kansas Grain Sorghum Commission, \$3,600, "Remote Sensing Screening Tools for Sorghum Breeding Programs."

Aiken, Robert M., Fritz, Allan K. (Agronomy), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$7,479, "Screening Tools to Identify Drought Resistance in Promising Wheat Lines."

Aiken, Robert M., Monsanto Company, \$16,731, "Service Order No. 15."

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

Lamm, Freddie R., and O'Brien, Daniel M. (Northwest Area Office), Kansas Corn Commission, \$18,000, "Yield of Two Hybrid Maturities as Affected by Management Allowed Depletion Level."

Lamm, Freddie R., Adey, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Cramer, Gary L.** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenber, Gerard J.** (Agronomy), **O'Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L.** (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, \$37,496, "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, \$20,000, "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, \$2,991, "Training for Pakistan Proposal: On-Farm Water Management."

Lamm, Freddie R., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Holman, Johnathon D.** (Southwest Research Extension Center), **Pagadala, P. V. Vara** (Agronomy), **Schlegel, Alan J.** (Southwest Research Extension Center), **Steward, David R.** (Civil Engineering), and **Swamy, Aavudai Anandhi** (Agronomy), US Department of Agriculture, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

OFFICE OF ACADEMIC PROGRAMS

Boggs, Donald L., Kansas FFA Foundation, \$89,775, "FFA Foundation Executive Director."

Kane, Mary R., US Department of Education, \$70,428, "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."

De Wolf, Erick D., US Department of Agriculture, \$73,902, "A Predictive Model to Increase Adoption of IPM of a Mite-Virus Disease Complex in Wheat."

PLANT PATHOLOGY

Akhunov, Eduard D., Binational Agricultural Research and Development Fund (BARD), \$142,000, "Population Genomics, Linkage Disequilibrium and Association Mapping of Stripe Rust Resistance Genes in Wild Emmer Wheat, *Triticum Turgidum* Ssp. *Dicoccoides*."

Akhunov, Eduard D., Heartland Plant Innovations, Inc., \$35,000, "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., Andresen, Daniel A. (Computing and Information Sciences), **Brown, Susan J.** (Biology), **Poland, Jesse A.,** and **Welch, Stephen M.** (Agronomy), National Science Foundation, \$69,450, "CC-IIIE Networking Infrastructure: KGEN: Next-generation Networking Environments for Biological and Agricultural Data-driven Research at Kansas State University."

Akhunov, Eduard D., and **Pagadala, P. V. Vara** (Agronomy), US Department of Agriculture, \$245,339, "Improving Barley and Wheat Germplasm for Changing Environments."

Bockus, William W., De Wolf, 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, \$40,960, "Development of Scab Resistant Wheat Cultivars for Kansas."

Bockus, William W., US Department of Agriculture, \$150,000, "Improvement of Hard Winter Wheat for FHB Resistance."

Bockus, William W., De Wolf, 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."

De Wolf, 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."

De Wolf, 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."

De Wolf, Erick D., US Department of Agriculture, \$45,154, "Development and Deployment of Prediction Models for Fusarium Head Blight."

De Wolf, Erick D., US Department of Agriculture, \$10,000, "Memorandum of Agreement between USDA, APHIS and KSU."

De Wolf, 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."

De Wolf, 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."

De Wolf, Erick D., US Department of Agriculture, \$121,412, "Wheat Rust Resistance Research."

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

Friebe, Bernd, Bockus, William W., De Wolf, 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, 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, \$19,527, "New Sources of Resistance to FHB and DON."

Garrett, Karen A., Dalton, Timothy J. (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Jumpponen, Ari M.** (Biology), **Lilja, Nina K.** (International Agricultural Programs), **Pagadala, P. V. Vara** (Agronomy), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), and **Staggenborg,**

Scott A. (Agronomy), US Agency for International Development, \$1,959, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

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

Gill, Bikram S., Dow AgroSciences, LLC, \$50,000, "Partner Agreement for I/UCRC."

Gill, Bikram S., General Mills, Inc., \$52,000, "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, \$260,000, "Partner Agreement for I/UCRC."

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

Gill, Bikram S., Bockus, William W., De Wolf, 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., and **Liu, Sanzhen**, Kansas Wheat Commission, "Identification of Trait-Associated Genetic Markers with an Efficient Bulk Strategy."

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

Gill, Bikram S., Kansas Wheat Commission, \$50,000, "Wheat Genetic & Genomic Resources Center and Its Contributions to the Kansas Wheat Industry."

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

Gill, Bikram S., Poland, Jesse A., and **Sehgal, Sunish K.**, National Science Foundation, "GPF-PG: Genome Structure and Diversity of Wheat and Its Wild Relatives."

Gill, Bikram S., and **Poland, Jesse A.**, National Science Foundation, \$86,250, "I/UCRC: Collaborative Research: Wheat Genetics Resource Center: A Public-Private Consortium."

Gill, Bikram S., Pioneer Hi-Bred International, Inc., \$100,000, "Partner Agreement for I/UCRC."

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

Gill, Bikram S., and **Rawat, Nidhi**, US Department of Agriculture, \$63,168, "Alien Chromosome Engineering and the Deployment of Novel Source of Resistance to Fusarium Head Blight in Wheat."

Gill, Bikram S., and **Friebe, Bernd**, US Department of Agriculture, "New Sources of Resistance to FHB and DON."

Jardine, Douglas J., North Central Soybean Research Program, \$20,000, "Understanding the Role of Fungicide Programs on Soybean Health and Charcoal Rot Development."

Jardine, Douglas J., US Department of Agriculture, \$12,500, "Integrated Management of Oomycete Diseases of Soybean and other Crop Plants."

Kennelly, Megan, Fry, Jack D. (Horticulture, Forestry and Recreation Resources), and **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), Heart of America GCSA, \$1,250, "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), **De Wolf, 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, and Fry, Jack D. (Horticulture, Forestry and Recreation Resources), US Golf Association, Inc., \$7,482, "Development of Fine-Textured, Large Patch- Resistant Zoysiagrass Cultivars with Enhanced Cold Hardiness for the Transition Zone."

Kennelly, Megan, Bremer, Dale J. (Horticulture, Forestry and Recreation Resources), **Fry, Jack D.** (Horticulture, Forestry and Recreation Resources), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Keeley, Steven J.** (Horticulture, Forestry and Recreation Resources), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), US Golf Association, Inc., "Evaluating Small Unmanned Aerial Systems for Detecting Turfgrass Stress with an Emphasis on Drought."

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., and Poland, Jesse A. (Agronomy), Monsanto Company, \$34,703, "Monsanto's Beachell-Borlaug International Scholars Program (Sandra Dunkel's PhD Study)."

Leslie, John F., Bhadriraju, Subramanyam (Grain Science and Industry), **Floros, John D.** (Dean of Agriculture and Director of AES), **Higgins, Mary L.** (Human Nutrition), **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."

Leslie, John F., and Toomajian, Christopher, US Department of Agriculture, \$48,469, "Fungal Genes that Limit or Prevent the Growth of *Gibberella Zeae*."

Leslie, John F., US Department of Agriculture, \$79,999, "Improving Barley and Wheat Germplasm for Changing Environments."

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

Little, Christopher R., Aiken, Robert M. (Northwest Research Extension Center), and **Perumal, Ramasamy** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, "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, \$31,894, "Germplasm Screening, Host-Plant Interactions, and Inoculation Techniques for Sorghum Stalk Rot Diseases in Kansas."

Little, Christopher R., Adee, Eric A. (Agronomy), and **Presley, DeAnn R.** (Agronomy), Kansas Soybean Commission, \$28,122, "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.**, and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$4,360, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Little, Christopher R., North Central Soybean Research Program, \$8,102, "Identification and Biology of Seedling Pathogens of Soybean."

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

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

Liu, Sanzhen, and **Gill, Bikram S.**, Kansas Wheat Commission, \$30,000, "Identification of Trait-Associated Genetic Markers with an Efficient Bulk Strategy."

McCluskey, Kevin, National Science Foundation, \$328,032, "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** (Grain Science and Industry), and **Zhang, Guorong** (Agricultural Research Center-Hays), Kansas Wheat Alliance, Inc., \$5,750, "Quality Evaluation of Wheat for Molecular Marker Identification - 2014."

Poland, Jesse A., and **Fritz, Allan K.** (Agronomy), Kansas Wheat Commission, \$57,662, "Screening and Improvement of Barley Yellow Dwarf Resistance."

Poland, Jesse A., Monsanto Company, \$56,010, "Monsanto Beachell-Borlaug International Scholars Program (Mr. Jared I. Crain's PhD Study)."

Poland, Jesse A., Monsanto Company, \$13,700, "Monsanto Beachell-Borlaug International Scholars Program (Ms. Emily Delorean's PhD Study)."

Poland, Jesse A., Akhunov, Eduard D., Andresen, Daniel A. (Computing and Information Sciences), **Brown, Susan J.** (Biology), and **Welch, Stephen M.** (Agronomy), National Science Foundation, "CC-IIIE Networking Infrastructure: KGEN: Next-generation Networking Environments for Biological and Agricultural Data-driven Research at Kansas State University."

Poland, Jesse A., Gill, Bikram S., and **Sehgal, Sunish K.**, National Science Foundation, \$1,585,420, "GPF-PG: Genome Structure and Diversity of Wheat and Its Wild Relatives."

Poland, Jesse A., and **Gill, Bikram S.**, National Science Foundation, \$86,250, "I/UCRC: Collaborative Research: Wheat Genetics Resource Center: A Public-Private Consortium."

Poland, Jesse A., Andresen, Daniel A. (Computing and Information Sciences), **Brown, Susan J.** (Biology), **Caragea, Doina** (Computing and Information Sciences), and **Ou, Xinming (Simon)** (Computing and Information Sciences), National Science Foundation, \$60,000, "MRI: Acquisition of an Adaptive Data Cluster for Data-intensive Applications in Science and Engineering."

Poland, Jesse A., and Lilja, Nina K. (International Agricultural Programs), US Agency for International Development, \$161,588, "BHEARD Program: Bangladesh."

Poland, Jesse A., US Agency for International Development, \$1,364,694 (includes \$414,694 from Third Party In-Kind, Cornell University), "Rapid Development of Climate Resilient Wheat Varieties for South Asia using Genomic Selection."

Poland, Jesse A., US Department of Agriculture, \$20,000, "Genotyping-by-Sequencing Training, Support and Sequencing."

Rotenberg, Dorith, and Whitfield, Anna E., Kansas Wheat Commission, \$40,835, "Identification of Barley Yellow Dwarf Virus Species and Aphid Vectors of Primary Importance in Kansas."

Rotenberg, Dorith, and Whitfield, Anna E., US Department of Agriculture, \$142,064, "Advancing Innovative Technologies and Integrated Strategies for Sustainable Management of Thrips-transmitted Tospoviruses."

Sehgal, Sunish K., Gill, Bikram S., and Poland, Jesse A., National Science Foundation, "GPF-PG: Genome Structure and Diversity of Wheat and Its Wild Relatives."

Stack, James P., Bockus, William W., De Wolf, 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, \$42,500, "Plant Diagnostic Information System, Michigan State University (North Central Plant Diagnostic Network)."

Stack, James P., US Department of Agriculture, \$44,000, "Plant Diagnostics Information System, Cornell University."

Todd, Richard B., Kansas State University Foundation, \$15,012, "Cancer Research."

Todd, Timothy C., Kusel, Kelly R. (Southeast Agricultural Research Center), **Schapaugh Jr, William T.** (Agronomy), and **Trick, Harold N.,** Kansas Soybean Commission, "Breeding and Management of Soybean for Improved Performance."

Todd, Timothy C., Schapaugh Jr, William T. (Agronomy), and **Trick, Harold N.,** Kansas Soybean Commission, \$15,268, "Enhancement of Soybean Through Genetic Engineering."

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

Toomajian, Christopher, and Leslie, John F., US Department of Agriculture, "Fungal Genes that Limit or Prevent the Growth of Gibberella Zeae."

Toomajian, Christopher, and Lei, Li, US Department of Health and Human Services, \$32,500, "Alternative Polyadenylation Site Usage Variation and its Genetic Basis (Li Lei)."

Trick, Harold N., Kusel, Kelly R. (Southeast Agricultural Research Center), **Schapaugh Jr, William T.** (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$9,059, "Breeding and Management of Soybean for Improved Performance."

Trick, Harold N., Schapaugh Jr, William T. (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$57,254, "Enhancement of Soybean Through Genetic Engineering."

Trick, Harold N., Fellers, John P., Fritz, Allan K. (Agronomy), and **Todd, Timothy C.**, Kansas Wheat Commission, \$72,446, "Transgenic Approaches for Trait Enhancement in Wheat."

Trick, Harold N., National Science Foundation, \$280,618, "Targeting MicroRNAs for Destruction in Crop Epigenome by Short Tandem Target Mimic (STTM)."

Trick, Harold N., US Department of Agriculture, \$23,346, "Harnessing the Power of Basal Defense to Improve Resistance to Fusarium Head Blight."

Trick, Harold N., Bockus, William W., De Wolf, 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."

Trick, Harold N., US Department of Agriculture, \$4,430, "Targeting Host Defense Mechanism for Enhancing FHB Resistance in Wheat."

Valent, Barbara S., Bockus, William W., De Wolf, 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., Chuang, Wenpo (Entomology), **Fritz, Allan K.** (Agronomy), and **Smith, C. Michael** (Entomology), Kansas Wheat Alliance, Inc., \$9,800, "Evaluation of Kansas Germplasm for Resistance to Multiple Curl Mite-Vectored Viruses."

Whitfield, Anna E., and **Rotenberg, Dorith**, Kansas Wheat Commission, "Identification of Barley Yellow Dwarf Virus Species and Aphid Vectors of Primary Importance in Kansas."

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

Whitfield, Anna E., US Department of Agriculture, \$50,228, "Vector Status of the Invasive Leafhopper, *Balclutha rubrostrata* as it Invades the Central Plains States."

SOUTHEAST AGRICULTURAL RESEARCH CENTER

Kusel, Kelly R., Schapaugh Jr, William T. (Agronomy), **Todd, Timothy C.** (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, "Breeding and Management of Soybean for Improved Performance."

SOUTHWEST RESEARCH EXTENSION CENTER

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

Currie, Randall S., Multi-Sponsor, \$32,500, "Weed Control Research in Southwest Kansas."

Gillen, Robert L., Multi-Sponsor, \$30,520, "ASW Multi-Sponsor Research 36."

Holman, Johnathon D., Adee, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Cramer, Gary L.** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Kisekka, Isaya, Kluitenberg, Gerard J.** (Agronomy), **Lamm, Freddie R.** (Northwest Research Extension Center), **O Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L.** (Agronomy), and **Schlegel, Alan J.**, Kansas Grain Sorghum Commission, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

Holman, Johnathon D., Multi-Sponsor, \$24,200, "Soil Fertility and Soil Management Research for Western Kansas."

Holman, Johnathon D., Aguilar, Jonathan P. (Southwest Area Office), **Kisekka, Isaya**, and **O Brien, Daniel M.** (Northwest Area Office), US Department of Agriculture, "Demonstrating Interactions between Reduced Tillage, Soil Water Storage, and Nutrient Leaching Under Water Limited Irrigated Cropping Systems."

Holman, Johnathon D., Ciampitti, Ignacio (Agronomy), **Cramer, Gary L.** (Agronomy), and **Stamm, Michael J.** (Agronomy), US Department of Agriculture, \$9,000, "Extending Risk Management Education to New and Experienced Canola Producers in Kansas and Colorado."

Holman, Johnathon D., 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), **Pagadala, P. V. Vara** (Agronomy), **Schlegel, Alan J., Steward, David R.** (Civil Engineering), and **Swamy, Aavudai Anandhi** (Agronomy), US Department of Agriculture, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

Kisekka, Isaya, Currie, Randall S., and **Zukoff, Sarah N.**, Kansas Corn Commission, \$32,507, "Developing Integrated Pest Management Strategies for Drought Tolerant Corn under Deficit Irrigation Scenarios."

Kisekka, Isaya, Adee, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Cramer, Gary L.** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D., Kluitenberg, Gerard J.** (Agronomy), **Lamm, Freddie R.** (Northwest Research Extension Center), **O Brien, Daniel M.** (Northwest Area Office), **Roozeboom, Kraig L.** (Agronomy), and **Schlegel, Alan J.**, Kansas Grain Sorghum Commission, \$37,496, "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, and **Aguilar, Jonathan P.** (Southwest Area Office), Kansas Water Office, \$27,443, "Mobile Drip Irrigation for Water Limited Crop Production."

Kisekka, Isaya, Monsanto Company, \$18,360, "Service Order No. 22."

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, \$2,991, "Training for Pakistan Proposal: On-Farm Water Management."

Kisekka, Isaya, Aguilar, Jonathan P. (Southwest Area Office), **Holman, Johnathon D.**, and **O Brien, Daniel M.** (Northwest Area Office), US Department of Agriculture, \$161,433, "Demonstrating Interactions between Reduced Tillage, Soil Water Storage, and Nutrient Leaching Under Water Limited Irrigated Cropping Systems."

Kisekka, Isaya, Aguilar, Jonathan P. (Southwest Area Office), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), and **Lin, Xiaomao** (Agronomy), US Department of the Interior, "Kansas Water Resources Research Institute."

Kisekka, Isaya, and Sheshukov, Aleksey Y. (Biological and Agricultural Engineering), Vietnam Education Foundation, \$28,250, "Vietnam Education Foundation Fellowship."

Kisekka, Isaya, Holman, Johnathon D., and Zukoff, Sarah N. (Southwest Area Office), State of Kansas - KSU Global Food Systems Program (Internal Project), "Mobile Drip Irrigation for Water Limited Crop Production."

Nechols, James R., Kirkham, Mary B. (Agronomy), **Margolies, David C.** (Entomology), **Ruberson, John R.** (Entomology), **Swamy, Aavudai Anandhi** (Agronomy), and **Zukoff, Sarah N.** (Southwest Area Office), US Department of Agriculture, \$96,794, "Cotton Crop Risk in Changing Environments: Interaction of Drought Stress and Early Season Arthropod Pests."

Schlegel, Alan J., Adee, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Cramer, Gary L.** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Holman, Johnathon D., Kisekka, Isaya, Kluitenberg, Gerard J.** (Agronomy), **Lamm, Freddie R.** (Northwest Research Extension Center), **O'Brien, Daniel M.** (Northwest Area Office), and **Roozeboom, Kraig L.** (Agronomy), Kansas Grain Sorghum Commission, "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, \$7,293, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

Schlegel, Alan J., Syngenta Seeds, Inc., \$48,960, "Research Testing Project Influence of Agrisure Artesian™ Water-optimization Alleles on Hybrid Performance and Response to Plant Density and Water Regime."

Schlegel, Alan J., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Holman, Johnathon D., Lamm, Freddie R.** (Northwest Research Extension Center), **Pagadala, P. V. Vara** (Agronomy), **Steward, David R.** (Civil Engineering), and **Swamy, Aavudai Anandhi** (Agronomy), US Department of Agriculture, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

Zukoff, Sarah N., Currie, Randall S., and Kisekka, Isaya, Kansas Corn Commission, \$6,501, "Developing Integrated Pest Management Strategies for Drought Tolerant Corn under Deficit Irrigation Scenarios."

Zukoff, Sarah N., Monsanto Company, \$2,040, "Service Order #28."

Zukoff, Sarah N., Monsanto Company, \$4,080, "Service Order No. 23."

Zukoff, Sarah N., US Department of Agriculture, \$1,998, "Identifying Pest Management Solutions for Problematic Western Bean Cutworm Infestations."

COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN

ARCHITECTURE

Knox, Matthew A., Johnson County Kansas, \$28,500, "Sunset Drive Office Building Pavilion."

LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING

Nesse, Katherine, Illinois Department of Human Services, \$7,210, "IECAM Project Agreement - Child Care - Quality Discretionary."

COLLEGE OF ARTS AND SCIENCES

BIOCHEMISTRY

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

Durrett, Timothy P., US Agency for International Development, \$33,466, "Targeted Engineering of Brassica juncea Seed Biochemistry to produce Reduced-viscosity Plant Oils for direct use as Biofuel."

Durrett, Timothy P., US Department of Agriculture, \$490,000, "Targeted Engineering of Camelina Seed Biochemistry to Synthesize Valuable Oleochemical Feedstocks."

Durrett, Timothy P., US Department of Energy, \$38,539, "Optimization and Production of Acetyl-triacylglycerols for use as Fuels, Lubricants, and Specialty Chemicals."

Durrett, Timothy P., US Department of Energy, \$87,927, "Sustainable Biofuel from the Great Plains to the Semi-arid West: Improved Germplasm for Camelina Oilseed."

Geisbrecht, Brian V., American Heart Association, Midwest Affiliate, \$52,000, "Predoctoral Fellowship: Application for Jordan Woehl: Inhibition of the Classical and Lectin Pathways of Complement by *S. aureus* Eap."

Geisbrecht, Brian V., US Department of Health and Human Services, \$188,000, "Cheminformatic Discovery of Alternative Pathway C3 Pro-Convertase Inhibitors."

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., US Department of Health and Human Services, \$296,792, "The Multiple States of IpaB *Shigella* Type III Secretion."

Geisbrecht, Erika R., US Department of Health and Human Services, \$325,136, "Mechanisms Underlying Muscle Development in *Drosophila* AR060788."

Geisbrecht, Erika R., US Department of Health and Human Services, \$91,172, "Protein Tyrosine Phosphatase Signaling in Muscle Maintenance."

Geisbrecht, Erika R., and **Vishal, Kumar**, US Department of Health and Human Services, \$32,500, "The Role of *Drosophila* Trim32 in Progressive Muscle Wasting (Kumar Vishal)."

Kanost, Michael R., US Department of Health and Human Services, \$500,548, "Proteinase Systems in Insect Hemolymph."

Klebba, Phillip E., Kansas State University Foundation, \$73,054, "Cancer Center Research Core."

Prakash, Om, US Department of Agriculture, \$27,500, "Integrated Strategies to Control Equine Herpesvirus 1 Infection."

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."

Zolkiewska, Anna, US Department of Health and Human Services, \$1,625, "K-INBRE DRPP Mentor to S. Lee: Anna Zolkiewska."

BIOLOGY

Asano, Katsura, National Science Foundation, \$149,982, "Studies on the Novel 5MP-ATR-4 Pathway using Insects as the Model System."

Asano, Katsura, University of Kansas Center for Research, Inc., \$2,300, "The Structure and Interaction of eIF5-mimic Protein (5MP)."

Blair, John M., National Science Foundation, \$74,485, "Collaborative Research: Does the Legacy of Long-Term Chronic Climate Change Alter Ecosystem Responses to Short Term Climatic Extremes."

Blair, John M., Dodds, Walter K., Joern, Anthony, and Nippert, Jesse B., National Science Foundation, \$1,176,998, "LTER: Long-Term Research on Grassland Dynamics - Assessing Sensitivity and Resilience to Global Change."

Boyle, Alice, Friends of the Sunset Zoo, \$500, "FOSZ Research Scholarship Award for Mark Herse entitled "Spatial and Temporal Predictability of Habitat Associations in a Nomadic Grassland Bird: A Multiscale Approach."

Boyle, Alice, Friends of the Sunset Zoo, \$1,000, "Friends of Sunset Zoo Award for Emily Williams entitled "Grasshopper Sparrows on the Move: What Explains Variation in Dispersal Strategies in a Declining Grassland Songbird?"."

Boyle, Alice, National Science Foundation, \$7,332, "RCN: Enabling Comparative Studies of the Process and Products of Sexual Selection in a Genomic Context."

Boyle, Alice, US Department of the Interior, \$129,075, "Development of Spatially Explicit Models and Decision Support Tools for Henslow's Sparrows and Other Priority Birds in the Flint Hills."

Boyle, Daniel L., Microscopy Society of America, \$3,000, "MSA UG Research Award for Cassie Binns entitled "Morphological and Structural Characterization of aA- and aB- Crystallin Double Knock-out Mouse Retina."

Brown, Susan J., Akhunov, Eduard D. (Plant Pathology), **Andresen, Daniel A.** (Computing and Information Sciences), **Poland, Jesse A.** (Plant Pathology), and **Welch, Stephen M.** (Agronomy), National Science Foundation, \$57,875, "CC-IIIE Networking Infrastructure: KGEN: Next-generation Networking Environments for Biological and Agricultural Data-driven Research at Kansas State University."

Brown, Susan J., Andresen, Daniel A. (Computing and Information Sciences), **Caragea, Doina** (Computing and Information Sciences), **Ou, Xinming (Simon)** (Computing and Information Sciences), and **Poland, Jesse A.** (Plant Pathology), National Science Foundation, \$45,000, "MRI: Acquisition of an Adaptive Data Cluster for Data-intensive Applications in Science and Engineering."

Brown, Susan J., Syngenta Biotechnology, Inc., \$50,598, "Bioinformatics Service Agreement."

Brown, Susan J., and Ellis, Jason D. (Communications), US Department of Agriculture, \$3,581,366, "Developing an Infrastructure and Product Test Pipeline to Deliver Novel Therapies for Citrus Greening Disease."

Brown, Susan J., US Department of Health and Human Services, \$240,000, "Bioinformatics Core - KINBRE."

Chapes, Stephen K., National Aeronautics and Space Administration, \$15,000, "Collection of Immune/Stress-related Tissues from Mice Flown on ISS."

Chapes, Stephen K., US Department of Health and Human Services, \$18,200, "K-INBRE Star Trainees: Peters, Sensenich."

Chapes, Stephen K., US Department of Health and Human Services, \$31,200, "KINBRE Summer Scholar/Translational Scholar Awards: Colter; Feuerborn; Hodge; Meier; Vontz; Lloyd; Troupe."

Chapes, Stephen K., US Department of Health and Human Services, \$13,000, "K-INBRE Undergraduate Coordinator Office Campus Coordinator Award - S.K. Chapes."

Chapes, Stephen K., US Department of Health and Human Services, \$87,498, "Undergraduate Coordinator Office - KINBRE."

Clem, Rollie J., and Passarelli, A. Lorena, US Department of Health and Human Services, "Arbovirus Midgut Escape Mechanisms."

Cully, Jr., Jack F., US Department of Agriculture, \$3,600 (includes \$3,600 from Texas Animal Health Inspection Service), "Black-tailed Prairie Dog Monitoring on the Kiowa and Rita Blanca National Grasslands."

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, \$30,500, "Ecological Integrity of Prairie Streams as Influenced by Patchburn Grazing and Riparian Protection."

Dodds, Walter K., and Gido, Keith B., National Science Foundation, \$200,118, "Collaborative Research: Stream Consumers and Lotic Ecosystem Rates (SCALER): Scaling from Centimeters to Continents."

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

Fleming, Sherry D., US Department of Health and Human Services, \$150,000, "Neoantigens and TLR4."

Gido, Keith B., National Science Foundation, \$282,080, "Collaborative Research: Shifting Hotspots: How do Consumer Aggregations interact to influence Resource Heterogeneity and Fluxes in Streams?."

Gido, Keith B., and Dodds, Walter K., National Science Foundation, "Collaborative Research: Stream Consumers and Lotic Ecosystem Rates (SCALER): Scaling from Centimeters to Continents."

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, \$114,250, "Effectiveness of the Sedgwick County Lincoln Street Passageway."

Gido, Keith B., US Department of the Interior, \$112,927, "Use and Importance of Tributaries to Sustaining Native Fish Communities in San Juan River."

Haukos, David A., Conoco, Inc., \$81,710 (includes \$31,710 from In-kind Contribution), "Verifying Ground-based Habitat Quality Monitoring and Micro-Habitat Selection by Lesser Prairie-chickens (*Tympanuchus pallidicinctus*) with Remote Sensing Technology."

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, \$85,725, "CEAP Assessments of the Effects of NRCS Lesser Prairie Chicken Initiative."

Haukos, David A., US Department of the Interior, \$24,525, "A Multi-Scale Examination of the Distribution and Habitat-Use Patterns of the Regal fritillary (*Speyeria idalia*) within the Fort Riley Military Reservation."

Haukos, David A., and **Hope, Andrew**, US Department of the Interior, "Climate Change Science in the Arctic: Temporal and Spatial Diversification among Arctic Shrews and their Parasites across the Northern Continents."

Herman, Michael A., American Genetic Association, \$10,000, "12th Ecological Genomics Symposium."

Hope, Andrew, and **Haukos, David A.**, US Department of the Interior, \$7,050, "Climate Change Science in the Arctic: Temporal and Spatial Diversification among Arctic Shrews and their Parasites across the Northern Continents."

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

Johnson, Loretta C., American Society of Plant Physiologists, \$700, "Summer Undergrad Research Fellowship (SURF) for Matthew Galliard."

Johnson, Loretta C., Botanical Society of America, \$200, "UG Student Award for Matthew Galliard Project Entitled "Long-Term Field Selection of Big Bluestem Ecotypes in Reciprocal Gardens planted across the Great Plains Precipitation Gradient"."

Johnson, Loretta C., Kansas Academy of Science, \$1,500, "Identifying Genes Involved in Drought Tolerance in the Dominant Prairie Grass Big Bluestem *Andropogon gerardii*: Implications for Climate Change and Restoration across the Great Plains Climate Gradient (Jacob D. Alsdurf)."

Jumpponen, Ari M., and **Sandercock, Brett K.**, National Science Foundation, "DISSERTATION RESEARCH: Intra-annual Dynamics in Gut Microbiota of Migratory Shorebirds (Kirsten Grond)."

Jumpponen, Ari M., Dalton, Timothy J. (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Garrett, Karen A.** (Plant Pathology), **Lilja, Nina K.** (International Agricultural Programs), **Pagadala, P. V. Vara** (Agronomy), **Presley, DeAnn R.** (Agronomy), **Rice, Charles W.** (Agronomy), and **Staggenborg, Scott A.** (Agronomy), US Agency for International Development, \$1,959, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

Jumpponen, Ari M., US Department of Agriculture, \$2,500, "Reniform Nematode Implicated in Sweet Potato End Rot: the Key to Economic Losses?."

Jumpponen, Ari M., US Department of Agriculture, \$30,021, "Soil Microbial Community Composition in a Long-term Prescribed Fire Study on the Florida Coastal Plain."

Jumpponen, Ari M., and **Sandercock, Brett K.**, US Department of the Interior, "Disease Risk of Shorebirds in the Western Hemisphere."

Lee, Stella Yu-Chien, University of Kansas Center for Research, Inc., \$5,000, "Crystal Structure of Lysosomal Luminal Protein CLN5."

Lee, Stella Yu-Chien, US Department of Health and Human Services, \$112,500, "Alterations of Autophagy in CLN5 Deficient Neuronal Ceroid Lipofuscinosis."

Mather, Martha E., National Science Foundation, \$32,514, "The PIE-LTER: Interactions Between External Drivers, Humabs and Ecosystems in Shaping Ecological Process in a Mosaic of Coastal Landscape and Estuarine Seascapes."

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, US Department of Agriculture, \$247,328, "The Impact of Insect Immunity on Vector Competence in Changing Environments."

Michel, Kristin, and **Meekins, David A.**, US Department of Health and Human Services, \$32,500, "Serpins-6 Protein-Protein Interactions in Mosquito Immunity Against Malaria (David Meekins)."

Michel, Kristin, US Department of Health and Human Services, \$6,000, "Vector Biology Representation at the 2015 Arthropod Genomics Symposium."

Morgan, Theodore J., and **Snyder, Bruce**, National Science Foundation, \$312,001, "REU Site: Ecology and Evolutionary Biology of Changing Environments: Integrating from Genomes to Biomass."

Morgan, Theodore J., and **Snyder, Bruce**, National Science Foundation, "REU Site: Undergraduate Research in the Ecology and Evolution of Changing Environments: Mechanisms to Responses."

Nippert, Jesse B., and **Ungerer, Mark**, National Science Foundation, "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, "LTER: Long-Term Research on Grassland Dynamics - Assessing Sensitivity and Resilience to Global Change."

Olson, Bradley J., National Science Foundation, \$236,836, "Collaborative Research: The Genomic Basis of Multicellularity and Developmental Complexity in the Volvocine Algae."

Olson, Bradley J., US Department of Health and Human Services, \$43,800, "Multicellular Evolution by Reprogramming Cell Cycle Regulation."

Passarelli, A. Lorena, and **Clem, Rollie J.**, US Department of Health and Human Services, \$658,536, "Arbovirus Midgut Escape Mechanisms."

Roelofs, Jeroen, National Science Foundation, \$138,722, "Studying Proteasome Assembly Using a Combination of Modeling and Experiment."

Roelofs, Jeroen, US Department of Health and Human Services, \$360,000, "Allosteric Mechanisms Controlling the Formation of Different Proteasom Complexes."

Rothenburg, Stefan, US Department of Health and Human Services, \$367,000, "Importance of Species-Specific Interactions of PKR with Poxvirus Inhibitors for Virus Replication and Host Range."

Sandercock, Brett K., National Science Foundation, \$19,407, "DISSERTATION RESEARCH: Effects of Habitat Heterogeneity on Songbird Fecundity in an Experimental Landscape (Bram Verheijen)."

Sandercock, Brett K., and **Jumpponen, Ari M.**, National Science Foundation, \$18,030, "DISSERTATION RESEARCH: Intra-annual Dynamics in Gut Microbiota of Migratory Shorebirds (Kirsten Grond)."

Sandercock, Brett K., and **Jumpponen, Ari M.**, US Department of the Interior, \$111,721 (includes \$51,012 from 3rd Party Match - Conicet Cenpat), "Disease Risk of Shorebirds in the Western Hemisphere."

Schrick, Kathrin, National Science Foundation, \$6,000, "The Impact of Sterol Biogenesis on Cellulose Synthesis in Higher Plants."

Snyder, Bruce, and **Morgan, Theodore J.**, National Science Foundation, "REU Site: Ecology and Evolutionary Biology of Changing Environments: Integrating from Genomes to Biomas."

Snyder, Bruce, and **Morgan, Theodore J.**, National Science Foundation, \$9,203, "REU Site: Undergraduate Research in the Ecology and Evolution of Changing Environments: Mechanisms to Responses."

Spooner, Brian S., Kansas State University Foundation, \$9,047, "Biology Research Career Development Core."

Spooner, Brian S., Kansas State University Foundation, \$31,344, "Biology Summer Graduate Fellowships."

Spooner, Brian S., Kansas State University Foundation, \$104,104, "Cancer Center Research Awards."

Tobler, Michael, Mohamed bin Zayed Species Conservation Fund, \$12,000, "Critically Endangered Species Research: Poecilia sulphuraria and Gambusia eurystoma."

Tobler, Michael, National Science Foundation, \$221,524, "Relicated Ecological Speciation in Extreme Habitats: Patterns, Mechanisms, and Consequences of Multi-Trait Divergence."

Tobler, Michael, US Department of Defense, \$154,836, "A Comparative Approach to Understanding the Physiological Effects and Processing of Hydrogen Sulfide."

Tobler, Michael, and **Culumber, Zachary W.**, US Department of Health and Human Services, \$32,448, "Molecular Pathways Mediating Responses to Toxic Hydrogen Sulfide Exposure (Zachary Culumber)."

Ungerer, Mark, and **Nippert, Jesse B.**, National Science Foundation, \$228,434, "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, \$475,000, "Linking Cell Shape and Asymmetric Division in Ciona Notochord Tapering."

Veeman, Michael, US Department of Health and Human Services, \$30,000, "Morphogenetic Effector Networks in the Ciona Notochord."

Welti, Ruth, and Gadbury, Gary L. (Statistics), National Science Foundation, \$128,010, "Collaborative Research: Lipidomic Profiling, Dynamics, and Functions of Head-group Acylation of Membrane Lipids in Plant Stress Response."

Yang, Zhilong, University of Kansas Center for Research, Inc., \$2,500, "Identify Selectively Synthesized Proteins in Vaccinia Virus Infected Cells During the Virus-induced Host Shutoff."

Yang, Zhilong, US Department of Health and Human Services, \$244,779, "Host Innate Immune Response Induction and Shutoff During Poxvirus Infection."

Zeglin, Lydia H., National Science Foundation, \$117,948, "Microbial Mechanism of Drought Tolerance and the Implications for Grassland Soil Carbon Storage."

CHEMISTRY

Aakeroy, Christer B., US Department of Defense, \$156,600, "Theory and Experiment of Cocrystals: Principles, Synthesis and Properties."

Aikens, Christine M., US Department of Defense, \$67,491, "Foundations of Nanoscale Energy Transfer in Molecular Plasmonics."

Aikens, Christine M., US Department of Energy, \$115,918, "Understanding Electron Transfer in Plasmon-Enhanced Photocatalysis using Nonadiabatic Electron Dynamics."

Bossmann, Stefan, and Culbertson, Christopher T., National Science Foundation, \$172,500, "REU Site: Biosecurity Research Experience for Undergraduates in Chemistry at Kansas University."

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

Culbertson, Christopher T., and Bossmann, Stefan, National Science Foundation, \$172,500, "REU Site: Biosecurity Research Experience for Undergraduates in Chemistry at Kansas University."

Higgins, Daniel A., National Science Foundation, \$240,000, "Collaborative Research: Characterization of Functionally-Graded Sol-Gel-Derived Silica Films on Multiple Length Scales, from Single Molecules to Macroscopic Properties."

Hua, Duy H., US Department of Health and Human Services, \$10,000, "Synthesis and Quantification of TP70 and CP2 in Plasma and Tissues."

Jankowiak, Ryszard J., US Department of Energy, \$260,000, "Resonant and Non-resonant Hole-burning and Delta Fluorescence Line-narrowing Study of BCh1s in Excitonically Coupled Photosynthetic Systems."

Li, Jun, Kansas Board of Regents, \$25,000, "Nanostructured Solid-State Energy Storage Devices for Wide-Temperature Applications in Space Exploration."

Li, Jun, National Science Foundation, \$67,093, "Phase VI: Climate Change and Energy: Basic Science: Impacts, and Mitigation - Supplemental Funding."

Li, Jun, and Richt, Juergen (Diagnostic Medicine/Pathobiology), US Department of Homeland Security, "Portable Smart Platforms for Detection of Biological Pathogens and Chemicals."

Li, Ping, University of Kansas Center for Research, Inc., \$2,000, "Crystallization Efforts of Polyhydroxyalkanoate (PHA) Synthases."

Li, Ping, and **Liu, Weiwei**, US Department of Health and Human Services, \$32,500, "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, \$149,299, "Center for Basic Cancer Research: Fraternal Order of Eagles Fund."

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."

ENGLISH

Crosby, Mark C., **Karlin, Katherine**, and **Leader-Picone, Cameron**, Kansas Humanities Council, "Gordon Parks Digital Collection: The Learning Tree Module."

Karlin, Katherine, **Crosby, Mark C.**, and **Leader-Picone, Cameron**, Kansas Humanities Council, \$9,982, "Gordon Parks Digital Collection: The Learning Tree Module."

Leader-Picone, Cameron, **Crosby, Mark C.**, and **Karlin, Katherine**, Kansas Humanities Council, "Gordon Parks Digital Collection: The Learning Tree Module."

GEOGRAPHY

Goodin, Douglas G., and **Carraway, Kurt J.** (Salina Applied Aviation Research Center), US Department of the Interior, \$10,000, "Unmanned Aircraft Systems (UAS) Resource Management Operations: A proposal in Response to the Bureau of Land Management's Funding Opportunity."

Harrington Jr, John A., National Geographic Education Foundation, \$38,775, "Kansas 2014/2015 Alliance Grant."

McLauchlan, Kendra K., National Science Foundation, \$124,659, "RCN: The Novus Project for Integrating Paleo- and Neo-ecosystem Ecology."

McLauchlan, Kendra K., National Science Foundation, \$149,963, "SG: Continental and Century Scale Assessment of Forest Nitrogen Cycling in the United States Using Dendroisotopes."

GEOLOGY

Brueseke, Matthew E., National Science Foundation, \$173,117, "Collaborative Research: Investigating the Lost Arc: Geological Constraints on ~25 Million Years of Magmatism Along an Arc-transform Junction, Wrangell Volcanic Belt, Alaska."

Kirk, Matthew, National Science Foundation, \$119,505, "Kansas NSF EPSCoR: Experimental and Modeling Analysis of CO₂ as a Control on Microbial Activity in Anoxic Environments."

HISTORY

Breen, Louise A., and **Lynn-Sherow, Bonnie**, Kansas State University Foundation, \$50,000, "Chapman Center for Personnel."

Breen, Louise A., Kansas State University Foundation, \$39,000, "George Kren Fund."

Lynn-Sherow, Bonnie, Brunswick Corporation, \$9,000, "Brunswick Graduate Student Award in History."

Lynn-Sherow, Bonnie, and **Breen, Louise A.**, Kansas State University Foundation, \$50,000, "Chapman Center for Personnel."

MATHEMATICS

Albin, Nathan, and **Korten, Marianne**, National Science Foundation, "Collaborative Research: Prairie Analysis Seminar 2015-2017."

Auckly, David R., US Department of Defense, \$25,000, "The Navajo Nations Math Circles Project."

Bennett, Andrew G., **Allen, David B.** (Curriculum and Instruction), **Martinie, Sherri** (Curriculum and Instruction), and **Rumsey, Chepina W.** (Curriculum and Instruction), US Department of Education, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Bennett, Andrew G., **Allen, David S.** (Curriculum and Instruction), **Brown, Jonathan H.**, **Martinie, Sherri** (Curriculum and Instruction), and **Rumsey, Chepina W.** (Curriculum and Instruction), US Department of Education, "Improving Mathematics Instructions through Lesson Study (MILes)."

Brown, Jonathan H., **Allen, David S.** (Curriculum and Instruction), **Bennett, Andrew G.**, **Martinie, Sherri** (Curriculum and Instruction), and **Rumsey, Chepina W.** (Curriculum and Instruction), US Department of Education, "Improving Mathematics Instructions through Lesson Study (MILes)."

Firsova, Tanya, National Science Foundation, \$119,998, "Holomorphic Dynamics in One and Several Variables."

Hoehn, Gerald H., Simons Foundation, \$35,000, "Mathieu Moonshine and the Geometry of Hyperkaehler Manifolds."

Korten, Marianne, and **Albin, Nathan**, National Science Foundation, \$33,320, "Collaborative Research: Prairie Analysis Seminar 2015-2017."

Naibo, Virginia M., National Science Foundation, \$115,463, "Methods and Applications for Bilinear Operators."

Reznikoff, Sarah, Simons Foundation, \$35,000, "Combinatorially defined C*-algebras and interactions with Set Theory."

Spencer, Craig, US Department of Defense, \$20,000, "Applications of Harmonic Analysis to Diophantine Problems and Discrepancy Theory."

MUSIC

Pinkall, Bryan R., Master Teacher, Inc., \$17,355, "Summer Choral Institute."

PHYSICS

Ben-Itzhak, Itzhak, US Department of Energy, \$2,500,000, "Structure and Dynamics of Atoms. Ions, Molecules, and Surfaces."

Ben-Itzhak, Itzhak, National Science Foundation, \$2,322,959, "Collaborative Research: Imaging and Controlling Ultrafast Dynamics of Atoms, Molecules, and Nanostructures."

Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., Maravin, Yuri, and Ratra, Bharat, US Department of Energy, \$216,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Chakrabarti, Amitabha, and Sorensen, Christopher M., National Science Foundation, "Experimental and Theoretical Studies of Light Scattering from Irregularly Shaped Particles."

Corwin, Kristan L., and Flanders, Bret N., National Science Foundation, \$202,026, "REU Site: Physics at Kansas State University - Interactions of Matter, Light and Learning."

Corwin, Kristan L., and Washburn, Brian R., US Department of Defense, \$800,000, "Hollow Core Optical Fiber Gas Lasers (HOFGLAS): Toward Novel and Practical Systems in Fused Silica."

Esry, Brett D., US Department of Defense, \$41,528, "Ultracold Polar Molecules: New Phases of Matter for Quantum Information and Quantum Control."

Flanders, Bret N., and Corwin, Kristan L., National Science Foundation, \$202,026, "REU Site: Physics at Kansas State University - Interactions of Matter, Light and Learning."

Gollapinni, Sowjanya, and Horton-Smith, Glenn A., US Department of Energy, "2015 Intensity Frontier Fellow Program for Sowjanya Gollapinni."

Horton-Smith, Glenn A., and Gollapinni, Sowjanya, US Department of Energy, \$33,911, "2015 Intensity Frontier Fellow Program for Sowjanya Gollapinni."

Horton-Smith, Glenn A., Bolton, Timothy A., Ivanov, Andrew G., Maravin, Yuri, and Ratra, Bharat, US Department of Energy, \$216,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Ivanov, Andrew G., and Kaadze, Ketino, US Department of Energy, \$182,975, "LHC CMS Detector Upgrade FPIX Subsystem for 2014."

Ivanov, Andrew G., US Department of Energy, \$150,000, "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, \$216,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Kaadze, Ketino, US Department of Energy, \$110,692, "LHC CMS Detector Upgrade HCAL Subsystem."

Khalil, Sadia, US Department of Energy, \$43,633, "Fermilab Partial Salary Support for Dr. Sadia Khalil to Collaborate on the CMS Experiment."

Lin, Chii-Dong, US Department of Defense, \$40,000, "Isolated Soft-X-ray Attosecond Pulse Generation Using Synthesized Strong-Field Infrared Pulses."

Lin, Chii-Dong, US Department of Energy, \$145,000, "Time-Resolved Imaging of Molecules by High-Order Harmonics and Ultra Short Rescattering Electrons."

Maravin, Yuri, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., and Ratra, Bharat, US Department of Energy, \$216,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Ratra, Bharat, National Science Foundation, \$13,763, "Quarknet."

Ratra, Bharat, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., and Maravin, Yurii, US Department of Energy, \$216,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

Rebello, Nobel S., Sayre, Eleanor C., and Zollman, Dean A., National Science Foundation, "Foundational Research on Problem Mathematization in Undergraduate Physics."

Rebello, Nobel S., National Science Foundation, \$41,449, "Science Inquiry Using Physical and Virtual Experiments: Systematic Investigation of Issues and Conditions for Learning."

Sayre, Eleanor C., Hsu, William H. (Computing and Information Sciences), and **Vasserman, Eugene** (Computing and Information Sciences), National Science Foundation, \$10,691, "Collaborative Research: Community Implementation: WIDER: Data Explorer and Assessment Resources for Faculty."

Sayre, Eleanor C., Rebello, Nobel S., and Zollman, Dean A., National Science Foundation, \$300,250, "Foundational Research on Problem Mathematization in Undergraduate Physics."

Schmit, Jeremy D., and Chen, Jianhan (Biochemistry), US Department of Health and Human Services, \$280,656, "Theoretical and Computational Modeling of Amyloid Aggregation."

Sorensen, Christopher M., Kansas State University Research Foundation, \$14,800, "Direct Dissolution Synthesis of Nanoparticles."

Sorensen, Christopher M., and Chakrabarti, Amitabha, National Science Foundation, \$114,156, "Experimental and Theoretical Studies of Light Scattering from Irregularly Shaped Particles."

Szozskiewicz, Robert, National Science Foundation, \$19,962, "Controlling the Chemistry at the Nanoscale: Parallelization, Robustness, and Registration."

Thumm, Uwe, National Science Foundation, \$90,000, "Attosecond Time-resolved Quantum Dynamics: From Atoms Towards Nanostructures."

Washburn, Brian R., and Corwin, Kristan L., US Department of Defense, "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, "Foundational Research on Problem Mathematization in Undergraduate Physics."

PSYCHOLOGICAL SCIENCES

Cain, Mary E., US Department of Health and Human Services, \$72,938, "The Effects of Differential Rearing on Glutamate Homeostasis and Addiction."

Loschky, Lester C., US Department of Defense, \$177,244, "A New Measure of the Useful Field of View (UFOV): The Gaze-Contingent Peripheral Blur Detection Task."

Monaco, Gregory E., and Young, Michael, Great Plains Network Consortium, \$258,538, "Funding for Executive Director - Great Plains Network."

Monaco, Gregory E., National Science Foundation, \$129,880, "CC*IIIE Region: Leveraging Partnerships Across the Great Plains to Enhance Campus Advanced Networking and CI Expertise."

Young, Michael, and Monaco, Gregory E., Great Plains Network Consortium, "Funding for Executive Director - Great Plains Network."

Young, Michael, Hershey Company, \$50,000, "Examining the Factors that Millennials Use when Choosing Candy."

SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS

Furnas, Kelly R., and Wolgast, Stephen L., Collegian Media Group, "Student Publications Positions."

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., and Furnas, Kelly R., Collegian Media Group, \$52,992, "Student Publications Positions."

SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

Alfonso Durruty, Marta P., National Geographic Society, \$49,680, "Uncovering the Genetic Legacy of Fueguians and Patagonians through Modern and Ancient DNA Analyses."

Flora, Cornelia, US Department of Agriculture, \$78,702, "Networks and Worldview Shaping New Value Chains in Producing and Processing Oil Seeds for Jet Fuel."

Logan, Brad R., and Ritterbush, Lauren W., US Department of the Interior, \$13,314, "Phase III National Register of Historic Places Evaluation of the Sam Kimble Site (14RY201), a Wildcat Creek Valley Archaeological Site, Riley County, Kansas."

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, \$114,205, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Ritterbush, Lauren W., and Logan, Brad R., US Department of the Interior, \$2,350, "Phase III National Register of Historic Places Evaluation of the Sam Kimble Site (14RY201), a Wildcat Creek Valley Archaeological Site, Riley County, Kansas."

Roper, Donna C., Trileaf Corporation, \$838, "Archaeological Re-examination of Trileaf Cell Towers Project."

Roper, Donna C., Trileaf Corporation, \$10,500, "Trileaf Cell Towers Project."

Roper, Donna C., US Department of the Interior, \$62,359, "Testing Archeological Sites 25FT56/130, 25FT353, 25FT354, & 25FT355, Hugh Butler Lake, Nebraska; Completion of Testing."

Sanderson, Matthew R., State Association of Kansas Watersheds, \$27,188, "Kansas Watershed Districts: Fast, Present, and Future."

Wesch, Michael, Ou, Xinming (Simon) (Computing and Information Sciences), and **Vaile, Robert S.** (Information Security & Compliance), National Science Foundation, \$3,200, "TWC SBE TTP: Medium: Collaborative: Bringing Anthropology into Cybersecurity."

STATISTICS

Bello, Nora M., Cernicchiaro, Natalia (Diagnostic Medicine/Pathobiology), **Larson, Robert L.** (Clinical Sciences), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), **Schroeder, Ted C.** (Agricultural Economics), and **White, Bradley J.** (Clinical Sciences), US Department of Agriculture, \$34,067, "Risk Management Strategies to Reduce the Impacts of Bovine Respiratory Disease Complex in Commercial Feeder Cattle."

Gadbury, Gary L., and Welti, Ruth (Biology), National Science Foundation, \$17,456, "Collaborative Research: Lipidomic Profiling, Dynamics, and Functions of Head-group Acylation of Membrane Lipids in Plant Stress Response."

Yao, Weixin, National Science Foundation, \$35,618, "Collaborative Research: Information Matrix Analysis for Nonparametric Multivariate Problems."

COLLEGE OF BUSINESS ADMINISTRATION

MARKETING

Deeter-Schmelz, Dawn R., Morgan, Heather M. (Advanced Manufacturing Institute), **Nwadike, Londa S.** (Director of Cooperative Extension), and **Procter, David E.** (Center for Engagement and Community Development), US Department of Agriculture, \$21,780, "Rural Business Enterprise Grant - E-Commerce and Marketing Assistance."

COLLEGE OF EDUCATION

CURRICULUM AND INSTRUCTION

Allen, David B., Bennett, Andrew G. (Mathematics), **Martinie, Sherri**, and **Rumsey, Chepina W.**, US Department of Education, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Allen, David S., Bennett, Andrew G. (Mathematics), **Brown, Jonathan H.** (Mathematics), **Martinie, Sherri**, and **Rumsey, Chepina W.**, US Department of Education, "Improving Mathematics Instructions through Lesson Study (MILes)."

Martinie, Sherri, Allen, David B., Bennett, Andrew G. (Mathematics), and **Rumsey, Chepina W.**, US Department of Education, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Martinie, Sherri, Allen, David S., Bennett, Andrew G. (Mathematics), **Brown, Jonathan H.** (Mathematics), and **Rumsey, Chepina W.**, US Department of Education, "Improving Mathematics Instructions through Lesson Study (MILes)."

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**, US Department of Education, \$105,268, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Rumsey, Chepina W., Allen, David S., Bennett, Andrew G. (Mathematics), **Brown, Jonathan H.** (Mathematics), and **Martinie, Sherri**, US Department of Education, "Improving Mathematics Instructions through Lesson Study (MILes)."

DEAN OF EDUCATION

Dalton, Andrew, and Herrera, Socorro G., US Department of Education, \$419,782, "KANCO 2."

Havlicek, Barbara J., Kansas Foundation for Agriculture in the Classroom, \$142,276, "Kansas Foundation for Agriculture in the Classroom."

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

Herrera, Socorro G., and **Mercer, Debbie K.**, Ministry of Education, Ecuador, "Go Teacher Program."

Herrera, Socorro G., US Department of Education, \$468,894, "DESTINY 2."

Herrera, Socorro G., and **Dalton, Andrew**, US Department of Education, "KANCO 2."

Herrera, Socorro G., US Department of Education, \$399,974, "Project KORE."

Mercer, Debbie K., and **Herrera, Socorro G.**, Ministry of Education, Ecuador, \$7,223,966, "Go Teacher Program."

Middendorf, B. Jan, US Department of Defense, \$225,000, "Braiding STEM Early."

Rankin, Charles I., US Department of Education, \$651,225, "Midwest Equity Assistance Center."

Rumsey, Chepina W., Allen, David B. (Curriculum and Instruction), **Bennett, Andrew G.** (Mathematics), and **Martinie, Sherri** (Curriculum and Instruction), US Department of Education, \$105,268, "Improving Mathematics Instruction through Lesson Study (MILes) Year 3."

Rumsey, Chepina W., Allen, David S. (Curriculum and Instruction), **Bennett, Andrew G.** (Mathematics), **Brown, Jonathan H.** (Mathematics), and **Martinie, Sherri** (Curriculum and Instruction), US Department of Education, \$16,713, "Improving Mathematics Instructions through Lesson Study (MILes)."

Shuman, Cindy, National Science Foundation, \$88,276, "Evaluation Services, Track 1 Experimental Program to Stimulate Competitive Research (EPSCoR)."

Shuman, Cindy, National Science Foundation, \$26,272, "External Evaluation of Iowa NSF EPSCoR."

Shuman, Cindy, National Science Foundation, \$75,000, "Louisiana Track 3: STEM- Discovery - Evaluation."

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 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, \$60,000, "Building Integrated Pathways to Independence for Diverse Biomedical Researchers (Project Pathways) - Evaluation."

Shuman, Cindy, US Department of Health and Human Services, \$29,500, "Medicare Rural Hospital Flexibility Program (FLEX)."

Spears, Jacqueline D., Esri, \$5,720 (includes \$720 from Third Party Match), "Using ArcGIS Online to Teach Climate Science and Climate Change."

Spears, Jacqueline D., National Science Foundation, \$11,900, "Teacher Workshop Program."

Thurston, Linda P., National Science Foundation, \$15,521, "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

Rankin, Charles I., US Department of Education, "Midwest Equity Assistance Center."

SPECIAL EDUCATION, COUNSELING, AND STUDENT AFFAIRS

Hughey, Judith K., US Department of Education, \$27,020, "Summer Academy for School Counselors 2015."

COLLEGE OF ENGINEERING

ADVANCED MANUFACTURING INSTITUTE

Kramer, Bradley A., and **Tucker, Jeffrey W.**, Kansas Department of Commerce, "Project 17 Kansas Department of Commerce Matching Funds."

Kramer, Bradley A., and **Tucker, Jeffrey W.**, Multi-Sponsor, \$329,702, "Advanced Manufacturing Institute - Manufacturing Learning Center."

Kramer, Bradley A., and **Tucker, Jeffrey W.**, US Department of Commerce, \$38,500 (includes \$10,000 from In Kind Contribution KSU IC, and \$3,500 from In Kind Contribution KSU Olathe), "Kansas State University Olathe Innovation Accelerator University Center Program Grant."

Morgan, Heather M., Deeter-Schmelz, Dawn R. (Marketing), **Nwadike, Londa S.** (Director of Cooperative Extension), and **Procter, David E.** (Center for Engagement and Community Development), US Department of Agriculture, \$36,630, "Rural Business Enterprise Grant - E-Commerce and Marketing Assistance."

Tucker, Jeffrey W., Kansas Department of Commerce, \$100,000, "KDOC Innovation Growth Program."

Tucker, Jeffrey W., and **Kramer, Bradley A.**, Kansas Department of Commerce, \$120,000 (includes \$120,000 from KS Dept. of Commerce In-Kind), "Project 17 Kansas Department of Commerce Matching Funds."

Tucker, Jeffrey W., and **Kramer, Bradley A.**, Multi-Sponsor, "Advanced Manufacturing Institute - Manufacturing Learning Center."

Tucker, Jeffrey W., and **Kramer, Bradley A.**, US Department of Commerce, \$346,500 (includes \$90,000 from In Kind Contribution KSU IC, and \$31,500 from In Kind Contribution KSU Olathe), "Kansas State University Olathe Innovation Accelerator University Center Program Grant."

Tucker, Jeffrey W., US Department of Transportation, \$381,657, "Active Suspension Control and Positioning - A Stewart Platform."

BIOLOGICAL AND AGRICULTURAL ENGINEERING

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

Barnes, Philip L., Aguilar, Jonathan P. (Southwest Area Office), **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), **Rogers, Danny H.**, and **Zukoff, Sarah N.** (Southwest Area Office), US Agency for International Development, "Training for Pakistan Proposal: On-Farm Water Management."

Bhadra, Rumela, Ambrose, R. P. Kingsly (Grain Science and Industry), and **Boac, Josephine M.** (Grain Science and Industry), The Andersons, Inc., "Determining Time, Aeration, and Loading Cycle Effects on Grain Packing."

Ebert, Kerri L., and **Hadley, Gregg L.** (Agriculture and Natural Resources), US Department of Agriculture, \$50,000, "Kansas SARE - Kansas 2015 PDP."

Harner III, Joseph P., and **He, Mei**, US Department of Health and Human Services, \$10,056, "Start-up Package Support - Mei He."

He, Mei, Kansas State University Foundation, \$27,500, "Cancer Research - Olathe."

He, Mei, and **Harner III, Joseph P.**, US Department of Health and Human Services, \$10,056, "Start-up Package Support - Mei He."

Maghirang, Ronaldo G., US Department of Agriculture, \$22,199, "Mechanistic Modeling of Wind Barriers and Grain Commingling Using CFD and DEM."

Moore, Trisha L., City of Wichita, KS, \$24,385, "Consultant Services for an Offsite BMP Evaluation Plan."

Rogers, Danny H., Aguilar, Jonathan P. (Southwest Area Office), **Ciampitti, Ignacio** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Lin, Xiaomao** (Agronomy), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), and **Roozeboom, Kraig L.** (Agronomy), Kansas Corn Commission, \$7,500, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

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, \$29,914, "Training for Pakistan Proposal: On-Farm Water Management."

Sharda, Ajay, Peterson, Dallas E. (Agronomy), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Lockheed Martin Corporation, \$2,554, "Develop a Plan for Experiments Relating to a Spectral Sensor for Weed Recognition Analysis."

Sharda, Ajay, US Department of Agriculture, \$10,000, "Developing a Thermal Imaging System for On-Demand Corn Temperature Profiles for Variable Rate Irrigation - Devin Mangus."

Sheshukov, Aleksey Y., and Kisekka, Isaya (Southwest Research Extension Center), Vietnam Education Foundation, \$28,250, "Vietnam Education Foundation Fellowship."

Slocombe, John W., US Department of Agriculture, \$180,000, "Kansas AgrAbility Project."

Wang, Donghai, United Sorghum Checkoff Program, \$25,000, "Evaluation of the Potential of Multi-Seeded Mutants for Bioethanol Production."

Wang, Donghai, US Department of Agriculture, \$5,000, "Acquisition of Goods and Services."

Wang, Donghai, US Department of Agriculture, \$72,000, "Spectroscopic Measurement of Biological Materials."

Wilken, Lisa R., National Science Foundation, \$90,591, "Integrated Process Development for Protein and Oil Recovery from Microalgae Biomass."

CENTER FOR HAZARDOUS SUBSTANCE RESEARCH

Erickson, Larry E., and Pahwa, Anil (Electrical and Computer Engineering), Black & Veatch Corporation, \$30,000, "Building a World of Difference with Solar Powered Charge Stations for Electric Vehicles."

Leven, Blase A., US Department of Defense, \$18,000, "Evaluations for Airburst Nonlethal Weapon System Program."

CHEMICAL ENGINEERING

Edgar, James H., Lawrence Livermore National Laboratory, \$9,997, "Epitaxial Growth of Icosahedral Boron Phosphide."

Edgar, James H., National Science Foundation, \$349,526, "Scandium Nitride Crystal Growth and Characterization."

Erickson, Larry E., and Hohn, Keith L., National Science Foundation, "REU Site: Earth, Wind, and Fire: Sustainable Energy in the 21st Century."

Hohn, Keith L., INVISTA, \$94,171, "Impact of Amines on Catalytic Dehydration of 2,3butanediol to 1,3-butadiene."

Hohn, Keith L., and Erickson, Larry E., National Science Foundation, \$361,264, "REU Site: Earth, Wind, and Fire: Sustainable Energy in the 21st Century."

Hohn, Keith L., Pipeline Research Council International, Inc., \$58,308, "Modeling of NSCR Performance with Exhaust Mixtures from Natural Gas-Fueled Engines."

Liu, Bin, National Science Foundation, \$115,672, "Determination of the Molecular Structures of Cu/Fe-modified ZSM-5 Catalysts for Methane-to-methanol Conversions from First- principles Method."

Rezac, Mary E., National Science Foundation, \$49,998, "FEW Workshop: Water- and Energy- efficient Food Production: Solutions for America's Bread Basket."

Schlup, John R., and Eckels, Steven J. (Institute for Environmental Research), Hemlock Semiconductor Corporation, \$45,500, "Economic and Environmental Implications of Implementing Alternate Refrigerants for R-22 for Low to Medium Temperature Chiller Application in a Large Industrial Setting."

CIVIL ENGINEERING

Dissanayake, Sunanda, Kansas Department of Transportation, \$69,000, "Aging Road User Survey and Crash Analysis to Identify Issues and Applicable Improvement Strategies for Kansas Conditions."

Dissanayake, Sunanda, and **Fitzsimmons, Eric J.**, Kansas Department of Transportation, \$22,500, "Demonstration and Development of an Implementation Plan to Integrate the United States Road Assessment Program (USRAP) into Existing Kansas Highway Safety Programs."

Fitzsimmons, Eric J., and **Dissanayake, Sunanda**, Kansas Department of Transportation, \$27,499, "Demonstration and Development of an Implementation Plan to Integrate the United States Road Assessment Program (USRAP) into Existing Kansas Highway Safety Programs."

Fitzsimmons, Eric J., Kansas Department of Transportation, \$5,500, "Developing a Decision Matrix to Improve Rural Road Safety by Investigating Roadside Countermeasure Potential Benefits and Costs."

Fitzsimmons, Eric J., Kansas Department of Transportation, \$1,000, "Improving the Traffic Safety Culture in Kansas."

Fitzsimmons, Eric J., Transportation Research Board, \$24,939, "NCHRP 03-111 Effectiveness of Work Zone Transportation Management Plan Strategies."

Hossain, Mustaque A., Kansas Department of Transportation, \$20,000, "Administration of KDOT/KTRAN Program."

Hossain, Mustaque A., US Department of Transportation, \$555,000, "Implementation of the AASHTO Mechanistic-Empirical Design Guide (AASHTOWare Pavement me Design) for Pavement Rehabilitation."

Kulesza, Stacey, Kansas Department of Transportation, \$68,000, "Characterizing Soil Erosion Potential Using Electrical Resistivity Imaging."

Kulesza, Stacey, Kansas Department of Transportation, \$60,000, "Electrical Resistivity Measurement of MSE Wall Backfill."

Mladenov, Natalie, National Science Foundation, \$249,304, "IRES: Sustainable Sanitation: Innovative Solutions in Wastewater Treatment and Resource Recovery in Under- Served Urban Communities in South Africa."

Peterman, Robert J., Kansas Department of Transportation, \$84,464, "Comparison of NU Girders and K-Girders for Use in Kansas Pretensioned Concrete Bridges."

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, \$157,590, "Developing Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

Rasheed, Hayder A., Kansas Department of Transportation, \$51,000, "Rational Load Rating of Deck-Girder Bridge Spans with Cracked Girder Ends."

Riding, Kyle, Kansas Department of Transportation, \$90,000, "Kansas Sustainable Concrete Pavements Initiative Phase II: Acceleration of Aggregate Qualification Procedures."

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, "Developing

Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

Steward, David R., National Science Foundation, \$21,973, "RAPID: Toward an Improved Understanding of Reactive Organic Carbon Sources and Arsenic Mobility in Reducing Aquifers."

Steward, David R., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Golden, Bill B.** (Agricultural Economics), **Holman, Johnathon D.** (Southwest Research Extension Center), **Lamm, Freddie R.** (Northwest Research Extension Center), **Pagadala, P. V. Vara** (Agronomy), **Schlegel, Alan J.** (Southwest Research Extension Center), and **Swamy, Aavudai Anandhi** (Agronomy), US Department of Agriculture, "Improving Water Productivity and New Water Management Technologies to Sustain Rural Economies - KSU."

Stokes, Robert W., The Land Institute, \$23,188, "Non-Legume Sources of Nitrogen Fixation 2015."

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., Akhunov, Eduard D. (Plant Pathology), **Brown, Susan J.** (Biology), **Poland, Jesse A.** (Plant Pathology), and **Welch, Stephen M.** (Agronomy), National Science Foundation, \$57,875, "CC-IIE Networking Infrastructure: KGEN: Next-generation Networking Environments for Biological and Agricultural Data-driven Research at Kansas State University."

Andresen, Daniel A., Brown, Susan J. (Biology), **Caragea, Doina, Ou, Xinming (Simon)**, and **Poland, Jesse A.** (Plant Pathology), National Science Foundation, \$195,000, "MRI: Acquisition of an Adaptive Data Cluster for Data-intensive Applications in Science and Engineering."

Andresen, Daniel A., Hatcliff, John M., Ranganath, Venkatesh, Robby, , Vasserman, Eugene, and **Warren, Steven** (Electrical and Computer Engineering), US Department of Health and Human Services, "Development of a Prototype Healthcare Intranet for Improved Health Outcomes."

Caragea, Doina, Andresen, Daniel A., Brown, Susan J. (Biology), **Ou, Xinming (Simon)**, and **Poland, Jesse A.** (Plant Pathology), National Science Foundation, "MRI: Acquisition of an Adaptive Data Cluster for Data-intensive Applications in Science and Engineering."

Caragea, Doina, Das, Sanjoy (Electrical and Computer Engineering), **Kluitenberg, Gerard J.** (Agronomy), and **Welch, Stephen M.** (Agronomy), National Science Foundation, \$9,421, "TRMS: Agroecological Annotation of Gene Function and Computational Analysis of Gene Networks."

DeLoach, Scott A., and **Ou, Xinming (Simon)**, US Department of Defense, \$397,952, "Understanding and Quantifying the Impact of Moving Target Defenses on Computer Networks."

Hatcliff, John M., Ranganath, Venkatesh, and **Robby, -**, National Science Foundation, \$80,000, "FDA SIR: Compositional Approaches to Safety and Risk Management for Medical Application Platforms."

Hatcliff, John M., Andresen, Daniel A., Ranganath, Venkatesh, Robby, , Vasserman, Eugene, and **Warren, Steven** (Electrical and Computer Engineering), US Department of Health and Human Services, \$85,000, "Development of a Prototype Healthcare Intranet for Improved Health Outcomes."

Hsu, William H., Sayre, Eleanor C. (Physics), and **Vasserman, Eugene**, National Science Foundation, \$7,429, "Collaborative Research: Community Implementation: WIDER: Data Explorer and Assessment Resources for Faculty."

Hsu, William H., US Department of Energy, \$80,000, "Capacity-Oriented Relational Information Extraction from Public Domain Text Sources."

Neilsen, Mitchell L., Sandia National Laboratories, \$50,000, "Interface Development for Thermal Battery Models."

Neilsen, Mitchell L., US Department of Agriculture, \$35,000, "Enhancement of Software Tools for Predicting Embankment Erosion of Earthen Dams."

Ou, Xinming (Simon), Andresen, Daniel A., Brown, Susan J. (Biology), **Caragea, Doina**, and **Poland, Jesse A.** (Plant Pathology), National Science Foundation, "MRI: Acquisition of an Adaptive Data Cluster for Data-intensive Applications in Science and Engineering."

Ou, Xinming (Simon), Vaile, Robert S. (Information Security & Compliance), and **Wesch, Michael** (Sociology, Anthropology, and Social Work), National Science Foundation, \$9,600, "TWC SBE TTP: Medium: Collaborative: Bringing Anthropology into Cybersecurity."

Ou, Xinming (Simon), and **DeLoach, Scott A.**, US Department of Defense, "Understanding and Quantifying the Impact of Moving Target Defenses on Computer Networks."

Ranganath, Venkatesh, Hatcliff, John M., and **Robby, -**, National Science Foundation, "FDA SIR: Compositional Approaches to Safety and Risk Management for Medical Application Platforms."

Ranganath, Venkatesh, Andresen, Daniel A., Hatcliff, John M., Robby, , Vasserman, Eugene, and **Warren, Steven** (Electrical and Computer Engineering), US Department of Health and Human Services, "Development of a Prototype Healthcare Intranet for Improved Health Outcomes."

Robby, -, Hatcliff, John M., and **Ranganath, Venkatesh**, National Science Foundation, "FDA SIR: Compositional Approaches to Safety and Risk Management for Medical Application Platforms."

Robby, -, Andresen, Daniel A., Hatcliff, John M., Ranganath, Venkatesh, Vasserman, Eugene, and **Warren, Steven** (Electrical and Computer Engineering), US Department of Health and Human Services, "Development of a Prototype Healthcare Intranet for Improved Health Outcomes."

Singh, Gurdip, National Science Foundation, \$32,591, "National Science Foundation - Intergovernmental Personnel Act."

Vasserman, Eugene, National Science Foundation, \$88,239, "CAREER: Safety and Security for Next-generation World-scale Real-time Medical Systems."

Vasserman, Eugene, Hsu, William H., and **Sayre, Eleanor C.** (Physics), National Science Foundation, "Collaborative Research: Community Implementation: WIDER: Data Explorer and Assessment Resources for Faculty."

Vasserman, Eugene, Andresen, Daniel A., Hatcliff, John M., Ranganath, Venkatesh, Robby, -, and Warren, Steven (Electrical and Computer Engineering), US Department of Health and Human Services, "Development of a Prototype Healthcare Intranet for Improved Health Outcomes."

DEAN OF ENGINEERING

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

Darabi Sahneh, Faryad, and Scoglio, Caterina M., National Science Foundation, \$249,771, "CIF: Small: Spreading Processes over Multilayer and Interconnected Networks."

Darabi Sahneh, Faryad, and Scoglio, Caterina M., National Science Foundation, "SCH: RAPID: Effectiveness of Contact Tracing for Detection of Ebola Risk during Early Introduction of the Virus within the USA."

Das, Sanjoy, Caragea, Doina (Computing and Information Sciences), **Kluitenberg, Gerard J.** (Agronomy), and **Welch, Stephen M.** (Agronomy), National Science Foundation, \$51,144, "TRMS: Agroecological Annotation of Gene Function and Computational Analysis of Gene Networks."

Dyer, Stephen A., Institute of Electrical and Electronics Engineers, \$10,000, "Development of a Graduate-level "Sensors and Systems" Course."

Gruenbacher, Don M., and **Schulz, Noel N.**, Kansas State University Foundation, \$98,615, "Power Affiliates."

Miller, Ruth D., Spaulding, Gregory L. (Mechanical and Nuclear Engineering), and **Wang, Youqi** (Mechanical and Nuclear Engineering), National Renewable Energy Laboratory, \$3,750, "Kansas State University Wind Turbine Design Team."

Miller, Ruth D., and **White, Warren J.** (Mechanical and Nuclear Engineering), National Renewable Energy Laboratory, \$4,000, "Kansas State University Wind Turbine Design Team 2016."

Miller, Ruth D., US Department of Energy, \$7,500, "Wind Turbine Data Systems Support."

Pahwa, Anil, and **Erickson, Larry E.** (Center for Hazardous Substance Research), Black & Veatch Corporation, \$10,000, "Building a World of Difference with Solar Powered Charge Stations for Electric Vehicles."

Prakash, Punit, Kansas State University Foundation, \$11,000, "EEC Cancer Center Research."

Rys, Andrew, and **Rys, Malgorzata J.** (Industrial and Manufacturing Systems Engineering), Kansas Department of Transportation, \$28,000, "Study of UAVs Applications that Support KDOT's Tasks to Improve Efficiency, Safety and Cost Reduction."

Schulz, Noel N., and **Gruenbacher, Don M.**, Kansas State University Foundation, \$98,615, "Power Affiliates."

Scoglio, Caterina M., and **Darabi Sahneh, Faryad**, National Science Foundation, \$249,771, "CIF: Small: Spreading Processes over Multilayer and Interconnected Networks."

Scoglio, Caterina M., and **Darabi Sahneh, Faryad**, National Science Foundation, \$137,209, "SCH: RAPID: Effectiveness of Contact Tracing for Detection of Ebola Risk during Early Introduction of the Virus within the USA."

Scoglio, Caterina M., US Department of Agriculture, \$151,048, "Modeling Japanese Encephalitis in US using Interconnected Networks."

Scoglio, Caterina M., **Brase, Gary** (Psychological Sciences), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), and **Schroeder, Ted C.** (Agricultural Economic), State of Kansas - KSU Global Food Systems Program (Internal Project), "Beefing up the Beef Transport System: Multi-College Initiative toward Resilient Interdependent Beef Production System and Transport Infrastructure."

Warren, Steven, Andresen, Daniel A. (Computing and Information Sciences), **Hatcliff, John M.** (Computing and Information Sciences), **Ranganath, Venkatesh** (Computing and Information Sciences), **Robby, -** (Computing and Information Sciences), and **Vasserman, Eugene** (Computing and Information Sciences), US Department of Health and Human Services, \$15,000, "Development of a Prototype Healthcare Intranet for Improved Health Outcomes."

INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

Ben-Arieh, David H., Via Christi Regional Medical Center, Inc., \$57,283, "Throughput Enhancement in the Mercy Emergency Department."

Chang, Shing I., and **Rys, Malgorzata J.**, US Department of Veterans Affairs, "Application of Human Reliability Analysis (HRA) Techniques to Prevent Healthcare-associated Infections."

Rys, Malgorzata J., and **Rys, Andrew** (Electrical and Computer Engineering), Kansas Department of Transportation, \$42,000, "Study of UAVs Applications that Support KDOT's Tasks to Improve Efficiency, Safety and Cost Reduction."

Rys, Malgorzata J., and **Chang, Shing I.**, US Department of Veterans Affairs, \$83,562, "Application of Human Reliability Analysis (HRA) Techniques to Prevent Healthcare- associated Infections."

Wu, Chih-Hang, Beck, B. Terry (Mechanical and Nuclear Engineering), **Peterman, Robert J.** (Civil Engineering), and **Riding, Kyle** (Civil Engineering), US Department of Transportation, \$78,795, "Developing Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

INSTITUTE FOR ENVIRONMENTAL RESEARCH

Eckels, Steven J., and **McCullough, Elizabeth A.**, Centers for Disease Control and Prevention, "Evaporative Resistance Properties of Fabrics Used in Isolation Gowns."

Eckels, Steven J., and **Schlup, John R.** (Chemical Engineering), Hemlock Semiconductor Corporation, \$45,500, "Economic and Environmental Implications of Implementing Alternate Refrigerants for R-22 for Low to Medium Temperature Chiller Application in a Large Industrial Setting."

Eckels, Steven J., and **McCullough, Elizabeth A.**, Multi-Sponsor, \$10,200, "Thermal Properties of Textile Products."

McCullough, Elizabeth A., and **Eckels, Steven J.**, Centers for Disease Control and Prevention, \$9,375, "Evaporative Resistance Properties of Fabrics Used in Isolation Gowns."

McCullough, Elizabeth A., and **Eckels, Steven J.**, Multi-Sponsor, "Thermal Properties of Textile Products."

KANSAS INDUSTRIAL EXTENSION SERVICES

Carter, David A., and **Snyder, Kristina E.**, US Department of State, \$248,955 (includes \$2,000 from City of Manhattan, \$300 from Manhattan Konza Rotary-Closing Ceremony, \$600 from Max Fitness, \$3,900 from National Pollution Prevention Roundtable, \$1,210 from Sunset Zoo, and \$1,500 from Wolfe Creek Nuclear Power), "Summer Institute on Environmental Stewardship - FY 2015."

Carter, David A., and **Larson, Nancy J.**, US Environmental Protection Agency, "Intern Programs Partner to Reassess P2 Implementation and Study Related Motivating Drivers."

Carter, David A., and **Larson, Nancy J.**, US Environmental Protection Agency, "Kansas Pollution Prevention Grants - 2014 (P2)."

Carter, David A., Wolf Creek Nuclear Operating Corporation, \$9,039, "Pollution Prevention Student Intern Program 2015."

Goode, Barbara L., US Department of Agriculture, \$26,182 (includes \$1,296 from Kitchen 4 Hire), "Assessment of the Salina Area Food System."

Goode, Barbara L., US Environmental Protection Agency, \$4,618, "Environmental Sustainability for the Salina, Kansas Community Level II."

Hamel, Ryan J., and Larson, Nancy J., US Department of Agriculture, \$53,000, "K- State and Partners Work to Keep Toxic Metals Out of Landfills."

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, "Radon Projects for Kansas."

Larson, Nancy J., Kansas Department of Health and Environment, \$224,000, "Small Business Environmental Assistance Program 2015."

Larson, Nancy J., and Hamel, Ryan J., US Department of Agriculture, "K-State and Partners Work to Keep Toxic Metals Out of Landfills."

Larson, Nancy J., and Carter, David A., US Environmental Protection Agency, \$11,604 (includes \$500 from In-Kind Contribution), "Intern Programs Partner to Reassess P2 Implementation and Study Related Motivating Drivers."

Larson, Nancy J., and Carter, David A., US Environmental Protection Agency, \$74,548, "Kansas Pollution Prevention Grants - 2014 (P2)."

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, \$150,000, "Radon Projects for Kansas."

Snead, Bruce C., US Environmental Protection Agency, \$5,400 (includes \$2,700 from In Kind Support), "Training for the Nebraska State Radon Program 2014-15."

Snyder, Kristina E., and Carter, David A., US Department of State, "Summer Institute on Environmental Stewardship - FY 2015."

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), **Riding, Kyle** (Civil Engineering), and **Wu, Chih-Hang** (Industrial and Manufacturing Systems Engineering), US Department of Transportation, \$78,795, "Developing Qualification Tests to Ensure Proposer Selection and Interaction of Pretensioned Concrete Railroad Tie Materials."

Bellinger, Steven L., McGregor, Douglas S., and Shultis, J. Kenneth, US Department of Defense, \$171,141, "Advanced Trenched Structure for Solid-State Neutron Detectors."

Betz, Amy R., and Derby, Melanie M., National Science Foundation, \$9,500, "EAGER: Control and Mitigation of Frost Formation using Mixed Hydrophilic and Hydrophobic Surfaces."

Betz, Amy R., Geuther, Jeffrey A., and Hosni, Mohammad H., US Nuclear Regulatory Commission, \$87,426, "Development of an Interactive Nuclear Power Systems Laboratory Class."

Bindra, Hitesh, US Department of Energy, \$9,999, "A Comparative Study on the Adoption of Thermal Energy Storage or Electrical Energy Storage for Nuclear Power Plants."

Bindra, Hitesh, and Roberts, Jeremy A., US Department of Energy, "Fuel Cladding Analysis Tool based on Coupled Neutronics and Thermal-hydraulics."

Bindra, Hitesh, Dunn, William L., and Roberts, Jeremy A., US Nuclear Regulatory Commission, "Kansas State University Nuclear Research Fellowship Program."

Derby, Melanie M., Am. Soc. Heating, Refrigerating & Air-Cond Engineers, Inc., \$54,210, "TRP-1630, Update the Scientific Evidence for Specifying Lower Limit Relative Humidity Levels for Comfort, Health and IEQ in Occupied Spaces - Kansas State University."

Derby, Melanie M., and Betz, Amy R., National Science Foundation, "EAGER: Control and Mitigation of Frost Formation using Mixed Hydrophilic and Hydrophobic Surfaces."

Derby, Melanie M., OneSubsea Corporate Technology, \$99,485, "Oil-water Separation Utilizing Surface Tension Effects in Horizontal Mini-channels."

Dunn, William L., Shultis, J. Kenneth, and Ugorowski, Philip B., US Department of Energy, \$143,563, "Proposal for a Consortium for Nonproliferation-Enabling Capabilities."

Dunn, William L., Bindra, Hitesh, and Roberts, Jeremy A., US Nuclear Regulatory Commission, \$396,740, "Kansas State University Nuclear Research Fellowship Program."

Geuther, Jeffrey A., McGregor, Douglas S., Roberts, Jeremy A., and Ugorowski, Philip B., US Department of Energy, \$93,947, "Develop an Active Sensor Array Prototype for Knolls Atomic Power Laboratory."

Geuther, Jeffrey A., McGregor, Douglas S., and Roberts, Jeremy A., US Nuclear Regulatory Commission, "Development of a High-Fidelity Model with Depleted Fuel for the Kansas State TRIGA Mark II Reactor."

Geuther, Jeffrey A., Betz, Amy R., and Hosni, Mohammad H., US Nuclear Regulatory Commission, "Development of an Interactive Nuclear Power Systems Laboratory Class."

Hosni, Mohammad H., US Department of Defense, \$10,000, "2014 University Engineering Alliance Summit."

Hosni, Mohammad H., US Department of Energy, \$5,000, "Nuclear Energy University Programs Fellowship and Scholarship Support."

Hosni, Mohammad H., Betz, Amy R., and Geuther, Jeffrey A., US Nuclear Regulatory Commission, "Development of an Interactive Nuclear Power Systems Laboratory Class."

Lease, Kevin B., National Aeronautics and Space Administration, \$49,683, "Kansas Space Grant Consortium."

McGregor, Douglas S., Bellinger, Steven L., and Shultis, J. Kenneth, US Department of Defense, \$171,141, "Advanced Trenched Structure for Solid-State Neutron Detectors."

McGregor, Douglas S., and Shultis, J. Kenneth, US Department of Defense, \$256,677, "Wearable Detection Device (WDD) - Low Visibility Gamma Neutron Sensor."

McGregor, Douglas S., and Ugorowski, Philip B., US Department of Energy, "Advanced Instrumentation for Transient Reactor Testing."

McGregor, Douglas S., Geuther, Jeffrey A., Roberts, Jeremy A., and Ugorowski, Philip B., US Department of Energy, \$93,947, "Develop an Active Sensor Array Prototype for Knolls Atomic Power Laboratory."

McGregor, Douglas S., and Ugorowski, Philip B., US Department of Energy, \$62,116, "Technical Assistance on High Temperature MPFD Development."

McGregor, Douglas S., Geuther, Jeffrey A., and Roberts, Jeremy A., US Nuclear Regulatory Commission, "Development of a High-Fidelity Model with Depleted Fuel for the Kansas State TRIGA Mark II Reactor."

Roberts, Jeremy A., Geuther, Jeffrey A., McGregor, Douglas S., and Ugorowski, Philip B., US Department of Energy, \$93,947, "Develop an Active Sensor Array Prototype for Knolls Atomic Power Laboratory."

Roberts, Jeremy A., and Bindra, Hitesh, US Department of Energy, \$8,000, "Fuel Cladding Analysis Tool based on Coupled Neutronics and Thermal-hydraulics."

Roberts, Jeremy A., Geuther, Jeffrey A., and McGregor, Douglas S., US Nuclear Regulatory Commission, \$224,935, "Development of a High-Fidelity Model with Depleted Fuel for the Kansas State TRIGA Mark II Reactor."

Roberts, Jeremy A., Bindra, Hitesh, and Dunn, William L., US Nuclear Regulatory Commission, "Kansas State University Nuclear Research Fellowship Program."

Shultis, J. Kenneth, Bellinger, Steven L., and McGregor, Douglas S., US Department of Defense, \$38,031, "Advanced Trenched Structure for Solid-State Neutron Detectors."

Shultis, J. Kenneth, and McGregor, Douglas S., US Department of Defense, \$64,169, "Wearable Detection Device (WDD) - Low Visibility Gamma Neutron Sensor."

Shultis, J. Kenneth, Dunn, William L., and Ugorowski, Philip B., US Department of Energy, \$57,425, "Proposal for a Consortium for Nonproliferation-Enabling Capabilities."

Singh, Gurpreet, National Science Foundation, \$500,000, "CAREER: Scalable Liquid Exfoliation Processing of Ultrathin Two-Dimensional Metal Dichalcogenides Nanosheets for Energy Storage Devices."

Singh, Gurpreet, OneSubsea Corporate Technology, \$85,739, "Investigation of Graphene Oxide Coating for Protection Against Seawater Corrosion."

Spaulding, Gregory L., Miller, Ruth D. (Electrical and Computer Engineering), and **Wang, Youqi**, National Renewable Energy Laboratory, "Kansas State University Wind Turbine Design Team."

Ugorowski, Philip B., and McGregor, Douglas S., US Department of Energy, \$217,176, "Advanced Instrumentation for Transient Reactor Testing."

Ugorowski, Philip B., Geuther, Jeffrey A., McGregor, Douglas S., and Roberts, Jeremy A., US Department of Energy, \$93,947, "Develop an Active Sensor Array Prototype for Knolls Atomic Power Laboratory."

Ugorowski, Philip B., Dunn, William L., and Shultis, J. Kenneth, US Department of Energy, \$86,138, "Proposal for a Consortium for Nonproliferation-Enabling Capabilities."

Ugorowski, Philip B., and McGregor, Douglas S., US Department of Energy, \$62,116, "Technical Assistance on High Temperature MPFD Development."

Wang, Youqi, National Aeronautics and Space Administration, \$25,000, "Numerical Simulation for 3-D Reinforced Jet Turbine Engine Vane Components."

Wang, Youqi, Miller, Ruth D. (Electrical and Computer Engineering), and **Spaulding, Gregory L.**, National Renewable Energy Laboratory, \$1,250, "Kansas State University Wind Turbine Design Team."

Wang, Youqi, US Department of Defense, \$84,638, "3D Woven Preform Software Design Tool(s) Development."

Wang, Youqi, US Department of Defense, \$150,000, "Ballistic Strength and Optimal Design of Single and Multi-Layer 3-D Fabrics."

Wang, Youqi, US Department of Defense, \$80,000, "Design Methodology for Accelerated Development of Manufacturing and Technical Readiness Levels for Integrally Fabricated 3D Woven C-C Aeroshells."

Wang, Youqi, US Department of Defense, \$25,000, "Improved Design and Manufacturing of High Pressure, Layflat Hose."

White, Warren J., and Miller, Ruth D. (Electrical and Computer Engineering), National Renewable Energy Laboratory, \$4,000, "Kansas State University Wind Turbine Design Team 2016."

COLLEGE OF HUMAN ECOLOGY

APPAREL, TEXTILES, AND INTERIOR DESIGN

Kaup, Migette L., and Doll, Gayle (Dean of Human Ecology), US Department of Health and Human Services, \$51,190, "PEAK 2.0 Evaluation."

DEAN OF HUMAN ECOLOGY

Buckwalter, John, and Gould, Carol A., AG*IDEA, \$24,848, "AG*IDEA Lead Institute."

Buckwalter, John, and Gould, Carol A., Great Plains IDEA Alliance, \$153,939, "Comprehensive Fiscal Sponsorship Agreement - Great Plains Interactive Distance Education Alliance."

Doll, Gayle, and Kaup, Migette L. (Apparel, Textiles, and Interior Design), US Department of Health and Human Services, \$51,190, "PEAK 2.0 Evaluation."

Gould, Carol A., and Buckwalter, John, AG*IDEA, \$24,848, "AG*IDEA Lead Institute."

Gould, Carol A., and Buckwalter, John, Great Plains IDEA Alliance, \$153,939, "Comprehensive Fiscal Sponsorship Agreement - Great Plains Interactive Distance Education Alliance."

HOSPITALITY MANAGEMENT AND DIETETICS

Hanson, Jennifer, and VerBrugge (Glasscock), Marlene K. (School of Family Studies and Human Services), US Department of Agriculture, \$227,273, "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, US Department of Agriculture, \$34,225, "Assessing Point-of-Service Systems in School Nutrition Programs in the United States."

Roberts, Kevin R., Gragg, Sara E. (Animal Sciences and Industry), and **Sauer, Kevin L.** (Human Nutrition), US Department of Agriculture, \$360,000, "Center of Excellence for Food Safety Research in Child Nutrition Programs."

Sauer, Kevin L., US Department of Agriculture, \$26,874, "Mitigating Risks of Foodborne Illness Associated with Handling Leafy Greens in Retail Foodservice Establishments Serving Aging Populations."

HUMAN NUTRITION

Chambers IV, Edgar, and Garcia, Jane M. (School of Family Studies and Human Services), Kansas State University Foundation, \$6,000, "Enhancing Nutrition Care for Older Adults with Impaired Swallowing."

Chambers IV, Edgar, and Chambers, Delores H., US Department of Agriculture, \$49,185, "Development and Evaluation of Science-Based Messages to Improve Consumers' Storage, Handling, and Preparation of Poultry and Poultry Products."

Chambers IV, Edgar, Alavi, Sajid (Grain Science and Industry), **Lilja, Nina K.** (International Agricultural Programs), **Lindshield, Brian L.,** and **Procter, Sandra B.,** US Department of Agriculture, "Novel Sorghum Based Fortified Food Blend for Infants and Young Children Nutrition."

Chambers IV, Edgar, Chambers, Delores H., and Koppel, Kadri, World Coffee Research, \$10,000, "SensCAFE (SENSory Coffee Analysis Flavor Evaluation)."

Chambers, Delores H., and Chambers IV, Edgar, US Department of Agriculture, \$49,185, "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, World Coffee Research, "SensCAFE (SENSory Coffee Analysis Flavor Evaluation)."

Haub, Mark D., Glukos Energy, Inc., \$8,100, "Glycemic Response of Sweeteners and Commercial Sports Drinks."

Haub, Mark D., Isagenix International, LLC, \$3,635, "Determining the Impact of Meal Replacement Products on Human Blood Glucose Levels - Year 2."

Higgins, Mary 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."

Kidd, Tandalayo, US Department of Agriculture, \$48,727, ""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), Fats and Proteins Research Foundation, Inc., \$23,200, "The Impact of Rendered Protein Meal Level of Oxidation on Shelf Life and Acceptability in Extruded Pet Foods: Determining Sensory Limites for Oxidation Values."

Koppel, Kadri, and Alavi, Sajid (Grain Science and Industry), The United Sorghum Checkoff Program Board, \$31,980, "Use of Grain Sorghum as the Primary Grain Ingredient in Premium Extruded Foods Designed for Cats."

Koppel, Kadri, Chambers IV, Edgar, and Chambers, Delores H., World Coffee Research, "SensCAFE (SENSory Coffee Analysis Flavor Evaluation)."

Lindshield, Brian L., Alavi, Sajid (Grain Science and Industry), **Chambers IV, Edgar, Lilja, Nina K.** (International Agricultural Programs), and **Procter, Sandra B.**, US Department of Agriculture, \$279,907, "Novel Sorghum Based Fortified Food Blend for Infants and Young Children Nutrition."

Procter, Sandra B., and Peters, Paula (Director of Cooperative Extension), US Department of Agriculture, "Kansas Food Assistance Nutrition Education Plan."

Procter, Sandra B., Alavi, Sajid (Grain Science and Industry), **Chambers IV, Edgar, Lilja, Nina K.** (International Agricultural Programs), and **Lindshield, Brian L.**, US Department of Agriculture, "Novel Sorghum Based Fortified Food Blend for Infants and Young Children Nutrition."

Rosenkranz, Richard R., and Dzewaltowski, David A. (Kinesiology), US Department of Agriculture, \$17,398, "Dissemination of the Evidence-Based SWITCH Program for Childhood Obesity Prevention."

Sauer, Kevin L., Gragg, Sara E. (Animal Sciences and Industry), and **Roberts, Kevin R.** (Hospitality Management and Dietetics), US Department of Agriculture, \$360,000, "Center of Excellence for Food Safety Research in Child Nutrition Programs."

KINESIOLOGY

Barstow, Thomas J., National Aeronautics and Space Administration, \$60,000, "Determining the Effect of Space Flight on the Incidence of Cardiovascular Risk Factors and Disease - Continuation."

Behnke, Brad J., American Cancer Society, Inc., \$760,000, "Modulation of Tumor Oxygenation to Enhance Radiotherapy."

Behnke, Brad J., Kansas State University Foundation, \$12,284, "Center for Basic Cancer Research Equipment Award."

Dzewaltowski, David A., and Rosenkranz, Richard R. (Human Nutrition), US Department of Agriculture, \$40,596, "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, \$55,033, "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, \$495,297, "HIFT for Obesity Prevention, Fitness and Health Promotion in Military Personnel."

SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES

Anderson, Jared R., Durtschi, Jared A., Stith, Sandra M., and Vennum, Amber V., US Department of Agriculture, "KSU/USAF 2014 FAP Research Project."

Baptist, Joyce, EMDR Research Foundation, \$25,000, "Developing Evidence-based Practice for EMDR for Depression."

DeLuccie, Mary L., US Department of Agriculture, \$2,642, "Federal Aid in Support of the Child and Adult Care Food Program."

Durtschi, Jared A., Anderson, Jared R., Stith, Sandra M., and Vennum, Amber V., US Department of Agriculture, "KSU/USAF 2014 FAP Research Project."

Garcia, Jane M., and Chambers IV, Edgar (Human Nutrition), Kansas State University Foundation, "Enhancing Nutrition Care for Older Adults with Impaired Swallowing."

Goff, Briana S., US Department of Agriculture, \$271,277, "Family Support Programs Evaluation Plan Development and Implementation."

Goff, Briana S., and Johannes, Elaine M., US Department of Agriculture, \$12,000, "Measuring Communities: Mapping Progress for Military and Veteran Families."

Johannes, Elaine M., and Riportella, Roberta, US Department of Agriculture, \$35,004, "Community Behavioral Health Early Warning System Barometer Community Application."

Johannes, Elaine M., and Goff, Briana S., US Department of Agriculture, "Measuring Communities: Mapping Progress for Military and Veteran Families."

Johannes, Elaine M., US Department of Defense, \$41,825, "Kansas 2014 Operation: Military Kids (OMK)."

Johannes, Elaine M., and Leatherman, John C. (Agricultural Economics), US Department of Health and Human Services, \$69,362, "Community Behavioral Health Early Warning Systems: Kansas State University and Pawnee Mental Health Services."

O'Conner, Nancy T., US Department of Health and Human Services, \$246,401, "Program for Training and Consultation of CMHC Practitioners Delivering Intensive Home Based Family Therapy Services."

Riportella, Roberta, Kansas Health Foundation, \$12,218, "Primary Health Extension for Kansas: Improving Population Health through New Models of Community Engagement."

Riportella, Roberta, and Johannes, Elaine M., US Department of Agriculture, "Community Behavioral Health Early Warning System Barometer Community Application."

Schumm, Walter R., Witherspoon Institute, \$43,410, "Further Analysis of NFSS and Other Data."

Seay, Martin, US Department of Agriculture, \$11,699, "The Dynamics of Food and Housing Assistance Programs before and after the Great Recession."

Stith, Sandra M., Anderson, Jared R., Durtschi, Jared A., and Vennum, Amber V., US Department of Agriculture, \$2,064,716, "KSU/USAF 2014 FAP Research Project."

Vennum, Amber V., Anderson, Jared R., Durtschi, Jared A., and Stith, Sandra M., US Department of Agriculture, "KSU/USAF 2014 FAP Research Project."

VerBrugge (Glasscock), Marlene K., US Department of Agriculture, \$810,000, "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, \$227,273, "Army/4-H Military Partnership and Outreach and Support."

VerBrugge (Glasscock), Marlene K., US Department of Agriculture, \$600,000, "Children, Youth, and Families At-Risk 4-H Military Partnership Project."

VerBrugge (Glasscock), Marlene K., US Department of Agriculture, \$800,000, "DoD-USDA Partnership: Child and Youth Reintegration Support Camps."

VerBrugge (Glasscock), Marlene K., Jang, Jichul (Hospitality Management and Dietetics), and **Kwon, Junehee**, US Department of Defense, \$3,004,482, "Navy/4-H Military Partnership and Outreach and Support."

VerBrugge (Glasscock), Marlene K., US Department of Defense, \$15,100, "Operation: Military Kids (OMK) Bridge Contract."

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."

Gehring, Ronette, Apley, Michael D. (Clinical Sciences), and **DeDonder, Keith D.** (Diagnostic Medicine/Pathobiology), Merial Limited, "A Pharmacokinetic/Pharmacodynamic Investigation of Gamithromycin in the Treatment of Naturally Occurring Bovine Respiratory Disease in Feedlot Cattle Comparing Minimal Inhibitory Concentration and Concentration-time Kill Curve Techniques."

Gehring, Ronette, Apley, Michael D. (Clinical Sciences), **Kukanich, Stanley P.,** and **Riviere, Jim,** US Department of Agriculture, "Food Animal Residue Avoidance Databank (FARAD)."

Kenney, Michael J., Davis, Elizabeth G. (Clinical Sciences), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$15,897, "Short Term Training in Health Professional Schools."

Kukanich, Stanley P., KuKanich, Katherine (Clinical Sciences), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), Morris Animal Foundation, \$1,650, "Evaluation of Drug Content and Stability in Compounded and FDA Approved Formulations of Doxycycline used in Dogs and Cats (Vet Student Scholar - Tanner Slead)."

Kukanich, Stanley P., Apley, Michael D. (Clinical Sciences), **Gehring, Ronette,** and **Riviere, Jim,** US Department of Agriculture, "Food Animal Residue Avoidance Databank (FARAD)."

Marcus, Daniel C., and **Wangemann, A. Philine,** US Department of Health and Human Services, \$75,480, "Fluid Transport in Inner Ear Development."

Riviere, Jim, Apley, Michael D. (Clinical Sciences), **Gehring, Ronette,** and **Kukanich, Stanley P.,** US Department of Agriculture, \$356,400, "Food Animal Residue Avoidance Databank (FARAD)."

Shi, Jishu N., Ceva Sante Animale, \$100,000, "Efficacy Evaluation of a Ceva Vaccine for PRRS Virus."

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."

Tamura, Masaaki, Kansas State University Foundation, \$11,536, "Johnson Center for Basic Cancer Research Funding."

Wangemann, A. Philine, and **Marcus, Daniel C.**, US Department of Health and Human Services, \$301,920, "Fluid Transport in Inner Ear Development."

Weiss, Mark L., **Ganta, Chanran K.** (Veterinary Diagnostic Laboratory), **Grauer, Gregory F.** (Clinical Sciences), and **Klocke, Emily** (Clinical Sciences), American Holistic Veterinary Medical Foundation, \$836 (includes \$200 from Third Party Match), "Adipose Tissue (fat) Derived Stromal Vascular Fraction for Treating Feline Chronic Kidney Disease: A Pilot Study."

Weiss, Mark L., **Bagladi-Swanson, Mary S.** (Clinical Sciences), **Renberg, Walter C.** (Clinical Sciences), and **Roush, James K.** (Clinical Sciences), MediVet America, \$115,571, "Evaluation of Safety and Efficacy of Stromal Vascular Fraction Treatment of Canine Atopic Dermatitis."

Weiss, Mark L., **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), and **Sun, X. Susan** (Grain Science and Industry), National Science Foundation, \$7,041, "Novel Peptide Hydrogel for 3D Cell Culture."

CLINICAL SCIENCES

Apley, Michael D., **DeDonder, Keith D.** (Diagnostic Medicine/Pathobiology), and **Gehring, Ronette** (Anatomy and Physiology), Merial Limited, \$18,784, "A Pharmacokinetic/Pharmacodynamic Investigation of Gamithromycin in the Treatment of Naturally Occurring Bovine Respiratory Disease in Feedlot Cattle Comparing Minimal Inhibitory Concentration and Concentration-time Kill Curve Techniques."

Apley, Michael D., **Gehring, Ronette** (Anatomy and Physiology), **Kukanich, Stanley P.** (Anatomy and Physiology), and **Riviere, Jim** (Anatomy and Physiology), US Department of Agriculture, \$39,600, "Food Animal Residue Avoidance Databank (FARAD)."

Bagladi-Swanson, Mary S., **Renberg, Walter C.**, **Roush, James K.**, and **Weiss, Mark L.** (Anatomy and Physiology), MediVet America, "Evaluation of Safety and Efficacy of Stromal Vascular Fraction Treatment of Canine Atopic Dermatitis."

Davis, Elizabeth G., **Kenney, Michael J.** (Anatomy and Physiology), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$15,429, "Short Term Training in Health Professional Schools."

Grauer, Gregory F., **George, Christopher M.** (Veterinary Medical Teaching Hospital), **Schermerhorn, Thomas**, and **Vaske, Heather H.** (Veterinary Medical Teaching Hospital), American College of Veterinary Internal Medicine Foundation, \$50,000, "Effects of Low-dose Meloxicam in Cats with Chronic Kidney Disease."

Grauer, Gregory F., **Ganta, Chanran K.** (Veterinary Diagnostic Laboratory), **Klocke, Emily**, and **Weiss, Mark L.** (Anatomy and Physiology), American Holistic Veterinary Medical Foundation, \$12,546 (includes \$3,000 from Third Party Match), "Adipose Tissue (fat) Derived Stromal Vascular Fraction for Treating Feline Chronic Kidney Disease: A Pilot Study."

Harkin, Kenneth R., and **Wilkerson, Melinda** (Diagnostic Medicine/Pathobiology), Maddie's Fund, \$36,000, "Evaluation of the Therapeutic Efficacy and Changes in Cytokines in Cerebrospinal Fluid and Plasma in Dogs with Canine Distemper Encephalitis treated with Intrathecal Live Newcastle Disease Virus Vaccine."

Higginbotham, Mary Lynn, **Hocker, Samuel E.** (Veterinary Medical Teaching Hospital), and **Wouda, Raelene**, American College of Veterinary Internal Medicine Foundation, \$3,750, "Toceranib Phosphate & Carboplatin Combined Chemotherapy in Dogs with Cancer."

Higginbotham, Mary Lynn, Morris Animal Foundation, \$15,898, "D14CA-507: COTC20: Evaluation of Orally Administered mTOR Inhibitor Rapamycin in Dogs with Osteosarcoma."

Klocke, Emily, Ganta, Chanran K. (Veterinary Diagnostic Laboratory), **Grauer, Gregory F.**, and **Weiss, Mark L.** (Anatomy and Physiology), American Holistic Veterinary Medical Foundation, \$3,346 (includes \$800 from Third Party Match), "Adipose Tissue (fat) Derived Stromal Vascular Fraction for Treating Feline Chronic Kidney Disease: A Pilot Study."

KuKanich, Katherine, Kukanich, Stanley P. (Anatomy and Physiology), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), Morris Animal Foundation, \$1,650, "Evaluation of Drug Content and Stability in Compounded and FDA Approved Formulations of Doxycycline used in Dogs and Cats (Vet Student Scholar - Tanner Slead)."

Larson, Robert L., and **White, Bradley J.**, US Department of Agriculture, \$74,994, "Development of Collaborative, Online, Novel, Science-based, User-friendly, Learning Tools (CONSULT) for Beef Cattle Producers and Advisors."

Larson, Robert L., Bello, Nora M. (Statistics), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), **Schroeder, Ted C.** (Agricultural Economics), and **White, Bradley J.**, US Department of Agriculture, \$68,232, "Risk Management Strategies to Reduce the Impacts of Bovine Respiratory Disease Complex in Commercial Feeder Cattle."

Renberg, Walter C., Bagladi-Swanson, Mary S., Roush, James K., and **Weiss, Mark L.** (Anatomy and Physiology), MediVet America, \$12,841, "Evaluation of Safety and Efficacy of Stromal Vascular Fraction Treatment of Canine Atopic Dermatitis."

Roush, James K., Bagladi-Swanson, Mary S., Renberg, Walter C., and **Weiss, Mark L.** (Anatomy and Physiology), MediVet America, "Evaluation of Safety and Efficacy of Stromal Vascular Fraction Treatment of Canine Atopic Dermatitis."

Rush, Bonnie R., Maddie's Fund, \$6,000, "Maddie's Shelter Medicine Externship."

Rush, Bonnie R., PetSmart Charities, \$200,000, "Shelter Medicine Program at Kansas State University."

Schermerhorn, Thomas, George, Christopher M. (Veterinary Medical Teaching Hospital), **Grauer, Gregory F.**, and **Vaske, Heather H.** (Veterinary Medical Teaching Hospital), American College of Veterinary Internal Medicine Foundation, "Effects of Low-dose Meloxicam in Cats with Chronic Kidney Disease."

White, Bradley J., and **Larson, Robert L.**, US Department of Agriculture, \$74,994, "Development of Collaborative, Online, Novel, Science-based, User-friendly, Learning Tools (CONSULT) for Beef Cattle Producers and Advisors."

White, Bradley J., Bello, Nora M. (Statistics), **Cernicchiaro, Natalia** (Diagnostic Medicine/Pathobiology), **Larson, Robert L., Renter, David G.** (Diagnostic Medicine/Pathobiology), **Sanderson, Michael W.** (Diagnostic Medicine/Pathobiology), and **Schroeder, Ted C.** (Agricultural Economics), US Department of Agriculture, "Risk Management Strategies to Reduce the Impacts of Bovine Respiratory Disease Complex in Commercial Feeder Cattle."

Wouda, Raelene, Higginbotham, Mary Lynn, and **Hocker, Samuel E.** (Veterinary Medical Teaching Hospital), American College of Veterinary Internal Medicine Foundation, \$17,498, "Toceranib Phosphate & Carboplatin Combined Chemotherapy in Dogs with Cancer."

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, \$17,683, "The Effects of Aggressive Versus Low- stress Cattle Handling at the Time of Shipping to Slaughter on Physiological Responses in Cattle Fed Ractopamine Hydrochloride."

Bartle, Steven J., Hagenmaier, Jacob A., Reinhardt, Christopher D. (Animal Sciences and Industry), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), Merck & Company, Inc., "Blood Parameter Comparison of Slow-Moving and Non-Ambulatory Finished Cattle to Normal Cohorts in Harvest Facilities to Aid in Characterizing Fatigued Cattle Syndrom (FCS)."

Bartle, Steven J., Thomson, Daniel U., and Reinhardt, Christopher D. (Animal Sciences and Industry), State of Kansas - KSU Global Food Systems Program (Internal Project), "Coatings for Animals to Manage Solar Radiation - Mitigation of Heat Stress In Feedlot Cattle."

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."

Hagenmaier, Jacob A., Bartle, Steven J., Reinhardt, Christopher D. (Animal Sciences and Industry), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), Merck & Company, Inc., "Blood Parameter Comparison of Slow-Moving and Non-Ambulatory Finished Cattle to Normal Cohorts in Harvest Facilities to Aid in Characterizing Fatigued Cattle Syndrom (FCS)."

Richardson, Ralph C., Blecha, Frank (Anatomy and Physiology), **Shi, Jishu N.** (Anatomy and Physiology), and **Wang, Lei**, Zoetis LLC, \$428,335, "International Veterinary Collaboration for China DVM Program."

Thomson, Daniel U., Merck & Company, Inc., \$550,000, "Development of a Novel Training and Educational Program for Global Beef Production."

DIAGNOSTIC MEDICINE/PATHOBIOLOGY

Amachawadi, Raghavendra G., Dritz, Steven S., Nagaraja, Tiruvoor G., Narayanan, Sanjeevkumar, and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, "Do Probiotics, an Antibiotic Alternative, Mitigate or Contribute to Emergence and Persistence of Antimicrobial Resistance in Gut Bacteria?."

Anderson, Gary A., Nebraska, State of, \$4,000, "Rabies Testing for the State of Nebraska."

Bai, Jianfa, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvoor G., Narayanan, Sanjeevkumar, Oberst, Richard D., 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, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Cernicchiaro, Natalia, Bello, Nora M. (Statistics), **Larson, Robert L.** (Clinical Sciences), **Renter, David G., Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), and **White, Bradley J.** (Clinical Sciences), US Department of Agriculture, "Risk Management Strategies to Reduce the Impacts of Bovine Respiratory Disease Complex in Commercial Feeder Cattle."

Cernicchiaro, Natalia, US Department of Agriculture, \$58,365, "Use of Epidemiological Approaches to Investigate the Risk of Emergence of the Japanese Encephalitis Virus in USA."

Chang, Kyeong-Ok, Hesse, Richard, and Kim, Yunjeong, Merck & Company, Inc., \$57,375, "Memorandum of Agreement: Characterization of Novel Vaccine Candidates of Porcine Epidemic Diarrhea Virus: Determination of Safety and Immune Responses in Neonatal Pigs."

Chang, Kyeong-Ok, US Department of Health and Human Services, \$734,295, "Norovirus 3CL Protease-Based Anti-Norovirus Therapeutics."

DeDonder, Keith D., Apley, Michael D. (Clinical Sciences), and **Gehring, Ronette** (Anatomy and Physiology), Merial Limited, "A Pharmacokinetic/Pharmacodynamic Investigation of Gamithromycin in the Treatment of Naturally Occurring Bovine Respiratory Disease in Feedlot Cattle Comparing Minimal Inhibitory Concentration and Concentration-time Kill Curve Techniques."

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** (Animal Sciences and Industry), Advanced Ag Products, "Determining the Impact of By-O-Reg+ in Diets with and without Feed Grade Antibiotic on Growth Performance of Nursery Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goncalves, Marcio A., Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), Ajinomoto Heartland LLC, "Determining the Effects of AminoGut and Diet Formulation on Growth Performance of Nursery Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goncalves, Marcio A., Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), Ajinomoto Heartland LLC, "Determining the Effects of Standardized Ileal Digestible Valine:Lysine Ratio in Low Crude Protein and Low Lysine Diets on the Growth Performance of Finishing Pigs from 60 to 95 lbs and influence of Low Crude Protein Diets for Pigs from 240 to 280 lbs."

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** (Animal Sciences and Industry), Church & Dwight Co., Inc., "Effects of Increasing Fermentation on Growth Performance of Weaning Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Jones, Cassandra K.** (Grain Science and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), DSM Nutritional Products AG, "Determining the Impact of Vevovital and/or CRINA as Potential PEDv Mitigation Strategies as Determine by PCR Analysis and Bioassay."

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** (Animal Sciences and Industry), Hamlet Protein, Inc., "Effect of HP300 and NP600 Soy Protein Sources 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** (Animal Sciences and Industry), Kemin Americas, "Determining the Influence of KemTRACE Cr and/or Micro-Aid on Growth Performance, Carcass Composition and Economic Return of Pigs Housed in a Commercial Environment."

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** (Animal Sciences and Industry), Kemin Americas, "Influence of Chromium Dose and Feeding Regimen on Growth Performance, Carcass Composition, and Economic Return of Pigs Housed in a Commercial Environment."

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** (Animal Sciences and Industry), Micronutrients, "Comparing the Effects of Added Zn from IntelliBond® Z or ZnO on Nursery Pig Growth 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** (Animal Sciences and Industry), Micronutrients, "KSU Applied Swine Nutrition Fellowship."

Dritz, Steven S., Amachawadi, Raghavendra G., Nagaraja, Tiruvor G., Narayanan, Sanjeevkumar, and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, "Do Probiotics, an Antibiotic Alternative, Mitigate or Contribute to Emergence and Persistence of Antimicrobial Resistance in Gut Bacteria?."

Dritz, Steven S., 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** (Animal Sciences and Industry), National Pork Board, "Evaluating Alternative Chemical Mitigants to Prevent PEDv Recontamination of Swine Feed and Ingredients."

Dritz, Steven S., Jones, Cassandra K. (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, \$19,960, "Utilizing Feed Sequencing as a Biosecurity Intervention for Preventing PEDV Cross Contamination in the Feed Manufacturing Process."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Frobose, Hyatt L.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Nelssen, Jim L.** (Animal Sciences and Industry), **Stephenson, Ethan W.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), Nutri-Quest, Inc., "Effects of Detoxifying Agents on Growth Performance and Deoxynivalenol (DON) Balance Characteristics of Nursery Pigs Fed DON-Contaminated Wheat."

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** (Animal Sciences and Industry), Tech-Mix, "Effect of Soy Protein Sources on Nursery Pig Performance."

Dryden, Michael W., Intervet, Inc., \$105,018, "Determining the Residual Flea Reproductive Break Point for BRAVECTO (fluralaner) Chewable Tablets for Dogs."

Dryden, Michael W., Intervet, Inc., \$104,333, "Evaluation of Fluralaner (Bravecto: Merck) to Control Flea Populations on Naturally Infested Dogs in Private Residences in Tampa, FL 2015."

Dryden, Michael W., Merial, Inc., \$69,467, "Twenty-Four hour Efficacy of FRONTLINE(R) Plus for Cats against the Merial-Tampa Isolate of Ctenocephalides Felis Flea Infestations on Cats on Days 1, 7, 14, 21 and 28."

Faburay, Bonto, Hesse, Richard (Veterinary Diagnostic Laboratory), **Ma, Wenjun,** and **Richt, Juergen,** US Department of Homeland Security, \$34,000, "Center of Excellence for Emerging & Zoonotic Animal Disease (CEEZAD)."

Fang, Ying, and Anderson, Gary A. (Veterinary Diagnostic Laboratory), Elanco Animal Health, \$150,000, "Generation of Diagnostic Reagents for Differentiation of Porcine Reproductive and Respiratory Syndrome Virus Vaccine Strains and Porcine Circovirus."

Fang, Ying, Kansas State University Research Foundation, \$14,400, "MOA - Development of Vaccines against Porcine Epidemic Diarrhea Virus (PEDV)."

Fang, Ying, Merial, Inc., \$28,670, "Evaluation of Safety and Immunogenic Response Live Porcine Epidemic Diarrhea Virus (PEDV) Vaccines in Pigs."

Fang, Ying, National Pork Board, \$35,624, "A Candidate Swine Influenza Virus Vaccine: In vivo Evaluation of Novel Chimeric Hemagglutinins expressed by Parainfluenza Virus 5 (PIV5) Vector."

Fang, Ying, University of Georgia, \$21,431, "Recombinant PIV5 as a Candidate Vaccine in Prevention of PRRSV Infection."

Fang, Ying, US Department of Agriculture, \$472,179, "A Novel Arterivirus Protein and Expression Mechanism: Implication in Vaccine and Companion Diagnostic Assay Development."

Fang, Ying, Zoetis LLC, \$86,085, "In Vitro Evaluation of nsp2TF-mutated PRRS Viruses: Application in Development of Improved Zoetis PRRS Vaccines."

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** (Animal Sciences and Industry), Ajinomoto Heartland LLC, "Determining the Effects of AminoGut and Diet Formulation on Growth Performance of Nursery Pigs."

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** (Animal Sciences and Industry), Ajinomoto Heartland LLC, "Determining the Effects of Standardized Ileal Digestible Valine:Lysine Ratio in Low Crude Protein and Low Lysine Diets on the Growth Performance of Finishing Pigs from 60 to 95 lbs and influence of Low Crude Protein Diets for Pigs from 240 to 280 lbs."

Haley, Nicholas J., Elk Research Council, \$6,000, "Antemortem Surveillance for Chronic Wasting Disease in Farmed Cervids by Real Time Quaking-induced Conversion."

Haley, Nicholas J., and Richt, Juergen, North American Deer Farmers Association, \$65,790, "Antemortem Surveillance for Chronic Wasting Disease in Farmed Cervids by Real Time Quaking-induced Conversion."

Hardwidge, Philip R., US Department of Health and Human Services, \$412,500, "An Enterotoxigenic *E. coli* Protein that Antagonizes the NF-kappaB."

Hardwidge, Philip R., US Department of Health and Human Services, \$375,000, "Bacterial Effectors Targeting the IKK/NF-kB Pathway."

Hesse, Richard, Chang, Kyeong-Ok, and Kim, Yunjeong, Merck & Company, Inc., \$28,688, "Memorandum of Agreement: Characterization of Novel Vaccine Candidates of Porcine Epidemic Diarrhea Virus: Determination of Safety and Immune Responses in Neonatal Pigs."

Hesse, Richard, and Hause, Benjamin M. (Veterinary Diagnostic Laboratory), National Pork Board, "Development of Swine Influenza Virus Platform Vector Vaccines to Control Swine Influenza Virus and Porcine Epidemic Diarrhea Virus."

Higgs, Stephen, US Department of Homeland Security, \$32,214, "Graduate Student Fellowship for Jolene Carlson."

Kastner, Justin J., Bai, Jianfa, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Nagaraja, Tiruvoor G., Narayanan, Sanjeevkumar, Oberst, Richard D., 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, "Shiga-toxicogenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Kastner, Justin J., State of Kansas - KSU Global Food Systems Program (Internal Project), "Experiential, multidisciplinary career-development investment for Kansas."

Kim, Yunjeong, Chang, Kyeong-Ok, and Hesse, Richard, Merck & Company, Inc., \$28,688, "Memorandum of Agreement: Characterization of Novel Vaccine Candidates of Porcine Epidemic Diarrhea Virus: Determination of Safety and Immune Responses in Neonatal Pigs."

Kim, Yunjeong, Winn Feline Foundation, \$23,758, "Expression and Bioevaluation of a Feline Tumor Necrosis Factor Inhibitor for Feline Infectious Peritonitis in Cats."

Ma, Wenjun, and Richt, Juergen, US Department of Health and Human Services, "Protection of Pigs from Influenza Virus Challenge by Stalk-reactive Antibodies: A Proof of Concept."

Ma, Wenjun, and Richt, Juergen, US Department of Health and Human Services, "Syndromic Surveillance of Swine Influenza Viruses in the United States."

Ma, Wenjun, Faburay, Bonto, Hesse, Richard (Veterinary Diagnostic Laboratory), and **Richt, Juergen,** US Department of Homeland Security, \$34,000, "Center of Excellence for Emerging & Zoonotic Animal Disease (CEEZAD)."

McGill, Jodi L., US Department of Health and Human Services, \$28,680, "Alternative Functions for $\gamma\delta$ T Cells in the Immune Response to Mycobacterium."

Nagaraja, Tiruvoor G., Amachawadi, Raghavendra G., Dritz, Steven S., Narayanan, Sanjeevkumar, and Tokach, Michael D. (Animal Sciences and Industry), National Pork Board, \$93,393, "Do Probiotics, an Antibiotic Alternative, Mitigate or Contribute to Emergence and Persistence of Antimicrobial Resistance in Gut Bacteria?."

Nagaraja, Tiruvoor G., Bai, Jianfa, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Narayanan, Sanjeevkumar, Oberst, Richard D., 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, "Shiga-toxicogenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Narayanan, Sanjeevkumar, Amachawadi, Raghavendra G., Dritz, Steven S., Nagaraja, Tiruvoor G., and Tokach, Michael D. (Animal Sciences and Industry), National Pork Board, "Do Probiotics, an Antibiotic

Alternative, Mitigate or Contribute to Emergence and Persistence of Antimicrobial Resistance in Gut Bacteria?."

Narayanan, Sanjeevkumar, Bai, Jianfa, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvoor G., Oberst, Richard D., 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, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Nguyen, Thu A., Merial Limited, \$10,000, "2015 Merial Veterinary Research Scholars Program."

Nguyen, Thu A., KuKanich, Katherine (Clinical Sciences), and **Kukanich, Stanley P.** (Anatomy and Physiology), Morris Animal Foundation, \$1,700, "Evaluation of Drug Content and Stability in Compounded and FDA Approved Formulations of Doxycycline used in Dogs and Cats (Vet Student Scholar - Tanner Slead)."

Nguyen, Thu A., Sun, X. Susan (Grain Science and Industry), and **Weiss, Mark L.** (Anatomy and Physiology), National Science Foundation, \$7,041, "Novel Peptide Hydrogel for 3D Cell Culture."

Nguyen, Thu A., Davis, Elizabeth G. (Clinical Sciences), and **Kenney, Michael J.** (Anatomy and Physiology), US Department of Health and Human Services, \$15,429, "Short Term Training in Health Professional Schools."

Oberst, Richard D., Bai, Jianfa, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvoor G., Narayanan, Sanjeevkumar, 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, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Renter, David G., Bello, Nora M. (Statistics), **Cernicchiaro, Natalia, Larson, Robert L.** (Clinical Sciences), **Sanderson, Michael W., Schroeder, Ted C.** (Agricultural Economics), and **White, Bradley J.** (Clinical Sciences), US Department of Agriculture, \$361,569, "Risk Management Strategies to Reduce the Impacts of Bovine Respiratory Disease Complex in Commercial Feeder Cattle."

Renter, David G., Bai, Jianfa, Ellis, Jason D. (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvoor G., Narayanan, Sanjeevkumar, Oberst, Richard D., 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, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Richt, Juergen, and **Haley, Nicholas J.,** North American Deer Farmers Association, "Antemortem Surveillance for Chronic Wasting Disease in Farmed Cervids by Real Time Quaking-induced Conversion."

Richt, Juergen, and **Ma, Wenjun,** US Department of Health and Human Services, \$399,005, "Protection of Pigs from Influenza Virus Challenge by Stalk-reactive Antibodies: A Proof of Concept."

Richt, Juergen, and **Ma, Wenjun,** US Department of Health and Human Services, \$147,979, "Syndromic Surveillance of Swine Influenza Viruses in the United States."

Richt, Juergen, Faburay, Bonto, Hesse, Richard (Veterinary Diagnostic Laboratory), and **Ma, Wenjun**, US Department of Homeland Security, \$1,581,000, "Center of Excellence for Emerging & Zoonotic Animal Disease (CEEZAD)."

Richt, Juergen, and **Li, Jun** (Chemistry), US Department of Homeland Security, \$104,000, "Portable Smart Platforms for Detection of Biological Pathogens and Chemicals."

Richt, Juergen, US Department of Homeland Security, \$60,000, "The National Center of Excellence for Zoonotic and Animal Disease Defense: Workshops to Coordinate and Enhance the Agro-security Enterprise Phase III."

Rowland, Raymond R. R., PIC USA, \$61,178, "Use of Genetically Modified Pigs to Evaluate PRRS Virus Susceptibility."

Rowland, Raymond R. R., US Department of Agriculture, \$91,817, "Genetically Improving Resistance of Pigs to PRRS Virus Infection."

Sanderson, Michael W., Kansas Department of Agriculture, \$24,000, "MOA - A Secure Beef Supply (SBS) Plan for Business Continuity in a Foot and Mouth Disease Outbreak."

Sanderson, Michael W., US Department of Agriculture, \$44,000, "A Secure Beef Supply (SBS) Plan for Business Continuity in a Foot and Mouth Disease Outbreak."

Sanderson, Michael W., **Bello, Nora M.** (Statistics), **Cernicchiaro, Natalia**, **Larson, Robert L.** (Clinical Sciences), **Renter, David G.**, **Schroeder, Ted C.** (Agricultural Economics), and **White, Bradley J.** (Clinical Sciences), US Department of Agriculture, "Risk Management Strategies to Reduce the Impacts of Bovine Respiratory Disease Complex in Commercial Feeder Cattle."

Sanderson, Michael W., **Bai, Jianfa**, **Ellis, Jason D.** (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.**, **Nagaraja, Tiruvoor G.**, **Narayanan, Sanjeevkumar**, **Oberst, Richard D.**, **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, \$647,116, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

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, \$265,252, "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., **Bartle, Steven J.** (Dean of Veterinary Medical Center), **Hagenmaier, Jacob A.** (Dean of Veterinary Medical Center), and **Reinhardt, Christopher D.** (Animal Sciences and Industry), Merck & Company, Inc., \$43,291, "Blood Parameter Comparison of Slow-Moving and Non-Ambulatory Finished Cattle to Normal Cohorts in Harvest Facilities to Aid in Characterizing Fatigued Cattle Syndrom (FCS)."

Thomson, Daniel U., **Bai, Jianfa**, **Ellis, Jason D.** (Communications), **Fox, John "Sean" A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.**, **Nagaraja, Tiruvoor G.**, **Narayanan, Sanjeevkumar**, **Oberst, Richard D.**, **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, \$229,622, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

Van Der Merwe, Deon, Aiken, Robert M. (Northwest Research Extension Center), **Pagadala, P. V. Vara** (Agronomy), **Perumal, Ramasamy** (Agricultural Research Center-Hays), **Price, Kevin** (Agronomy), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, "Remote Sensing Screening Tools for Sorghum Breeding Programs."

Van Der Merwe, Deon, Peterson, Dallas E. (Agronomy), and **Sharda, Ajay** (Biological and Agricultural Engineering), Lockheed Martin Corporation, \$5,107, "Develop a Plan for Experiments Relating to a Spectral Sensor for Weed Recognition Analysis."

Van Der Merwe, Deon, and Lubbers, Brian (Veterinary Diagnostic Laboratory), US Department of Health and Human Services, \$16,500, "KSVDL Vet-LRN Veterinary Diagnostic Laboratory Program."

Van Der Merwe, Deon, Bremer, Dale J. (Horticulture, Forestry and Recreation Resources), **Fry, Jack D.** (Horticulture, Forestry and Recreation Resources), **Hoyle, Jared** (Horticulture, Forestry and Recreation Resources), **Keeley, Steven J.** (Horticulture, Forestry and Recreation Resources), and **Kennelly, Megan** (Plant Pathology), US Golf Association, Inc., "Evaluating Small Unmanned Aerial Systems for Detecting Turfgrass Stress with an Emphasis on Drought."

Vanlandingham, Dana L., US Department of Agriculture, \$251,328, "Biology of Mosquito Vectors of Arbovirus Transmission Associated with Emerging Disease Threats of Livestock."

Vanlandingham, Dana L., and **Higgs, Stephen** (Biosecurity Research Institute), US Department of Agriculture, "US-UK Collaborative Control of Emerging Bunyaviruses."

Wilkerson, Melinda, and **Harkin, Kenneth R.** (Clinical Sciences), Maddie's Fund, "Evaluation of the Therapeutic Efficacy and Changes in Cytokines in Cerebrospinal Fluid and Plasma in Dogs with Canine Distemper Encephalitis treated with Intrathecal Live Newcastle Disease Virus Vaccine."

Zhang, Weiping, US Department of Health and Human Services, \$225,000, "A Subunit Vaccine for Enterotoxigenic E. coli Associated Traveler's Diarrhea."

VETERINARY DIAGNOSTIC LABORATORY

Anderson, Gary A., and **Fang, Ying** (Diagnostic Medicine/Pathobiology), Elanco Animal Health, "Generation of Diagnostic Reagents for Differentiation of Porcine Reproductive and Respiratory Syndrome Virus Vaccine Strains and Porcine Circovirus."

Anderson, Gary A., US Department of Agriculture, \$55,000, "NAHLN: KS."

Anderson, Gary A., US Department of Agriculture, \$7,920, "Swine Surveillance."

Anderson, Gary A., and **Bai, Jianfa**, US Department of State, "Iraq Science Fellowship Program of the US Department of State, Nadira Salman Mohamed Mohamed."

Bai, Jianfa, Hause, Benjamin M., and **Hesse, Richard**, National Pork Board, "Development of Next Generation Sequencing Methodology for Full Genome Characterization of PRRS from Oral Fluids and Nasal Swabs."

Bai, Jianfa, and **Anderson, Gary A.**, US Department of State, \$7,500, "Iraq Science Fellowship Program of the US Department of State, Nadira Salman Mohamed Mohamed."

Ganta, Chanran K., **Grauer, Gregory F.** (Clinical Sciences), **Klocke, Emily** (Clinical Sciences), and **Weiss, Mark L.** (Anatomy and Physiology), American Holistic Veterinary Medical Foundation, \$25,092 (includes

\$6,000 from Third Party Match), "Adipose Tissue (fat) Derived Stromal Vascular Fraction for Treating Feline Chronic Kidney Disease: A Pilot Study."

Hause, Benjamin M., Bai, Jianfa, and Hesse, Richard, National Pork Board, \$60,000, "Development of Next Generation Sequencing Methodology for Full Genome Characterization of PRRS from Oral Fluids and Nasal Swabs."

Hause, Benjamin M., and Hesse, Richard (Diagnostic Medicine/Pathobiology), National Pork Board, \$64,889, "Development of Swine Influenza Virus Platform Vector Vaccines to Control Swine Influenza Virus and Porcine Epidemic Diarrhea Virus."

Hesse, Richard, Bai, Jianfa, and Hause, Benjamin M., National Pork Board, "Development of Next Generation Sequencing Methodology for Full Genome Characterization of PRRS from Oral Fluids and Nasal Swabs."

Hesse, Richard, Faburay, Bonto (Diagnostic Medicine/Pathobiology), **Ma, Wenjun** (Diagnostic Medicine/Pathobiology), and **Richt, Juergen** (Diagnostic Medicine/Pathobiology), US Department of Homeland Security, \$51,000, "Center of Excellence for Emerging & Zoonotic Animal Disease (CEEZAD)."

Lubbers, Brian, and Van Der Merwe, Deon (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, "KSVDL Vet-LRN Veterinary Diagnostic Laboratory Program."

VETERINARY MEDICAL TEACHING HOSPITAL

Arck, Shirley T., and Colvin-Marion, Landa J., University of Kansas, \$5,600, "Training of Pharmacy D. Students."

Colvin-Marion, Landa J., and Arck, Shirley T., University of Kansas, \$5,600, "Training of Pharmacy D. Students."

Fingland, Roger B., Friends of the Sunset Zoo, \$2,000, "Sunset Zoo Internship Program."

George, Christopher M., Grauer, Gregory F. (Clinical Sciences), **Schermerhorn, Thomas** (Clinical Sciences), and **Vaske, Heather H.**, American College of Veterinary Internal Medicine Foundation, "Effects of Low-dose Meloxicam in Cats with Chronic Kidney Disease."

Hocker, Samuel E., Higginbotham, Mary Lynn (Clinical Sciences), and **Wouda, Raelene** (Clinical Sciences), American College of Veterinary Internal Medicine Foundation, \$3,750, "Toceranib Phosphate & Carboplatin Combined Chemotherapy in Dogs with Cancer."

Vaske, Heather H., George, Christopher M., Grauer, Gregory F. (Clinical Sciences), and **Schermerhorn, Thomas** (Clinical Sciences), American College of Veterinary Internal Medicine Foundation, "Effects of Low-dose Meloxicam in Cats with Chronic Kidney Disease."

KANSAS COOPERATIVE EXTENSION SERVICE

AGRICULTURE AND NATURAL RESOURCES

Hadley, Gregg L., and Rice, Trudy M., Hansen Foundation, Dane G, \$525,000, "Leading Locally - Working Together for Lasting Solutions."

Hadley, Gregg L., and Barnaby Jr, Glenn A. (Agricultural Economics), US Department of Agriculture, \$79,545, "2014 Farm Bill - Producer Education - Kansas State University Extension Services."

Hadley, Gregg L., US Department of Agriculture, \$337,635, "Kansas Agricultural Mediation Service."

Hadley, Gregg L., and **Ebert, Kerri L.** (Biological and Agricultural Engineering), US Department of Agriculture, \$50,000, "Kansas SARE - Kansas 2015 PDP."

Rice, Trudy M., and **Hadley, Gregg L.**, Hansen Foundation, Dane G, "Leading Locally - Working Together for Lasting Solutions."

Rice, Trudy M., US Department of Agriculture, \$4,962, "NIFA/AMS/RRCD/AMSTA Project for Kansas Community Local Food Initiatives."

AGRONOMY

Shoup, Douglas E., **Janssen, Keith A.**, and **Thompson, Curtis R.**, Multi- Sponsor, "Field Herbicidal Evaluations."

DIRECTOR OF COOPERATIVE EXTENSION

Davis, Alvin N., and **Lindquist, Jack W.**, Kansas Agriculture and Rural Leadership, Inc., \$91,061, "Kansas Agriculture and Rural Leadership, Inc.."

Lindquist, Jack W., and **Davis, Alvin N.**, Kansas Agriculture and Rural Leadership, Inc., \$91,061, "Kansas Agriculture and Rural Leadership, Inc.."

Nwadike, Londa S., Kansas Health Foundation, \$22,990, "Improving the Safety of Home Preserved Foods in Kansas."

Nwadike, Londa S., **Deeter-Schmelz, Dawn R.** (Marketing), **Morgan, Heather M.** (Advanced Manufacturing Institute), and **Procter, David E.** (Center for Engagement and Community Development), US Department of Agriculture, \$6,930, "Rural Business Enterprise Grant - E-Commerce and Marketing Assistance."

Peters, Paula, National Endowment for the Humanities, \$500, "The Nicodemus Connection to a Vice President."

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, "Kansas Food Assistance Nutrition Education Plan."

EXTENSION FAMILY AND CONSUMER SCIENCES

Peters, Paula, and **Procter, Sandra B.** (Human Nutrition), US Department of Agriculture, \$2,547,558, "Kansas Food Assistance Nutrition Education Plan."

FOUR-H YOUTH DEVELOPMENT

Gonzalez, Rosa I., **Bolton, Debra** (Southwest Area Office), and **Stone, Barbara J.**, US Department of Justice, "4-H National Mentoring Program Proposal Kansas State University."

Keatley, Sarah L., **Stone, Barbara J.**, and **Wiebers, Justin A.**, Monsanto Company, "Kansas Ag Innovators Experience."

Stone, Barbara J., **Keatley, Sarah L.**, and **Wiebers, Justin A.**, Monsanto Company, \$25,000, "Kansas Ag Innovators Experience."

Stone, Barbara J., Bolton, Debra (Southwest Area Office), and **Gonzalez, Rosa I.**, US Department of Justice, \$64,905, "4-H National Mentoring Program Proposal Kansas State University."

Stone, Barbara J., US Department of Justice, \$20,000, "Kansas 4-H Tech Wizards: 4-H National Mentoring Program."

Wiebers, Justin A., Keatley, Sarah L., and Stone, Barbara J., Monsanto Company, "Kansas Ag Innovators Experience."

KANSAS FOREST SERVICE

Atchison, Robert L., US Department of Agriculture, \$115,188 (includes \$14,400 from In- Kind Contribution), "NRCS Technical Service Provider."

Biles, Larry E., Kansas Department of Agriculture, \$105,713, "Riparian Forest Buffer Restoration IX."

Biles, Larry E., US Department of Agriculture, \$2,172,822, "2014 Consolidated Payment Grant."

Biles, Larry E., US Department of Agriculture, \$2,744,772 (includes \$996,511 from Third Party Match), "2015 Consolidated Payment Grant."

Biles, Larry E., US Department of Agriculture, \$105,500, "2015 Forest Legacy Program."

Biles, Larry E., and Paull, Darci A., US Department of Agriculture, \$14,907,929 (includes \$12,553,473 from In-Kind), "Improving Water Quality Through the Implementation of Forestry Practices and the Assessment of Riparian Systems in Kansas' Priority Watersheds."

Biles, Larry E., US Department of Agriculture, \$98,899, "Rangeland Management Lesser Prairie-Chicken Initiative Site Specific Agreement with Pheasants Forever."

Biles, Larry E., US Environmental Protection Agency, \$36,300, "Riparian Forest Management Technical Assistance and Coordination SFY14-SFY16."

Paull, Darci A., and Biles, Larry E., US Department of Agriculture, "Improving Water Quality Through the Implementation of Forestry Practices and the Assessment of Riparian Systems in Kansas' Priority Watersheds."

NORTHEAST AREA OFFICE

Duncan, Stewart R., Ciampitti, Ignacio (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, "2015 K-State Soybean Production Schools for Kansas."

Duncan, Stewart R., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **De Wolf, 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., Aguilar, Jonathan P. (Southwest Area Office), **Ciampitti, Ignacio** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Lin, Xiaomao** (Agronomy), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M., Rogers, Danny H.** (Biological and Agricultural Engineering), and **Roozeboom, Kraig L.**

(Agronomy), Kansas Corn Commission, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

Haag, Lucas A., Adee, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Cramer, Gary L.** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenberg, Gerard J.** (Agronomy), **Lamm, Freddie R.** (Northwest Research Extension Center), **O Brien, Daniel M., Roozeboom, Kraig L.** (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

O Brien, Daniel M., Ariyaratne, Chatura (Agricultural Economics), **Featherstone, Allen M.** (Agricultural Economics), and **Taylor, Mykel R.** (Agricultural Economics), Grains Research and Development Corporation, \$3,904, "Proposed Scope of Work for GRDC Project."

O Brien, Daniel M., Aguilar, Jonathan P. (Southwest Area Office), **Ciampitti, Ignacio** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A., Lin, Xiaomao** (Agronomy), **McCornack, Brian P.** (Entomology), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Roozeboom, Kraig L.** (Agronomy), Kansas Corn Commission, \$12,500, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

O Brien, Daniel M., and Lamm, Freddie R. (Northwest Research Extension Center), Kansas Corn Commission, "Yield of Two Hybrid Maturities as Affected by Management Allowed Depletion Level."

O Brien, Daniel M., Adee, Eric A. (Agronomy), **Ciampitti, Ignacio** (Agronomy), **Cramer, Gary L.** (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A., Holman, Johnathon D.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenberg, Gerard J.** (Agronomy), **Lamm, Freddie R.** (Northwest Research Extension Center), **Roozeboom, Kraig L.** (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Grain Sorghum Commission, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

O Brien, Daniel M., Aguilar, Jonathan P. (Southwest Area Office), **Holman, Johnathon D.** (Southwest Research Extension Center), and **Kisekka, Isaya** (Southwest Research Extension Center), US Department of Agriculture, \$23,062, "Demonstrating Interactions between Reduced Tillage, Soil Water Storage, and Nutrient Leaching Under Water Limited Irrigated Cropping Systems."

SOUTHEAST AREA OFFICE

Duncan, Stewart R., Ciampitti, Ignacio (Agronomy), **Peterson, Dallas E.** (Agronomy), and **Shoup, Douglas E.**, Kansas Soybean Commission, "Update for the Soybean Production Handbook (K-State)."

Farney, Jaymelynn K., NuTech Biosciences, Inc., \$14,000, "Production Responses to Organic Mineral Form for Spring-Calving Cows Grazing Endophyte-Infected Fescue."

Shoup, Douglas E., Ciampitti, Ignacio (Agronomy), and **Duncan, Stewart R.** (Northeast Area Office), Kansas Soybean Commission, "2015 K-State Soybean Production Schools for Kansas."

Shoup, Douglas E., Lin, Xiaomao (Agronomy), **Little, Christopher R.** (Plant Pathology), **Presley, DeAnn R.** (Agronomy), and **Sassenrath, Gretchen F.**, Kansas Soybean Commission, \$451, "Soybean Production Systems to Control Charcoal Rot and Other Soil-Born Diseases."

Shoup, Douglas E., Ciampitti, Ignacio (Agronomy), **Duncan, Stewart R.**, and **Peterson, Dallas E.** (Agronomy), Kansas Soybean Commission, "Update for the Soybean Production Handbook (K-State)."

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, \$19,034, "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., Ciampitti, Ignacio (Agronomy), **Golden, Bill B.** (Agricultural Economics), **Haag, Lucas A.** (Northwest Area Office), **Lin, Xiaomao** (Agronomy), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), **Rogers, Danny H.** (Biological and Agricultural Engineering), and **Roozeboom, Kraig L.** (Agronomy), Kansas Corn Commission, \$5,000, "Developing a Crop Evaluation Tool for Comparing Corn to Alternative Crops in Kansas Cropping Systems."

Aguilar, Jonathan P., and **Kisekka, Isaya** (Southwest Research Extension Center), Kansas Water Office, "Mobile Drip Irrigation for Water Limited Crop Production."

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, \$23,931, "Training for Pakistan Proposal: On-Farm Water Management."

Aguilar, Jonathan P., Holman, Johnathon D. (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), and **O'Brien, Daniel M.** (Northwest Area Office), US Department of Agriculture, \$46,124, "Demonstrating Interactions between Reduced Tillage, Soil Water Storage, and Nutrient Leaching Under Water Limited Irrigated Cropping Systems."

Aguilar, Jonathan P., US Department of the Interior, \$2,340, "Fate of High Uranium in Saline Arkansas River Water in Southwest Kansas: Distribution of Soils, Crops, and Groundwater."

Aguilar, Jonathan P., Devlin, Daniel L. (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Kisekka, Isaya** (Southwest Research Extension Center), and **Lin, Xiaomao** (Agronomy), US Department of the Interior, "Kansas Water Resources Research Institute."

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, "Training for Pakistan Proposal: On-Farm Water Management."

Bolton, Debra, Gonzalez, Rosa I. (Four-H Youth Development), and **Stone, Barbara J.** (Four-H Youth Development), US Department of Justice, "4-H National Mentoring Program Proposal Kansas State University."

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, \$19,034, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use, and Markets."

Zukoff, Sarah N., Currie, Randall S. (Southwest Research Extension Center), and **Kisekka, Isaya** (Southwest Research Extension Center), Kansas Corn Commission, \$6,501, "Developing Integrated Pest Management Strategies for Drought Tolerant Corn under Deficit Irrigation Scenarios."

Zukoff, Sarah N., Monsanto Company, \$2,040, "Service Order #28."

Zukoff, Sarah N., Monsanto Company, "Service Order No. 23."

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, "Training for Pakistan Proposal: On- Farm Water Management."

Zukoff, Sarah N., Kirkham, Mary B. (Agronomy), **Margolies, David C.** (Entomology), **Nechols, James R.** (Entomology), **Ruberson, John R.** (Entomology), and **Swamy, Aavudai Anandhi** (Agronomy), US Department of Agriculture, "Cotton Crop Risk in Changing Environments: Interaction of Drought Stress and Early Season Arthropod Pests."

Zukoff, Sarah N., US Department of Agriculture, \$1,998, "Identifying Pest Management Solutions for Problematic Western Bean Cutworm Infestations."

Zukoff, Sarah N., Boyer, Cheryl R. (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **De Wolf, 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 PRESIDENT

BEACH ART MUSEUM

Duke, Linda A., and **Seaton, Elizabeth G.**, International Fine Print Dealers Association Foundation, \$3,000, "Associated American Artists Index."

Schlageck, Kathrine W., Caroline Peine Charitable Foundation, \$10,000, "Beach Museum of Art/USD 383 Visual Thinking Strategies Pilot Project."

Seaton, Elizabeth G., and **Duke, Linda A.**, International Fine Print Dealers Association Foundation, "Associated American Artists Index."

OFFICE OF THE PROVOST

CENTER FOR ENGAGEMENT AND COMMUNITY DEVELOPMENT

Procter, David E., Deeter-Schmelz, Dawn R. (Marketing), **Morgan, Heather M.** (Advanced Manufacturing Institute), and **Nwadike, Londa S.** (Director of Cooperative Extension), US Department of Agriculture, \$33,660, "Rural Business Enterprise Grant - E-Commerce and Marketing Assistance."

INFORMATION SECURITY & COMPLIANCE

Vaile, Robert S., Ou, Xinming (Simon) (Computing and Information Sciences), and **Wesch, Michael** (Sociology, Anthropology, and Social Work), National Science Foundation, \$3,200, "TWC SBE TTP: Medium: Collaborative: Bringing Anthropology into Cybersecurity."

OFFICE OF DIVERSITY AND DUAL CAREER DEVELOPMENT

Chavez, Mirta, and **Gordon, Myra E.**, US Department of Health and Human Services, "Project IMPACT Leadership Programs."

Gordon, Myra E., Kansas State University Foundation, \$35,000, "Project IMPACT Coordinator - ConocoPhillips Summer Bridge Program."

Gordon, Myra E., Kansas State University Foundation, \$35,000, "Project IMPACT Coordinator - Diversity Infrastructure."

Gordon, Myra E., and **Chavez, Mirta**, US Department of Health and Human Services, \$187,299, "Project IMPACT Leadership Programs."

OFFICE OF THE PROVOST

Mason, April, Kansas State University Foundation, \$29,154, "Pickett Chair."

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

Hartman, Eric M., Luce, Henry, Foundation, Inc., \$51,830 (includes \$16,000 from Multi- parties), "globalsl.org."

Kliwer, Brandon W., and **Priest, Kerry**, Association of Leadership Educators, \$1,500, "The Power of Partnerships: Exploring Deliberative Civic Engagement Strategies for Community Change and Leadership Identity Development."

Priest, Kerry, and **Kliwer, Brandon W.**, Association of Leadership Educators, "The Power of Partnerships: Exploring Deliberative Civic Engagement Strategies for Community Change and Leadership Identity Development."

Tolar, Mary H., Corporation for National and Community Service, \$750, "Global Youth Service Day."

VICE PRESIDENT FOR COMMUNICATIONS AND MARKETING

Mock, James B., Country Stampede LLC, \$23,000, "Video Production Services."

SALINA COLLEGE OF TECHNOLOGY AND AVIATION

SALINA APPLIED AVIATION RESEARCH CENTER

Barnhart, Richard K., and **Blanks, Mark T.**, Westar Energy, \$10,000, "Westar-KSU Task Order 2."

Blanks, Mark T., US Department of Transportation, \$100,000, "Small Unmanned Aircraft Systems Standards Validation Project."

Blanks, Mark T., and Barnhart, Richard K., Westar Energy, \$10,000, "Westar-KSU Task Order 2."

Carraway, Kurt J., National Aeronautics and Space Administration, \$3,933, "Scenario- Based Verification and Validation (V&V) for Aviation Authority and Autonomy Constructs."

Carraway, Kurt J., National Aeronautics and Space Administration, \$1,875, "UAS Virtual Workshop Consulting Services for Subcontract NNL13AA05C."

Carraway, Kurt J., and Goodin, Douglas G. (Geography), US Department of the Interior, \$90,000, "Unmanned Aircraft Systems (UAS) Resource Management Operations: A proposal in Response to the Bureau of Land Mangement's Funding Opportunity."

SALINA AVIATION

Barnhart, Richard K., and McCornack, Brian P. (Entomology), CRC Plant Biosecurity, \$68,274, "Optimizing Surveillance Protocols Using Unmanned Aerial Systems."

VICE PRESIDENT FOR RESEARCH

BIOSECURITY RESEARCH INSTITUTE

Higgs, Stephen, and Vanlandingham, Dana L., Cerus Corporation, "Inactivation of Chikungunya Virus in red Blood Cells."

Higgs, Stephen, and Vanlandingham, Dana L. (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$499,995, "US-UK Collaborative Control of Emerging Bunyaviruses."

NATIONAL AGRICULTURAL BIOSECURITY CENTER

Beardsley, Craig A., and Burton, Kenneth R., US Department of Homeland Security, "Development of Guidance to Ensure a Risk-Informed Planning Process and Appropriate Decision Making for Use by State, Local, Tribal and Territorial (SLTT) Government Entities in Creation of Emergency Operation Plans to Defend Food and Agriculture Infrastructure."

Beardsley, Craig A., and Burton, Kenneth R., US Department of Homeland Security, \$10,000, "Lessons Learned / Food Shield App."

Burton, Kenneth R., and Beardsley, Craig A., US Department of Homeland Security, \$23,200, "Development of Guidance to Ensure a Risk-Informed Planning Process and Appropriate Decision Making for Use by State, Local, Tribal and Territorial (SLTT) Government Entities in Creation of Emergency Operation Plans to Defend Food and Agriculture Infrastructure."

Burton, Kenneth R., and Beardsley, Craig A., US Department of Homeland Security, \$10,000, "Lessons Learned / Food Shield App."

Vanier, Martha A., US Department of Homeland Security, \$155,841, "IPA for Dr. Marty Vanier to DHS Science and Technology Directorate."

VICE PRESIDENT ELECTRONICS DESIGN LABORATORY

Sobering, Timothy J., Radiation Detection Technologies, Inc., \$12,052, "Pulsed LED Test Fixture."

VICE PRESIDENT FOR STUDENT LIFE AND DEAN OF STUDENTS

EDUCATIONAL AND PERSONAL DEVELOPMENT

Booker, Monshonda, US Department of Agriculture, \$4,457, "Summer Food Service Program - UB-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, \$492,800, "Ronald E. McNair PostBaccalaureate Achievement Program."

Greene, Kathleen V., US Department of Education, \$288,576, "Student Support Services at KSU-Manhattan."

Greene, Kathleen V., US Department of Education, \$222,151, "Student Support Services at KSU-Salina."

KSU CHILD DEVELOPMENT CENTER, INC.

Bosco, Pat J., Kansas Department for Children and Families, \$313,746, "Early Childhood Workforce Development Grant."

Mitchell, Rose M., US Department of Defense, \$62,000, "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, \$15,000, "Phillips 66 Shield Scholars Fund."

Lehning, Emily M., Kansas State University Foundation, \$36,351, "Suder Foundation FIRST SCHOLARS FUND."

UNIVERSITY COUNSELING SERVICES

Mailey, Chaz D., City of Manhattan, KS, \$34,713, "Youth Oriented Alcohol Abuse Prevention Program."

VICE PRESIDENT FOR STUDENT LIFE AND DEAN OF STUDENTS

Bosco, Pat J., Kansas Department for Children and Families, "Early Childhood Workforce Development Grant."

Bosco, Pat J., and **Cortez, Anita R.**, Kansas State University Foundation, \$26,000, "Edgerley-Franklin Urban Leadership Scholars Program."

Bosco, Pat J., Kauffman Scholars, Inc., "IEP Kauffman Scholars Program - ISP."