

# RESEARCH

— *Kansas State University* —  
*2014*



Office of Research and Sponsored Programs



**Vice President for Research**  
108 Anderson Hall  
Manhattan, KS 66506-0113  
785-532-5110  
Fax: 785-532-6507

September 9, 2014

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<sup>st</sup>, 2013– June 30<sup>th</sup>, 2014. These reports are intended to provide you with information regarding faculty efforts to obtain extramural support, along with a summary of their respective successes to date. As a reminder, you can also review a monthly listing of awards by going to the following link:

<http://www.k-state.edu/research/awards/>

If you have any questions regarding the contents of the attached report, you may contact Paul Lowe at [plowe@ksu.edu](mailto:plowe@ksu.edu) or 2-6804 or Cecelia Scaler at [cscaler@k-state.edu](mailto:cscaler@k-state.edu) or 2-6804.

We hope you continue to find this information useful.

Thank you for your continued support and hard work.

Sincerely,

R.W. Trewyn  
Assistant to the President

Karen J. L. Burg  
Vice President for Research

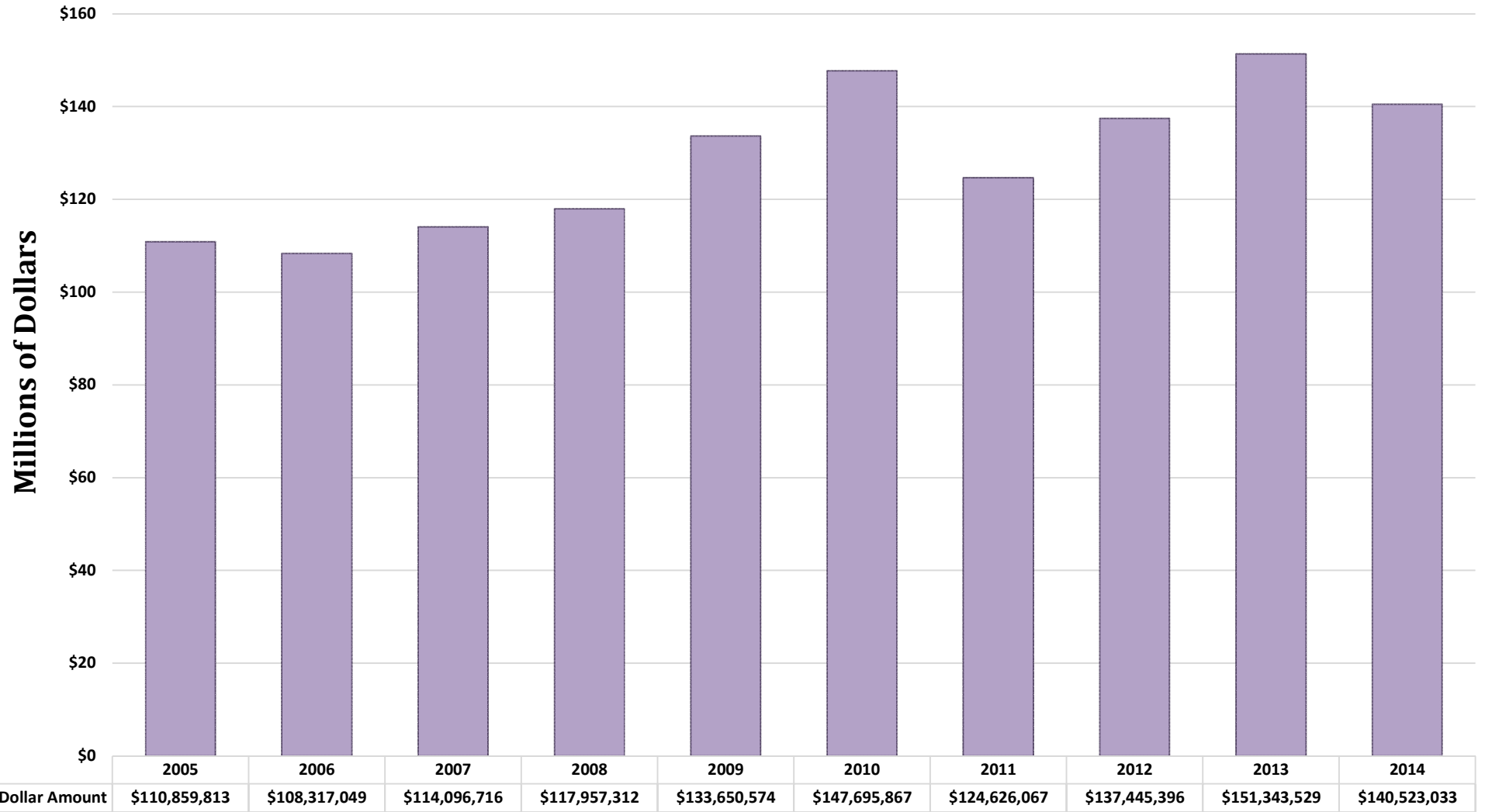
FY14 ANNUAL REPORT  
RESEARCH/SCHOLARLY ACTIVITY FUNDING BASE  
KANSAS STATE UNIVERSITY

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		\$140,523,033
II. Appropriated		
Main Campus State Appropriation	\$14,367,822	
Experiment Station Programs and Extension Services		
Federal Appropriation*	\$10,143,763	
State Appropriation	\$45,777,434	
Veterinary Medical Center State Appropriation	\$0	
College of Technology and Aviation	\$31,014	
State Appropriation		
SUBTOTAL		\$70,320,033
III. Donated**		\$41,144,611
RESEARCH/SCHOLARLY ACTIVITY BASE GRAND TOTAL		\$251,987,677

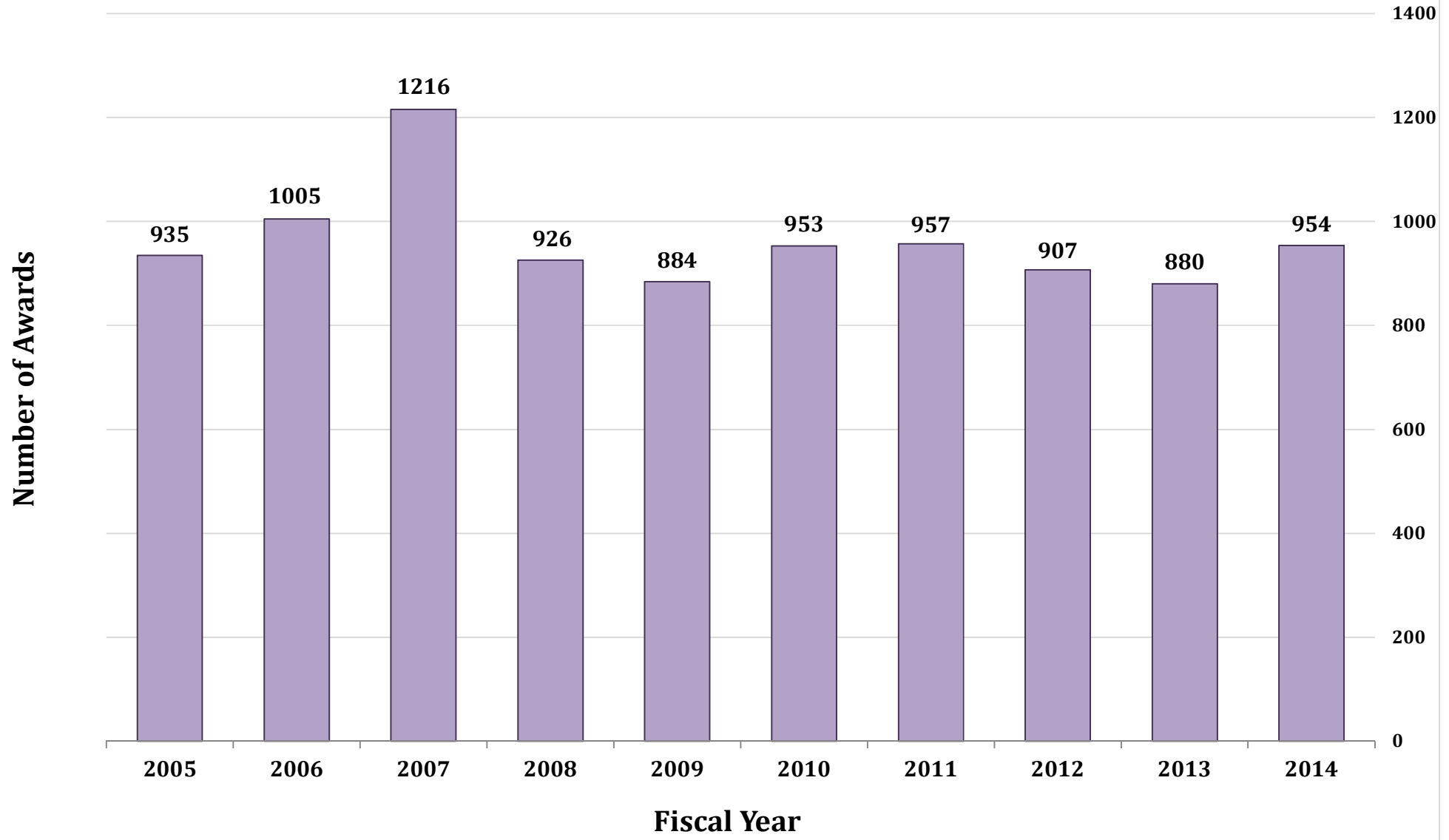
\*\*KSU Foundation funds transferred to KSU in support of research/scholarly activity (excludes transfers to Athletics).

# Kansas State University Total Dollars of Extramural Awards Received

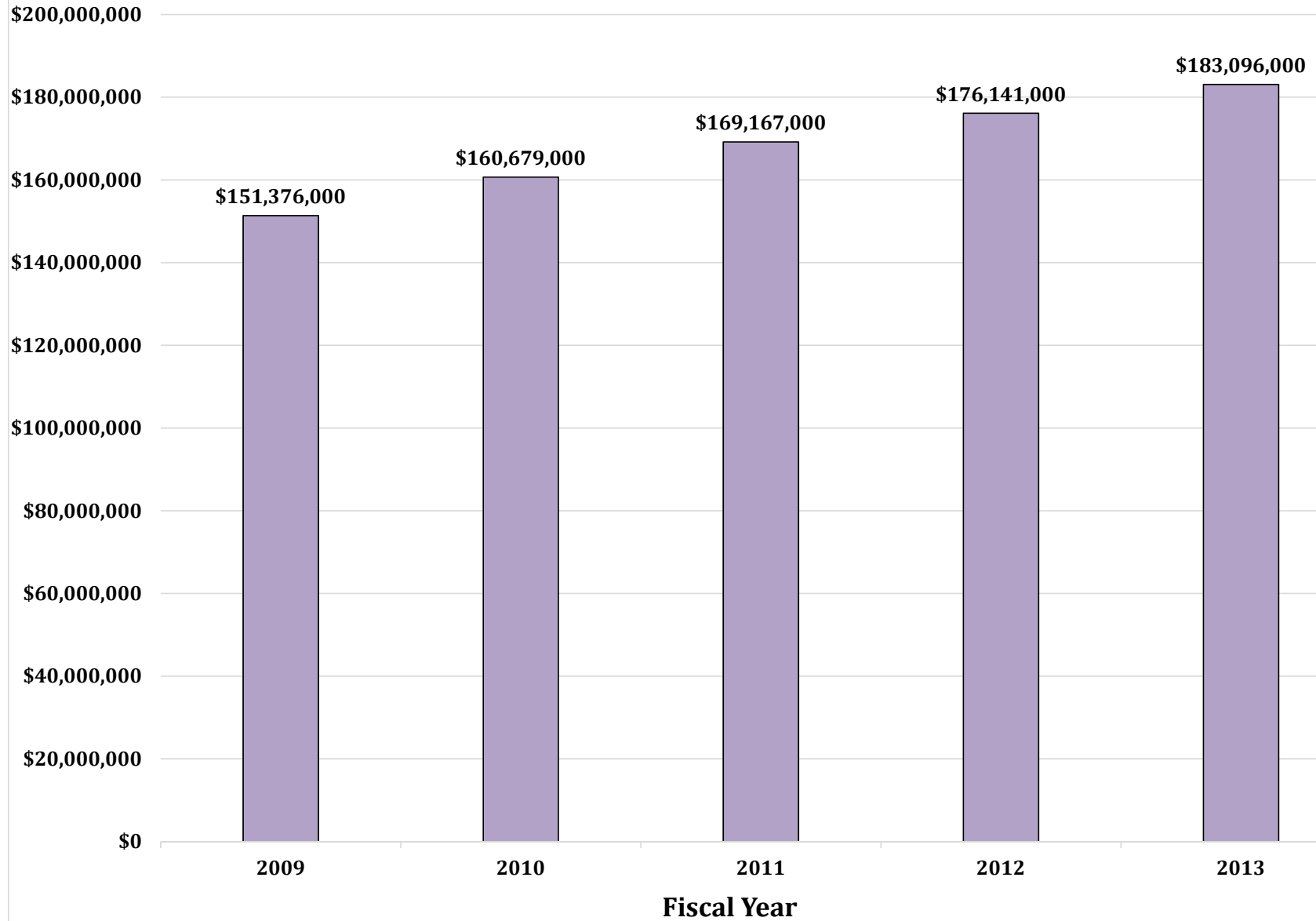


Fiscal Year

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



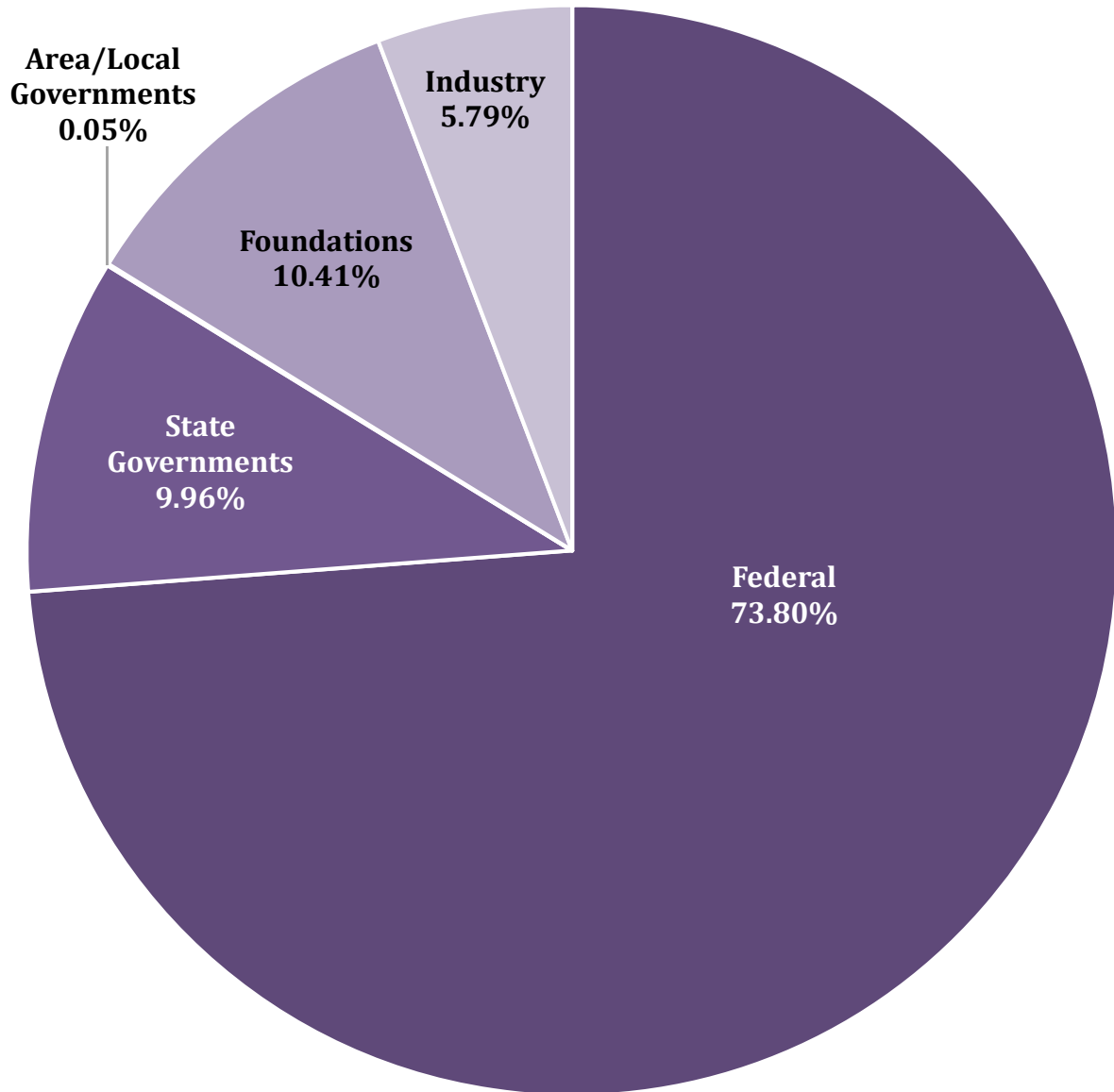
## Kansas State University Expenditures



Kansas State University  
Sources of Awards  
Fiscal Year 2014

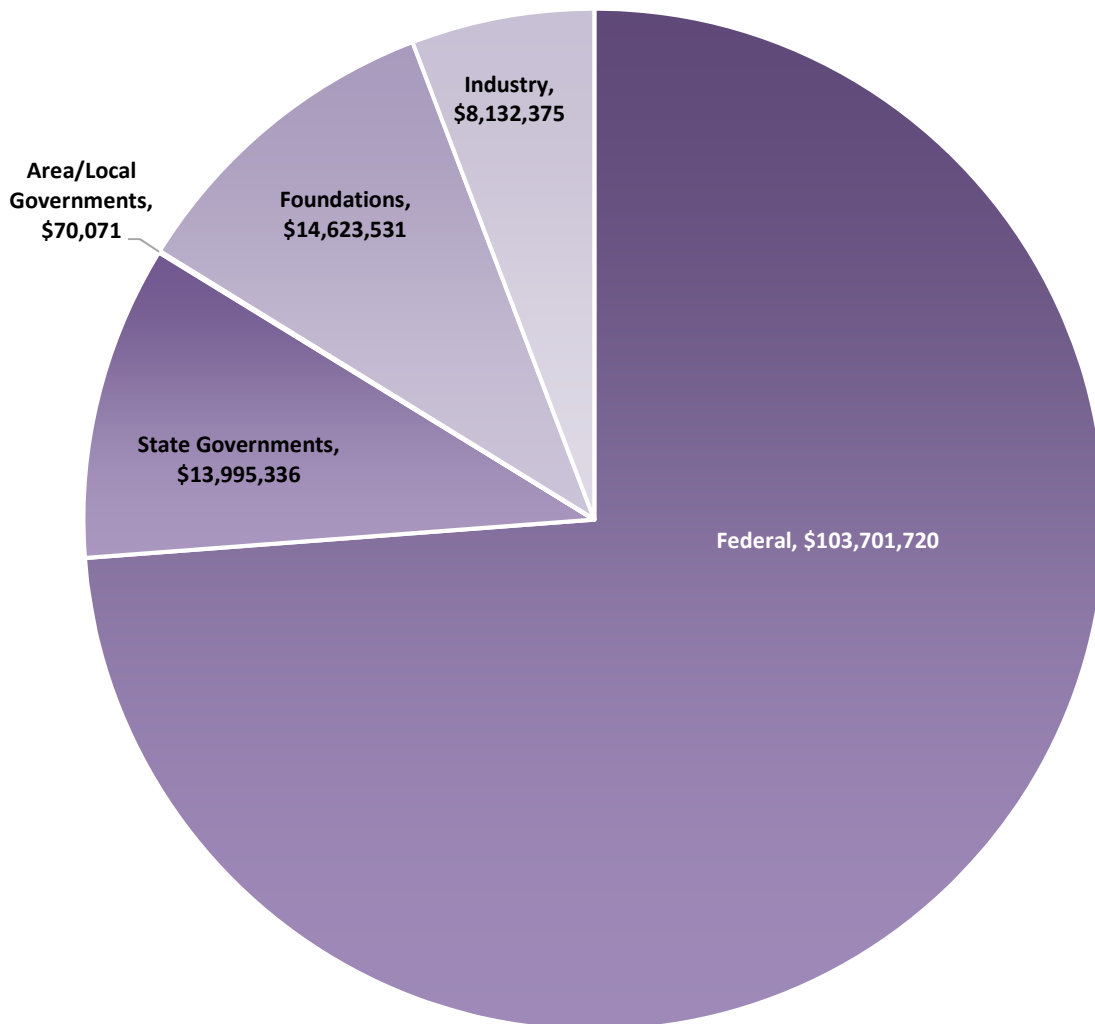
Source	Number of Awards	Dollar Value	Percentage
<b>Government:</b>			
Area/Local Governments	10	70,071	0.05%
State Governments	51	13,995,336	9.96%
Federal:			
Department of Agriculture	137	28,676,445	20.41%
Department of Defense	28	5,706,751	4.06%
Department of Education	15	3,398,047	2.42%
Department of Energy	15	3,987,631	2.84%
Department of Health and Human Services	65	10,109,748	7.19%
Department of Homeland Security	11	2,469,591	1.76%
Department of the Interior	18	976,831	0.70%
Department of Transportation	6	694,706	0.49%
Environmental Protection Agency	20	3,234,654	2.30%
National Aeronautics and Space Administration	12	795,746	0.57%
National Science Foundation	89	18,202,980	12.95%
US Agency for International Development	17	9,290,601	6.61%
Other Federal	39	16,157,989	11.50%
<b>Private:</b>			
Foundations	282	14,623,531	10.41%
Industry	139	8,132,375	5.79%
<b>TOTAL</b>	<b>954</b>	<b>140,523,033</b>	<b>100.00%</b>

**FY2014 Extramural  
Award Sources by  
Percentage**

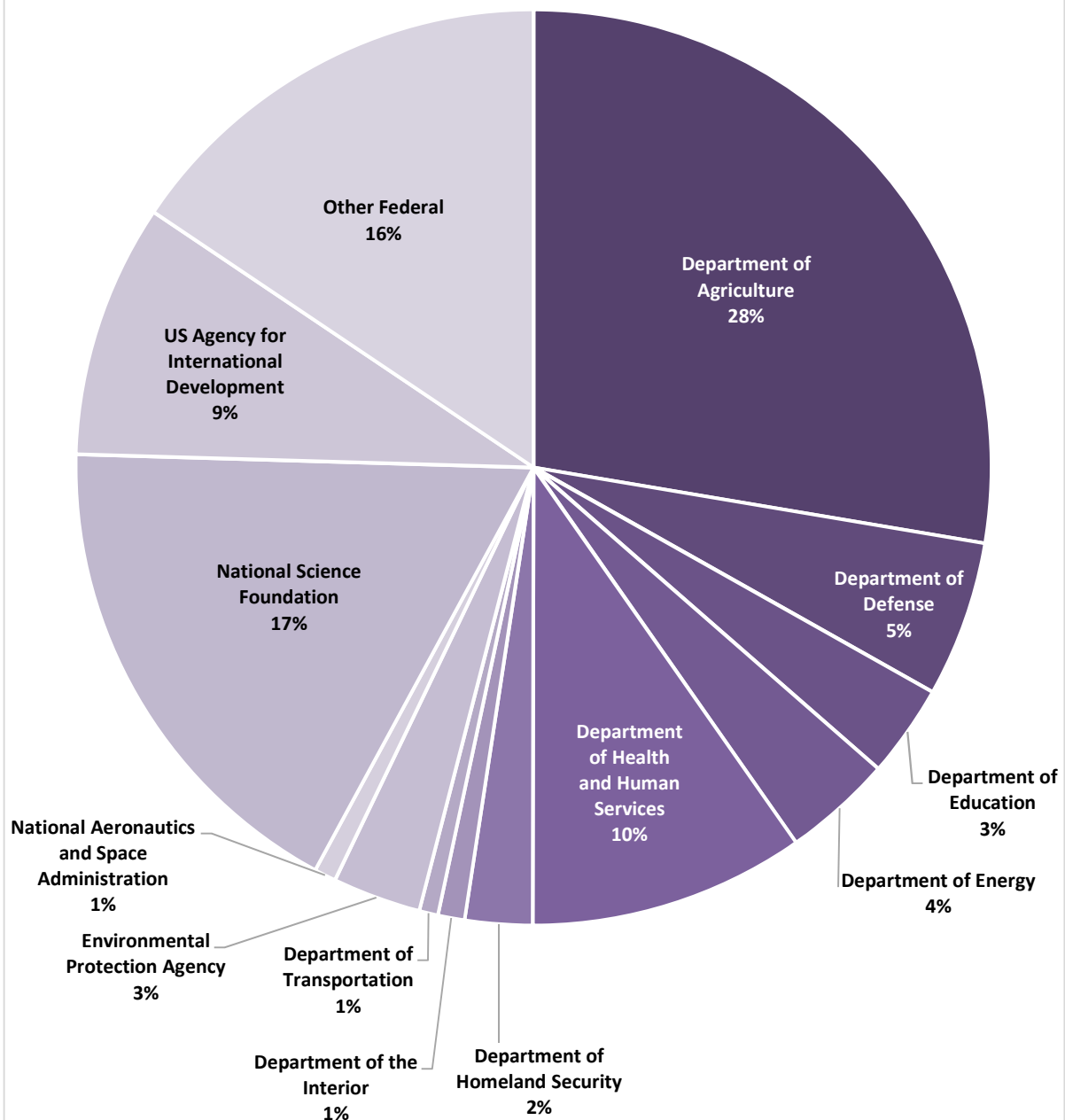




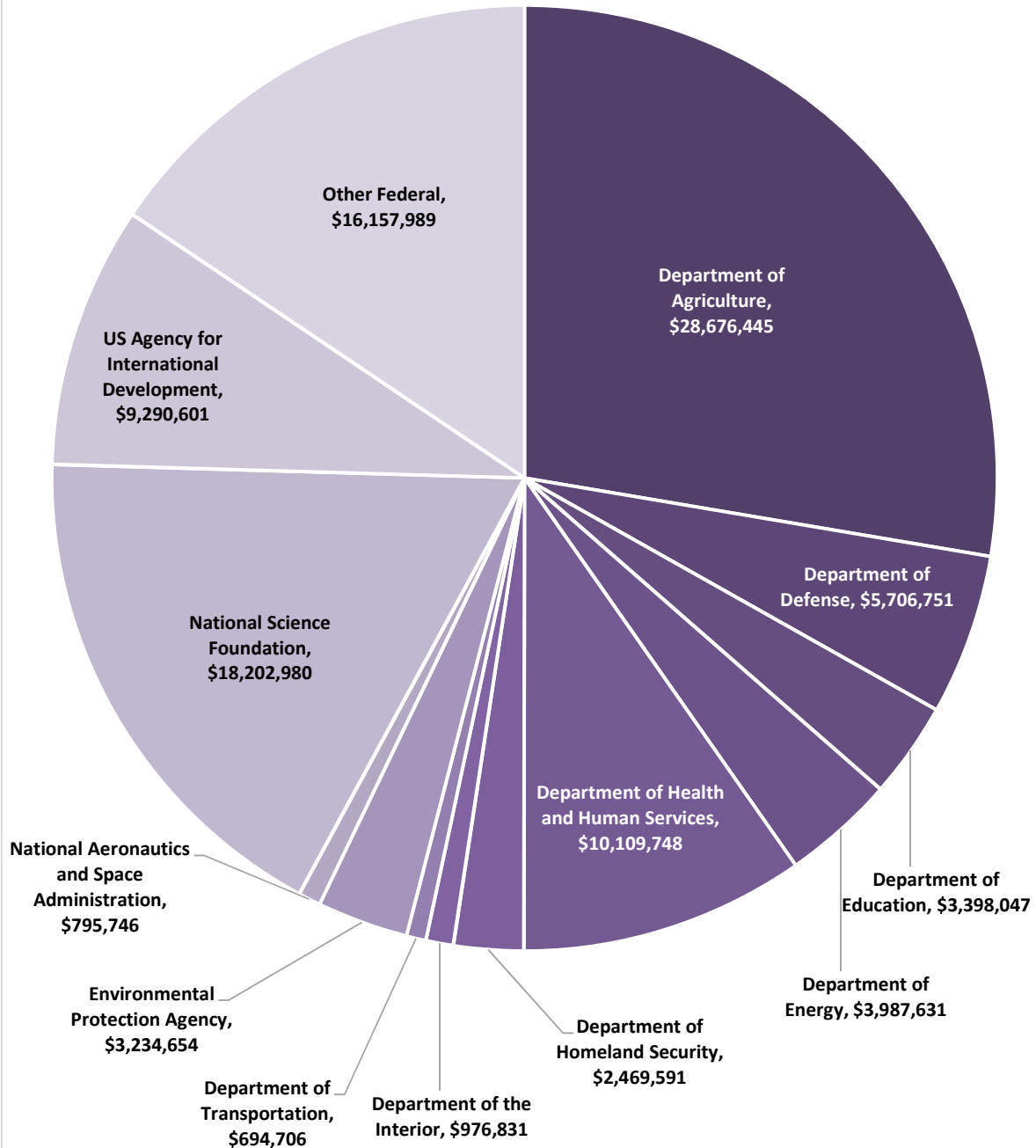
## **FY2014 Extramural Award Sources by Dollar Amount**



## FY2014 Extramural Award Federal Sources by Percentage



## FY2014 Extramural Award Federal Sources by Dollar Amount



Distribution of New Awards Among  
Colleges and Offices of the University  
Fiscal Year 2014

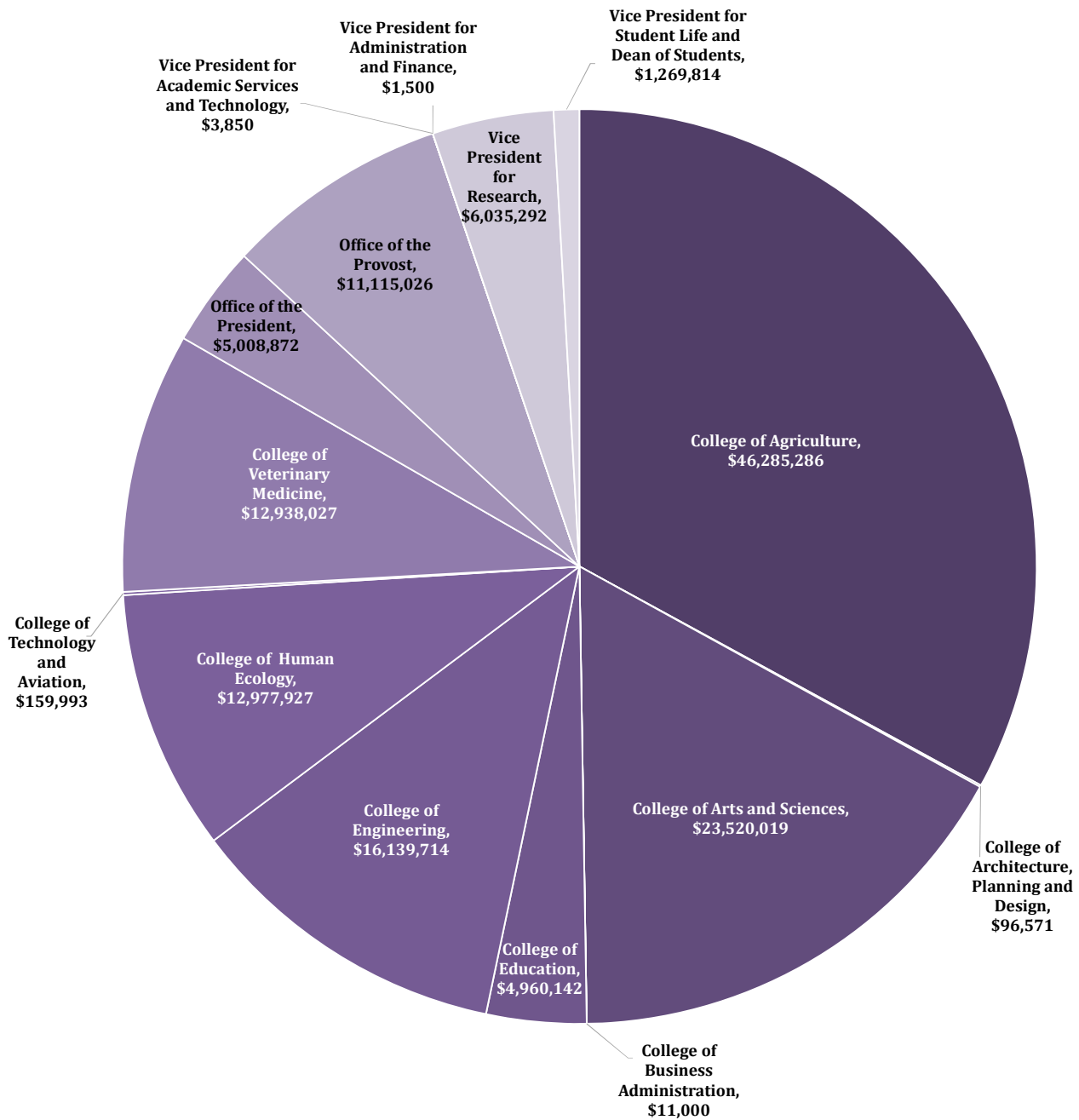
College/Office	Number of Awards	Dollar Value	Percentage
College of Agriculture	429	\$46,285,286 *	39.53%
College of Architecture, Planning and Design	10	\$96,571	0.08%
College of Arts and Sciences	164	\$23,520,019	20.09%
College of Business Administration	2	\$11,000	0.01%
College of Education	29	\$4,960,142	4.24%
College of Engineering	132	\$16,139,714	13.78%
College of Human Ecology	44	\$12,977,927 **	11.08%
College of Technology and Aviation	4	\$159,993	0.14%
College of Veterinary Medicine	90	\$12,938,027	11.05%
Office of the President	2	\$5,008,872	
Office of the Provost	16	\$11,115,026	
Vice President for Academic Services and Technology	1	\$3,850	
Vice President for Administration and Finance	2	\$1,500	
Vice President for Research	13	\$6,035,292	
Vice President for Student Life and Dean of Students	16	\$1,269,814	
<b>UNIVERSITY TOTAL</b>	<b>954</b>	<b>\$140,523,033</b>	<b>100.00%</b>

\*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

# FY2014 Extramural Award Dollars by College



**Fourth Quarter  
Proposal/Award Summary  
07/01/13 - 6/30/14**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
<b><u>COLLEGE OF AGRICULTURE</u></b>					
Agricultural Economics	58	\$5,575,531	\$23,871,294	21	\$2,701,748
Agricultural Experiment Station	0	\$0	\$0	1	\$10,000
Agricultural Research Center-Hays	31	\$653,444	\$2,064,730	16	\$536,961
Agriculture and Natural Resources	0	\$0	\$0	0	\$0
Agronomy	149	\$6,277,833	\$18,113,046	91	\$9,047,246
Animal Sciences and Industry	61	\$3,455,132	\$7,343,297	48	\$4,160,941
Communications	7	\$308,604	\$684,514	4	\$572,825
Dean of Agriculture and Director of AES	11	\$77,766	\$372,619	4	\$4,080,119
Entomology	44	\$1,753,990	\$5,793,412	33	\$2,951,497
Food Science Institute	4	\$79,557	\$664,038	2	\$351,396
Grain Science and Industry	60	\$2,703,923	\$7,658,163	48	\$4,881,064
Horticulture, Forestry and Recreation Resources	32	\$2,548,113	\$9,746,164	18	\$1,212,934
International Agricultural Programs	0	\$0	\$0	1	\$473,742
Kansas Industrial Extension Services	0	\$0	\$0	0	\$0
KS Ctr for Agri & the Env./KS Water Resource Res. Inst.	19	\$589,667	\$1,653,545	14	\$1,237,346
Northwest Research Extension Center	12	\$142,448	\$418,725	8	\$167,220
Office of Academic Programs	1	\$70,427	\$70,427	2	\$223,774
Plant Biotechnology Center	1	\$144,000	\$144,000	1	\$72,000
Plant Pathology	84	\$8,814,297	\$26,480,495	71	\$8,563,872
Southeast Agricultural Research Center	6	\$102,087	\$286,249	1	\$26,385
Southwest Research Extension Center	20	\$518,471	\$1,227,105	11	\$231,245
<b>Total Agriculture</b>	<b>600</b>	<b>\$33,815,290</b>	<b>\$106,591,823</b>	<b>395</b>	<b>\$41,502,315</b>
<b><u>COLLEGE OF ARCHITECTURE, PLANNING &amp; DESIGN</u></b>					
Architecture	4	\$117,193	\$268,112	1	\$25,000
Dean of Architecture, Planning and Design	0	\$0	\$0	0	\$0
Interior Architecture and Product Design	0	\$0	\$0	0	\$0
Landscape Architecture/Regional & Community Planning	9	\$414,115	\$1,304,115	9	\$71,571
<b>Total Architecture, Planning and Design</b>	<b>13</b>	<b>\$531,308</b>	<b>\$1,572,227</b>	<b>10</b>	<b>\$96,571</b>
<b><u>COLLEGE OF ARTS AND SCIENCES</u></b>					
American Ethnic Studies	0	\$0	\$0	0	\$0
Art	0	\$0	\$0	0	\$0
Biochemistry	26	\$3,817,005	\$13,426,823	13	\$2,463,717
Biology	79	\$10,542,596	\$31,658,005	57	\$8,162,164
Center for Basic Cancer Research	1	\$210,000	\$420,000	0	\$0
Chemistry	42	\$6,209,648	\$19,023,148	18	\$2,243,577
Communication Studies, Theatre and Dance	0	\$0	\$0	0	\$0
Community Health Institute	0	\$0	\$0	0	\$0
Dean of Arts and Sciences	1	\$26,532	\$74,995	1	\$200,000
Economics	0	\$0	\$0	0	\$0
English	9	\$657,727	\$744,184	0	\$0
Geography	14	\$899,190	\$2,349,009	10	\$1,118,409
Geology	10	\$977,742	\$2,482,224	4	\$229,475
History	1	\$40,000	\$40,000	0	\$0
James R. Macdonald Laboratory	1	\$766,187	\$2,289,562	0	\$0
Kinesiology	0	\$0	\$0	3	\$178,084
Mathematics	23	\$1,301,945	\$4,759,303	9	\$861,187
Modern Languages	0	\$0	\$0	1	\$6,000
Music	3	\$34,950	\$68,977	1	\$15,950

**Fourth Quarter  
Proposal/Award Summary  
07/01/13 - 6/30/14**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
Philosophy	1	\$25,728	\$25,728	0	\$0
Physics	48	\$13,529,139	\$56,489,727	21	\$5,694,471
Political Science	3	\$110,444	\$114,444	1	\$4,000
Psychological Sciences	14	\$3,643,070	\$16,161,890	3	\$934,052
School of Journalism and Mass Communications	3	\$73,545	\$73,545	4	\$835,043
Sociology, Anthropology and Social Work	17	\$343,985	\$989,807	14	\$488,048
Statistics	17	\$515,136	\$1,330,637	4	\$85,842
Women Studies	0	\$0	\$0	0	\$0
<b>Total Arts and Sciences</b>	<b>313</b>	<b>\$43,724,569</b>	<b>\$152,522,008</b>	<b>164</b>	<b>\$23,520,019</b>

**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	1	\$1,000
Marketing	0	\$0	\$0	1	\$10,000
<b>Total Business Administration</b>	<b>0</b>	<b>\$0</b>	<b>\$0</b>	<b>2</b>	<b>\$11,000</b>

**COLLEGE OF EDUCATION**

Curriculum and Instruction	1	\$591,470	\$2,456,468	0	\$0
Dean of Education	31	\$6,030,792	\$24,966,503	27	\$4,913,616
Educational Leadership	2	\$62,443	\$103,001	1	\$19,500
Elementary Education	0	\$0	\$0	0	\$0
Secondary Education	0	\$0	\$0	0	\$0
Special Education, Counseling and Student Affairs	1	\$27,026	\$27,026	1	\$27,026
<b>Total Education</b>	<b>35</b>	<b>\$6,711,731</b>	<b>\$27,552,998</b>	<b>29</b>	<b>\$4,960,142</b>

**COLLEGE OF ENGINEERING**

Advanced Manufacturing Institute	3	\$178,285	\$270,000	5	\$1,372,000
Architectural Engineering and Construction Science	2	\$176,311	\$429,900	1	\$37,730
Biological and Agricultural Engineering	38	\$2,320,408	\$6,990,901	12	\$794,204
Center for Hazardous Substance Research	6	\$366,444	\$1,376,206	5	\$2,274,343
Chemical Engineering	22	\$3,736,631	\$8,683,595	11	\$1,475,765
Civil Engineering	19	\$1,009,245	\$2,101,025	17	\$1,193,043
Computing and Information Sciences	28	\$2,574,173	\$6,965,195	20	\$2,908,196
Dean of Engineering	1	\$26,532	\$74,995	2	\$200,378
Electrical and Computer Engineering	28	\$3,532,754	\$11,889,848	17	\$1,426,653
Engineering Experiment Station	0	\$0	\$0	0	\$0
Industrial and Manufacturing Systems Engineering	15	\$1,059,067	\$3,467,295	9	\$903,179
Institute for Environmental Research	7	\$1,296,204	\$1,702,101	2	\$421,049
Kansas Industrial Extension Service	11	\$711,635	\$741,268	12	\$849,510
Mechanical and Nuclear Engineering	68	\$16,136,742	\$45,012,714	18	\$2,245,934
National Gas Machinery Laboratory	0	\$0	\$0	1	\$37,730
National Institute for Land Management and Training	0	\$0	\$0	0	\$0
<b>Total Engineering</b>	<b>248</b>	<b>\$33,124,431</b>	<b>\$89,705,043</b>	<b>132</b>	<b>\$16,139,714</b>

**COLLEGE OF HUMAN ECOLOGY**

**Fourth Quarter  
Proposal/Award Summary  
07/01/13 - 6/30/14**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
Apparel, Textiles, and Interior Design	1	\$5,636	\$15,000	0	\$0
Communication Studies, Theatre, Dance	0	\$0	\$0	0	\$0
Communications	0	\$0	\$0	0	\$0
Dean of Human Ecology	4	\$568,238	\$848,456	3	\$491,557
Hospitality Management and Dietetics	2	\$1,991	\$801,991	4	\$827,642
Human Nutrition	32	\$1,726,993	\$4,127,055	14	\$1,506,520
Kinesiology	9	\$955,438	\$3,461,741	4	\$124,866
School of Family Studies and Human Services	21	\$4,007,128	\$9,843,072	18	\$7,537,520
<b>Total Human Ecology</b>	<b>69</b>	<b>\$7,265,424</b>	<b>\$19,097,315</b>	<b>43</b>	<b>\$10,488,105</b>

**COLLEGE OF TECHNOLOGY AND AVIATION**

Academic Services	0	\$0	\$0	0	\$0
Applied Aviation Research Center	7	\$315,857	\$411,028	2	\$157,993
Arts, Science and Business	2	\$133,620	\$203,948	1	\$500
Aviation	1	\$228,596	\$499,964	0	\$0
College Advancement	0	\$0	\$0	1	\$1,500
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
<b>Total Technology and Aviation</b>	<b>10</b>	<b>\$678,073</b>	<b>\$1,114,940</b>	<b>4</b>	<b>\$159,993</b>

**COLLEGE OF VETERINARY MEDICINE**

Anatomy and Physiology	27	\$3,045,436	\$8,887,296	20	\$2,997,688
Clinical Sciences	21	\$381,852	\$1,246,502	13	\$771,662
Dean of Veterinary Medical Center	1	\$30,000	\$50,000	1	\$206,431
Diagnostic Medicine/Pathobiology	87	\$8,821,802	\$35,551,145	52	\$8,910,119
Veterinary Diagnostic Laboratory	8	\$170,245	\$236,099	3	\$50,127
Veterinary Medical Teaching Hospital	1	\$450	\$450	1	\$2,000
<b>Total Veterinary Medical Center</b>	<b>145</b>	<b>\$12,449,785</b>	<b>\$45,971,492</b>	<b>90</b>	<b>\$12,938,027</b>

**COOPERATIVE EXTENSION**

**Cooperative Extension - Agriculture**

Agricultural Economics	0	\$0	\$0	0	\$0
Agriculture and Natural Resources	4	\$82,574	\$1,036,021	4	\$562,308
Agronomy	1	\$10,632	\$10,632	1	\$21,677
Biological and Agricultural Engineering	0	\$0	\$0	0	\$0
Communications	0	\$0	\$0	0	\$0
County Agents-Metropolitan Sector	0	\$0	\$0	0	\$0
County Agents-Northwest Sector	0	\$0	\$0	0	\$0
Director of Cooperative Extension	1	\$39,977	\$39,977	2	\$283,589
Four-H Youth Development	6	\$119,500	\$389,433	6	\$307,433
Kansas Forest Service	7	\$4,001,609	\$4,419,647	10	\$3,442,665
KS Ctr for Agri & the Env./KS Water Resource Res. Inst.	0	\$0	\$0	0	\$0
Northeast Area Office	2	\$19,487	\$48,317	2	\$56,784
Northeast/Metro Area Office	0	\$0	\$0	0	\$0
Northwest Area Office	8	\$119,003	\$158,870	1	\$1,575
Southeast Area Office	6	\$40,387	\$88,813	4	\$42,263



**Fourth Quarter  
Proposal/Award Summary  
07/01/13 - 6/30/14**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
Southwest Area Office	17	\$391,843	\$710,534	4	\$64,677
<b>Subtotal Cooperative Ext - Agriculture</b>	<b>52</b>	<b>\$4,825,012</b>	<b>\$6,902,244</b>	<b>34</b>	<b>\$4,782,971</b>
<b>Cooperative Extension - Human Ecology</b>					
Family and Consumer Sciences	1	\$2,490,054	\$2,490,054	1	\$2,489,822
Human Nutrition	0	\$0	\$0	0	\$0
Nutrition Program	0	\$0	\$0	0	\$0
<b>Subtotal Cooperative Ext - Human Ecology</b>	<b>1</b>	<b>\$2,490,054</b>	<b>\$2,490,054</b>	<b>1</b>	<b>\$2,489,822</b>
<b>Total Cooperative Extension</b>	<b>53</b>	<b>\$7,315,066</b>	<b>\$9,392,298</b>	<b>35</b>	<b>\$7,272,793</b>
<b><u>OFFICE OF THE PRESIDENT</u></b>					
Auditorium Performances	0	\$0	\$0	0	\$0
Beach Art Museum	2	\$18,872	\$18,872	1	\$8,872
Office of the President	1	\$5,000,000	\$5,000,000	1	\$5,000,000
<b>Total Office of the President</b>	<b>3</b>	<b>\$5,018,872</b>	<b>\$5,018,872</b>	<b>2</b>	<b>\$5,008,872</b>
<b><u>OFFICE OF THE PROVOST</u></b>					
Assessment and Program Review	0	\$0	\$0	0	\$0
Center for Engagement and Community Development	1	\$100,881	\$249,934	2	\$264,757
Dean of Continuing Education	0	\$0	\$0	1	\$9,987,444
Dean of Graduate School	0	\$0	\$0	3	\$320,741
Information Security & Compliance	1	\$59,578	\$59,578	1	\$139,969
International Programs	0	\$0	\$0	0	\$0
Kansas Center for Rural Initiatives	0	\$0	\$0	0	\$0
Library	1	\$1,200	\$1,200	0	\$0
Office of Diversity and Dual Career Development	0	\$0	\$0	0	\$0
Office of the Provost	3	\$134,671	\$302,954	4	\$341,067
Regent's Educational Communications Center	0	\$0	\$0	0	\$0
School of Leadership Studies	4	\$59,260	\$111,260	5	\$61,048
Office of Vice President for Communications and Marketing	0	\$0	\$0	0	\$0
<b>Total Office of the Provost</b>	<b>10</b>	<b>\$355,590</b>	<b>\$724,926</b>	<b>16</b>	<b>\$11,115,026</b>
<b><u>OFFICE OF THE VICE PRESIDENT FOR ACADEMIC SERVICES AND TECHNOLOGY</u></b>					
Information Technology Assistance Center	0	\$0	\$0	1	\$3,850
<b>Total Academic Services and Technology</b>	<b>0</b>	<b>\$0</b>	<b>\$0</b>	<b>1</b>	<b>\$3,850</b>
<b><u>OFFICE OF THE VICE PRESIDENT FOR ADMINISTRATION AND FINANCE</u></b>					
Budget Office	0	\$0	\$0	0	\$0

**Fourth Quarter  
Proposal/Award Summary  
07/01/13 - 6/30/14**

Department/College	Proposals			Awards	
	Submitted	*Period	**Total	Received	***Total
KSU Police Department	2	\$37,879	\$117,574	2	\$1,500
Public Safety	0	\$0	\$0	0	\$0
Vice President for Administration and Finance	0	\$0	\$0	0	\$0
<b>Total Administration and Finance</b>	<b>2</b>	<b>\$37,879</b>	<b>\$117,574</b>	<b>2</b>	<b>\$1,500</b>

**OFFICE OF THE VICE PRESIDENT FOR RESEARCH**

Biosecurity Research Institute	5	\$834,964	\$3,647,384	3	\$5,033,555
Comparative Medicine	0	\$0	\$0	0	\$0
K-State Olathe Innovation Campus	2	\$347,610	\$1,064,749	0	\$0
National Agricultural Biosecurity Center	4	\$566,653	\$2,385,024	2	\$148,134
Office of the Vice President for Research	0	\$0	\$0	3	\$237,058
Vice President Biotech Laboratory	0	\$0	\$0	0	\$0
Vice President Electronics Design Laboratory	1	\$175,834	\$325,997	5	\$616,545
<b>Total Vice President for Research</b>	<b>12</b>	<b>\$1,925,061</b>	<b>\$7,423,154</b>	<b>13</b>	<b>\$6,035,292</b>

**OFFICE OF THE VICE PRESIDENT FOR  
STUDENT LIFE AND DEAN OF STUDENTS**

Department of Housing	0	\$0	\$0	1	\$1,000
Educational and Personal Development	1	\$9,890	\$9,890	7	\$986,068
KSU Child Development Center, Inc.	1	\$3,000	\$3,000	3	\$137,806
New Student Services	0	\$0	\$0	2	\$49,940
Office of Vice President for Student Life	0	\$0	\$0	2	\$61,000
University Counseling Services	0	\$0	\$0	1	\$34,000
<b>Total Student Life and Dean of Students</b>	<b>2</b>	<b>\$12,890</b>	<b>\$12,890</b>	<b>16</b>	<b>\$1,269,814</b>

<b>University Totals</b>	<b>1,515</b>	<b>\$152,965,969</b>	<b>\$466,817,560</b>	<b>954</b>	<b>\$140,523,033</b>
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**PROPOSALS**

\*Period = Initial budget period amount requested

\*\*Total = Total funds requested for entire project period

**AWARDS**

\*\*\*Total = Awards reflect the sum total of all awards actually received during the specific 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 a given reporting period are included. *(All totals are cumulative throughout the fiscal year.)*

KANSAS STATE UNIVERSITY  
SUMMARY OF EXTRAMURAL SUPPORT

FY2014

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
<b>AGRICULTURE</b>					
Dean of Agriculture & Director of AES	\$41,518	\$0	\$81,958	\$0	\$4,080,119
Agricultural Economics	\$2,408,959	\$2,179,162	\$3,275,769	\$1,879,073	\$2,701,748
Agronomy	\$6,779,713	\$4,911,685	\$6,135,014	\$6,317,145	\$9,047,246
Animal Sciences & Industry	\$1,327,458	\$2,425,820	\$1,463,992	\$3,264,082	\$4,160,941
Communications	\$76,436	\$0	\$49,639	\$28,948	\$572,825
Entomology	\$1,898,520	\$2,316,683	\$1,361,623	\$1,641,243	\$2,951,497
Food Science Institute	\$218,472	\$117,689	\$117,175	\$860,581	\$351,396
Grain Science & Industry	\$1,582,167	\$1,376,246	\$2,165,610	\$10,118,056	\$4,881,064
Hort., Forestry & Recreation Resources	\$514,216	\$368,293	\$755,787	\$610,161	\$1,212,934
International Agriculture Programs	\$0	\$3,982	\$125,945	\$453,714	\$473,742
KS Ctr for Agri & the Env/KS Water Res. Res. Inst.	\$886,398	\$647,659	\$1,514,499	\$886,934	\$1,237,346
Office of Academic Programs	\$221,702	\$150,210	\$74,134	\$150,737	\$223,774
Plant Biotechnology Center	\$0	\$0	\$0	\$72,000	\$72,000
Plant Pathology	\$6,754,886	\$5,451,762	\$7,375,691	\$9,373,376	\$8,563,872
Agricultural Experiment Station	\$333,010	\$210,000	\$165,000	\$0	\$10,000
Northwest Research Extension Center	\$393,406	\$410,701	\$231,733	\$387,423	\$167,220
Agricultural Research Center-Hays	\$608,307	\$575,798	\$432,201	\$341,647	\$536,961
Southeast Agricultural Res. Ctr.	\$41,305	\$49,937	\$39,607	\$60,928	\$26,385
Southwest Research Extension Ctr.	\$436,221	\$398,106	\$453,934	\$232,481	\$231,245
Extension Director	\$424,058	\$798,100	\$3,376,842	\$385,035	\$283,589
Extension Agricultural Economics	\$0	\$45,696	\$0	\$0	\$0
Extension Agronomy	\$15,529	\$12,571	\$10,368	\$10,609	\$21,677
Extension Animal Sciences & Industry	\$0	\$0	\$0	\$0	\$0
Extension Biological & Agricultural Engineering	\$45,000	\$25,000	\$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 Human Nutrition	\$0	\$0	\$0	\$0	\$0
Extension Four-H Youth Development	\$253,000	\$228,500	\$295,157	\$390,367	\$307,433
Extension Grain Science and Industry	\$0	\$0	\$0	\$0	\$0
Extension Hort., Forestry & Rec. Res.	\$0	\$0	\$0	\$0	\$0
Extension KS Ctr. for Agriculture & the Environ.	\$0	\$17,500	\$0	\$0	\$0
Extension Kansas Forest Service	\$5,914,897	\$493,890	\$6,522,887	\$420,967	\$3,442,665
Extension Kansas Water Resource Res. Inst.	\$0	\$0	\$0	\$0	\$0
Extension Northeast Area Office	\$10,620	\$12,446	\$17,137	\$10,235	\$56,784
Extension Northwest Area Office	\$18,822	\$40,613	\$91,685	\$9,360	\$1,575
Extension Plant Pathology	\$0	\$0	\$0	\$0	\$0
Extension Agriculture and Natural Resources	\$489,315	\$503,211	\$383,458	\$493,018	\$562,308
Extension South Central Area Office	\$0	\$0	\$0	\$0	\$0
Extension Southeast Area Office	\$3,933	\$37,776	\$12,532	\$32,699	\$42,263
Extension Southwest Area Office	\$45,169	\$21,710	\$7,638	\$23,662	\$64,677
College Totals	<u>\$31,743,036</u>	<u>\$23,830,745</u>	<u>\$36,537,015</u>	<u>38,454,478</u>	<u>\$46,285,286</u>

**ARCHITECTURE, PLANNING AND DESIGN**

Dean of Architecture, Planning & Design	\$0	\$0	\$0	\$0	\$0
Architecture	\$0	\$0	\$0	\$0	\$25,000
Interior Architecture and Product Design	\$5,000	\$0	\$33,982	\$0	\$0
Landscape Arch/Regional & Comm Plan	<u>\$167,343</u>	<u>\$60,008</u>	<u>\$261,936</u>	<u>\$0</u>	<u>\$71,571</u>
College Totals	<u>\$172,343</u>	<u>\$60,008</u>	<u>\$295,918</u>	<u>\$0</u>	<u>\$96,571</u>

**ARTS AND SCIENCES**

Dean of Arts & Sciences	\$0	\$15,000	\$0	\$0	\$200,000
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	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Biochemistry	\$3,018,734	\$1,457,390	\$1,383,653	\$1,446,113	\$2,463,717
Biology	\$8,171,385	\$8,471,140	\$10,262,919	\$7,793,383	\$8,162,164
Chemistry	\$3,340,693	\$3,784,835	\$1,673,244	\$2,491,458	\$2,243,577
Communication Studies, Theatre & Dance	\$59,374	\$0	\$0	\$0	\$0
Community Health Institute	\$0	\$0	\$0	\$0	\$0
Economics	\$0	\$0	\$0	\$0	\$0
English	\$740	\$23,334	\$0	\$0	\$0
Geography	\$165,536	\$497,609	\$423,393	\$478,709	\$1,118,409
Geology	\$288,128	\$172,352	\$486,811	\$162,184	\$229,475
History	\$65,000	\$25,000	\$43,000	\$234,342	\$0
Kinesiology	\$317,481	\$198,395	\$268,607	\$179,012	\$178,084
Mathematics	\$1,183,781	\$387,717	\$539,233	\$418,469	\$861,187
Modern Languages	\$0	\$0	\$0	\$0	\$6,000
Music	\$14,050	\$17,850	\$15,950	\$15,950	\$15,950
Philosophy	\$0	\$0	\$0	\$0	\$0
Physics	\$5,241,624	\$9,318,025	\$6,921,664	\$5,231,021	\$5,694,471
Political Science	\$314,246	\$0	\$87,469	\$171,028	\$4,000
Psychological Sciences	\$625,142	\$648,914	\$1,181,142	\$841,284	\$934,052
School of Journalism & Mass Communications	\$0	\$89,924	\$388,368	\$379,467	\$835,043
Sociology, Anthropology, & Social Work	\$760,237	\$333,359	\$87,277	\$227,879	\$488,048
Speech Communication, Theatre and Dance	\$0	\$0	\$0	\$0	\$0
Statistics	\$51,633	\$45,164	\$36,953	\$260,908	\$85,842
Woman Studies	\$0	\$10,050	\$0	\$0	\$0
College Totals	<u>\$23,617,786</u>	<u>\$25,496,059</u>	<u>\$23,799,683</u>	<u>\$20,331,206</u>	<u>\$23,520,019</u>

#### **BUSINESS ADMINISTRATION**

Dean of Business Administration	\$0	\$0	\$0	\$0	\$0
Accounting	\$0	\$0	\$0	\$41,416	\$0
Marketing	\$15,463	\$3,250	\$0	\$0	\$10,000
Management	<u>\$228,749</u>	<u>\$38,772</u>	<u>\$38,002</u>	<u>\$5,000</u>	<u>\$1,000</u>
College Totals	<u>\$244,212</u>	<u>\$42,022</u>	<u>\$38,002</u>	<u>\$46,416</u>	<u>\$11,000</u>

#### **EDUCATION**

Curriculum and Instruction	\$0	\$0	\$4,014	\$295,178	\$0
Dean of Education	\$6,403,595	\$3,690,061	\$5,678,838	\$4,568,448	\$4,913,616
Educational Leadership	\$110,947	\$65,885	\$66,106	\$87,771	\$19,500
Elementary Education	\$32,370	\$32,370	\$0	\$0	\$0
Secondary Education	\$30,984	\$0	\$0	\$0	\$0
Special Education, Counseling and Student Affairs	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$27,026</u>
College Totals	<u>\$6,577,896</u>	<u>\$3,788,316</u>	<u>\$5,748,958</u>	<u>\$4,951,397</u>	<u>\$4,960,142</u>

#### **ENGINEERING**

Dean of Engineering	\$323,884	\$20,106	\$3,862,252	\$7,045,581	\$200,378
Advanced Manufacturing Institute	\$2,141,383	\$2,550,702	\$1,390,487	\$2,787,818	\$1,372,000
Architectural Engg & Construction Sci	\$0	\$0	\$60,722	\$0	\$37,730
Biological & Agricultural Engineering	\$2,923,787	\$1,422,306	\$1,746,929	\$1,526,681	\$794,204
Center for Hazardous Substance Research	\$1,222,000	\$290,245	\$595,543	\$288,727	\$2,274,343
Chemical Engineering	\$2,851,943	\$4,715,020	\$1,767,029	\$1,120,526	\$1,475,765
Civil Engineering	\$2,850,820	\$2,279,751	\$1,505,432	\$2,753,232	\$1,193,043
Computing & Information Sciences	\$3,328,123	\$2,252,037	\$2,902,450	\$3,782,564	\$2,908,196
Electrical & Computer Engineering	\$2,703,700	\$1,835,404	\$2,105,802	\$874,793	\$1,426,653
Engineering Experiment Station	\$67,079	\$54,409	\$173,276	\$0	\$0
Institute for Environmental Research	\$1,368,029	\$1,080,237	\$898,846	\$611,763	\$421,049
Extension Engineering	\$0	\$0	\$0	\$0	\$0
Industrial & Manufacturing Sys Engg	\$431,774	\$863,656	\$787,941	\$1,330,252	\$903,179
Kansas Industrial Extension Service	\$1,283,777	\$1,359,975	\$672,125	\$1,004,228	\$849,510
Mechanical and Nuclear Engineering	\$1,866,639	\$3,376,890	\$3,549,961	\$2,029,180	\$2,245,934
National Gas Machinery Laboratory	\$96,110	\$125,667	\$58,216	\$201,149	\$37,730

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Nat'l Institute for Land Mgmt & Training	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$23,459,046</u>	<u>\$22,226,404</u>	<u>\$22,077,011</u>	<u>\$25,356,493</u>	<u>\$16,139,714</u>

#### **HUMAN ECOLOGY**

Dean of Human Ecology	\$2,757,068	\$320,913	\$428,501	\$110,461	\$491,557
Apparel, Textiles & Interior Design	\$0	\$74,499	\$28,854	\$713,847	\$0
Human Nutrition	\$1,040,636	\$462,504	\$2,564,729	\$1,716,444	\$1,506,520
Hospitality Mgmt & Dietetics	\$15,204	\$2,282,480	\$145,168	\$500,000	\$827,642
Kinesiology	\$0	\$0	\$0	\$100,454	\$124,866
School of Family Studies & Human Services	\$14,709,030	\$11,156,617	\$15,630,852	\$6,524,106	\$7,537,520
Extension Apparel, Textiles & Interior Design	\$0	\$0	\$0	\$0	\$0
Extension Family & Consumer Sciences	\$0	\$591,157	\$2,359,722	\$1,757,763	\$2,489,822
Extension Human Nutrition	\$3,162,679	\$3,421,868	\$0	\$0	\$0
Extension Nutrition Program	\$0	\$0	\$0	\$0	\$0
Ext. Family Studies & Human Services	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$21,684,617</u>	<u>\$18,310,037</u>	<u>\$21,157,826</u>	<u>\$11,423,074</u>	<u>\$12,977,927</u>

#### **TECHNOLOGY AND AVIATION**

Dean, College of Technology	\$0	\$0	\$0	\$0	\$0
Academic Services	\$0	\$0	\$0	\$12,276	\$0
College Advancement	\$0	\$0	\$0	\$0	\$1,500
Salina Applied Aviation Research Center	\$2,965,110	\$20,389	\$0	\$10,000	\$157,993
Salina Arts, Science and Business	\$8,500	\$4,500	\$4,500	\$0	\$500
Salina Aviation	\$45,690	\$20,288	\$14,066	\$0	\$0
Engineering Technology	\$0	\$0	\$0	\$0	\$0
College Totals	<u>\$3,019,300</u>	<u>\$45,177</u>	<u>\$18,566</u>	<u>\$22,276</u>	<u>\$159,993</u>

#### **VETERINARY MEDICINE**

Dean of Veterinary Medicine	\$142,790	\$177,879	\$287,167	\$199,401	\$206,431
Anatomy & Physiology	\$3,494,658	\$3,661,475	\$3,090,238	\$7,747,515	\$2,997,688
Clinical Sciences	\$1,640,051	\$2,019,718	\$1,219,405	\$1,164,922	\$771,662
Diagnostic Medicine/Pathobiology	\$10,833,620	\$11,253,396	\$8,882,207	\$10,496,241	\$8,910,119
Veterinary Diagnostic Laboratory	\$220,517	\$465,217	\$61,860	\$231,875	\$50,127
Veterinary Medical Teaching Hospital	\$19,000	\$23,800	\$22,405	\$2,000	\$2,000
College Totals	<u>\$16,350,636</u>	<u>\$17,601,484</u>	<u>\$13,563,282</u>	<u>\$19,841,954</u>	<u>\$12,938,027</u>

#### **PRESIDENT**

Beach Art Museum	\$14,208	\$26,860	\$75,000	\$0	\$8,872
McCain Auditorium	\$347,358	\$430,286	\$0	\$0	\$0
Office of the President	\$2,100,000	\$0	\$1,500,000	\$0	\$5,000,000
Totals	<u>\$2,461,566</u>	<u>\$457,146</u>	<u>\$1,575,000</u>	<u>\$0</u>	<u>\$5,008,872</u>

#### **PROVOST**

Office of the Provost	\$0	\$3,186,621	\$53,051	\$1,527	\$341,067
Assessment & Program Review	\$0	\$0	\$39,078	\$14,421	\$0
Center for Engagement, Community Development	\$168,385	\$93,415	\$471,045	\$101,648	\$264,757
Dean of Continuing Education	\$33,995	\$225,000	\$75,000	\$15,871,917	\$9,987,444
Dean of the Graduate School	\$58,152	\$183,048	\$295,157	\$579,565	\$320,741
Information Security & Compliance	\$0	\$0	\$0	\$0	\$139,969
International Programs	\$246,421	\$101,214	\$10,224	\$0	\$0
Kansas Center for Rural Initiatives	\$0	\$0	\$0	\$0	\$0
Library	\$46,479	\$14,589	\$750	\$0	\$0
Office of Diversity and Dual Career Dev.	\$31,714	\$34,022	\$35,002	\$0	\$0
Planning and Analysis	\$0	\$0	\$0	\$0	\$0
Regents Educational Communications Ctr.	\$0	\$0	\$0	\$0	\$0
School of Leadership Studies	\$247,954	\$149,637	\$180,314	\$94,847	\$61,048
Vice President for Communications and Marketing	\$0	<u>\$249,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Totals	\$833,100	\$4,236,546	\$1,159,621	\$16,663,925	\$11,115,026
<b>V.P. ADMINISTRATION AND FINANCE</b>					
Vice President for Administration and Finance	\$583,507	\$0	\$0	\$0	\$0
Budget Office	\$11,748,086	\$0	\$0	\$0	\$0
KSU Police Department	\$4,697	\$7,097	\$205,271	\$2,500	\$1,500
Public Safety	\$0	\$0	\$2,600,000	\$0	\$0
Physical Facilities	\$0	\$0	\$0	\$0	\$0
Totals	\$12,336,290	\$7,097	\$2,805,271	\$2,500	\$1,500
<b>V.P. INSTITUTIONAL ADVANCEMENT</b>					
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	\$0	\$0	\$0	\$0	\$0
<b>V. P. ACADEMIC SERVICES &amp; TECHNOLOGY</b>					
Vice President for Academic Serv. & Tech.	\$0	\$0	\$0	\$0	\$0
Dean of Continuing Education	\$0	\$0	\$0	\$0	\$0
Information Technology Assistance Center	\$0	\$0	\$0	\$0	\$3,850
Regents Educational Communications Ctr.	\$0	\$0	\$0	\$0	\$0
Regents Telenet	\$0	\$0	\$0	\$0	\$0
Totals	\$0	\$0	\$0	\$0	\$3,850
<b>VICE PRESIDENT FOR RESEARCH</b>					
Vice President for Research	\$67,189	\$0	\$5,081,000	\$5,180,466	\$237,058
Vice President for Res. & Dean Grad of Sch.	\$0	\$0	\$0	\$0	\$0
Biosecurity Research Institute	\$0	\$340,842	\$752,521	\$5,226,382	\$5,033,555
K-State Olathe Innovation Campus	\$0	\$0	\$0	\$500	\$0
National Agricultural Biosecurity Center	\$2,160,791	\$6,028,149	\$812,000	\$1,753,544	\$148,134
Biotechnology Laboratory	\$52,037	\$50,005	\$57,054	\$0	\$0
Electronics Design Lab	\$165,865	\$233,893	\$330,790	\$334,864	\$616,545
Totals	\$2,445,882	\$6,652,888	\$7,033,365	\$12,495,755	\$6,035,292
<b>V.P. FOR STUDENT LIFE AND DEAN OF STUDENTS</b>					
Office of Vice President for Student Life	\$84,240	\$69,957	\$0	\$15,000	\$61,000
Department of Housing	\$0	\$0	\$0	\$0	\$1,000
Educational & Personal Development	\$2,542,353	\$1,635,762	\$1,288,752	\$1,118,279	\$986,068
KSU Child Development Center	\$86,165	\$129,420	\$310,126	\$586,442	\$137,806
New Student Services	\$0	\$0	\$0	\$0	\$49,940
Office of Diversity & Dual Career Dev.	\$0	\$0	\$0	\$0	\$0
University Counseling Services	\$37,400	\$37,000	\$37,000	\$34,333	\$34,000
Totals	\$2,750,158	\$1,872,139	\$1,635,878	\$1,754,054	\$1,269,814
<b>UNIVERSITY TOTALS</b>	<b>\$147,695,867</b>	<b>\$124,626,067</b>	<b>\$137,445,396</b>	<b>\$151,343,529</b>	<b>\$140,523,033</b>

# EXTRAMURAL AWARDS

Fiscal Year 2014 (July 1, 2013 – June 30, 2014)

## COLLEGE OF AGRICULTURE

### AGRICULTURAL ECONOMICS

**Amanor-Boadu, Vincent R., Featherstone, Allen M., and Ross, Kara**, US Agency for International Development, \$304,264, "Pulse Value Chain Initiative-Zambia (PVCIZ)."

**Amanor-Boadu, Vincent R., Ross, Kara, Shanoyan, Aleksan, and Zereyesus, Yacob**, US Department of Agriculture, \$705,566, "METSS Ghana Implementation (Sustaining Growth Through Effective Management and Collaboration)."

**Bergtold, Jason S., Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), and **Peterson, Jeffrey M.**, National Science Foundation, "Farmers' Decisions to Grow Crops for Fuel."

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

**Bergtold, Jason S.**, US Department of Agriculture, \$20,000, "Analysis of Farmer Willingness to Produce Oilseeds for Biofuel in the Western US."

**Bergtold, Jason S.**, US Department of Agriculture, \$71,750, "Oilseed to Jet-Fuel Economics, Outreach, and Extension."

**Dalton, Timothy J., Dhuyvetter, Kevin C., Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina** (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."

**Dalton, Timothy J.**, US Agency for International Development, "The Management Entity of the Sorghum and Millet Innovation Lab."

**Dhuyvetter, Kevin C., Dalton, Timothy J., Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), **Lilja, Nina** (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, \$44,332, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

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

**Fox, John A., Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), **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.** (Clinical Sciences), **Tonsor, Glynn,** 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., Adee, 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, \$7,517, "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., Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & 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."

**Hadley, Gregg L., Buhler, Forrest A.** (Agriculture and Natural Resources), and **Henton, Charlene M.** (Agriculture and Natural Resources), US Department of Agriculture, "Planning Successful Farm and Ranch Successions."

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

**Ibendahl, Gregory,** and **Taylor, Mykel R.,** US Department of Agriculture, \$500,000, "Farm Business Management and Benchmarking: Kansas, Illinois, and Kentucky Collaborations."

**Leatherman, John C.,** Kansas Department of Health and Environment, \$137,373 (includes \$24,390 from Stockholder Leadership Team), "KS WRAPS - Cottonwood SFY 14 Yr 1."

**Leatherman, John C.,** Kansas Department of Health and Environment, \$148,146 (includes \$24,381 from BMP Projects), "Milford WRAPS Implementation SFY 14 Yr 1."

**Leatherman, John C., Bolton, Debra** (Southwest Area Office), and **Wiles, Bradford B.** (School of Family Studies and Human Services), US Department of Health and Human Services, \$59,773, "Behavioral Health Information Pilot Communities: Kansas State University and Finney County Community Health Coalition."

**Leatherman, John C.,** US Department of Health and Human Services, \$48,369, "Community Assessment and Education to Promote Behavioral Health Planning and Evaluation."



**Leatherman, John C.**, US Environmental Protection Agency, \$42,647 (includes \$10,247 from BMP Projects), "Hillsdale WRAPS Implementation FY 2014 - 2016."

**Leatherman, John C.**, US Environmental Protection Agency, \$185,507, "NPS Management Plan Technical Assistance."

**Leatherman, John C.**, US Environmental Protection Agency, \$109,919 (includes \$23,940 from BMP Projects), "Upper Neosho Implementation SFY 2014 - 2016."

**Peterson, Hikaru H., Kahl, Daniel W.** (Agriculture and Natural Resources), **Procter, David E.** (Center for Engagement and Community Development), and **Procter, Sandra B.** (Human Nutrition), US Department of Agriculture, \$124,879, "Increasing Healthful Food Choice and Strengthening Rural Grocery Stores through Nutritional Education and Labeling."

**Peterson, Hikaru H., Baker, Lauri M.** (Communications), and **Boyer, Cheryl R.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$35,363, "Social Media Strategies for Rural Nurseries and Garden Centers."

**Peterson, Jeffrey M., Bergtold, Jason S., and Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), National Science Foundation, \$8,000, "Farmers' Decisions to Grow Crops for Fuel."

**Peterson, Jeffrey M., Pfromm, Peter H.** (Chemical Engineering), **Rezac, Mary E.** (Chemical Engineering), and **Wang, Donghai** (Biological and Agricultural Engineering), National Science Foundation, "IGERT: From Crops to Commuting: Integrating the Social, Technological, and Agricultural Aspects of Renewable and Sustainable Biorefining (ISTAR)."

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

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**Schroeder, Ted C., Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John A., Kastner, Curtis L.** (Food Science Institute), **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), **Thomson, Daniel U.** (Clinical Sciences), **Tonsor, Glynn,** and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$74,351, "Shigatoxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**Taylor, Mykel R., and Ibendahl, Gregory**, US Department of Agriculture, "Farm Business Management and Benchmarking: Kansas, Illinois, and Kentucky Collaborations."

**Taylor, Mykel R., Kennelly, Megan** (Plant Pathology), **Pryor, Debra D.** (Communications), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), Wal-Mart Foundation, \$17,477, "Development and Adoption of Annual, Plasticulture Strawberry Production in the Great Plains."

**Tonsor, Glynn, Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John A., Kastner, Curtis L.** (Food Science Institute), **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., Thomson, Daniel U.** (Clinical Sciences), and **Zurek, Ludek** (Entomology), US Department of Agriculture, "Shigatoxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**Williams, Jeffery R., Barnes, Philip L.** (Biological and Agricultural Engineering), **Kluitenberg, Gerard J.** (Agronomy), **Nelson, Nathan O.** (Agronomy), **Roozeboom, Kraig L.** (Agronomy), and **Tomlinson, Peter J.** (Agronomy), 4RNutrient Stewardship, \$52,516, "Minimizing Phosphorus Loss with 4R Stewardship and Cover Crops."

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**McCornack, Brian P., and Johnson, Wendy,** Kansas Crop Improvement Association, \$10,000, "A Web-based Directory to Connect Kansas Wheat Growers to Seed Distribution."

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**Harmony, Keith R.,** US Department of Energy, \$11,432, "CRP Management for Biomass Feedstock Production."

**Jaeger, John R., Olson, K C** (Animal Sciences and Industry), **Stevenson, Jeffrey S.** (Animal Sciences and Industry), **Waggoner, Justin** (Southwest Area Office), and **Weaber, Robert L.** (Animal Sciences and Industry), Multimin USA, Inc., "The Effect of Multimin Injectable Trace Mineral Solution on Semen Quality of Young Breeding Beef Bulls."

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

**Martin, Terry J., and Zhang, Guorong,** Multi-Sponsor, "Crop Culture."

**Perumal, Ramasamy, Aiken, Robert M.** (Northwest Research Extension Center), and **Little, Christopher R.** (Plant Pathology), Kansas Grain Sorghum Commission, \$98,000, "Development of Sorghum Germplasm with Enhanced Drought Tolerance and Higher Grain Yield."

**Perumal, Ramasamy, Obour, Augustine K., and Pagadala, P. V. Vara** (Agronomy), Kansas Grain Sorghum Commission, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

**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, Little, Christopher R.** (Plant Pathology), and **Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$7,957, "Screening Exotic Sorghum Germplasm to Identify New Sources of Stalk Rot Resistance."

**Perumal, Ramasamy**, US Department of Agriculture, \$10,000, "Enhancement of Cold Tolerance in Sorghums."

**Seifers, Dallas L.**, and **Zhang, Guorong**, Kansas Crop Improvement Association, "Wheat Streak Mosaic Virus Resistance in KS03HW12."

**Stahlman, Phillip W.**, and **Peterson, Dallas E.** (Agronomy), BASF Corporation, \$47,900, "Testing Agreement."

**Stahlman, Phillip W.**, and **Jugulam, Mithila** (Agronomy), Kansas Soybean Commission, \$23,592, "Risk of Stacked Dicamba and Glyphosate Resistance in Kochia and Best Management Practices."

**Stahlman, Phillip W.**, Monsanto Company, \$6,800, "Service Order #11."

**Stahlman, Phillip W.**, Monsanto Company, \$14,280, "Service Order 56."

**Zhang, Guorong**, and **Seifers, Dallas L.**, Kansas Crop Improvement Association, \$10,000, "Wheat Streak Mosaic Virus Resistance in KS03HW12."

**Zhang, Guorong**, Kansas Wheat Alliance, \$78,000, "Advanced Technology Application to Improve Breeding Efficiency."

**Zhang, Guorong**, Kansas Wheat Alliance, \$50,000, "Enhancement of Hays Wheat Breeding Program through Equipment Update."

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

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

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**Adee, Eric A., Dumler, Troy** (Southwest Area Office), **Roozeboom, Kraig L.**, and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Corn Commission, \$77,191, "Irrigation Management of Emerging Drought-Tolerant Corn Hybrids."

**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), **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., Nelson, Randall**, and **Roozeboom, Kraig L.**, Kansas Soybean Commission, "Agronomic Maximization of Soybean Yield and Quality."

**Adee, Eric A., Nelson, Randall, Ruiz Diaz Suarez, Dorivar A.**, and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, "Evaluation of Micronutrients for High Yield Soybean Production Using Small Plot and Strip Trial Research."

**Adee, Eric A., Little, Christopher R.** (Plant Pathology), and **Presley, DeAnn R.**, Kansas Soybean Commission, "Irrigation Regimes and Soil Oxygen Content: Investigating Environmental Parameters Associated with SDS in Kansas."

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

**Ciampitti, Ignacio**, Kansas Corn Commission, \$5,533, "Extension and Applied Research Programs for Kansas Corn Production."

**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, Jardine, Douglas J.** (Plant Pathology), **Ruiz Diaz Suarez, Dorivar A., Thompson, Curtis R., and Whitworth, Robert "Jeff" J.** (Entomology), Kansas Grain Sorghum Commission, \$6,400, "Diagnosing Sorghum Production Problems in Kansas."

**Ciampitti, Ignacio, Roozeboom, Kraig L., and Thompson, Curtis R.,** Kansas Grain Sorghum Commission, \$12,174, "Sorghum Production Schools for Kansas."

**Ciampitti, Ignacio, Duncan, Stewart R.** (Northeast Area Office), **Haag, Lucas A.** (Northwest Area Office), **Peterson, Dallas E., and Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, \$4,020, "K-State Soybean Production Schools for Kansas."

**Ciampitti, Ignacio,** Monsanto Company, \$7,500, "Service Order #5."

**Ciampitti, Ignacio,** and **Stamm, Michael J.,** US Department of Agriculture, "Bringing Risk Management to Kansas Winter Canola Producers."

**Ciampitti, Ignacio, Cramer, Gary L., Presley, DeAnn R., and Tomlinson, Peter J.,** US Department of Agriculture, "Soil Health and Water Use: Effects of Cover Crops in Producer-Owned Crop Rotations."

**Cramer, Gary L.,** Cotton, Inc., \$4,000, "Controlling Suspected Herbicide Resistant Weeds in Cotton in Sought Central Kansas."

**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, 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, \$30,066, "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.,** Monsanto Company, \$5,040, "Service Order #7."

**Cramer, Gary L., Ciampitti, Ignacio, Presley, DeAnn R., and Tomlinson, Peter J.,** US Department of Agriculture, "Soil Health and Water Use: Effects of Cover Crops in Producer-Owned Crop Rotations."

**Dille, Johanna A.,** Dupont (E.I.) De Nemours & Co., \$20,000, "Pollen-Mediated Gene Flow from Acetolactate Synthase-Inhibiting Herbicide-Resistant Sorghum to Johnsongrass."

**Dille, Johanna A.,** United Sorghum Checkoff Program, \$10,000, "ALS Resistance in Shattercane and Johnsongrass: Current Status and Future Predictions."

**Edwards, Cristie L., Mengel, David B., and Ruiz Diaz Suarez, Dorivar A.**, International Plant Nutrition Institute, "Meta-Analysis of Phosphorus Fertilizer Placement and Tillage Interaction for Corn and Soybean in the US."

**Fick, Walter H.**, Multi-Sponsor, \$23,000, "Range and Pasture Brush and Weed Control."

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

**Fritz, Allan K.**, Kansas Wheat Alliance, \$50,000, "Germplasm Enhancement."

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

**Fritz, Allan K., Chuang, Wenpo** (Entomology), **Smith, C. Michael** (Entomology), and **Whitfield, Anna E.** (Plant Pathology), Kansas Wheat Alliance, \$8,000, "Identification of Wheat Curl Mite and Virus-Resistant Wheat Germplasm."

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

**Fritz, Allan K., Poland, Jesse A.** (Plant Pathology), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Kansas Wheat Alliance, \$7,571, "Winter Wheat Phenotyping Using a Multitemporal Vegetation Index Acquired from Small Unmanned Aircraft Systems Imagery."

**Fritz, Allan K.**, Kansas Wheat Commission, \$47,000, "Implementation of Advanced Breeding Technologies."

**Fritz, Allan K.**, and **Martin, Terry J.** (Agricultural Research Center-Hays), Kansas Wheat Commission, \$242,000, "Improvement of Hard Winter Wheat for Kansas."

**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.**, Pioneer Hi-Bred International, Inc., \$100,000, "Hybrid Wheat Seed Production Agreement."

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

**Fritz, Allan K., Chen, Ming-Shun** (Entomology), **Chuang, Wenpo** (Entomology), and **Smith, C. Michael** (Entomology), US Department of Agriculture, \$10,000, "Assessment of Wheat Curl mite Virulence and Avirulence on Mite-Resistant Wheat."

**Fritz, Allan K.**, US Department of Agriculture, \$42,763, "Wheat Stem Rust Cooperative Research - Kansas State University."

**Hettiarachchi, Ganga M., Davis, Lawrence C.** (Biochemistry), **Erickson, Larry E.** (Center for Hazardous Substance Research), and **Roozeboom, Kraig L.**, North Atlantic Treaty Organization (NATO), \$3,224, "Phytotechnology with Biomass Production for Cleaning Up Former Military Sites."

**Hettiarachchi, Ganga M., Leven, Blase A.** (Center for Hazardous Substance Research), and **Martin, Sabine E.** (Geology), US Environmental Protection Agency, \$112,500, "Sustainable Local Gardening Redevelopment at Brownfields Sites."

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

**Jennings, Joshua D., and Roozeboom, Kraig L.**, Kansas Grain Sorghum Commission, "Sorghum Hybrid and Wheat Variety Traits for Planting Wheat after Sorghum in No-till."

**Jugulam, Mithila, Morris, Geoffrey, and Pagadala, P. V. Vara**, Kansas Grain Sorghum Commission, "Development of Genomic Tools to Facilitate Drought Tolerance and ALS Resistance Breeding in Sorghum."

**Jugulam, Mithila, and Stahlman, Phillip W.** (Agricultural Research Center-Hays), Kansas Soybean Commission, "Risk of Stacked Dicamba and Glyphosate Resistance in Kochia and Best Management Practices."

**Jugulam, Mithila**, Kansas Soybean Commission, \$60,680, "Understanding the Genetic Basis of Glyphosate Resistance in Kochia (*K. scoparia*)."

**Kluitenberg, Gerard J., Barnes, Philip L.** (Biological and Agricultural Engineering), **Nelson, Nathan O., Roozeboom, Kraig L., Tomlinson, Peter J., and Williams, Jeffery R.** (Agricultural Economics), 4R Nutrient Stewardship, "Minimizing Phosphorus Loss with 4R Stewardship and Cover Crops."

**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., 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., and Pierzynski, Gary M.**, National Oceanic and Atmosphere Administration, "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."

**Mengel, David B., Edwards, Cristie L., and Ruiz Diaz Suarez, Dorivar A.**, International Plant Nutrition Institute, "Meta-Analysis of Phosphorus Fertilizer Placement and Tillage Interaction for Corn and Soybean in the US."

**Mengel, David B.**, Kansas Grain Sorghum Commission, \$31,956, "Maximizing Sorghum Yield and Profitability through Efficient N Fertilization."

**Mengel, David B., and Ruiz Diaz Suarez, Dorivar A.**, Kansas Soybean Commission, \$26,080, "Phosphorus, Secondary and Micronutrient Fertilization of Soybeans in Kansas."

**Mengel, David B., Fritz, Allan K., Poland, Jesse A., and Price, Kevin**, Kansas Wheat Alliance, \$5,500, "Developing Smartphone Applications for Estimating the Grain Yield of Winter Wheat."

**Mengel, David B.**, Koch Agriculture, Inc., \$12,000, "Impact of N Timing and Urease Inhibitor Use on Nitrogen Use Efficiency in Sorghum."

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**Morris, Geoffrey, Jugulam, Mithila, and Pagadala, P. V. Vara**, Kansas Grain Sorghum Commission, \$57,250, "Development of Genomic Tools to Facilitate Drought Tolerance and ALS Resistance Breeding in Sorghum."

**Morris, Geoffrey**, United Sorghum Checkoff Program, \$26,000, "Diversity, Genetics, and Health Benefits of Sorghum Flavonoids."

**Morris, Geoffrey**, US Department of Agriculture, \$144,788, "At the Root of Sustainable Bioenergy: Using Genetic Variation in Root Traits to Maximize Soil Carbon Sequestration and Biomass Yields."

**Nelson, Nathan O., Barnes, Philip L.** (Biological and Agricultural Engineering), **Kluitenberg, Gerard J., Roozeboom, Kraig L., Tomlinson, Peter J., and Williams, Jeffery R.** (Agricultural Economics), 4R Nutrient Stewardship, \$446,386, "Minimizing Phosphorus Loss with 4R Stewardship and Cover Crops."



**Nelson, Nathan O., Adee, Eric A., Maddux, Larry D., Marsh, Brian H., and Pierzynski, Gary M.**, Multi-Sponsor, \$30,000, "Soil Fertility and Soil Management Investigations."

**Nelson, Randall, Adee, Eric A., and Roozeboom, Kraig L.**, Kansas Soybean Commission, "Agronomic Maximization of Soybean Yield and Quality."

**Nelson, Randall, Adee, Eric A., Ruiz Diaz Suarez, Dorivar A., and Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, "Evaluation of Micronutrients for High Yield Soybean Production Using Small Plot and Strip Trial Research."

**Pagadala, P. V. Vara**, International Crops Research Institute for the Semi-Arid Tropics, \$22,000, "High Temperature Tolerance and Association Mapping in Finger Millet."

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

**Pagadala, P. V. Vara, Jugulam, Mithila, and Morris, Geoffrey**, Kansas Grain Sorghum Commission, "Development of Genomic Tools to Facilitate Drought Tolerance and ALS Resistance Breeding in Sorghum."

**Pagadala, P. V. Vara, Obour, Augustine K., and Perumal, Ramasamy** (Agricultural Research Center-Hays), Kansas Grain Sorghum Commission, "Evaluating Nitrogen and Iron Use Efficiency in Advanced Sorghum Lines."

**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, \$30,000, "Exploring Wheat Germplasm for Drought and Heat Tolerance."

**Pagadala, P. V. Vara, Fritz, Allan K., and Mengel, David B.**, US Agency for International Development, \$80,218, "Development and Enhancing Heat Tolerance in Wheat Using Genomics, Molecular and Physiological Tools."

**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** (International Agricultural Programs), **Presley, DeAnn R., Rice, Charles W., and Staggenborg, Scott A.**, US Agency for International Development, \$354,659, "Improving

Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

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**Pagadala, P. V. Vara, and Schapaugh Jr, William T.,** US Department of Agriculture, "Drought, Heat, and Flood Tolerant Varieties for the Midwest and South: Building on Success."

**Pagadala, P. V. Vara,** US Department of Agriculture, \$20,000, "Enhancement of Drought and Heat Tolerance in Sorghum."

**Pagadala, P. V. Vara, and Akhunov, Eduard D.** (Plant Pathology), US Department of Agriculture, \$144,707, "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."

**Pagadala, P. V. Vara,** US Department of Agriculture, \$31,350, "Understanding Mechanisms of Physiological and Root Traits for Screening for Drought Tolerance in Common Bean (Borlaug India [P.A. Sofi])."

**Peterson, Dallas E., and Stahlman, Phillip W.** (Agricultural Research Center-Hays), BASF Corporation, "Testing Agreement."

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**Peterson, Dallas E., Ciampitti, Ignacio, Duncan, Stewart R.** (Northeast Area Office), **Haag, Lucas A.** (Northwest Area Office), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, "K-State Soybean Production Schools for Kansas."

**Peterson, Dallas E.,** Monsanto Company, \$12,663, "Service Order # 12."

**Peterson, Dallas E.,** Monsanto Company, \$6,300, "Service Order #6."

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**Peterson, Dallas E.,** Syngenta Seeds, Inc., \$12,500, "Weed Control Study."

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**Pierzynski, Gary M.**, Kansas State University Foundation, \$23,750, "ASI Salary."

**Wiley, Zelia Z., Grauer, Bette** (Dean of Engineering), **Mason, April** (Office of the Provost), **Montelone, Beth A.** (Dean of Arts and Sciences), and **Thurston, Linda P.** (Dean of Education), National Science Foundation, \$50,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

**Zhang, Guorong**, Kansas Wheat Commission, \$106,369, "Development of New Hard Red and Hard White Winter Wheat Varieties with Improved Levels of Disease Resistance for Western Kansas."

## ENTOMOLOGY

**Beeman, Richard W., Arakane, Yasuyuki** (Biochemistry), **Kramer, Karl J.** (Biochemistry), and **Muthukrishnan, Subbarat** (Biochemistry), National Science Foundation, \$1,200, "Collaborative Research: Functional Analysis of Proteins Involved in the Dynamic Assembly of Chitin/Chitosan Laminae in the Insect Exoskeleton."

**Chen, Ming-Shun, Chuang, Wenpo, Fritz, Allan K.** (Agronomy), and **Smith, C. Michael**, US Department of Agriculture, "Assessment of Wheat Curl mite Virulence and Avirulence on Mite-Resistant Wheat."

**Chuang, Wenpo, Fritz, Allan K.** (Agronomy), **Smith, C. Michael**, and **Whitfield, Anna E.** (Plant Pathology), Kansas Wheat Alliance, "Identification of Wheat Curl Mite and Virus-Resistant Wheat Germplasm."

**Chuang, Wenpo, Chen, Ming-Shun, Fritz, Allan K.** (Agronomy), and **Smith, C. Michael**, US Department of Agriculture, "Assessment of Wheat Curl mite Virulence and Avirulence on Mite-Resistant Wheat."

**Cloyd, Raymond A.**, Gloeckner Foundation, Inc. (Fred C.), \$15,000, "Effect of Incorporating Entomopathogenic Fungi into Rotation Programs Against the Western Flower Thrips, *Frankliniella Occidentalis*."

**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, \$4,000, "Evaluating Phytotoxicity of Pesticides on Horticultural Crops."

**Cloyd, Raymond A., Boyer, Cheryl R.** (Horticulture, Forestry and Recreation Resources), **DeWolf, Erick D.** (Plant Pathology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P., Miller, Frannie L., Peterson, Dallas E.** (Agronomy), and **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, "Innovative Programming Resources for Kansas Stakeholders to Enhance IPM Decisions."

**Harvey, Tom L., and Michaud, John P.**, Multi-Sponsor, \$14,300, "Insecticide Management of Field Crop Insects."

**Johnson, Wendy, and McCornack, Brian P.**, Kansas Crop Improvement Association, "An Interactive Web-Application for Diagnosing Wheat Production Production."

**McCornack, Brian P.**, CRC Plant Biosecurity, \$184,202, "Design and Deployment of Smart-Traps for Evaluating Risk and Spread of Endemic Species as a Model for Sharper Responses to Incursions - PhD Scholarship Award."

**McCornack, Brian P., and Johnson, Wendy**, Kansas Crop Improvement Association, \$10,000, "An Interactive Web-Application for Diagnosing Wheat Production Production."

**McCornack, Brian P., and Zolnerowich, Gregory**, Kansas Department of Wildlife and Parks, \$5,000, "Native Pollinator, Wildflower, and Wildlife Habitat Quality Responses to Patch-burn Grazing on Rangelands throughout the Flint Hills Ecoregion - Shelly WiggamRichetts."

**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.**, Kansas Grain Sorghum Commission, \$10,000, "Expansion and Validation of an Automated Trapping System for Monitoring Sorghum Headworm."

**McCornack, Brian P.**, Kansas Soybean Commission, \$48,750, "Agricultural Research Experiences for Teachers (RET) - Using Soybean as a Model Sytem."

**McCornack, Brian P., Schapaugh Jr, William T.** (Agronomy), **Smith, C. Michael**, and **Whitworth, Robert "Jeff" J.**, Kansas Soybean Commission, "Developing Genetic, Chemical and Population-based Management of Soybean Stem Borer and Other Soybean Insect Pests."

**McCornack, Brian P., and Reese, John C.**, North Central Soybean Research Program, \$58,143, "Soybean Aphid Management, Resistance and Outreach in the North Central Region."

**McCornack, Brian P.**, United Soybean Board, \$43,800, "GY-12 Food and Agriculture Research Experiences for Teachers - Expanding the Model beyond Nebraska."

**McCornack, Brian P., Boyer, Cheryl R.** (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A., DeWolf, Erick D.** (Plant Pathology), **Kennelly, Megan** (Plant Pathology), **Miller, Frannie L., Peterson, Dallas E.** (Agronomy), and **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, "Innovative Programming Resources for Kansas Stakeholders to Enhance IPM Decisions."

**McCornack, Brian P.**, US Department of Agriculture, \$5,000, "Integrated Management of Mite-Vectored Virus Diseases of Wheat."

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

**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., DeWolf, Erick D.** (Plant Pathology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P., Peterson, Dallas E.** (Agronomy), and **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$144,600, "Innovative Programming Resources for Kansas Stakeholders to Enhance IPM Decisions."

**Miller, Frannie L.**, US Environmental Protection Agency, \$10,000, "Pesticide Safety Education Program Support."

**Park, Yoonseong**, Monsanto Company, \$160,000, "Memorandum of Agreement."

**Park, Yoonseong**, US Department of Health and Human Services, \$293,040, "Signaling Pathways for Tick Salivary Secretion."

**Phillips, Thomas W., Cloyd, Raymond A., Reese, John C., and Whitworth, Robert "Jeff" J.**, Multi-Sponsor, \$201,945, "Chemical Control of Insect Pests of Corn and Other Field Crops, Small Grain and Forage."

**Phillips, Thomas W.**, US Department of Agriculture, \$479,946, "Developing IPM with Methyl Bromide Alternatives for Protecting Southern Dry-Cured Hams."

**Phillips, Thomas W.**, US Department of Agriculture, \$85,325, "Development of New Treatment Options for Khapra Beetle, Trogoderma Granarium (Everts)."

**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."

**Reese, John C., and McCornack, Brian P.**, North Central Soybean Research Program, "Soybean Aphid Management, Resistance and Outreach in the North Central Region."

**Ruberson, John R.**, US Department of Agriculture, \$2,420, "Acquisition of Goods and Services #58-5430-3-008."

**Ruberson, John R.**, US Department of Agriculture, \$23,000, "Biology of Dipteran Vectors of diseases Impacting Livestock and Humans."

**Ruberson, John R.**, US Department of Agriculture, \$75,052, "Wheat-Hessian Fly Interaction and Plant Resistance Mechanisms."

**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, \$61,047, "Developing Genetic, Chemical and Population-based Management of Soybean Stem Borer and Other Soybean Insect Pests."

**Smith, C. Michael, Chuang, Wenpo, Fritz, Allan K.** (Agronomy), and **Whitfield, Anna E.** (Plant Pathology), Kansas Wheat Alliance, \$24,000, "Identification of Wheat Curl Mite and Virus-Resistant Wheat Germplasm."

**Smith, C. Michael, Shroyer, James P.** (Agronomy), and **Whitworth, Robert "Jeff" J.**, Kansas Wheat Commission, \$30,000, "Aphid Vectors of Barley Yellow Dwarf Virus in Kansas Wheat."



**Smith, C. Michael, and Whitfield, Anna E.** (Plant Pathology), Kansas Wheat Commission, \$4,788, "Identification of Wheat Curl Mite and Virus-Resistant Wheat Germplasm."

**Smith, C. Michael, Chen, Ming-Shun, Chuang, Wenpo, and Fritz, Allan K.** (Agronomy), US Department of Agriculture, \$90,000, "Assessment of Wheat Curl mite Virulence and Avirulence on Mite-Resistant Wheat."

**Whitworth, Robert "Jeff" J., Ciampitti, Ignacio** (Agronomy), **Jardine, Douglas J.** (Plant Pathology), **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), and **Thompson, Curtis R.** (Agronomy), Kansas Grain Sorghum Commission, \$800, "Diagnosing Sorghum Production Problems in Kansas."

**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, "Developing Genetic, Chemical and Population-based Management of Soybean Stem Borer and Other Soybean Insect 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."

**Zhu, Kun Yan, and Bhadriraju, Subramanyam** (Grain Science and Industry), US Department of Agriculture, \$345,000, "Evaluation of New Strategies and Tactics to Manage Insect Pests in Mills."

**Zhu, Kun Yan,** US Department of Agriculture, \$444,054, "Mechanisms of Double-stranded RNA Uptake in Major Insect Pests."

**Zolnerowich, Gregory, and McCornack, Brian P.,** Kansas Department of Wildlife and Parks, "Native Pollinator, Wildflower, and Wildlife Habitat Quality Responses to Patch-burn Grazing on Rangelands throughout the Flint Hills Ecoregion - Shelly Wiggam-Richetts."

**Zurek, Ludek, Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **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.** (Clinical Sciences), and **Tonsor, Glynn** (Agricultural Economics), US Department of Agriculture, \$29,740, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

## **FOOD SCIENCE INSTITUTE**

**Getty, Kelly J. K., Kastner, Curtis L., Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), and **Nutsch, Abbey L.** (Animal Sciences and Industry), US Department of Homeland Security, "Interdisciplinary Multi-Institutional Education Programs for NCFPD."

**Kastner, Curtis L., Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John 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.** (Clinical Sciences), **Tonsor, Glynn** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$297,402, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**Kastner, Curtis L., Getty, Kelly J. K., Kastner, Justin J.** (Diagnostic Medicine/Pathobiology), and **Nutsch, Abbey L.** (Animal Sciences and Industry), US Department of Homeland Security, \$53,994, "Interdisciplinary Multi-Institutional Education Programs for NCFPD."

## **GRAIN SCIENCE AND INDUSTRY**

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

**Alavi, Sajid, and Zhu, Lijia**, PepsiCo, Inc., \$67,500, "Bio-based Nano Composites for Flexible Packaging."

**Alavi, Sajid**, PepsiCo, Inc., \$9,450, "Co-extruded Snack Product with Different Textures."

**Alavi, Sajid**, PepsiCo, Inc., \$7,400, "True Co-extrusion Bi-Texture."

**Alavi, Sajid, Aldrich, Greg, Churchill, Frances, Hancock, Joe D.** (Animal Sciences and Industry), **Jones, Cassandra K., Koppel, Kadri** (Human Nutrition), and **Miller, Christopher L.**, The United Sorghum Checkoff Program Board, "Introducing New Profit Streams for Grain Sorghum: Milling Characteristics and Inclusion Considerations for Use in Pet Foods."

**Alavi, Sajid**, United Sorghum Checkoff Program, \$68,550, "Use of Grain Sorghum as the Primary Cereal Ingredient in Premium Pet Food Products."

**Aldrich, Greg**, Fats and Proteins Research Foundation, Inc., \$67,760, "The Impact of Rendered Protein meal Level of Oxidation on Shelf Life and Acceptability in Extruded Pet Foods."

**Aldrich, Greg, Alavi, Sajid, Churchill, Frances, Hancock, Joe D.** (Animal Sciences and Industry), **Jones, Cassandra K., Koppel, Kadri** (Human Nutrition), and **Miller, Christopher L.**, The United Sorghum Checkoff Program Board, \$83,790, "Introducing New Profit Streams for Grain Sorghum: Milling Characteristics and Inclusion Considerations for Use in Pet Foods."

**Ambrose, R. P. Kingsly, Bhadriraju, Subramanyam, and Maier, Dirk E.**, CRC Plant Biosecurity, "Evaluating Chlorine Dioxide and Ozone as Alternative Methods for Controlling Phosphine-resistant Insects in On-farm and Commercial Bulk Storages – Linked PhD Scholarship Award."

**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 - Linked PhD Scholarship Award."

**Ambrose, R. P. Kingsly**, The Andersons, Inc., \$75,000, "Intrinsic Characteristics of Modified DDGS and Development of Effective Handling Strategies."

**Ambrose, R. P. Kingsly, and Maier, Dirk E.**, The Andersons, Inc., "Third Edition of the Grain Drying, Handling and Storage Handbook (MWPS-13) - Using NC-213 Multi-state Expertise for National Impact."

**Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J.**, US Department of Agriculture, "Cochran Program on Grain and Feed Procurement Vietnam."

**Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J.**, US Department of Agriculture, "Cochran Program on Grain and Oilseeds Storage & Handling Asia Region."

**Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, Maier, Dirk E., and Miller, Brandi M.**, US Department of Labor, \$104,901, "Training on Advanced Methods of Grain Dust Control within the Grain Handling and Processing Industry."

**Bhadriraju, Subramanyam, Ambrose, R. P. Kingsly, and Maier, Dirk E.**, CRC Plant Biosecurity, \$177,523, "Evaluating Chlorine Dioxide and Ozone as Alternative Methods for Controlling Phosphine-resistant Insects in On-farm and Commercial Bulk Storages – Linked PhD Scholarship Award."

**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 - Linked PhD Scholarship Award."

**Bhadriraju, Subramanyam, and Alavi, Sajid**, Multi-Sponsor, \$82,070, "Grain Science."

**Bhadriraju, Subramanyam, Higgins, Mary L.** (Human Nutrition), **Lilja, Nina** (International Agricultural Programs), **Maier, Dirk E.**, 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 Zhu, Kun Yan** (Entomology), US Department of Agriculture, \$155,000, "Evaluation of New Strategies and Tactics to Manage Insect Pests in Mills."

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

**Campabadal Teran, Carlos, Jones, Cassandra K., Maier, Dirk E., and Stark, Charles,** US Department of Agriculture, \$39,510, "Cochran Program on Animal Production and Management."

**Campabadal Teran, Carlos, Ambrose, R. P. Kingsly, Maier, Dirk E., and O'Neil III, Howard J.,** US Department of Agriculture, \$30,195, "Cochran Program on Grain and Feed Procurement Vietnam."

**Campabadal Teran, Carlos, Ambrose, R. P. Kingsly, Maier, Dirk E., and O'Neil III, Howard J.,** US Department of Agriculture, \$19,800, "Cochran Program on Grain and Oilseeds Storage & Handling Asia Region."

**Campabadal Teran, Carlos, and Maier, Dirk E.,** US Department of Agriculture, \$39,230, "Cochran Program on Grain Management & Storage Africa & Middle East Region."

**Campabadal Teran, Carlos, Ambrose, R. P. Kingsly, Maier, Dirk E., and Miller, Brandi M.,** US Department of Labor, "Training on Advanced Methods of Grain Dust Control within the Grain Handling and Processing Industry."

**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."

**Campabadal Teran, Carlos, Fowler, Mark, Maier, Dirk E., and O'Neil III, Howard J.,** US Soybean Export Council, Inc., "Latin American Animal Production Training Program, Part 2."

**Churchill, Frances, Alavi, Sajid, Aldrich, Greg, Hancock, Joe D.** (Animal Sciences and Industry), **Jones, Cassandra K., Koppel, Kadri** (Human Nutrition), and **Miller, Christopher L.,** The United Sorghum Checkoff Program Board, "Introducing New Profit Streams for Grain Sorghum: Milling Characteristics and Inclusion Considerations for Use in Pet Foods."

**Dogan, Hulya,** Kansas State University Foundation, \$35,000, "Grain Science & Industry Ross Professorship."

**Donnelly, Brendan J.,** Multi-Sponsor, \$300, "Graduate Seminar Program."

**Faubion, Jon M.,** Kansas State University Foundation, \$50,000, "Charles D. Singleton Chair in Grain Science and Industry."

**Fowler, Mark, Maier, Dirk E., and O'Neil III, Howard J.,** Kansas Corn Commission, "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 Soybean Commission, "Market Development Grant - International Grains Program."

**Fowler, Mark, 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., "Latin America Animal Production Training Program."

**Fowler, Mark, Campabadal Teran, Carlos, Maier, Dirk E., and O'Neil III, Howard J.**, US Soybean Export Council, Inc., "Latin American Animal Production Training Program, Part 2."

**Jones, Cassandra K., Faris, Brian R.** (Animal Sciences and Industry), and **Sexten, Andrea K.** (Animal Sciences and Industry), Kansas Soybean Commission, "Determining Economic and Growth Implications of Goals Using Soyhulls and Soybean Meal in Pelleted Diets."

**Jones, Cassandra K., DeRouchey, Joel M.** (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Hesse, Richard** (Diagnostic Medicine/Pathobiology), **Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, "Determining the Impact of Conditioning Time and Temperature in Pelleted Diets on PEDv Survivability in Complete Swine Diets."

**Jones, Cassandra K., DeRouchey, Joel M.** (Animal Sciences and Industry), **Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, \$67,212, "Evaluating the Use of Long-term Conditioning or Extrusion to Extract Nutrients from Lo-energy Feedstuffs."

**Jones, Cassandra K., Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Hesse, Richard** (Diagnostic Medicine/Pathobiology), **Stark, Charles,** and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, \$84,490 (includes \$63,120 from Fats and Protein Research Foundation), "Post-contamination Chemical Mitigation Strategies to Control PEDV in Feed and Feed Ingredients."

**Jones, Cassandra K., DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, "Should Producers Invest in 2-high, or 4-high Roller Mills?."

**Jones, Cassandra K., Alavi, Sajid, Aldrich, Greg, Churchill, Frances, Hancock, Joe D.** (Animal Sciences and Industry), **Koppel, Kadri** (Human Nutrition), and **Miller, Christopher L.**, The United Sorghum Checkoff Program Board, "Introducing New Profit Streams for Grain Sorghum: Milling Characteristics and Inclusion Considerations for Use in Pet Foods."

**Jones, Cassandra K., Campabadal Teran, Carlos, Maier, Dirk E., and Stark, Charles**, US Department of Agriculture, "Cochran Program on Animal Production and Management."

**Jones, Cassandra K., and Maier, Dirk E.**, US Department of Health and Human Services, \$83,344, "Personnel Training for Food Safety in Bulk Grain Based Product Processing and Handling."

**Madl, Ronald L., Shi, Yong Cheng, and Vadlani, Praveen V.**, Kansas Bioscience Authority, \$72,236, "Sustainable and Technically Advanced Integrated Biobased and Bioenergy Products."

**Madl, Ronald L., Champion, Benjamin** (Office of the Provost), and **Hohn, Keith L.** (Chemical Engineering), Kansas Soybean Commission, \$30,560, "Promoting Cooking Oil-to-Biodiesel Process on K-State University Campus."

**Maier, Dirk E.**, ADM Institute for the Prevention of Postharvest Loss, \$390,000, "Alliance for Food Security Supplemental Funding."

**Maier, Dirk E., Ambrose, R. P. Kingsly,** and **Bhadriraju, Subramanyam**, CRC Plant Biosecurity, "Evaluating Chlorine Dioxide and Ozone as Alternative Methods for Controlling Phosphine-resistant Insects in On-farm and Commercial Bulk Storages – Linked PhD Scholarship Award."

**Maier, Dirk E., Ambrose, R. P. Kingsly,** and **Bhadriraju, Subramanyam**, CRC Plant Biosecurity, \$167,829, "Modeling VaporPhos and ProFume Distribution in Bulk Storages to Improve Efficacy Against Insects - Linked PhD Scholarship Award."

**Maier, Dirk E., Fowler, Mark,** and **O'Neil III, Howard J.**, Kansas Corn Commission, \$75,000, "Market Development Grant - International Grains Program."

**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., Campabadal Teran, Carlos, Fowler, Mark,** and **O'Neil III, Howard J.**, Kansas Soybean Commission, \$100,000, "Market Development Grant International Grains Program."

**Maier, Dirk E.**, Kansas State University Foundation, \$50,000, "Grain Science & Industry Charles D. Singleton Chair."

**Maier, Dirk E.**, Kansas State University Foundation, \$100,000, "Grain Science & Industry NAMA Instructor of Milling."

**Maier, Dirk E.**, Kansas State University Foundation, \$115,000, "Grain Science & Industry, Bakers National Education Fellowship."

**Maier, Dirk E., Fowler, Mark,** and **O'Neil III, Howard J.**, Kansas Wheat Commission, \$100,000, "Market Development Grant - International Grains Program Support Project."

**Maier, Dirk E.,** and **Ambrose, R. P. Kingsly**, The Andersons, Inc., \$19,640, "Third Edition of the Grain Drying, Handling and Storage Handbook (MWPS-13) - Using NC-213 Multi-state Expertise for National Impact."

**Maier, Dirk E., Bhadriraju, Subramanyam, Higgins, Mary L.** (Human Nutrition), **Lilja, Nina** (International Agricultural Programs), and **Washburn, Shannon G.** (Communications), US Agency for International Development, \$1,737,053 (includes \$109,907 from Oklahoma State University, \$810,698 from University of Illinois-UC, and \$128,949 from University of Nebraska-Lincoln), "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

**Maier, Dirk E., Campabadal Teran, Carlos, Jones, Cassandra K.,** and **Stark, Charles**, US Department of Agriculture, "Cochran Program on Animal Production and Management."

**Maier, Dirk E., Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, and O'Neil III, Howard J.,** US Department of Agriculture, "Cochran Program on Grain and Feed Procurement Vietnam."

**Maier, Dirk E., Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, and O'Neil III, Howard J.,** US Department of Agriculture, "Cochran Program on Grain and Oilseeds Storage & Handling Asia Region."

**Maier, Dirk E., and Campabadal Teran, Carlos,** US Department of Agriculture, "Cochran Program on Grain Management & Storage Africa & Middle East Region."

**Maier, Dirk E., and Jones, Cassandra K.,** US Department of Health and Human Services, "Personnel Training for Food Safety in Bulk Grain Based Product Processing and Handling."

**Maier, Dirk E., Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, and Miller, Brandi M.,** US Department of Labor, "Training on Advanced Methods of Grain Dust Control within the Grain Handling and Processing Industry."

**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."

**Maier, Dirk E., Campabadal Teran, Carlos, Fowler, Mark, and O'Neil III, Howard J.,** US Soybean Export Council, Inc., \$47,500, "Latin American Animal Production Training Program, Part 2."

**Miller, Brandi M., Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, and Maier, Dirk E.,** US Department of Labor, "Training on Advanced Methods of Grain Dust Control within the Grain Handling and Processing Industry."

**Miller, Christopher L., Alavi, Sajid, Aldrich, Greg, Churchill, Frances, Hancock, Joe D.** (Animal Sciences and Industry), **Jones, Cassandra K., and Koppel, Kadri** (Human Nutrition), The United Sorghum Checkoff Program Board, "Introducing New Profit Streams for Grain Sorghum: Milling Characteristics and Inclusion Considerations for Use in Pet Foods."

**Miller, Rebecca,** Kansas Wheat Alliance, \$30,000, "Quality Evaluation of Wheat for Molecular Marker Identification."

**Miller, Rebecca,** Kansas Wheat Commission, \$120,000, "Kansas Wheat Quality Laboratory: Quality Evaluation from KAES Wheat Breeding Programs and Protein/Hardness Screening of Early Progeny Wheat."

**Miller, Rebecca,** Kansas Wheat Commission, \$3,500, "Preferred Hard Winter Wheat Varieties for Kansas 2014: Flour Tortilla Quality Rankings."

**Miller, Rebecca,** Kansas Wheat Commission, \$1,400, "Preferred Hard Winter Wheat Varieties for Kansas: Milling & Bread Baking Quality Rankings."

**O'Neil III, Howard J., Fowler, Mark, and Maier, Dirk E.,** Kansas Corn Commission, "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 Soybean Commission, "Market Development Grant - International Grains Program."

**O'Neil III, Howard J., 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, \$41,072, "Bulgaria Grain Management Training Program."

**O'Neil III, Howard J., Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, and Maier, Dirk E.**, US Department of Agriculture, "Cochran Program on Grain and Feed Procurement Vietnam."

**O'Neil III, Howard J., Ambrose, R. P. Kingsly, Campabadal Teran, Carlos, and Maier, Dirk E.**, US Department of Agriculture, "Cochran Program on Grain and Oilseeds Storage & Handling Asia Region."

**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."

**O'Neil III, Howard J., Campabadal Teran, Carlos, Fowler, Mark, and Maier, Dirk E.**, US Soybean Export Council, Inc., "Latin American Animal Production Training Program, Part 2."

**Shi, Yong Cheng, Madl, Ronald L., and Vadlani, Praveen V.**, Kansas Bioscience Authority, "Sustainable and Technically Advanced Integrated Biobased and Bioenergy Products."

**Shi, Yong Cheng**, Kansas State University Research Foundation, \$8,000, "Glycemic Response to Starch Spherulites."

**Stark, Charles**, Elanco Animal Health, \$4,134, "The 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 gm/ton Type C Feed."

**Stark, Charles**, Kansas State University Foundation, \$33,017, "Jim and Carol Brown Endowed Professorship in Grain Science."

**Stark, Charles, DeRouchey, Joel M.** (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Hesse, Richard** (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), National Pork Board, "Determining the Impact of Conditioning Time and Temperature in Pelleted Diets on PEDv Survivability in Complete Swine Diets."

**Stark, Charles, DeRouchey, Joel M.** (Animal Sciences and Industry), **Jones, Cassandra K., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences



and Industry), National Pork Board, "Evaluating the Use of Long-term Conditioning or Extrusion to Extract Nutrients from Lo-energy Feedstuffs."

**Stark, Charles, Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Hesse, Richard** (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K.**, and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, "Post-contamination Chemical Mitigation Strategies to Control PEDV in Feed and Feed Ingredients."

**Stark, Charles, DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Jones, Cassandra K.**, **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, "Should Producers Invest in 2-high, or 4-high Roller Mills?."

**Stark, Charles, Campabadal Teran, Carlos, Jones, Cassandra K.**, and **Maier, Dirk E.**, US Department of Agriculture, "Cochran Program on Animal Production and Management."

**Sun, X. Susan, Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), and **Weiss, Mark L.** (Anatomy and Physiology), National Science Foundation, \$39,600, "Novel Peptide Hydrogel for 3D Cell Culture."

**Vadlani, Praveen V., Madl, Ronald L.**, and **Shi, Yong Cheng**, Kansas Bioscience Authority, "Sustainable and Technically Advanced Integrated Biobased and Bioenergy Products."

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

**Vadlani, Praveen V.**, and **Pagadala, P. V. Vara** (Agronomy), US Agency for International Development, \$22,000, "Production of Advanced Biofuels From Salinity Tolerant Brown Midrib (bmr) Sorghum Genotypes."

**Vadlani, Praveen V.**, and **Hohn, Keith L.** (Chemical Engineering), US Department of Defense, \$108,000, "Novel Biomass Conversion Process for Production of Butylenes."

**Zhu, Lijia**, and **Alavi, Sajid**, PepsiCo, Inc., "Bio-based Nano Composites for Flexible Packaging."

## **HORTICULTURE, FORESTRY AND RECREATION RESOURCES**

**Blocksome, Carolyn E.**, and **Devlin, Daniel L.** (Ks Ctr for Ag Rsrce & the Env / Ks Water Rsrce Rsrch Inst), US Environmental Protection Agency, "Kansas Flint Hills Smoke Management Plan."

**Boyer, Cheryl R., Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), and **Upham, Ward S.**, US Department of Agriculture, \$43,380, "Innovative Programming Resources for Kansas Stakeholders to Enhance IPM Decisions."

**Boyer, Cheryl R., Baker, Lauri M.** (Communications), and **Peterson, Hikaru H.** (Agricultural Economics), US Department of Agriculture, \$36,434, "Social Media Strategies for Rural Nurseries and Garden Centers."

**Bremer, Dale J.**, Kansas Turfgrass Foundation, \$3,000, "Nitrous Oxide Emission and Carbon Sequestration in Turfgrass: Effects of Irrigation and N Fertilization (Match for Proposal # 28575)."

**Bremer, Dale J.**, and **Fry, Jack D.**, US Golf Association, Inc., \$28,000 (includes \$3,000 from KS Turfgrass Foundation), "Nitrous Oxide Emissions and Carbon Sequestration in Turfgrass: Effects of Irrigation and N Fertilization."

**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., \$1,500, "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.**, 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."

**Janke, Rhonda R.**, US Environmental Protection Agency, "From Garbage to Gourmet: Sustainable Waste Prevention and Mushroom Cultivation from Used Coffee Grounds."

**Lavis, Catherine C.**, National Science Foundation, \$6,000, "CAT Dissemination."

**Miller, Chad T.**, and **Williams, Kimberly A.**, Gloeckner Foundation, Inc. (Fred C.), \$10,000, "Understanding and Preventing Intumescence Development on Ipomoea Batatas and Other Ornamental Crops."

**Park, Sunghun**, and **Chambers IV, Edgar** (Human Nutrition), US Department of Agriculture, \$11,320, "Development of Calcium-Enhanced Lettuce."

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

**Pliakoni, Eleni**, and **Rivard, Cary L.**, US Department of Agriculture, \$981,244, "Postharvest Physical Treatments to Reduce Losses of Organic and Other Locally-Grown Produce while Improving Quality and Extending Shelf Life."

**Reid, William R.**, University of Missouri, \$9,617, "Missouri Pecan Growers."

**Rivard, Cary L., Garrett, Karen A.** (Plant Pathology), **Jumpponen, Ari M.** (Biology), and **Kennelly, Megan** (Plant Pathology), US Department of Agriculture, \$39,629, "Tomato Grafting: Developing Grower Recommendations for the Great Plains and Enhancing Our Understanding of the "Rhizobiome"."

**Rivard, Cary L., Kennelly, Megan** (Plant Pathology), **Pryor, Debra D.** (Communications), and **Taylor, Mykel R.** (Agricultural Economics), Wal-Mart Foundation, \$17,477, "Development and Adoption of Annual, Plasticulture Strawberry Production in the Great Plains."

**Upham, Ward S., Boyer, Cheryl R., Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D.** (Plant Pathology), **Kennelly, Megan** (Plant Pathology), **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), and **Peterson, Dallas E.** (Agronomy), US Department of Agriculture, "Innovative Programming Resources for Kansas Stakeholders to Enhance IPM Decisions."

**Williams, Kimberly A.**, Gloeckner Foundation, Inc. (Fred C.), \$750, "e-Gro University Certificate (Horticulture)."

**Williams, Kimberly A.**, and **Miller, Chad T.**, Gloeckner Foundation, Inc. (Fred C.), "Understanding and Preventing Intumescence Development on Ipomoea Batatas and Other Ornamental Crops."

#### **INTERNATIONAL AGRICULTURAL PROGRAMS**

**Lilja, Nina, Bhadriraju, Subramanyam** (Grain Science and Industry), **Higgins, Mary L.** (Human Nutrition), **Maier, Dirk E.** (Grain Science and Industry), and **Washburn, Shannon G.** (Communications), US Agency for International Development, \$473,742 (includes \$29,975 from Oklahoma State University, \$221,099 from University of Illinois-UC, and \$35,168 from University of Nebraska-Lincoln), "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

**Lilja, Nina, 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."

#### **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 Agriculture, \$17,172, "Poultry Litter Nutrient Management Initiative."

**Devlin, Daniel L.**, Kansas Department of Health and Environment, \$104,178 (includes \$15,600 from Cooperators), "Big Creek, Middle Smoky River Watersheds WRAPS (Kanopolis Reservoir) Implementation - Years 4-6."

**Devlin, Daniel L.**, Kansas Department of Health and Environment, \$280,712 (includes \$36,960 from BMP's & Watershed Teams), "Kansas Watershed Specialists."

**Devlin, Daniel L.**, Kansas Department of Health and Environment, \$206,073 (includes \$33,800 from McPherson County), "KS WRAPS: Little Arkansas River Watershed - Implementation."

**Devlin, Daniel L., Barnes, Philip L.** (Biological and Agricultural Engineering), **Graber, Ronald W., Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), US Department of Agriculture, "Ephemeral Gully Assessment and Adoption of Preventive Measures to Reduce Erosion in Cultivated Croplands."

**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, \$402,660, "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), **Shroyer, James P.** (Agronomy), **Swamy, Aavudai Anandhi** (Agronomy), **Tomlinson, Peter J.** (Agronomy), 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."

**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., Hutchinson, Stacy L.** (Biological and Agricultural Engineering), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), and **Mladenov, Natalie** (Civil Engineering), US Department of the Interior, "Water Research for the Fort Riley Net Zero Initiative."

**Devlin, Daniel L., and Blocksome, Carolyn E.** (Horticulture, Forestry and Recreation Resources), US Environmental Protection Agency, \$10,000, "Kansas Flint Hills Smoke Management Plan."

**Devlin, Daniel L.**, US Environmental Protection Agency, \$61,040 (includes \$11,040 from Stakeholders), "KS WRAPS: Lower Smoky Hill River Watershed (Upper Portion) - Implementation."

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

**Graber, Ronald W., Barnes, Philip L.** (Biological and Agricultural Engineering), **Devlin, Daniel L., Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), US Department of Agriculture, \$5,500, "Ephemeral Gully Assessment and Adoption of Preventive Measures to Reduce Erosion in Cultivated Croplands."

**Leatherman, John C.**, Kansas Department of Health and Environment, \$15,264 (includes \$2,710 from Stockholder Leadership Team), "KS WRAPS - Cottonwood SFY 14 Yr 1."

**Leatherman, John C.**, Kansas Department of Health and Environment, \$16,461 (includes \$2,709 from BMP Projects), "Milford WRAPS Implementation SFY 14 Yr 1."

**Leatherman, John C.**, US Environmental Protection Agency, \$4,739 (includes \$1,139 from BMP Projects), "Hillsdale WRAPS Implementation FY 2014 - 2016."

**Leatherman, John C.**, US Environmental Protection Agency, "NPS Management Plan Technical Assistance."

**Leatherman, John C.**, US Environmental Protection Agency, \$12,213 (includes \$2,660 from BMP Projects), "Upper Neosho Implementation SFY 2014 - 2016."

#### **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, \$7,479, "Screening Tools to Identify Drought Resistance in Promising Wheat Lines."

**Aiken, Robert M.**, Monsanto Company, \$5,460, "Service Order #4."

**Aiken, Robert M.**, Monsanto Company, \$10,164, "Service Order #9."

**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., 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.** (Southwest Research Extension Center), **Kisekka, Isaya** (Southwest Research Extension Center), **Kluitenberg, 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, \$7,517, "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.,** Syngenta Crop Protection, LLC, \$95,000, "Research and Materials Transfer Agreement."

**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, \$82,919, "FFA Foundation Executive Director."

**Kane, Mary R.,** US Department of Education, \$140,855, "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."

**DeWolf, Erick D.,** US Department of Agriculture, \$72,000, "A Predictive Model to Increase Adoption of IPM of a Mite-Virus Disease Complex in Wheat."

#### **PLANT PATHOLOGY**

**Akhunov, Eduard D.,** Bill and Melinda Gates Foundation, \$1,670,504, "Fine-scale Dissection of the Host-Pathogen Interaction Landscape using Genome-wide Association Scans of the Host and Pathogen Genomes."

**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., and Pagadala, P. V. Vara** (Agronomy), US Department of Agriculture, \$241,178, "Improving Barley and Wheat Germplasm for Changing Environments."

**Bockus, William W., and DeWolf, Erick D.,** Kansas Crop Improvement Association, "Evaluating Options for Barley Yellow Dwarf Virus Management on New Wheat Varieties."

**Bockus, William W.,** Kansas Wheat Commission, \$30,000, "Disease Phenotyping: Determining the Reaction of Wheat Lines to Important Disease."

**Bockus, William W.,** Multi-Sponsor, \$32,500, "Seed Treatment."

**Bockus, William W.,** US Department of Agriculture, \$41,000, "Development of Scab Resistant Wheat Cultivars for Kansas."

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

**DeWolf, Erick D., and Bockus, William W.**, Kansas Crop Improvement Association, \$10,000, "Evaluating Options for Barley Yellow Dwarf Virus Management on New Wheat Varieties."

**DeWolf, Erick D.**, Kansas Crop Improvement Association, \$12,000, "Kansas WheatDashboard: Information about Emerging Stripe Rust Epidemics and Other Threats to Wheat Production."

**DeWolf, Erick D.**, Multi-Sponsor, \$1,000, "Winter Wheat Seed Treatment Tests."

**DeWolf, Erick D.**, US Department of Agriculture, \$45,197, "Development and Deployment of Prediction Models for Fusarium Head Blight."

**DeWolf, Erick D., Boyer, Cheryl R.** (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **Kennelly, Megan, McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), and **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$43,380, "Innovative Programming Resources for Kansas Stakeholders to Enhance IPM Decisions."

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

**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, and Poland, Jesse A.** (Agronomy), General Mills, Inc., \$256,753, "Development of Wheat Varieties with High Beta Glucan."

**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, "Alien Chromosome Engineering and the Deployment of Novel Sources of Resistance to Fusarium Head Blight in Wheat."

**Friebe, Bernd, and Gill, Bikram S.**, US Department of Agriculture, \$19,546, "New Sources of Resistance to FHB and DON."

**Garrett, Karen A.**, Consultative Group on International Agricultural Research, \$216,144, "CGIAR Research Program: Roots, Tubers, and Bananas for Food Security and Income."

**Garrett, Karen A.**, Consultative Group on International Agricultural Research, \$179,004, "CGIAR Research Program: Roots, Tubers, and Bananas for Food Security and Income - Surveillance."

**Garrett, Karen A.**, International Crops Research Institute for the Semi-Arid Tropics, \$10,000, "Climate Change Analysis of Pigeonpea Diseases in Semi-Arid Tropics to Develop Appropriate Disease Management Strategy."

**Garrett, Karen A., Dalton, Timothy J.** (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Jumpponen, Ari M.** (Biology), **Lilja, Nina** (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, \$22,166, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

**Garrett, Karen A., Jumpponen, Ari M.** (Biology), **Kennelly, Megan**, and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$79,258, "Tomato Grafting: Developing Grower Recommendations for the Great Plains and Enhancing Our Understanding of the "Rhizobiome"."

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

**Gill, Bikram S.**, Dow AgroSciences, LLC, \$50,143 (includes \$143 from Dow), "Partner Agreement for I/UCRC."

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

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

**Gill, Bikram S.**, Kansas Department of Agriculture, \$50,000, "Partner Agreement for I/UCRC."

**Gill, Bikram S.**, Kansas State University Research Foundation, \$625,000, "A Trait Discovery Pipeline for Wheat Crop Production."

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

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

**Gill, Bikram S.**, Kansas Wheat Commission, \$100,000, "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.**, Monsanto Company, \$8,297, "Methodology for Efficient Mapping of Alien Introgression for Adult Plant Resistance to Leaf Rust and Other Agronomic Traits in Wheat-Aegilops Tauschii Hybrids - (Bahnu Kalia, Graduate Student)."

**Gill, Bikram S., and Sehgal, Sunish K.**, National Science Foundation, \$402,500 (includes \$50,000 from DOW, \$50,000 from General Mills, \$50,000 from KS Wheat Alliance, \$50,000 from KS Wheat



Commission, \$50,000 from Limagrain, and \$50,000 from Syngenta), "I/UCRC: Collaborative Research: Wheat Genetics Resource Center: A Public-Private Consortium."

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

**Gill, Bikram S.**, and **Friebe, Bernd**, US Department of Agriculture, \$63,230, "Alien Chromosome Engineering and the Deployment of Novel Sources 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.**, **Ciampitti, Ignacio** (Agronomy), **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), **Thompson, Curtis R.** (Agronomy), and **Whitworth, Robert "Jeff" J.** (Entomology), Kansas Grain Sorghum Commission, \$800, "Diagnosing Sorghum Production Problems in Kansas."

**Jardine, Douglas J.**, Multi-Sponsor, \$10,500, "Soybean Foliar Fungicide and Seed Treatment Tests."

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

**Kennelly, Megan**, Multi-Sponsor, \$23,000, "Evaluation and Testing of Fungicides and Nematicides on Horticultural Crops."

**Kennelly, Megan**, **Boyer, Cheryl R.** (Horticulture, Forestry and Recreation Resources), **Cloyd, Raymond A.** (Entomology), **DeWolf, Erick D.**, **McCornack, Brian P.** (Entomology), **Miller, Frannie L.** (Entomology), **Peterson, Dallas E.** (Agronomy), and **Upham, Ward S.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, "Innovative Programming Resources for Kansas Stakeholders to Enhance IPM Decisions."

**Kennelly, Megan**, **Garrett, Karen A.**, **Jumpponen, Ari M.** (Biology), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, "Tomato Grafting: Developing Grower Recommendations for the Great Plains and Enhancing Our Understanding of the "Rhizobiome".

**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**, US Golf Association, Inc., \$7,500, "Evaluation of Fertilizer Application Strategies for Preventing or Recovering from Large Patch Disease of Zoysiagrass."

**Kennelly, Megan**, **Pryor, Debra D.** (Communications), **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), and **Taylor, Mykel R.** (Agricultural Economics), Wal-Mart Foundation, \$17,477, "Development and Adoption of Annual, Plasticulture Strawberry Production in the Great Plains."

**Leslie, John F., and Poland, Jesse A.**, Monsanto Company, \$53,074, "Monsanto Beachell-Borlaug International Scholars Program (Mr. Jared I. Crain's PhD Study)."

**Leslie, John F., and Poland, Jesse A.** (Agronomy), Monsanto Company, \$52,749, "Monsanto's Beachell-Borlaug International Scholars Program (Sandra Dunkel's PhD Study)."

**Leslie, John F.**, US Department of Agriculture, \$51,040, "Acquisition of Goods and Services #58-5430-3-007."

**Leslie, John F.**, US Department of Agriculture, \$29,040, "Acquisition of Goods and Services #58-5430-4-008."

**Leslie, John F., and Toomajian, Christopher**, US Department of Agriculture, \$48,517, "Fungal Genes that Limit or Prevent the Growth of Gibberella Zeae."

**Leslie, John F.**, US Department of Agriculture, \$109,803, "Genetics of Rust Pathogen Avirulence and Host Resistance in Hard Winter Wheat."

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

**Little, Christopher R., Aiken, Robert M.** (Northwest Research ExtensionCenter), 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, \$27,850, "Screening Exotic Sorghum Germplasm to Identify New Sources of Stalk Rot Resistance."

**Little, Christopher R., Adey, Eric A.** (Agronomy), and **Presley, DeAnn R.** (Agronomy), Kansas Soybean Commission, \$28,974, "Irrigation Regimes and Soil Oxygen Content: Investigating Environmental Parameters Associated with SDS in Kansas."

**Little, Christopher R.**, North Central Soybean Research Program, \$103,656, "Identification and Biology of Seedling Pathogens of Soybean."

**Little, Christopher R.**, United Soybean Board, \$53,208, "Charcoal Rot: Most Resistance and Disease Development."

**Poland, Jesse A.**, Kansas Wheat Alliance, \$100,000, "Small Plot Research for Wheat Genetics at K-State."

**Poland, Jesse A., Fritz, Allan K.** (Agronomy), and **Van Der Merwe, Deon** (Diagnostic Medicine/Pathobiology), Kansas Wheat Alliance, \$15,142, "Winter Wheat Phenotyping Using a Multitemporal Vegetation Index Acquired from Small Unmanned Aircraft Systems Imagery."

**Poland, Jesse A.**, Kansas Wheat Commission, \$50,000, "Small Plot Research for Wheat Genetics at K-State."

**Poland, Jesse A., and Leslie, John F.**, Monsanto Company, "Monsanto Beachell-Borlaug International Scholars Program (Mr. Jared I. Crain's PhD Study)."

**Rotenberg, Dorith**, Monsanto Company, \$12,660, "Service Agreement for the Wheat Seed Treatment Screening."

**Rotenberg, Dorith, and Whitfield, Anna E.**, US Department of Agriculture, \$161,078, "Advancing Innovative Technologies and Integrated Strategies for Sustainable Management of Thrips-transmitted Tospoviruses."

**Sehgal, Sunish K., and Gill, Bikram S.**, National Science Foundation, "I/UCRC: Collaborative Research: Wheat Genetics Resource Center: A Public-Private Consortium."

**Stack, James P.**, US Department of Agriculture, \$987,623, "Great Plains Diagnostic Network."

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

**Stack, James P.**, US Department of Agriculture, \$40,000, "Plant Diagnostic Information System, Michigan State University."

**Stack, James P.**, US Department of Agriculture, \$40,000, "Plant Diagnostics Information System, Cornell University."

**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, "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."

**Todd, Timothy C.**, Multi-Sponsor, \$34,000, "Nematode and Soybean Research."

**Todd, Timothy C., and Trick, Harold N.**, North Central Soybean Research Program, "Engineering Resistance to Soybean Cyst Nematodes via Induced Gene Silencing."

**Toomajian, Christopher**, National Science Foundation, \$42,380, "Arabidopsis 2010: Transcriptomes for Functional and Evolutionary Studies."

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

**Trick, Harold N., Kusel, Kelly R.** (Southeast Agricultural Research Center), **Schapaugh Jr, William T.** (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$81,793, "Breeding and Management of Soybean for Improved Performance."

**Trick, Harold N., Schapaugh Jr, William T.** (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$75,914, "Enhancement of Soybean Through Genetic Engineering."

**Trick, Harold N., Fellers, John P., Fritz, Allan K.** (Agronomy), and **Todd, Timothy C.**, Kansas Wheat Commission, \$64,663, "Transgenic Approaches for Trait Enhancement in Wheat."

**Trick, Harold N.**, and **Todd, Timothy C.**, North Central Soybean Research Program, \$168,671, "Engineering Resistance to Soybean Cyst Nematodes via Induced Gene Silencing."

**Trick, Harold N.**, US Department of Agriculture, \$26,485, "Exploring the Role of Ethylene Signaling in Fusarium Head Blight (FHB) Resistance and Susceptibility."

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

**Trick, Harold N.**, US Department of Agriculture, \$10,956, "Targeting Host Defense Mechanism for Enhancing FHB Resistance in Wheat."

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

**Valent, Barbara S.**, US Department of Agriculture, \$8,000, "Whole Genome Sequencing of Magnaporthe Oryzae Isolates and Gene Expression Analysis of Infected Wheat."

**Whitfield, Anna E., Chuang, Wenpo** (Entomology), **Fritz, Allan K.** (Agronomy), and **Smith, C. Michael** (Entomology), Kansas Wheat Alliance, \$8,000, "Identification of Wheat Curl Mite and Virus-Resistant Wheat Germplasm."

**Whitfield, Anna E.**, and **Smith, C. Michael** (Entomology), Kansas Wheat Commission, \$4,788, "Identification of Wheat Curl Mite and Virus-Resistant Wheat Germplasm."

**Whitfield, Anna E.**, National Science Foundation, \$206,752, "CAREER: Molecular Mechanisms of Virus-Vector Interactions."

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

#### **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, \$26,385, "Breeding and Management of Soybean for Improved Performance."

#### **SOUTHWEST AREA OFFICE**

**Zukoff, Sarah N.**, Syngenta Seeds, Inc., "Corn Root Worm Study."

## **SOUTHWEST RESEARCH EXTENSION CENTER**

**Currie, Randall S.**, Monsanto Company, \$6,300, "Service Order #10."

**Currie, Randall S.**, Monsanto Company, \$14,280, "Service Order 57."

**Currie, Randall S.**, Multi-Sponsor, \$9,500, "Weed Control Research in Southwest Kansas."

**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.**, **Devlin, Daniel L.** (Ks Ctr for Ag Rsrcees & 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**, **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, \$7,517, "Comparison of Yield, Water Use, and Profitability of Grain Sorghum and Drought-Tolerant Corn in Dryland and Limited Irrigation Systems in Central Kansas."

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

**Schlegel, Alan J.**, **Adee, Eric A.** (Agronomy), **Dumler, Troy** (Southwest Area Office), and **Roozeboom, Kraig L.** (Agronomy), Kansas Corn Commission, \$8,577, "Irrigation Management of Emerging Drought-Tolerant Corn Hybrids."

**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.**, Monsanto Company, \$17,680, "Service Order # 16."

**Schlegel, Alan J.**, Monsanto Company, \$5,440, "Service Order 3."

**Schlegel, Alan J.**, Multi-Sponsor, \$7,000, "Variety Testing of Alternative Crops."

**Schlegel, Alan J.**, Syngenta Seeds, Inc., \$128,340, "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."

**Stamm, Michael J.**, and **Ciampitti, Ignacio** (Agronomy), US Department of Agriculture, \$8,412, "Bringing Risk Management to Kansas Winter Canola Producers."

**Zukoff, Sarah N.**, Syngenta Seeds, Inc., \$18,200, "Corn Root Worm Study."

## **COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN**

### **ARCHITECTURE**

**Gibson, Michael D.**, National Council of Architectural Registration Boards, \$25,000, "Designed for Performance: Research and Application of Innovative Building Skins."

### **DEAN OF ARCHITECTURE, PLANNING AND DESIGN**

**Canfield, Jessica**, and **Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), Landscape Architecture Foundation, "Landscape Performance Series Case Study Review and Analysis: Task-2: Quality Assessment."

### **LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING**

**Beamish, Anne E., Canfield, Jessica**, and **Gibson, Huston**, City of Jetmore, KS, "Jetmore Project."

**Belanger, Blake M.**, and **Nawre, Alpa**, City of St. Joseph, MO, \$15,000, "St. Joseph Downtown Redevelopment."

**Canfield, Jessica, Beamish, Anne E.**, and **Gibson, Huston**, City of Jetmore, KS, "Jetmore Project."

**Canfield, Jessica**, Domaine Regional de Chaumont-sur-Loire, \$15,000, "Green without Greed."

**Canfield, Jessica**, and **Keane, Timothy D.**, Landscape Architecture Foundation, \$7,500, "Landscape Performance Series Case Study Review and Analysis: Task-2: Quality Assessment."

**Gibson, David**, Park City, KS, \$3,608, "Park City Project."

**Gibson, Huston, Beamish, Anne E.**, and **Canfield, Jessica**, City of Jetmore, KS, \$1,434, "Jetmore Project."

**Gibson, Huston**, US Department of Transportation, \$5,000, "How do Inclusive Community Design Charettes Influence Voter Approval of Regional Transit Initiative? James P. Wood - Graduate Fellow."

**Keane, Timothy D.**, and **Canfield, Jessica**, Landscape Architecture Foundation, "Landscape Performance Series Case Study Review and Analysis: Task-2: Quality Assessment."

**Keane, Timothy D.**, **Barnes, Philip L.** (Biological and Agricultural Engineering), **Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Grabner, Ronald W.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), USDepartment of Agriculture, \$10,500, "Ephemeral Gully Assessment and Adoption of Preventive Measures to Reduce Erosion in Cultivated Croplands."

**Lawhon, Larry L.**, City of Atchison, KS, \$6,529, "Community Engagement Project, Atchison, KS."

**Nawre, Alpa**, and **Belanger, Blake M.**, City of St. Joseph, MO, "St. Joseph Downtown Redevelopment."

**Nesse, Katherine**, Illinois Department of Human Services, \$7,000, "IDHS FY14 Illinois Early Childhood Asset Map (IECAM)."

## **COLLEGE OF ARTS AND SCIENCES**

### **BIOCHEMISTRY**

**Arakane, Yasuyuki**, **Beeman, Richard W.** (Entomology), **Kramer, Karl J.**, and **Muthukrishnan, Subbarat**, National Science Foundation, "Collaborative Research: Functional Analysis of Proteins Involved in the Dynamic Assembly of Chitin/Chitosan Laminae in the Insect Exoskeleton."

**Chen, Jianhan**, National Science Foundation, \$144,207, "CAREER: Implicit Modeling of Non-polar Solvation: Towards Reliable Atomistic Simulation of Intrinsically Disordered Proteins."

**Davis, Lawrence C.**, **Erickson, Larry E.** (Center for Hazardous SubstanceResearch), **Hettiarachchi, Ganga M.** (Agronomy), and **Roozeboom, Kraig L.**(Agronomy), North Atlantic Treaty Organization (NATO), \$2,149, "Phytotechnology with Biomass Production for Cleaning Up Former Military Sites."

**Dittmer, Neal T.**, and **Kanost, Michael R.**, National Science Foundation, "Collaborative Research: Unique Structural Proteins and Cross-Linking Reactions that Control Physical Properties of Insect Exoskeletons."

**Durrett, Timothy P.**, US Agency for International Development, \$36,688, "Targeted Engineering of Brassica juncea Seed Biochemistry to produce Reduced-viscosity Plant Oils for direct use as Biofuel."

**Geisbrecht, Brian V.**, US Department of Health and Human Services, \$250,500, "Cheminformatic Discovery of Alternative Pathway C3 Pro-Convertase Inhibitors."

**Geisbrecht, Brian V.**, US Department of Health and Human Services, \$184,360, "The Multiple States of IpaB Shigella Type III Secretion."

**Geisbrecht, Erika R.**, US Department of Health and Human Services, \$313,219, "Mechanisms Underlying Muscle Development in *Drosophila* AR060788."

**Kanost, Michael R.**, and **Dittmer, Neal T.**, National Science Foundation, \$571,548, "Collaborative Research: Unique Structural Proteins and Cross-Linking Reactions that Control Physical Properties of Insect Exoskeletons."

**Kanost, Michael R.**, US Department of Health and Human Services, \$392,387, "Proteinase Systems in Insect Hemolymph."

**Kanost, Michael R.**, **Culbertson, Christopher T.** (Chemistry), and **Michel, Kristin** (Biology), US Department of Health and Human Services, \$92,447, "The Function of Serpin-2 in Mosquito Immunity and Physiology."

**Klebba, Phillip E.**, Kansas State University Foundation, \$86,770, "Cancer Center Research Core."

**Kramer, Karl J.**, **Arakane, Yasuyuki**, **Beeman, Richard W.** (Entomology), and **Muthukrishnan, Subbarat**, National Science Foundation, "Collaborative Research: Functional Analysis of Proteins Involved in the Dynamic Assembly of Chitin/Chitosan Laminae in the Insect Exoskeleton."

**Muthukrishnan, Subbarat**, **Arakane, Yasuyuki**, **Beeman, Richard W.** (Entomology), and **Kramer, Karl J.**, National Science Foundation, \$3,600, "Collaborative Research: Functional Analysis of Proteins Involved in the Dynamic Assembly of Chitin/Chitosan Laminae in the Insect Exoskeleton."

**Zolkiewska, Anna**, US Department of Health and Human Services, \$384,216, "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**

**Blair, John M.**, National Science Foundation, \$203,646, "Collaborative Research: Rhizosphere Priming and C-N dynamics in Grassland Ecosystems in Transition."

**Blair, John M.**, National Science Foundation, \$980,000, "Konza Prairie LTER VI: Grassland Dynamics and Long-Term Trajectories of Change."

**Boyle, Alice**, Wilson Ornithological Society, \$1,000, "Paul A Stewart Grant for Emily Williams - Grasshopper Sparrows on the Move: What Drives Within-season Dispersal in Grasshopper Sparrows?."

**Briggs, John M.**, National Science Foundation, \$129,992, "NEON Domain 6 - Prairie Peninsula, Core Tower, Relocatable Tower and Core Aquatic Site."



**Brown, Susan J.**, Multi-Sponsor, \$50,000, "Industry Participation Agreement for the Midwest Center for Genomic Studies of Arthropods affecting Plant, Animal and Human Health."

**Brown, Susan J., Andresen, Daniel A.** (Computing and Information Sciences), **Caragea, Doina** (Computing and Information Sciences), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Hutchinson, J. M. Shawn** (Geography), **Schulz, Noel N.** (Electrical and Computer Engineering), **Scoglio, Caterina M.** (Electrical and Computer Engineering), and **Vasserman, Eugene** (Computing and Information Sciences), National Science Foundation, \$99,823, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."

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

**Brown, Susan J.**, US Department of Health and Human Services, \$47,788, "KSU Bioinformatics Core."

**Chapes, Stephen K.**, National Aeronautics and Space Administration, \$68,285, "Impact of Spaceflight on Primary and Secondary Antibody Responses."

**Chapes, Stephen K.**, US Department of Health and Human Services, \$9,100, "K-INBRE Star Trainee: Cao Thuy."

**Chapes, Stephen K.**, US Department of Health and Human Services, \$36,400, "K-INBRE Summer Scholars and Bioinformatics Scholar: Dismuke (LU); Fields (LU);Bradley, Cole, Hustak, Parker, Peel; Zliefert (BS)."

**Chapes, Stephen K.**, US Department of Health and Human Services, \$650, "K-INBRE Summer Scholars: M. Caywood, J. Parker, E. Peel, E. DeLoach, K. Pollard, J. Goering."

**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, \$67,500, "Undergraduate Coordinator Office - KINBRE."

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

**Craine, Joseph M., Nippert, Jesse B.**, and **Ungerer, Mark**, National Science Foundation, \$1,190,752, "Dimensions NASA: Collaborative Research: The Biogeography and Evolution of Drought Tolerance in Grasses."

**Cully, Jr., Jack F.**, US Department of Agriculture, \$15,000, "Black-tailed Prairie Dog Monitoring on the Kiowa and Rita Blanca National Grasslands."

**Daniels, Melinda, Caldas, Marcellus M.** (Geography), **Heier Stamm, Jessica L.** (Industrial and Manufacturing Systems Engineering), and **Sheshukov, Aleksey Y.**(Biological and Agricultural

Engineering), National Science Foundation, \$232,000, "CNH: Coupled Climate, Cultivation, and Culture in the Great Plains: Understanding Water Supply and Water Quality in a Fragile Landscape."

**Dodds, Walter K., and Gido, Keith B.**, National Science Foundation, \$292,385, "Collaborative Research: Stream Consumers and Lotic Ecosystem Rates (SCALER): Scaling from Centimeters to Continents."

**Dodds, Walter K., and Daniels, Melinda** (Geography), National Science Foundation, "Doctoral Dissertation Research: The Impact of Historical Logging Activities on the Ecology and Geomorphology of Mountain Streams (Claire Ruffing)."

**Ferguson, Carolyn J.**, US Department of Defense, \$100,000, "2014-2015 EIDROP Collaborative with USD 475."

**Fleming, Sherry D.**, US Department of Health and Human Services, \$262,500, "Neoantigens and TLR4."

**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, \$170,076, "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, \$84,218, "Mapping and Predicting Groundwater-Mediated Hydrologic Connectivity for Great Plains Prairie Rivers and Streams."

**Govind, Revathi**, US Department of Health and Human Services, \$90,000, "Role of TcdR, the Alternate Sigma Factor in Clostridium Difficile Virulence."

**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., and Olson, K C** (Animal Sciences and Industry), National Fish and Wildlife Foundation, \$136,908, "Restoration of Tallgrass Prairie Infested with *L.cuneata*."

**Haukos, David A.**, National Science Foundation, \$364,892, "Collaborative Research: Climatic and Anthropogenic Forcing of Wetland Landscape Connectivity in the Great Plains."

**Haukos, David A.**, US Department of Agriculture, \$184,600, "Outcome Based Evaluation of the NRCS Lesser Prairie-chicken Initiative."

**Haukos, David A.**, US Department of the Interior, \$37,247, "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.**, US Department of the Interior, \$94,340, "Lesser Prairie-Chicken Response to USDA Conservation Practices in Kansas and Colorado."

**Haukos, David A.**, US Department of the Interior, \$75,472, "Occurrence and Prediction of Avian Disease Outbreaks in Kansas."

**Haukos, David A.**, US Department of the Interior, \$11,000, "Parasitemia, Health, and Reproduction in a Migratory Waterfowl."

**Haukos, David A.**, US Department of the Interior, \$60,415, "Risk Assessment of Exposure to Lead for Mottled Ducks on National Wildlife Refuges of the Texas Gulf Coast."

**Haukos, David A.**, Wisconsin Waterfowl Hunters' Conference, \$1,000, "Andrew Stetter Scholarship Award."

**Herman, Michael A.**, US Department of Health and Human Services, \$1,625, "K-INBRE DRPP Mentor to M. Veeman: Michael Herman."

**Johnson, Loretta C.**, Sigma Xi Scientific Research Society, \$500, "Long-term Field Selection of Big Bluestem Ecotypes in Reciprocal Gardens Planted Across the Great Plains Precipitation Gradient: A Novel Test for the Strength of Local Adaptation (Matthew Galliart)."

**Johnson, Loretta C.**, Washburn University, \$1,000, "Kansas Academy of Science (Galliart)."

**Jumpponen, Ari M.**, Kansas Academy of Science, \$1,500, "Allison Veach Scholarship Award."

**Jumpponen, Ari M., Dalton, Timothy J.** (Agricultural Economics), **Dhuyvetter, Kevin C.** (Agricultural Economics), **Garrett, Karen A.** (Plant Pathology), **Lilja, Nina** (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, \$22,166, "Improving Soil Quality and Crop Productivity through Farmers' Tested and Recommended Conservation Agricultural Practices in Cropping Systems of West Africa."

**Jumpponen, Ari M., Garrett, Karen A.** (Plant Pathology), **Kennelly, Megan** (Plant Pathology), and **Rivard, Cary L.** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$39,629, "Tomato Grafting: Developing Grower Recommendations for the Great Plains and Enhancing Our Understanding of the "Rhizobiome"."

**Lee, Stella Yu-Chien**, US Department of Health and Human Services, \$97,500, "Alterations of Autophagy in CLN5 Deficient Neuronal Ceroid Lipofuscinosis."

**Marriage, Tara, and Olson, Bradley J.**, US Department of Health and Human Services, "Investigating the Evolution of Multicellularity through Transcriptomics (Tara N. Marriage)."

**Mather, Martha E.**, Kansas Department of Wildlife and Parks, \$307,499, "Early Spawn and Natural Spawn Age-0 Largemouth Bass: Food Habits and Habitat Use Evaluation."

**Mather, Martha E.**, National Science Foundation, \$31,459, "The PIE-LTER: Interactions Between External Drivers, Humabs and Ecosystems in Shaping Ecological Process in a Mosaic of Coastal Landscape and Estuarine Seascapes."

**Michel, Kristin**, US Department of Health and Human Services, \$58,946, "Effects of Blood Meal on Cellular Immunity in Mosquitoes (William B. Bryant)."

**Michel, Kristin, Culbertson, Christopher T.** (Chemistry), and **Kanost, Michael R.** (Biochemistry), US Department of Health and Human Services, \$225,571, "The Function of Serpin-2 in Mosquito Immunity and Physiology."

**Michel, Kristin**, US Department of Health and Human Services, \$5,000, "Vector Biology Representation at the 2014 Arthropod Genomics Symposium."

**Nippert, Jesse B., Craine, Joseph M., and Ungerer, Mark**, National Science Foundation, "Dimensions NASA: Collaborative Research: The Biogeography and Evolution of Drought Tolerance in Grasses."

**Olson, Bradley J., and Marriage, Tara**, US Department of Health and Human Services, \$32,500, "Investigating the Evolution of Multicellularity through Transcriptomics (Tara N. Marriage)."

**Olson, Bradley J.**, US Department of Health and Human Services, \$79,088, "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."

**Sandercock, Brett K.**, US Department of the Interior, \$231,675, "Demographic Analysis and Life Cycle Modeling of Arctic-breeding Shorebirds."

**Schrick, Kathrin**, National Science Foundation, \$229,379, "The Impact of Sterol Biogenesis on Cellulose Synthesis in Higher Plants."

**Spooner, Brian S.**, Kansas State University Foundation, \$35,000, "Biology Research Career Development Core."

**Spooner, Brian S.**, Kansas State University Foundation, \$182,372, "Biology Summer Graduate Fellowships."

**Spooner, Brian S.**, Kansas State University Foundation, \$28,000, "Cancer Center Core."

**Spooner, Brian S.**, Kansas State University Foundation, \$79,732, "Cancer Center Research Awards."

**Ungerer, Mark, Craine, Joseph M., and Nippert, Jesse B.**, National Science Foundation, "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**, US Department of Health and Human Services, \$97,500, "TGF-B Signaling in Ciona Notochord Morphogenesis."

**Yang, Zhilong**, US Department of Health and Human Services, \$248,999, "Host Innate Immune Response Induction and Shutoff During Poxvirus Infection."

## **CHEMISTRY**

**Aakeroy, Christer B.**, Israel Chemicals Ltd., \$59,036, "Modulating Physical Properties of Solid Forms of Urea-Using Co-Crystallization Technology."

**Aakeroy, Christer B.**, Syngenta Crop Protection, LLC, \$16,886, "Research Agreement."

**Aakeroy, Christer B.**, US Department of Defense, \$145,000, "Theory and Experiment of Cocrystals: Principles, Synthesis and Properties."

**Bossmann, Stefan**, and **Troyer, Deryl L.** (Anatomy and Physiology), Kansas Board of Regents, \$60,000, "Detection of Early (Subclinical) Mastitis in Dairy Cows to Improve Milk Production."

**Bossmann, Stefan**, Kansas State University Foundation, \$100,000, "Simultaneous Detection of Cancer Related Proteases."

**Bossmann, Stefan**, and **Troyer, Deryl L.** (Anatomy and Physiology), Kansas State University Research Foundation, \$75,000, "Protease Assays."

**Bossmann, Stefan**, **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Prakash, Punit** (Electrical and Computer Engineering), and **Troyer, Deryl L.** (Anatomy and Physiology), National Science Foundation, \$901,176, "MRI: Development of an Integrated Image-guided Thermal Therapy Platform."

**Culbertson, Christopher T.**, **Kanost, Michael R.** (Biochemistry), and **Michel, Kristin** (Biology), US Department of Health and Human Services, \$51,770, "The Function of Serpin-2 in Mosquito Immunity and Physiology."

**Higgins, Daniel A.**, and **Ito, Takashi**, US Department of Energy, "SISGR: Molecular-Level Investigation of Diffusion Behaviors within Cylindrical Nanoscale Pores."

**Hua, Duy H.**, and **Chang, Kyeong-Ok** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$6,098, "Development of Novel Therapeutic Agents for Norovirus Infection."

**Hua, Duy H.**, US Department of Health and Human Services, \$80,000, "Development of Tricyclic Pyrone Molecules for Treatment of Alzheimer's Disease."

**Hua, Duy H.**, US Department of Health and Human Services, \$25,000, "Synthesis and Quantification of TP70 and CP2 in Plasma and Tissues."

**Ito, Takashi**, and **Higgins, Daniel A.**, US Department of Energy, \$240,000, "SISGR: Molecular-Level Investigation of Diffusion Behaviors within Cylindrical Nanoscale Pores."

**Jankowiak, Ryszard J.**, US Department of Energy, \$160,000, "Resonant and Non-resonant Hole-burning and Delta Fluorescence Line-narrowing Study of BChls 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, \$183,690, "Nanotechnology for Renewable Energy."

**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**, US Department of Health and Human Services, \$32,500, "Efforts in PhaC Crystallization for Cancer Drug Delivery Purpose (Wei Zhang)."

**Maatta, Eric A.**, Kansas State University Foundation, \$28,421, "Center for Basic Cancer Research: Fraternal Order of Eagles Fund."

**Maatta, Eric A.**, Kansas State University Foundation, \$54,000, "Dane G. Hansen Excellence Fund."

## **DEAN OF ARTS AND SCIENCES**

**Montelone, Beth A.**, **Grauer, Bette** (Dean of Engineering), **Mason, April** (Office of the Provost), **Thurston, Linda P.** (Dean of Education), and **Wiley, Zelia Z.** (Dean of Agriculture and Director of AES), National Science Foundation, \$200,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

## **GEOGRAPHY**

**Caldas, Marcellus M.**, **Daniels, Melinda**, **Heier Stamm, Jessica L.** (Industrial and Manufacturing Systems Engineering), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), National Science Foundation, "CNH: Coupled Climate, Cultivation, and Culture in the Great Plains: Understanding Water Supply and Water Quality in a Fragile Landscape."

**Daniels, Melinda**, **Caldas, Marcellus M.**, **Heier Stamm, Jessica L.** (Industrial and Manufacturing Systems Engineering), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), National Science Foundation, \$754,000, "CNH: Coupled Climate, Cultivation, and Culture in the Great Plains: Understanding Water Supply and Water Quality in a Fragile Landscape."

**Daniels, Melinda**, and **Dodds, Walter K.** (Biology), National Science Foundation, \$15,972, "Doctoral Dissertation Research: The Impact of Historical Logging Activities on the Ecology and Geomorphology of Mountain Streams (Claire Ruffing)."

**Daniels, Melinda**, US Environmental Protection Agency, \$17,000, "EPA STAR Fellowship (Mehl)."

**Harrington Jr, John A.**, National Geographic Education Foundation, \$32,527, "Kansas 2013/2014 Alliance Grant."

**Harrington Jr, John A., Hutchinson, Stacy L.** (Biological and Agricultural Engineering), and **Rice, Charles W.** (Agronomy), National Science Foundation, "Understanding Climate Change in the Great Plains: Source, Impact, and Mitigation."

**Hutchinson, J. M. Shawn, Andresen, Daniel A.** (Computing and Information Sciences), **Brown, Susan J.** (Biology), **Caragea, Doina** (Computing and Information Sciences), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Schulz, Noel N.** (Electrical and Computer Engineering), **Scoglio, Caterina M.** (Electrical and Computer Engineering), and **Vasserman, Eugene** (Computing and Information Sciences), National Science Foundation, \$74,867, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."

**Hutchinson, J. M. Shawn**, US Department of Agriculture, \$20,000, "Landscape Connectivity Pest Spread Model."

**McLauchlan, Kendra K.**, National Science Foundation, \$95,870, "CAREER: Ecosystem Change in Forests and Grasslands from Decades to Millennia: A Retrospective Approach."

**McLauchlan, Kendra K.**, National Science Foundation, \$99,173, "RCN: The Novus Project for Integrating Paleo- and Neo-ecosystem Ecology."

**McLauchlan, Kendra K.**, US Department of the Interior, \$5,000, "Dendrochronological Assessment of Whitebark Pine Response to Past Climate Change: Implications for a Threatened Species in Grand Teton National Park (Kyleen Kelly)."

**Peterson, Jeffrey M., Bergtold, Jason S.** (Agricultural Economics), and **Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), National Science Foundation, \$4,000, "Farmers' Decisions to Grow Crops for Fuel."

## **GEOLOGY**

**Martin, Sabine E., Hettiarachchi, Ganga M.** (Agronomy), and **Leven, Blase A.** (Center for Hazardous Substance Research), US Environmental Protection Agency, "Sustainable Local Gardening Redevelopment at Brownfields Sites."

## **HISTORY**

**Breen, Louise A.**, Kansas State University Foundation, \$40,000, "George Kren Fund."

**Breen, Louise A.**, Kansas State University Foundation, \$25,000, "NEH Faculty Enhancement Award in Military History."

**Lynn-Sherow, Bonnie**, and **Breen, Louise A.**, Kansas State University Foundation, \$135,938, "Chapman Center for Personnel."

**Stone, David R.**, Kansas State University Foundation, \$28,537, "Institute for Military History and 20th Century Studies."

## **KINESIOLOGY OLD**

**Ade, Carl, Barstow, Thomas J.** (Kinesiology), and **Gadbury, Gary L.** (Statistics), National Aeronautics and Space Administration, "Determining the Effect of Space Flight on the Incidence of Cardiovascular Risk Factors and Disease."

**Barstow, Thomas J., Day, Dwight D.** (Electrical and Computer Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Kuhn, William B.** (Electrical and Computer Engineering), **Natarajan, Balasubramaniam** (Electrical and Computer Engineering), **Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven** (Electrical and Computer Engineering), Kansas Board of Regents, \$4,200, "Biosensor Networks and Telecommunication Subsystems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions."

**Barstow, Thomas J., Day, Dwight D.** (Electrical and Computer Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Kuhn, William B.** (Electrical and Computer Engineering), **Natarajan, Balasubramaniam** (Electrical and Computer Engineering), **Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven** (Electrical and Computer Engineering), National Aeronautics and Space Administration, \$52,336, "Developing BioSensor Networks and Telecommunication Sub-systems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions - Coordinated Research Spanning Early-stage Innovations through Game Changing Technologies."

**Barstow, Thomas J., Schinstock, Dale E.** (Mechanical and Nuclear Engineering), and **Warren, Steven** (Electrical and Computer Engineering), National Aeronautics and Space Administration, \$121,548, "Standardized "Pre-flight" Exercise Tests to Predict Performance during Extravehicular Activities in a Lunar Environment."

## **MATHEMATICS**

**Auckly, David R.**, National Security Agency, \$2,000, "Navajo Nation Math Circle."

**Auckly, David R.**, US Department of Defense, \$49,392, "The Navajo Nations Math Circles Project."

**Bennett, Andrew G., Loschky, Lester C.** (Psychological Sciences), and **Rebello, Nobel S.** (Physics), National Science Foundation, "Research on the Use of Visual Cueing and Feedback to Facilitate Problem Solving."

**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)."

**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, "Project Quest, Leadership for the Pursuit of Excellence in Mathematics Education."

**Brown, Jonathan H., Nagy, Gabriel, and Reznikoff, Sarah**, National Science Foundation, "Great Plains Operator Theory Symposium 2014."



**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)."

**Fedorov, Roman**, National Science Foundation, \$157,637, "Principal Bundles on Local Schemes and a Duality for Hitchin Systems."

**Kerr, Gabriel**, Simons Foundation, \$35,000, "Simons Collaboration Grant - Kerr 2014."

**Korten, Marianne**, and **Yetter, David**, National Science Foundation, \$346,158, "REU Site: Summer Undergraduate Mathematics Research (SUMaR) at K-State."

**Maldonado, Diego M.**, National Science Foundation, \$166,000, "A First-order Calculus for the Monge-Ampere Quasi-metric Structure and its Applications to Analysis and PDEs."

**Nagy, Gabriel, Brown, Jonathan H.**, and **Reznikoff, Sarah**, National Science Foundation, "Great Plains Operator Theory Symposium 2014."

**Reznikoff, Sarah, Brown, Jonathan H.**, and **Nagy, Gabriel**, National Science Foundation, \$50,000, "Great Plains Operator Theory Symposium 2014."

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

**Yetter, David**, and **Korten, Marianne**, National Science Foundation, "REU Site: Summer Undergraduate Mathematics Research (SUMaR) at K-State."

**Zemlyanova, Anna**, Simons Foundation, \$35,000, "New Models of Fracture in Solids with Curvature-Dependent Surface Tension."

## **MODERN LANGUAGES**

**Kanost, Laura M.**, Kansas Campus Compact, \$6,000, "Leveraging Computer Assisted Translation for Community Service-Learning."

## **MUSIC**

**Yu Oppenheim, Julie**, Master Teacher, Inc., \$15,950, "Summer Choral Institute."

## **PHYSICS**

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

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

**Chakrabarti, Amitabha**, and **Sorensen, Christopher M.**, US Department of Defense, "Q-space Scattering Power Laws and the Interior Fields of Particles."

**Corwin, Kristan L., and Weaver, Oliver L.,** National Science Foundation, \$142,743, "REU Site: Laser-Matter Interactions on Atomic and Nanoscales."

**Corwin, Kristan L., and Washburn, Brian R.,** US Air Force, \$193,000, "Direct Spectroscopy in Hollow Optical Fiber with Fiber-based Optical Frequency Combs."

**Corwin, Kristan L., and Washburn, Brian R.,** US Department of Defense, \$200,000, "Hollow Core Optical Fiber Gas Lasers (HOFGLAS): Toward Novel and Practical Systems in Fused Silica."

**Esry, Brett D.,** US Department of Defense, \$78,528, "Ultracold Polar Molecules: New Phases of Matter for Quantum Information and Quantum Control."

**Horton-Smith, Glenn A., Maravin, Yurii, and Ratra, Bharat,** US Department of Energy, \$282,000, "Heavy Quark and Neutrino Physics."

**Ivanov, Andrew G.,** US Department of Energy, \$30,000, "Exploiting Third Generation Quarks for New Physics Discoveries at the Energy Frontier."

**Ivanov, Andrew G.,** US Department of Energy, \$150,000, "Quest for a Top Quark Partner and Upgrade of the Pixel Detector Readout Chain at the CMS."

**Khalil, Sadia,** US Department of Energy, \$42,229, "Fermilab Partial Salary Support for Dr. Sadia Khalil to Collaborate on the CMS Experiment."

**Kling, Matthias,** US Department of Energy, \$25,000, "Electron Dynamics in Nanostructures in Strong Laser Fields."

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

**Maravin, Yurii, Horton-Smith, Glenn A., and Ratra, Bharat,** US Department of Energy, "Heavy Quark and Neutrino Physics."

**Ratra, Bharat,** National Science Foundation, \$12,100, "Quarknet."

**Ratra, Bharat, Horton-Smith, Glenn A., and Maravin, Yurii,** US Department of Energy, "Heavy Quark and Neutrino Physics."

**Rebello, Nobel S., Bennett, Andrew G.** (Mathematics), and **Loschky, Lester C.** (Psychological Sciences), National Science Foundation, \$1,233,906, "Research on the Use of Visual Cueing and Feedback to Facilitate Problem Solving."

**Sayre, Eleanor C., Hsu, William H.** (Computing and Information Sciences), and **Vasserman, Eugene** (Computing and Information Sciences), National Science Foundation, \$249,336, "Collaborative Research: Community Implementation: WIDER: Data Explorer and Assessment Resources for Faculty."

**Schmit, Jeremy D.,** AMGEN, Inc., \$80,000, "Amgen - Preclinical Research Program."

**Sorensen, Christopher M., and Chakrabarti, Amitabha**, National Science Foundation, \$116,761, "Experimental and Theoretical Studies of Light Scattering from Irregularly Shaped Particles."

**Sorensen, Christopher M.**, US Department of Defense, \$94,873, "Multi-angle Light Scattering Device for Aerosol Particle Detection."

**Sorensen, Christopher M., and Chakrabarti, Amitabha**, US Department of Defense, \$50,000, "Q-space Scattering Power Laws and the Interior Fields of Particles."

**Szozzkiewicz, Robert**, Science Exchange (Ocular Dynamics, LLC), \$3,195, "Basic AFM Imaging."

**Szozzkiewicz, Robert**, Science Exchange (Ocular Dynamics, LLC), \$800, "Microscale Topography Measurements on Selected Contact Lenses."

**Thumm, Uwe**, National Science Foundation, \$65,000, "Attosecond Time-resolved Quantum Dynamics in Atoms and Surfaces."

**Washburn, Brian R., and Corwin, Kristan L.**, US Air Force, "Direct Spectroscopy in Hollow Optical Fiber with Fiber-based Optical Frequency Combs."

**Washburn, Brian R., and Corwin, Kristan L.**, US Department of Defense, "Hollow Core Optical Fiber Gas Lasers (HOFGLAS): Toward Novel and Practical Systems in FusedSilica."

**Weaver, Oliver L., and Corwin, Kristan L.**, National Science Foundation, "REU Site: Laser-Matter Interactions on Atomic and Nanoscales."

## **POLITICAL SCIENCE**

**Peterson, Jeffrey M., Bergtold, Jason S.** (Agricultural Economics), and **Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), National Science Foundation, \$4,000, "Farmers' Decisions to Grow Crops for Fuel."

## **PSYCHOLOGICAL SCIENCES**

**Kirkpatrick, Kimberly**, US Department of Health and Human Services, \$256,410, "Timing, Reward Processing and Choice."

**Loschky, Lester C., Bennett, Andrew G.** (Mathematics), and **Rebello, Nobel S.** (Physics), National Science Foundation, "Research on the Use of Visual Cueing and Feedback to Facilitate Problem Solving."

**Loschky, Lester C.**, US Department of Defense, \$200,000, "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, "Funding for Executive Director - Great Plains Network."

**Young, Michael, and Monaco, Gregory E.**, Great Plains Network Consortium, \$477,642, "Funding for Executive Director - Great Plains Network."

## **SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS**

**Bressers, Bonnie M., and Gordon, Joye C.**, Association for Education in Journalism and Mass Communications, "Ethical Orientation, Professional Identity, and Ethical Assessment of News Subsidization among Journalists and Public Relations Professionals."

**Furnas, Kelly R., and Wolgast, Stephen L.**, Collegian Media Group, "Student Publications Positions."

**Furnas, Kelly R.**, Journalism Education Association, \$756,374, "JEA Agreement for National Headquarters at Kansas State University."

**Gordon, Joye C., and Bressers, Bonnie M.**, Association for Education in Journalism and Mass Communications, \$1,000, "Ethical Orientation, Professional Identity, and Ethical Assessment of News Subsidization among Journalists and Public Relations Professionals."

**Hallaq, Tom, and Dissanayake, Sunanda** (Civil Engineering), Kansas Department of Transportation, \$22,545, "Effect of Vehicle Color and Background Visibility for Improving Safety on Rural Kansas Highways."

**Muturi, Nancy W., Adhikari, Koushik** (Human Nutrition), and **Kidd, Tandalayo** (Human Nutrition), US Department of Agriculture, "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, \$55,124, "Student Publications Positions."

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

**Flora, Cornelia**, US Department of Agriculture, \$70,000, "Social Network Analysis of Hydrotreated Renewable Jet Fuel Value Chains."

**Goe, W. Richard**, Kauffman Foundation, \$88,100, "Measuring Entrepreneurial Activity at Missouri and Kansas Universities."

**Kulcsar, Laszlo, Bergtold, Jason S.** (Agricultural Economics), and **Peterson, Jeffrey M.** (Agricultural Economics), National Science Foundation, \$4,000, "Farmers' Decisions to Grow Crops for Fuel."

**Logan, Brad R.**, US Department of the Interior, \$10,040, "National Register of Historic Places Thematic Nomination Late Prehistoric Sites of Lovewell Reservoir, Jewell County, Kansas."

**Logan, Brad R.**, US Department of the Interior, \$10,064, "Phase III National Register of Historic Places Evaluation of 14RY402 Riley County, Kansas."

**Logan, Brad R., and Ritterbush, Lauren W.**, US Department of the Interior, \$15,107, "Phase III National Register of Historical Places Evaluation of the Dreiling Site (14RY403) and Multiple Property Nomination of Wildcat Creek Valley Archaeological Sites in 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), **Shroyer, James P.** (Agronomy), **Swamy, Aavudai Anandhi** (Agronomy), **Tomlinson, Peter J.** (Agronomy), and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, \$53,579, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use and Markets."

**Middendorf, Gerad D., Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), and **Mladenov, Natalie** (Civil Engineering), US Department of the Interior, \$48,544, "Water Research for the Fort Riley Net Zero Initiative."

**Ritterbush, Lauren W., and Logan, Brad R.**, US Department of the Interior, "Phase III National Register of Historical Places Evaluation of the Dreiling Site (14RY403) and Multiple Property Nomination of Wildcat Creek Valley Archaeological Sites in Riley County, Kansas."

**Roper, Donna C.**, Alfred Benesch & Company, \$1,800, "Phase II Archaeological Survey for Proposed Upgrade at Blosser Municipal Airport, Concordia, Cloud County, Kansas."

**Roper, Donna C.**, Garver LLC, \$4,000, "Phase II Archaeological Survey for Proposed Improvements at Martin Johnson Airport, Chanute, Neosha County, Kansas."

**Roper, Donna C.**, Harbin Construction L.L.C., \$2,100, "Phase II Archaeological Survey for Smoky Hill Range Water Distribution Lines, Saline County, Kansas."

**Roper, Donna C.**, US Department of the Interior, \$745 (includes \$745 from Kansas Historical Society), "Technical Analysis of Pottery from the Kansas Monument Site (14RP1)."

**Roper, Donna C.**, US Department of the Interior, \$40,000, "Testing Archaeological Sites 25FT56/130, 25FT353, 25FT354, & 25FT355, Hugh Butler Lake, Nebraska; Continued Testing Archaeological Sites."

**Wesch, Michael, Ou, Xinming (Simon)** (Computing and Information Sciences), and **Vaile, Robert S.** (Information Security & Compliance), National Science Foundation, \$139,969, "TWC SBE TTP: Medium: Collaborative: Bringing Anthropology into Cybersecurity."

## **STATISTICS**

**Bello, Nora M.**, Merial Limited, \$44,892, "Consulting Services Agreement."

**Bello, Nora M., 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), Micronutrients, \$4,410, "The Effects of SID Lysine and Intellibond C(TBCC) Feeding Strategy in Finishing Pigs on Growth Performance, Carcass Characteristics and Economics."

**Bello, Nora M., KuKanich, Katherine** (Clinical Sciences), **Rankin, Amy** (Clinical Sciences), and **Schermerhorn, Thomas** (Clinical Sciences), Morris Animal Foundation, "The Effects of Ophthalmic Prednisolone and Diclofenac on Diabetes Mellitus Regulation in Dogs."

**Bello, Nora M., Davis, Elizabeth G.** (Clinical Sciences), **Delph, Katherine M.** (Veterinary Medical Teaching Hospital), **Ewen, Catherine L.** (Diagnostic Medicine/Pathobiology), **Pohlman, Lisa M.** (Diagnostic Medicine/Pathobiology), and **Wilkerson, Melinda** (Diagnostic Medicine/Pathobiology), Zoetis LLC, "Research Protocol Agreement: Evaluation of Immunologic Response following Oral Vaccination with a USDA-approved, Attenuated, Live, Streptococcus Equi Vaccine."

**Gadbury, Gary L., Ade, Carl** (Kinesiology OLD), and **Barstow, Thomas J.** (Kinesiology), National Aeronautics and Space Administration, "Determining the Effect of Space Flight on the Incidence of Cardiovascular Risk Factors and Disease."

**Murray, Leigh W., Peterman, Robert J.** (Civil Engineering), and **Riding, Kyle** (Civil Engineering), Precast/Prestressed Concrete Institute, \$1,540, "Determination of Acceptance Criteria for Prestressing Strand in Pretensioned Applications."

**Yao, Weixin**, Simons Foundation, \$35,000, "Nonparametric and Semiparametric Models."

## **COLLEGE OF BUSINESS ADMINISTRATION**

### **MANAGEMENT**

**Kovar, Stacy E.**, Multi-Sponsor, \$1,000, "MBA Practicum."

### **MARKETING**

**Deeter-Schmelz, Dawn R.**, Kansas State University Foundation, \$10,000, "National Strategic Sales Institute."

## **COLLEGE OF EDUCATION**

### **CIVIL ENGINEERING**

**Janke, Rhonda R.**, US Environmental Protection Agency, \$12,906, "From Garbage to Gourmet: Sustainable Waste Prevention and Mushroom Cultivation from Used Coffee Grounds."

### **CURRICULUM AND INSTRUCTION**

**Allen, David B., Bennett, Andrew G.** (Mathematics), **Martinie, Sherri**, and **Rumsey, Chepina W.**, US Department of Education, "Project Quest, Leadership for the Pursuit of Excellence in Mathematics Education."

**Allen, David S., Shroyer, Margaret G.**, and **Spears, Jacqueline D.** (Dean of Education), Kansas Board of Regents, "Supporting Transitions."

**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 S., Bennett, Andrew G.** (Mathematics), **Brown, Jonathan H.** (Mathematics), 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, "Project Quest, Leadership for the Pursuit of Excellence in Mathematics Education."

**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)."

**Rumsey, Chepina W., Allen, David B., Bennett, Andrew G.** (Mathematics), and **Martinie, Sherri**, US Department of Education, "Project Quest, Leadership for the Pursuit of Excellence in Mathematics Education."

**Shroyer, Margaret G., Allen, David S., and Spears, Jacqueline D.** (Dean of Education), Kansas Board of Regents, "Supporting Transitions."

#### **DEAN OF CONTINUING EDUCATION**

**Rankin, Charles I.**, US Department of Education, "Midwest Equity Assistance Center."

#### **DEAN OF EDUCATION**

**Dalton, Andrew, and Herrera, Socorro G.**, US Department of Education, \$420,472, "KANCO 2."

**Havlicek, Barbara J.**, Kansas Foundation for Agriculture in the Classroom, \$141,679, "Kansas Foundation for Agriculture in the Classroom."

**Havlicek, Barbara J.**, Multi-Sponsor, \$2,286, "Council for Public School Improvement."

**Havlicek, Barbara J.**, Multi-Sponsor, \$73,062, "Educational Computer Assistance."

**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, \$997,990, "R.E.A.C.H. Language Project."

**Herrera, Socorro G.**, US Department of Education, \$468,370, "DESTINY 2."

**Herrera, Socorro G., and Dalton, Andrew**, US Department of Education, "KANCO 2."

**Herrera, Socorro G.**, US Department of Education, \$293,922, "Project KORE."

**Herrera, Socorro G.**, USD 497, Lawrence, \$10,000, "USD 497 ELL Support."

**Martinie, Sherri, Allen, David B.** (Curriculum and Instruction), **Bennett, Andrew G.** (Mathematics), and **Rumsey, Chepina W.** (Curriculum and Instruction), US Department of Education, \$138,109, "Project Quest, Leadership for the Pursuit of Excellence in Mathematics Education."

**Mercer, Debbie K., and Herrera, Socorro G.**, Ministry of Education, Ecuador, " R.E.A.C.H. Language Project."

**Middendorf, B. Jan**, Kansas Board of Regents, \$33,440, "Kansas Board of Regents (KBOR) on Behalf of the Data Research and Planning Unit for Evaluation Services."

**Middendorf, B. Jan**, National Science Foundation, \$74,000, "Adapting Socio-ecological Systems to Increased Climate Variability."

**Middendorf, B. Jan**, National Science Foundation, \$116,139, "Evaluation Services, Track 1 Experimental Program to Stimulate Competitive Research (EPSCoR)."

**Middendorf, B. Jan**, National Science Foundation, \$26,272, "External Evaluation of Iowa NSF EPSCoR."

**Middendorf, B. Jan**, National Science Foundation, \$281,074, "Research in Disabilities Education Synthesis Project (RDE-SP)."

**Middendorf, B. Jan**, US Department of Health and Human Services, \$28,000, "Medicare Rural Hospital Flexibility Program (FLEX)."

**Middendorf, B. Jan**, US Department of Health and Human Services, \$12,000, "Project ATTAIN: Increasing Participation of Xavier Students in the NIH Workforce - Evaluation."

**Middendorf, B. Jan**, US Department of Labor, \$260,000, "Butler Community College TAACCCT Proposal."

**Middendorf, B. Jan**, US Department of Labor, \$150,000, "Soaring to Success - North Idaho College - Evaluation."

**Procter, David E., Kahl, Daniel W.** (Agriculture and Natural Resources), **Peterson, Hikaru H.** (Agricultural Economics), and **Procter, Sandra B.** (Human Nutrition), US Department of Agriculture, \$59,942, "Increasing Healthful Food Choice and Strengthening Rural Grocery Stores through Nutritional Education and Labeling."

**Rankin, Charles I.**, US Department of Education, \$651,270, "Midwest Equity Assistance Center."

**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, \$133,287, "Improving Mathematics Instructions through Lesson Study (MILeS)."

**Scott, Harvey M., Amachawadi, Raghavendra G.** (Diagnostic Medicine/Pathobiology), **Drouillard, James S.** (Animal Sciences and Industry), **Nagaraja, Tiruvoor G.**(Diagnostic Medicine/Pathobiology), and **Tokach, Michael D.** (Animal Sciences and Industry), US Department of Agriculture, "Alternatives to Antibiotics in Animal Agriculture: Impacts on Antimicrobial of Enteric Bacteria."



**Spears, Jacqueline D., Allen, David S.** (Curriculum and Instruction), and **Shroyer, Margaret G.** (Curriculum and Instruction), Kansas Board of Regents, \$145,370, "Supporting Transitions."

**Spears, Jacqueline D., Andresen, Daniel A.** (Computing and Information Sciences), **Neilsen, Mitchell L.** (Computing and Information Sciences), and **Zhang, Naiqian** (Biological and Agricultural Engineering), National Science Foundation, \$114,364, "Infusing System Design and Sensor Technology in Education."

**Thurston, Linda P.**, National Science Foundation, \$15,069, "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), and **Wiley, Zelia Z.** (Dean of Agriculture and Director of AES), National Science Foundation, \$250,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

**Zacharakis, Jeffrey T.**, American Association for Adult & Continuing Education, \$10,500, "Adult Education Quarterly Editorship."

## **EDUCATIONAL LEADERSHIP**

**Devin, Mary E.**, US Department of Education, \$19,500, "Kansas Educational Leadership Institute."

**Rankin, Charles I.**, US Department of Education, "Midwest Equity Assistance Center."

**Zacharakis, Jeffrey T.**, American Association for Adult & Continuing Education, "Adult Education Quarterly Editorship."

## **SPECIAL EDUCATION, COUNSELING, AND STUDENT AFFAIRS**

**Hughey, Judith K.**, US Department of Education, \$27,026, "Summer Academy for School Counselors."

## **COLLEGE OF ENGINEERING**

### **ADVANCED MANUFACTURING INSTITUTE**

**Jones, Taylor S.**, KEMA, LLC, \$20,000, "Phase I-Evaluate Potential for Phosphate Recovery from Ethanol Plant Byproduct Stream through Bobierite Precipitation."

**Jones, Taylor S., Kramer, Bradley A., and Tucker, Jeffrey W.**, Multi- Sponsor, "Advanced Manufacturing Institute - Manufacturing Learning Center."

**Kramer, Bradley A., Jones, Taylor S., and Tucker, Jeffrey W.**, Multi- Sponsor, \$797,000, "Advanced Manufacturing Institute - Manufacturing Learning Center."

**Kramer, Bradley A., and Tucker, Jeffrey W.**, US Department of Commerce, "Kansas State University Olathe Innovation Accelerator University Center Program Grant."

**Tucker, Jeffrey W.**, Kansas Department of Commerce, \$50,000, "KDOC Innovation Growth Program."

**Tucker, Jeffrey W., and Kramer, Bradley A.** (Industrial and Manufacturing Systems Engineering), Kansas State University Olathe, \$120,000, "Kansas State University Olathe Innovation Accelerator University Center Program Grant Matching Funds."

**Tucker, Jeffrey W., Jones, Taylor S., and Kramer, Bradley A.**, Multi- Sponsor, "Advanced Manufacturing Institute - Manufacturing Learning Center."

**Tucker, Jeffrey W., and Kramer, Bradley A.**, US Department of Commerce, \$385,000 (includes \$100,000 from In Kind Contribution KSU IC, and \$35,000 from In Kind Contribution KSU Olathe), "Kansas State University Olathe Innovation Accelerator University Center Program Grant."

## **ARCHITECTURAL ENGINEERING AND CONSTRUCTION SCIENCE**

**Keen, Julia A., and Jones, Byron W.** (National Gas Machinery Laboratory), Am. Soc. Heating, Refrigerating & Air-Cond Engineers, Inc., \$37,730, "Role of HVAC Systems in the Transmission of Infectious Agents in Buildings and Intermodal Transportation."

## **BIOLOGICAL AND AGRICULTURAL ENGINEERING**

**Barnes, Philip L., Kluitenberg, Gerard J.** (Agronomy), **Nelson, Nathan O.** (Agronomy), **Roozeboom, Kraig L.** (Agronomy), **Tomlinson, Peter J.** (Agronomy), and **Williams, Jeffery R.** (Agricultural Economics), 4R Nutrient Stewardship, \$26,258, "Minimizing Phosphorus Loss with 4R Stewardship and Cover Crops."

**Barnes, Philip L., Devlin, Daniel L.** (Ks Ctr for Ag Rsrce & the Env / Ks Water Rsrce Rsrch Inst), **Graber, Ronald W.** (Ks Ctr for Ag Rsrce & the Env / Ks Water Rsrce Rsrch Inst), **Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), and **Sheshukov, Aleksey Y.**, US Department of Agriculture, "Ephemeral Gully Assessment and Adoption of Preventive Measures to Reduce Erosion in Cultivated Croplands."

**Ebert, Kerri L., and Hadley, Gregg L.**, US Department of Agriculture, "Kansas SARE - Kansas 2014 State PDP Chapter 1 Program."

**Ebert, Kerri L., and Hadley, Gregg L.** (Agriculture and Natural Resources), US Department of Agriculture, "Kansas SARE - Kansas 2014 State PDP Chapter 3 Program."

**Hutchinson, Stacy L., Harrington Jr, John A.** (Geography), and **Rice, Charles W.** (Agronomy), National Science Foundation, "Understanding Climate Change in the Great Plains: Source, Impact, and Mitigation."

**Hutchinson, Stacy L., Devlin, Daniel L.** (Ks Ctr for Ag Rsrce & the Env / Ks Water Rsrce Rsrch Inst), **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), and **Mladenov, Natalie** (Civil Engineering), US Department of the Interior, \$97,087, "Water Research for the Fort Riley Net Zero Initiative."

**Maghirang, Ronaldo G., and Steichen, James M.**, US Department of Agriculture, \$20,000, "Measurement and Modeling of Fugitive Dust from Off-Road DOD Activities."

**Maghirang, Ronaldo G.**, US Department of Agriculture, \$9,000, "Mechanistic Modeling of Wind Barriers and Grain Commingling Using CFD and DEM."

**Sheshukov, Aleksey Y., Caldas, Marcellus M.** (Geography), **Daniels, Melinda** (Geography), and **Heier Stamm, Jessica L.** (Industrial and Manufacturing Systems Engineering), National Science Foundation, \$232,000, "CNH: Coupled Climate, Cultivation, and Culture in the Great Plains: Understanding Water Supply and Water Quality in a Fragile Landscape."

**Sheshukov, Aleksey Y., Barnes, Philip L., Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Grabner, Ronald W.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), and **Keane, Timothy D.** (Landscape Architecture/Regional and Community Planning), US Department of Agriculture, \$34,000, "Ephemeral Gully Assessment and Adoption of Preventive Measures to Reduce Erosion in Cultivated Croplands."

**Steichen, James M., and Maghirang, Ronaldo G.,** US Department of Agriculture, "Measurement and Modeling of Fugitive Dust from Off-Road DOD Activities."

**Wang, Donghai,** Heartland Plant Innovations, Inc., \$11,000, "Seed Characterization to Enable Development and Implementation of a Doubled Haploid Breeding System for Sorghum."

**Wang, Donghai, and Tesso, Tesfaye** (Agronomy), Kansas Grain Sorghum Commission, \$17,500, "Development and Utilization of Sorghum as Feedstock for Biofuel Production."

**Wang, Donghai, Peterson, Jeffrey M.** (Agricultural Economics), **Pfromm, Peter H.** (Chemical Engineering), and **Rezack, Mary E.** (Chemical Engineering), National Science Foundation, "IGERT: From Crops to Commuting: Integrating the Social, Technological, and Agricultural Aspects of Renewable and Sustainable Biorefining (I-STAR)."

**Wang, Donghai,** The United Sorghum Checkoff Program Board, \$140,000, "Fully Utilizing Non-Structural Carbohydrates in Sweet Sorghum via Diffusion Process."

**Wang, Donghai,** US Department of Agriculture, \$55,000, "Spectroscopic Measurement of Biological Materials."

**Wang, Donghai,** US Department of Transportation, \$37,995, "Commercialization of Identity Preserved Grain Sorghum with Optimized Endosperm Matrices for Enhanced Bioethanol Conversion and High Lysine DDG Feed and Food Value."

**Zhang, Naiqian, Andresen, Daniel A.** (Computing and Information Sciences), **Neilsen, Mitchell L.** (Computing and Information Sciences), and **Spears, Jacqueline D.** (Dean of Education), National Science Foundation, \$114,364, "Infusing System Design and Sensor Technology in Education."

#### **CENTER FOR HAZARDOUS SUBSTANCE RESEARCH**

**Erickson, Larry E., and Pahwa, Anil** (Electrical and Computer Engineering), Black & Veatch Corporation, \$20,000, "Building a World of Difference with Solar Powered Charge Stations for Electric Vehicles."

**Erickson, Larry E., Davis, Lawrence C.** (Biochemistry), **Hettiarachchi, Ganga M.** (Agronomy), and **Roozeboom, Kraig L.** (Agronomy), North Atlantic Treaty Organization (NATO), \$1,343, "Phytotechnology with Biomass Production for Cleaning Up Former Military Sites."

**Leven, Blase A.**, US Department of Defense, \$65,500, "Non-Lethal Weapons Maritime Environmental Memorandum of Agreement and Job Aid, Joint Non-Lethal Weapons Program (JNLWP) Quantico, VA."

**Leven, Blase A., Hettiarachchi, Ganga M.** (Agronomy), and **Martin, Sabine E.** (Geology), US Environmental Protection Agency, \$37,500, "Sustainable Local Gardening Redevelopment at Brownfields Sites."

**Leven, Blase A.**, US Environmental Protection Agency, \$2,150,000, "Technical Assistance to Brownfield Communities in US EPA Regions 5, 6, 7, and 8."

## **CHEMICAL ENGINEERING**

**Amama, Placidus B.**, American Chemical Society, \$110,000, "Size-Controlled Catalyst Nanoparticles Supported on Superacid-derived Carbon Nanotube Foams for Synthesis of Clean Fuels."

**Berry, Vikas**, MEMC Electronic Materials Inc., \$37,774, "Growth and Transfer of Large-Area Graphene on Silicon and Silica Substrates and its Surface Engineering."

**Berry, Vikas**, US Department of Defense, \$50,000, "Tapered Graphene Nanoribbons of Controlled Tapering Angle: Structurally Tuning the Charge-carrier Properties."

**Edgar, James H.**, and **Geuther, Jeffrey A.** (Mechanical and Nuclear Engineering), US Department of Homeland Security, \$114,306, "ARI-MA: Collaborative Research: Hexagonal Boron Nitride Based Neutron Detectors."

**Erickson, Larry E.**, and **Hohn, Keith L.**, National Science Foundation, "REU Site: Earth, Wind, and Fire: Sustainable Energy in the 21st Century."

**Erickson, Larry E., Carter, David A.** (Kansas Industrial Extension Services), **Hohn, Keith L., Miller, Ruth D.** (Electrical and Computer Engineering), **Snead, Bruce C.** (Kansas Industrial Extension Services), and **Snyder, Kristina E.** (Kansas Industrial Extension Services), US Department of State, "Summer Institute on Environmental Stewardship."

**Hohn, Keith L.**, INVISTA, \$87,857, "Impact of Amines on Catalytic Dehydration of 2,3butanediol to 1,3-butadiene."

**Hohn, Keith L., Champion, Benjamin** (Office of the Provost), and **Madl, Ronald L.** (Grain Science and Industry), Kansas Soybean Commission, \$3,820, "Promoting Cooking Oil-to-Biodiesel Process on K-State University Campus."

**Hohn, Keith L.**, and **Erickson, Larry E.**, National Science Foundation, \$109,186, "REU Site: Earth, Wind, and Fire: Sustainable Energy in the 21st Century."

**Hohn, Keith L.**, Pipeline Research Council International, Inc., \$25,430, "Modeling of NSCR Performance with Exhaust Mixtures from Natural Gas-Fueled Engines."

**Hohn, Keith L., and Vadlani, Praveen V.** (Grain Science and Industry), US Department of Defense, \$72,000, "Novel Biomass Conversion Process for Production of Butylenes."

**Hohn, Keith L., Carter, David A.** (Kansas Industrial Extension Services), **Erickson, Larry E., Miller, Ruth D.** (Electrical and Computer Engineering), **Snead, Bruce C.** (Kansas Industrial Extension Services), and **Snyder, Kristina E.** (Kansas Industrial Extension Services), US Department of State, "Summer Institute on Environmental Stewardship."

**Pfromm, Peter H., Peterson, Jeffrey M.** (Agricultural Economics), **Rezac, Mary E., and Wang, Donghai** (Biological and Agricultural Engineering), National Science Foundation, "IGERT: From Crops to Commuting: Integrating the Social, Technological, and Agricultural Aspects of Renewable and Sustainable Biorefining (I-STAR)."

**Rezac, Mary E., Peterson, Jeffrey M.** (Agricultural Economics), **Pfromm, Peter H., and Wang, Donghai** (Biological and Agricultural Engineering), National Science Foundation, \$648,192, "IGERT: From Crops to Commuting: Integrating the Social, Technological, and Agricultural Aspects of Renewable and Sustainable Biorefining (ISTAR)."

**Rezac, Mary E., and Bergtold, Jason S.** (Agricultural Economics), National Science Foundation, \$217,200, "REU Site: Summer Academy in Sustainable BioEnergy."

## **CIVIL ENGINEERING**

**Dissanayake, Sunanda,** Kansas Department of Transportation, \$65,000, "Calibrating the HSM Rural Multi-Lane Model for Kansas Highways."

**Dissanayake, Sunanda, and Hallaq, Tom** (School of Journalism and Mass Communications), Kansas Department of Transportation, \$22,545, "Effect of Vehicle Color and Background Visibility for Improving Safety on Rural Kansas Highways."

**Dissanayake, Sunanda,** Kansas Department of Transportation, \$69,000, "Gravel Road Paving Guidelines."

**Esmaily, Asadollah, and Rasheed, Hayder A.,** Kansas Department of Transportation, "Ultimate Shear Capacity of Circular Columns Using the Modified Compression Field Theory."

**Hossain, Mustaque A.,** Kansas Department of Transportation, \$20,000, "Administration of KDOT/KTRAN Program."

**Hossain, Mustaque A.,** Kansas Department of Transportation, \$68,000, "Durable Recycled Superpave Mixes in Kansas."

**Hossain, Mustaque A.,** Kansas Department of Transportation, \$78,000, "Friction Management on KDOT Highways."

**Hossain, Mustaque A., and Stokes, Robert W.,** US Department of Transportation, \$349,380, "Region VII University Transportation Center (UTC)."

**Mladenov, Natalie**, National Science Foundation, \$49,537, "The Role of Dust on Snow and Other Aeolian Inputs in Soil Formation and Biogeochemical Cycling in Barren, Alpine Catchments."

**Mladenov, Natalie, Devlin, Daniel L.** (Ks Ctr for Ag Rsrces & the Env / Ks Water Rsrce Rsrch Inst), **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), and **Middendorf, Gerad D.** (Sociology, Anthropology, and Social Work), US Department of the Interior, \$48,544, "Water Research for the Fort Riley Net Zero Initiative."

**Peterman, Robert J., and Riding, Kyle**, Logan Structural Research Foundation, "Determination of Acceptance Criteria for Prestressing Strand."

**Peterman, Robert J., Murray, Leigh W.** (Statistics), and **Riding, Kyle**, Precast/Prestressed Concrete Institute, "Determination of Acceptance Criteria for Prestressing Strand in Pretensioned Applications."

**Rasheed, Hayder A., and Esmaeily, Asadollah**, Kansas Department of Transportation, \$61,000, "Ultimate Shear Capacity of Circular Columns Using the Modified Compression Field Theory."

**Riding, Kyle**, Kansas Department of Transportation, \$68,000, "Best Practices for Concrete Pumping."

**Riding, Kyle, and Peterman, Robert J.**, Logan Structural Research Foundation, \$10,000, "Determination of Acceptance Criteria for Prestressing Strand."

**Riding, Kyle, Murray, Leigh W.** (Statistics), and **Peterman, Robert J.**, Precast/Prestressed Concrete Institute, \$13,860, "Determination of Acceptance Criteria for Prestressing Strand in Pretensioned Applications."

**Riding, Kyle**, US Department of Transportation, \$102,331, "Freeze-Thaw Performance of Concrete Railroad Ties."

**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.**, Land Institute, \$54,940, "Non-legume Sources of Nitrogen Fixation."

**Stokes, Robert W., and Hossain, Mustaque A.**, US Department of Transportation, "Region VII University Transportation Center (UTC)."

**Stokes, Robert W.**, US Department of Transportation, \$100,000, "Traffic Assistance Services for Kansas (TASK) Program (FY 2012 - 2014)."

## **COMPUTING AND INFORMATION SCIENCES**

**Amtoft, Torben, Banerjee, Anindya, Hatcliff, John M., Ou, Xinming (Simon), and Robby, -, US Department of Defense, "Evidence-based Trust in Large-Scale MLS Systems."**

**Andresen, Daniel A., Brown, Susan J. (Biology), Caragea, Doina, Gruenbacher, Don M. (Electrical and Computer Engineering), Hutchinson, J. M. Shawn (Geography), Schulz, Noel N. (Electrical and Computer Engineering), Scoglio, Caterina M. (Electrical and Computer Engineering), and Vasserman, Eugene, National Science Foundation, \$174,690, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."**

**Andresen, Daniel A., Neilsen, Mitchell L., Spears, Jacqueline D. (Dean of Education), and Zhang, Naiqian (Biological and Agricultural Engineering), National Science Foundation, "Infusing System Design and Sensor Technology in Education."**

**Andresen, Daniel A., National Science Foundation, \$65,798, "Prairie Light: Next Generation Networking for Mid-Continent Science."**

**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."**

**Banerjee, Anindya, Amtoft, Torben, Hatcliff, John M., Ou, Xinming (Simon), and Robby, -, US Department of Defense, "Evidence-based Trust in Large-Scale MLS Systems."**

**Caragea, Doina, Andresen, Daniel A., Brown, Susan J. (Biology), Gruenbacher, Don M. (Electrical and Computer Engineering), Hutchinson, J. M. Shawn (Geography), Schulz, Noel N. (Electrical and Computer Engineering), Scoglio, Caterina M. (Electrical and Computer Engineering), and Vasserman, Eugene, National Science Foundation, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."**

**Caragea, Doina, Das, Sanjoy (Electrical and Computer Engineering), Kluitenberg, Gerard J. (Agronomy), and Welch, Stephen M. (Agronomy), National Science Foundation, \$16,853, "TRMS: Agroecological Annotation of Gene Function and Computational Analysis of Gene Networks."**

**Chalin, Patrice, Hatcliff, John M., and Warren, Steven (Electrical and Computer Engineering), National Science Foundation, "FDA SIR: Risk Assessment Techniques for Apps and Devices Within Interoperable Medical Frameworks."**

**DeLoach, Scott A., Hatcliff, John M., Ou, Xinming (Simon), and Robby, -, US Department of Defense, "Enhancing the Cybersecurity and Information Assurance Research and Education Infrastructure of Kansas State University."**

**DeLoach, Scott A., and Ou, Xinming (Simon), US Department of Defense, \$187,722, "Understanding and Quantifying the Impact of Moving Target Defenses on Computer Networks."**

**Gustafson, David A.**, GTM Sportswear, \$12,903, "CIS Internship Program (GTM)."

**Gustafson, David A.**, NetApp, Inc., \$28,508, "CIS Internship Program."

**Hatcliff, John M., Chalin, Patrice, and Warren, Steven** (Electrical and Computer Engineering), National Science Foundation, \$64,000, "FDA SIR: Risk Assessment Techniques for Apps and Devices Within Interoperable Medical Frameworks."

**Hatcliff, John M., DeLoach, Scott A., Ou, Xinming (Simon), and Robby, -**, US Department of Defense, "Enhancing the Cybersecurity and Information Assurance Research and Education Infrastructure of Kansas State University."

**Hatcliff, John M., Amtoft, Torben, Banerjee, Anindya, Ou, Xinming (Simon), and Robby, -**, US Department of Defense, \$150,000, "Evidence-based Trust in Large-Scale MLS Systems."

**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.**, iQ Gateway LLC, \$10,000, "Computational Information and Knowledge Management: Data Mining, Analytics, and Information Extraction and Integration Tasks."

**Hsu, William H., Sayre, Eleanor C.** (Physics), and **Vasserman, Eugene**, National Science Foundation, \$173,267, "Collaborative Research: Community Implementation: WIDER: Data Explorer and Assessment Resources for Faculty."

**Neilsen, Mitchell L., Andresen, Daniel A., Spears, Jacqueline D.** (Dean of Education), and **Zhang, Naiqian** (Biological and Agricultural Engineering), National Science Foundation, \$343,091, "Infusing System Design and Sensor Technology in Education."

**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)**, National Science Foundation, \$90,379, "CAREER: Reasoning about Uncertainty in Cybersecurity."

**Ou, Xinming (Simon), Vaile, Robert S.** (Information Security & Compliance), and **Wesch, Michael** (Sociology, Anthropology, and Social Work), National Science Foundation, \$419,907, "TWC SBE TTP: Medium: Collaborative: Bringing Anthropology into Cybersecurity."

**Ou, Xinming (Simon), DeLoach, Scott A., Hatcliff, John M., and Robby, -**, US Department of Defense, \$605,650, "Enhancing the Cybersecurity and Information Assurance Research and Education Infrastructure of Kansas State University."



**Ou, Xinming (Simon), Amtoft, Torben, Banerjee, Anindya, Hatcliff, John M., and Robby, -,** US Department of Defense, "Evidence-based Trust in Large- Scale MLS Systems."

**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, 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, -, DeLoach, Scott A., Hatcliff, John M., and Ou, Xinming (Simon),** US Department of Defense, "Enhancing the Cybersecurity and Information Assurance Research and Education Infrastructure of Kansas State University."

**Robby, -, Amtoft, Torben, Banerjee, Anindya, Hatcliff, John M., and Ou, Xinming (Simon),** US Department of Defense, "Evidence-based Trust in Large- Scale MLS Systems."

**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,** Kansas State University Foundation, \$8,000, "Mounday PhD Graduate Fellowship Support."

**Singh, Gurdip,** National Science Foundation, \$299,027, "National Science Foundation - Intergovernmental Personnel Act."

**Vasserman, Eugene,** National Science Foundation, \$88,402, "CAREER: Safety and Security for Next-generation World-scale Real-time Medical Systems."

**Vasserman, Eugene, Andresen, Daniel A., Brown, Susan J. (Biology), Caragea, Doina, Gruenbacher, Don M. (Electrical and Computer Engineering), Hutchinson, J. M. Shawn (Geography), Schulz, Noel N. (Electrical and Computer Engineering), and Scoglio, Caterina M. (Electrical and Computer Engineering),** National Science Foundation, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."

**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**

**English, John R.,** Kansas State University Foundation, "Professor Research Support."

**Grauer, Bette, 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, \$200,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

**Larson, Nancy J.**, Multi-Sponsor, \$378, "KINEX Multi-Sponsor."

## **ELECTRICAL AND COMPUTER ENGINEERING**

**Das, Sanjoy, Caragea, Doina** (Computing and Information Sciences), **Kluitenberg, Gerard J.** (Agronomy), and **Welch, Stephen M.** (Agronomy), National Science Foundation, \$91,485, "TRMS: Agroecological Annotation of Gene Function and Computational Analysis of Gene Networks."

**Day, Dwight D., Barstow, Thomas J.** (Kinesiology OLD), **Gruenbacher, Don M., Kuhn, William B., Natarajan, Balasubramaniam, Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, Kansas Board of Regents, "Biosensor Networks and Telecommunication Subsystems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions."

**Day, Dwight D., Barstow, Thomas J.** (Kinesiology OLD), **Gruenbacher, Don M., Kuhn, William B., Natarajan, Balasubramaniam, Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, National Aeronautics and Space Administration, "Developing BioSensor Networks and Telecommunication Sub-systems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions - Coordinated Research Spanning Early-stage Innovations through Game Changing Technologies."

**Gruenbacher, Don M., Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D., Kuhn, William B., Natarajan, Balasubramaniam, Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, Kansas Board of Regents, "Biosensor Networks and Telecommunication Subsystems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions."

**Gruenbacher, Don M.**, and **Schulz, Noel N.**, Kansas State University Foundation, "Power Affiliates."

**Gruenbacher, Don M., Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D., Kuhn, William B., Natarajan, Balasubramaniam, Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, National Aeronautics and Space Administration, "Developing BioSensor Networks and Telecommunication Sub-systems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions - Coordinated Research Spanning Early-stage Innovations through Game Changing Technologies."

**Gruenbacher, Don M., Andresen, Daniel A.** (Computing and Information Sciences), **Brown, Susan J.** (Biology), **Caragea, Doina** (Computing and Information Sciences), **Hutchinson, J. M. Shawn** (Geography), **Schulz, Noel N., Scoglio, Caterina M.**, and **Vasserman, Eugene** (Computing and Information Sciences), National Science Foundation, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."

**Kuhn, William B., Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D., Gruenbacher, Don M., Natarajan, Balasubramaniam, Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, Kansas Board of Regents, \$15,750, "Biosensor Networks and Telecommunication Subsystems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions."

**Kuhn, William B., Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D., Gruenbacher, Don M., Natarajan, Balasubramaniam, Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, National Aeronautics and Space Administration, \$196,262, "Developing BioSensor Networks and Telecommunication Sub-systems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions - Coordinated Research Spanning Early-stage Innovations through Game Changing Technologies."

**Kuhn, William B.**, US Department of Energy, \$56,301, "Characterization of Thin Film on LTCC Technologies."

**Miller, Ruth D., Spaulding, Gregory L.** (Mechanical and Nuclear Engineering), and **Wang, Youqi** (Mechanical and Nuclear Engineering), National Renewable Energy Laboratory, \$12,716, "Kansas State University Wind Turbine Design Team."

**Miller, Ruth D.**, US Department of Energy, \$36,945, "Wind Turbine Data SystemsSupport."

**Miller, Ruth D., Carter, David A.** (Kansas Industrial Extension Services), **Erickson, Larry E.** (Chemical Engineering), **Hohn, Keith L.** (Chemical Engineering), **Snead, Bruce C.** (Kansas Industrial Extension Services), and **Snyder, Kristina E.** (Kansas Industrial Extension Services), US Department of State, "Summer Institute on Environmental Stewardship."

**Mirafzal, Behrooz**, National Science Foundation, \$400,000, "CAREER: Toward Grid-Interactive Converters with Diagnostic, Remedial, and Lifetime Prognostic Features for the Next Generation of Power Grids."

**Natarajan, Balasubramaniam, Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D., Gruenbacher, Don M., Kuhn, William B., Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, Kansas Board of Regents, "Biosensor Networks and Telecommunication Subsystems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions."

**Natarajan, Balasubramaniam, Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D., Gruenbacher, Don M., Kuhn, William B., Sobering, Timothy J.** (Vice President Electronics Design Laboratory), and **Warren, Steven**, National Aeronautics and Space Administration, "Developing BioSensor Networks and Telecommunication Sub-systems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions - Coordinated Research Spanning Early-stage Innovations through Game Changing Technologies."

**Pahwa, Anil**, and **Erickson, Larry E.** (Center for Hazardous Substance Research), Black & Veatch Corporation, \$20,000, "Building a World of Difference with Solar Powered Charge Stations for Electric Vehicles."

**Pahwa, Anil**, National Science Foundation, \$31,927, "Workshop on CPS Education with Emphasis on the Power Grid."

**Prakash, Punit, Bossmann, Stefan** (Chemistry), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), and **Troyer, Deryl L.** (Anatomy and Physiology), National Science Foundation, \$180,235, "MRI: Development of an Integrated Image-guided Thermal Therapy Platform."

**Prakash, Punit**, Novian Health, Inc., \$14,749, "Theoretical Modeling of the Novilase Interstitial Laser Therapy System for Treatment of Breast Tumors."

**Schulz, Noel N.**, and **Gruenbacher, Don M.**, Kansas State University Foundation, \$111,621, "Power Affiliates."

**Schulz, Noel N., Andresen, Daniel A.** (Computing and Information Sciences), **Brown, Susan J.** (Biology), **Caragea, Doina** (Computing and Information Sciences), **Gruenbacher, Don M.**, **Hutchinson, J. M. Shawn** (Geography), **Scoglio, Caterina M.**, and **Vasserman, Eugene** (Computing and Information Sciences), National Science Foundation, \$149,734, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."

**Scoglio, Caterina M., Andresen, Daniel A.** (Computing and Information Sciences), **Brown, Susan J.** (Biology), **Caragea, Doina** (Computing and Information Sciences), **Gruenbacher, Don M.**, **Hutchinson, J. M. Shawn** (Geography), **Schulz, Noel N.**, and **Vasserman, Eugene** (Computing and Information Sciences), National Science Foundation, "CC-NIE Network Infrastructure: KGAP: Bridging the Gap on Network Flexibility and Performance for Genomics and Data-Intensive Research at Kansas State University."

**Scoglio, Caterina M.**, US Department of Agriculture, \$5,000, "Network Based Modeling of Arthropods, Humans, and Animals to Better Understand Vector-Borne Disease Transmission."

**Warren, Steven, Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D.**, **Gruenbacher, Don M.**, **Kuhn, William B.**, **Natarajan, Balasubramaniam**, and **Sobering, Timothy J.** (Vice President Electronics Design Laboratory), Kansas Board of Regents, "Biosensor Networks and Telecommunication Subsystems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions."

**Warren, Steven, Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D.**, **Gruenbacher, Don M.**, **Kuhn, William B.**, **Natarajan, Balasubramaniam**, and **Sobering, Timothy J.** (Vice President Electronics Design Laboratory), National Aeronautics and Space Administration, "Developing BioSensor Networks and Telecommunication Sub-systems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions - Coordinated Research Spanning Early-stage Innovations through Game Changing Technologies."

**Warren, Steven, Barstow, Thomas J.** (Kinesiology OLD), and **Schinstock, Dale E.** (Mechanical and Nuclear Engineering), National Aeronautics and Space Administration, \$72,929, "Standardized "Pre-flight" Exercise Tests to Predict Performance during Extravehicular Activities in a Lunar Environment."

**Warren, Steven, Chalin, Patrice** (Computing and Information Sciences), and **Hatcliff, John M.** (Computing and Information Sciences), National Science Foundation, \$16,000, "FDA SIR: Risk Assessment Techniques for Apps and Devices Within Interoperable Medical Frameworks."

**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., Chang, Shing I., and Rys, Malgorzata J.**, US Department of Veterans Affairs, "Enhancing our Virtual Learning Environment."

**Ben-Arieh, David H.**, US Department of Veterans Affairs, \$85,961, "Telemental Health Appointment Optimization."

**Chang, Shing I., Ben-Arieh, David H., and Rys, Malgorzata J.**, US Department of Veterans Affairs, \$68,577, "Enhancing our Virtual Learning Environment."

**Easton, Todd W.**, Navajo Nation Oil and Gas Company, \$30,000, "Optimizing Energy Planning for Navajo Nation Oil and Gas Company."

**Easton, Todd W.**, U.S. Stone Industries, LLC, \$7,500, "Agreement Between US Stone Industries LLC and Kansas State University."

**Heier Stamm, Jessica L., Caldas, Marcellus M.** (Geography), **Daniels, Melinda** (Geography), and **Sheshukov, Aleksey Y.** (Biological and Agricultural Engineering), National Science Foundation, \$116,000, "CNH: Coupled Climate, Cultivation, and Culture in the Great Plains: Understanding Water Supply and Water Quality in a Fragile Landscape."

**Kramer, Bradley A., and Tucker, Jeffrey W.** (Advanced Manufacturing Institute), Kansas State University Olathe, "Kansas State University Olathe Innovation Accelerator University Center Program Grant Matching Funds."

**Kramer, Bradley A.**, National Science Foundation, \$21,000, "Workshop/Collaborative Research: 2014 NSF CAREER Proposal Writing Workshop."

**Lei, Shuting**, National Science Foundation, \$5,000, "Defect Free and Robust Microstructuring Using Femtosecond Axicon-lens-focused Beam (FAB) with Application Focus in Thin Film Solar Cell Manufacturing."

**Lei, Shuting**, US Department of Defense, \$15,000, "FEM Simulation of the Dynamic Heating Process in Laser Assisted Machining."

**Pei, Zhijian**, National Science Foundation, \$554,141, "National Science Foundation - Intergovernmental Personnel Act."

**Rys, Malgorzata J., Ben-Arieh, David H., and Chang, Shing I.**, US Department of Veterans Affairs, "Enhancing our Virtual Learning Environment."

#### **INSTITUTE FOR ENVIRONMENTAL RESEARCH**

**McCullough, Elizabeth A.**, Battelle Memorial Institute, \$24,600, "The Effect of Environmental and Storage Conditions on the Insulation Provided by PCU Jackets."

#### **KANSAS INDUSTRIAL EXTENSION SERVICES**

**Carter, David A., Erickson, Larry E.** (Chemical Engineering), **Hohn, Keith L.** (Chemical Engineering), **Miller, Ruth D.** (Electrical and Computer Engineering), **Snead, Bruce C.**, and **Snyder, Kristina E.**, US Department of State, "Summer Institute on Environmental Stewardship."

**Carter, David A.**, and **Snyder, Kristina E.**, US Department of State, \$153,454, "Summer Institute on Environmental Stewardship - FY2014."

**Carter, David A.**, and **Larson, Nancy J.**, US Environmental Protection Agency, "Intern Programs Partner to Reassess P2 Implementation and Study Related Motivating Drivers."

**Goode, Barbara L.**, US Environmental Protection Agency, \$18,529, "Environmental Sustainability for the Salina, Kansas Community Level II."

**Hamel, Ryan J.**, and **Larson, Nancy J.**, US Department of Agriculture, \$40,000, "Food Recovery Challenge Meets Rural Kansas."

**Hanson, Brian R.**, and **Snead, Bruce C.**, US Environmental Protection Agency, "National Radon Program Services."

**Hanson, Brian R.**, and **Snead, Bruce C.**, US Environmental Protection Agency, "Radon Projects for Kansas."

**Larson, Nancy J.**, Kansas Health Foundation, \$25,000, "The Proper Place for Pharmacy Waste."

**Larson, Nancy J.**, Multi-Sponsor, \$768, "KINEX Multi-Sponsor."

**Larson, Nancy J.**, and **Hamel, Ryan J.**, US Department of Agriculture, "Food Recovery Challenge Meets Rural Kansas."

**Larson, Nancy J.**, US Department of Agriculture, \$5,670, "Product Stewardship Institute, Inc.."

**Larson, Nancy J.**, and **Carter, David A.**, US Environmental Protection Agency, \$53,165, "Intern Programs Partner to Reassess P2 Implementation and Study Related Motivating Drivers."

**Snead, Bruce C., Carter, David A., Erickson, Larry E.** (Chemical Engineering), **Hohn, Keith L.** (Chemical Engineering), **Miller, Ruth D.** (Electrical and Computer Engineering), and **Snyder, Kristina E.**, US Department of State, "Summer Institute on Environmental Stewardship."

**Snead, Bruce C.**, and **Hanson, Brian R.**, US Environmental Protection Agency, \$150,000, "National Radon Program Services."

**Snead, Bruce C., and Hanson, Brian R.**, US Environmental Protection Agency, \$192,000 (includes \$68,000 from Contractual / In Kind Costs), "Radon Projects for Kansas."

**Snead, Bruce C.**, US Environmental Protection Agency, \$2,900, "Radon-Kit Project for KS Schools."

**Snead, Bruce C.**, US Environmental Protection Agency, \$9,000 (includes \$4,000 from Engineering Dept.), "Training for the Nebraska State Radon Program 2013-14."

**Snyder, Kristina E., Carter, David A., Erickson, Larry E.** (Chemical Engineering), **Hohn, Keith L.** (Chemical Engineering), **Miller, Ruth D.** (Electrical and Computer Engineering), and **Snead, Bruce C.**, US Department of State, \$199,024, "Summer Institute on Environmental Stewardship."

**Snyder, Kristina E., and Carter, David A.**, US Department of State, "Summer Institute on Environmental Stewardship - FY2014."

#### **MECHANICAL AND NUCLEAR ENGINEERING**

**Bellinger, Steven L., McGregor, Douglas S., and Shultis, J. Kenneth**, US Department of Defense, "Advanced Trenched Structure for Solid-State Neutron Detectors."

**Betz, Amy R., and Derby, Melanie M.**, National Science Foundation, \$78,832, "EAGER: Control and Mitigation of Frost Formation using Mixed Hydrophilic and Hydrophobic Surfaces."

**Derby, Melanie M., and Betz, Amy R.**, National Science Foundation, "EAGER: Control and Mitigation of Frost Formation using Mixed Hydrophilic and Hydrophobic Surfaces."

**Geuther, Jeffrey A.**, Sandia National Laboratories, \$47,024, "Voluntary Security Enhancements for the Research and Test Reactor at Kansas State University."

**Geuther, Jeffrey A.**, US Department of Energy, \$57,890, "Reactor Cooling System Upgrades at Kansas State University TRIGA Reactor."

**Geuther, Jeffrey A., and Edgar, James H.** (Chemical Engineering), US Department of Homeland Security, \$76,204, "ARI-MA: Collaborative Research: Hexagonal Boron Nitride Based Neutron Detectors."

**Hosni, Mohammad H.**, US Department of Defense, \$10,000, "University Engineering Alliance Summit."

**Lease, Kevin B.**, National Aeronautics and Space Administration, \$25,000, "Cure Management for Bonded Composite Repair."

**McGregor, Douglas S.**, Schlumberger Technology Corporation, \$50,000, "SIC Materials for Neutron Detectors."

**McGregor, Douglas S., Bellinger, Steven L., and Shultis, J. Kenneth**, US Department of Defense, \$368,705, "Advanced Trenched Structure for Solid-State Neutron Detectors."

**McGregor, Douglas S.**, US Department of Defense, \$384,007, "Replacement Technology for 3He-Gas Filled Neutron Detectors."

**McGregor, Douglas S.**, and **Shultis, J. Kenneth**, US Department of Defense, \$307,175, "Wearable Detection Device (WDD) - Low Visibility Gamma Neutron Sensor."

**McGregor, Douglas S.**, and **Shultis, J. Kenneth**, US Department of Energy, \$75,000, "Technical Assistance on Compact Fission Chamber Development."

**McGregor, Douglas S.**, US Navy, \$102,038, "High Efficiency Solid State Neutron Detector."

**Schinstock, Dale E.**, **Barstow, Thomas J.** (Kinesiology OLD), and **Warren, Steven** (Electrical and Computer Engineering), National Aeronautics and Space Administration, \$48,619, "Standardized "Pre-flight" Exercise Tests to Predict Performance during Extravehicular Activities in a Lunar Environment."

**Shultis, J. Kenneth**, **Bellinger, Steven L.**, and **McGregor, Douglas S.**, US Department of Defense, "Advanced Trenched Structure for Solid-State Neutron Detectors."

**Shultis, J. Kenneth**, and **McGregor, Douglas S.**, US Department of Defense, "Wearable Detection Device (WDD) - Low Visibility Gamma Neutron Sensor."

**Shultis, J. Kenneth**, and **McGregor, Douglas S.**, US Department of Energy, "Technical Assistance on Compact Fission Chamber Development."

**Singh, Gurpreet**, National Science Foundation, \$268,202, "Investigating the Structure and Thermal Damage Resistance of Molecular Precursor Derived Ceramics for High Power Laser Radiometry."

**Spaulding, Gregory L.**, **Miller, Ruth D.** (Electrical and Computer Engineering), and **Wang, Youqi**, National Renewable Energy Laboratory, "Kansas State University Wind Turbine Design Team."

**Wang, Youqi**, National Aeronautics and Space Administration, \$43,000, "Stress Prediction for 3D Woven Preforms and Composites."

**Wang, Youqi**, **Miller, Ruth D.** (Electrical and Computer Engineering), and **Spaulding, Gregory L.**, National Renewable Energy Laboratory, \$4,239, "Kansas State University Wind Turbine Design Team."

**Wang, Youqi**, Textile Engineering and Manufacturing, Inc., \$50,000, "3D Woven Preform Design Code Simulation and Development."

**Wang, Youqi**, US Department of Defense, \$250,000, "Ballistic Strength and Optimal Design of Single and Multi-Layer 3-D Fabrics."

#### **NATIONAL GAS MACHINERY LABORATORY**

**Jones, Byron W.**, and **Keen, Julia A.** (Architectural Engineering and Construction Science), Am. Soc. Heating, Refrigerating & Air-Cond Engineers, Inc., \$37,730, "Role of HVAC Systems in the Transmission of Infectious Agents in Buildings and Intermodal Transportation."



# 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, "PEAK 2.0 Evaluation."

## DEAN OF HUMAN ECOLOGY

**Buckwalter, John**, Great Plains IDEA Alliance, \$270,016, "Comprehensive Fiscal Sponsorship Agreement - Great Plains Interactive Distance Education Alliance."

**Buckwalter, John, and Olsen, Charlotte S.** (School of Family Studies and Human Services), US Department of Health and Human Services, "Kansas Bridges to the Future."

**Doll, Gayle, and Kaup, Migette L.** (Apparel, Textiles, and Interior Design), US Department of Health and Human Services, \$179,270 (includes \$19,832 from In-Kind Support), "PEAK 2.0 Evaluation."

**Moxley, Virginia M.**, AG\*IDEA, \$42,271, "AG\*IDEA Lead Institute."

## HOSPITALITY MANAGEMENT AND DIETETICS

**Kwon, Junehee**, J. Willard and Alice S. Marriott Foundation, \$8,000, "Exploration and Improvement of Hospitality Undergraduate Students' Attitudes and Perceptions toward Hospitality Careers in China (Han Wen)."

**Kwon, Junehee**, Retired Army Medical Specialist Corps Assoc., Inc., \$1,991, "Feasibility and Effectiveness of Healthy Menu Changes for Non-trainee Military Dining Facilities (Bethany Deschamps)."

**Kwon, Junehee, Aramouni, Fadi M.** (Animal Sciences and Industry), **Roberts, Kevin R., Sauer, Kevin L., Shanklin, Carol W.** (Dean of Graduate School), and **Sneed, Jeannie**, US Department of Agriculture, "Continuation of the Center of Excellence for Food Safety Research in Child Nutrition Programs."

**Roberts, Kevin R., Aramouni, Fadi M.** (Animal Sciences and Industry), **Kwon, Junehee, Sauer, Kevin L., Shanklin, Carol W.** (Dean of Graduate School), and **Sneed, Jeannie**, US Department of Agriculture, \$800,000, "Continuation of the Center of Excellence for Food Safety Research in Child Nutrition Programs."

**Sauer, Kevin L., Aramouni, Fadi M.** (Animal Sciences and Industry), **Kwon, Junehee, Roberts, Kevin R., Shanklin, Carol W.** (Dean of Graduate School), and **Sneed, Jeannie**, US Department of Agriculture, "Continuation of the Center of Excellence for Food Safety Research in Child Nutrition Programs."

**Sauer, Kevin L.**, US Department of Agriculture, \$17,651, "Mitigating Risks of Foodborne Illness Associated with Handling Leafy Greens in Retail Foodservice Establishments Serving Aging Populations."

**Sneed, Jeannie, Aramouni, Fadi M.** (Animal Sciences and Industry), **Kwon, Junehee, Roberts, Kevin R., Sauer, Kevin L., and Shanklin, Carol W.** (Dean of Graduate School), US Department of Agriculture, "Continuation of the Center of Excellence for Food Safety Research in Child Nutrition Programs."

## **HUMAN NUTRITION**

**Adhikari, Koushik, and Olson, Valerie R.**, Kansas State University Foundation, \$1,230, "Descriptive Analysis of Oat-Fed Beef for a Local Kansas Beef Cattle Farmer."

**Adhikari, Koushik, Kidd, Tandalayo, and Muturi, Nancy W.** (School of Journalism and Mass Communications), US Department of Agriculture, "Community-Based Participatory Research (CBPR) Model in Preventing Overweight and Obesity Among 6th-8th Grade Youth in Low-Income Racial/Ethnic Communities."

**Chambers IV, Edgar, and Garcia, Jane M.** (School of Family Studies and Human Services), Kansas State University Foundation, "Quality of Life Considerations: Striving for Best Practices with Thickened Beverages in Nutrition Care of Older Adults (Courtney Chacon)."

**Chambers IV, Edgar, and Chambers, Delores H.**, US Department of Agriculture, \$103,787, "Development and Evaluation of Science-Based Messages to Improve Consumers' Storage, Handling, and Preparation of Poultry and Poultry Products."

**Chambers IV, Edgar, and Park, Sunghun** (Horticulture, Forestry and Recreation Resources), US Department of Agriculture, \$2,830, "Development of Calcium-Enhanced Lettuce."

**Chambers IV, Edgar, Chambers, Delores H., and Koppel, Kadri**, World Coffee Research, \$100,000, "SensCAFE (SENSory Coffee Analysis Flavor Evaluation)."

**Chambers, Delores H., and Chambers IV, Edgar**, US Department of Agriculture, "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.**, Isagenix International, LLC, \$6,125, "Determining the Impact of Meal Replacement Products on Human Blood Glucose Levels."

**Haub, Mark D.**, Penford Food Ingredients Co., \$23,850, "Resistant Starch on Glucose Metabolism, Insulin, and Gut Fermentation."

**Higgins, Mary L., Bhadriraju, Subramanyam** (Grain Science and Industry), **Lilja, Nina** (International Agricultural Programs), **Maier, Dirk E.** (Grain Science and Industry), and **Washburn, Shannon G.** (Communications), US Agency for International Development, \$473,742 (includes \$29,975 from Oklahoma State University, \$221,099 from University of Illinois-UC, and \$35,168 from University of Nebraska-Lincoln), "Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss."

**Kidd, Tandalayo, Adhikari, Koushik, and Muturi, Nancy W.** (School of Journalism and Mass Communications), US Department of Agriculture, \$456,810, "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 Chambers IV, Edgar,** Kansas State University Foundation, \$5,001, "Beef Study in Texas A&M and SAC."

**Koppel, Kadri, Alavi, Sajid** (Grain Science and Industry), **Aldrich, Greg** (Grain Science and Industry), **Churchill, Frances** (Grain Science and Industry), **Hancock, Joe D.** (Animal Sciences and Industry), **Jones, Cassandra K.** (Grain Science and Industry), and **Miller, Christopher L.** (Grain Science and Industry), The United Sorghum Checkoff Program Board, \$20,349, "Introducing New Profit Streams for Grain Sorghum: Milling Characteristics and Inclusion Considerations for Use in Pet Foods."

**Koppel, Kadri, Chambers IV, Edgar, and Chambers, Delores H.,** World Coffee Research, "SensCAFE (SENSory Coffee Analysis Flavor Evaluation)."

**Melgarejo, L Tonatiah,** Nestlé Purina PetCare Global Resources, Inc., \$165,625, "Advancing Feline Oral Health."

**Mendoza, Bertha,** Kansas Department for Children and Families, \$3,430, "Incredible Years Facilitation."

**Olson, Valerie R., and Adhikari, Koushik,** Kansas State University Foundation, "Descriptive Analysis of Oat-Fed Beef for a Local Kansas Beef Cattle Farmer."

**Procter, Sandra B., Kahl, Daniel W.** (Agriculture and Natural Resources), **Peterson, Hikaru H.** (Agricultural Economics), and **Procter, David E.** (Center for Engagement and Community Development), US Department of Agriculture, \$64,937, "Increasing Healthful Food Choice and Strengthening Rural Grocery Stores through Nutritional Education and Labeling."

**Procter, Sandra B., and Peters, Paula** (Director of Cooperative Extension), US Department of Agriculture, "Kansas Food Assistance Nutrition Education Plan."

**Rosenkranz, Richard R., Dzewaltowski, David A.** (Kinesiology), and **Rosenkranz, Sara,** Kansas Health Foundation, \$78,804, "Girl Scouts Wellness Policy to Practice."

**Rosenkranz, Sara, Dzewaltowski, David A.** (Kinesiology), and **Rosenkranz, Richard R.,** Kansas Health Foundation, "Girl Scouts Wellness Policy to Practice."

## **KINESIOLOGY**

**Barstow, Thomas J., Ade, Carl** (Kinesiology OLD), and **Gadbury, Gary L.** (Statistics), National Aeronautics and Space Administration, \$100,000, "Determining the Effect of Space Flight on the Incidence of Cardiovascular Risk Factors and Disease."

**Barstow, Thomas J.,** National Aeronautics and Space Administration, \$5,000, "Physiological Responses During Simulated Partial-Gravity Ambulation (Ryan Broxterman)."

**Dzewaltowski, David A., Rosenkranz, Richard R.** (Human Nutrition), and **Rosenkranz, Sara** (Human Nutrition), Kansas Health Foundation, \$19,701, "Girl Scouts Wellness Policy to Practice."

**Musch, Timothy I., and Poole, David C.** (Anatomy and Physiology), American Physiological Society, "2014 Undergraduate Summer Research Fellowship for Angela Glean."

**Poole, David C., and Musch, Timothy I.,** American Physiological Society, \$165, "2014 Undergraduate Summer Research Fellowship for Angela Glean."

#### **SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES**

**Anderson, Jared R., Durtschi, Jared A., and Stith, Sandra M.,** US Department of Agriculture, "KSU/USAF 2013 FAP Research Project."

**Britt, Sonya L., Crawford Jr, Duane W.** (Dean of Graduate School), **Kaus, Jodi L.** (Student Financial Assistance), **Robb, Clifford A., and Shanklin, Carol W.** (Dean of Graduate School), Council of Graduate Schools, "Enhancing Student Financial Education at Kansas State University."

**DeLuccie, Mary L.,** US Department of Agriculture, \$6,166, "Federal Aid in Support of the Child and Adult Care Food Program."

**Durtschi, Jared A., Anderson, Jared R., and Stith, Sandra M.,** US Department of Agriculture, "KSU/USAF 2013 FAP Research Project."

**Garcia, Jane M., and Chambers IV, Edgar** (Human Nutrition), Kansas State University Foundation, \$5,000, "Quality of Life Considerations: Striving for Best Practices with Thickened Beverages in Nutrition Care of Older Adults (Courtney Chacon)."

**Griffin, Charles L., and Jager, Shanna K.,** Kansas Department for Children and Families, \$500,000, "Technical Support for DCF Strategic Development, Faith-based and Community Initiatives."

**Hadley, Gregg L., Buhler, Forrest A.** (Agriculture and Natural Resources), and **Henton, Charlene M.** (Agriculture and Natural Resources), US Department of Agriculture, "Planning Successful Farm and Ranch Successions."

**Jager, Shanna K., and Griffin, Charles L.,** Kansas Department for Children and Families, "Technical Support for DCF Strategic Development, Faith-based and Community Initiatives."

**Johannes, Elaine M.,** Kansas Department of Health and Environment, \$53,709, "Kansas Adolescent Health Needs Assessment and Strategic Plan Pilot Project."

**Johannes, Elaine M.,** US Department of Defense, \$83,650, "Kansas 2014 Operation: Military Kids (OMK)."

**Kiss, D. Elizabeth, and Riportella, Roberta,** US Department of Agriculture, "Multistate Extension Education and Outreach Project on the Marketplace Exchange of the Affordable Care Act."

**O'Conner, Nancy T., and Vennum, Amber V.**, Greater Manhattan Community Foundation, "Adaptation of Working on What Works to a High School Context."

**Olsen, Charlotte S., and Buckwalter, John** (Dean of Human Ecology), US Department of Health and Human Services, \$217,831, "Kansas Bridges to the Future."

**Riportella, Roberta, and Kiss, D. Elizabeth**, US Department of Agriculture, \$90,000, "Multistate Extension Education and Outreach Project on the Marketplace Exchange of the Affordable Care Act."

**Robb, Clifford A., Britt, Sonya L., Crawford Jr, Duane W.** (Dean of Graduate School), **Kaus, Jodi L.** (Student Financial Assistance), and **Shanklin, Carol W.** (Dean of Graduate School), Council of Graduate Schools, "Enhancing Student Financial Education at Kansas State University."

**Schumm, Walter R.**, Witherspoon Institute, \$22,683, "Secondary Analysis of Data Related to Same-Sex Couples or Parents."

**Stith, Sandra M., Anderson, Jared R., and Durtschi, Jared A.**, US Department of Agriculture, \$1,215,350, "KSU/USAF 2013 FAP Research Project."

**Vennum, Amber V., and O'Conner, Nancy T.**, Greater Manhattan Community Foundation, \$3,000, "Adaptation of Working on What Works to a High School Context."

**VerBrugge (Glasscock), Marlene K.**, US Department of Agriculture, \$454,545, "4-H Military Partnerships: 4-H Army Youth Development Project."

**VerBrugge (Glasscock), Marlene K.**, US Department of Agriculture, \$1,636,364, "Air Force/4-H Military Partnership and Outreach and Support."

**VerBrugge (Glasscock), Marlene K.**, US Department of Agriculture, \$543,731, "Children, Youth, and Families At-Risk 4-H Military Partnership Project."

**VerBrugge (Glasscock), Marlene K.**, US Department of Agriculture, \$500,000, "DoD-USDA Partnership: Child Youth Deployment Support Project."

**VerBrugge (Glasscock), Marlene K.**, US Department of Defense, \$650,000, "Hired! Program Stipend - Child, Youth and School Services Army Youth-Development Projects."

**VerBrugge (Glasscock), Marlene K.**, US Department of Defense, \$1,027,273, "Navy/4-H Military Partnership and Outreach and Support."

**VerBrugge (Glasscock), Marlene K.**, US Department of Defense, \$28,218, "Operation: Military Kids (OMK) Bridge Contract."

**Wiles, Bradford B., Bolton, Debra** (Southwest Area Office), and **Leatherman, John C.** (Agricultural Economics), US Department of Health and Human Services, "Behavioral Health Information Pilot Communities: Kansas State University and Finney County Community Health Coalition."

# COLLEGE OF VETERINARY MEDICINE

## ANATOMY AND PHYSIOLOGY

**Anji, Antje, and Kumari, Meena**, US Department of Health and Human Services, "Ethanol-Induced NMDA R1 mRNA Stabilization."

**Blecha, Frank, Rowland, Raymond R. R.** (Diagnostic Medicine/Pathobiology), and **Sang, Yongming**, US Department of Agriculture, "Antiviral Regulation Underlying the Activation Status of Porcine Monocytic Innate Immune Cells."

**Blecha, Frank, Richardson, Ralph C.** (Dean of Veterinary Medical Center), and **Shi, Jishu N.**, Zoetis LLC, "International Veterinary Collaboration for China DVM Program."

**Fong, Peking**, US Department of Health and Human Services, \$285,000, "CFTR Regulation of Thyroid Transport."

**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), Merial Limited, \$5,280, "2014 Merial Veterinary Research Scholars Program."

**Kenney, Michael J.**, US Department of Health and Human Services, \$36,688, "BRITE Veterinary Student Program."

**Kenney, Michael J., Davis, Elizabeth G.** (Clinical Sciences), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$17,142, "Short Term Training in Health Professional Schools."

**Kenney, Michael J.**, US Department of Health and Human Services, \$598,619, "Sympathetic Neural Regulation and Aging: Medullary Mechanisms and Strategies."

**Kukanich, Stanley P., Apley, Michael D.** (Clinical Sciences), **Gehring, Ronette**, and **Riviere, Jim**, US Department of Agriculture, "Food Animal Residue Avoidance Databank (FARAD)."

**Kumari, Meena**, and **Anji, Antje**, US Department of Health and Human Services, \$34,800, "Ethanol-Induced NMDA R1 mRNA Stabilization."

**Marcus, Daniel C.**, and **Wangemann, A. Philine**, US Department of Health and Human Services, "Fluid Transport in Inner Ear Development."

**Monteiro-Riviere, Nancy A.**, Mars, Inc., \$225,404, "Alternative Methods for Ingredient Evaluation."

**Musch, Timothy I.**, and **Poole, David C.** (Kinesiology), American Physiological Society, "2014 Undergraduate Summer Research Fellowship for Angela Glean."

**Poole, David C.**, and **Musch, Timothy I.** (Kinesiology), American Physiological Society, \$335, "2014 Undergraduate Summer Research Fellowship for Angela Glean."

**Riviere, Jim**, **Apley, Michael D.** (Clinical Sciences), **Gehring, Ronette**, and **Kukanich, Stanley P.**, US Department of Agriculture, \$263,076, "Food Animal Residue Avoidance Databank (FARAD)."

**Sang, Yongming**, **Blecha, Frank**, and **Rowland, Raymond R. R.** (Diagnostic Medicine/Pathobiology), US Department of Agriculture, \$499,436, "Antiviral Regulation Underlying the Activation Status of Porcine Monocytic Innate Immune Cells."

**Shi, Jishu N.**, Biomune Company, \$41,236, "Efficacy Evaluation of Ceva Fowlpox-MG Vaccine for Protection Against MG in Chicken at 16 Weeks after Vaccination."

**Shi, Jishu N.**, **Blecha, Frank**, and **Richardson, Ralph C.** (Dean of Veterinary Medical Center), Zoetis LLC, "International Veterinary Collaboration for China DVM Program."

**Tamura, Masaaki**, US Department of Health and Human Services, \$49,994, "Novel Nontoxic Peptide Nanoparticle-based Targeted Gene Therapy for Lung Cancer."

**Troyer, Deryl L.**, and **Bossmann, Stefan** (Chemistry), Kansas Board of Regents, \$60,000, "Detection of Early (Subclinical) Mastitis in Dairy Cows to Improve Milk Production."

**Troyer, Deryl L.**, Kansas State University Foundation, \$100,000, "Detection & Targeted Therapy of Cancer."

**Troyer, Deryl L.**, and **Bossmann, Stefan** (Chemistry), Kansas State University Research Foundation, \$75,000, "Protease Assays."

**Troyer, Deryl L.**, **Bossmann, Stefan** (Chemistry), **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), and **Prakash, Punit** (Electrical and Computer Engineering), National Science Foundation, \$60,078, "MRI: Development of an Integrated Image-guided Thermal Therapy Platform."

**Wangemann, A. Philine**, and **Marcus, Daniel C.**, US Department of Health and Human Services, \$358,530, "Fluid Transport in Inner Ear Development."

**Weiss, Mark L.**, **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), and **Sun, X. Susan** (Grain Science and Industry), National Science Foundation, \$35,200, "Novel Peptide Hydrogel for 3D Cell Culture."

**Weiss, Mark L.**, University of Kansas Medical Center Research Institute, Inc., \$227,000, "Modified Stem Cells as Therapeutic Agents in Spinal Cord Injury."

**Weiss, Mark L.**, US Department of Health and Human Services, \$24,870, "Gradient-based Strategy for Osteochondral Regeneration."

## **CLINICAL SCIENCES**

**Apley, Michael D., DeDonder, Keith D.** (Diagnostic Medicine/Pathobiology), and **Gehring, Ronette** (Anatomy and Physiology), Merial Limited, \$64,626, "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., Larson, Robert L.**, and **White, Bradley J.**, National Cattlemen's Beef Association, \$182,605, "Antibiotic Resistance Selection Pressure in Cattle: Understanding the Effects of Widespread Antibiotic Exposure by Evaluating the Epidemiology of Mannheimia Haemolytica in Comingled Feedlot Cattle."

**Apley, Michael D., Gehring, Ronette** (Anatomy and Physiology), **Kukanich, Stanley P.** (Anatomy and Physiology), and **Riviere, Jim** (Anatomy and Physiology), US Department of Agriculture, \$29,231, "Food Animal Residue Avoidance Databank (FARAD)."

**Davis, Elizabeth G., Kenney, Michael J.** (Anatomy and Physiology), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), Merial Limited, \$5,280, "2014 Merial Veterinary Research Scholars Program."

**Davis, Elizabeth G., Kenney, Michael J.** (Anatomy and Physiology), and **Nguyen, Thu A.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$16,638, "Short Term Training in Health Professional Schools."

**Davis, Elizabeth G., Bello, Nora M.** (Statistics), **Delph, Katherine M.** (Veterinary Medical Teaching Hospital), **Ewen, Catherine L.** (Diagnostic Medicine/Pathobiology), **Pohlman, Lisa M.** (Diagnostic Medicine/Pathobiology), and **Wilkerson, Melinda** (Diagnostic Medicine/Pathobiology), Zoetis LLC, \$39,611, "Research Protocol Agreement: Evaluation of Immunologic Response following Oral Vaccination with a USDA-approved, Attenuated, Live, Streptococcus Equi Vaccine."

**Grauer, Gregory F.**, IDEXX Laboratories, Inc., \$32,670, "Part 2: Follow-up of Patients with Liver/kidney Abnormalities."

**Grauer, Gregory F.**, IDEXX Laboratories, Inc., \$18,900, "The Effect of Volume Responsive Dehydration/pre-renal Azotemia on Symmetric Dimethylarginine (SDMA) and Serum Creatinine Concentrations in Dogs and Cats."

**KuKanich, Katherine, Bello, Nora M.** (Statistics), **Rankin, Amy**, and **Schermerhorn, Thomas**, Morris Animal Foundation, "The Effects of Ophthalmic Prednisolone and Diclofenac on Diabetes Mellitus Regulation in Dogs."

**Larson, Robert L., Apley, Michael D.**, and **White, Bradley J.**, National Cattlemen's Beef Association, "Antibiotic Resistance Selection Pressure in Cattle: Understanding the Effects of



Widespread Antibiotic Exposure by Evaluating the Epidemiology of Mannheimia Haemolytica in Comingled Feedlot Cattle."

**Rankin, Amy, Bello, Nora M.** (Statistics), **KuKanich, Katherine**, and **Schermerhorn, Thomas**, Morris Animal Foundation, \$29,863, "The Effects of Ophthalmic Prednisolone and Diclofenac on Diabetes Mellitus Regulation in Dogs."

**Rush, Bonnie R.**, Maddie's Fund, \$6,000, "Maddie's Shelter Medicine Externship."

**Schermerhorn, Thomas, Bello, Nora M.** (Statistics), **KuKanich, Katherine**, and **Rankin, Amy**, Morris Animal Foundation, "The Effects of Ophthalmic Prednisolone and Diclofenac on Diabetes Mellitus Regulation in Dogs."

**Thomson, Daniel U.**, and **Reinhardt, Christopher D.** (Animal Sciences and Industry), Intervet, Inc., \$25,852, "Effect of Physical Exertion on Blood and Muscle Parameters."

**Thomson, Daniel U., Bai, Jianfa** (Diagnostic Medicine/Pathobiology), **Ellis, Jason D.** (Communications), **Fox, John A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **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), **Tonsor, Glynn** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$163,571, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**White, Bradley J., Apley, Michael D.**, and **Larson, Robert L.**, National Cattlemen's Beef Association, "Antibiotic Resistance Selection Pressure in Cattle: Understanding the Effects of Widespread Antibiotic Exposure by Evaluating the Epidemiology of Mannheimia Haemolytica in Comingled Feedlot Cattle."

**White, Bradley J.**, US Department of Agriculture, \$156,815, "A Study to Investigate the Impact of Oral Meloxicam on the Behavior, Innate Immune Response, Health, Performance and Carcass Traits of Feedlot Cattle after Long Distance Transportation."

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**Richardson, Ralph C., Blecha, Frank** (Anatomy and Physiology), and **Shi, Jishu N.** (Anatomy and Physiology), Zoetis LLC, \$206,431, "International Veterinary Collaboration for China DVM Program."

#### **DIAGNOSTIC MEDICINE/PATHOBIOLOGY**

**Amachawadi, Raghavendra G., Drouillard, James S.** (Animal Sciences and Industry), **Nagaraja, Tiruvoor G., Scott, Harvey M.**, and **Tokach, Michael D.** (Animal Sciences and Industry), US Department of Agriculture, "Alternatives to Antibiotics in Animal Agriculture: Impacts on Antimicrobial of Enteric Bacteria."

**Anderson, Gary A.**, Nebraska, State of, \$55,000, "Nebraska Rabies."

**Bai, Jianfa, Dritz, Steven S., Hesse, Richard, Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.**(Animal Sciences and Industry), National Pork Board, "Postcontamination Chemical Mitigation Strategies to Control PEDV in Feed and Feed Ingredients."

**Bai, Jianfa, Ellis, Jason D.** (Communications), **Fox, John A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvloor 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.** (Clinical Sciences), **Tonsor, Glynn** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, "Shigatoxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**Cernicchiaro, Natalia, Nagaraja, Tiruvloor G., and Renter, David G.**, National Cattlemen's Beef Association, "Salmonella in the Peripheral Lymph Nodes of Cattle: Host, Agent and Environmental Factors."

**Chang, Kyeong-Ok, and Hua, Duy H.** (Chemistry), US Department of Health and Human Services, \$32,013, "Development of Novel Therapeutic Agents for Norovirus Infection."

**Chang, Kyeong-Ok**, US Department of Health and Human Services, \$784,022, "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), **Hesse, Richard, Tokach, Michael D.**(Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), Anitox, \$15,000, "Determine the Efficacy of Formaldehyde Treatment in Feed to Inactive PEDV."

**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), DSM Nutritional Products AG, "Maternal Dietary Supplementation of Vitamin D from Cholecalciferol of 25-Hydroxycholecalciferol (25OHD3) and its Effects on Sow and 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), Feed Energy Company, "Comparing the Effects of Corn Oil One™ to Soybean Oil on Growth Performance of Nursery Pigs."

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**Dritz, Steven S., DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), International Ingredient Corporation, "Evaluation of NutriGold in Nursery Pig Starter Diets."

**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), Jefe Nutrition, Inc., "Evaluation of Protected ZnO in Diets for Nursery Pigs."

**Dritz, Steven S., Bello, Nora M.** (Statistics), **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, \$20,590, "The Effects of SID Lysine and Intellibond C(TBCC) Feeding Strategy in Finishing Pigs on Growth Performance, Carcass Characteristics and Economics."

**Dritz, Steven S., DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Hesse, Richard, 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, "Determining the Impact of Conditioning Time and Temperature in Pelleted Diets on PEDv Survivability in Complete Swine Diets."

**Dritz, Steven S., Burnett, Derris D.** (Animal Sciences and Industry), **DeRouchey, Joel M.** (Animal Sciences and Industry), **Gonzalez, John 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), National Pork Board, "Improving Energy Utilization in High By-product Diets with Copper."

**Dritz, Steven S., Bai, Jianfa, Hesse, Richard, Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, "Postcontamination Chemical Mitigation Strategies to Control PEDV in Feed and Feed Ingredients."

**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), Novus International, "The Effects of DP100 on Growth Performance and Carcass Characteristics of Commercial Finishing Pigs."

**Dritz, Steven S., DeRouchey, Joel M.** (Animal Sciences and Industry), **Frobose, Hyatt L.** (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), Nutraferma, Inc., "Evaluation of Fermented Soybean Meal Sources in Diets for Nursery Pigs."

**Dritz, Steven S., DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Nelssen, Jim L.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason** (Animal Sciences and Industry), Olmix NA, Inc., "The Effects of an Algae-modified Montmorillonite Clay on Nursery Pig Growth Performane in Diets Contaminated with Low Levels of Deoxynivalenol."

**Dritz, Steven S., DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), and **Tokach, Michael D.** (Animal Sciences and Industry), Purco, \$54,000, "Purco Project Fixed Price Agreement."

**Dritz, Steven S., DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Tech-Mix, "Effect of Soy Protein Source 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), The United Sorghum Checkoff Program Board, "Determining the Effects of Sorghum- or Corn-based Diets Balanced on Tryptophan or Isoleucine and Valine on Growth Performance of Nursery and Finishing Pigs."

**Dryden, Michael W.**, CEVA Animal Health, LLC, \$87,062, "Evaluation of the Residual Adulticidal and Ovicidal Efficacy of Dinotefuran/Pyriproxyfen Topical Spt on Applied to Dogs."

**Dryden, Michael W.**, Merial Limited, \$115,430, "Evaluation of Afoxolaner (NexGard Chewables: Merial) to Control Flea Populations on Naturally Infested Cats and Dogs inPrivate Residences in Tampa, FL 2014."

**Dryden, Michael W.**, Merial Limited, \$117,012, "Twelve and 24-hour Efficacy offrontline® TRITAK® against KS1 (Kansas State 1) Ctenocephalides Felis Fleas on Days 1, 7, 14, 21 and 28."

**Ewen, Catherine L.**, and **Wilkerson, Melinda**, National Pork Board, "The Contribution of Adaptive Immunity to Porcine Reproduction and Respiratory Syndrom Virus Infection."

**Ewen, Catherine L., Bello, Nora M.** (Statistics), **Davis, Elizabeth G.** (Clinical Sciences), **Delph, Katherine M.** (Veterinary Medical Teaching Hospital), **Pohlman, Lisa M.**, and **Wilkerson, Melinda**, Zoetis LLC, "Research Protocol Agreement: Evaluation of Immunologic Response following Oral Vaccination with a USDA-approved, Attenuated, Live, Streptococcus Equi Vaccine."

**Fang, Ying**, National Pork Board, \$108,311, "Development of a Broadly Protective PRRS Vaccine Candidate: Application of Non-Toxic Enterotoxin and E. coli as the Adjuvant-delivery System."

**Fang, Ying**, National Pork Board, \$10,000, "Virology Review for Porcine Reproductive and Respiratory Syndrome Virus."

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**Ganta, Roman Reddy R.**, US Department of Health and Human Services, \$425,535, "Vector and Host Contributions to the Regulation of *E. chaffeensis* Gene Expression."

**Haley, Nicholas J.**, US Department of Health and Human Services, \$148,373, "CWD: A Model of Prion Transmission via Saliva and Urine."

**Hardwidge, Philip R.**, US Department of Health and Human Services, \$711,342, "Bacterial Effectors Targeting the IKK/NF- $\kappa$ B Pathway."

**Hardwidge, Philip R.**, US Department of Health and Human Services, \$211,500, "Reverse Vaccinology of Enterotoxigenic *E. coli*."

**Hesse, Richard, 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), Anitox, "Determine the Efficacy of Formaldehyde Treatment in Feed to Inactive PEDV."

**Hesse, Richard**, Eli Lilly & Company, \$60,000, "Cross Neutralization Antibody Response to BVDV Vaccine Viruses and Field Isolates."

**Hesse, Richard**, National Pork Board, \$168,693, "Determination of the Sites of Tissue Localization, routes of viral shedding, duration of virus carriage, kinetics of antibody response, and potential of aerosol transmission of Porcine Deltacoronavirus (PDCoV) following inoculation of nursing pigs and their dams."

**Hesse, Richard, DeRouchey, Joel M.** (Animal Sciences and Industry), **Dritz, Steven S.**, **Goodband, Robert D.** (Animal Sciences 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, "Determining the Impact of Conditioning Time and Temperature in Pelleted Diets on PEDV Survivability in Complete Swine Diets."

**Hesse, Richard, Bai, Jianfa, Dritz, Steven S.**, **Jones, Cassandra K.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, "Postcontamination Chemical Mitigation Strategies to Control PEDV in Feed and Feed Ingredients."

**Hesse, Richard**, National Pork Board, \$88,128, "Tissue Localization, Shedding, Antibody Response, Horizontal and Aerosol Transmission of Porcine Epidemic Diarrhea Virus (PEDV) following Inoculation of Feeder Pigs."

**Kastner, Justin J.**, **Bai, Jianfa**, **Ellis, Jason D.** (Communications), **Fox, John 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.** (Clinical Sciences), **Tonsor, Glynn** (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."

**Kastner, Justin J., Getty, Kelly J. K.** (Food Science Institute), **Kastner, Curtis L.** (Food Science Institute), and **Nutsch, Abbey L.** (Animal Sciences and Industry), US Department of Homeland Security, \$53,994, "Interdisciplinary Multi-Institutional Education Programs for NCFPD."

**Kastner, Justin J.**, US Department of Homeland Security, \$148,928, "National Center for Food Protection and Defense (NCFPD) "Curricular, Experiential, and Skill-development Education through the Frontier Program". "

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**Ma, Wenjun**, Embassy of the Arab Republic of Egypt, \$10,000, "Development of an Efficacious Avian Influenza Vaccine for Egyptian Market."

**Ma, Wenjun**, Hemispherx Biopharma, Inc., \$27,000, "Material Transfer and Research Agreement."

**Ma, Wenjun**, and **Richt, Juergen**, US Department of Health and Human Services, "Swine Influenza Syndromic Surveillance and Research."

**Mosier, Derek A., Larson, Adair K.**, and **White, Bradley J.**, Zoetis LLC, \$156,760, "Effect of Neurokinin-1 Antagonists on Substance P-induced Alterations in Bovine Cells and Mannheimia Haemolytica-induced Bovine Pneumonia."

**Nagaraja, Tiruvoor G.**, Eli Lilly & Company, \$112,500, "Evaluation of Bacteria causing Liver Abscesses in Holstein and Cross-bred Steers and Determinations of their Antimicrobial Susceptibilities to Tylosin, Chlorotetracycline and Oxytetracycline."

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**Narayanan, Sanjeevkumar, Bossmann, Stefan** (Chemistry), **Prakash, Punit** (Electrical and Computer Engineering), and **Troyer, Deryl L.** (Anatomy and Physiology), National Science Foundation, \$60,078, "MRI: Development of an Integrated Image-guided Thermal Therapy Platform."

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**Nguyen, Thu A., Davis, Elizabeth G.** (Clinical Sciences), and **Kenney, Michael J.** (Anatomy and Physiology), Merial Limited, \$5,440, "2014 Merial Veterinary Research Scholars Program."

**Nguyen, Thu A.,** Morris Animal Foundation, \$4,000, "Efficacy of Anticancer Drugs in Canine Mammary Carcinoma (Vet Student Scholar - Michael Porta)."

**Nguyen, Thu A., Sun, X. Susan** (Grain Science and Industry), and **Weiss, Mark L.** (Anatomy and Physiology), National Science Foundation, \$35,200, "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, \$16,638, "Short Term Training in Health Professional Schools."

**Oberst, Richard D., Bai, Jianfa, Ellis, Jason D.** (Communications), **Fox, John 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.** (Clinical Sciences), **Tonsor, Glynn** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, "Shigatoxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**Pohlman, Lisa M., Bello, Nora M.** (Statistics), **Davis, Elizabeth G.** (Clinical Sciences), **Delph, Katherine M.** (Veterinary Medical Teaching Hospital), **Ewen, Catherine L., and Wilkerson, Melinda,** Zoetis LLC, "Research Protocol Agreement: Evaluation of Immunologic Response following Oral Vaccination with a USDA-approved, Attenuated, Live, Streptococcus Equi Vaccine."

**Renter, David G., Cernicchiaro, Natalia,** and **Nagaraja, Tiruvoor G.,** National Cattlemen's Beef Association, \$50,000, "Salmonella in the Peripheral Lymph Nodes of Cattle: Host, Agent and Environmental Factors."

**Renter, David G., Bai, Jianfa, Ellis, Jason D.** (Communications), **Fox, John 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.** (Clinical Sciences), **Tonsor, Glynn** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, "Shigatoxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**Renter, David G.**, Zoetis LLC, \$7,800, "Genotyping Feedlot Cattle to Assess Associations with Salmonella Lymph Node Carriage and Response to the Salmonella SRP Vaccine."

**Richt, Juergen**, US Department of Agriculture, \$31,524, "Evaluation of Recombinant Replication-defective Adenoviruses which Induce Anti-viral Activity in Cattle."

**Richt, Juergen**, US Department of Health and Human Services, \$263,000, "Pathogenesis, Transmission and Detection of Zoonotic Prion Diseases."

**Richt, Juergen**, and **Ma, Wenjun**, US Department of Health and Human Services, \$145,077, "Swine Influenza Syndromic Surveillance and Research."

**Richt, Juergen**, US Department of Homeland Security, \$1,742,539, "Center of Excellence for Emerging & Zoonotic Animal Disease (CEEZAD)."

**Richt, Juergen**, and **Li, Jun** (Chemistry), US Department of Homeland Security, \$100,000, "Portable Smart Platforms for Detection of Biological Pathogens and Chemicals."

**Richt, Juergen**, US Department of Homeland Security, \$19,494, "Workshops to Coordinate and Enhance the Agro-security Enterprise Phase III."

**Rowland, Raymond R. R., Blecha, Frank** (Anatomy and Physiology), and **Sang, Yongming** (Anatomy and Physiology), US Department of Agriculture, "Antiviral Regulation Underlying the Activation Status of Porcine Monocytic Innate Immune Cells."

**Rowland, Raymond R. R.**, US Department of Agriculture, \$277,914, "Genetically Improving Resistance of Pigs to PRRS Virus Infection."

**Sanderson, Michael W., Bai, Jianfa, Ellis, Jason D.** (Communications), **Fox, John A.** (Agricultural Economics), **Kastner, Curtis L.** (Food Science Institute), **Kastner, Justin J., Nagaraja, Tiruvor G., Narayanan, Sanjeevkumar, Oberst, Richard D., Phebus, Randall K.** (Animal Sciences and Industry), **Renter, David G., Schroeder, Ted C.** (Agricultural Economics), **Thomson, Daniel U.** (Clinical Sciences), **Tonsor, Glynn** (Agricultural Economics), and **Zurek, Ludek** (Entomology), US Department of Agriculture, \$460,973, "Shiga-toxigenic Escherichia coli (STEC) in the Beef Chain: Assessing and Mitigating the Risk by Translational Science, Education and Outreach."

**Scott, Harvey M., Amachawadi, Raghavendra G., Drouillard, James S.** (Animal Sciences and Industry), **Nagaraja, Tiruvor G.**, and **Tokach, Michael D.** (Animal Sciences and Industry), US Department of Agriculture, \$400,000, "Alternatives to Antibiotics in Animal Agriculture: Impacts on Antimicrobial of Enteric Bacteria."

**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, Fritz, Allan K.** (Agronomy), and **Poland, Jesse A.** (Plant Pathology), Kansas Wheat Alliance, \$7,571, "Winter Wheat Phenotyping Using a Multitemporal Vegetation Index Acquired from Small Unmanned Aircraft Systems Imagery."

**Van Der Merwe, Deon**, RoboFlight Systems, Inc., \$10,310, "Small Unmanned Aircraft Systems Data 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."

**Vanlandingham, Dana L.**, Defense Threat Reduction Agency, \$50,000, "Genotypic and Pheotypic Analysis of Rift Valley Fever Virus Serially Passed in Vitro and Vivo."

**Vanlandingham, Dana L.**, and **Higgs, Stephen** (Biosecurity Research Institute), US Department of Health and Human Services, \$1,042, "WEEV Vaccine Development."

**Wilkerson, Melinda**, and **Ewen, Catherine L.**, National Pork Board, \$97,675, "The Contribution of Adaptive Immunity to Porcine Reproduction and Respiratory Syndrom Virus Infection."

**Wilkerson, Melinda, Bello, Nora M.** (Statistics), **Davis, Elizabeth G.** (Clinical Sciences), **Delph, Katherine M.** (Veterinary Medical Teaching Hospital), **Ewen, Catherine L.**, and **Pohlman, Lisa M.**, Zoetis LLC, "Research Protocol Agreement: Evaluation of Immunologic Response following Oral Vaccination with a USDA-approved, Attenuated, Live, Streptococcus Equi Vaccine."

**Zhang, Weiping**, Program for Appropriate Technology in Health (PATH), \$194,379, "A Toxoid Vaccine Against Heat-Stable Enterotoxin of E. Coli."

**Zhang, Weiping**, and **Fang, Ying**, US Department of Agriculture, "Innovative Strategies to Enhance PRRSV Specific Innate and Mucosal Immunity: Implication for Development of Broadly Protective PRRS Vaccine."

**Zhang, Weiping**, US Department of Health and Human Services, \$170,376, "A Broadly Protective Vaccine for Enterotoxigenic Escherichia Coli (ETEC)."

**Zhang, Weiping**, US Department of Health and Human Services, \$412,500, "A Subunit Vaccine for Enterotoxigenic E. coli Associated Traveler's Diarrhea."

#### **VETERINARY DIAGNOSTIC LABORATORY**

**Anderson, Gary A.**, Pfizer, Inc., \$8,710, "Service Protocol Agreement: Evaluation of the 1 Year Duration of Immunity of the WNV Innovator VEWT + Rabies Vaccine - Rabies Challenge (Addendum to MSA Exhibit A-12)."

**Anderson, Gary A.**, US Department of Agriculture, \$30,000, "NAHLN: KS."

**Anderson, Gary A.**, US Department of Agriculture, \$11,417, "Swine Surveillance."

**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**

**Delph, Katherine M.**, **Bello, Nora M.** (Statistics), **Davis, Elizabeth G.** (Clinical Sciences), **Ewen, Catherine L.** (Diagnostic Medicine/Pathobiology), **Pohlman, Lisa M.** (Diagnostic Medicine/Pathobiology), and **Wilkerson, Melinda** (Diagnostic Medicine/Pathobiology), Zoetis LLC, "Research Protocol Agreement: Evaluation of Immunologic Response following Oral Vaccination with a USDA-approved, Attenuated, Live, Streptococcus Equi Vaccine."

**Fingland, Roger B.**, Friends of the Sunset Zoo, \$2,000, "Sunset Zoo Internship Program."

## **KANSAS COOPERATIVE EXTENSION SERVICE**

### **AGRICULTURE AND NATURAL RESOURCES**

**Buhler, Forrest A.**, **Hadley, Gregg L.**, and **Henton, Charlene M.**, US Department of Agriculture, "Planning Successful Farm and Ranch Successions."

**Hadley, Gregg L.**, US Department of Agriculture, \$433,847, "Kansas Agricultural Mediation Service."

**Hadley, Gregg L.**, and **Ebert, Kerri L.** (Biological and Agricultural Engineering), US Department of Agriculture, \$32,750, "Kansas SARE - Kansas 2014 State PDP Chapter 3 Program."

**Hadley, Gregg L.**, **Buhler, Forrest A.**, and **Henton, Charlene M.**, US Department of Agriculture, \$49,824, "Planning Successful Farm and Ranch Successions."

**Hadley, Gregg L.**, US Department of Agriculture, \$45,887, "Renewable Resources Extension Act Program (RREA Formula Funds)."

**Henton, Charlene M.**, **Buhler, Forrest A.**, and **Hadley, Gregg L.**, US Department of Agriculture, "Planning Successful Farm and Ranch Successions."

**Kahl, Daniel W.**, **Peterson, Hikaru H.** (Agricultural Economics), **Procter, David E.** (Center for Engagement and Community Development), and **Procter, Sandra B.** (Human Nutrition), US Department of Agriculture, "Increasing Healthful Food Choice and Strengthening Rural Grocery Stores through Nutritional Education and Labeling."

### **AGRONOMY**

**Eberle, William M.**, **Presley, DeAnn R.**, and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Department of Health and Environment, "Compost Site Development and Operation and Compost Operator Educational and Technical Assistance."

**Presley, DeAnn R.**, **Eberle, William M.**, and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Department of Health and Environment, \$21,677, "Compost Site Development and Operation and Compost Operator Educational and Technical Assistance."

**Ruiz Diaz Suarez, Dorivar A., Eberle, William M., and Presley, DeAnn R.,** Kansas Department of Health and Environment, "Compost Site Development and Operation and Compost Operator Educational and Technical Assistance."

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

#### **COUNTY AGENTS - METROPOLITAN SECTOR**

**Maass, Sarah E., and Stone, Barbara J.** (Four-H Youth Development), Philips Electronics North America Corporation, "Magic of Electricity."

#### **DIRECTOR OF COOPERATIVE EXTENSION**

**Lindquist, Jack W., and Davis, Alvin N.,** Kansas Agriculture and Rural Leadership, Inc., \$222,964, "Kansas Agriculture and Rural Leadership, Inc.."

**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, \$2,489,822, "Kansas Food Assistance Nutrition Education Plan."

#### **FOUR-H YOUTH DEVELOPMENT**

**Keatley, Sarah L., and Stone, Barbara J.,** National 4-H Council, "Challenging Kansas Youth to be the Solution to Feed the World Food Security."

**Keatley, Sarah L., and Stone, Barbara J.,** National 4-H Council, \$7,500, "Kansas 4-H Commodity Carnival."

**Stone, Barbara J., and Keatley, Sarah L.,** National 4-H Council, \$15,000, "Challenging Kansas Youth to be the Solution to Feed the World Food Security."

**Stone, Barbara J., and Wiebers, Justin A.,** National 4-H Council, \$42,933, "Contract between Kansas State University and National 4-H Council (Contractor is Justin Wiebers)."

**Stone, Barbara J., and Keatley, Sarah L.,** National 4-H Council, "Kansas 4-H Commodity Carnival."

**Stone, Barbara J., and Maass, Sarah E.** (County Agents - Metropolitan Sector), Philips Electronics North America Corporation, \$15,000, "Magic of Electricity."

**Stone, Barbara J.,** US Department of Agriculture, \$145,000, "Empowering Kansas Youth to Improve Their Physical Health."

**Stone, Barbara J.**, US Department of Justice, \$82,000, "Kansas 4-H Tech Wizards: 4-H National Mentoring Program."

**Wiebers, Justin A.**, and **Stone, Barbara J.**, National 4-H Council, "Contract between Kansas State University and National 4-H Council (Contractor is Justin Wiebers)."

### **KANSAS FOREST SERVICE**

**Atchison, Robert L.**, US Department of Agriculture, \$118,362, "NRCS Technical Service Provider."

**Beck, William J.**, and **Biles, Larry E.**, US Environmental Protection Agency, \$43,090, "Riparian Forest Management Technical Assistance and Coordination SFY14-SFY16."

**Biles, Larry E.**, Kansas Department of Agriculture, \$78,061, "Riparian Forest Buffer Restoration VII."

**Biles, Larry E.**, Kansas Department of Agriculture, \$50,977, "Riparian Forest Buffer Restoration V."

**Biles, Larry E.**, Kansas Department of Agriculture, \$17,172, "Riparian Forest Buffer Restoration VI."

**Biles, Larry E.**, Kansas Department of Agriculture, \$24,153, "Riparian Forest Buffer Restoration XIII."

**Biles, Larry E.**, US Department of Agriculture, \$20,000, "2012 Forest Legacy Administration."

**Biles, Larry E.**, US Department of Agriculture, \$3,041,689 (includes \$1,077,455 from Kansas Rural Fire Districts), "2013 Consolidated Payment Grant."

**Biles, Larry E.**, US Department of Agriculture, \$20,000, "2014 Forest Legacy Administration."

**Biles, Larry E.**, US Department of Agriculture, \$29,162, "Conservation Reserve Program 2014."

**Biles, Larry E.**, and **Beck, William J.**, US Environmental Protection Agency, "Riparian Forest Management Technical Assistance and Coordination SFY14-SFY16."

### **NORTHEAST AREA OFFICE**

**Duncan, Stewart R.**, Cotton, Inc., \$3,800, "Cotton Variety Performance Tests for Kansas."

**Duncan, Stewart R.**, **Ciampitti, Ignacio** (Agronomy), **Haag, Lucas A.** (Northwest Area Office), **Peterson, Dallas E.** (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, "K-State Soybean Production Schools for Kansas."

**Duncan, Stewart R.**, Multi-Sponsor, \$52,984, "Crop and Soils Multisponsor Programs."

### **NORTHWEST AREA OFFICE**

**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."

**Haag, Lucas A., Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), **Peterson, Dallas E.** (Agronomy), and **Shoup, Douglas E.** (Southeast Area Office), Kansas Soybean Commission, "K-State Soybean Production Schools for Kansas."

**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."

**Olson, Brian L.,** Multi-Sponsor, \$1,575, "Field Evaluation for Various Industry Products."

#### **SOUTHEAST AREA OFFICE**

**Farney, Jaymelynn,** Multi-Sponsor, \$1,000, "Replacement Heifer Project - Multi-Sponsor Project."

**Shoup, Douglas E., Adee, Eric A.** (Agronomy), **Nelson, Randall** (Agronomy), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Soybean Commission, "Evaluation of Micronutrients for High Yield Soybean Production Using Small Plot and Strip Trial Research."

**Shoup, Douglas E., Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), **Haag, Lucas A.** (Northwest Area Office), and **Peterson, Dallas E.** (Agronomy), Kansas Soybean Commission, \$6,029, "K-State Soybean Production Schools for Kansas."

**Shoup, Douglas E.,** Multi-Sponsor, \$13,956, "Weed Science Research at Southeast Area Extension Office."

**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), **Shroyer, James P.** (Agronomy), **Swamy, Aavudai Anandhi** (Agronomy), **Tomlinson, Peter J.** (Agronomy), and **Waggoner, Justin** (Southwest Area Office), US Department of Agriculture, \$21,277, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use and Markets."

## **SOUTHWEST AREA OFFICE**

**Aguilar, Jonathan P.**, Kansas Department of Agriculture, \$4,000, "Irrigation Water Probe Sensor Demonstration Project."

**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, Leatherman, John C.** (Agricultural Economics), and **Wiles, Bradford B.** (School of Family Studies and Human Services), US Department of Health and Human Services, "Behavioral Health Information Pilot Communities: Kansas State University and Finney County Community Health Coalition."

**Dumler, Troy, Adee, Eric A.** (Agronomy), **Roozeboom, Kraig L.** (Agronomy), and **Schlegel, Alan J.** (Southwest Research Extension Center), Kansas Corn Commission, "Irrigation Management of Emerging Drought-Tolerant Corn Hybrids."

**Martin, Kent L.**, Multi-Sponsor, \$7,000, "Chemical Evaluation."

**Mendoza, Bertha**, Kansas Department for Children and Families, "Incredible Years Facilitation."

**Waggoner, Justin, Jaeger, John R.** (Agricultural Research Center-Hays), **Olson, K C** (Animal Sciences and Industry), **Stevenson, Jeffrey S.** (Animal Sciences and Industry), and **Weaber, Robert L.** (Animal Sciences and Industry), Multimin USA, Inc., "The Effect of Multimin Injectable Trace Mineral Solution on Semen Quality of Young Breeding Beef Bulls."

**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), **Shroyer, James P.** (Agronomy), **Swamy, Aavudai Anandhi** (Agronomy), and **Tomlinson, Peter J.** (Agronomy), US Department of Agriculture, \$21,277, "Resilience and Vulnerability of Beef Cattle Production in the Southern Great Plains under Changing Climate, Land Use and Markets."

**Zukoff, Sarah N.**, Monsanto Company, \$32,400, "Characterizing Resistance Evolution to Pyrethroid Insecticides."

## **OFFICE OF THE PRESIDENT**

### **BEACH ART MUSEUM**

**Duke, Linda A.**, Kansas Humanities Council, \$8,872, "Take Shelter: Flint Hills Native Stone Subterranean Structures."

### **OFFICE OF THE PRESIDENT**

**Schulz, Kirk H.**, Kansas Department of Commerce, \$5,000,000, "Kansas Animal Agrosecurity 2025 and Beyond."

# OFFICE OF THE PROVOST

## CENTER FOR ENGAGEMENT AND COMMUNITY DEVELOPMENT

**Procter, David E.**, National Issues Forums Institute, \$15,000, "Community Conversations about Mental Health."

**Procter, David E., Kahl, Daniel W.** (Agriculture and Natural Resources), **Peterson, Hikaru H.** (Agricultural Economics), and **Procter, Sandra B.** (Human Nutrition), US Department of Agriculture, \$249,757, "Increasing Healthful Food Choice and Strengthening Rural Grocery Stores through Nutritional Education and Labeling."

## DEAN OF CONTINUING EDUCATION

**Maes, Sue C.**, Ministry of Education, Ecuador, \$9,987,444, "Go Teacher Program."

## DEAN OF GRADUATE SCHOOL

**Crawford Jr, Duane W., Britt, Sonya L.** (School of Family Studies and Human Services), **Kaus, Jodi L.** (Student Financial Assistance), **Robb, Clifford A.** (School of Family Studies and Human Services), and **Shanklin, Carol W.**, Council of Graduate Schools, "Enhancing Student Financial Education at Kansas State University."

**Lease, Kevin B.**, National Aeronautics and Space Administration, \$49,683, "Kansas Space Grant Consortium."

**Polson, Cheryl J.**, US Department of Defense, \$231,058, "Brigade Spouse Courses at Fort Leavenworth."

**Shanklin, Carol W., Britt, Sonya L.** (School of Family Studies and Human Services), **Crawford Jr, Duane W., Kaus, Jodi L.** (Student Financial Assistance), and **Robb, Clifford A.** (School of Family Studies and Human Services), Council of Graduate Schools, \$40,000, "Enhancing Student Financial Education at Kansas State University."

**Shanklin, Carol W., Aramouni, Fadi M.** (Animal Sciences and Industry), **Kwon, Junehee** (Hospitality Management and Dietetics), **Roberts, Kevin R.** (Hospitality Management and Dietetics), **Sauer, Kevin L.** (Hospitality Management and Dietetics), and **Sneed, Jeannie** (Hospitality Management and Dietetics), US Department of Agriculture, "Continuation of the Center of Excellence for Food Safety Research in Child Nutrition Programs."

## INFORMATION SECURITY & COMPLIANCE

**Vaile, Robert S., Ou, Xinming (Simon)** (Computing and Information Sciences), and **Wesch, Michael** (Sociology, Anthropology, and Social Work), National Science Foundation, \$139,969, "TWC SBE TTP: Medium: Collaborative: Bringing Anthropology into Cybersecurity."

## OFFICE OF THE PROVOST

**Champion, Benjamin, Hohn, Keith L.** (Chemical Engineering), and **Madl, Ronald L.** (Grain Science and Industry), Kansas Soybean Commission, \$3,820, "Promoting Cooking Oil-to-Biodiesel Process on K-State University Campus."

**Dyer, Ruth A.**, Kansas State University Foundation, \$8,710, "Spainhour Faculty Chair for KAWSE."

**Mason, April**, Kansas State University Foundation, \$28,537, "Pickett Chair."

**Mason, April, Grauer, Bette** (Dean of Engineering), **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, \$300,000, "Pathways to STEM: Kansas Louis Stokes Alliance for Minority Participation."

## **SCHOOL OF LEADERSHIP STUDIES**

**Fine, Leigh E.**, University of California - Los Angeles, \$1,395, "The Effects of Sexual Identity and Institutional Factors on LGBT College Student Outcomes: A Quantitative Approach."

**Tolar, Mary H.**, Caroline Peine Charitable Foundation, \$5,000, "Campus-Community Partnership Award Program."

**Tolar, Mary H.**, Corporation for National and Community Service, \$4,053, "Get Hands On."

**Tolar, Mary H.**, Kansas State Department of Education, \$600, "Kansas Mentors."

**Tolar, Mary H.**, Manhattan Area Chamber of Commerce, \$50,000, "Leadership Manhattan."

## **SALINA COLLEGE OF TECHNOLOGY AND AVIATION**

### **SALINA APPLIED AVIATION RESEARCH CENTER**

**Barnhart, Richard K.**, and **Blanks, Mark T.**, Westar Energy, "Aerial Inspection and Suveying Techniques of Power Infrastructure."

**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, \$57,993, "Aerial Inspection and Suveying Techniques of Power Infrastructure."

### **SALINA ARTS, SCIENCE AND BUSINESS**

**Brockway, Kathy J.**, **Norlin, David D.**, and **Stephens, Gregory F.**, City of Salina, KS, "CECD Equipment Incentive - North Salina Community Development."

**Norlin, David D.**, **Brockway, Kathy J.**, and **Stephens, Gregory F.**, City of Salina, KS, "CECD Equipment Incentive - North Salina Community Development."

**Stephens, Gregory F.**, **Brockway, Kathy J.**, and **Norlin, David D.**, City of Salina, KS, \$500, "CECD Equipment Incentive - North Salina Community Development."

### **SALINA COLLEGE ADVANCEMENT**

**Schierlman, Dixie L.**, Greater Salina Community Foundation, \$1,500, "GSCF Support of Wellness Program."



## **VICE PRESIDENT FOR ACADEMIC SERVICES AND TECHNOLOGY**

### **VICE PRESIDENT FOR ACADEMIC SERVICES AND TECHNOLOGY**

**Stafford, Kenneth R.**, US Department of Agriculture, \$3,850, "Acquisition of Goods and Services #58-5430-3-017."

## **VICE PRESIDENT FOR ADMINISTRATION AND FINANCE**

### **KSU POLICE DEPARTMENT**

**Stubbings, Donald C.**, Wal-Mart Foundation, \$500, "Walmart Foundation Grant."

**Stubbings, Donald C.**, Wal-Mart Foundation, \$1,000, "Walmart Foundation Grant - 2013."

## **VICE PRESIDENT FOR RESEARCH**

### **BIOSECURITY RESEARCH INSTITUTE**

**Higgs, Stephen**, State of Kansas, \$5,000,000, "Launching NBAF Research in BRI."

**Higgs, Stephen**, US Department of Health and Human Services, \$13,764, "The Role of Mosquito Saliva in Chikungunya Virus Transmission and Dissemination."

**Higgs, Stephen**, and **Vanlandingham, Dana L.** (Diagnostic Medicine/Pathobiology), US Department of Health and Human Services, \$19,791, "WEEV Vaccine Development."

### **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, "Lessons Learned / Food Shield App."

**Burton, Kenneth R.**, and **Beardsley, Craig A.**, US Department of Homeland Security, \$135,000, "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, \$13,134, "Lessons Learned / Food Shield App."

### **OFFICE OF THE VICE PRESIDENT FOR RESEARCH**

**Bossmann, Stefan**, **Narayanan, Sanjeevkumar** (Diagnostic Medicine/Pathobiology), **Prakash, Punit** (Electrical and Computer Engineering), and **Troyer, Deryl L.** (Anatomy and Physiology), National Science Foundation, "MRI: Development of an Integrated Image-guided Thermal Therapy Platform."

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

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

**Greene, Kathleen V.**, National Science Foundation, "McNair Scholars Program."

**Guikema, James A.**, National Science Foundation, \$136,000, "National Science Foundation Graduate Research Fellowship Award."

**Li, Jun**, National Science Foundation, "Nanotechnology for Renewable Energy."

**Peterson, Jeffrey M., Bergtold, Jason S.** (Agricultural Economics), and **Kulcsar, Laszlo** (Sociology, Anthropology, and Social Work), National Science Foundation, "Farmers' Decisions to Grow Crops for Fuel."

**Rice, Charles W., Harrington Jr, John A.** (Geography), and **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), National Science Foundation, "Understanding Climate Change in the Great Plains: Source, Impact, and Mitigation."

**Trewyn, R. W.**, Kansas State University Foundation, \$12,677, "BGS BRI Peine Chair Account."

#### **VICE PRESIDENT ELECTRONICS DESIGN LABORATORY**

**Huddleston, David E.**, and **Taylor, Russell D.**, US Department of Energy, "1-D Linear Array Neutron Detector Electronics Development Phase II."

**Sobering, Timothy J., Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D.** (Electrical and Computer Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Kuhn, William B.** (Electrical and Computer Engineering), **Natarajan, Balasubramaniam** (Electrical and Computer Engineering), and **Warren, Steven** (Electrical and Computer Engineering), Kansas Board of Regents, \$1,050, "Biosensor Networks and Telecommunication Subsystems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions."

**Sobering, Timothy J., Barstow, Thomas J.** (Kinesiology OLD), **Day, Dwight D.** (Electrical and Computer Engineering), **Gruenbacher, Don M.** (Electrical and Computer Engineering), **Kuhn, William B.** (Electrical and Computer Engineering), **Natarajan, Balasubramaniam** (Electrical and Computer Engineering), and **Warren, Steven** (Electrical and Computer Engineering), National Aeronautics and Space Administration, \$13,084, "Developing BioSensor Networks and Telecommunication Sub-systems for Long-duration Missions, EVA Suits, and Robotic Precursor Scout Missions - Coordinated Research Spanning Early-stage Innovations through Game Changing Technologies."

**Sobering, Timothy J.**, US Department of Defense, \$175,000, "Extended Lifetime Electronics."

**Taylor, Russell D.**, and **Huddleston, David E.**, US Department of Energy, \$175,834, "1-D Linear Array Neutron Detector Electronics Development Phase II."

# **VICE PRESIDENT FOR STUDENT LIFE AND DEAN OF STUDENTS**

## **DEPARTMENT OF HOUSING**

**Wessel, Tonya R.**, Kansas Health Foundation, \$1,000, "Work Well Kansas."

## **EDUCATIONAL AND PERSONAL DEVELOPMENT**

**Booker, Monshonda**, US Department of Education, \$236,925, "Kansas State University - Salina Upward Bound Program-Central Kansas."

**Bosco, Pat J.**, Kauffman Scholars, Inc., "IEP Kauffman Scholars Program - ISP."

**Greene, Kathleen V.**, Multi-Sponsor, \$990, "Ronald E. McNair Post Baccalaureate Achievement Program - Travel."

**Greene, Kathleen V.**, National Science Foundation, \$20,734, "McNair Scholars Program."

**Greene, Kathleen V.**, US Department of Education, \$233,513, "Ronald E. McNair PostBaccalaureate Achievement Program."

**Greene, Kathleen V.**, US Department of Education, \$273,483, "Student Support Services at KSU-Manhattan."

**Greene, Kathleen V.**, US Department of Education, \$210,533, "Student Support Services at KSU-Salina."

## **KSU CHILD DEVELOPMENT CENTER, INC.**

**Parker, Leslie M.**, US Department of Agriculture, \$3,000, "Kansas Child Care Wellness Program (KCCWP)."

**Ring, Debra J.**, Kansas Child Care Training Opportunities, Inc, \$30,267, "Kansas Child Care Training Opportunities."

**Ring, Debra J.**, 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, \$34,940, "Suder Foundation FIRST SCHOLARS FUND."

## **STUDENT FINANCIAL ASSISTANCE**

**Kaus, Jodi L., Britt, Sonya L.** (School of Family Studies and Human Services), **Crawford Jr, Duane W.** (Dean of Graduate School), **Robb, Clifford A.** (School of Family Studies and Human Services), and **Shanklin, Carol W.** (Dean of Graduate School), Council of Graduate Schools, "Enhancing Student Financial Education at Kansas State University."

**UNIVERSITY COUNSELING SERVICES**

**Mailey, Chaz D.**, City of Manhattan, KS, \$34,000, "Youth Oriented Alcohol Abuse Prevention Program."

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**Bosco, Pat J.**, Conoco, Inc., \$15,000, "ConocoPhillips SPIRIT Scholars Administration."

**Bosco, Pat J.**, and **Cortez, Anita R.**, Kansas State University Foundation, \$46,000, "Edgerley-Franklin Urban Leadership Scholars Program."