

# EXTRAMURAL AWARDS

May 2019

## COLLEGE OF AGRICULTURE

### AGRICULTURAL ECONOMICS

**Bergtold, Jason S., and Tack, Jesse B.**, US Department of Agriculture, \$50,843, "Producer Driven Adaptation to Extreme Weather and Climate Change: Examining Crop Management and Marketing Adaption Strategies (Noah Miller)."

**Pendell, Dustin L., Amrine, David E.** (Dean of Veterinary Medical Center), **Larson, Robert L.** (Clinical Sciences), **Weaber, Robert L.** (Animal Sciences and Industry), and **White, Bradley J.** (Dean of Veterinary Medical Center), American Angus Association, \$18,000, "BCI Health Knowledge Network: Monitoring Cattle Heart Syndromes."

**Reid, Roberta M., and Taylor, Mykel R.**, US Department of Agriculture, \$44,879, "Farm Financial Skills for Kansas Women in Agriculture-A Statewide Program to Address Financial Risk Amid a Struggling Farm Economy."

**Tack, Jesse B., and Bergtold, Jason S.**, US Department of Agriculture, \$50,843, "Producer Driven Adaptation to Extreme Weather and Climate Change: Examining Crop Management and Marketing Adaption Strategies (Noah Miller)."

**Taylor, Mykel R., and Reid, Roberta M.**, US Department of Agriculture, \$4,987, "Farm Financial Skills for Kansas Women in Agriculture-A Statewide Program to Address Financial Risk Amid a Struggling Farm Economy."

**Tonsor, Glynn T.**, US Department of Agriculture, \$91,975, "Consumer and Societal Impacts of More Efficient Animal Protein Production."

### AGRICULTURAL RESEARCH CENTER-HAYS

**Kumar, Vipin, and Peterson, Dallas E.** (Agronomy), Kansas Soybean Commission, \$17,109, "Non-Xtend Soybean Response to Simulated Dicamba Drift."

### AGRONOMY

**Adee, Eric A., Little, Christopher R.** (Plant Pathology), and **Schapaugh Jr, William T.**, Kansas Soybean Commission, \$3,995, "Investigating SDS and Fusarium Root Rot Resistance, Preventive Seed Treatments, and Pathogen Variability in Kansas."

**Adee, Eric A.**, Support Funds, \$24,500, "AGR Support Funds Experiment Field 26."

**Ciampitti, Ignacio, Duncan, Stewart R.** (Northeast Area Office), **Ruiz Diaz Suarez, Dorivar A.**, and **Sweeney, Daniel W.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$4,333, "Assessment of Soil Potassium Bioavailability and Improving Diagnostics Tools for K Management on Soybean in Kansas."

**Ciampitti, Ignacio, Duncan, Stewart R.** (Northeast Area Office), **Jardine, Douglas J.** (Plant Pathology), **Knapp, Mary C., McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), and **Ruiz Diaz Suarez, Dorivar A.**, Kansas Soybean Commission, \$16,500, "Improving Soybean Yields by Enhancing Seed Filling."

**Jugulam, Mithila**, Miller Chemical and Fertilizer LLC, \$21,870, "Enhancement of Herbicide Uptake and Translocation by Miller Adjuvants."

**Knapp, Mary C., Ciampitti, Ignacio, Duncan, Stewart R.** (Northeast Area Office), **Jardine, Douglas J.** (Plant Pathology), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), and **Ruiz Diaz**

**Suarez, Dorivar A.**, Kansas Soybean Commission, \$1,375, "Improving Soybean Yields by Enhancing Seed Filling."

**Lin, Xiaomao, Little, Christopher R.** (Plant Pathology), **Roozeboom, Kraig L.**, and **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$1,722, "Soybean Production Systems to Control Charcoal Rot and Other Soil-borne Diseases."

**Lingenfelter, Jane E.**, Syngenta Seeds, Inc., \$13,720, "Service Order A-1: Standard Yield Trial Evaluations."

**Peterson, Dallas E.**, and **Kumar, Vipin** (Agricultural Research Center-Hays), Kansas Soybean Commission, \$17,109, "Non-Xtend Soybean Response to Simulated Dicamba Drift."

**Peterson, Dallas E.**, Support Funds, \$16,420, "AGR Support Funds Public Service 35."

**Presley, DeAnn R.**, US Department of Agriculture, \$50,000, "Implementing Sustainable Landscape Designs for Great Plains Bioenergy Supply Systems."

**Rice, Charles W., Dodds, Walter K.** (Biology), and **Zeglin, Lydia H.** (Biology), Kansas Board of Regents, \$2,500, "RII Track-1: Microbiomes of Aquatic, Plant and Soil Systems Across Kansas."

**Roozeboom, Kraig L., Lin, Xiaomao, Little, Christopher R.** (Plant Pathology), and **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$5,165, "Soybean Production Systems to Control Charcoal Rot and Other Soil-borne Diseases."

**Ruiz Diaz Suarez, Dorivar A., Ciampitti, Ignacio, Duncan, Stewart R.** (Northeast Area Office), and **Sweeney, Daniel W.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$30,330, "Assessment of Soil Potassium Bioavailability and Improving Diagnostics Tools for K Management on Soybean in Kansas."

**Ruiz Diaz Suarez, Dorivar A., Ciampitti, Ignacio, Duncan, Stewart R.** (Northeast Area Office), **Jardine, Douglas J.** (Plant Pathology), **Knapp, Mary C., McCornack, Brian P.** (Entomology), and **O'Brien, Daniel M.** (Northwest Area Office), Kansas Soybean Commission, \$1,375, "Improving Soybean Yields by Enhancing Seed Filling."

**Schapaugh Jr, William T., Todd, Timothy C.** (Plant Pathology), and **Trick, Harold N.** (Plant Pathology), Kansas Soybean Commission, \$170,000, "Integrating Germplasm Evaluation, Genetic Engineering, Breeding and High-Throughput Phenotyping to Improve Sustainability of Soybean Production."

**Schapaugh Jr, William T., Adey, Eric A., and Little, Christopher R.** (Plant Pathology), Kansas Soybean Commission, \$1,998, "Investigating SDS and Fusarium Root Rot Resistance, Preventive Seed Treatments, and Pathogen Variability in Kansas."

## **ANIMAL SCIENCES AND INDUSTRY**

**Amamcharla, Jayendra K.**, Midwest Dairy Association, \$7,692, "Functional Modification of Dairy Ingredients Using Whey Protein Nanofibrils to Replace Thickening Agents in the Formulations."

**Beyer, R. Scott, Paulk, Chad B.** (Grain Science and Industry), and **Stark, Charles** (Grain Science and Industry), Illinois Soybean Association, \$852, "Evaluation of Soybean Meal from Illinois Soybeans."

**Bradford, Barry J.**, Nutreco, \$95,274, "The Effect of Gluconic Acid (Calcium Gluconate) Supplementation in Diets for Mid-lactation Holstein Cows on Lactation Performance and Feed Efficiency."

**Chao, Michael, Magnin, Geraldine C.** (Anatomy and Physiology), and **O'Quinn, Travis G.**, National Cattlemen's Beef Association, \$9,900, "Utilizing Collagen Crosslinks as Markers for Sensory Improvement of Beef Shin/Shank Cuts."

**DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason C.**, CEVA Biomune, \$21,298, "Effect of GleptoForte Injection Timing on Suckling, Nursery and Finish Pig Performance, Hematological Criteria and Fecal Microbiome Characteristics."

**DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.**, Origination Inc, \$12,000, "Comparing the Effects of Different Phytase Sources on the Growth Performance and Bone Mineralization of Nursery Pigs."

**DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), **Tokach, Michael D., and Woodworth, Jason C.**, Syngenta Seeds, Inc., \$24,000, "Influence of Particle Size of High Amylase and Conventional Corn on Grinding Cost, Diet Flowability, and Productivity of Lactating Sows, Nursery, and Grow-finish Pigs."

**Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason C.**, CEVA Biomune, \$21,298, "Effect of GleptoForte Injection Timing on Suckling, Nursery and Finish Pig Performance, Hematological Criteria and Fecal Microbiome Characteristics."

**Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason C.**, Origination Inc, \$12,000, "Comparing the Effects of Different Phytase Sources on the Growth Performance and Bone Mineralization of Nursery Pigs."

**Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), **Tokach, Michael D., and Woodworth, Jason C.**, Syngenta Seeds, Inc., \$24,000, "Influence of Particle Size of High Amylase and Conventional Corn on Grinding Cost, Diet Flowability, and Productivity of Lactating Sows, Nursery, and Grow-finish Pigs."

**Lee, Charles D.**, Kansas Department of Wildlife and Parks, \$4,899, "Extension Education Position Support."

**O'Quinn, Travis G., Chao, Michael, and Magnin, Geraldine C.** (Anatomy and Physiology), National Cattlemen's Beef Association, \$5,400, "Utilizing Collagen Crosslinks as Markers for Sensory Improvement of Beef Shin/Shank Cuts."

**Phebus, Randall K., and Smith, Gordon L.** (Grain Science and Industry), General Mills, Inc., \$58,964, "Flour Safety: An Industry Collaboration Proposal for K-State Studies to Advance the Development of a Commercially Applied Antimicrobial Intervention [Study 1a)1]."

**Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), and **Woodworth, Jason C.**, CEVA Biomune, \$21,298, "Effect of GleptoForte Injection Timing on Suckling, Nursery and Finish Pig Performance, Hematological Criteria and Fecal Microbiome Characteristics."

**Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., and Woodworth, Jason C.**, Origination Inc, \$12,000, "Comparing the Effects of Different Phytase Sources on the Growth Performance and Bone Mineralization of Nursery Pigs."

**Tokach, Michael D., Paulk, Chad B.** (Grain Science and Industry), and **Stark, Charles** (Grain Science and Industry), Syngenta Seeds, Inc., \$900, "Evaluation of Pelleting of High Amylase Corn on Starch Gelatinization."

**Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and

**Woodworth, Jason C.**, Syngenta Seeds, Inc., \$24,000, "Influence of Particle Size of High Amylase and Conventional Corn on Grinding Cost, Diet Flowability, and Productivity of Lactating Sows, Nursery, and Grow-finish Pigs."

**Weaber, Robert L., Amrine, David E.** (Dean of Veterinary Medical Center), **Larson, Robert L.** (Clinical Sciences), **Pendell, Dustin L.** (Agricultural Economics), and **White, Bradley J.** (Dean of Veterinary Medical Center), American Angus Association, \$18,000, "BCI Health Knowledge Network: Monitoring Cattle Heart Syndromes."

**Woodworth, Jason C., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), and **Tokach, Michael D.**, CEVA Biomune, \$21,298, "Effect of GleptoForte Injection Timing on Suckling, Nursery and Finish Pig Performance, Hematological Criteria and Fecal Microbiome Characteristics."

**Woodworth, Jason C., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Tokach, Michael D.**, Origination Inc, \$12,000, "Comparing the Effects of Different Phytase Sources on the Growth Performance and Bone Mineralization of Nursery Pigs."

**Woodworth, Jason C., DeRouchey, Joel M., Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.**, Syngenta Seeds, Inc., \$24,000, "Influence of Particle Size of High Amylase and Conventional Corn on Grinding Cost, Diet Flowability, and Productivity of Lactating Sows, Nursery, and Grow-finish Pigs."

#### **DEAN OF AGRICULTURE AND DIRECTOR OF AES**

**Dalton, Timothy J.**, US Agency for International Development, \$184,057, "Implement a Genomics-Assisted Breeding Program in a Small Breeding Program in a Developing Country."

**Dalton, Timothy J.**, US Agency for International Development, \$800,000, "The Management Entity of the Sorghum and Millet Innovation Lab."

#### **ENTOMOLOGY**

**Kim, Tania**, and **Spiesman, Brian J.**, US Department of Agriculture, \$24,975, "Does Resource Continuity at a Landscape Scale Benefit Natural Enemies and Biocontrol?."

**McCornack, Brian P.**, Kansas Soybean Commission, \$56,198, "Agricultural Research Experiences for Teachers (RET) - Using Soybean as a Model System."

**McCornack, Brian P., Smith, C. Michael**, and **Whitworth, Robert "Jeff" J.**, Kansas Soybean Commission, \$24,000, "Development of Genetic, Chemical and Population-Based Tactics to Manage Key Kansas Soybean Insect Pests."

**McCornack, Brian P., Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), **Jardine, Douglas J.** (Plant Pathology), **Knapp, Mary C.** (Agronomy), **O'Brien, Daniel M.** (Northwest Area Office), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Soybean Commission, \$1,375, "Improving Soybean Yields by Enhancing Seed Filling."

**Park, Yoonseong**, US Department of Agriculture, \$118,150, "Fly-microbe Interactions Across Life History."

**Ruberson, John R.**, Support Funds, \$15,000, "AEN Support Funds Research 50."

**Smith, C. Michael, McCornack, Brian P.**, and **Whitworth, Robert "Jeff" J.**, Kansas Soybean Commission, \$24,000, "Development of Genetic, Chemical and Population-Based Tactics to Manage Key Kansas Soybean Insect Pests."

**Spiesman, Brian J., and Kim, Tania**, US Department of Agriculture, \$24,975, "Does Resource Continuity at a Landscape Scale Benefit Natural Enemies and Biocontrol?."

**Whitworth, Robert "Jeff" J., McCornack, Brian P., and Smith, C. Michael**, Kansas Soybean Commission, \$12,000, "Development of Genetic, Chemical and Population-Based Tactics to Manage Key Kansas Soybean Insect Pests."

#### **GRAIN SCIENCE AND INDUSTRY**

**Paulk, Chad B., Beyer, R. Scott** (Animal Sciences and Industry), and **Stark, Charles**, Illinois Soybean Association, \$7,239, "Evaluation of Soybean Meal from Illinois Soybeans."

**Paulk, Chad B., Stark, Charles, and Tokach, Michael D.** (Animal Sciences and Industry), Syngenta Seeds, Inc., \$16,200, "Evaluation of Pelleting of High Amylase Corn on Starch Gelatinization."

**Paulk, Chad B., DeRouchey, Joel M.** (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Stark, Charles, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Syngenta Seeds, Inc., \$24,000, "Influence of Particle Size of High Amylase and Conventional Corn on Grinding Cost, Diet Flowability, and Productivity of Lactating Sows, Nursery, and Grow-finish Pigs."

**Smith, Gordon L., and Phebus, Randall K.** (Animal Sciences and Industry), General Mills, Inc., \$19,655, "Flour Safety: An Industry Collaboration Proposal for K-State Studies to Advance the Development of a Commercially Applied Antimicrobial Intervention [Study 1a)1]."

**Smith, Gordon L.**, Grain Elevator & Processing Society, \$182,189, "GEAPS~KSU MOU 3.0."

**Stark, Charles, Beyer, R. Scott** (Animal Sciences and Industry), and **Paulk, Chad B.**, Illinois Soybean Association, \$426, "Evaluation of Soybean Meal from Illinois Soybeans."

**Stark, Charles, Paulk, Chad B., and Tokach, Michael D.** (Animal Sciences and Industry), Syngenta Seeds, Inc., \$900, "Evaluation of Pelleting of High Amylase Corn on Starch Gelatinization."

**Stark, Charles, DeRouchey, Joel M.** (Animal Sciences and Industry), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.** (Animal Sciences and Industry), **Paulk, Chad B., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Syngenta Seeds, Inc., \$6,000, "Influence of Particle Size of High Amylase and Conventional Corn on Grinding Cost, Diet Flowability, and Productivity of Lactating Sows, Nursery, and Grow-finish Pigs."

#### **HORTICULTURE AND NATURAL RESOURCES**

**Ebert, Kerri L., and Hadley, Gregg L.** (Director of Cooperative Extension), University of Minnesota, \$65,000, "Kansas SARE 2019-2020 PDP Plan of Work."

**Fry, Jack D.**, US Golf Association, Inc., \$3,500, "Evaluation of Experimental Bermudagrasses in Kansas."

**Griffin, Jason**, Kansas Department of Agriculture, \$100,000, "Monitoring Soil Moisture and Irrigation Requirements for Industrial Hemp Production in Kansas."

**Hoyle, Jared**, Support Funds, \$62,000, "AHF Support Funds Research 0."

#### **NORTHWEST RESEARCH EXTENSION CENTER**

**Aiken, Robert M.**, The Land Institute, \$10,100, "Water Productivity and Genetic Variation of *Silghium Integrifolium*."

## **PLANT PATHOLOGY**

**Cook III, David E., Kennelly, Megan, and Mehra, Lucky K.**, US Department of Agriculture, \$76,134, "Pathways to Plant Health through Integrated FACT-driven Research and Extension Internships."

**Jardine, Douglas J., Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), **Knapp, Mary C.** (Agronomy), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Soybean Commission, \$1,375, "Improving Soybean Yields by Enhancing Seed Filling."

**Kennelly, Megan, Cook III, David E., and Mehra, Lucky K.**, US Department of Agriculture, \$190,336, "Pathways to Plant Health through Integrated FACT-driven Research and Extension Internships."

**Leslie, John F.**, International Institute for Tropical Agriculture, \$18,656, "Collaboration Agreement."

**Little, Christopher R., Adey, Eric A.** (Agronomy), and **Schapaugh Jr, William T.** (Agronomy), Kansas Soybean Commission, \$33,958, "Investigating SDS and Fusarium Root Rot Resistance, Preventive Seed Treatments, and Pathogen Variability in Kansas."

**Little, Christopher R., Lin, Xiaomao** (Agronomy), **Roozeboom, Kraig L.** (Agronomy), and **Sassenrath, Gretchen F.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$13,774, "Soybean Production Systems to Control Charcoal Rot and Other Soil-borne Diseases."

**Mehra, Lucky K., Cook III, David E., and Kennelly, Megan**, US Department of Agriculture, \$114,201, "Pathways to Plant Health through Integrated FACT-driven Research and Extension Internships."

**Todd, Timothy C., Schapaugh Jr, William T.** (Agronomy), and **Trick, Harold N.**, Kansas Soybean Commission, \$55,000, "Integrating Germplasm Evaluation, Genetic Engineering, Breeding and High-Throughput Phenotyping to Improve Sustainability of Soybean Production."

**Trick, Harold N., Schapaugh Jr, William T.** (Agronomy), and **Todd, Timothy C.**, Kansas Soybean Commission, \$25,000, "Integrating Germplasm Evaluation, Genetic Engineering, Breeding and High-Throughput Phenotyping to Improve Sustainability of Soybean Production."

## **SOUTHEAST AGRICULTURAL RESEARCH CENTER**

**Sassenrath, Gretchen F., Lin, Xiaomao** (Agronomy), **Little, Christopher R.** (Plant Pathology), and **Roozeboom, Kraig L.** (Agronomy), Kansas Soybean Commission, \$13,774, "Soybean Production Systems to Control Charcoal Rot and Other Soil-borne Diseases."

**Sweeney, Daniel W., Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Soybean Commission, \$4,333, "Assessment of Soil Potassium Bioavailability and Improving Diagnostics Tools for K Management on Soybean in Kansas."

## **COLLEGE OF ARTS AND SCIENCES**

### **BIOLOGY**

**Dodds, Walter K., Rice, Charles W.** (Agronomy), and **Zeglin, Lydia H.**, Kansas Board of Regents, \$5,000, "RII Track-1: Microbiomes of Aquatic, Plant and Soil Systems Across Kansas."

**Spooner, Brian S.**, Kansas State University Foundation, \$47,058, "Biology Summer Graduate Fellowships."

**Spooner, Brian S.**, Kansas State University Foundation, \$6,500, "Cancer Center Research Awards."

**Spooner, Brian S.**, Support Funds, \$500, "OBO Biology Student Research Awards."

**Zeglin, Lydia H., Dodds, Walter K., and Rice, Charles W.** (Agronomy), Kansas Board of Regents, \$2,500, "RII Track-1: Microbiomes of Aquatic, Plant and Soil Systems Across Kansas."

## **CHEMISTRY**

**Aakeroy, Christer B.**, US Department of Defense, \$43,750, "Theory and Experiment of Cocrystals: Principles, Synthesis and Properties."

**Aikens, Christine M.**, US Department of Energy, \$119,697, "Elucidating the Mechanism of Plasmon-Mediated Photocatalysis using Electron Dynamics Calculations."

**Higgins, Daniel A., and Ito, Takashi**, US Department of Energy, \$94,161, "SISGR: Molecular-Level Investigation of Diffusion Behaviors within Cylindrical Nanoscale Pores."

**Ito, Takashi, and Higgins, Daniel A.**, US Department of Energy, \$94,161, "SISGR: Molecular-Level Investigation of Diffusion Behaviors within Cylindrical Nanoscale Pores."

## **HISTORY**

**Graff, David A., and Taber, Charles** (Office of the Provost), Kansas State University Foundation, \$24,068, "Pickett Chair."

**Krysko, Michael**, Kansas State University Foundation, \$2,836, "Kenneth Davis Professorship."

## **PHYSICS**

**Berg, Matthew J.**, National Science Foundation, \$187,986, "CAREER: In Situ Study of Aerosol in the Coarse Mode with Digital Holography."

**Bolton, Timothy A.**, US Department of Energy, \$700,673, "Deep Underground Neutrino Experiment (DUNE)."

**Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., Kaadze, Ketino, Maravin, Yurii, Ratra, Bharat, and Samushia, Lado**, US Department of Energy, \$130,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

**Horton-Smith, Glenn A., Bolton, Timothy A., Ivanov, Andrew G., Kaadze, Ketino, Maravin, Yurii, Ratra, Bharat, and Samushia, Lado**, US Department of Energy, \$148,800, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

**Ivanov, Andrew G.**, National Science Foundation, \$103,826, "U.S. CMS Operations at the Large Hadron Collider."

**Ivanov, Andrew G., Bolton, Timothy A., Horton-Smith, Glenn A., Kaadze, Ketino, Maravin, Yurii, Ratra, Bharat, and Samushia, Lado**, US Department of Energy, \$130,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

**Kaadze, Ketino**, US Department of Energy, \$146,477, "High Luminosity (HL) LHC CMS Detector Upgrade Project, Endcap Calorimeter - FY19."

**Kaadze, Ketino, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., Maravin, Yurii, Ratra, Bharat, and Samushia, Lado**, US Department of Energy, \$130,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

**Maravin, Yurii, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., Kaadze, Ketino, Ratra, Bharat, and Samushia, Lado**, US Department of Energy, \$130,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

**Ratra, Bharat, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., Kaadze, Ketino, Maravin, Yurii, and Samushia, Lado**, US Department of Energy, \$130,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

**Samushia, Lado, Bolton, Timothy A., Horton-Smith, Glenn A., Ivanov, Andrew G., Kaadze, Ketino, Maravin, Yurii, and Ratra, Bharat**, US Department of Energy, \$130,200, "Research at Kansas State University into the Basic Nature of Matter, Energy, Space, and Time."

## **POLITICAL SCIENCE**

**Flynn, Michael, and Martinez, Carla**, US Department of Defense, \$13,291, "The Political, Economic, and Social Effects of America's Overseas Military Presence."

**Martinez, Carla, and Flynn, Michael**, US Department of Defense, \$13,291, "The Political, Economic, and Social Effects of America's Overseas Military Presence."

## **COLLEGE OF EDUCATION**

### **DEAN OF EDUCATION**

**Havlicek, Barbara J.**, Kansas Foundation for Agriculture in the Classroom, \$60,415, "Kansas Foundation for Ag in the Classroom."

## **COLLEGE OF ENGINEERING**

### **BIOLOGICAL AND AGRICULTURAL ENGINEERING**

**Bigham, Kari A., and Moore, Trisha L.**, US Fish and Wildlife Service, \$3,000, "King's Creek Watershed Modeling."

**Hutchinson, Stacy L., and Derby, Melanie M.** (Mechanical and Nuclear Engineering), National Science Foundation, \$7,200, "EPRI: Flexible Flapping Surfaces for Water Collection and Condensation."

**Moore, Trisha L., and Bigham, Kari A.**, US Fish and Wildlife Service, \$3,000, "King's Creek Watershed Modeling."

**Sharda, Ajay, and Ciampitti, Ignacio**, Deere & Company, \$183,089, "Precision Planting System with Hydraulic Downforce Technology for Seed Placement Uniformity."

### **COMPUTER SCIENCE**

**Hatcliff, John M., and Robby, -**, US Department of Defense, \$30,000, "Cyber Assured Systems Engineering (CASSE): Architecture Information Flow Analysis and Translation for High-Assurance Embedded Systems with Separation Kernels."

**Hatcliff, John M., and Robby, -**, US Department of Defense, \$5,000, "GUMBO: Grand Unified Modeling of Behavior Operators SBIR Phase I."

**Robby, -, and Hatcliff, John M.**, US Department of Defense, \$45,000, "Cyber Assured Systems Engineering (CASSE): Architecture Information Flow Analysis and Translation for High-Assurance Embedded Systems with Separation Kernels."

**Robby, -, and Hatcliff, John M.**, US Department of Defense, \$5,000, "GUMBO: Grand Unified Modeling of Behavior Operators SBIR Phase I."



## **ELECTRICAL AND COMPUTER ENGINEERING**

**Shadmand, Mohammad B.**, Qatar Foundation, \$9,000, "1-MW PV Power RD&D Using SiC-based qZS Cascade Multilevel Inverter and Battery Energy Storage."

## **INSTITUTE FOR ENVIRONMENTAL RESEARCH**

**Eckels, Steven J.**, Support Funds, \$11,460, "Evaluation of Human Thermal Comfort and Textile Properties."

**Eckels, Steven J.**, Support Funds, \$1,394, "Thermal Properties of Textile Products."

## **KANSAS INDUSTRIAL EXTENSION SERVICES**

**Ladd, Lynelle M.**, and **Larson, Nancy J.**, US Environmental Protection Agency, \$37,709, "Kansas Hospitals for a Healthy Environment."

**Larson, Nancy J.**, and **Ladd, Lynelle M.**, US Environmental Protection Agency, \$87,987, "Kansas Hospitals for a Healthy Environment."

## **MECHANICAL AND NUCLEAR ENGINEERING**

**Betz, Amy R.**, and **Derby, Melanie M.**, National Aeronautics and Space Administration, \$10,266, "Humans in Space: A Workshop for Middle School STEM Teachers."

**Derby, Melanie M.**, and **Betz, Amy R.**, National Aeronautics and Space Administration, \$10,266, "Humans in Space: A Workshop for Middle School STEM Teachers."

**Derby, Melanie M.**, and **Hutchinson, Stacy L.** (Biological and Agricultural Engineering), National Science Foundation, \$40,797, "EPRI: Flexible Flapping Surfaces for Water Collection and Condensation."

**McGregor, Douglas S.**, and **Shultis, J. Kenneth**, Defense Threat Reduction Agency, \$144,489, "Reconfigurable Wearable Detection Device (RWD)."

**McGregor, Douglas S.**, and **Roberts, Jeremy A.**, US Department of Energy, \$65,000, "Micro-Pocket Fission Detector."

**McNeil, Walter J.**, US Department of Defense, \$175,000, "Radiological Systems Research for Detection, Localization, and Isotope Identification."

**Roberts, Jeremy A.**, and **McGregor, Douglas S.**, US Department of Energy, \$65,000, "Micro-Pocket Fission Detector."

**Shultis, J. Kenneth**, and **McGregor, Douglas S.**, Defense Threat Reduction Agency, \$144,489, "Reconfigurable Wearable Detection Device (RWD)."

**Wang, Youqi**, US Department of Defense, \$100,000, "Real Scale Numerical Simulation of Ballistic Tests for Multi-layer Fabric Body Armor."

**Wei, Mingjun**, US Department of Defense, \$120,000, "(YIP) A Multiscale Morphing Continuum Analysis on Energy Cascade of Compressible Turbulence."

## **COLLEGE OF HEALTH AND HUMAN SCIENCES**

### **APPAREL, TEXTILES, AND INTERIOR DESIGN**

**Wu, Yingying**, Gneiss Concepts, LLC, \$1,500, "Gneiss Concepts MOA."

### **FOOD, NUTRITION, DIETETICS AND HEALTH**

**Thiele, Ryan**, and **Williams, Jeffrey**, Mid-America Athletic Trainers' Association (MAATA), "The Effects of

Aerobic Exercise and Peristaltic Pulse Compression on Neuromuscular Performance Following Exercise-induced Muscle Damage."

**Williams, Jeffrey, and Thiele, Ryan**, Mid-America Athletic Trainers' Association (MAATA), \$2,000, "The Effects of Aerobic Exercise and Peristaltic Pulse Compression on Neuromuscular Performance Following Exercise-induced Muscle Damage."

## **SCHOOL OF FAMILY STUDIES AND HUMAN SERVICES**

**Butler, Meredith A.**, US Department of Agriculture, \$117,140, "4-H Military Partnerships and Outreach Support Program."

**Butler, Meredith A.**, US Department of Agriculture, \$500,000, "CYFAR 4-H Military Partnership Professional Development and Technical Assistance Program."

## **COLLEGE OF VETERINARY MEDICINE**

### **ANATOMY AND PHYSIOLOGY**

**Choi, Seongo**, QuadMedicine, \$26,000, "Development of Flexible Microneedle Patches for Drug Delivery Through Contoured Skin Surfaces."

**DeLong, Robert K.**, Johnson Center for Basic Cancer Research, \$1,400, "Graduate Travel Award for Johnson Center for Basic Research."

**Kukanich, Stanley P.**, and **KuKanich, Katherine** (Clinical Sciences), Morris Animal Foundation, \$500, "Evaluation of Feline Urine Concentrations of Amoxicillin and Clavulanate (for Kallie Woodruff - VRSP Student)."

**Kukanich, Stanley P.**, and **KuKanich, Katherine** (Clinical Sciences), Winn Feline Foundation, \$2,546, "Evaluation of Feline Urine Concentrations of Amoxicillin and Clavulanate."

**Magnin, Geraldine C.**, **Chao, Michael** (Animal Sciences and Industry), and **O'Quinn, Travis G.** (Animal Sciences and Industry), National Cattlemen's Beef Association, \$2,700, "Utilizing Collagen Crosslinks as Markers for Sensory Improvement of Beef Shin/Shank Cuts."

**Yu, Jianzhong**, Kansas State University Foundation, \$25,000, "KSU Cancer Center - Innovative Research Award."

**Yu, Jianzhong**, Kansas State University Foundation, \$7,000, "KSU Cancer Center Summer Stipends Award."

### **CLINICAL SCIENCES**

**Harkin, Kenneth R.**, and **Hetrick, Merry Caitlin** (Veterinary Health Center), MYOS RENS Technology Inc, \$3,290, "Evaluation of Fortetropin on Quality of Life and Activity in Geriatric Dogs."

**KuKanich, Katherine**, and **Kukanich, Stanley P.** (Anatomy and Physiology), Morris Animal Foundation, \$4,500, "Evaluation of Feline Urine Concentrations of Amoxicillin and Clavulanate (for Kallie Woodruff - VRSP Student)."

**KuKanich, Katherine**, and **Kukanich, Stanley P.** (Anatomy and Physiology), Winn Feline Foundation, \$4,729, "Evaluation of Feline Urine Concentrations of Amoxicillin and Clavulanate."

**Larson, Robert L.**, **Amrine, David E.** (Dean of Veterinary Medical Center), **Pendell, Dustin L.** (Agricultural Economics), **Weaber, Robert L.** (Animal Sciences and Industry), and **White, Bradley J.** (Dean of Veterinary Medical Center), American Angus Association, \$18,000, "BCI Health Knowledge Network: Monitoring Cattle Heart Syndromes."

### **DEAN OF VETERINARY MEDICAL CENTER**

**Amrine, David E.**, **Larson, Robert L.** (Clinical Sciences), **Pendell, Dustin L.** (Agricultural Economics), **Weaber,**

**Robert L.** (Animal Sciences and Industry), and **White, Bradley J.**, American Angus Association, \$36,000, "BCI Health Knowledge Network: Monitoring Cattle Heart Syndromes."

**Dollarhide, Patricia J.**, and **White, Bradley J.**, National Cattlemen's Beef Association, \$158,328, "Beef Sustainability 101: A Systems Approach to Decoding Sustainability Metrics for Non-Commercial Foodservice Professionals."

**White, Bradley J.**, **Amrine, David E.**, **Larson, Robert L.** (Clinical Sciences), **Pendell, Dustin L.** (Agricultural Economics), and **Weaber, Robert L.** (Animal Sciences and Industry), American Angus Association, \$30,000, "BCI Health Knowledge Network: Monitoring Cattle Heart Syndromes."

**White, Bradley J.**, and **Dollarhide, Patricia J.**, National Cattlemen's Beef Association, \$17,592, "Beef Sustainability 101: A Systems Approach to Decoding Sustainability Metrics for Non-Commercial Foodservice Professionals."

#### **DIAGNOSTIC MEDICINE/PATHOBIOLOGY**

**Chang, Kyeong-Ok**, and **Kim, Yunjeong**, US Department of Health and Human Services, \$367,462, "Small Molecule Protease Inhibitors against MERS-CoV."

**Dritz, Steven S.**, **DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Niederwerder, Megan**, **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), CEVA Biomune, \$20,045, "Effect of GleptoForte Injection Timing on Suckling, Nursery and Finish Pig Performance, Hematological Criteria and Fecal Microbiome Characteristics."

**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), Origination Inc, \$12,000, "Comparing the Effects of Different Phytase Sources on the Growth Performance and Bone Mineralization of Nursery Pigs."

**Dritz, Steven S.**, **DeRouchey, Joel M.** (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Syngenta Seeds, Inc., \$24,000, "Influence of Particle Size of High Amylase and Conventional Corn on Grinding Cost, Diet Flowability, and Productivity of Lactating Sows, Nursery, and Grow-finish Pigs."

**Ganta, Roman Reddy R.**, Saint George's University, \$60,000, "Training Grant Funds Work Agreement - Postdoctoral Scholars Program (PSP) Training Grant."

**Hardwidge, Philip R.**, and **Richt, Juergen**, Kansas Board of Regents, \$20,000, "Laser Capture Microdissection Instrumentation for the COBRE Center of Emerging and Zoonotic Infectious Diseases (EZID)."

**Kim, Yunjeong**, and **Chang, Kyeong-Ok**, US Department of Health and Human Services, \$367,462, "Small Molecule Protease Inhibitors against MERS-CoV."

**Ma, Wenjun**, and **Richt, Juergen**, US Department of Health and Human Services, \$39,149, "Host Dependence of Influenza A Virus Reassortment."

**Ma, Wenjun**, and **Richt, Juergen**, US Department of Health and Human Services, \$78,519, "Syndromic Surveillance of Swine Influenza Viruses in the United States."

**Nguyen, Thu A.**, US Department of Health and Human Services, \$128,586, "Bio-active H9e Peptide Derivatives Form Novel Hydrogels."

**Niederwerder, Megan, DeRouchey, Joel M.** (Animal Sciences and Industry), **Dritz, Steven S., Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), CEVA Biomune, \$20,045, "Effect of GleptoForte Injection Timing on Suckling, Nursery and Finish Pig Performance, Hematological Criteria and Fecal Microbiome Characteristics."

**Niederwerder, Megan,** Purina Animal Nutrition, LLC, \$146,900, "Investigating Viral Mitigation in Feed."

**Richt, Juergen, and Hardwidge, Philip R.,** Kansas Board of Regents, \$80,000, "Laser Capture Microdissection Instrumentation for the COBRE Center of Emerging and Zoonotic Infectious Diseases (EZID)."

**Richt, Juergen,** US Department of Agriculture, \$297,330, "Evaluation of Foot-and-Mouth Disease Virus Vaccine Candidates with Broad Breadth of Protection Against Diverse Virus Strains."

**Richt, Juergen, and Ma, Wenjun,** US Department of Health and Human Services, \$58,723, "Host Dependence of Influenza A Virus Reassortment."

**Richt, Juergen, and Ma, Wenjun,** US Department of Health and Human Services, \$78,519, "Syndromic Surveillance of Swine Influenza Viruses in the United States."

**Rowland, Raymond R. R.,** PIC USA, Inc., \$25,950, "Task Order #2 - Evaluation of PDCoV Infection in ANPEP KO Pigs."

**Springer, Nora L.,** Johnson Center for Basic Cancer Research, \$8,983, "Summer Stipend Award for Brandy Kastl."

#### **VETERINARY DIAGNOSTIC LABORATORY**

**Henningson, Jamie N.,** US Department of Agriculture, \$500, "NAHLN FAD Testing."

#### **VETERINARY HEALTH CENTER**

**Hetrick, Merry Caitlin, and Harkin, Kenneth R.** (Clinical Sciences), MYOS RENS Technology Inc, \$3,290, "Evaluation of Fortetropin on Quality of Life and Activity in Geriatric Dogs."

## **KANSAS COOPERATIVE EXTENSION SERVICE**

#### **AGRICULTURE AND NATURAL RESOURCES**

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

**Sigle, Nadine J., and Hadley, Gregg L.** (Director of Cooperative Extension), Hansen Foundation, Dane G, \$194,250, "2019 Community Intern Program."

#### **DIRECTOR OF COOPERATIVE EXTENSION**

**Hadley, Gregg L., and Sigle, Nadine J.** (Agriculture and Natural Resources), Hansen Foundation, Dane G, "2019 Community Intern Program."

**Hadley, Gregg L., and Ebert, Kerri L.** (Horticulture and Natural Resources), University of Minnesota, \$65,000, "Kansas SARE 2019-2020 PDP Plan of Work."

**Peters, Paula, and Procter, Sandra B.** (Extension Family and Consumer Sciences), US Department of Agriculture, \$5,792, "Kansas Food Assistance Nutrition Education Plan."

#### **EXTENSION FAMILY AND CONSUMER SCIENCES**

**Procter, Sandra B., and Peters, Paula** (Director of Cooperative Extension), US Department of Agriculture, \$23,167, "Kansas Food Assistance Nutrition Education Plan."

## **NORTHEAST AREA OFFICE**

**Duncan, Stewart R., Ciampitti, Ignacio** (Agronomy), **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), and **Sweeney, Daniel W.** (Southeast Agricultural Research Center), Kansas Soybean Commission, \$4,333, "Assessment of Soil Potassium Bioavailability and Improving Diagnostics Tools for K Management on Soybean in Kansas."

**Duncan, Stewart R., Ciampitti, Ignacio** (Agronomy), **Jardine, Douglas J.** (Plant Pathology), **Knapp, Mary C.** (Agronomy), **McCornack, Brian P.** (Entomology), **O'Brien, Daniel M.** (Northwest Area Office), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Soybean Commission, \$1,375, "Improving Soybean Yields by Enhancing Seed Filling."

## **NORTHWEST AREA OFFICE**

**O'Brien, Daniel M., Ciampitti, Ignacio** (Agronomy), **Duncan, Stewart R.** (Northeast Area Office), **Jardine, Douglas J.** (Plant Pathology), **Knapp, Mary C.** (Agronomy), **McCornack, Brian P.** (Entomology), and **Ruiz Diaz Suarez, Dorivar A.** (Agronomy), Kansas Soybean Commission, \$4,125, "Improving Soybean Yields by Enhancing Seed Filling."

# **OFFICE OF THE PRESIDENT**

## **VICE PRESIDENT FOR COMMUNICATIONS AND MARKETING**

**Nelson, Robert F.**, Country Stampede LLC, \$22,500, "Video Production Services."

# **OFFICE OF THE PROVOST**

## **INTERNATIONAL PROGRAMS**

**Wood, Mary**, US Department of State, \$135,125, "Fulbright English for Graduate Studies."

## **OFFICE OF THE PROVOST**

**Taber, Charles**, and **Graff, David A.** (History), Kansas State University Foundation, "Pickett Chair."

# **VICE PRESIDENT FOR RESEARCH**

## **OFFICE OF RESEARCH DEVELOPMENT**

**Marino, Mary Lou**, and **Montelone, Beth A.**, National Aeronautics and Space Administration, \$21,565, "National Space Grant College and Fellowship Program (SPACE Grant) Training Grant 2015-2018."

**Montelone, Beth A.**, and **Marino, Mary Lou**, National Aeronautics and Space Administration, \$21,565, "National Space Grant College and Fellowship Program (SPACE Grant) Training Grant 2015-2018."

# **VICE PRESIDENT FOR STUDENT LIFE AND DEAN OF STUDENTS**

## **KSU CHILD DEVELOPMENT CENTER, INC.**

**Mitchell, Rose M.**, US Department of Agriculture, \$500, "Spring 2017 Kansas Local Food and Gardening Sub-Grant."