

EXTRAMURAL AWARDS

April 2019

COLLEGE OF AGRICULTURE

AGRICULTURAL ECONOMICS

Briggeman, Brian C., Kansas Cooperative Council, \$11,000, "Developing a Cooperative Game."

Griffin, Terry W., and **Ibendahl, Gregory**, Cotton, Inc., \$15,000, "Economics of Whole-farm Swarm-Bots for Cotton Production in the US."

Ibendahl, Gregory, and **Griffin, Terry W.**, Cotton, Inc., \$15,000, "Economics of Whole-farm Swarm-Bots for Cotton Production in the US."

Tonsor, Glynn T., **Blasi, Dale A.** (Animal Sciences and Industry), **DeRouchey, Joel M.** (Animal Sciences and Industry), **O'Quinn, Travis G.** (Animal Sciences and Industry), **Tarpoff, Anthony J.** (Animal Sciences and Industry), and **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), National Cattlemen's Beef Association, \$22,522, "Development of a Production and Economic Framework that will Measure and Quantify the Sustainable Attributes of Limit Feeding During the Backgrounding Phase and on Subsequent Feedlot Cattle Performance, Health and Carcass Merit."

AGRICULTURAL RESEARCH CENTER-HAYS

Gillen, Robert L., Support Funds, \$50,000, "AHY Support Funds Research 37."

Kumar, Vipan, Kansas Soybean Commission, \$10,249, "Best Management Practices in Soybean for Managing Herbicide-Resistant Weeds in Western Kansas."

Kumar, Vipan, Monsanto Company, \$11,088, "Service Order No. 64."

Kumar, Vipan, Monsanto Company, \$10,080, "Service Order No. 65."

Kumar, Vipan, Monsanto Company, \$10,080, "Service Order No. 66."

Kumar, Vipan, Monsanto Company, \$12,096, "Service Order No. 67."

AGRONOMY

Ciampitti, Ignacio, Pioneer Hi-Bred International, Inc., \$111,352, "Collaboration Research Agreement for Predictive AgCrop Science."

Dille, Johanna A., Xarvio Digital Farming Solutions, \$10,000, "2018 Weed Image Collection via iCatcher App."

Jugulam, Mithila, BASF Corporation, \$9,728, "Herbicide Evaluation Trial on Palmer Amaranth Control."

Moorberg, Colby, and **Zhang, Naiqian** (Biological and Agricultural Engineering), National Science Foundation, \$1,698, "Collaborative Research: EAGER SitS: Automated Imaging Platform for In Situ Sensing and Analysis of Roots, Fungi, and Soil Solution Chemistry."

Rice, Charles W., Kansas State University Foundation, \$40,000, "Mary L. Vanier Endowed Professorship."

ANIMAL SCIENCES AND INDUSTRY

Blasi, Dale A., **DeRouchey, Joel M.**, **O'Quinn, Travis G.**, **Tarpoff, Anthony J.**, **Thomson, Daniel U.** (Diagnostic Medicine/Pathobiology), and **Tonsor, Glynn T.** (Agricultural Economics), National Cattlemen's Beef Association, \$7,507, "Development of a Production and Economic Framework that will Measure and Quantify the Sustainable

Attributes of Limit Feeding During the Backgrounding Phase and on Subsequent Feedlot Cattle Performance, Health and Carcass Merit."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.**, CJ America, Inc., \$6,000, "Improving Performance of Finishing Pigs with Supplemental Val, Ile, and Trp: Validating a Meta-Analysis Model."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.**, ICM, Inc., \$16,000, "Evaluation of High-Protein Distillers Dried Grains on Growth Performance and Carcass Characteristics of Growing-Finishing Pigs."

DeRouchey, Joel M., Blasi, Dale A., O'Quinn, Travis G., Tarpoff, Anthony J., Thomson, Daniel U. (Diagnostic Medicine/Pathobiology), and **Tonsor, Glynn T.** (Agricultural Economics), National Cattlemen's Beef Association, \$7,507, "Development of a Production and Economic Framework that will Measure and Quantify the Sustainable Attributes of Limit Feeding During the Backgrounding Phase and on Subsequent Feedlot Cattle Performance, Health and Carcass Merit."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.**, National Pork Board, \$87,665, "Developing an Automated, Real-time Counting Technology for Pigs."

DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D., Tokach, Michael D., and Woodworth, Jason C.**, New Fashion Pork, \$6,400, "New Fashion Pork Student Fellowship."

Douthit, Teresa L., Drouillard, James S., and Lattimer, James M., AB Vista, \$1,982, "Effect of Application Method of Vista Pre-T to a Dairy TMR on Ruminal in vitro Fermentation Parameters."

Drouillard, James S., Douthit, Teresa L., and Lattimer, James M., AB Vista, \$1,982, "Effect of Application Method of Vista Pre-T to a Dairy TMR on Ruminal in vitro Fermentation Parameters."

Drouillard, James S., Lattimer, James M., and Paulk, Chad B. (Grain Science and Industry), Syngenta Crop Protection, LLC, \$56,914, "Steam Flaking."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason C.**, CJAmerica, Inc., \$6,000, "Improving Performance of Finishing Pigs with Supplemental Val, Ile, and Trp: Validating a Meta-Analysis Model."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason C.**, ICM, Inc., \$16,000, "Evaluation of High-Protein Distillers Dried Grains on Growth Performance and Carcass Characteristics of Growing-Finishing Pigs."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason C.**, National Pork Board, \$87,665, "Developing an Automated, Real-time Counting Technology for Pigs."

Goodband, Robert D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Tokach, Michael D., and Woodworth, Jason C.**, New Fashion Pork, \$6,400, "New Fashion Pork Student Fellowship."

Gragg, Sara E., Phebus, Randall K., Trinetta, Valentina, and Vipham, Jessie (Dean of Agriculture and Director of AES), HEPACART Inc., \$8,328, " Quantifying the Reduction of Shiga Toxin-Producing Escherichia coli (STEC) and Salmonella Populations on beef tissues subjected to HEPACART Technology."

Jones, Cassandra K., Li, Yonghai (Grain Science and Industry), **Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), **Tokach, Michael D., and Woodworth, Jason C.**, National Pork

Board, \$4,003, "Determining how the pelleting process influences amino acid digestibility and availability for growth and carcass characteristics when feeding varying diets with increased levels of synthetic AA."

Jones, Cassandra K., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), **Rowland, Raymond R. R.** (Diagnostic Medicine/Pathobiology), **Tokach, Michael D.,** and **Woodworth, Jason C.**, National Pork Board, \$38,174, "Understanding the Survivability and Infectivity of African Swine Fever Virus in Various Environments."

Jones, Cassandra K., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), and **Woodworth, Jason C.**, Swine Health Information Center, \$25,796, "Assessing Distribution and Mitigation of Senecavirus A, a Foot and Mouth Disease Surrogate, in a Swine Feed Mill."

Lattimer, James M., Douthit, Teresa L., and Drouillard, James S., AB Vista, \$2,042, "Effect of Application Method of Vista Pre-T to a Dairy TMR on Ruminal in vitro Fermentation Parameters."

Lattimer, James M., Drouillard, James S., and Paulk, Chad B. (Grain Science and Industry), Syngenta Crop Protection, LLC, \$55,241, "Steam Flaking."

O'Quinn, Travis G., Blasi, Dale A., DeRouchey, Joel M., Tarpoff, Anthony J., Thomson, Daniel U. (Diagnostic Medicine/Pathobiology), and **Tonsor, Glynn T.** (Agricultural Economics), National Cattlemen's Beef Association, \$7,507, "Development of a Production and Economic Framework that will Measure and Quantify the Sustainable Attributes of Limit Feeding During the Backgrounding Phase and on Subsequent Feedlot Cattle Performance, Health and Carcass Merit."

Phebus, Randall K., Gragg, Sara E., Trinetta, Valentina, and Vipham, Jessie (Dean of Agriculture and Director of AES), HEPACART Inc., \$4,164, "Quantifying the Reduction of Shiga Toxin-Producing Escherichia coli (STEC) and Salmonella Populations on beef tissues subjected to HEPACART Technology."

Tarpoff, Anthony J., Blasi, Dale A., DeRouchey, Joel M., O'Quinn, Travis G., Thomson, Daniel U. (Diagnostic Medicine/Pathobiology), and **Tonsor, Glynn T.** (Agricultural Economics), National Cattlemen's Beef Association, \$22,522, "Development of a Production and Economic Framework that will Measure and Quantify the Sustainable Attributes of Limit Feeding During the Backgrounding Phase and on Subsequent Feedlot Cattle Performance, Health and Carcass Merit."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.,** and **Woodworth, Jason C.**, CJ America, Inc., \$6,000, "Improving Performance of Finishing Pigs with Supplemental Val, Ile, and Trp: Validating a Meta-Analysis Model."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.,** and **Woodworth, Jason C.**, ICM, Inc., \$16,000, "Evaluation of High-Protein Distillers Dried Grains on Growth Performance and Carcass Characteristics of Growing-Finishing Pigs."

Tokach, Michael D., Jones, Cassandra K., Li, Yonghai (Grain Science and Industry), **Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Woodworth, Jason C.**, National Pork Board, \$4,003, "Determining how the pelleting process influences amino acid digestibility and availability for growth and carcass characteristics when feeding varying diets with increased levels of synthetic AA."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.,** and **Woodworth, Jason C.**, National Pork Board, \$87,665, "Developing an Automated, Real-time Counting Technology for Pigs."

Tokach, Michael D., Amachawadi, Raghavendra G. (Clinical Sciences), **Apley, Michael D.** (Clinical Sciences), **Dritz, Steven S.** (Diagnostic Medicine/Pathobiology), and **Nagaraja, Tiruvoor G.** (Diagnostic

Medicine/Pathobiology), National Pork Board, \$14,287, "Metagenomics Approach to Delineate the Impact of Antibiotic Administration Route on Gut Microbial Changes and Antimicrobial Resistome in Nursery Piglets."

Tokach, Michael D., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K., Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), **Rowland, Raymond R. R.** (Diagnostic Medicine/Pathobiology), and **Woodworth, Jason C.**, National Pork Board, \$5,726, "Understanding the Survivability and Infectivity of African Swine Fever Virus in Various Environments."

Tokach, Michael D., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Woodworth, Jason C.**, New Fashion Pork, \$6,400, "New Fashion Pork Student Fellowship."

Trinetta, Valentina, Gragg, Sara E., Phebus, Randall K., and Vipham, Jessie (Dean of Agriculture and Director of AES), HEPACART Inc., \$4,164, "Quantifying the Reduction of Shiga Toxin-Producing Escherichia coli (STEC) and Salmonella Populations on beef tissues subjected to HEPACART Technology."

Woodworth, Jason C., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Tokach, Michael D.**, CJAmerica, Inc., \$6,000, "Improving Performance of Finishing Pigs with Supplemental Val, Ile, and Trp: Validating a Meta-Analysis Model."

Woodworth, Jason C., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Tokach, Michael D.**, ICM, Inc., \$16,000, "Evaluation of High-Protein Distillers Dried Grains on Growth Performance and Carcass Characteristics of Growing-Finishing Pigs."

Woodworth, Jason C., Jones, Cassandra K., Li, Yonghai (Grain Science and Industry), **Paulk, Chad B.** (Grain Science and Industry), **Stark, Charles** (Grain Science and Industry), and **Tokach, Michael D.**, National Pork Board, \$4,003, "Determining how the pelleting process influences amino acid digestibility and availability for growth and carcass characteristics when feeding varying diets with increased levels of synthetic AA."

Woodworth, Jason C., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Tokach, Michael D.**, National Pork Board, \$87,665, "Developing an Automated, Real-time Counting Technology for Pigs."

Woodworth, Jason C., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K., Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), **Rowland, Raymond R. R.** (Diagnostic Medicine/Pathobiology), and **Tokach, Michael D.**, National Pork Board, \$5,726, "Understanding the Survivability and Infectivity of African Swine Fever Virus in Various Environments."

Woodworth, Jason C., DeRouchey, Joel M., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Goodband, Robert D.**, and **Tokach, Michael D.**, New Fashion Pork, \$6,400, "New Fashion Pork Student Fellowship."

Woodworth, Jason C., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Jones, Cassandra K.**, and **Niederwerder, Megan** (Diagnostic Medicine/Pathobiology), Swine Health Information Center, \$5,159, "Assessing Distribution and Mitigation of Senecavirus A, a Foot and Mouth Disease Surrogate, in a Swine Feed Mill."

DEAN OF AGRICULTURE AND DIRECTOR OF AES

Vipham, Jessie, Gragg, Sara E. (Animal Sciences and Industry), **Phebus, Randall K.** (Animal Sciences and Industry), and **Trinetta, Valentina** (Animal Sciences and Industry), HEPACART Inc., \$4,164, "Quantifying the Reduction of Shiga Toxin-Producing Escherichia coli (STEC) and Salmonella Populations on beef tissues subjected to HEPACART Technology."

ENTOMOLOGY

Kim, Tania, and **Spiesman, Brian J.**, The Land Institute, \$11,979, "Living on the Edge: Determining the Potential of Multipurpose Perennial Crops as Habitat for Native Pollinators and Natural Enemies."

Ruberson, John R., Support Funds, \$5,000, "AEN Support Funds Off-Campus 26."

Ruberson, John R., Support Funds, \$8,000, "AEN Support Funds Research 50."

Smith, C. Michael, US Department of Agriculture, \$108,284, "Principles Underlying the Spread of Sorghum Halepense, Toward its Containment and Mitigation."

Spiesman, Brian J., and **Kim, Tania**, The Land Institute, \$11,979, "Living on the Edge: Determining the Potential of Multipurpose Perennial Crops as Habitat for Native Pollinators and Natural Enemies."

GRAIN SCIENCE AND INDUSTRY

Campabadal Teran, Carlos, and **Thiele, Shawn M.**, US Soybean Export Council, Inc., \$42,750, "Addendum to Independent Contract Master Agreement: 19KA08F54A."

Campabadal Teran, Carlos, and **Thiele, Shawn M.**, US Soybean Export Council, Inc., \$21,600, "Addendum to Independent Contractor Master Agreement: 19KA08U74A."

Li, Yonghai, **Jones, Cassandra K.** (Animal Sciences and Industry), **Paulk, Chad B.**, **Stark, Charles**, **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, \$4,003, "Determining how the pelleting process influences amino acid digestibility and availability for growth and carcass characteristics when feeding varying diets with increased levels of synthetic AA."

Li, Yonghui, State of Oklahoma, \$18,700, "Wheat Testing."

Paulk, Chad B., **Jones, Cassandra K.** (Animal Sciences and Industry), **Li, Yonghai**, **Stark, Charles**, **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, \$52,040, "Determining how the pelleting process influences amino acid digestibility and availability for growth and carcass characteristics when feeding varying diets with increased levels of synthetic AA."

Paulk, Chad B., **Drouillard, James S.** (Animal Sciences and Industry), and **Lattimer, James M.** (Animal Sciences and Industry), Syngenta Crop Protection, LLC, \$55,241, "Steam Flaking."

Stark, Charles, **Jones, Cassandra K.** (Animal Sciences and Industry), **Li, Yonghai**, **Paulk, Chad B.**, **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, \$12,009, "Determining how the pelleting process influences amino acid digestibility and availability for growth and carcass characteristics when feeding varying diets with increased levels of synthetic AA."

Thiele, Shawn M., and **Campabadal Teran, Carlos**, US Soybean Export Council, Inc., \$4,750, "Addendum to Independent Contract Master Agreement: 19KA08F54A."

Thiele, Shawn M., and **Campabadal Teran, Carlos**, US Soybean Export Council, Inc., \$2,400, "Addendum to Independent Contractor Master Agreement: 19KA08U74A."

HORTICULTURE AND NATURAL RESOURCES

Fry, Jack D., and **Kennelly, Megan** (Plant Pathology), US Golf Association, Inc., \$13,307, "Development of Cold Hardy Zoysiagrass Cultivars for Golf Courses in the Transition Zone."

PLANT PATHOLOGY

Kennelly, Megan, and **Fry, Jack D.** (Horticulture and Natural Resources), US Golf Association, Inc., \$8,872, "Development of Cold Hardy Zoysiagrass Cultivars for Golf Courses in the Transition Zone."

Little, Christopher R., Kansas Academy of Science, \$1,500, "KAS Graduate Research Grant - Afsana Noor."

Poland, Jesse A., BASF Corporation, \$50,000, "Phase II IUCRC Membership Agreement."

Poland, Jesse A., US Agency for International Development, \$972,745, "Rapid Development of Climate Resilient Wheat Varieties for South Asia Using Genomic Selection."

COLLEGE OF ARCHITECTURE, PLANNING AND DESIGN

LANDSCAPE ARCHITECTURE/REGIONAL AND COMMUNITY PLANNING

Belanger, Blake M., and **Rishi, Susmita**, City of Marysville, KS, \$7,000, "Community Visioning for Brownfield Reuse and Redevelopment in Marysville, KS."

Rishi, Susmita, and **Belanger, Blake M.**, City of Marysville, KS, \$7,000, "Community Visioning for Brownfield Reuse and Redevelopment in Marysville, KS."

COLLEGE OF ARTS AND SCIENCES

BIOCHEMISTRY

Geisbrecht, Brian V., and **Li, Ping** (Chemistry), US Department of Health and Human Services, \$48,545, "Molecular Study of PHA Biosynthesis: Production of Biodegradable Polymers for Medical Applications."

Geisbrecht, Brian V., **Prakash, Om**, and **Tomich, John M.**, US Department of Health and Human Services, \$231,000, "Novel Staphylococcus Inhibitors of Neutrophil Granule Enzymes."

Prakash, Om, **Geisbrecht, Brian V.**, and **Tomich, John M.**, US Department of Health and Human Services, \$28,875, "Novel Staphylococcus Inhibitors of Neutrophil Granule Enzymes."

Tomich, John M., **Geisbrecht, Brian V.**, and **Prakash, Om**, US Department of Health and Human Services, \$28,875, "Novel Staphylococcus Inhibitors of Neutrophil Granule Enzymes."

BIOLOGY

Haukos, David A., US Department of the Interior, \$108,491, "Response of Greater Prairie-Chickens to Natural and Anthropogenic Disturbance on Fort Riley."

Roelofs, Jeroen, US Department of Health and Human Services, \$300,000, "Mechanism of Degradation of the Proteasome through Autophagy."

Spooner, Brian S., Support Funds, \$1,000, "OBO Biology Student Research Awards."

CHAPMAN CENTER

Lynn-Sherow, Bonnie, Kansas State University Foundation, \$130,000, "Chapman Center for Personnel."

CHEMISTRY

Li, Ping, and **Geisbrecht, Brian V.** (Biochemistry), US Department of Health and Human Services, \$237,016, "Molecular Study of PHA Biosynthesis: Production of Biodegradable Polymers for Medical Applications."

MATHEMATICS

Auckly, David R., Mathematical Association of America, \$6,000, "Heritage Math Camp and Indigenous Math Circles."

PHYSICS

Flanders, Bret N., US Department of Energy, \$74,375, "Climbing Over Energy Barriers - A New Paradigm for Accelerating Kinetics."

SCHOOL OF MUSIC, THEATRE, AND DANCE

Pinkall, Bryan R., Master Teacher, Inc., \$15,950, "Summer Choral Institute."

COLLEGE OF EDUCATION

CURRICULUM AND INSTRUCTION

Goodson, F. Todd, and **Vontz, Thomas**, Kansas Board of Regents, \$75,000, "Transitions to Teaching."

Vontz, Thomas, and **Goodson, F. Todd**, Kansas Board of Regents, \$75,000, "Transitions to Teaching."

DEAN OF EDUCATION

Shuman, Cindy, National Association of Service and Conservation Corps, \$63,840, "EPSCOR RII Track-1 Water Security in Delaware's Changing Coastal Environment (People & Water) - Evaluation."

Shuman, Cindy, National Science Foundation, \$15,200, "NSF ATE Critical Environments Engineering Technology Program (CEETP) - Evaluation."

COLLEGE OF ENGINEERING

BIOLOGICAL AND AGRICULTURAL ENGINEERING

Moore, Trisha L., National Science Foundation, \$19,774, "Defining the Future of Ecological Engineering through Today's Students."

Zhang, Naiqian, and **Moorberg, Colby** (Agronomy), National Science Foundation, \$424, "Collaborative Research: EAGER SitS: Automated Imaging Platform for In Situ Sensing and Analysis of Roots, Fungi, and Soil Solution Chemistry."

CHEMICAL ENGINEERING

Amama, Placidus B., National Science Foundation, \$6,470, "CAREER: Rational Design of Efficient Carbon Nanotube-Supported TiO₂ Photocatalysts for Air Purification."

Amama, Placidus B., National Science Foundation, \$16,000, "Nanomanufacturing of Vertically Aligned Carbon Nanotube Arrays from Industrial Waste Gas Mixture."

COMPUTER SCIENCE

Caragea, Doina, Children's Mercy Hospital, \$17,066, "Modeling Pediatric Cancer Trajectories Using Deidentified EHR Data."

ELECTRICAL AND COMPUTER ENGINEERING

Natarajan, Balasubramaniam, Black & Veatch Corporation, \$30,000, "Modeling and Predictive Analysis of Springfield Sanitary Sewer System from a Machine/Statistical Learning Perspective."

Shadmand, Mohammad B., Qatar Foundation, \$6,000, "1-MW PV Power RD&D Using SiC-based qZS Cascade Multilevel Inverter and Battery Energy Storage."

INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

Lei, Shuting, National Science Foundation, \$8,000, "High Performance Machining of Brittle Materials by Controlled Crack Propagation."

TECHNOLOGY DEVELOPMENT INSTITUTE

Tucker, Jeffrey W., Support Funds, \$84,500, "Support Funds 52% Account."

COLLEGE OF HUMAN ECOLOGY

DEAN OF HUMAN ECOLOGY

Fees, Bronwyn S., Kansas Child Care Training Opportunities, Inc, \$988,725, "Early Childhood Workforce Development Grant."

Fees, Bronwyn S., Kansas Child Care Training Opportunities, Inc, \$118,800, "Kansas Child Care Training Opportunities."

Fees, Bronwyn S., Kansas Department for Children and Families, \$105,126, "KCCTO - Statewide Infant - Toddler Specialist Network."

FOOD, NUTRITION, DIETETICS AND HEALTH

Koppel, Kadri, Swaney-Stueve, Marianne, and Talavera, Martin, Garmin International, Inc., \$8,607, "Assessment of Teen Stress Behavior and its Relation to Health."

Rosenkranz, Sara, and Ade, Carl (Kinesiology), California Strawberry Commission, \$49,939, "Integrated Cardiovascular and Metabolic Effects of Strawberry Consumption in Overweight and Obese Individuals."

Swaney-Stueve, Marianne, Koppel, Kadri, and Talavera, Martin, Garmin International, Inc., \$11,476, "Assessment of Teen Stress Behavior and its Relation to Health."

Swaney-Stueve, Marianne, Hill's Pet Nutrition, Inc., \$24,190, "Toy Dog Kibble Optimization Study."

Talavera, Martin, Koppel, Kadri, and Swaney-Stueve, Marianne, Garmin International, Inc., \$8,607, "Assessment of Teen Stress Behavior and its Relation to Health."

KINESIOLOGY

Ade, Carl, and Rosenkranz, Sara (Food, Nutrition, Dietetics and Health), California Strawberry Commission, \$21,402, "Integrated Cardiovascular and Metabolic Effects of Strawberry Consumption in Overweight and Obese Individuals."

COLLEGE OF VETERINARY MEDICINE

ANATOMY AND PHYSIOLOGY

Coetzee, Johann F., and Viscardi, Abbie, National Pork Board, \$50,927, "Evaluation of Transmammary-Delivered Firocoxib and a Vapocoolant Spray to Alleviate Pain in Piglets after Surgical Castration and Tail Docking."

Viscardi, Abbie, and Coetzee, Johann F., National Pork Board, \$50,927, "Evaluation of Transmammary-Delivered Firocoxib and a Vapocoolant Spray to Alleviate Pain in Piglets after Surgical Castration and Tail Docking."

Weiss, Mark L., Kansas State University Foundation, \$15,000, "Innovative Research Award."

CLINICAL SCIENCES

Amachawadi, Raghavendra G., Apley, Michael D., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, \$71,434, "Metagenomics Approach to Delineate the Impact of Antibiotic Administration Route on Gut Microbial Changes and Antimicrobial Resistome in Nursery Piglets."

Apley, Michael D., Amachawadi, Raghavendra G., Dritz, Steven S. (Diagnostic Medicine/Pathobiology), **Nagaraja, Tiruvoor G.** (Diagnostic Medicine/Pathobiology), and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, \$14,287, "Metagenomics Approach to Delineate the Impact of Antibiotic Administration Route on Gut Microbial Changes and Antimicrobial Resistome in Nursery Piglets."

DIAGNOSTIC MEDICINE/PATHOBIOLOGY

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), CJ America, Inc., \$6,000, "Improving Performance of Finishing Pigs with Supplemental Val, Ile, and Trp: Validating a Meta-Analysis Model."

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), ICM, Inc., \$16,000, "Evaluation of High-Protein Distillers Dried Grains on Growth Performance and Carcass Characteristics of Growing-Finishing Pigs."

Dritz, Steven S., DeRouchey, Joel M. (Animal Sciences and Industry), **Goodband, Robert D.** (Animal Sciences and Industry), **Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, \$87,665, "Developing an Automated, Real-time Counting Technology for Pigs."

Dritz, Steven S., Amachawadi, Raghavendra G. (Clinical Sciences), **Apley, Michael D.** (Clinical Sciences), **Nagaraja, Tiruvoor G.,** and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, \$14,287, "Metagenomics Approach to Delineate the Impact of Antibiotic Administration Route on Gut Microbial Changes and Antimicrobial Resistome in Nursery Piglets."

Dritz, Steven S., Jones, Cassandra K. (Animal Sciences and Industry), **Niederwerder, Megan, Rowland, Raymond R. R., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, \$17,178, "Understanding the Survivability and Infectivity of African Swine Fever Virus in Various Environments."

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), New Fashion Pork, \$6,400, "New Fashion Pork Student Fellowship."

Dritz, Steven S., Jones, Cassandra K. (Animal Sciences and Industry), **Niederwerder, Megan,** and **Woodworth, Jason C.** (Animal Sciences and Industry), Swine Health Information Center, \$15,478, "Assessing Distribution and Mitigation of Senecavirus A, a Foot and Mouth Disease Surrogate, in a Swine Feed Mill."

Ganta, Roman Reddy R., ABAXIS, Inc., \$48,884, "Indirect Fluorescent Antibody Test Assessment of Ehrlichia, Anaplasma and Borrelia Species Infections in Dogs."

Ma, Wenjun, US Department of Agriculture, \$56,706, "Antiviral Potency and Functional Novelty of Porcine Interferon-omega Subtype."

Nagaraja, Tiruvoor G., Amachawadi, Raghavendra G. (Clinical Sciences), **Apley, Michael D.** (Clinical Sciences), **Dritz, Steven S.,** and **Tokach, Michael D.** (Animal Sciences and Industry), National Pork Board, \$28,574, "Metagenomics Approach to Delineate the Impact of Antibiotic Administration Route on Gut Microbial Changes and Antimicrobial Resistome in Nursery Piglets."

Niederwerder, Megan, Dritz, Steven S., Jones, Cassandra K. (Animal Sciences and Industry), **Rowland, Raymond R. R., Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), National Pork Board, \$106,888, "Understanding the Survivability and Infectivity of African Swine Fever Virus in Various Environments."

Niederwerder, Megan, Dritz, Steven S., Jones, Cassandra K. (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal Sciences and Industry), Swine Health Information Center, \$5,159, "Assessing Distribution and Mitigation of Senecavirus A, a Foot and Mouth Disease Surrogate, in a Swine Feed Mill."

Rowland, Raymond R. R., Dritz, Steven S., Jones, Cassandra K. (Animal Sciences and Industry), **Niederwerder, Megan, Tokach, Michael D.** (Animal Sciences and Industry), and **Woodworth, Jason C.** (Animal

Sciences and Industry), National Pork Board, \$17,178, "Understanding the Survivability and Infectivity of African Swine Fever Virus in Various Environments."

Thomson, Daniel U., Blasi, Dale A. (Animal Sciences and Industry), **DeRouchey, Joel M.** (Animal Sciences and Industry), **O'Quinn, Travis G.** (Animal Sciences and Industry), **Tarpoft, Anthony J.** (Animal Sciences and Industry), and **Tonsor, Glynn T.** (Agricultural Economics), National Cattlemen's Beef Association, \$7,507, "Development of a Production and Economic Framework that will Measure and Quantify the Sustainable Attributes of Limit Feeding During the Backgrounding Phase and on Subsequent Feedlot Cattle Performance, Health and Carcass Merit."

VETERINARY DIAGNOSTIC LABORATORY

Henningson, Jamie N., US Department of Agriculture, \$4,125, "NAHLN AMR Testing."

Moore, Susan M., Corixa Corporation (d/b/a GSK Vaccines), \$6,369, "SAM-Rabies CNE Mouse Study #3 - (0164-18) In vivo Testing of CNE with Varying DOTAP Levels in Balb/C Mice."

Moore, Susan M., US Department of Agriculture, \$11,000, "Sponsorship of Rabies in the Americas (RITA) Conference."

KANSAS COOPERATIVE EXTENSION SERVICE

AGRICULTURE AND NATURAL RESOURCES

Hadley, Gregg L., US Department of Agriculture, \$256,800, "Kansas Agricultural Mediation Service."

NORTHWEST AREA OFFICE

Haag, Lucas A., Support Funds, \$5,138, "XNW Support Funds Public Service Off Campus 26."

K-STATE POLYTECHNIC CAMPUS

SALINA RESEARCH AND ENGAGEMENT

Carraway, Kurt J., Kansas Department of Transportation, \$4,715, "Iris DAA Flight - IPP TO 2.4."

Carraway, Kurt J., Kansas Department of Transportation, \$4,099, "KDOT Administrative Training - Task Order 2.2."

Carraway, Kurt J., Kansas Department of Transportation, \$3,717, "KDOT IPP TO 2.6."

Carraway, Kurt J., Kansas Department of Transportation, \$1,539, "KDOT IPP TO 2.5."

OFFICE OF THE PROVOST

DEAN OF GRADUATE SCHOOL

Polson, Cheryl J., US Department of Defense, \$237,931, "Brigade Spouse Courses at Fort Leavenworth 2015-2020."

INTERNATIONAL PROGRAMS

Wood, Mary, CAPES, \$165,837, "Six-Week English Language Certificate Program for High School English Teachers from Brazil (PDPI)."

SCHOOL OF LEADERSHIP STUDIES

Gott, Trisha C., and **Kliwer, Brandon W.**, US Department of State, \$120,000, "Mandela Washington Fellowship for Young African Leaders - 2019."

Kliewer, Brandon W., and Gott, Trisha C., US Department of State, \$80,000, "Mandela Washington Fellowship for Young African Leaders - 2019."