

2018 Presentations

Faculty Invited Presentations

Ravi Jadeja*. "Are You Ready for FSMA and Third Party Audits?" Horticulture Industry Show, Tulsa, Oklahoma, Jan. 5, 2018.

Ravi Jadeja*. "GFSI Benchmarked Audits for Small Meat Processors." Innovations in Livestock Sector for Doubling Farmers Income: Strategies and Opportunities in Meat Value Chain, India (online presentation), July 27, 2018.

Ravi Jadeja*. "3rd Party Auditing: An Emerging Trend in the Food Industry." Oklahoma Association of Environmental Health Professional Annual meeting, Oklahoma State University, Broken Arrows, Oklahoma, Sep. 7, 2018.

Ravi Jadeja*. "Introduction to Food Safety Modernization Act." Oklahoma Association of Environmental Health Professional Annual meeting, Oklahoma State University, Broken Arrows, Oklahoma, Sep. 7, 2018.

Ravi Jadeja*. "The U.S. Food Industry and FDA." US-Kagoshima-Asia Triad Program in a Multipolar World Conference, Kagoshima, Japan (online presentation), Dec. 5, 2018.

David Lalman*. "Changes in the U.S. Cowherd and Their Implication on Heifer Development." ASAS Southern Section, Ft. Worth, Texas, Feb. 2-6, 2018.

David Lalman*. "Matching Beef Cows to Forage Resources." Hemphill County Texas A&M AgriLife Beef Cattle Conference, Canadian, Texas, April 19, 2018.

David Lalman*. Implications of Cow Size Change. 2018 Florida Beef Cattle Short Course, Gainesville, Florida, May 9-11, 2018.

David Lalman*. "Maintenance Requirements in Cows." ASAS, Vancouver, Canada, July 8-12, 2018.

David Lalman*. "California Net Energy System-Cows." California Net Energy System Symposium, Davis, California, Sep. 12-14, 2018.

David Lalman*. "Fine-Tuning an Efficient Cowherd." High Plains Nutrition & Management Roundtable, Laramie, Wyoming, Oct. 4, 2018.

Ranjith Ramanathan*. "Alternate meat protein sources." Innovate, American Society of Animal Science, Atlanta, Georgia, September 10, 2018.

Ranjith Ramanathan*. "Recent updates in meat quality research." College of Veterinary and Animal Sciences, Kerala, India, Dec. 21, 2018.

Ranjith Ramanathan*, Rachel Mitacek ^g, Gretchen Mafi*, and Deb VanOverbeke*. "Biochemistry of dark-cutting beef." Meat and Muscle Biology concurrent session at the American Meat Science Association Reciprocal Meat Conference, Kansas City, Missouri, June 24-27, 2018.

Ranjith Ramanathan*, Rachel Mitacek ^g, Anupam Abraham ^g, Gretchen Mafi*, and Deb VanOverbeke*. "Application of metabolomics to improve beef color." The Institute of Food Technologists Annual Meeting, Chicago, Illinois, July 19-22, 2018.

Ranjith Ramanathan*, Deb VanOverbeke*, Dan Stein*, and Navam Hettiarachchy ^g. "Use of 3D Simulation Models to Enhance Student Learning in a Food Science Class." North American Colleges and Teachers of Agriculture (NACTA) Annual Conference, Iowa State University, Ames, Iowa, June 13, 2018.

Ranjith Ramanathan*, Gretchen Mafi*, and Deb VanOverbeke*. "Meat Processing, Packaging, and Retailing in the USA: Industry Perspectives, Innovations, and Major Challenges." Indian Council of Agricultural Research-National Research Centre on Meat, Hyderabad, India, July 25, 2018.

Janeen Salek-Johnson*. "Science of animal well-being should be at the forefront of cattle welfare issues." OSU/OVMA Summer Seminar, Center for Veterinary Health Sciences, Oklahoma State Veterinary School, Stillwater, Oklahoma, June 18, 2018.

Janeen Salek-Johnson*. "Improving Pig Well-being Using Science." Oklahoma Pork Congress, Embassy Suites Hotel, Norman, Oklahoma, June 29, 2018.

Janeen Salek-Johnson*. "Update on Swine and Cattle Welfare Issues." Advancing Animal Welfare Consortium (online meeting), Aug. 16, 2018.

Janeen Salek-Johnson*. "Animal Health and Well-being: Where do we go from here?" OSU Beef Industry Conference, ConocoPhillips Alumni Center, Stillwater, Oklahoma, Oct. 19, 2018.

Janeen Salek-Johnson*. "Scientific Research in Animal Well-being Essential to Advancing and Reacting to Industry and Consumer Needs," Sustainable Agriculture Summit Meeting in Advancing Animal Welfare Breakout Session, Hyatt Convention Center, Denver, Colorado, Nov. 15, 2018.

Janeen Salek-Johnson*. "Animal Care and Well-being: Essential to Beef Industry." Oklahoma Beef Board, OK Farm Bureau, Oklahoma City, Oklahoma, Dec. 14, 2018.

Leon Spicer*. "Identification of novel genes and their role in ovarian follicular growth and cyst formation in cattle." Università degli Studi di Napoli Federico II, Naples, Italy, March 22, 2018.

Leon Spicer*. "Endocrine disruptor-contaminants and effects on the endocrine and reproductive system of domestic species." Università degli Studi di Milano, Milan, Italy, May 17, 2018.

Deb VanOverbeke*. "Beef quality audit." National Cattlemen's Beef Association, 2018.

Glenn Zhang*. "Mechanisms of synergistic regulation of intestinal host defense peptides and mucosa development by forskolin and Clostridium butyricum." National Science Foundation of China, Beijing, China, May 12, 2018.

Glenn Zhang*. "Development of next-generation natural alternatives to antibiotics." Eastman Chemical Company, Kingsport, Tennessee, Sep. 13, 2018.

Graduate Student Presentations

Manish Aryal^G. "Microplate Lethality Assay to Determine the Efficacy of Commercial Sanitizers for Inactivation of *Listeria Monocytogenes*, *E. coli* O157:H7, and *Salmonella* Sp. in Extended Biofilms." International Association for Food Protection, Salt Lake City, Utah, July 9, 2018.

Abigail Bechtold, Gretchen Mafi*, Deb VanOverbeke*, and Ranjith Ramanathan*. "Comparison of myoglobin, hemoglobin, and cytochrome c oxidation properties." American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27, 2018.

Kassidy Bliss, Kelsey Bruno^G, and Chris Richards*. "Varying Hematocrit levels in water restricted beef cattle." Oklahoma State University Undergraduate Research Symposium, Stillwater, Oklahoma, April 20, 2018.

Audrey Boeken^G. "Use of Green-Label Bacteriocin-Containing Microbial Fermentates for Control of *Listeria Monocytogenes* in RTE Meat Applications." International Association for Food Protection, Salt Lake City, Utah, July 11, 2018.

Kelsey Bruno^G, Elizabeth DeSocio^G, Jason White, and Blake Wilson*. "Effect of environmental enrichment devices on behavior of individually housed beef heifers." American Soc. Anim. Sci: National Meetings, Vancouver, Canada, July 10, 2018.

Kelsey Bruno^G, Levi McPhillips, Michelle Calvo-Lorenzo, Clint Krehbiel, Udaya DeSilva*, Sara Place, Deb Vanoverbeke*, Megan Rolf, and Chris Richards*. Effect of Temperament Measures on Feedlot Cattle Performance. American Soc. Anim. Sci.: Southern Section, Fort Worth, Texas. Feb. 5, 2018.

Andrew Cassens, Kendra Wills^G, Morgan Pfeiffer^G, Gretchen Mafi*, Deb VanOverbeke*, and Ranjith Ramanathan*. "Effects of antioxidant/beef flavor-enhancement and modified atmosphere packaging of dark-cutting beef on retail display, flavor, and tenderness." American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27, 2018.

Anna Goldkamp^G. "de novo Transcriptomes of the Burying Beetles *Nicrophorus pustulatus* and *Nicrophorus orbicollis*." Arthropod Genomics Symposium, Urbana-Champaign, Illinois, June 8, 2018.

Anna Goldkamp^G. "Differentially expressed tRNA fragments in bovine fetuses with assisted reproduction induced congenital overgrowth syndrome." Annual Research Symposium in Biological Sciences, Stillwater, Oklahoma, Sep. 21, 2018.

Taylor Husz^G. "Effects of Ractopamine Hydrochloride on Slice Shear Slice Force within USDA Quality Grade of Feedlot Holstein Steers." ASAS Midwest Section, Omaha, Nebraska, March 13, 2018.

Taylor Husz^G. "Effects of Ractopamine Hydrochloride on Slice Shear Slice Force within USDA Quality Grade of Feedlot Holstein Steers." Plains Nutrition Council, San Antonio, Texas, April 6, 2018.

Taylor Husz^G. "The effect of competition for an automated supplement feeder on supplement intake behavior of beef stocker steers." ASAS - Southern Section, Oklahoma City, Oklahoma, Jan. 29, 2019.

Frank Kiyimba^G, Mahesh Nair, Gretchen Mafi*, Deb VanOverbeke*, and Ranjith Ramanathan*. "Effect of high oxygen partial pressure on 4-hydroxy-2-nonenal induced myoglobin oxidation, oxidation-reduction potential, and myoglobin unfolding." American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27, 2018.

Wentao Lyu^G, Judy Deng^G, Lakshmi Sunkara, Sage Becker^U, Kelsy Robinson^G, Robert Matts, and Glenn Zhang*. "High throughput screening for natural host defense peptide-inducing compounds as novel alternatives to antibiotics." Poultry Science Association Annual Meeting, San Antonio, Texas, July 23-26, 2018.

Conner McDaniel^G, Sabra Billups^G, Tony Kountoupis^G, Divya Jaroni*, and Ravi Jadeja*. "Efficacy of novel antimicrobial sodium acid sulfate used in fresh cut produce." Oklahoma Research Symposium, Oklahoma State University, Stillwater, Oklahoma, 2018.

Conner McDaniel^G, Sabra Billups^G, Tony Kountoupis^G, Divya Jaroni*, and Ravi Jadeja*. "Evaluating antimicrobial efficacy of sodium acid sulfate to reduce *E. coli* O157:H7 from chopped bell peppers." Whiteman Research Competition, Department of Animal Science, Oklahoma State University, Stillwater, Oklahoma, 2018.

Conner McDaniel^G and Ravi Jadeja*. "Novel Antimicrobial to Increase Produce Safety." College Level 3 Minute Thesis Competition, Oklahoma State University, Stillwater, Oklahoma, Nov. 6, 2018.

Conner McDaniel^G, Sabra Billups^G, Tony Kountoupis^G, Divya Jaroni*, and Ravi Jadeja*. "Evaluating the Effectiveness of Sodium Acid Sulfate to Reduce *E. coli* O157:H7 and *S. Typhimurium* DT104 from Chopped Bell Peppers." International Association for Food Protection, Salt Lake City, Utah, July 8-11, 2018.

Adam McGee^G, J.R. Cole, Corbit Bayliff, Miles Redden, C.M. Spencer, Axel Wiseman^G, J.G. Warren, Ryan Reuter*, D. Doye, Gerald Horn*, and David Lalman*. "Evaluation of Net Returns to Risk and Management in an Intensified Cow-Calf Production System." American Society of Animal Science, Fort Worth, Texas, Feb. 3-6, 2018.

Rachel Mitacek, Ravi Jadeja*, Deb VanOverbeke*, Gretchen Mafi*, and Ranjith Ramanathan*. "The effects of postmortem aging on beef color stability and biochemical properties." Institute of Food Technologists Annual Meeting, Chicago, Illinois, July 19-22, 2018.

Collin Mowery, Ranjith Ramanathan*, and Aneesh Johny. "Punica granatum extract promotes mitochondrial function and attenuates paraquat toxicity." Experimental Biology Conference, Programming Society: American Society for Biochemistry and Molecular Biology, San Diego, California, April 22-26, 2018.

Taylor Neilson, Morgan Pfeiffer ^g, Gretchen Mafi*, Deb VanOverbeke*, and Ranjith Ramanathan*. "Pomegranate rind extract limits ground beef color discoloration and lipid oxidation." American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27, 2018.

Maria Perego ^g, Breanne Morrell, Luis Schutz, and Leon Spicer*. "Endogenous production of UHRF1 and effects of E2F transcription factors and FGF9 on UHRF1 mRNA abundance in ovarian cells." Annual Cancer Research Symposium, Stephenson Cancer Center, University of Oklahoma College of Medicine, Oklahoma City, Oklahoma, Feb. 2, 2018.

Morgan Pfeiffer ^g, Gretchen Mafi*, Taylor Neilson, Ranjith Ramanathan*, and Deb. VanOverbeke*. "Frequencies and severity of injection-site lesions in muscles from rounds of cow carcasses." American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27, 2018.

Dennis Pletcher ^g. "Use of *Listeria innocua* and *Clostridium sporogenes* as surrogate organisms for in-plant validation of a sous vide process for chicken breasts using celery nitrite." International Association for Food Protection, Salt Lake City, Utah, July 9, 2018.

Kelsy Robinson ^g, Yingping Xiao, Jiangchao Zhao, Hua Yang, and Glenn Zhang. "Association of the jejunal microbiome and transcriptome with growth in broiler chickens." Poultry Science Association Annual Meeting, San Antonio, Texas, July 23-26, 2018.

Joyjit Saha ^g and Divya Jaroni*. "Commercialization potential of STEAK (Safe Temperature Estimator At a Klick) Software." National Science Foundation I-Corps Summer Cohort 2018 Program, Spears School of Business - Oklahoma State University, Stillwater, OK, July 31, 2018.

Joyjit Saha ^g, Ravi Jadeja* and Divya Jaroni*. "STEAK-Safe Temperature Estimator at A Klick: A simple, spreadsheet-based tool to create safe cooking time-labels for mechanically tenderized beef steaks." International Association for Food Protection, Salt Lake City, Utah, July 9, 2018.

Joyjit Saha ^g, Ravi Jadeja*, and Divya Jaroni*. "Efficacy of bacteriophages as beef trim intervention treatment against Shiga toxin-producing *Escherichia coli*." International Association for Food Protection, Salt Lake City, Utah, July 9, 2018.

Joyjit Saha ^g, Ravi Jadeja*, and Divya Jaroni*. "Quantitative Microbial Risk Assessment approach for selecting pathogen control strategies during ground beef processing." International Association for Food Protection, Salt Lake City, Utah, July 9, 2018.

Joyjit Saha ^g, Ravi Jadeja*, and Divya Jaroni*. "Quantitative Microbial Risk Assessment for the selection of pathogen control strategies during ground beef processing: A cost effective approach." American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27, 2018.

Joyjit Saha ^g, Ravi Jadeja*, and Divya Jaroni*. "Quantitative Microbial Risk Assessment: A cost-effective tool for deciding on pathogen control strategies during ground beef processing." FAPC Research Symposium 2018, OSU, Stillwater, Oklahoma. Feb. 26, 2018.

Joyjit Saha ^g, Ravi Jadeja*, Jacob Nelson, and Divya Jaroni*. "A simple spreadsheet-based tool, utilizing predictive modeling, to generate safe-cooking time labels for mechanically tenderized beef steaks." Whiteman Research Competition 2018, AFS, OSU, Stillwater, Oklahoma, Feb. 15, 2018.

Shelby Spring, Cedrick Shili ^g, and Adel Pezeshki*. "Effect of low protein diets with or without supplemented synthetic amino acids on growth performance of nursery pigs." Midwest section of American Society of Animal Science (ASAS), Omaha, Nebraska, March 12-14, 2018.

Nicole Stevenson ^u, Kelsey Bruno ^g, and Chris Richards*. "Effects of water restriction on shade seeking behavior in beef cattle." Oklahoma State University Undergraduate Research Symposium, Stillwater, Oklahoma, April 20, 2018.

Sydney Stewart ^g. "If You Give a Pig a Penicillin: Livestock Health, Performance, and Welfare in the 'Post-Antibiotic' Age." 64th Annual Fulbright Mid-Year Seminar, Berlin, Germany, March 19, 2018.

Alex Taylor, Kelsey Bruno, Michelle Calvo-Lorenzo, Clint Krehbiel, Udaya DeSilva*, Sara Place, Deb Vanoverbeke*, Megan Rolf, and Chris Richards*. "The Effects of Extended Water Restriction on the Hematological Cell Distribution of Beef Cattle in Confinement." American Soc. Anim. Sci.: Midwest Section, Omaha, Nebraska, March 14, 2018.

Parker Wilson, Collin Mowery, and Ranjith Ramanathan*. "Binding of 4-hydroxy-2-nonenal decrease non-enzymatic methemoglobin reducing capacity." Experimental Biology Conference, San Diego, Programming Society: American Society for Biochemistry and Molecular Biology, April 22-26, 2018.

Axel Wiseman ^g, Miles Redden, Courtney Spencer, Adam McGee ^g, Ryan Reuter*, and David Lalman*. "Effects of timing of weaning on calf performance and maintenance energy requirements in primiparous beef cows." American Society of Animal Science, Fort Worth, Texas, Feb. 3-6, 2018.

Qing Yang ^g, Binlong Chen, Kelsy Robinson ^g, and Glenn Zhang*. 2018. "Forskolin and butyrate act synergistically in protecting chickens from necrotic enteritis." Poultry Science Association Annual Meeting, San Antonio, Texas, July 23-26, 2018.