

2018 Research Publications

Analyzing beef color stability differences with metabolomics.

A. Abraham ^g, J.W. Dillwith, D.L. VanOverbeke*, G.G. Mafi*, and R. Ramanathan*.
Meat and Muscle Biology, 1(2), 157-157.

Behavioral responses of laying hens to atmospheric ammonia in an environmental chamber.

C. Tucker, A.R. Green-Miller, R.S. Gates, S. Myint, and J.L. Salak-Johnson*.
American Society Agricultural Biological Engineers. doi: 10.13031/iles.18-106

Bovine genome database: Tools for mining the bos taurus genome.

D.E. Hagen*, D.R. Unni, A. Tayal, G.W. Burns, and C.G. Elsik.
Eukaryotic Genomic Databases, 211-249.

Branched chain amino acids: Beyond nutrition metabolism.

C. Nie, T. He, W. Zhang, G. Zhang*, and X. Ma.
International journal of molecular sciences 19(4), 954.

Butyrate: A double-edged sword for health?

H. Liu, J. Wang, T. He, S. Becker ^u, G. Zhang*, D. Li, and X. Ma.
Advances in Nutrition, 9(1), 21-29.

Case study: Effects of body weight gain and bovine somatotropin treatment of postpartum beef cows on concentrations of IGF-1, insulin, and glucose in blood plasma; luteal activity; and calf growth.

M.J. Cooper-Prado, I. Rubio, N.M. Long, M.P. Davis, L.J. Spicer*, and R.P. Wettemann*.
The Professional Animal Scientist, 34(5), 513-521.

Changes in the U.S. cowherd and their implications on heifer development.

D.L. Lalman*, A.L. McGee ^g, C.M. Spencer ^g, and A.R. Wiseman ^g.
Journal of Animal Science, 96, 25-26.

Characterization of bacteriophages targeting non-O157 shiga toxigenic escherichia coli.

P.K. Litt ^g, J. Saha ^g, and D. Jaroni*.
Journal of Food Protection, 81(5), 785-794.

Comparative biogeography of the gut microbiome between jinhua and landrace pigs.

Y. Xiao, F. Kong, Y. Xiang, W. Zhou, J. Wang, H. Yang, G. Zhang*, and J. Zhao.
Scientific Reports, 8(1), 5985.

Cooking for individuals with food allergies and intolerances.

T. LaLonde and R. Jadeja*.
Madridge J Food Tech., 3(1), 115-121.

Determination of the efficacy of titrated levels of water soluble zinc amino acid complex on growth performance of nursery pigs.

P. Aparachita ^g, S.D. Carter*, C.V. Cooper ^g, I.S. Lara ^g, A. Sawyer ^g, Z.J. Rambo, et al.
Journal of Animal Science, 96, 134.

Determination of the efficacy of titrated levels of water soluble zinc amino acid complex on immune response of nursery pigs.

P. Aparachita ^g, S.D. Carter*, C.V. Cooper ^g, I. Silva Lara ^g, A. Sawyer ^g, Z.J. Rambo, et al.
Journal of Animal Science, 96(2), 120-121.

Development of a cell-based high-throughput screening assay to identify porcine host defense peptide-inducing compounds.

Z. Deng ^g, J. Wang, W. Lyu ^g, X. Wieneke, R. Matts, X. Ma, and G. Zhang*.
Journal of Immunology Research. Retrieved from <https://doi.org/10.1155/2018/5492941>.

Dietary clostridium butyricum induces a phased shift in fecal microbiota structure and increases the acetic acid-producing bacteria in a weaned piglet model.

J. Zhang, X. Chen, P. Liu, J. Zhao, J. Sun, W. Guan, L.J. Johnston, C. Levesque, P. Fan, T. He, G. Zhang*, and X. Ma.
Journal of Agricultural and Food Chemistry, 66(20), 5157-5166.

Dietary modulation of endogenous host defense peptide synthesis as an alternative approach to in-feed antibiotics.

K. Robinson ^g, X. Ma, Y. Liu, S. Qiao, Y. Hou, and G. Zhang*.
Animal Nutrition, 4(2), 160-169.

Effect of dietary source and concentrations of copper, manganese, and zinc on growth performance and immune response of nursery pigs following an acute lipopolysaccharide challenge.

S. Schaaf, S.D. Carter*, C.V. Cooper ^g, P. Aparachita ^g, I. Silva Lara ^g, C. Shili ^g, K.R. Perryman, and J.L. Usry.
Journal of Animal Science, 96(2), 135-136.

Effect of exogenous progesterone or flunixin meglumine after AI on serum progesterone concentration and pregnancy per AI in lactating dairy cows.

S. Barkhori-Mehni, H. Karami-Shabankareh, R. Masoumi, M. Kazemi-Bonchenari, A. Pezeshki*, A. Badiiei, E. Dirandeh, and M.G. Colazo.
Animal Reproduction, 15(2), 140-147.

Effect of melatonin on bovine theca cells in vitro.

T. Feng, L.F. Schütz, B.C. Morrell, M.C. Perego^o, and L.J. Spicer*.
Reproduction, Fertility and Development, 30, 643-650.

Effect of temperament measures on feedlot cattle performance.

K. Bruno^o, L.J. McPhillips, M. Calvo-Lorenzo, U. Desilva*, C.R. Krehbiel, M.M. Rolf, S.E. Place, D.L. Step, R.G. Mateescu, D.L. VanOverbeke*, and T.C. Husz^o.
Journal of Animal Science, 96(1), 18-19.

Effects of a chronic lipopolysaccharide challenge on growth performance and immune response of nursery pigs fed differing sources and concentrations of copper, manganese, and zinc.

I.S. Lara^o, S.D. Carter*, C.V. Cooper^o, P. Aparachita^o, K.R. Perryman, and J.L. Usry.
Journal of Animal Science, 96, 136.

Effects of dietary vitamin E and selenium on growth performance and immune response of nursery pigs following an immune challenge.

C. Shili^o, S.D. Carter*, S. Schaaf^o, C.V. Cooper^o, I. Silva Lara^o, and P. Aparachita^o.
Journal of Animal Science, 96(2), 115-116.

Effects of display time on mitochondrial and cytochrome C content in beef longissimus and psoas muscles.

Y. Ke, A. Abraham^o, G.G. Mafi*, D. Vanoverbeke*, and R. Ramanathan*.
Meat and Muscle Biology, 1(2), 154.

Effects of exercise and roughage source on the health and performance of receiving beef calves.

M.A. Woolsoncroft, M.E. Youngers^o, L.J. McPhillips, C.G. Lockard^o, C.L. Haviland^o, E.S. DeSocio^o, W.R. Ryan^o, C.J. Richards*, B.K. Wilson*, et al.
The Professional Animal Scientist, 34(2), 183-191.

Effects of inclusion of spray-dried porcine plasma in lactation diets on sow and litter performance.

S.D. Carter*, M.D. Lindemann, L.I. Chiba, M.J. Estienne, and G. Lima.
Livestock Science, 216, 32-35.

Effects of marbling and postmortem aging on consumer assessment of United States lamb loin.

M.R. Phelps, A.J. Garmyn, J.C. Brooks, G.G. Mafi*, S.K. Duckett, J.F. Legako, et al.
Meat and Muscle Biology, 2(1), 221-232.

Effects of N-carbamylglutamate and L-arginine on steroidogenesis and gene expression in bovine granulosa cells.

T. Feng, L.F. Schütz, B.C. Morrell, M.C. Perego^o, and L.J. Spicer*.
Animal Reproduction Science, 188, 85-92.

Effects of oral administration of lipopolysaccharide on growth performance and immune response of nursery pigs.

I. Silva Lara^o, S.D. Carter*, C.V. Cooper^o, P. Aparachita^o, C. Shili^o, and J.L. Usry, et al.
Journal of Animal Science, 96(2), 209.

Effects of Outpace^o and Ambitine^o feed additives on the performance of wean-to finish pigs.

C.V. Cooper^o, S.D. Carter*, P. Aparachita^o, and I. Silva Lara^o.
Journal of Animal Science, 96(2), 185.

Effects of OutpaceTM feed additive on nursery pig performance.

C.V. Cooper^o, S.D. Carter*, and P. Aparachita^o.
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Effects of packaging, antioxidants, and Nadh on ground beef color and oxidation reduction potential.

R.M. Mitacek, R. Ramanathan*, D.L. VanOverbeke*, G.G. Mafi*, K. Brennecke, et al.
Meat and Muscle Biology, 1(2), 163.

Effects of pomegranate rind extract on ground beef color.

K.M. Wills, H.J. Nelson, S. Bhargava, A. Abraham^o, G.G. Mafi*, D.L. VanOverbeke*, et al.
Meat and Muscle Biology, 1(2), 142.

Effects of ractopamine hydrochloride on slice shear force within USDA quality grade of feedlot holstein steers.

T.C. Husz^o, C.J. Richards*, C. L. Haviland^o, M. J. Corbin, and C.R. Krehbiel.
Journal of Animal Science, 96(2), 270.

Effects of timing of weaning on calf performance and maintenance energy requirements in primiparous beef cows.

A.R. Wiseman^o, M.D. Redden, C.M. Spencer, A.L. McGee^o, R.R. Reuter*, et al.
Journal of Animal Science, 96, 12-13.

Environmental effects on water intake and water intake prediction in growing beef cattle.

C.M. Ahlberg, K. Allwardt, A. Broocks, K. Bruno [¶], L. McPhillips, A. Taylor, C.R. Krehbiel, M.S. Calvo-Lorenzo, C.J. Richards*, S.E. Place, U. DeSilva*, D.L. VanOverbeke*, et al.
Journal of Animal Science, 96(10), 4368-84.

Essential oils improved weight gain, growth and feed efficiency of young dairy calves fed 18 or 20% crude protein starter diets.

M. Kazemi-Bonchenari, R. Falahati, M. Poorhamdollah, S.R. Heidari, and A. Pezeshki*.
Journal of Animal Physiology and Animal Nutrition, 102(3), 652-661.

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A.L. McGee [¶], J.R. Cole, C.L. Bayliff, M.D. Redden, C.M. Spencer, A.R. Wiseman [¶], J.G. Warren, R.R. Reuter*, D. Doye, G.W. Horn*, and D.L. Lalman*.
Journal of Animal Science, 96(1), 52.

Frequencies and severity of injection-site lesions in muscles from rounds of cow carcasses.

M.M. Pfeiffer [¶], G.G. Mafi*, R. Ramanathan*, T.M. Neilson, and D.L. VanOverbeke*.
Translational Animal Science, 3(1).

Fusarium molds and mycotoxins: potential species-specific effects.

A. Bertero, A. Moretti, L. Spicer*, and F. Caloni.
Toxins, 10(6), 244.

Fusarium mycotoxins and in vitro species-specific approach with porcine intestinal and brain in vitro barriers: A review.

A. Bertero, L.J. Spicer*, and F. Caloni.
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Gut microbiota is a major contributor to adiposity in pigs.

H. Yang, Y. Xiang, K. Robinson [¶], J. Wang, G. Zhang*, J. Zhao, and Y. Xiao.
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High throughput screening for natural host defense peptide-inducing compounds as novel alternatives to antibiotics.

W. Lyu [¶], Z. Deng, L.T. Sunkara, S. Becker [¶], K. Robinson [¶], R. Matts, and G. Zhang*.
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A. DeDecker, M. Mandru, and J.L. Salak-Johnson*.
American Journal of Animal and Veterinary Sciences, 13(4), 123-129.

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C.G. Elsik, A. Tayal, D.R. Unni, G.W. Burns, and D.E. Hagen*.
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F. Caloni, M.C. Perego [¶], C. Cortinovis, A. Bertero, and L.J. Spicer*.
Journal of Veterinary Pharmacology and Therapeutics, 41(1), 103-104.

Influences of weight and thickness on cooking time required for various mechanically tenderized beef steaks to reach minimum safe internal temperature without resting.

J. Saha [¶], D. Jaroni*, J. Nelson, C. Willoughby, C. McDaniel [¶], and R. Jadeja*.
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A. Singh, R.C. Zapata, A. Pezeshki*, R.D. Reidelberger, and P.K. Chelikani.
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A.L. Nagy, C. Cortinovis, L.J. Spicer*, M.C. Perego [¶], and F. Caloni.
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L. Zhang, X. Wang, S. Chen, S. Wang, Z. Tu, G. Zhang*, H. Zhu, X. Li, J. Xiong, and Y. Liu.
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C.L. Robinson, L. Zhang, L.F. Schütz, M.L. Totty, and L.J. Spicer*.
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R. Mitacek, J. Prenni, R. Jadeja, D.L. VanOverbeke*, G.G. Mafi*, and R. Ramanathan*.
Journal of Food Science, 84(1), 38-50.

Modeling techniques for prediction of safe cooking times of mechanically tenderized beef steaks.

J. Saha [□], R. Jadeja*, G.G. Mafi*, J. Nelson, R. Ramanathan*, and D. Jaroni*.
Meat and Muscle Biology, 2(1), 180-188.

Modified atmosphere packaging improves surface color of dark-cutting beef.

R.M. Mitacek, A.R. English, G.G. Mafi*, D.L. VanOverbeke*, and R. Ramanathan*.
Meat and Muscle Biology, 2(1), 57-63.

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R.A. Mancini, K. Belskie, S.P. Suman, and R. Ramanathan*.
Journal of Food Science, 83(8), 2077-2082.

National Beef Quality – Audit 2016: Assessment of cattle hided characteristics, offal condemnations, and carcass traits to determine the quality status of the market cow and bull beef industry.

M.K. Harris, L.C. Eastwood, C.A. Boykin, A.N. Arnold, K.B. Gehring, D.S. Hale, C.R. Kerth, D.B. Griffin, J.W. Savell, K.E. Belk, D.R. Woerner, J.D. Hasty, R.J. Delmore, J.N. Martin, T.E. Lawrence, T.J. McEvers, D.L. VanOverbeke*, G.G. Mafi*, M.M. Pfeiffer [□], et al.
Translational Animal Science, 2(1), 37-49.

National Beef Quality Audit – 2016.

D.L. VanOverbeke* and J. Fulton.
Journal of Animal Science, 96(2), 35-36.

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R. Ramanathan*, R.M. Mitacek, S.D. Billups [□], R. Jadeja*, M.M. Pfeiffer [□], G.G. Mafi*, and D.L. VanOverbeke*.
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C. Bir, E.A. DeVuyst, M. Rolf, and D. Lalman*.
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Preference evaluation of ground beef by untrained subjects with three levels of finely textured beef.

S.M. Depue, M.M. Neilson, J.L. Lusk, G.G. Mafi*, F.B. Norwood, R. Ramanathan*, et al.
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Short and long-term effects of weaning age on pig innate immune status.

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Stewardship of energy use by beef cows: Maintenance requirements of the U.S. cowherd.

D. Lalman* and C. Andresen[¶].
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Supplementing energy in conjunction with monensin improves sustainability of stocker cattle grazing winter wheat.

L.R. Thompson, M.R. Beck, G.D. Williams, S.E. Place, and R. Reuter*.
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Test duration for water intake, average daily gain, and dry matter intake in beef cattle.

C.M. Ahlberg, K. Allwardt, S. Broocks, K. Bruno[¶], L. McPhillips, A. Taylor, C.R. Krehbiel, M. Calvo-Lorenzo, C.J. Richards*, S.E. Place, U. DeSilva*, D.L. VanOverbeke*, et al.
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The effects of Capn1 gene inactivation on the differential expression of genes in skeletal muscle.

W.T. Oliver, B.N. Keel, A.K. Lindholm-Perry, J. Horodyska, and A.P. Foote*.
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The effects of protein supplementation of fall calving beef cows on pre-and postpartum plasma insulin, glucose and IGF-I, and postnatal growth and plasma insulin and IGF-I of calves.

K.J. McLean, B.H. Boehmer, L.J. Spicer*, and R.P. Wettemann*.
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M.S. Grant and A.P. Foote*.
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The role of tight junction proteins in ovarian follicular development and ovarian cancer.

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R.C. Zapata, A. Singh, A. Pezeshki*, and P.K. Chelikani.
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The Professional Animal Scientist, 34(4), 364-371.

Weather tools for retrospective assessment of restoration outcomes.

C.A. Moffet, S.P. Hardegree, J.T. Abatzoglou, K.C. Hegewisch, R.R. Reuter*, et al.
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Yogurt fortification with chickpea (cicer arietinum) flour: Physicochemical and sensory effects.

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