

**CURRICULUM VITAE**  
**DEBORAH L. (ROEBER) VANOVERBEKE**

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**EDUCATIONAL BACKGROUND:**

Ph.D., COLORADO STATE UNIVERSITY, Fort Collins, CO, **December, 2002**

Major: Animal Science, Meat Science specialization

***DISSERTATION: Injection-site lesions in beef muscles and study of the chemistry responsible for green discoloration. October 2002.***

Major advisor: Dr. Keith Belk

**M.S., COLORADO STATE UNIVERSITY, Fort Collins, CO, May, 2000**

Major: Animal Science, Meat Science specialization

***THESIS: Improving the consistency and competitiveness of market cow and bull beef and increasing the value of market cows and bulls. May 2000.***

Major advisor: Dr. Keith Belk

**B.S., UNIVERSITY OF NEBRASKA – LINCOLN, Lincoln, NE, December 1996**

Bachelor of Science in Agricultural Sciences – With Distinction

Major: Animal Science Minor: Agricultural Leadership and Communication

**PRESENT POSITION:**

**Title:** Assistant Dean, Academic Programs, Ferguson College of Agriculture – July 2019 – Present  
50% Asst. Dean/50% Professor; July 2016 – June 2019 (July 2016-June 2017, Interim)

**Location:** Oklahoma State University  
Department of Animal and Food Sciences  
Stillwater, OK 74078

**Duties:** 100% Administration

- Coordinate and teach AG 1011, First Year Seminar
- Supervise 8-10 graduate teaching assistants as they assist with AG 1011
- Provide administrative leadership for Freshmen In Transition (FIT) Living Learning Program
- Provide administrative leadership for Ferguson College of Agriculture Student Council
- Serve as College liaison to Late Withdrawal & Tuition Appeals, and Director of Student Academic Services Committees
- Serve as liaison to Registrar's office in the development and implementation of Degree Works to students across campus, implementation of Slate for Student Success, and Classroom Scheduling software
- Manage communication and outreach with students during their first year of enrollment specifically to focus on issues related to student success and retention
- Coordinate faculty award applications for national and institutional award programs and coordinate selection process for college faculty award programs
- Assist with selection of students to serve in the spring State Legislative Internships and summer Washington, DC Legislative Internship
- Serve as committee chair for the Ferguson College of Agriculture Advising Coordinators Committee
- Collaborate with staff in the student success center staff on recruitment, student development, academic success, and career placement programming.
- Assist students with withdrawals, reinstatements, and readmissions

- Mentor reinstatement and readmission students in Academic-on-Track program
- Develop and coordinate spring and fall teaching workshops for teaching faculty
- Developed and coordinate PETE's Peer Coaching of Instruction program for faculty

**PREVIOUS POSITIONS & EXPERIENCE:**

**Title:** Professor – Meat Science (Promoted to Full Professor July 2015, Associate Professor July 2010 June 2015, Assistant Professor June 2005-June 2010)  
George Chiga Endowed Professor; July 2014 – June 2019

**Location:** Oklahoma State University  
Department of Animal and Food Sciences  
Stillwater, OK 74078

**Period:** June 2005 – June 2019 (July 2016-June 2019 50% Departmental, 50% Administration)

**Duties:** 70% Teaching

- Co-teach Agricultural Economics/Food Science 4243, Researching Consumer Food Preferences (traditional delivery, fall semesters)
- Animal Science 4863, Capstone for Animal Agriculture (traditional delivery fall/spring; online delivery summer)
- Food Science 2103, Diversity in Food Production (online delivery, fall and spring)
- Food Science 5553, Interpreting Animal Science and Food Science Research (traditional delivery, spring semester)
- Animal Science/Food Science 2253, Live Animal and Carcass Evaluation (traditional delivery fall and spring)
- Food Science 5393, Issues in Food Science (traditional delivery spring)
- Academic advising for undergraduate students (averaged 85 students per term; ranged from 50-145)
- Assessment Coordinator for Animal Science degrees (B.S., M.S., and Ph.D.) and Food Science degree (B.S. only)
- Advising Coordinator for Animal and Food Sciences Department

30% Research:

- Conducted research to determine the impact of pre-harvest and post-harvest management on meat quality and palatability
  - Coordinated National Beef Quality Audit – 2016 and 2011 as lead PI for OSU
  - Manage multi-year sub-contract project with USDA, El Reno on forage vs. grain finished cattle
  - Manage multi-year project with Multisorb, Inc. on retail meat color stability pilot studies for various retailers and packers across the U.S.
- Maintain budgets and reporting on grants
- Mentor graduate students

**Title:** Associate Affiliate Faculty; September, 2012 – August, 2015

**Location:** Colorado State University  
Department of Animal Sciences  
Fort Collins, CO 80523

**Title:** Assistant Professor – Pre-harvest Management for Improved Meat Quality and Safety Specialist

**Location:** University of Minnesota  
Department of Animal Science  
St. Paul, MN 55108

**Period:** November 2002 – June 2005

**Duties:** 50% Extension:

- Served as the meat scientist on the University of Minnesota Beef Team and in the Center for Animal Health and Food Safety

- Contributed and participated in the efforts of the Center for Animal Health and Food Safety to enhance multi-disciplinary research in the areas of nutrition and pre-harvest management effects of meat product quality and safety
- Developed working relationships with animal scientists, veterinarians, extension educators, producers, government officials, livestock markets, agricultural based organizations and associations, processors and others to develop industry-integrated programs that focus on feedlot and on-ranch process control to assure meat quality and safety from gate to plate
- Provided Just-In-Time assistance with issues such as Bovine Spongiform Encephalopathy and E. coli O157:H7 outbreaks
- Developed instructional and informational materials and lead self-sustaining, well-defined educational programs on nutrition and pre-harvest management strategies that result in safe, wholesome, high quality meat products

50% Research:

- Conducted research to determine the impact of pre-harvest and post-harvest management on meat quality and palatability
- Participated in undergraduate and graduate courses as an invited lecturer and student adviser

**Title:** Research Associate  
**Location:** Colorado State University  
 Department of Animal Sciences  
 Fort Collins, CO 80523  
**Period:** June 2000 – October 2002  
**Duties:**

- Provided on-going research and extension support to the Meat Science group at Colorado State University. In addition to providing support, coursework and individual research was completed for a Ph.D
- Conducted annual beef quality assurance audits to determine the incidence of injection-site damage in top sirloin butts and in muscles of the round
- Fulfilled research, teaching and extension responsibilities in the area of meat science, specifically meat animal growth and development, meat animal carcass composition, and carcass quality
- Collaborated with Colorado Livestock Association, Colorado Cattlemen's Association and the Colorado Beef Council in the development and dissemination of the Colorado Beef Quality Assurance program
- Collaborated with the American Sheep Industry Association in the development of the Sheep Safety and Quality Assurance manual and supporting materials

**Title:** Graduate Research Assistant  
**Location:** Colorado State University  
 Department of Animal Sciences  
 Fort Collins, CO 80523  
**Period:** June 1998 – June 2000  
**Duties:**

- Conducted research and served as a teaching assistant in meat science courses
- Fulfilled research, teaching and extension responsibilities in the area of meat science, specifically meat animal growth and development, meat animal carcass composition, and carcass quality
- Served as a teaching assistant with the responsibility of giving lectures, designing homework problems, and grading homework and exams
- Coordinated and developed seminars and displays for the Beef University program, the Montana Gate-to-Plate program and the National Western Stock Show and Rodeo

**Title:** Director – Nebraska Corn-Fed Beef Program (NCFB)

**Location:** Nebraska Cattlemen

Lincoln, NE 68508

**Period:** January 1997 – June 1998

**Duties:**

- Expanded and coordinated the Nebraska Beef Quality Assurance (BQA) Program
- Conducted BQA educational meetings with state veterinarians and extension educators
- Aided in the development and expansion of other state BQA programs
- Developed and maintained the USDA Quality Control Program Certification Manual
- Marketed the Nebraska Corn-Fed Beef (NCFB) Program and guidelines to producers
- Designed and distributed correspondence materials for the NCFB and BQA Programs

**Title:** Nebraska Cattlemen Intern

**Location:** Nebraska Cattlemen

Lincoln, NE 68508

**Period:** April 1996 – December 1996

**Duties:** Responsibilities included:

- Designed and distributed correspondence materials for the NCFB and BQA Programs
- Developed and organized Nebraska Beef 706 programs
- Completed feasibility research for the NCFB Program
- Collected and disseminated fed cattle sales data and market information via telephone, electronic wire and the *Nebraska Cattlemen Market Update* radio broadcast

**Title:** Undergraduate Teaching Assistant

**Location:** University of Nebraska – Lincoln

Lincoln, NE 68583

**Period:** August 1994 – December 1996 (semesters only)

**Duties:** Responsibilities included:

- Instructed weekly lab sessions and tutored students outside of class
- Developed and graded quizzes, lab exercises and tests

**Title:** Carcass Data Collection Service

**Location:** University of Nebraska – Lincoln

Lincoln, NE 68583

**Period:** May 1993 – April 1996

**Duties:** Responsibilities included:

- Supervised co-workers to assure collection and analysis of data from May – September, 1995
- Scheduled data collection with packing plant managers
- Assisted in collection and summarization of data for NCBA and graduate students at USDA-Meat Animal Research Center

### **TEACHING:**

The purpose of teaching is to impart knowledge incorporating base knowledge and current research to students in areas of the professor's expertise, to empower students to think about and apply the course material, and to prepare students to meet the expectations of their career choice. There are four key points to my teaching philosophy: 1) challenge the students to learn concepts rather than facts, 2) challenge the students to develop their written and verbal communication skills, 3) be enthusiastic about teaching and try to impart that enthusiasm to the students to increase their curiosity and desire to learn, and 4) have an open door policy allowing students the opportunity to discuss material and ask questions. I have high expectations of my students. I have high expectations because I believe that students learn more in the classroom when they are challenged versus when they can simply or easily complete the course. My ultimate goal as a teacher is to have students succeed in and

out of the classroom. If I have a positive impact on that individual, thereby pushing them toward success, I have reached my goal of making a difference.

*Oklahoma State University*

- (a) **AG 1011: First Year Seminar.** The orientation course for first time, full time college students enrolled in the Ferguson College of Agriculture. The goal of the course is to get students started right, teaching them the resources available on campus, the policies of campus such as Academic Integrity, how to use campus based systems such as the online classroom and student self-service and start to build the 5 Ferguson Commitments: intercultural competence, leadership, communication, critical thinking, and financial responsibility.
- (b) **ANSI/FDSC 5553: Interpreting Animal Science/Food Science Research.** New graduate course developed and taught for the first time in the Spring, 2007; course materials were developed to officially develop a new course listing for Spring, 2009. Course content includes an in-depth study of understanding, critically evaluating, and communicating knowledgeably on the design, analyses, and reporting of animal science and food science research. Aimed at improving understanding of statistics, comfort with reading scientific literature and writing. Taught spring semesters, traditional delivery 2007-present.
- (c) **ANSI 4863: Capstone.** A fall and spring course designed to examine the role of animal and food science in society and the importance of research and current issues. Acquired teaching responsibility for the course for spring semesters beginning in 2008. Restructured course requirements of students and lectures given in 2008. Taught various semesters, traditional delivery 2008-2014. Beginning in the Spring 2010, along with a face to face offering, a distance section was also taught incorporating technology for students to deliver their individual presentations. Have sole responsibility for online delivery 2010-present. Presently, online delivery offered only in the summer session.
- (d) **ANSI/FDSC 2253: Meat Animal and Carcass Evaluation.** Fall and spring course designed to give students a basic understanding of meat science and evaluation of livestock and their carcasses. The course teaches basic concepts of meat science and muscle biology through lecture presentations utilizing PowerPoint and other technology. The laboratory gives students the opportunity to have hands on experience evaluating live animals and their respective carcass, as well as fabrication and further processing of those carcasses. Taught fall and spring semesters 2005-2007; taught fall only 2008-2012.
- (e) **FDSC 2103/2102: Diversity in Food Production.** Developed and taught for the first time in Fall, 2013 a course that was labeled with a Diversity Credit for students. Course development included course outline, lecture development and writing of homework assignments (papers), group project and exams. Also developed, with a liaison from the Student Success Center a portion of the curriculum to talk about StrengthsFinder that was used with one of the two sections of students to determine if utilizing strengths impacts student performance in group work. Taught fall and spring semesters, traditional delivery fall 2013-spring 2016 with two sections in the fall and one section in the spring. Taught fall and spring semesters, online delivery beginning spring 2017-present.
- (f) **FDSC 5393: Issues in the Food Science Industry.** A Fall semester course geared toward graduate students and the exploration of key issues in the animal and food industries and how those issues impact research in academia and in corporate environments. This course is constantly updated with new and current issues in the food/animal industries that are in the media as well as incorporating research to support/refute those issues as portrayed in the media. New course developed and co-taught for the first time in the Fall 2007, 2008, and 2009. This course was converted to an official course offering, with the new course number being utilized Fall 2010 and was taught every other year through 2014.
- (g) **FDSC 1133: Fundamentals of Food Science.** Took responsibility for FDSC 1133 for the first time Fall, 2012 to fill a void in between instructors. Course development included determination of a new

text book, lecture development and writing of quizzes, homework assignments and exams. Also developed, with a liaison from the Student Success Center a portion of the curriculum to talk about StrengthsFinder/Strengths Quest and work with students on how using their strengths can improve course performance.

- (h) **ANSI/FDSC 4900: Special Problems.** Provides students with experiential learning in all phases of meat science: carcass data and value, fabrication and product utilization, and laboratory techniques. Students assist with general data collection and entry, meat animal harvest, carcass fabrication, product utilization and lab techniques used in various research projects.
- (i) **ANSI 1111: ANSI/FDSC Experience.** Co-taught ANSI 1111 for incoming freshmen to experience the department. Taught only one semester between instructors.
- (j) **FDSC 4243: Consumer Research Methods.** Co-taught and cross listed with AGECE 4243. Provides students with experiential learning in all aspects of consumer research from focus groups to consumer taste panels. Taught Fall 2017 to Fall 2021.

(2) *Other Courses Taught*

- ANSI 5110, General Seminar
- Guest lectures in:
  - Introduction to Animal Science (Fall 2005, 2006, 2007, 2008, 2009, 2010, 2011). Provided a two-hour opportunity for students to get a small snapshot of the field of meat science by discussing and having them participate on a consumer taste panel.
  - Capstone (Fall, 2007; 2009, 2010, 2014). Provided an hour lecture on understanding statistical measures which are commonly found in journal articles in the food and animal science areas of research; served as faculty evaluator of student individual presentations and group debates in two lectures and four lab sessions while the instructor was traveling abroad for invited talks.

(3) Instructional materials, textbook, laboratory manual, other publications.

- (a) Revised lectures and assignments for AG 1011
- (b) Developed all course and lecture materials for FDSC 2103. Converted FDSC 2103 to online offering during Spring 2017
- (c) Developed all course and lecture materials for FDSC 1133
- (d) Developed laboratory materials for ANSI 1124 lab on meat sensory attributes
- (e) Developed laboratory materials and continually update production statistics for ANSI/FDSC 2253 including a major course revision for the Fall, 2011
- (f) Developed course materials for ANSI/FDSC 5120/5393 Issues and ANSI/FDSC 5120/5553 Interpreting research courses

(4) Advising students: Graduate and Undergraduate.

- (a) Advised up to 108 undergraduate students per semester – currently advise 14 students
- (b) Served on graduate committees for three M.S. students and three Ph.D. students in other departments
- (c) Have served as Major Advisor (MA) or Committee Member (CM) for Graduate Students completing Degrees in Animal and Food Science:
  - Micca Sullivan, M.S. (MA), Spring 2007. Current Position: Research & Development, Simmons Prepared Foods
  - Jennifer Green, M.S. (MA), Spring 2008. Current Position: Research & Development, International Flavors and Fragrances
  - Claudia Cerruto Noya, M.S. (MA), Spring, 2008. Current Position: Cargill.
  - Dennis Price, Ph.D. (CM), Spring, 2008. Current Position: Consumer Research & Development, Red Lobster.
  - Sid Cunningham, M.S. (CM), Spring, 2008. Current Position: Research & Development, Nestle Food Group, A Division of Purina

- Teresa Brown, M.S. (CM), Spring, 2008. Last held position: Research & Development, Sigma Meats
- Scott Grumbles, M.S. (CM), Fall, 2008. Current Position: Product Specialist, Hudson Smokey Ridge Sausage
- Mindy Rose, M.S. (CM), Fall, 2008. Current Position: Quality Assurance, Tyson Foods.
- Ben Holland, Ph.D. (CM), Summer, 2009. Current Position: Merck Animal Health.
- Josh Shook, Ph.D. (MA), Fall, 2009. Current Position: Research & Development, Smithfield Foods
- Sydney Knobel, M.S. (MA), Fall, 2009. Current Position: Nestle Purina Pet Food.
- Lea Ann Kinman, Ph.D. (MA), Fall, 2009. Current Position: Tarleton State University.
- Kate Hargens, M.S. (MA), Fall, 2009. Last industry held position: ConAgra.
- Courtney Maloney, M.S. (CM), Fall, 2009.
- Andrea Garmyn, Ph.D. (CM), Fall, 2009. Current Position: Michigan State University.
- David Hayden, M.S. (CM), Fall, 2010. Current Position: Application Specialist, Wolf Tec Inc.
- Tanner Hopkins, M.S. (CM), Fall, 2010. Current Position: Quality Assurance, Booker Packing Company.
- David Ramos, M.S. (MA), Spring, 2011. Current Position: Research Scientist, National Beef Company.
- Kacie George, M.S. (MA), Spring, 2011. Current Position: Food Technologist, Marel Townsend.
- Jackie Eager, M.S. (MA), Spring, 2011. Current Position: Sales, Food Safety Net Services.
- Brent Wellings, M.S. (MA), Spring, 2011. Current Position: National Commercial Auctioneers.
- Amber Sharp, M.S. (MA), Fall, 2011.
- Lacey Vedral, M.S. (MA), Fall, 2011. Current Position: Food Technologist, Tyson.
- Mary Katherine Henderson, M.S. (MA), Fall, 2011. Current Position: Lead Meats Buyer for Campbells.
- Tricia Harlan, M.S. (CM), Fall, 2012. Current Position: Food Technologist, Tyson.
- Michael McCusker Kinna, M.S. (CM), Fall, 2012. Current Position: Livestock consultant.
- Blake Bloomberg, Ph.D. (CM), Summer, 2013. Current Position: Blackhawk College.
- KatieRose McCullough, M.S. (CM), Fall, 2013. Current Position: NAMI.
- Kassie Jo Winn, M.S. (CM), Spring, 2014. Current Position: CEV Multimedia.
- Renee Kinsey, M.S. (MA), Spring, 2014. Current Position: Curly's Foods
- Casey Maxwell, Ph.D. (CM), Spring, 2014. Current Position: Elanco Animal Health.
- Bailey Harsh, M.S. (MA), Fall, 2014. Current Position: Univ. of Illinois.
- Andrea English, M.S. (CM), Spring, 2015. Current Position: Cargill.
- Kass Pfeiffer, M.S. (CM), Fall, 2015. Current Position: Oklahoma Youth Expo.
- Morgan Neilson, M.S. (CM), Spring 2016. Current Position: Oklahoma State Univ.
- Anupam Abraham, M.S. (CM), Fall 2016.
- Kendra Wills, M.S. (CM), Spring 2017. Current: JD program at University of Oklahoma Law School.
- Blancefort Djisma, M.S. (CM), Spring 2017. Current position: Ph.D. program at Colorado State University.
- Chance Billups, M.S. (CM), Spring 2017. Current position: Food Technologist, Tyson Foods.
- Rachel Mitacek, M.S. (CM), Fall 2017. Current position: Ph.D. program at University of Minnesota.
- Ponpim Aparachita, M.S. (CM), Fall 2017.

(5) Honors/Scholar Development involvement.

- (a) Supervision of Research Scholars: completed (1)

- (b) Supervision of Honors Thesis (2)
- (c) Supervise Honors Contracts for Honors students various courses:

(6) Other Teaching Experience

(a) *University of Minnesota*

- Developed and co-taught VMED 8195: Pre-harvest Meat Quality and Food Safety
  - Lecture: 10 students; overall course rating: 5.6; overall instructor rating: 4.8 (scale of 1-7; 1=very poor; 7=exceptional)
- Co-taught Public Health Summer Institute: Global Beef Systems  
Developed instruction for 50 public health professionals on the beef industry from production to consumption, including an on-farm visit and tours of a packing plant, retail store and restaurant research and development center.
- Guest lectures in:
  - Food Animal Products for Consumers
  - Livestock Systems Management
  - Beef Production and Advanced Beef Production
  - Food Quality
  - Veterinary Feedlot Rotation (CVM 6796)
  - Veterinary Dairy Biosecurity Rotation (CVM 6818)
  - Veterinary Public Health Rotation (CVM 6500)
  - Animal Science Departmental Seminar
  - Food Science Departmental Seminar
  - CSU Integrated Resource Management (distance education lecture)

(b) *Colorado State University*

- Teaching Assistant: AN 100, Introductory Animal Science – 1998
- Teaching Assistant: AN 250, Live Animal and Carcass Evaluation – 1999
- Teaching Assistant: AN 560, Issues in the Meat Industry – 2000
- Teaching Assistant: AN 565, Interpreting Animal Science Research – 2000, 2001, 2002

**RESEARCH AND SCHOLARLY ACTIVITIES:**

My philosophy or goal for research is to develop a nationally recognized research program that provides valued scientific data to the academic community and valued information that can be applied in the meat industry to improve meat quality and safety with the use of pre- and post-harvest interventions. Specifically, my research goals have been to: 1) Identify pre-harvest factors that impact carcass quality and meat palatability, 2) identify post-harvest interventions that can counteract production practices that have detrimental effects on meat quality and palatability, and 3) train well rounded graduate students that are academically, scientifically and ethically sound minded with the ability to communicate with people in the meat industry and teach today's students.

(1) **OSU Extramural Research. Total Funded:**

**PI: \$1,666,382(31 grants); Co-PI: \$3,810,038 (38 grants) - Total: \$5,476,420 (69 grants)**

*Research Funded*

- (a) **D. L. VanOverbeke, (PI)**, G.G. Mafi, and R. Ramanathan. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2018-2019. \$15,000
- (b) R. Ramanathan, G. G. Mafi, **D. L. VanOverbeke (Co-PI)**, and R. Jadeja. Oklahoma Center for the Advancement of Science and Technology. Novel nitrite-embedded packaging to improve the color of dark-cutting beef. 2018-2020. \$ 90,000.
- (c) R. Ramanathan, A. Pezeshki, S. Carter, G. G. Mafi, D. Lalman, C. Richards, and **D. L. VanOverbeke (Co-PI)**. USDA/AFRI Competitive Grants Program. Seahorse XFp Oxygen



analyzer to enhance mitochondrial research capabilities in meat quality studies. 2018-2019. \$22,832. Equal matching funds from DASNR and Department.

- (d) Mafi, G.G., **D. L. VanOverbeke, (Co-PI)**, and R. Ramanathan. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2017-2018. \$15,000
- (e) **D.L. VanOverbeke (PI)** and G.G. Mafi. Beef Quality Assurance – Injection Site Lesion Audit. NCBA. 2017. \$50,000
- (f) Ramanathan, R., S.D. Hartson, G.G. Mafi, **D.L. VanOverbeke (Co-PI)**. Characterizing the biochemical mechanisms governing color of dark cutting beef. USDA-AFRI. Awarded in 2016. Grant timeline 1/1/17-12/31/18. \$149,980.
- (g) Mafi, G.G., **D. L. VanOverbeke, (Co-PI)**, and R. Ramanathan. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2016-2017. \$15,000
- (h) **D.L. VanOverbeke (PI)**, G.G. Mafi, K.E. Belk, J. Savell, D. Woerner, J. Martin, D. Hale, B. Delmore, and D. Pendell. National Cattlemen's Beef Association. National Beef Quality Audit, Phase I – Face to Face Interviews. 2015-2017. \$122,260 total funding; OSU portion \$58,730.
- (i) **D.L. VanOverbeke (PI for OSU)**, J.W. Savell, D.S. Hale, K.E. Belk, T. Lawrence, T. Schmidt, R. Maddock, D. Johnson, T.D. Pringle, D.B. Griffin, D. Woerner, J.D. Tatum, B. Delmore, J. Martin, G. Mafi, A. Stelzieni, and J. Gottlieb. National Cattlemen's Beef Association. National Beef Quality Audit, Phase II – Plant Audits. 2015-2017. \$238,000 total funding; OSU portion \$18,000.
- (j) G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan. National Beef Tenderness Survey. 2016. Subcontract from Texas A&M University. \$7,000.
- (k) R. Ramanathan, G.G. Mafi, **D. L. VanOverbeke (Co-PI)**, D. Jaroni. Enhancing the value of dark cutting beef. Oklahoma Applied Research Support, Oklahoma Center for the Advancement of Science and Technology. 2015-2016. \$90,000.
- (l) G.G. Mafi, **D.L. VanOverbeke (Co-PI)**, and R. Ramanathan. National Beef Tenderness Survey, NCBA – Subcontract from TAMU. 2015-2016. \$7,000.
- (m) G.G. Mafi, **D.L. VanOverbeke (Co-PI)**, and R. Ramanathan. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2015-2016. \$15,000
- (n) **D.L. VanOverbeke (PI)**, G.G. Mafi, and R. Ramanathan. National Beef. Retail stability of packaged red meat. 2015-2016. \$13,918
- (o) **D.L. VanOverbeke (PI)**, G.G. Mafi, and R. Ramanathan. Multisorb Technologies. 2015-2019. \$389,435.
- (p) R. Ramanathan, **D.L. VanOverbeke (Co-PI)**, G.G. Mafi. Persistent pinking in cooked Italian sausage, Standard Meat Company, Dallas, TX. 2015. \$500.
- (q) R. Ramanathan, G.G. Mafi, **D.L. VanOverbeke (Co-PI)**. Proteomics analysis on chicken breast myopathies. University of Arkansas, Department of Poultry Science. 2015. \$1350.
- (r) R. Ramanathan, G.G. Mafi, **D.L. VanOverbeke (Co-PI)**. Investigating the potential of probiotic metabolites to improve meat quality. University of Minnesota, Department of Animal Science. 2015. \$2000.

- (s) R. Ramanathan, G.G. Mafi, **D.L. VanOverbeke (Co-PI)**. Effects of water- and oil-soluble rosemary on ground beef color. Kalsec, Kalamazoo, MI. 2015. \$495.
- (t) **D.L. VanOverbeke (PI)**, G.G. Mafi and R. Ramanathan. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2014-2015. \$15,000
- (u) **D.L. VanOverbeke (PI)**, and G.G. Mafi. USDA-ARS. Influence of Frame Score and Finishing System on Carcass and Meat Quality. 2014-2019. \$30,000.
- (v) **D.L. VanOverbeke (PI)**, and G.G. Mafi. Multisorb Technologies. 2014-2015. \$65,820
- (w) M. Rolf, C. Krehbiel, **D. VanOverbeke**, C. Richards, D.L. Step, M. Calvo Lorenzo, S. Place, U. DeSilva, R. Mateescu, Sutherland. USDA. Beef cattle selection and management for adaptation to drought. 2014-2019. \$999,999.
- (x) G.G. Mafi and **D.L. VanOverbeke**. Consumer evaluation of beef fed traditionally, naturally and supplemented with Zilmax. Merck Corporation. 2013. \$4,935 + in-kind and Merck sponsorship (\$28,000 total).
- (y) G.G. Mafi and **D.L. VanOverbeke**. Dimensional changes of strips loins from cattle fed traditionally, naturally, or supplemented with Zilmax. Merck Corporation. 2013. \$4,500.
- (z) **D.L. VanOverbeke (PI)** and G. Mafi. National Beef. Comparison of 5 processing options on the sensory characteristics of beef corned beef. 2013-2014. \$25,200.
- (aa) **D. VanOverbeke (PI)**, G. Mafi and R. Ramanathan. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2013-2014. \$15,000
- (bb) **D.L. VanOverbeke (PI)**, G.G. Mafi, R. Ramanathan, C. Krehbiel, R. Mateescu, and C. Gifford. USDA-NIFA-AFRI Foundation. Instron 5943 Dual Column Tabletop Model Testing System. 2013-2014. \$17,300.
- (cc) **D.L. VanOverbeke (PI)**, G.G. Mafi, and D. Jaroni. Multisorb Technologies. 2013-2014. \$65,820.
- (dd) Jaroni, D., C. Gifford, **D. VanOverbeke**, M. Calvo-Lorenzo, and C. Richards. USDA-NIFA-AFRI Foundation. Bax-Q7-System to increase efficiency and accuracy of microbial detection in environmental and food matrices. 2013-2014. \$27,500.
- (ee) **D.L. VanOverbeke (PI)**, G.G. Mafi, and D. Jaroni. Multisorb Technologies. 2012-2013. \$57,600.
- (ff) **D. VanOverbeke (PI)** and G. Mafi. National Beef. To investigate the effects of sodium metasilicate on the organoleptic properties of ground beef. 2012. \$5,490.
- (gg) **D. VanOverbeke (PI)** and G. Mafi. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2012-2013. \$15,000
- (hh) **D. VanOverbeke (PI)** and G. Mafi. DuPont/Danisco. Testing of sodium metasilicate and its ability to buffer. 2012. \$6,720.
- (ii) **D. VanOverbeke (PI)** and G. Hilton. Oklahoma Beef Council/National Cattlemen's Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2011-2012. \$15,000.
- (jj) **D.L. VanOverbeke (PI)** and G.G. Hilton. Multisorb Technologies. 2011-2012. \$48,000.

- (kk) **D. VanOverbeke (PI)**, G. Hilton, and B. Morgan in conjunction with Colorado State University and Texas A&M University. National Cattlemen’s Beef Association. National Beef Quality Audit – 2011, Phase I: Face to Face Interviews. \$105,250; Oklahoma State Subcontract: 2010-2012. \$44,000.
- (ll) **D.L. VanOverbeke (PI)**, G.G. Hilton, and J.B. Morgan in conjunction with Texas A&M University. National Cattlemen’s Beef Association. National Beef Quality Audit – 2011, Phase II: In-Plant Audits. \$105,250; Oklahoma State Subcontract: 2010-2012, \$18,000.
- (mm) **D. VanOverbeke (PI)**, G. Hilton, and B. Morgan. Oklahoma Beef Council/National Cattlemen’s Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2010-2011. \$15,000.
- (nn) C.M. DeWitt, **D.L. VanOverbeke**, G.G. Hilton, P. Muriana, W. McGlynn, and P. Cuesta-Alonso. USDA/CREES. Special Research Grants Program: Food Safety: Farm to Table. 2010-2012. \$250,000.
- (oo) **D. VanOverbeke (PI)**, G. Hilton, and B. Morgan. Oklahoma Beef Council/National Cattlemen’s Beef Association. Impact of retail tray color on retail case life and consumer acceptability. 2009-2010. \$28,910.
- (pp) B. Morgan, G. Hilton, **D. VanOverbeke**, J. Nelson, K. Smith, and P. Clayton. Oklahoma Beef Council/National Cattlemen’s Beef Association/U.S. Meat Export Federation. Creating dry-aged traditional and beef value cut programs for domestic and international markets. 2009-2010. \$42,500.
- (qq) G. Hilton, **D. VanOverbeke**, B. Morgan and J. Nelson. Oklahoma Beef Council/National Cattlemen’s Beef Association. Oklahoma Beef Quality Summit and other education programs graduate research assistantship. 2009-2010. \$15,000.
- (rr) **D. VanOverbeke (PI)**, G. Hilton, and B. Morgan. Oklahoma Beef Council/National Cattlemen’s Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 2009-2010. \$15,000.
- (ss) C.M. DeWitt, **D.L. VanOverbeke**, G.G. Hilton, W. McGlynn, and P. Cuesta-Alonso. USDA/CREES. Special Research Grants Program: Food Safety: Farm to Table. 2008-2010. \$356,134.
- (tt) B. Morgan, G. Hilton, **D. VanOverbeke**, and J. Nelson. Oklahoma Beef Council/National Cattlemen’s Beef Association. Improving tenderness consistency of “tough” beef items using the proven successful “suspentec” system. 10/1/08-5/31/09. \$50,000.
- (uu) B. Morgan, G. Hilton, J. Nelson, and **D. VanOverbeke**. Oklahoma Beef Council/National Cattlemen’s Beef Association. Oklahoma Beef Quality Summit and other education programs graduate research assistantship. 10/1/08-9/30/09. \$15,000.
- (vv) B. Morgan, **D. VanOverbeke**, and G. Hilton. Oklahoma Beef Council/National Cattlemen’s Beef Association. Oklahoma State University – Meat Science graduate student research assistantship. 10/1/08-9/30/09. \$15,000.
- (ww) **D.L. VanOverbeke (PI)**, G.G. Hilton and J.B. Morgan. National Cattlemen’s Beef Association. The impact of post-harvest interventions on the color stability, and subsequently, the palatability, of beef from cattle fed wet or dry distillers grains. 1/1/08-5/31/09. \$72,500.
- (xx) C.R. Krehbiel and **D.L. VanOverbeke**. Zinpro Corporation. Evaluating effects of Zinpro Performance Minerals on performance and carcass characteristics of steers fed finishing diets designed for natural beef production. 9/1/07-6/30/09. \$53,095.

- (yy) J.B. Morgan, **D.L. VanOverbeke**, and G.G. Hilton. Oklahoma Beef Council/National Cattlemen's Beef Association. Using a real-time, modern, non-invasive technology to identify "tough" beef so improvements can be made to create a 100% customer satisfaction beef program – Phase I and II. 10/1/08-9/30/09. \$125,000.
- (zz) **D.L. VanOverbeke (PI)**, G.G. Hilton and N. Litherland. California Beef Council. Determination of the age and cause of the bottom round blemish identified in dairy steer rounds. 6/1/08-9/30/09. \$12,644.
- (aaa) R. Mateescu and **D.L. VanOverbeke**. Iowa State University. Utilization of natural genomic variation to enhance nutritional and health values of beef. 3/27/08-12/31/09. \$129,500.
- (bbb) J.B. Morgan, **D.L. VanOverbeke**, G.G. Hilton, B. Kropp, K. Brock, and B. Crutcher. Oklahoma Beef Council. 2008 Meat Animal Evaluation Contest. 10/1/07-9/30/08. \$5,000.
- (ccc) **D.L. VanOverbeke (PI)**, G.G. Hilton, and J.B. Morgan. Oklahoma Beef Council. 2008 Meat Science Graduate Student Research Assistantship. 10/1/07-9/30/08. \$15,000.
- (ddd) G.G. Hilton, **D.L. VanOverbeke**, J.B. Morgan, and J. Nelson. Oklahoma Beef Council. 2008 Beef Quality Summit Graduate Student Research Assistantship. 10/1/07-9/30/08. \$15,000.
- (eee) C.A. Mireless DeWitt and **D.L. VanOverbeke**. Oklahoma Beef Council/National Cattlemen's Beef Association. Comparing ammonia-based Select striploin subprimal enhancement to a traditional phosphate injection brine. 10/1/07-9/30/08. \$10,000.
- (fff) G.G. Hilton, **D.L. VanOverbeke**, and J.B. Morgan. Intervet Corporation. Effects of feeding cattle Zilmax® on carcass characteristics, palatability, and shelf life. 11/15/06-6/30/2011. \$723,000.
- (ggg) **D.L. VanOverbeke (PI)**, C. Richards, C.R. Krehbiel, and B. Hicks. Texas Cattle Feeders Association. Effects of feeding wet and dry distillers grains to yearling steers consuming steam flaked corn diets in the panhandle of Oklahoma: Performance and beef quality. 9/4/07-3/31/09. \$9,750.
- (hhh) **D.L. VanOverbeke (PI)**, G.G. Hilton, and J.B. Morgan. Oklahoma Beef Council/National Cattlemen's Beef Association. Comparison of tenderness, palatability and retail caselife of enhanced cow subprimals to control cow and USDA Select subprimals. 10/1/07-9/30/08. \$50,000.
- (iii) J.B. Morgan, G.G. Hilton, and **D.L. VanOverbeke**. Oklahoma Beef Council/National Cattlemen's Beef Association. Augmentation of the OSU Near-Infrared (NIR) and in-plant beef video image analysis systems to sort carcasses into tenderness categories. 10/1/06-5/31/08. \$60,000.
- (jjj) J.B. Morgan, **D.L. VanOverbeke**, G.G. Hilton, B. Kropp, K. Brock, and B. Crutcher. Oklahoma Beef Council. 2007 Meat Animal Evaluation Contest. 10/1/06-9/30/07. \$5,000.
- (kkk) J.B. Morgan, **D.L. VanOverbeke**, and G.G. Hilton. Oklahoma Beef Council. 2007 Meat Science Graduate Student Research Assistantship. 10/1/06-9/30/07. \$15,000.
- (lll) J.B. Morgan, **D.L. VanOverbeke**, J. Nelson, and G.G. Hilton. Oklahoma Beef Council. 2007 Beef Quality Summit Graduate Student Research Assistantship. 10/1/06-9/30/07. \$15,000.

- (mmm) C. Richards, C.R. Krehbiel, **D.L. VanOverbeke**, and D. Lalman. USDA/Federal Crop Insurance Agency. Rumen Temperature Bolus Validation. Pending contract 10/1/07-9/30/08. \$31,999.
- (nnn) Richards, C., **D. VanOverbeke**, D. Lalman, C. Krehbiel. OCAST. Cattle health monitoring system validation. 10/2006 – 10/2010. \$99,750.
- (ooo) **D.L. VanOverbeke (PI)**, J.B. Morgan, C.R. Krehbiel, and D. Lalman. Oklahoma Beef Council/National Cattlemen’s Beef Assn. Comparison of the biobullet versus traditional injection techniques on tissue damage and tenderness in beef subprimals. 11/1/05-12/31/06. \$41,500.
- (ppp) J.B. Morgan and **D.L. VanOverbeke**. Oklahoma Beef Council/National Cattlemen’s Beef Assn. Can lean beef color originating from dark-cutting carcasses be improved by “super-saturation” oxygen packaging? 10/1/05-9/30/06. \$27,600.
- (qqq) **D.L. VanOverbeke (PI)** and J.B. Morgan. Oklahoma Beef Council. 2006 OSU Meat Science Graduate Research Assistant. 10/1/05-9/30/06. \$15,000.

**(2) OAES Internal Proposals & Other OSU Internal Funding:**

**PI: \$329,277 (8 grants); Co-PI: \$299,361 (10 grants) – Total: \$628,638 (18 grants)**

*Research Funded*

- (a) Oklahoma Agriculture Experiment Station A multi-year evaluation of meat quality parameters of beef from grain and grass finished cattle. 2015-2020 Hatch Project. Principal Investigator.
- (b) Oklahoma Agriculture Experiment Station Evaluation of Pre- and Post- Harvest Quality and Safety Attributes in the Beef and Pork Industries. 2010-2015 Hatch Project. Principal Investigator.
- (c) R. Ramanathan, G. G. Mafi, and **D. L. VanOverbeke**. 2016. Mass Profiler Metabolomics software to enhance metabolomics data analysis capabilities. Funds for purchasing this equipment, in part, was provided by Drs. Owens and Rusk. Total internal support: \$10,654.00.
- (d) **D.L. VanOverbeke (PI)**. University Assessment and Testing. Annual Assessment Request. 2015-2016. \$10,100.
- (e) **D.L. VanOverbeke (PI)**, R. Ramanathan, and G.G. Mafi. Foss: Food Scan. Department of Animal Science, Robert M. Kerr Food and Agricultural Products Center, Oklahoma Agricultural Experiment Station, and OSU Research Office. 2014. \$80,000.
- (f) **D.L. VanOverbeke (PI)**. University Assessment and Testing. Annual Assessment Request. 2014-2015. \$9,476.
- (g) R. Ramanathan and **D.L. VanOverbeke**. OSU ITLE Grants. Use of high and low technology to enhance student responses in introductory Food Science class. 2013-2014. \$1500.
- (h) **D.L. VanOverbeke (PI)**. University Assessment and Testing. Annual Assessment Request. 2013-2014. \$10,126.
- (i) **D.L. VanOverbeke (PI)**. University Assessment and Testing. Annual Assessment Request. 2012-2013. \$7,592.

- (j) G.G. Hilton, **D.L. VanOverbeke**, B. Morgan, C. DeWitt and D. Scott. OSU Facility Renovation Support Program. Technology enhancement of the sensory panel evaluation room. 2010, 2 years. \$28,999.
- (k) **D.L. VanOverbeke (PI)**, G.G. Hilton, J. Nelson and C. DeWitt. Oklahoma State University, Office of the Vice President for Research. Enhancement of the facilities used for meat color stability evaluation—facility renovation. 2008. 1 year \$65,000.
- (l) **D.L. VanOverbeke (PI)**, C. Richards, B. Hicks, G.G. Hilton, and C.R. Krehbiel. Team Initiative Program. Methods to counteract the economically critical anti-quality meat characteristics imposed when feeding wet distillers grains to finishing cattle. 2008, 1 year. \$79,083.
- (m) G.G. Hilton, S. Cooper, **D.L. VanOverbeke**, and J. Fitch. Oklahoma State University – Student Technology Fee, Ultrasound and Software. 2008. \$22,600
- (n) G.G. Hilton and **D.L. VanOverbeke**. Oklahoma State University – Student Technology Fee, Colorimeter. 2008. \$6,600.
- (o) C. Richards, C. Krehbiel, **D.L. VanOverbeke**, B. Hicks. Team Initiative Program. Use of distiller’s grains in flaked corn diets for finishing cattle. 2007-2008. \$71,108. (Resulted in publications 5.b.2, 5.b.4, 5.d.1, 5.d.4, 5.d.7, 5.d.12)
- (p) C. Krehbiel, U. DeSilva, J. Dillwith, D.L. Step, and **D.L. VanOverbeke**. Team Initiative Program. Metabolic and genomic biomarkers of animal performance in cattle with a history of bovine respiratory disease. 2007. \$22,000. (Resulted in publication 5.b.5)
- (q) **D.L. VanOverbeke (PI)** and C. DeWitt. Centennial Scholars Program: Meat Science. (\$20,000/year for 3 years/2006-2008) \$60,000.
- (r) **D.L. VanOverbeke (PI)** and C. DeWitt. Sitlington Scholar Program: Meat Science. (\$6,000/year for 3 years/2006-2008) \$18,000.
- (s) D. Lalman, G. Horn, C. Richards, D. Doyle, **D. VanOverbeke**, B. Wettemann, C. Krehbiel. Centennial Scholars Program: Beef Production Systems. 2006-2008. \$60,000.
- (t) C. Krehbiel, U. DeSilva, C. Richards, **D. Roeber**, D.L. Step. Team Initiative Program. Bovine Respiratory Disease: Effects on Feedlot Performance, Carcass Characteristics, Meat Quality, and Gene Expression. 2006-2008. \$55,900.
- (u) Bowser, T., R. Holcomb, **D. Roeber**, and C. DeWitt. Team Initiative Program. Food Processing, Fats, Oils, and Grease. 2006-2008. \$20,000.

### (3) Previous Funded Research

#### UNIVERSITY OF MINNESOTA: TOTAL: \$ 133,417

- Education and outreach for the National Animal Identification System premise identification project, Minnesota Board of Animal Health and the Minnesota Department of Agriculture, \$20,000 (PI)
- Impact of feeding distillers grains on sensory traits and color stability of beef, University of Minnesota Graduate School Grant-in-Aid Program, \$26,040 (PI)
- Evaluation of the TrimVac system for spinal cord removal, Bettcher Industries, \$5,796 (PI)
- Tenderness evaluation of steaks intended for restaurant trade, Schumacher Meats, \$136 (PI)
- Sheep Safety and Quality Assurance, Colorado State University and National Sheep Industry Improvement Center, \$12,000 (PI)

- Evaluation of strategies to remove specified risk materials, especially dorsal root ganglia, from spinal columns in order to salvage the value of market cow and bull muscle cuts, Minnesota Beef Council, \$24,250 (PI)
- Feeding distillers dried grains, Iowa Corn and Promotion Board, \$25,628 (PI)
- Carcass merit program tenderness evaluation, Elanco Animal Health, \$3,500 (PI)
- University of Minnesota Beef Team educational IRM webcast, National Cattlemen's Beef Association, \$1,500 (PI)
- IRM webcast programming series, Pfizer Animal Health, \$750 (PI)
- Technology enhanced quality assurance educational delivery evaluation, National Cattlemen's Beef Association, \$8,000 (PI)
- Development of a beef carcass quality 101 producer educational workshops, National Cattlemen's Beef Association, \$4,900 (PI)
- Evaluation of chronic muscle tissue damage in rounds of dairy steers, Sun Land Beef Company, \$917 (PI)

**COLORADO STATE UNIVERSITY: TOTAL: \$ 155,220**

- Determination of the impact of alpha-tocopheryl acetate supplementation on reducing the discoloration of injection-site lesions, Roche Vitamins, Inc., \$9,840 (Co-PI)
- Effects of three levels of alpha-tocopheryl acetate supplementation levels to feedlot cattle on performance of beef cuts during retail display, Roche Vitamins, Inc., \$32,500 (Co-PI)
- Sheep quality assurance program review and development, American Sheep Industry Association, \$105,880 (Co-PI)
- Elanco Beef University, Elanco Animal Health, \$7,000 (Co-PI)

**(4) Publications**

(a) Books and Book Chapters:

1. Ramanathan, R., G.G. Mafi, L. Yoder, M. Perry, M. Pfeiffer, **D.L. VanOverbeke**, and N.B. Maheswarappa. 2019. Chapter 5: Biochemical changes of postmortem meat during the aging process and strategies to improve meat quality. Pages 67-80 in Meat quality analysis: advanced evaluation methods, techniques, and technologies.
2. **VanOverbeke, D.L.** and J.A. Ahola. 2013. Farm Level: Beef Quality In: Carrick Devine and Michael Dikeman, editors-in-chief. Encyclopedia of Meat Science 2e, Vol. 3, Oxford: Elsevier; pp 173-177.
3. **VanOverbeke, D.L. (ed.)**. 2007. *Handbook of Beef Safety and Quality*. Haworth Press, Binghamton, NY. Hard Cover ISBN: 978-1-56022-323-8; Soft Cover ISBN: 978-1-56022-324-5.
4. Field, T.G., and **D.L. VanOverbeke**. 2007. Chapter 4. The Quality Revolution. Pages 85-100 in Handbook of Beef Safety and Quality.

(b) Referred Journal. (29 First, Second or Corresponding Author; 88 Total). Corresponding (primary) author is denoted with an \*. Articles where the lead author is a graduate student under my supervision ±.

1. Denzer, M.L., G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2022. *Effects of glucono delta-lactone enhancement and nitrite embedded packaging on fresh color, cooked color, and sensory attributes of dark-cutting beef*. Appl. Food Res. <https://doi.org/10.1016/j.afres.2022.100189>.
2. Kiyimba, F., S.D. Hartson, J. Rogers, **D.L. VanOverbeke**, G.G. Mafi, and R. Ramanathan. 2022. *Dark cutting beef mitochondrial proteomic signatures reveal increased biogenesis proteins and bioenergetics capabilities*. J. Proteomics. <https://doi.org/10.1016/j.jprot.2022.104637>.
3. Kiyimba, F., S.D. Hartson, J. Rogers, **D.L. VanOverbeke**, G.G. Mafi, and R. Ramanathan. 2021. *Changes in glycolytic and mitochondrial protein profiles regulates postmortem muscle acidification and oxygen consumption in dark-cutting beef*. J. JProt. <https://doi.org/10.1016/j.jprot.2020.104016>.

4. Mitacek, R.M., Y. Ke, J.E. Prenni, R. Jadeja, **D.L. VanOverbeke**, G.G. Mafi, and R. Ramanathan. 2019. *Mitochondrial degeneration, depletion of NADH, and oxidative stress decrease color stability of wet-aged beef longissimus steaks*. J. Food Sci. 84(1):38-50.
5. \*Pfeiffer, M.M., G.G. Mafi, R. Ramanathan, T.M. Neilson, and **D.L. VanOverbeke**. 2018. *Frequencies and severity of injection-site lesions in muscles from rounds of cow carcasses*. Transl. Anim. Sci. <https://doi.org/10.1093/tas/txy094>.
6. Ramanathan, R. R. M. Mitacek, S. D. Billups, R. Jadeja, M. M. Pfeiffer, **G. G. Mafi**, and D. L. VanOverbeke. 2018. *Novel nitrite-embedded packaging improves surface redness of dark-cutting longissimus steaks*. Translational Anim. Sci. 2(2):135-143.
7. Mitacek, R.M., A. R. English, G. G. Mafi, **D. L. VanOverbeke**, R. Ramanathan. 2018. *Modified atmospheric packaging improves the surface color of dark-cutting beef*. Meat and Muscle Bio. 2:57-63.
8. Ahlberg, C.M., K. Allwardt, A. Broocks, K. Bruno, L. McPhillips, A. Taylor, C.R. Krehbiel, M.S. Calvo-Lorenzo, S.E. Place, U. DeSilva, **D.L. VanOverbeke**, R.G. Mateescu, L.A. Kuehn, R.L. Weaver, J.M. Bormann, and M.M. Rolf. 2018. *Environmental effects on water intake and water intake prediction in growing beef cattle*. J. Anim. Sci. Aug. 29 doi: 10./1093/jas/sky267.
9. Ahlberg, C.M., K. Allwardt, A. Broocks, K. Bruno, L. McPhillips, A. Taylor, C.R. Krehbiel, M.S. Calvo-Lorenzo, S.E. Place, U. DeSilva, **D.L. VanOverbeke**, R.G. Mateescu, L.A. Kuehn, R.L. Weaver, J.M. Bormann, and M.M. Rolf. 2018. *Test duration for water intake, ADG, and DMI in beef cattle*. J. Anim. Sci. 96(8):3043-3054.
10. Ramanathan, R., R.M. Mitacek, S.D. Billuips, R. Jadeja, M.M. Pfeiffer, G.G. Mafi, and **D.L. VanOverbeke**. 2018. *Novel nitrite-embedded packaging improves surface redness of dark-cutting longissimus steaks*. Transl. Anim. Sci. 2:135-143.
11. Harris, M. K., 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, T. B. Schmidt, R. J. Maddock, D. D. Johnson, C. C. Carr, J. M. Scheffler, T. D. Pringle, and A. M. Stelzleni. 2018. *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*. Translational Anim. Sci. 2(1):37-49.
12. Harris, M. K., 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, T. B. Schmidt, R. J. Maddock, D. D. Johnson, C. C. Carr, J. M. Scheffler, T. D. Pringle, and A. M. Stelzleni. 2017. *National Beef Quality Audit – 2016: Transportation, mobility, live cattle, and carcass assessments of targeted producer-related characteristics that affect value of market cows and bulls, their carcasses, and associated by-products*. Translational Anim. Sci. 1(4):570-584.
13. Ke, Y., R.M Mitacek, A. Abraham, G.G. Mafi, **D.L. VanOverbeke**, U. DeSilva, and R. Ramanathan. 2017. *Effects of muscle-specific oxidative stress on Cytochrome c release and oxidation reduction potential properties*. J. Agric. Food Chem. 65(35):7749-7755
14. Depue, S.M., M.M. Neilson, J.L. Lusk, G. Mafi, F.B. Norwood, R. Ramanathan, and **D.L. VanOverbeke**. 2017. *Preference evaluation of ground beef by untrained subjects with three levels of finely textured beef*. PLOS One. doi.org/10.1371/journal.pone.0190680.
15. Wills, K.M., R.M. Mitacek, G.G. Mafi, **D.L. VanOverbeke**, D. Jaroni, R. Jadeja, R. Ramanathan. 2017. *Improving the lean muscle color of dark-cutting beef by aging, antioxidant-enhancement, and modified atmospheric packaging*. J. Animal Sci. 95(12):5378-5387.
16. Boykin, C.A., L.C. Eastwood, M.K. Harris, D.S. Hale, C.R. Kerth, D.B. Griffin, A.N. Arnold, J.D. Hasty, K.E. Belk, D.R. Woerner, R.J. Delmore, J.N. Martin, **D.L. VanOverbeke**, G. . Mafi, M. M.



- Pfeiffer, T.E. Lawrence, T.J. McEvers, T.B. Schmidt, R.J. Maddock, D.D. Johnson, C.C. Carr, J.M. Scheffler, T.D. Pringle, A.M. Stelzleni, J. Gottlieb and J.W. Savell. 2017. *National Beef Quality Audit–2016: In-plant survey of carcass characteristics related to quality, quantity, and value of fed steers and heifers*. J. Anim. Sci. 95:7:2993-3002. doi:10.2527/jas2017.1543.
17. Boykin, C.A., L.C. Eastwood, M.K. Harris, D.S. Hale, C.R. Kerth, D.B. Griffin, A.N. Arnold, J.D. Hasty, K.E. Belk, D.R. Woerner, R.J. Delmore, J.N. Martin, **D.L. VanOverbeke**, G.G. Mafi, M.M. Pfeiffer, T.E. Lawrence, T.J. McEvers, T.B. Schmidt, R.J. Maddock, D.D. Johnson, C.C. Carr, J.M. Scheffler, T.D. Pringle, A.M. Stelzleni, J. Gottlieb and J.W. Savell. 2017. *National Beef Quality Audit – 2016: Survey of carcass characteristics through instrument grading assessments*. J. Anim. Sci. 95:7:3003-3011 doi:10.2527/jas2017.1544.
  18. Hasty, J.D., M.M. Pfeifer, L.C. Eastwood, D.A. Gredell, C.L. Gifford, J.R. Levey, C.M. Cashman, D.R. Woerner, J.N. Martin, R.J. Delmore, W.B. Griffin, **D.L. VanOverbeke**, G.G. Mafi, C.A. Boykin, D.S. Hale, C.R. Kerth, D.B. Griffin, A.N. Arnold, J.W. Savell, D.L. Pendell and K.E. Belk. 2017. *National Beef Quality Audit-2016: Phase I, Face-to-face interviews*. Translational Animal Science. 1:320-332.
  19. Eastwood, L.C., C.A. Boykin, M.K. Harris, A.N. Arnold, 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, T.B. Schmidt, R.J. Maddock, D.D. Johnson, C.C. Carr, J.M. Scheffler, T.D. Pringle and A.M. Stelzleni. 2017. *National Beef Quality Audit-2016: Transportation, mobility, and harvest-floor assessments of targeted characteristics that affect quality and value of cattle, carcasses, and by-products*. Translational Animal Science. 1:229-238.
  20. Y. Ke, R.M. Mitacek, A. Abraham, G.G. Mafi, **D.L. VanOverbeke**, U. DeSilva, R. Ramanathan. 2017. *Effects of muscle-specific oxidative stress on cytochrome c release and oxidation-reduction potential properties*. J. Ag. Food Chem. 65:7749-7755.
  21. B. A. Djimsa, A. Abraham, G. Mafi, **D. VanOverbeke**, and R. Ramanathan. 2017. *Effects of metmyoglobin reducing activity and thermal stability of NADH-dependent reductase and lactate dehydrogenase on premature browning in ground beef*. J. Food Sci. 82: 304-313.
  22. Martinez, H.A., A.N. Arnold, J.C. Brooks, C.C. Carr, K.B. Gehring, D.B. Griffin, D.S. Hale, G.G. Mafi, D.D. Johnson, C.L. Lorenzen, R.J. Maddock, R.K. Miller, **D.L. VanOverbeke**, B.E. Wasser and J.W. Savell. 2017. *National Beef Tenderness Survey–2015: Palatability and Shear Force Assessments of Retail and Foodservice Beef*. Meat and Muscle Biology. 1:138-148.
  23. Abraham, A., J.W. Dillwith, G.G. Mafi, **D.L. VanOverbeke** and R. Ramanathan. 2017. *Metabolite profile differences between beef longissimus and psoas muscles during display*. Meat and Muscle Biology. 1:18-27.
  24. Nerimetla, R., S. Krishnan, S. Mazumder, S. Mohanty, G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan. 2017. *Species-specificity in myoglobin oxygenation and reduction potential properties*. Meat and Muscle Biology. 1:1-7.
  25. Djimsa, B.A., A. Abraham, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2017. *Effects of metmyoglobin reducing activity and thermal stability of NADH-dependent reductase and lactate dehydrogenase on premature browning in ground beef*. J. Food Sci. 82:2:304-313.
  26. Mateescu, R.G., P.A. Oletnacu, A.J. Garmyn, G.G. Mafi, and **D.L. VanOverbeke**. 2016. *Strategies to predict and improve eating quality of cooked beef using carcass and meat composition traits in Angus cattle*. J. Anim. Sci. 94:2160:2171.
  27. English, A.R., **D.L. VanOverbeke**, G.G. Mafi, and R. Ramanathan. 2016. *Effects of aging on the fundamental color chemistry of dark-cutting beef*. J. Anim. Sci. 94:4040-4048.

28. English, A.R., G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2016. *Effects of extended aging and modified atmospheric packaging on beef top loin steak color*. J. Anim. Sci. 94:1727-1737.
29. Maxwell, C.L. C.R. Krehbiel, B.K. Wilson, B.T. Johnson, B.C. Bernhard, C.F. O'Neill, K.J. Winn, K.R. McCullough, T.A. Harlan, M.M. Kinna, B.D. Bloomberg, C.J. Richards, G.G. Mafi, D.L. Step, S. Lei, D.C. Beitz, S.L. Hansen, and **D.L. VanOverbeke\***. 2015. *Effects of beef production systems on retail meat attributes*. J. Anim. Sci. Submitted and revisions received.
30. Elroy, N.N., J. Rogers, G.G. Mafi, **D. L. VanOverbeke**, S.D. Hartson, and R. Ramanathan. 2015. *Species-specific effects on non-enzymatic metmyoglobin reduction*. Meat Sci. 105:108-113.
31. Maxwell, C.L. B.K. Wilson, B.T. Johnson, B.C. Bernhard, C.F. O'Neill, **D.L. VanOverbeke**, G.G. Mafi, C.J. Richards, D.L. Step, and C.R. Krehbiel. 2014. *Effects of beef production system on animal performance and carcass characteristics*. J. Anim. Sci. 92:5727-5738.
32. Mateescu, R.G., D.J. Garrick, A.J. Garmyn, **D.L. VanOverbeke**, G.G. Mafi, and J.M. Reecy. 2014. *Genetic parameters for sensory traits in longissimus muscle and their association with tenderness, marbling score, and intramuscular fat in Angus cattle*. J. Anim. Sci. (published online November 20, 2014 *J ANIM SCI* doi 10.2527/jas.2014-8405).
33. Howard, S.T., D.R. Woerner, J.A. Scanga, **D.L. VanOverbeke**, G.G. Mafi, J.L. Igo, M.D. Salman, J.D. Tatum, and K.E. Belk. 2013. *North American Beef Tenderness Survey 2011-2012: Benchmarking tenderness and sample shipping procedures*. J. Anim. Sci. 91(12):5981-5988.
34. Mateescu, R.G., D.J. Garrick, R.G. Tait Jr., A.J. Garmyn, Q. Duan, Q. Liu, M.S. Mayes, A.L. Van Eenennaam, **D.L. VanOverbeke**, G.G. Hilton, D.C. Beitz, and J.M. Reecy. 2013. *Genome wide association study of concentration of iron and other minerals in longissimus muscle of Angus cattle*. J. Anim. Sci. 91(8):3593-3600.
35. Bloomberg, B.D., G.G. Hilton, B.J. Pye, J.L. Wahrmund, C.J. Richards, and **D.L. VanOverbeke\***. 2013. *Impact of health management, health treatments, and zilpaterol hydrochloride supplementation on carcass quality, color and palatability traits*. J. Anim. Sci. 91(7):3465-3473.
36. Igo, J.L., **D.L. VanOverbeke**, D.R. Woerner, J.D. Tatum, D.L. Pendell, L.L. Vedral, G.G. Mafi, M.C. Moore, R.O. McKeith, G.D. Gray, D.B. Griffin, D.S. Hale, J.W. Savell and K.E. Belk. 2013. *Phase I of the National Beef Quality Audit – 2011: Willingness-to-pay, best worst scaling, and current status of quality characteristics in the beef industry as reported by market sector*. J. Anim. Sci. 91(4):1907-1919.
37. Mateescu, R.G., A.J. Garmyn, R.G. Tait Jr., Q. Duan, Q. Liu, M.S. Mayes, D.J. Garrick, A.L. Van Eenennaam, **D.L. VanOverbeke**, G.G. Hilton, D.C. Beitz, and J.M. Reecy. 2013. *Genetic parameters for concentrations of minerals in longissimus muscle and their associations with palatability traits in Angus cattle*. J. Anim. Sci. 91(3):1067-1075.
38. \*Knobel, S., G.G. Hilton, J.B. Morgan, and **D.L. VanOverbeke\***. 2013. *The impact of post-harvest interventions on the color stability, and subsequently, the palatability, of beef from cattle fed wet distillers grains*. J. Anim. Sci. 91(3):1468-1479.
39. Guelker, M.R., A.N. Haneklaus, J.C. Brooks, R.J. Delmore, D.B. Griffin, D.S. Hale, K.B. Harris, D.D. Johnson, C.L. Lorenzen, R.J. Maddock, R.K. Miller, G.G. Hilton, L. Vedral, **D.L. VanOverbeke**, K.L. Nicholson, C.R. Raines, B.E. Wasser, and J.W. Savell. 2013. *National Beef Tenderness Survey – 2010: Warner-Bratzler shear-force values and sensory-panel ratings for beef from US retail and foodservice establishments*. 91(2):1005-1014.
40. Buchanan, J.W., A.J. Garmyn, G.G. Hilton, **D.L. VanOverbeke**, Q. Duan, D.C. Beitz and R.G. Mateescu. 2013. *Comparison of gene expression and fatty acid profiles in concentrate and forage finished beef*. J. Anim. Sci. 91(1):1-9.

41. Duan Q., R.G. Tait Jr, M.S. Mayes, D.J. Garrick, Q. Liu, A.L. Van Eenennaam, R.G. Mateescu, **D.L. VanOverbeke**, A.J. Garmyn, D.C. Beitz, and J.M. Reecy. 2012. *Genetic polymorphisms in bovine transferrin receptor 2 (TFR2) and solute carrier family 40 (iron-regulated transporter), member 1 (SLC40A1) genes and their association with beef iron content.* Anim Genet. 43(2):115-122.
42. McKeith, R.O., G.D. Gray, D.S. Hale, C.R. Kerth, D.B. Griffin, J.W. Savell, C.R. Raines, K.E. Belk, D.R. Woerner, J.D. Tatum, J.L. Igo, **D.L. VanOverbeke**, G.G. Mafi, T.E. Lawrence, R.J. Delmore, Jr., L.M. Christensen, S.D. Shackelford, D.A. King, T.L. Wheeler, L.R. Meadows, and M. O'Connor. 2012. *National Beef Quality Audit – 2011: Harvest floor assessments of targeted characteristics that affect quality and value of cattle, carcasses and byproducts.* J. Anim. Sci. 90(13):5135-5142.
43. Moore, M.C., G.D. Gray, D.S. Hale, C.R. Kerth, D.B. Griffin, J.W. Savell, C.R. Raines, K.E. Belk, D.R. Woerner, J.D. Tatum, J.L. Igo, **D.L. VanOverbeke**, G.G. Mafi, T.E. Lawrence, R.J. Delmore, Jr., L.M. Christensen, S.D. Shackelford, D.A. King, T.L. Wheeler, L.R. Meadows, and M. O'Connor. 2012. *National Beef Quality Audit – 2011: In plant survey of targeted carcass characteristics related to quality, quantity, value and marketing of fed steers and heifers.* J. Anim. Sci. 90(13):5143-5151.
44. Mateescu, R.G., A.J. Garmyn, M.A. O'Neil, R.G. Tait Jr., A. Abuzaid, M.S. Mayes, D.J. Garrick, A.L. Van Eenennaam, **D.L. VanOverbeke**, G.G. Hilton, D.C. Beitz, and J.M. Reecy. 2012. *Genetic parameters for carnitine, creatine, creatinine, carnosine, and anserine concentrations in longissimus muscle and their association with palatability traits in Angus cattle.* J. Anim. Sci. 90(12):4248-4255.
45. McEvers, T.J., J.P. Hutcheson, G.G. Hilton, **D.L. VanOverbeke**, and T.E. Lawrence. 2012. *Comparison of USDA Yield Grading characteristics of steer and heifer carcasses evaluated by subjective and objective methods.* Prof. Anim. Sci. 28(4):477-481.
46. Burken, D.B., R.B. Hicks, **D.L. VanOverbeke**, G.G. Hilton, J.L. Wahrumnd, B. P. Holland, C.R. Krehbiel, P.K. Camfield, and C.J. Richards. 2012. *Vitamin E supplementation in beef finishing diets containing 35%wet distillers gains with soluble: Feedlot performance and carcass characteristics.* J. Anim. Sci. 90:1349-1355.
47. Bloomberg, B.D., G.G. Hilton, K.G. Hanger, C.J. Richards, J.B. Morgan, and **D.L. VanOverbeke\***. 2011. *Effects of vitamin E on color stability and palatability of strip loin steaks from cattle fed distillers grains.* J. Anim. Sci. 89:3769-3782.
48. Garmyn, A.J., G.G. Hilton, R.G. Mateescu, J.B. Morgan, J.M. Reecy, R.G. Tait, Jr., D.C. Beitz, Q. Duan, J.P. Schoonmaker, M.S. Mayes, M.E. Drewnoski, Q. Liu, and **D.L. VanOverbeke\***. 2011. *Estimation of relationships between mineral concentration and fatty acid composition of longissimus muscle and beef palatability traits.* J. Anim. Sci. 89:2849-2858
49. <sup>#</sup>Parsons, A.N. **D.L. VanOverbeke**, C.L. Goad, C.A.Mireless DeWitt. 2011. *Retail display evaluation of steaks from Select beef strip loins injected with a brine containing 1% ammonium hydroxide: Part 1: cook yield, tenderness, and sensory attributes.* J. Food Sci. 76(1):S63-S71.
50. <sup>#</sup>Parsons, A.N. **D.L. VanOverbeke**, C.L. Goad, C.A.Mireless DeWitt. 2011. *Retail display evaluation of steaks from Select beef strip loins injected with a brine containing 1% ammonium hydroxide: Part 2: cook yield, tenderness, and sensory attributes.* J. Food Sci. 76(1):S84-S88.
51. Ahola, J. K. , H. A. Foster, **D. L. VanOverbeke**, K. S. Jensen, R. L. Wilson, J. B. Glaze, Jr., T. E. Fife, C. W. Gray, S. A. Nash, R. R. Panting, and N. R. Rimbey. 2011. *Survey of quality defects in market beef and dairy cows and bulls sold through livestock auction markets in the Western United States: I. Incidence rates.* J. Anim. Sci. 2011: jas.2010-3170v1-20103170.
52. Ahola, J. K. , H. A. Foster, **D. L. VanOverbeke**, K. S. Jensen, R. L. Wilson, J. B. Glaze, Jr., T. E. Fife, C. W. Gray, S. A. Nash, R. R. Panting, and N. R. Rimbey. 2011. *Quality defects in market beef and dairy cows and bulls sold through livestock auction markets in the Western United States: II. Relative effects on selling price.* J. Anim. Sci. 2011: jas.2010-3171v1-20103171.

53. <sup>\*</sup>Kinman, L.A., **D.L. VanOverbeke**<sup>\*</sup>, C.J. Richards, J.B. Morgan, G.G. Hilton, C.R. Krehbiel, R.B. Hicks, and J.W. Dillwith. 2011. *The influence of feeding various levels of wet and dry distillers grains to yearling steers on carcass characteristics, meat quality, fatty acid profile and retail caselife of longissimus muscle.* J. Anim. Sci. 89:179-184.
54. Garmyn, A.J., G.G. Hilton, R.G. Mateescu, and **D.L. VanOverbeke**<sup>\*</sup>. 2010. *Effects of concentrate- vs. forage-based finishing diet on carcass traits, beef palatability in longissimus muscle from Angus heifers.* Prof. Anim. Sci. 26:579-586.
55. <sup>\*</sup>Rose, M.N., A.J. Garmyn, G.G. Hilton, J.B. Morgan, and **D.L. VanOverbeke**<sup>\*</sup>. 2010. *Comparison of tenderness, palatability, and retail caselife of enhanced cow subprimals to non-enhanced cow and USDA Select subprimals.* J. Anim. Sci. 88:3683-3692.
56. Holland, B.P., L.O. Burciaga-Robles, **D.L. VanOverbeke**, J.N. Shook, D.L. Step, C.J. Richards, and C.R. Krehbiel. 2010. *Effect of clinical bovine respiratory disease during the preconditioning phase on subsequent feedlot growth performance, carcass characteristics, and beef attributes.* J. Anim. Sci. 88:2486-2499.
57. Garmyn, A.J., J.N. Shook, **D.L. VanOverbeke**, J.L. Beckett, R.J. Delmore, D.A. Yates, D.M. Allen, and G.G. Hilton. 2010. *The effects of zilpaterol hydrochloride on carcass cutability and tenderness of calf-fed Holstein steers.* J. Animal. Sci. 88:2476-2485.
58. Lawrence, T.E., M.F. Miller, J.C. Brooks, G.G.Hilton, **D.L. VanOverbeke**, F.K. McKeith, J. Killefer, T.H. Montgomery, D.M. Allen, D.B. Griffin, W.T. Nichols, M.N. Streeter, D.A. Yates, and J.P. Hutcheson. 2010. *Predicting red meat yields in carcasses from beef type and calf-fed Holstein steers using USDA yield grade.* J. Anim. Sci. 88:2139-2143.
59. Hilton, G.G., A.J. Garmyn, T.E. Lawrence, M.F. Miller, J.C. Brooks, T.H. Montgomery, D.B. Griffin, **D.L. VanOverbeke**, N.A. Elam, W.T. Nichols, M.N. Streeter, J.P. Hutcheson, D.M. Allen, and D.A. Yates. 2010. *Effect of zilpaterol hydrochloride supplementation on cutability and subprimal yield of beef steer carcasses.* J. Anim. Sci. 88:1817-1822.
60. Rogers, H.R., J.C. Brooks, M.C. Hunt, G.G. Hilton, **D.L. VanOverbeke**, J. Killefer, T.E. Lawrence, R.J. Delmore, B.J. Johnson, D.M. Allen, M.N. Streeter, W.T. Nichols, J.P. Hutcheson, D.A. Yates, J.N. Martin, and M.F. Miller. 2010. *Effects of zilpaterol hydrochloride feeding duration on beef and calf-fed Holstein strip loin steak color.* J. Anim. Sci. 88:1168-1183.
61. Holland, B.P., C.R. Krehbiel, G.G. Hilton, M.N. Streeter, **D.L. VanOverbeke**, J.N. Shook, D.L. Step, L.O. Burciaga-Robles, D.R. Stein, D.A. Yates, J.P. Hutcheson, W.T. Nichols, and J.L. Montgomery. 2010. *Effects of extended withdrawal of zilpaterol hydrochloride on performance and carcass traits in finishing beef steers.* J. Anim. Sci. 88:338-348.
62. **VanOverbeke, D.L.**<sup>\*</sup>, G.G. Hilton, J. Green, M. Hunt, C. Brooks, J. Killefer, M. Streeter, J. Hutcheson, W. Nichols, D. Allen, and D.A. Yates. 2009. *Effect of zilpaterol hydrochloride supplementation of beef steers and calf-fed Holstein steers on the color stability of top sirloin butt steaks.* J. Anim. Sci. 87:3669-3676.
63. <sup>\*</sup>Shook, J.N., **D.L. VanOverbeke**, L.A. Kinman, C.R. Krehbiel, B.P. Holland, M.N. Streeter, D.A. Yates, and G.G. Hilton. 2009. *Effects of zilpaterol hydrochloride and zilpaterol hydrochloride withdrawal time on beef carcass cutability, composition, and tenderness.* J. Anim. Sci. 87:3677-3685.
64. Gunderson, J.A., M.C. Hunt, T.A. Houser, E.A.E. Boyle, M.E. Dikeman, D.E. Johnson, **D.L. VanOverbeke**, G.G. Hilton, C. Brooks, J. Killefer, D.M. Allen, M.N. Streeter, W.T. Nichols, J.P. Hutcheson, and D.A. Yates. 2009. *Effects of zilpaterol hydrochloride feeding duration on crossbred beef semimembranosus steak color in aerobic or modified atmosphere packaging.* J. Anim. Sci. 87:3739-3750.

65. Gunderson, J.A., M.C. Hunt, T.A. Houser, E.A.E. Boyle, M.E. Dikeman, D.E. Johnson, **D.L. VanOverbeke**, G.G. Hilton, C. Brooks, J. Killefer, D.M. Allen, M.N. Streeter, W.T. Nichols, J.P. Hutcheson, and D.A. Yates. 2009. *Feeding zilpaterol hydrochloride to calf-fed Holstein has minimal effects on semimembranosus steak color*. J. Anim. Sci. 87:3751-3763.
66. Boler, D.D., S.F. Holmer, F.K. McKeith, J. Killefer, **D.L. VanOverbeke**, G.G. Hilton, R.J. Delmore, J.L. Beckett, J.C. Brooks, R.K. Miller, D.B. Griffin, J.W. Savell, T.E. Lawrence, N.A. Elam, M.N. Streeter, W.T. Nichols, J.P. Hutcheson, D.A. Yates, and D. Allen. 2009. *Effects of feeding zilpaterol hydrochloride for 20 to 40 days on carcass fabrication values of finishing calf-fed Holstein steers*. J. Anim. Sci. 87:3722-3729.
67. Holmer, S.F., D.M. Fernandez-Duenas, S.M. Scramlin, C.M. Souza, F.K. McKeith, J. Killefer, R.J. Delmore, J.L. Beckett, T.E. Lawrence, **D.L. VanOverbeke**, G.G. Hilton, M.E. Dikeman, J.C. Brooks, M.N. Streeter, J.P. Hutcheson, W.T. Nichols, D.M. Allen, and D.A. Yates. 2009. *The effect of zilpaterol hydrochloride on meat quality in calf-fed Holstein steers*. J. Anim. Sci. 87:3730-3738.
68. Elam, N.A., J.T. Vasconelos, G.G. Hilton, **D.L. VanOverbeke**, T.E. Lawrence, T.H. Montgomery, W.T. Nichols, M.N. Streeter, J.P. Hutcheson, D.A. Yates, and M.L. Galyean. 2009. *Effect of zilpaterol hydrochloride duration of feeding on performance and carcass characteristics of feedlot cattle*. J. Anim. Sci. 87:2133-2144.
69. <sup>\*</sup>Cerruto-Noya, C.A., **D.L. VanOverbeke**, and C.A. Mireless DeWitt. 2009. *Evaluation of an alkaline-based meat enhancement solution adjusted to pH 10 using ammonium hydroxide*. J. Food Sci. 74(7):C519-C525.
70. Garcia, L.G., K.L. Nicholson, T.W. Hoffman, T.E. Lawrence, D.S. Hale, D.B. Griffin, J.W. Savell, **D.L. VanOverbeke**, J.B. Morgan, K.E. Belk, T.G. Field, J.A. Scanga, J.D. Tatum, and G.C. Smith. 2008. *National Beef Quality Audit-2005: Survey of targeted cattle and carcass characteristics related to quality, quantity, and value of fed steers and heifers*. J. Anim. Sci. 86:3533-3543.
71. <sup>\*</sup>Sullivan, M.M., **D.L. VanOverbeke** <sup>\*</sup>, L.A. Kinman, C.R. Krehbiel, G.G. Hilton, and J.B. Morgan. 2009. *Comparison of the Biobullet versus traditional injection techniques on tissue damage and tenderness in beef subprimals*. J. Anim. Sci. 87:716-722.
72. <sup>\*</sup>Shook, J.N., **D.L. VanOverbeke** <sup>\*</sup>, J.A. Scanga, K.E. Belk, J.W. Savell, T.E. Lawrence, J.B. Morgan, D.B. Griffin, D.S. Hale, and G.C. Smith. 2008. *The 2005 National Beef Quality Audit – Phase I: Views of producers, packers and merchandisers on current quality characteristics of the beef industry*. Prof. Anim. Sci. 24:189-197.
73. <sup>\*</sup>Gill, R.K., **D.L. VanOverbeke** <sup>\*</sup>, B. Depenbusch, J.S. Drouillard, and A. DiCostanzo. 2008. *Impact of beef cattle diets containing corn or sorghum distillers grains on beef color, fatty acid profiles, and sensory attributes*. J. Anim. Sci. 86:923-925.
74. Rust, S.R., D.M. Price, J. Subbiah, G. Kranzler, G.G. Hilton, **D.L. VanOverbeke**, and J.B. Morgan. 2008. *Predicting beef tenderness using near-infrared spectroscopy*. J. Anim. Sci. 86:211-219.
75. Price, D.M., G.G. Hilton, **D.L. VanOverbeke**, and J.B. Morgan. 2008. *Using the Near-Infrared (NIR) system to sort various beef “middle and end muscle cuts” into tenderness categories*. J. Anim. Sci. 86:413-418.
76. **Roerber, D.L.** <sup>\*</sup>, R. Gill, A. DiCostanzo. 2005. *Impact of feeding distillers grains to dairy-beef steers on beef color, tenderness, and sensory traits*. J. Anim. Sci. 83:2455-2460.
77. **Roerber, D. L.**, K.E. Belk, T.E. Engle, T.G. Field, S.R. Koontz, J.A. Scanga, J.D. Tatum, G.L. Mason, D. Van Metre, F.B. Garry, and G.C. Smith. 2003. *The effect of Vitamin E supplementation on discoloration of injection-site lesions in retail cuts and the greening reaction observed in injection-site lesions in muscles of the chuck*. J. Anim. Sci. 81:1855-1894.

78. Wyle, A.M., D.J. Vote, **D.L. Roeber**, R.C. Cannell, K.E. Belk, J.A. Scanga, M. Goldberg, J.D. Tatum, and G.C. Smith. 2003. *Effectiveness of using the SmartMV prototype BeefCam system to sort beef carcasses into expected palatability groups*. J. Anim. Sci. 81:441-448.
79. **Roeber, D. L.**, D.R. McKenna, P.K. Bates, T.B. Schmidt, K.E. Belk, T.G. Field, J.W. Savell, J.B. Morgan, T.H. Montgomery, and G.C. Smith. 2002. *The 2000 National Beef Quality Audit: The views of producers, packers, and merchandisers on current quality characteristics of beef*. J. Anim. Sci. 18:112-119.
80. McKenna, D.R., **D.L. Roeber**, P.K. Bates, T.B. Schmidt, D.S. Hale, D.B. Griffin, J.W. Savell, J.C. Brooks, J.B. Morgan, T.H. Montgomery, K.E. Belk, and G.C. Smith. 2002. *National Beef Quality Audit – 2000: Survey of targeted cattle and carcass characteristics related to quality, quantity, and value of fed steers and heifers*. J. Anim. Sci. 80:1212-1222.
81. **Roeber, D. L.**, R.C. Cannell, W.R. Wailes, K.E. Belk, J.A. Scanga, J.N. Sofos, G.L. Cowman, and G.C. Smith. 2002. *Frequencies of injection-site lesions in muscles from rounds of dairy and beef cow carcasses*. J. Dairy Sci. 85:532-536.
82. Speer, N.C., C. Young, and **D. Roeber**. 2001. *The importance of preventing Bovine Respiratory Disease: A Beef Industry Review*. Bovine Prac. 189-196.
83. **Roeber, D. L.**, R.C. Cannell, K.E. Belk, J.A. Scanga, G.L. Cowman, and G.C. Smith. 2001. *Incidence of injection-site lesions in beef top sirloin butts*. J. Anim. Sci. 79:2615-2618.
84. **Roeber, D. L.**, K.E. Belk, J.D. Tatum, J.W. Wilson, and G.C. Smith. 2001. *Effects of three levels of  $\alpha$ -tocopheryl acetate supplementation to feedlot cattle on performance of beef cuts during retail display*. J. Anim. Sci. 79:1814-1820.
85. **Roeber, D. L.**, N.C. Speer, J.G. Gentry, J.D. Tatum, C.D. Smith, J.C. Whittier, G.F. Jones, K.E. Belk, and G.C. Smith. 2001. *Feeder cattle health management: Effects on morbidity rates, feedlot performance, carcass characteristics and beef palatability*. Prof. Anim. Sci. 17:39-44.
86. **Roeber, D. L.**, P.D. Mies, C.D. Smith, K.E. Belk, T.G. Field, J.D. Tatum, J.A. Scanga, and G.C. Smith. 2001. *National Market Cow and Bull Beef Quality Audit – 1999: A survey of producer related defects in market cows and bulls*. J. Anim. Sci. 79:658-665.
87. **Roeber, D. L.**, R.C. Cannell, K.E. Belk, R.K. Miller, J.D. Tatum, and G.C. Smith. 2000. *Implant strategies during feeding: Impact on carcass grades and consumer acceptability*. J. Anim. Sci. 78:1867-1874.
88. **Roeber, D. L.**, R.C. Cannell, K.E. Belk, J.D. Tatum, and G.C. Smith. 2000. *Effects of a unique application of electrical stimulation on tenderness, color and quality attributes of the beef longissimus muscle*. J. Anim. Sci. 78:1504-1509.

(c) Abstracts of Papers Presented at Scientific Meetings

1. A. Bechtold, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2018. Comparison of myoglobin, hemoglobin, and cytochrome c oxidation properties. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27.
2. T.M. Neilson, M.M. Pfeiffer, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2018. Pomegranate rind extract limits ground beef color discoloration and lipid oxidation. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27.
3. A. Cassens, K. Wills, M.M. Pfeiffer, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2018. Effects of antioxidant/beef flavor-enhancement and modified atmosphere packaging of dark-cutting beef on retail display, flavor, and tenderness. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27.

4. M.M. Pfeiffer, G.G. Mafi, T.M. Neilson, R. Ramanathan, and **D.L. VanOverbeke**. 2018. Frequencies and severity of injection-site lesions in muscles from rounds of cow carcasses. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27.
5. F. Kiyimba, M.N. Nair, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2018. Effect of high oxygen partial pressure on 4-hydroxy-2-nonenal induced myoglobin oxidation, oxidation-reduction potential, and myoglobin unfolding. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27.
6. L. C. Eastwood, C. A. Boykin, M. K. Harris, A. N. Arnold, D. S. Hale, C. R. Kerth, D. B. Griffin, J. W. Savell, K. E. Belk, D. R. Woerner, J. D. Hasty, R. J. Delmore Jr., J. N. Martin, T. E. Lawrence, T. J. McEvers, **D. L. VanOverbeke**, G. G. Mafi, M. M. Pfeiffer, T. B. Schmidt, R. J. Maddock, D. D. Johnson, C. C. Carr, J. M. Scheffler, T. D. Pringle and A. M. Stelzleni. 2018. National beef quality audit-2016: comparisons between fed steers/heifers and market cows/bulls for by-product condemnations. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27.
7. C. C. Steele, C. A. Boykin, L. C. Eastwood, M. K. Harris, D. S. Hale, A. N. Arnold C. R. Kerth, D. B. Griffin, J. D. Hasty, K. E. Belk, D. R. Woerner, J. D. Hasty, R. J. Delmore Jr., J. N. Martin, T. E. Lawrence, T. J. McEvers, **D. L. VanOverbeke**, G. G. Mafi, M. M. Pfeiffer, T. B. Schmidt, R. J. Maddock, D. D. Johnson, C. C. Carr, J. M. Scheffler, T. D. Pringle, A. M. Stelzleni, J. Gottlieb, and J. W. Savell. 2018. National beef quality audit - 2016: frequency distributions of beef ribeyes within usda quality grades. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, Kansas City, Missouri, June 24-27.
8. **VanOverbeke, D.L.**, K.R. Hickman, J. Ramsey, D. Stein, R. Ramanathan, and P. Weckler. 2018. Facilitating faculty development for classroom excellence. Presented at the 201 North American Colleges and Teachers of Agriculture Annual Conference, June 12-14, Abstract #075.
9. Ramanathan, R., **D. VanOverbeke**, D.L. Stein. 2018. Use of 3D simulation models to enhance student learning in a food science class. Presented at the 201 North American Colleges and Teachers of Agriculture Annual Conference, June 12-14, Abstract #123.
10. R. Mitacek, R. Jadeja, **D.L. VanOverbeke**, G.G. Mafi, and R. Ramanathan. 2018. The effects of postmortem aging on beef color stability and biochemical properties. Accepted, will presented at the Institute of Food Technologists Annual Meeting, Chicago, Illinois, July 19-22.
11. M.M. Pfeiffer, **D.L. VanOverbeke**, R.M. Mitacek, G.G. Mafi, and R. Ramanathan. Effects of temperature abuse on shelf life and color stability on beef products. 2017. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, College Station, Texas, June 15-18. Abstract #38.
12. K. M. Wills, R. M. Mitacek, G. G. Mafi, **D. L. VanOverbeke**, D. Jaroni, and R. Ramanathan. 2017. Effects of aging, antioxidant-enhancement, and modified atmospheric packaging on the appearance of dark-cutting beef. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, College Station, Texas, June 15-18. Abstract #139.
13. R. M. Mitacek, A. R. English, G. G. Mafi, **D. L. VanOverbeke**, and R. Ramanathan. 2017. Effects of modified atmosphere packaging on surface color of dark-cutting beef. Presented at the Institute of Food Technologists Annual Meeting, Las Vegas, Nevada, June 25-28.
14. K. Peckham, R. M. Mitacek, **D. L. VanOverbeke**, G. G. Mafi, and R. Ramanathan. 2017. The effect of aging time on metmyoglobin reducing activity. Presented at the American Meat Science Association Annual Reciprocal Meat Conference, College Station, Texas, June 15-18. Abstract #156.
15. K. R. Brennecke, R. M. Mitacek, R. A. Mancini, K. Bailey, G. G. Mafi, **D. L. VanOverbeke**, and R. Ramanathan. 2017. Effects of lactate-enhancement on beef muscle structure. Presented at the Institute of Food Technologists Annual Meeting, Las Vegas, Nevada, June 25-28.
16. **D. L. VanOverbeke** and A. Gazaway. 2016. Assessment of strengths based leadership domains and their impact on student academic success. North American Colleges and Teachers of Agriculture (NACTA) Annual Confernece, Honolulu, HI.
17. R. Ramanathan, J. S. Robinson, G. G. Mafi, **D. L. VanOverbeke**, and D. R. Stein. 2016. Students' Perceptions Regarding the Use of Technology in an Introductory Food Science Class. NACTA Annual Conference, Hawaii

18. B. A. Djimsa, A. Abraham, G. Mafi, **D. VanOverbeke**, and R. Ramanathan. 2016. Characterizing the thermal stability of myoglobin, NADH-dependent reductase, and lactate dehydrogenase. Institute of Food Technologists Annual Meeting, Chicago, IL, July 15-19, Abstract #072.
19. K.M. Wills, H.J. Nelson, S Bhargava, A. Abraham, G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan. 2016. Effects of pomegranate rind extract on ground beef color. Recip. Meats Conf., San Angelo, TX.
20. Y. Ke, A. Abraham, G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan. 2016. Effects of display time on mitochondrial and cytochrome C content in beef longissimus and psoas muscles. Recip. Meats Conf., San Angelo, TX.
21. A. Abraham, J.W. Dillwith, **D.L. VanOverbeke**, G.G. Mafi, R. Ramanathan. 2016. Analyzing beef color stability differences with metabolomics. Recip. Meats Conf., San Angelo, TX.
22. A. Djimsa, A. Abraham, G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan. 2016. Effects of packaging and temperature on metmyoglobin reducing activity of cooked ground beef patties. Recip. Meats Conf., San Angelo, TX.
23. R.M. Mitacek, R. Ramanathan, **D.L. VanOverbeke**, G.G. Mafi, K. Brennecke, J. Poulson. 2016. Effects of packaging, antioxidants, and NADH on ground beef color and oxidation reduction potential. Recip. Meats Conf., San Angelo, TX.
24. R. Ramanathan, A.R. English, G.G. Mafi, **D.L. VanOverbeke**, and J.S. Robinson. 2015. *Students' perceptions regarding the use of TopHat as an interactive tool in food science class*. Institute of Food Technologists. Chicago, IL. Abstract #10770.
25. A.R. English, K.F. Satee, N.N. Elroy, K.M. Wills, B.N. Harsh, G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan. 2015. *Effects of extended aging and carbon monoxide packaging on beef longissimus color*. Institute of Food Technologists. Chicago, IL. Abstract #065-01.
26. R. Ramanathan, R. Madden, **D.L. VanOverbeke**, G.G. Mafi, and J.W. Dilwith. 2015. Metabolite profile differences between beef longissimus and psoas muscles. Institute of Food Technologists. Chicago, IL. Abstract #10769.
27. M.M. Neilson, **D. VanOverbeke**, S. Depue, J. Lusk, B. Norwood, R. Ramanathan, S. Howard, and G. Mafi. 2015. *Consumer preference of ground beef patties with varying percentages of finely textured beef*. Recip. Meats Conf., Lincoln, NE.
28. K. Pfeiffer, G. Mafi, R. Ramanathan, J. Neel, and **D. L. VanOverbeke**. 2015. *Tenderness of pasture versus grain fed beef aged 14 and 28 days*. Recip. Meats Conf., Lincoln, NE.
29. M.M. Neilson, G. Mafi, K. Pfeiffer, **D. VanOverbeke**, and R. Ramanathan. 2015. *Students' perceptions regarding the use of TopHat as an interactive tool in meat science class*. Recip. Meats Conf., Lincoln, NE.
30. B. Djimsa, A.R. English, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2015. *Effect of temperature on fluorescent properties of oxymyoglobin*. Recip. Meats Conf., Lincoln, NE.
31. A.R. English, B.N. Harsh, K.M. Wills, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2015. *Effects of freeze thawing on the oxygenation properties of dark cutting beef*. Recip. Meats Conf., Lincoln, NE.
32. A.R. English, G.G. Mafi, **D.L. VanOverbeke**, G. Xiaoping, U. Desilva, and R. Ramanathan. 2015. *Effects of extending aging on biochemical properties of dark cutting beef*. Recip. Meats Conf., Lincoln, NE.
33. A. Abraham, K.B. Bjugstad, G.G. Mafi, **D.L. VanOverbeke**, C. Gifford, L.T. Rael, R. Bar-Or, and R. Ramanathan. 2015. *Correlating myoglobin and lipid oxidation with reduction potential in a sarcoplasm-liposome system*. Recip. Meats Conf., Lincoln, NE.
34. B. Djimsa, A.R. English, G.G. Mafi, **D.L. VanOverbeke**, K.L. Bailey, and R. Ramanathan. 2015. *Reflectance and absorbance properties of dark cutting beef*. Recip. Meats Conf., Lincoln, NE.
35. K.M. Wills, A.R. English, G.G. Mafi, **D.L. VanOverbeke**, C. Gifford, K.B. Bjugstad, and R. Ramanathan. 2015. *Use of redoxSYS to measure oxidation reduction potential in beef*. Recip. Meats Conf., Lincoln, NE.
36. R. Ramanathan, G.G. Mafi, and **D.L. VanOverbeke**. 2014. *Use of Top Hat as an interactive tool to enhance student learning*. 2014 Big XII Teaching and Learning Conference, Oklahoma State University, Stillwater, OK.



37. A.R. English, G.G. Mafi, **D.L. VanOverbeke**, S.P. Suman, and R. Ramanathan. 2014. *Fluorescent properties of beef myoglobin during heat induced denaturation*. Institute of Food Technologists Annual Meeting, New Orleans, LA. Abstract #065-01.
38. K.R. McCullough, **D.L. VanOverbeke**, R. Ramanathan, and G.G. Mafi. 2014. *Effects of aging middle meats as steaks vs. intact whole muscles on eating quality*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #51.
39. K.R. McCullough, **D.L. VanOverbeke**, R. Ramanathan, and G.G. Mafi. 2014. *Effects of bone in vs. boneless aging on eating quality of middle meats*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #52.
40. B.N. Harsh, G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan, J.M. Hodgen, J.L. Finck, C.L. Maxwell, C.J. Richards, and C.R. Krehbiel. 2014. *Effects of technology use in beef production systems on meat quality and consumer palatability ratings*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #39.
41. B.N. Harsh, G.G. Mafi, **D.L. VanOverbeke**, R. Ramanathan, J.M. Hodgen, J.L. Finck, C.L. Maxwell, C.J. Richards, and C.R. Krehbiel. 2014. *Effects of technology use in beef production systems on muscle conformation of longissimus lumborum*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #76.
42. K.J. Winn, G.G. Mafi, B. Bloomer, **D.L. VanOverbeke**, R. Ramanathan, J. Staude, and S. Carter. 2014. *Impact of Paylean supplementation on production, carcass, and meat quality characteristics of Yorkshire and Danbred swine*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #84.
43. N.N. Elroy, G.G. Mafi, **D.L. VanOverbeke**, and R. Ramanathan. 2014. *Species specific effects on non-enzymatic metmyoglobin reduction*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #122.
44. English, A.R., B. English, B. Harsh, K.M. Price, G.G. Mafi, **D.L. VanOverbeke**, P. Joseph, and R. Ramanathan. 2014. *Effects of water- and oil-based rosemary on ground beef metmyoglobin reducing activity*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #13.
45. Ramanathan, R., X. Guo, G.G. Mafi, **D.L. VanOverbeke**, U. DeSilva. 2014. *Quantification of beef longissimus and psoas muscle mitochondria using real-time polymerase chain reaction*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #124.
46. Ramanathan, R., R. Madden, G.G. Mafi, **D.L. VanOverbeke**, J.W. Dillwith. 2014. *Comparison of extraction procedures to characterize beef longissimus metabolomic profile*. Proceedings of the Reciprocal Meat Conference, Madison, WI, June 15-18. Abstract #125.
47. Ramanathan, R., R. Nerimetla, S. Krishnan, **D. L. VanOverbeke**, G. G. Mafi. 2013. *Investigating the usefulness of cyclic voltammetry to determine myoglobin reduction potential and oxygenation*. Proceedings of the Reciprocal Meat Conference, Auburn, AL, June 16-19.
48. Nerimetla, R., S. Krishnan, G. G. Mafi, **D. L. VanOverbeke**, R. Ramanathan. 2013. *Effects of oxygen on beef myoglobin reduction potential in vitro*. Proceedings of the Reciprocal Meat Conference, Auburn, AL, June 16-19.
49. Elroy, N.N., R. Ramanathan, G. G. Mafi, **D. L. VanOverbeke**. 2013. *Effects of myoglobin primary structure on non-enzymatic metmyoglobin reduction*. Presented at the 10th Annual Biochemistry and Molecular Biology Research Symposium, Oklahoma State University, September 19-20.
50. Maxwell, C.L., B.K. Wilson, B.T. Johnson, B.C. Bernhard, C.F. O'Neill, **D.L. VanOverbeke**, D.L. Step, E.A. DeVuyst, C.J. Richards, and C.R. Krehbiel. 2013. *Effects of conventional and natural production programs on winter annual pasture and feedlot performance*. J. Anim. Sci. 91(E-Suppl.2):418(Abstr.)
51. Maxwell, C.L., B.K. Wilson, B.T. Johnson, B.C. Bernhard, C.F. O'Neill, K.J. Winn, K.R. McCullough, T.A. Harlan, M.M. Kinna, B.D. Bloomberg, **D.L. VanOverbeke**, D.L. Step, E.A. DeVuyst, C.J. Richards, and C.R. Krehbiel. 2013. *Effects of conventional and natural production programs on carcass characteristics and retail meat attributes*. J. Anim. Sci. 91(E-Suppl. 2):418(Abstr.)
52. Maxwell, C.L., B.K. Wilson, B.T. Johnson, B.C. Bernhard, **D.L. VanOverbeke**, D.L. Step, and C.J. Richards, and C.R. Krehbiel. 2013. *Advantages of technology enhanced beef production systems*. Plains Nutr. Council Spring Conf. Publ. p. 138. Texas A&M Research and Extension Center, Amarillo.
53. Howard, S.T., J.A. Scanga, D.R. Woerner, **D.L. VanOverbeke**, J.D. Tatum, and K.E. Belk. 2013. *North American Beef Tenderness Survey 2011-2012: Benchmarking tenderness and sample shipping procedures*. Proceedings of the 2013 Reciprocal Meats Conference.

54. Igo, J.L., **D.L. VanOverbeke**, G.G. Mafi, D.S. Hale, J.W. Savell, D.L. Pendell, D.R. Woerner, J.D. Tatum, and K.E. Belk. 2012. *Driving Change – The 2011 National Beef Quality Audit*. Proceedings of the 2012 Reciprocal Meats Conference. p 80.
55. McKeith, R.O, G.D. Gray, D.S. Hale, C.R. Kerth, D.B. Griffin, J.W. Savell, K.E. Belk, D.R. Woerner, J.D. Tatum, J.L. Igo, **D.L. VanOverbeke**, G.G. Mafi, T.E. Lawrence, R.J. Delmore, Jr., L.M. Christensen, S.D. Shackelford, D.A. King, and T.L. Wheeler. 2012. *National Beef Quality Audit - 2011: Survey of Producer- and Packer-Related Defects on the Harvest Floor*. Proceedings of the 2012 Reciprocal Meats Conference. p 73.
56. Buchanan, J.W., A.J. Garmyn, G.G. Hilton, **D.L. VanOverbeke**, Q. Duan, D.C Beitz, and R. Mateescu. 2012. *Effect of pasture based finishing system on bovine intramuscular gene expression and fatty acid composition*. Submitted for the Plant and Animal Genome Conference. San Diego, CA. January, 2012.
57. **VanOverbeke, D.L.**, M.K. Henderson, and G.G. Hilton. 2012. *Trends in beef consumption: Implications for producers*. J. Anim. Sci. 95(1):54-55.
58. Koltjes, J.E., R.G. Tait, Jr., E.R. Fritz., B.P. Mishra, A.L VanEenennaam, R.G. Mateescu, **D.L. VanOverbeke**, A.J. Garmyn, Q. Liu, G. Duan, D. Nettleton, D. Beitz, D. Garrick and J.M. Reecy. 2012. *A systems-genetics analysis of bovine skeletal muscle iron content*. J. Anim. Sci. 90(Suppl. 3):163.
59. Buchanan J.W., A. Garmyn, G.G. Hilton, **D.L. VanOverbeke**, Q. Duan, D.C. Beitz, and R. G. Mateescu. 2011. Gene expression analysis and fatty acid profiling in concentrate and pasture based beef finishing systems. J. Anim Sci. 88(Suppl. 1):709.
60. Reecy, J.M., R.G. Tait, **D.L. VanOverbeke**, A.J. Garmyn, R.G. Mateescu, A.L. Van Eenennaam, Q. Duan, Q. Liu, J.P. Schoonmaker, M.E. Drewnoski, D.C. Beitz, K. Kizilkaya, R.L. Fernando, and D.J. Garrick. 2011. Use of genomics to improve the fatty acid composition of meat. J. Anim Sci. 89(Suppl. 2):89
61. Rosenkrans, Jr., C., M. Looper, C. Krehbiel, **D. VanOverbeke**, and N. Hill. 2011. *Effects of cytochrome P450 genotype and tall fescue cultivar on taste panel evaluation of and alkaloid concentrations in beef*. Submitted for the 2011 ASAS Southern Section Meeting.
62. Reecy, J.M., R.G. Tait, **D.L. VanOverbeke**, A.J. Garmyn, R.G. Mateescu, A.L. Van Eenennaam, Q. Duan, Q. Liu, J.P. Schoonmaker, M.E. Drewnoski, D.C. Beitz, K. Kizilkaya, R.L. Fernando, and D.J. Garrick. 2010. *Use of genomics to improve the fatty acid composition of meat*. Submitted for Genomics Symposium.
63. Garmyn, A.J., **D.L. VanOverbeke**, R.G. Mateescu, and G.G. Hilton. 2010. *Effect of concentrate- vs. forage-based finishing diet on carcass traits, beef palatability, and color stability of longissimus muscle from Angus heifers*. ASAS Annual Meeting, Denver, CO.
64. Garmyn, A.J., **D.L. VanOverbeke**, R.G. Mateescu, J.B. Morgan, J.M. Reecy, R.G. Tait, Jr., D.C. Beitz, Q. Duan, J.P. Schoonmaker, M.S. Mayes, M.E. Drewnoski, Q. Lui, and G.G. Hilton. 2010. *Estimation of relationships between nutrient components of longissimus muscle and beef palatability traits*. Reciprocal Meats Conference (RMC) Proceedings.
65. Hayden, D.A., **D.L. VanOverbeke**, G.G. Hilton, and J.B. Morgan. 2010. *Applications of SuspenTec system in improving beef round palatability*. RMC Proceedings.
66. Kinman, L., **D. VanOverbeke**, C. Richards, J. Morgan, G. Hilton, C. Krehbiel, and R. Hicks. 2009. *The influence of feeding various levels of wet and dry corn distillers grains to yearling steers on carcass characteristics, meat quality, retail case life and fatty acid profiles of longissimus muscle*. FAPC/IFT-OK Research Symposium. pp 6.
67. Parsons, A., **D. VanOverbeke**, and C. Mireless DeWitt. 2009. *Lowering sodium tripolyphosphate usage in beef enhancement brines with 1% ammonium hydroxide*. FAPC/IFT-OK Research Symposium. pp 7.
68. Shook, J., **D. VanOverbeke**, L. Kinman, C. Krehbiel, B. Holland, M. Streeter, D. Yates, and G. Hilton. 2009. *Effects of zilpaterol hydrochloride withdrawal time on beef carcass cutability, composition, and tenderness*. FAPC/IFT-OK Research Symposium. pp 11.
69. Kinman, L.A., **D.L. VanOverbeke**, G.G. Hilton, J.B. Morgan, C.J. Richards, and C. Krehbiel. 2008. *The influence of feeding various levels of wet and dry corn distillers grains to yearling steers on carcass characteristics, meat quality, retail case life and fatty acid profiles of longissimus muscle*. Submitted for the 2009 Annual Meeting of the Institute of Food Technology.

70. Parsons, A., **D. VanOverbeke**, and C. Mireless DeWitt. 2008. *Lowering sodium tripolyphosphate usage in beef enhancement brines with 1% ammonium hydroxide*. Submitted for the 2009 Annual Meeting of the Institute of Food Technology.
71. Parsons, A., **D. VanOverbeke**, and C. Mireless DeWitt. 2008. *Evaluating a beef enhancement brine using 1% ammonium hydroxide as a replacement for sodium tripolyphosphate*. Submitted for the 2009 Annual Meeting of the Institute of Food Technology.
72. Kinman, L.A., **D.L. VanOverbeke**, J.B. Morgan, G.G. Hilton, C.J. Richards, C.R. Krehbiel, and R.B. Hicks. 2008. *The influence of feeding various levels of wet and dry corn distillers grains to yearling steers on carcass characteristics, meat quality, and retail case life of longissimus muscle*. Proceedings of the 61<sup>st</sup> RMC.
73. Cunningham, S.B., G.G. Hilton, **D.L. VanOverbeke**, and J.B. Morgan. 2008. *Benefits of oxygen scavenging technology on overwrapped beef cuts in a modified atmosphere motherbag*. Proceedings of the 61<sup>st</sup> RMC.
74. Cerruto Noya, C.A., C. Mireless DeWitt, and **D. VanOverbeke**. 2008. *Evaluation of a high pH solution as an alternative to phosphate for meat enhancement*. Presented at the 2008 Annual Meeting of the Institute of Food Technology.
75. Price, D., G. Hilton, D. VanOverbeke, C. DeWitt, and B. Morgan. 2008. *Using near-infrared (NIR) spectroscopy and video image analysis (VIA) to sort beef carcasses into tenderness categories*. Presented at the 2008 Annual Meeting of the Institute of Food Technology.
76. Holland, B.P., J.N. Shook, L.O. Burciaga-Robles, C.R. Krehbiel, M.N. Streeter, G.G. Hilton, **D.L. VanOverbeke**, D.L. Step, D.A. Yates, J.P. Hutcheson, W.T. Nichols, and J.L. Montgomery. 2008. *Extended withdrawal of zilpaterol hydrochloride: Effects on performance, carcass traits, meat tenderness, and retail cutout of finishing beef steers*. Proc. Plains Nutrition Council Spring Conf. Pub. No. AREC 08-19. TX A&M Agrilife Res. and Ext. Ctr. Amarillo.
77. Sims, L.E., R.B. Hicks, **D.L. VanOverbeke**, P.K. Camfield, J.J. Martin, T.K. Dye, B.P. Holland, C.L. Maxwell, C.R. Krehbiel, and C.J. Richards. 2008. *Distillers grains in flaked corn diets*. Presented at the 2008 Midwest Section Meeting of the American Society of Animal Science. J. Anim. Sci. 86 (Suppl. 3):114.
78. Price, D.M., G.G. Hilton, **D.L. VanOverbeke**, and J.B. Morgan. 2007. *Augmentation of the OSU near-infrared and in-plant beef video image analysis systems to sort carcasses into tenderness categories*. Proceedings of the 60<sup>th</sup> RMC.
79. Gill, R.K., **D.L. VanOverbeke**, and A. DiCostanzo. 2006. *Impacts of beef cattle diets containing corn or sorghum distillers grains on beef color, fatty acid profiles, and sensory attributes*. J. Anim. Sci. 84(1):114.
80. **VanOverbeke, D.L.** and A. DiCostanzo. 2006. *Impact of feeding distillers grains on beef tenderness and sensory traits*. Feedinfo News Service Scientific Reviews. March, 2006. <http://www.feedinfo.com>.
81. **Roerber, D.L.**, R. Gill, and A. DiCostanzo. 2005. *Impact of feeding distillers grains on beef tenderness and sensory traits*. Midwestern Section of the American Society of Animal Science for the 2005 Midwest ASAS meeting for the Symposium on Utilization of Co-products.
82. Gill, R., **D.L. Roerber**, and A. DiCostanzo. 2004. *Impact of feeding distillers grains on beef tenderness and sensory traits*. Proceedings of the 57<sup>th</sup> Annual RMC.
83. Gill, R., **D.L. Roerber**, and A. DiCostanzo. 2004. *Impact of feeding distillers grains to dairy-beef steers on beef color, tenderness and sensory traits*. Proceedings from the Plains Nutrition Conference. pp 99-100.
84. **Roerber, D.L.** and W.J. Umberger. 2002. *The economic value of preconditioning programs in beef production systems*. Selected paper presented at the 2002 American Agricultural Economics Association (AAEA/WAEA) Annual Meetings. Paper to be located at <http://agecon.lib.umn.edu>. July 29, 2002. Long Beach, CA.
85. **Roerber, D.L.**, K.E. Belk, S.B. LeValley, J.A. Scanga, J.N. Sofos, P. Rodgers, and G.C. Smith. 2002. *Producing consumer products from sheep: The Sheep Safety and Quality Assurance Program*. Proceedings of the Western Section, American Society of Animal Science. 53:239.
86. **Roerber, D.L.**, R.C. Cannell, K.E. Belk, J.N. Sofos, J.A. Scanga, G.L. Cowman, and G.C. Smith. 2001. *Incidence of injection-site lesions in top sirloin butts of fed steers and heifers*. J. Anim. Sci. 79 (1):63.

87. **Roeber, D.L.**, R.C. Cannell, K.E. Belk, J.N. Sofos, J.A. Scanga, G.L. Cowman, and G.C. Smith. 2001. *Incidence of injection-site lesions in beef and dairy cow rounds*. J. Anim. Sci. 79 (1):63.
88. **Roeber, D.L.**, D.R. McKenna, P.K. Bates, T.B. Schmidt, K.E. Belk, J.W. Savell, J.B. Morgan, T.H. Montgomery, and G.C. Smith. 2001. *National Beef Quality Audit – 2000: Survey of producers, packers and end-users*. J. Anim. Sci. 79 (1):62.
89. Bates, P.K., D.R. McKenna, **D.L. Roeber**, T.B. Schmidt, J.B. Morgan, J.W. Savell, T.H. Montgomery, D.B. Griffin, D.S. Hale, and G.C. Smith. 2001. *National Beef Quality Audit – 2000: Results of slaughter floor assessments*. J. Anim. Sci. 79 (1):62.
90. McKenna, D.R., P.K. Bates, **D.L. Roeber**, T.B. Schmidt, D.S. Hale, D.B. Griffin, J.W. Savell, J.B. Morgan, T.H. Montgomery, and G.C. Smith. 2001. *National Beef Quality Audit – 2000: Results of carcass assessments*. J. Anim. Sci. 79 (1):62
91. Schmidt, T.B., **D.L. Roeber**, P.K. Bates, D.R. McKenna, T.G. Field, T.H. Montgomery, J.B. Morgan, J.W. Savell, and G.C. Smith. 2001. *Consensus of the beef industry*. J. Anim. Sci. 79 (1):63
92. **Roeber, D.L.**, K.E. Belk, J.D. Tatum, T.G. Field, J.A. Scanga, and G.C. Smith. 2000. *Improving the consistency and competitiveness of market cow and bull beef; and, increasing the value of market cows and bulls*. J. Anim. Sci. 78 (1):228.
93. **Roeber, D.L.**, G.C. Smith, J.G. Floyd, and G.L. Cowman. 2000. *Lameness in breeding cattle in the United States: The National Market Cow and Bull Beef Quality Audit, 1999*. III International Symposium on Bovine Lameness. Parma, Italy. pp. 152-156
94. **Roeber, D.L.**, P.D. Mies, C.D. Smith, K.E. Belk, J.D. Tatum, T.G. Field, J.A. Scanga, and G.C. Smith. 2000. *Improving the consistency and competitiveness of market cow and bull beef*. Proceedings of the 53<sup>rd</sup> Annual RMC. pp. 122.
95. **Roeber, D.L.**, R.C. Cannell, K.E. Belk, J.D. Tatum, and G.C. Smith. 1999. *Effects of a unique application of electrical stimulation on tenderness, color and quality attributes of the beef longissimus muscle*. J. Anim. Sci. 77 (1):127.

**(5) Invited presentations at teaching and research professional meetings (date, title, location)**

1. 8/30/2018. **VanOverbeke, D.L.** 2018. National Beef Quality Audit – 2016 – Impact for producers. Northwest Beef Conference, Enid, OK.
2. 8/25/2018. **VanOverbeke, D.L.** 2018. Impact of cows and bulls on the value of the beef industry. Clemson University Stockmanship and Stewardship Program, Clemson, SC.
3. 6/26/2018. **VanOverbeke, D.L.** 2018. Research ethics for graduate students. Reciprocal Meat Conference Reciprocation Session. Kansas City, MO.
4. 3/2018. **VanOverbeke, D.L.** 2018. Market cow and bull quality and safety attributes. Beef Industry Food Safety Summit. Dallas, TX.
5. 1/20/2018. **VanOverbeke, D.L.** and J. Fulton. 2018. National Beef Quality Audit – 2016 – What do the results say? Oregon Producer’s Forum, LeGrande, OR.
6. 1/9-12/2018. **VanOverbeke, D.L.** and J. Fulton. 2018. National Beef Quality Audit – 2016 – What do the results say? Idaho Range Livestock Symposium, Marsing, Twin Falls, Pocatello and Rexburg, ID.
7. 12/19/2017. **VanOverbeke, D.L.** , K.E. Belk, J. Savell. 2017. National Beef Quality Audit – 2016 – What do the results say? Government Agencies/Industry Partners Meeting at NCBA. Washington, D.C.
8. 12/5-7/2017. **VanOverbeke, D.L.** and J. Fulton. 2017. National Beef Quality Audit – 2016 – What do the results say? Nebraska Cattlemen’s Convention Cattlemen’s College (12/5) and Animal Health Committee Meeting (12/7), Kearney, NE.
9. 11/28/2017. **VanOverbeke, D.L.** and J. Fulton. 2017. National Beef Quality Audit – 2016 – What do the results say? Range Beef Cow Symposium, Cheyenne, WY.
10. 11/10/2017. **VanOverbeke, D.L.** and J. Fulton. 2017. National Beef Quality Audit – 2016 – What do the results say? Washington Cattlemen’s Convention, Pasco, WA.
11. 11/9/2017. **VanOverbeke, D.L.** 2017. National Beef Quality Audit – 2016 – What do the results say? Radio Interviews at the American Farm Broadcasters Convention, Kansas City, MO.

12. 10/18/2017. **VanOverbeke, D.L.** 2017. National Beef Quality Audit – 2016 – What do the results say? North American Meat Institute Animal Handling Conference, Kansas City, MO.
13. 9/27/2017. **VanOverbeke, D.L.** and J. Fulton. 2017. National Beef Quality Audit – 2016 – What do the results say? Beef Business Summit, San Diego, CA. – Attendance 45 major retail and food service buyers.
14. 9/18/2017. **VanOverbeke, D.L.** and D. Kniffen. 2017. National Beef Quality Audit – 2016, What should a producer do? Taping of: Beef Roundtable Webinar with Purdue University and Beef Magazine hosting.
15. 9/7/2017. **VanOverbeke, D.L.**, K.E. Belk and J.W. Savell. 2017. National Beef Quality Audit – 2016, A preview of market cow and bull results. Presented via Webinar to Media across the United States.
16. 7/13/2017. **VanOverbeke, D.L.**, K.E. Belk and J.W. Savell. 2017. National Beef Quality Audit – 2016, A preview of fed steer and heifer results. National Cattlemen’s Beef Association Summer Conference, Denver, Co.
17. 7/12/2017. **VanOverbeke, D.L.**, K.E. Belk and J.W. Savell. 2017. National Beef Quality Audit – 2016, A preview of fed steer and heifer results. Taped in Denver, CO for RFD TV’s Cattlemen to Cattlemen Show, Broadcast August, 2017.
18. 6/6/2017. **VanOverbeke, D.L.**, K.E. Belk and J.W. Savell. 2017. National Beef Quality Audit – 2016, A preview of results. Beef Quality Assurance Advisory Board and State Coordinator’s Meeting. Denver, CO.
19. 2/1/2017. **VanOverbeke, D.L.**, K.E. Belk and J.W. Savell. 2017. 25 Years of NBQA Impact. NCBA Cattlemen’s College and Producer Forum presentations. NCBA Convention, Nashville, TN.
20. 1/27/2017. **VanOverbeke, D.L.** 2017. FARM Her STEM Panel. FARM Her Conference in Stillwater, OK.
21. 1/10/17. **VanOverbeke, D.L.** 2014. What to expect in advising. International Student New Student Orientation Panel. OSU NSO.
22. 6/23/15. **VanOverbeke, D.L.** 2015. Mythbusting Consumer Nutrition. Southeast 4-H Field Day, Wilburton, OK.
23. 6/16/15. **VanOverbeke, D.L.** and D. Boler. Production Technologies to Feed the World. 2015 Reciprocal Meats Conference, Lincoln, NE.
24. 6/17/14. **VanOverbeke, D.L.** 2014. Can Using Student Strengths and Flipped Classrooms Enhance Student Performance? 2014 Reciprocal Meats Conference, Madison, WI.
25. 11/9/2013. **VanOverbeke, D.L.** 2013. National Beef Quality Audit – 2011: How do Akaushi Fit? American Akaushi Association Annual Convention, Austin, TX.
26. 1/29-30/2013. **VanOverbeke, D.L.** 2013. National Beef Quality Audit – 2011, Implications for feedlot producers. Pennsylvania Cattle Feeders Days, Lancaster and Greensburg, PA.
27. 4/11/12. Igo, J.L. and **D.L. VanOverbeke.** 2012. Results of the National Beef Quality Audit – 2011: Phase I, Face-to-Face Interviews. Strategy Workshop for the National Beef Quality Audit, Denver, CO.
28. 4/11/12. **VanOverbeke, D.L.** 2012. Lost opportunities associated with quality defects identified in the 2011 National Beef Quality Audit. Strategy Workshop for the National Beef Quality Audit, Denver, CO.
29. 4/3/2012. **VanOverbeke, D.L.** 2012. Results of the National Beef Quality Audit – 2011. Beef Industry Conference, Stillwater, OK.
30. 3/20/12. **VanOverbeke, D.L.**, M.K. Henderson, and G.G. Hilton. 2012. Trends in Beef Consumption – Implications for Producers. Midwest Section of the American Society of Animal Science Meeting, Harlan Richie Symposium, Des Moines, IA.
31. 2/1/12. **VanOverbeke, D.L.**, **K.E. Belk** and **J.W. Savell.** 2012. National Beef Quality Audit – 2011, Driving Change. National Cattlemen’s Beef Association Annual Convention, Nashville, TN.

32. 3/9/11. **VanOverbeke, D.L.** 2011. Impact of fatty acid composition on carcass characteristics and beef palatability. Healthfulness Workshop. Sponsored by the U.S. Meat Animal Research Center, Lincoln, NE.
33. 10/10/08. **VanOverbeke, D.L.** 2008. Impact of pre-harvest health on carcass quality and palatability. Food Animal Health and Performance Conference Sponsored By Pfizer Animal Health, Stillwater, OK.
34. 8/18/06. **VanOverbeke, D.L.** 2006. Beef's quality revolution – What should your clients be producing? Idaho Veterinary Medical Association Summer Meeting, Post Falls, ID.
35. 8/18/06. **VanOverbeke, D.L.** 2006. Hot topics in the farm to table continuum. Idaho Veterinary Medical Association Summer Meeting, Post Falls, ID.
36. 7/28/06. **VanOverbeke, D.L.** 2006. National Beef Quality Audit—2005. Oklahoma Cattlemen's Association Convention, Oklahoma City.
37. 1/25/06. **VanOverbeke, D.L.** 2006. National Market Cow and Bull Beef Quality Audit—1999. Nebraska Beef 808, Lincoln.
38. 1/7/06. **VanOverbeke, D.L.** 2006. Carcass traits and quality characteristics. Ontario Cattle Feeders Association Convention, London, Ontario, Canada.
39. 1/5/06. **VanOverbeke, D.L.** 2006. Consumer trends vs. Production. Ontario Cattle Feeders Association Convention, London, Ontario, Canada.

#### **EXTENSION ACTIVITIES:**

Since joining the OSU faculty in 2005, the Animal Science Department has been without a Meat Science Extension Specialist. Due to this vacancy, and the desire to continue providing educational efforts to youth in the state of Oklahoma, producers, extension staff and others involved in and interested in pre and post harvest factors that impact meat quality, I have assisted with extension programs in the state. This activity allows me to work with future OSU students, adult leaders to aid in their development in the understanding of meat science, and producers to aid in their education of pre-harvest factors that affect meat quality and safety. This experience also allows me to make valuable contacts in the state of Oklahoma and maintain contacts made in previous positions. This experience would not be complete without being involved in professional societies where I can make contacts with other professionals in meat science in order to utilize their areas of expertise to enhance my knowledge and to pass that knowledge on to others in the state.

#### ***Oklahoma State University***

- (1) Programs developed or revised.
  - (a) Oklahoma Beef Quality Assurance Program. Assisted with revision of the program and serve as Chairman of the Oklahoma Beef Quality Assurance Program Advisory Committee. Program development included a producer manual, train the trainer educational program, and a producer educational program presentation.
  - (b) Livestock Health Care and Quality Assurance. Presented for 4-H District In-service Meetings. August 2, 2006 (Woodward, OK); August 9, 2006 (Beaver's Bend), October 13 (Claypool), November 1 (Muskogee).
- (2) Extension grants received.
  - (a) Incidence of quality defects in market dairy cows and bulls sold through major livestock auction markets in Idaho and California and their relative effects on sale price. 2007. Project collaborator, PIs include University of Idaho and California Beef Council. Provided technical assistance and training materials/expertise.
- (3) Publications authored (e.g., fact sheets, manuals, AV materials).
  - (a) **VanOverbeke, D.** 2012. Opinion Editorial for the Daily Oklahoman. "Pink slime" hysteria is overwrought. Printed April 1, 2012. p 19A.

- (b) **VanOverbeke, D.** and S. Howard. 2009. Efficient beef marketing in established industry channels. Pp 27-39. Materials developed for the 5 State Beef Conference.
  - (c) **VanOverbeke, D.,** D. Lalman, G. Highfill, R. Gosz, C. Richards, G. Parker, G. Selk, and D.L. Step. 2008. *Beef Cattle Manual* Chapter 36: Beef Quality Assurance. Pp 311-334. Materials include the written chapter, supplementary power point presentation and chapter quiz.
  - (d) Video Production for Oklahoma Youth Livestock Quality Assurance Educational Project: “Oklahoma Master Stockman”. Responsible for development and delivery of segments for introduction, carcass quality/value and injection-site management.
  - (e) Ward, C.E. and **D.L. VanOverbeke.** 2007. Beef Carcass Quality and Value Over Time. Oklahoma Cooperative Extension Service, AGEC 608.
  - (f) Authored and presented Beef Carcass Value presentation and materials for Master Cattlemen Handbook and Training Video, 2006.
  - (g) Authored Youth Quality Assurance presentation which has been utilized by several extension employees across Oklahoma, 2006.
- (4) Courses or conferences organized/Program Assistance Given.
- (a) Judged extension posters during the National Agricultural Extension meeting in Tulsa, OK. 2010.
  - (b) Developed Who’s Who in Stillwater: A Chance for Stillwater K-12 Special Education Students to Interact with Livestock. Hosted by Block and Bridle members. 2009 & 2010 (25 teachers and students in attendance each year).
  - (c) Assisted with organization and conduction of Oklahoma Beef Quality Summit, March and/or October annually, 2005-2016: Presentations included: (i) Beef Quality Assurance, (ii) Application of Quality and Yield Grades, and (iii) Value determination of beef carcasses. Programs have been conducted for Oklahoma Beef Council.
  - (d) Assisted with organization and conduction of an Elanco Animal Health Beef Quality Summit. April 2008. Served as primary conference organizer and presented three presentations during the three day session.
  - (e) Assisted with organization and coordination of National Meat Animal Evaluation Contest at Oklahoma State University. Served on Host Committee, Communication Division Coordinator, and Tabulation Coordinator – 2011, 2010, 2009, 2008, 2007, 2006. Contest Tabulation Coordinator – 2012-2016.
  - (f) Assisted with organization and coordination of Pork 101 Program – 2010, 2009, 2008, 2007. Presentations included: Live Market Hog Evaluation, Pre-Harvest Pork Quality Challenges.
  - (g) Assisted with coordination and organization of State 4-H & State FFA Meats Judging Contests. 2006-2016.
  - (h) Assisted with organization of Angus Boot Camp, Hosted for American Angus Association. 2006
- (5) Cooperative and other extension activities
- (a) Presentation/Panel Discussion: Bringing Beef Back to the Ranch. April 25, 2012
  - (b) Judged American Farmers and Ranchers State Speech Contest – 2012, 2011, 2013.
  - (c) Hosted Murray State University Block and Bridle Club visit and helped arrange Oklahoma livestock producers and companies for the group to tour. 2010, 18 students.

- (d) Invited Presentation: Efficient beef marketing in established industry channels. Presented at the 5 State Beef Conference in Dumas, TX and Boise City, OK. 2009.
  - (e) Antibiotic Residue Avoidance Committee. Comprised on representatives from National Cattlemen's Beef Association, Centers for Disease Control, University of Minnesota, North Dakota State University and Oklahoma State University. Participated in monthly conference calls and survey development. 2007.
  - (f) Tulsa State Fair Livestock Judging Contest Tabulation Committee (youth horse, youth livestock and collegiate livestock contests) – 2007-2016.
  - (g) Oklahoma Youth Expo. Assisted with coordination of harvest, data collection and reporting. 2009, 2008, 2007, 2006.
  - (h) Attendee: National Cattlemen's Beef Association, State Beef Quality Assurance Coordinator's Meeting – 2007, 2015, 2016.
  - (i) Judge: State 4-H Speech Contest – 2007, 2009.
  - (j) Presentation: Where does your meat come from? A Tour and Food Experience in the Robert M. Kerr Food and Agricultural Products Center. Students (n=50, 9-12 yr old) from the Stillwater Community Home School Association. 2007.
  - (k) Presentation: National Beef Quality Audit – 2005. Presented at the Oklahoma Cattlemen's Association Convention, July 28, 2006.
  - (l) Presentation: National Beef Quality Audit – 2005. Presented at the NW & SW District In-service. Roman Nose Lodge, Watonga, OK. July, 2006.
  - (m) Hosted the American Maine Anjou Junior Association Leadership Development group in FAPC, provided information to them about OSU and provided a tour of the meat lab portion of FAPC. 2006
  - (n) Presentation: Beef Carcass Value: A look at differences and marketing alternatives. Master Cattlemen Summit, Oklahoma State University, August, 2006.
  - (o) Presentation: Beef Carcass Value: Grid Marketing and Impact of Quality and Cutability on Market Value. Angus Boot Camp, Hosted at Oklahoma State University, December 2006.
- (6) International activities.
- (a) "Consumer Trends vs. Production." Presented for the Ontario Cattle Feeders Association Convention, London, Ontario, Canada. January 5, 2006.
  - (b) "Carcass traits and quality characteristics." Presented for the Ontario Cattle Feeders Association Convention, London, Ontario, Canada. January 7, 2006.

***University of Minnesota and Colorado State University***

- **MEAT SCIENCE AND RESEARCH PRESENTATIONS**

Idaho Veterinary Medical Association Meeting, Ontario Cattle Feeders Association Annual Convention, International Food and Beverage Congress, South Dakota Women in Agriculture, USMEF/Texas Beef Council Trade Team Visit, Japanese/Akita Prefecture UM Visit Day, Cargill UM Visit Day, Minnesota Nutrition Conference, Minnesota Dairy Herd Health Conference, Minnesota Association of Meat Processors Annual Conventions and Fall Forums, Range Beef Cow Symposium, Academy of Veterinary Consultants Convention, Western Section American Society of Animal Science Extension Symposium, Nebraska Beef 808, Pennsylvania Team Beef, Utah



Intermountain Beef 3910, United States Meat Export Federation Mexican Trade Team Seminar, Meril Key Account Symposium

- **EDUCATIONAL PROGRAMS**

American Angus Association Boot Camp, Master Cattlemen Summit, Oklahoma Youth Quality Assurance In-Service Program, Oklahoma Beef Quality Summit, Minnesota Mini Carcass 101 Coordinator, Minnesota Carcass Merit Program Coordinator, Meat Quality and Food Safety Workshop Coordinator, Minnesota Cow-Calf Days, Minnesota Cattle Feeder Days, Beef University Coordinator, Swift & Co. Beef Academy, Pork 101, Keystone/McDonald's Beef Industry Tour, Montana Gate-to-Plate Coordinator, Certified Angus Beef Round-Up, Colorado Association of Meat Processors Workshop

- **QUALITY ASSURANCE EDUCATIONAL SEMINARS**

Minnesota Beef Quality Assurance courses and Train-the-Trainer seminars, Minnesota Youth Meat and Quality Assurance curriculum development, American Sheep Industry Association Sheep Safety and Quality Assurance Train-the-Trainer and Auditor Training courses, Colorado Beef Quality Assurance Train-the-Trainer seminars, producer training seminars, Colorado Wool Growers Convention, National Lamb Feeders Association Lamb School, 4-H Conference Workshop, Wyoming Ram Test Field Day

- **CONTEST SUPPORT AND ORGANIZATION**

Minnesota State Fair Beef Committee-Premier Exhibitor Coordinator, Minnesota 4-H Project Bowl Committee, American Junior Angus Association Quiz Bowl, National Western Stock Show and Rodeo Collegiate Meats Judging Contest, National Western Stock Show and Rodeo 4-H/FFA Meats Judging Contest, National Western Stock Show and Rodeo Fed Beef Contest, Colorado FFA Meats Evaluation Contest, Minnesota county fair carcass contests, Colorado county fair livestock ultrasound evaluations/demonstrations

**PROFESSIONAL ACTIVITIES:**

- (1) Oklahoma State University Committees (departmental, college, and university levels).

Departmental

- Block and Bridle Club Advisor – 2005 to 2019
  - Host for the 2015 National Block and Bridle Convention – responsible for fundraising, convention planning, and convention set-up.
  - Raised \$18,890 in cash sponsorship and \$9,020 in in-kind donations to support convention.
- Undergraduate Advising Coordinator – 2013 to 2017
- Assessment Coordinator – 2011 to 2019
- Student Success Coordinator Advisory Committee – 2012-2013
- Arena Committee – 2011
- Student Survey of Instruction Committee – 2011
- Meat Science Association Advisor – 2005-2010
- Animal Science Awards Committee – 2013-2014
- Animal Science Seminar Committee – 2007 (Chair, Spring Semester), 2005-2006
- Animal Science Teaching Committee – 2006-2008
- Animal Science Research Committee – 2006-2018
- Animal Science Banquet Committee – 2006-2018, 2010 chairman, 2018/19 chairman
- Animal Science Quadrathlon Committee – 2008-2018
- Animal Science Academic Program Review, Lead Author with Dept. Head – 2017-2018
- Judge for the Whiteman Research Symposium – 2009
- Freshman Mixer Co-coordinator – 2007-2016
- Service on Search Committees for 9 positions; 2 times serving as chair

## College

- Food Systems Leadership Institute – 2020 – 2022
- LEAD 21 Leadership Development Program – 2017-2018
- Student Council Administrative Advisor – 2016-present
- Freshmen in Transition (FIT) Living Learning Program Administrative Advisor – 2016-present
- Effective Teaching Committee Administration Advisor – 2016-present
- Advising Coordinator Committee Chairman – 2016-present
- CASNR Faculty Council – 2008-2010; 2008-2009 and 2009-2010 (Secretary)
- Search Committee: Director, National Institute for Microbial Forensics, Food, and Ag Biosecurity
- Search Committee: Associate Vice President, Oklahoma Cooperative Extension Service
- Professional Development Workshops:
  - Planning Leader for Teaching Workshops 2016-2022 (fall and spring workshops)
  - Planning Committee for Advising Workshop held August, 2015
    - Presented session on the use of an Advising Syllabus
  - On-line Course Instructor Training – 2009
  - Adding Writing Components to Coursework – 2009; Workshop presenter – 2010
  - Diversity in the Classroom – 2008
  - Adding Critical Thinking Components to Coursework – 2008
- Oklahoma Beef Quality Assurance Committee – 2007-2012, Chair
- CASNR Student Council Advisor – 2006-2008
- CASNR Scholarship Committee – 2006
- CASNR Reading Group – 2007

## University

- Director of Student Academic Services Committee – 2016-present
- Late Withdrawal and Tuition Appeal Committee – 2016 to present
- Commencement Committee – 2016 to present
- Transfer Student Success Committee – 2020 to present
- Classroom Scheduling RFP Committee – 2021-2022
- Leadership OSU Mentor for University College Students – 2016-2018
- OSU Academic Leaders Academy Planning Committee, Presenter, Participant – 2016-2017
- OSU Faculty Council Secretary – 2014-2017
- OSU Faculty Council – 2011-2017
- Retirement and Fringe Benefits Committee – 2018
- Student Assessment Task Force – 2012
- Workload and Overload Task Force – 2012
- Academic Integrity Panel – 2014-2015, 2018
- Academic Integrity Facilitator – 2006-2018
- Chair, Academic Standards and Policy Committee – 2013-2014
  - Late Drop Committee
  - Tuition Appeal Committee
  - Grade Appeals Committee
  - Academic Reprieve Committee
- Chair, Rules and Procedures Committee – 2015-2017
- Academic Standards and Policies Committee – 2011-2017
- Faculty Council Nominating Committee – 2014-2015
- Faculty Benefits Committee – 2010-2011
- Dispute Resolution Panels – 2013, 2014
- Search Committee: Director, Pre-Professional Academic Support Services – 2017
- Search Committee: Director, University Assessment and Testing – 2014

- Search Committee: Director, Learning And Student Success Opportunity Center – 2011
- Activity Fee Allocation Program Committee – 2007-2009, 2017-2018
- Student Organization Committee – 2008-2010
- Professional Development Workshops:
  - Critical Thinking Assessment Series Presenter/Organizer – 2015
  - Assessment Series Participant
  - Undergraduate Student Assessment
  - Writing Assessment Workshop Presenter – 2010
  - Panel member during New Faculty Orientation – 2010

(2) Previous Professional Activities

*University of Minnesota*

- UM Block & Bridle Advisor – 2003-2005
- UM Departmental Faculty Consultative Committee & Grievance Committee – 2003- 2004
- UM and U-Wisconsin River Falls Joint Academic Quadrathlon – Lab practicum development & judge, 2003-2005
- Minnesota Youth Quality Assurance Committee – 2003-2004
- Minnesota State Fair Beef Show Committee – 2003-2004
- Kid’s Kick Off Food Safety Event Committee – 2003-2004
- Minnesota Association of Meat Processors – Ex-officio Board Member, 2003-2005; State Processed Products Contest Judge, 2003-2005
- Next Generation of the Professorate Program – 2003-2004

*Colorado State University*

- Western Section American Society of Animal Science Host Committee – 2002
- CSU Block & Bridle Little National Western (Judge) – 2000
- CSU Block and Bridle Graduate Student Advisor – 1998-1999
- CSU Academic Quadrathlon – Lab practicum development & judge, 1999-2002

*University of Nebraska*

- UNL Sr. & Jr. Livestock Judging & Meat Animal Evaluation Teams – Member, 2005; Asst. Coach, 2006
- UNL Block and Bridle President (1995 and 1996), Secretary (1994), North Central Region Secretary (1995), Member (1992-1996)

(3) Service in professional organizations

- American Society of Animal Science Board of Directors – 2018-2021
  - Annual Meeting Chair – 2020
- National Cattlemen’s Beef Association Beef Quality Assurance Advisory Board – 2015-2020
- Associate Section Editor – Journal of Animal Science – 2013 – 2019
- Gamma Sigma Delta, Member – 2006 to Present
- Sigma Xi, Member – 2006 - 2009
- American Meat Science Association, Member – 1998 - Present
  - Scientific resources committee – 2016-2020
  - Reciprocal Meats Conference (RMC) Planning Committee – 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2006, 2004
  - RMC Abstract Co-Chair – 2010, 2015
  - RMC Abstract Chair – 2011, 2016
  - RMC Reciprocation Session Chair (planning and organization of 33-1 hour extension, scientific and teaching presentations) – 2014
  - RMC Reciprocation Session Co-Chair – 2013

- Undergraduate Quiz Bowl Committee, 2007-2009 Chairman, Committee Member 2006-2007
  - North American Colleges and Teachers of Agriculture, Member – 2005 - present, Journal Committee 2016-present.
  - American Society of Animal Science, Member – 1998 - Present
  - National Cattlemen’s Beef Association, Member – 1996 to 2006
  - Leopold Marketing grant reviewer – 2006
  - Reviewer, *Journal of Animal Science*, *Meat Science*, and *Journal of Dairy Science* – 2006-present.
  - Minnesota State Cattlemen’s Association, Member – 2002-2005
  - Lloyd’s Registered Quality Assurance ISO 9000 Auditor/Lead Auditor Training
  - National Block & Bridle Club
    - Secretary/Treasurer – 2016 – 2021
    - Host, 96<sup>th</sup> Annual National Convention (Tulsa, OK) – 2015
    - Scrapbook Judge – 2007
    - Annual, Web Page, & Outstanding Senior Judge – 2004, 2003
  - Academy of Veterinary Consultants Convention Speaker
- (4) Consulting services.
- Consulted with Certified Angus Beef on the Development of a white paper.
  - Consulted as an expert reviewer for Sheridan Ross PC regarding litigation involving the process of electrical stimulation.
  - Consulted as a professional journal article reviewer prior to submission for Elanco Animal Health.

#### ***HONORS & AWARDS***

- NCBA Beef Quality Assurance Educator of the Year – 2022
- University of Nebraska Animal Science Undergraduate of Distinction – 2021
- North American Collegiate Teachers of Agriculture Teaching Scholar Award – 2016
- George Chiga Endowed Professor – 2014 to 2019
- American Meat Science Association Distinguished Teaching Award – 2014
- Southern Section American Society of Animal Science Young Educator Award – 2012
- Oklahoma State University Department of Animal Science Tyler Award – 2012
- North American Collegiate Teachers of Agriculture Teaching Award – 2010
- Southern Section American Society of Animal Science Young Researcher Award – 2010
- American Meat Science Association Young Scientist Achievement Award – 2008
- Gamma Sigma Delta Young Researcher Award – 2008
- Colorado State University College of Agriculture Graduate Student Teacher of the Year – 2002
- American Meat Science Association Graduate Student Research Poster Competition, 3<sup>rd</sup> Place, Master of Science Division – 2000
- Colorado Association of Meat Processors Scholarship Recipient – 2000
- Block and Bridle – National Outstanding Senior (1996), National Junior Scholarship (1995)
- American Society of Animal Science Undergraduate Awards