

CURRICULUM VITAE
DEBORAH L. (ROEBER) VANOVERBEKE

OFFICE ADDRESS

Oklahoma State University
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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.

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.

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 Professor – Meat Science

Location: Oklahoma State University, Department of Animal Science, Stillwater, OK 74078

Period: June 2005 – Present

Duties: 70% Teaching/ 30% Research:

- Animal Science/Food Science 2253, Live Animal and Carcass Evaluation
- Animal Science 4863, Capstone for Animal Agriculture
- Food Science 5120, Interpreting Animal Science and Food Science Research
- Academic advising for undergraduate and graduate students
- Conducting systems type research to determine the impact of pre-harvest and post-harvest management on meat quality and palatability.
- Studying the impact of ethanol co-products on meat quality characteristics.
- Conducting research to improve the utilization of cow carcasses and acceptability of subprimals from cow carcasses.

PREVIOUS EXPERIENCE:

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/50% Research:

- Contribute and participate 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.
- 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.
- Conducted systems type research to determine the impact of pre-harvest and post-harvest management on meat quality and palatability.

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 in the development and dissemination of the Colorado Beef Quality Assurance program and 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.

Title: Director – Nebraska Corn-Fed Beef Program (NCFB)
Location: Nebraska Cattlemen, Lincoln, NE 68508
Period: January 1997 – June 1998
Duties: Responsibilities included:

- Expanded and coordinated the Nebraska Beef Quality Assurance (BQA) Program.
- Conducted BQA educational meetings with state veterinarians and extension educators.
- Developed and maintained the USDA Quality Control Program Certification Manual.
- Marketed the NCFB Program and guidelines to producers.
- Designed and distributed correspondence materials for the NCFB and BQA Programs.

PROFESSIONAL MEMBERSHIPS:

- American Meat Science Association, Member – 1998 to Present
- American Society of Animal Science, Member – 1998 to Present
- National Cattlemen’s Beef Association, Member – 1996 to Present
- Reviewer, *Journal of Animal Science* and *Journal of Dairy Science* – 2007, 2006
- Lloyd’s Registered Quality Assurance ISO 9000 Auditor/Lead Auditor Training

SCHOLARLY PROGRAM:

TEACHING:

Assigned Courses

- (a) ANSI 2253: Live animal and carcass evaluation. Revisions on course content and lab application materials
- (b) ANSI/FDCS 5120: Special Topics in Food Science: Interpreting Animal Science/Food Science Research. New course developed and taught for the first time in the Spring, 2007

Other Courses Taught

- ANSI 4900, Special Problems: Explorations in Animal Science Research, Introduction to Animal Science, Capstone, Ag Orientation

RESEARCH AND CREATIVE ACTIVITIES:

- Zinpro Corporation. Evaluating effects of Zinpro Performance Minerals on performance and carcass characteristics of steers fed finishing diets designed for natural beef production. C.R. Krehbiel and **D.L. VanOverbeke**. \$53,095. 2008, 1 year
- 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. J.B. Morgan, **D.L. VanOverbeke**, and G.G. Hilton. \$125,000. 2008-2009, 2 years.
- California Beef Council. Determination of the age and cause of the bottom round blemish identified in dairy steer rounds. **D.L. VanOverbeke**, G.G. Hilton and N. Litherland. \$12,644. 2008, 1 year.
- Iowa State University. Utilization of natural genomic variation to enhance nutritional and health values of beef. R. Mateescu and **D.L. VanOverbeke**. \$129,500. 2008-2009, 2 years.
- Oklahoma Beef Council/National Cattlemen’s Beef Association. Comparing ammonia-based Select striploin subprimal enhancement to a traditional phosphate injection brine. C.A. Mireless DeWitt and **D.L. VanOverbeke**. \$10,000. 2008, 1 year.
- Intervet Corporation. Effects of feeding cattle Zilmax® on carcass characteristics, palatability, and shelf life. G.G. Hilton, **D.L. VanOverbeke**, and J.B. Morgan. \$631,000. 2007-2009, 2 years.
- 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. **D.L. VanOverbeke**, C. Richards, C.R. Krehbiel, and B. Hicks. \$9,750. 2007-2008, 1 year.
- Team Initiative Program. Use of distiller’s grains in flaked corn diets for finishing cattle. C. Richards, C. Krehbiel, **D.L. VanOverbeke**, B. Hicks. \$71,108. 2007-2008.

PUBLICATIONS:

(a) Books and Book Chapters:

- **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.

- T.G. Field and **D.L. VanOverbeke**. 2007. Chapter 4. The Quality Revolution. In: *Handbook of Beef Safety and Quality*. Pp 85-100.

(b) Selected Referred Journal Articles. (14 First or Corresponding* Author, 21 Total)

- 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. Submitted.
- *Sullivan, M.M., **D.L. VanOverbeke**, L.A. Kinman, C.R. Krehbiel, G.G. Hilton, and J.B. Morgan. 2007. *Comparison of the Biobullet versus traditional injection techniques on tissue damage and tenderness in beef subprimals*. J. Anim. Sci. Submitted
- *Shook, J.N., **D.L. VanOverbeke**, 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. 2007. *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. Accepted with revision.
- *Gill, R.K., **D.L. VanOverbeke**, B. Depenbusch, J.S. Drouillard, and A. DiCostanzo. 2007. *Impact of beef cattle diets containing corn or sorghum distillers grains on beef color, fatty acid profiles, and sensory attributes*. J. Anim. Sci. Accepted.
- 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.
- 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.
- ***Roeber, D. L.**, 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.
- **Roeber, 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.
- **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.
- **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.
- **Roeber, D. L.**, K. E. Belk, J. D. Tatum, J. W. Wilson, and G. C. Smith. 2001. *Effects of three levels of α -tocopheryl acetate supplementation to feedlot cattle on performance of beef cuts during retail display*. J. Anim. Sci. 79:1814-1820.
- **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. Ani. Sci. 17:39-44.
- **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.
- **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.
- **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.

CURRENT INITIATIVES:

(1)Teaching programs.

- Convert FDSC 5120 to a permanent course entitled “Interpreting Animal Science & Food Science Research”
- Continue to update ANSI/FDSC 2253 to be current with the livestock industry
- Enhance ANSI 4863: Capstone to make maintain its relevance to students and today’s livestock and food industries

(2)Research programs.

- Investigate pre and post harvest management techniques that impact carcass quality, palatability and retail stability.

(3)Extension programs.

- Oklahoma Beef Quality Assurance Program. Assisted with revision of the program and serve as the Oklahoma Beef Quality Assurance Program Advisory Committee Chairman
- 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. Provide technical assistance and training materials/expertise.
- 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