CURRICULUM VITAE DEBORAH L. (ROEBER) VANOVERBEKE

Department of Animal Science C 203G Animal Science Building Lincoln, NE 68583 402,472,6766 11941 N 144th Street Waverly, NE 68462 cell: 405.714.5879 dvanoverbeke2@unl.edu

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: Department Head, Department of Animal Science

July 2023 to Present

Location: University of Nebraska – Lincoln, Lincoln, NE

Duties: Provide oversight and director for animal science programming including teaching, research and

extension programs of 40 faculty and 70 staff at campus and out-state facilities, including animal

units at Research, Extension and Education Centers.

Title: Assistant Dean, Academic Programs, Ferguson College of Agriculture – July 2016 – July 2023

Location: Oklahoma State University, Stillwater, OK

Title: Professor – Meat Science

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

Duties: 70% Teaching – 30% Research

- Teach 6 different courses related to meat science, food science, interpreting research or senior capstone for undergraduate and graduate students
- 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) and Advising Coordinator for Animal and Food Sciences Department
- Conducted research to determine the impact of pre-harvest and post-harvest management on meat quality and palatability
 - o 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

o Manage multi-year project with Multisorb, Inc. on retail meat color stability pilot studies for various retailers and packers across the U.S.

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: 50% Research

Title: Research Associate & Graduate Research Assistant

Location: Colorado State University

Department of Animal Sciences

Fort Collins, CO 80523

Period: June 1998 – October 2002

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

Location: Nebraska Cattlemen

Lincoln, NE 68508

Period: January 1997 – June 1998

Research Highlights

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

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

UNIVERSITY OF MINNESOTA: TOTAL: \$ 133,417 COLORADO STATE UNIVERSITY: TOTAL: \$ 155,220

Selected 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 <u>Meat quality analysis: advanced evaluation methods</u>, 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.
 - 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. 2021. *Changes in glygolytic 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.
 - 3. 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.
 - 4. *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..
 - 5. 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 Weaber, J.M. Bormann, and M.M. Rolf. 2018. *Environmental effects on water intacke and water intake prediction in growing beef cattle*. J. Anim. Sci. Aug. 29 doi: 10./1093/jas/sky267.
 - 6. 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.
 - 7. 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
 - 8. 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.
 - 9. 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
 - 10. VanOverbeke, D.L.*, 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.

PROFESSIONAL ACTIVITIES:

- American Society of Animal Science Board of Directors 2018-2021, Member 1998 present
- National Cattlemen's Beef Association Beef Quality Assurance Advisory Board 2015-2020
- Associate Section Editor Journal of Animal Science 2013 2019
- American Meat Science Association, Member RMC Abstract Chair 2011, 2016; Member 1998 Present
- North American Colleges and Teachers of Agriculture, Member 2005 present, Journal Committee 2016-present.