

Blake K. Wilson

Abbreviated Curriculum Vitae

Education:

Doctor of Philosophy, Animal Science: July 2014

Department of Animal Science, Oklahoma State University, Stillwater, OK

Advisor: Clint R. Krehbiel (clint.krehbiel@okstate.edu)

Dissertation title: *Ancillary therapy use and trace mineral supplementation in beef cattle: Impacts on clinical health, immune response variables, animal performance, and carcass traits*

Master of Science, Animal Science: May 2010

Department of Animal Science, Oklahoma State University, Stillwater, OK

Advisor: Clint R. Krehbiel (clint.krehbiel@okstate.edu)

Thesis Title: *Feeding a direct-fed microbial to determine performance, carcass characteristics, and fecal shedding of Escherichia coli O157:H7 in feedlot heifers fed with or without wet distiller's grains plus solubles*

Bachelor of Science, Animal Science, Business Option Agricultural Economics and Agribusiness Minor: May 2008 Summa Cum Laude

Department of Animal Science, Oklahoma State University, Stillwater, OK

Advisor: Robert (Bob) Kropp (bob.kropp@okstate.edu)

Professional Experience and Employment:

Assistant Professor

Full time appointment, 75% teaching and 25% research: 2015 -present

Oklahoma State University, Department of Animal Science

- Teaching responsibilities
 - Instructor of Applied Animal Nutrition (ANSI 3653)
 - Spring and Fall Semesters
 - Four sections
 - Instructor of Peer-Led Team Learning in Animal Science (ANSI 3410)
 - Spring and Fall Semesters
 - One section
 - Co-instructor for Animal Management Techniques (ANSI 3703)
 - Spring and Fall Semesters Spring 2015-Spring 2016
 - Two sections
 - Instructor of Introduction to the Animal Sciences (ANSI 1124)
 - Spring 2016
 - Three sections
- Research areas
 - Ruminant nutrition
 - Calf health
 - Beef cattle production and management

Lecturer

Full time appointment, 100% teaching: 2014-2015

Oklahoma State University, Department of Animal Science

- Instructor of Applied Animal Nutrition (ANSI 3653)
 - Fall 2014
 - Four sections
- Conducted laboratories for Animal Management Techniques (ANSI 3703)

- Fall 2014
 - Two sections

Graduate Research Coordinator

Willard Sparks Beef Research Center, 3/4 time appointment: 2010-2014

Oklahoma State University, Department of Animal Science

- Supervision, scheduling, and record keeping in regard to all research conducted at the 980 head CAFO licensed facility
- Supervised the successful execution of 74 research trials
- Conducted research on excess of 9000 head of cattle
- Office manager for the Willard Sparks Beef Research Center
- Maintained commodity and pharmaceutical inventories
- Determined commodity and pharmaceutical projections
- Coordinated the procurement of commodities and supplies through vendors
- Prepared break-evens, monthly billing statements, and cattle closeouts
- Served as a liaison between faculty in multiple departments and institutions, graduate students, staff, and student employees
- Assisted graduate students in the formulation of rations and the development of research protocols
- Coordinated and conducted tours of the facility for students, alumni, and producers
- Assisted with extension and classroom demonstrations at the facility
- Conducted daily activities at the facility including but not limited to calling feed, processing cattle, evaluating and treating cattle
- Provided daily supervision and management for up to 15 undergraduate and graduate employees

Personal research explored:

- Effects of castration methods on health and performance of “high-risk” commingled calves purchased from livestock markets in Oklahoma, Arkansas, and Missouri
- Factors influencing the subsequent receiving health and performance of “high-risk” steer and bull calves purchased at regional livestock markets in 2010 and 2011
- Evaluation of multiple ancillary therapies utilized in combination with an antimicrobial in newly received high-risk calves treated for bovine respiratory disease
- Impact of previous bovine respiratory disease incidence and ancillary therapy use on steer finishing performance, efficiency, carcass characteristics, and lung scores
- Effects of chelated copper, manganese, and zinc supplementation on clinical signs, immune response variables, and mineral status of calves following natural exposure to bovine viral diarrhea virus type 1b and subsequent *Mannheimia haemolytica* infection

Other responsibilities:

- Assisted with the Animal Science Quadrathlon
- Assisted with the National Meat Animal Evaluation Contest
- Secretary of the Animal Science Graduate Student Association
 - Performed all customary secretarial duties
 - Organized and managed two successful fundraisers
 - Assisted with the planning of and hosting of the annual Totusek Seminar and Dinner
- President of the Animal Science Graduate Student Association
 - Performed all official presidential duties
 - Organized social and professional functions
 - Coordinated the planning of and hosting of the annual Totusek Lectureship
- Teaching assistant

Publications:

Manuscripts in Progress:

Wilson, B. K., G. I. Zanton, D. L. Step, C. A. Gifford, M. A. Montelongo, R. W. Fulton, A. W. Confer, J. W. Ritchey, D. M. Hallford, C. L. Haviland, M. S. Calvo-Lorenzo, C. R. Krehbiel, and C. J. Richards. Effect of copper, manganese, and zinc supplementation on serum antibody titers and multiple immune response variables of calves following exposure to bovine viral diarrhea virus type 1b and subsequent *Mannheimia haemolytica* infection.

Book Chapters:

Wilson, B. K., and C. R. Krehbiel. 2012. Current and Future Status of Practical Applications: Beef Cattle. In T. R. Callaway and S. C. Ricke (Eds). Direct-Fed Microbials and Prebiotics for Animals. Springer Science & Business Media, New York, NY. p. 137-153. ISBN 978-1-4614-1310-3.

Peer Reviewed Journal Articles:

Wilson, B. K., C. J. Richards, D. L. Step, and C. R. Krehbiel. 2017. Best management practices for newly weaned calves for improved health and well-being. J. Anim. Sci. 95:2170-2182.

Wilson, B. K., D. L. Step, C. L. Maxwell, C. A. Gifford, C. J. Richards, and C. R. Krehbiel. 2017. Impact of bovine respiratory disease during the receiving period on steer finishing performance, efficiency, carcass characteristics, and lung scores. Prof. Anim. Sci. 33:24-36.

Carlos-Valdez, L., **B. K. Wilson,** L. O. Burciaga-Robles, D. L. Step, B. P. Holland, C. J. Richards, M. A. Montelongo, A. W. Confer, R. W. Fulton, and C. R. Krehbiel. 2016. Effect of timing of *Mannheimia haemolytica* challenge following short-term natural exposure to bovine viral diarrhea virus type 1b on animal performance and immune response in beef steers. J. Anim. Sci. 94:4799-4808.

Wilson, B. K., B. P. Holland, D. L. Step, M. E. Jacob, D. L. VanOverbeke, C. J. Richards, T. G. Nagaraja, and C. R. Krehbiel. 2016. Feeding wet distillers grains plus solubles with and without a direct-fed microbial to determine performance, carcass characteristics, and fecal shedding of *Escherichia coli* O157:H7 in feedlot heifers. J. Anim. Sci. 94:297-305.

Wilson, B. K., M. Vazquez-Anon, D. L. Step, K. D. Moyer, C. L. Haviland, C. L. Maxwell, C. F. O'Neill, C. A. Gifford, C. R. Krehbiel, and C. J. Richards. 2016. Effect of copper, manganese, and zinc supplementation on the performance, clinical signs, and mineral status of calves following exposure to bovine viral diarrhea virus type 1b and subsequent *Mannheimia haemolytica* infection. J. Anim. Sci. 94:1123-1140.

Matera, J., **B. K. Wilson,** J. A. Hernandez Gifford, D. L. Step, C.R Krehbiel, and C.A. Gifford. 2015. Cattle with increased severity of bovine respiratory disease complex exhibit decreased capacity to protect against histone cytotoxicity. J. Anim. Sci. 93:1841-1849.

Maxwell, C. L., B. C. Bernhard, C. F. O'Neill, **B. K. Wilson,** C. G. Hixon, C. L. Haviland, A. N. Grimes, M. S. Calvo-Lorenzo, D. L. VanOverbeke, G. G. Mafi, C. J. Richards, D. L. Step, B. P. Holland, and C. R. Krehbiel. 2015. The effects of technology use in feedlot production systems on feedlot performance and carcass characteristics. J. Anim. Sci. 93:1340-1349.

Wilson, B. K., D. L. Step, C. L. Maxwell, J. J. Wagner, C. J. Richards, and C. R. Krehbiel. 2015. Evaluation of multiple ancillary therapies used in combination with an antimicrobial in newly received high-risk calves treated for bovine respiratory disease. *J. Anim. Sci.* 93:3661-3674.

Maxwell, C. L., C. R. Krehbiel, **B. K. Wilson**, B. T. Johnson, B. C. Bernhard, C. F. O'Neill, D. L. VanOverbeke, G. G. Mafi, D. L. Step, and C. J. Richards. 2014. Effects of beef production system on animal performance and carcass characteristics. *J. Anim. Sci.* 92:5727-5738.

Wahrmund, J. L., D. B. Burken, **B. K. Wilson**, S. J. Terrill, D. L. Step, C. R. Krehbiel, S. M. Trost, and C. J. Richards. 2012. Effect of truck compartment on ruminal temperature during transit and subsequent health and performance of recently weaned beef heifers. *Prof. Anim. Sci.* 28:670-677.

