

Karol E. Fike

EDUCATION

Ph.D., University of Nebraska-Lincoln, Lincoln, NE, August, 1997

Advisor: Dr. James E. Kinder

Major: Animal Science, Reproductive Physiology Specialization

Dissertation: *Regulation of LH secretion by progestins and their use in estrous synchronization programs in beef cattle*

M.S., University of Nebraska-Lincoln, Lincoln, NE, December, 1994

Advisor: Dr. James E. Kinder

Major: Animal Science, Reproductive Physiology Specialization

Thesis: *Role of LH in development of ovarian follicles and corpora lutea in cattle*

B.S., Iowa State University, Ames, IA, May, 1991

Advisor: Dr. Gene Rouse

Bachelor of Science in Agriculture

Major: Animal Science

EMPLOYMENT

Assistant Professor (May, 2008 to present)

- Teaching:
 - *Animal Behavior* (1 semester; enrollment=67)
 - *Stress Physiology* (1 semester; graduate course; enrollment=13)
 - *Advanced Reproductive Physiology* (graduate course)
- Advise undergraduate students
- Conduct research evaluating electronic animal identification technologies; data collection and analysis; write grant proposals, scientific journal articles, and publications for livestock producers

Kansas State University
Department of Animal Sciences and Industry
Weber Hall
Manhattan, KS 66506

Research Associate (May, 2006 to May, 2008)

Directed research program evaluating electronic animal identification technologies and issues impacting their effectiveness in livestock production environments including development of research protocols, supervision of undergraduate and graduate student workers, data collection and statistical analyses, budget management and report generation.

Kansas State University
Department of Animal Sciences and Industry
Weber Hall
Manhattan, KS 66506

Contract Work (July, 2004 to March, 2006)

- Certified Angus Beef, LLC
Managed collection and summarization of data regarding feeder calf sale premiums at auction markets. Wrote popular press articles interpreting and summarizing results.
- McCormick Company
Compiled and summarized research information and wrote a news release regarding *Mycoplasma bovis*.
- Ohio State University, Department of Animal Sciences
Adapted nine animal welfare PowerPoint teaching modules for classroom and extension use.
- Kansas State University, Department of Clinical Sciences
Compiled and summarized research information and wrote a book chapter.
Developed educational pamphlet regarding livestock transport issues.
Reconciled electronic animal identification data and tracking information and developed summary reports as a component of a research grant.
- Kansas State University, Department of Animal Sciences & Industry
Wrote United States Department of Agriculture National Animal Identification System grant entitled "Impact of Environmental Interferences and Performance Variation on Radio-Frequency Transponder and Transceiver Reliability and Economic Assessment of Radio-Frequency Identification Technology Implementation in Animal Production Environments" for Dr. Dale Blasi in cooperation with the Kansas Animal Health Department; grant was successfully and fully-funded (\$441430)

Assistant Professor (July, 2000 to July, 2004)

- Teaching:
 - *Introductory Animal Sciences* (7 quarters)
 - *Freshman Research Seminar* (2 quarters)
 - *Animal Products* (team taught; 7 quarters)
- Coordinated Departmental undergraduate internship program (required of all students) including program requirements, management, development of internship opportunities and advising students
- Developed and managed research program in male and female reproductive physiology
- Advised undergraduate and graduate students
 - Formally advised approximately 40 undergraduate students
 - Co-coordinating advisor for Department July, 2003-04
 - Informally advised (one-on-one) approximately 100 students per year (ie. internships, career advice, curriculum options)
 - Advised 6 Honors students
(4 completed Honors research project with me)
 - Advised graduate students, Mr. Eric Behlke (completed M.S. in August, 2003) and Danyelle Dauch (August, 2003 to June, 2004)

Ohio State University
Department of Animal Sciences
2029 Fyffe Road
Columbus, OH 43210

Adjunct Instructor (June, 1998 to May, 2000)

Courses: Anatomy and Physiology II
Human Nutrition

Basic Anatomy and Physiology
Introduction to Biology

Western Iowa Tech Community College
Denison Campus
11 North 35th Street
Denison, IA 51442

Extension Livestock Assistant (Summers, 1997 & 1999)

Collected and analyzed 4-H beef carcass data. Developed summary reports and program slide presentations regarding data collection process and carcass data.

East Pottawattamie County (Darrell Busby, supervisor)
Iowa State University Extension
Oakland, IA 51560

Graduate Research and Teaching Assistant (June, 1991 to June, 1997)

- Conducted research trials in animal science field. Collected, analyzed data and presented research results at scientific meetings and livestock extension education events. Published research results.
- Sole responsibility for teaching Animal Management (autumn, 1996)
- Coached Livestock Judging Team
- Teaching Assistant for Animal Systems and Animal Management courses
- Organized/presented livestock judging clinics

Department of Animal Science
University of Nebraska-Lincoln
Lincoln, NE 68583-0908

Internship as Technical Sales Assistant, ICI Americas, Inc. (Summer, 1990)

Increased visibility of ICI products through regular contact with dealers, growers, and custom applicators. Handled customer complaints, scouted crops and implemented appropriate problem-solving techniques.

Swine Breeding Laboratory Assistant (1989)

Performed laboratory tests, aided in sample collection, mixed reagents, and organized and compiled research data.

Department of Animal Science, Iowa State University
Ames, IA 50011

Livestock Detail Worker (1988)

Responsible for general care of livestock and facilities used for animal science courses.

Department of Animal Science, Iowa State University
Ames, IA 50011

Teaching

Summary of courses taught

Animal Management (teaching assistant and sole instructor; UNL)

Livestock Evaluation (sole instructor; UNL)

Basic Anatomy & Physiology (Western Iowa Tech)

Human Nutrition (Western Iowa Tech)

Introduction to Biology (Western Iowa Tech)

Anatomy & Physiology II (Western Iowa Tech)

Internship in Animal Sciences (OSU)

Introductory Animal Sciences (OSU)

Animal Products (OSU)

Freshmen Research Seminar (OSU)

Animal Behavior (KSU)

Stress Physiology (KSU)

Evaluation of Instruction

Course: Internship in Animal Sciences (Ohio State)

This is required for all Animal Sciences majors but is not a course that meets regularly, but rather entailed a specific structure for students to follow including internship orientation, informal advising of students regarding internship experiences and an internship forum as a conclusion to the course. I was the faculty coordinator for the internship program.

Selected Peer reviewer and student comments

- In my opinion, the greatest scholarly contribution for the academic community is that Dr. Fike shared the materials. I have learned and then applied several of the unique components of The Ohio State program through participation in presentations of Dr. Fike at regional and national meetings....
- The orientations, personal contact with Dr. Fike and documentation of the internship provide a means to ensure a high quality, valuable education experience for each student.
- Based on Dr. Fike's achievements, our internship program now helps dozens of students yearly to better appreciate and integrate principles taught in our classrooms with real-world applications and problems.
- I have witnessed the perception of the internship as a mandated item progressing to a truly rewarding, scholarly experience.

Course: Introductory Animal Sciences (Ohio State University)

SEI Question	AU 00	WI 01	AU 01	SP 02	AU 02	AU 03	SP 04
# students enrolled	97	102	93	53	100	98	50
# evaluations completed	87	79	74	36	76	84	46
1. Instructor is well organized	4.57	4.51	4.50	4.64	4.66	4.4	4.7
2. Intellectually stimulating	4.40	4.43	4.57	4.64	4.45	4.3	4.8
3. Instructor interested in teaching	4.84	4.73	4.77	4.75	4.75	4.5	4.9
4. Encouraged independent thinking	4.54	4.66	4.58	4.56	4.50	4.5	4.8
5. Instructor well prepared	4.70	4.75	4.57	4.78	4.71	4.6	4.9
6. Instructor interested in helping students	4.83	4.68	4.69	4.64	4.71	4.3	4.7
7. Learned greatly from instructor	4.52	4.47	4.53	4.75	4.57	4.3	4.6
8. Created learning atmosphere	4.55	4.59	4.50	4.64	4.59	4.4	4.7
9. Communicated subject matter clearly	4.45	4.52	4.45	4.67	4.45	4.2	4.3
10. Overall rating	4.64	4.60	4.64	4.81	4.63	4.4	4.7
Mean Overall Rating of College comparison group (class size over 60 & enrolled in course because required)	4.2	4.2	4.3	4.3	4.2	4.3	4.3
Mean Overall Rating of University comparison group (class size over 60 & enrolled in course because required)	4.1	4.1	4.0	4.2	4.1	4.1	4.3

Selected Peer reviewer and student comments

- Dr. Fike has a tremendous ability to make all students feel comfortable and a part of our department.
- Dr. Fike is a wonderful professor. She was very understanding and always willing to help. Her genuine interest in the subject and the students helped make this by far my favorite class.
- Many students mentioned in their course evaluations how much they appreciated the fact that Dr. Fike learned their names and tried to get to know them as individuals.
- Dr. Fike cares deeply about student development. She is student-oriented and makes the students feel comfortable and appreciated. Her teaching is a definite asset to this University.

Course: Animal Products – team taught 50% (Ohio State University)

SEI Question	WI 02	SP 02	AU 02	WI 03	SP 03	AU 03	SP 04
# students enrolled	75	59	29	81	70	43	65
# evaluations completed	68	73	43	69	60	27	59
1. Instructor is well organized	4.25	3.93	4.48	4.43	4.38	4.4	4.1
2. Intellectually stimulating	3.94	3.71	4.41	4.25	4.15	4.4	4.3
3. Instructor interested in teaching	4.63	4.12	4.66	4.61	4.67	4.4	4.3
4. Encouraged independent thinking	4.38	4.05	4.55	4.46	4.40	4.4	4.2
5. Instructor well prepared	4.40	4.03	4.66	4.46	4.55	4.5	4.2
6. Instructor interested in helping students	4.46	3.93	4.66	4.51	4.47	4.0	4.3
7. Learned greatly from instructor	4.12	3.61	4.38	4.23	4.27	4.2	4.0
8. Created learning atmosphere	4.36	3.88	4.55	4.46	4.40	4.3	4.2
9. Communicated subject matter clearly	4.37	3.81	4.34	4.32	4.27	4.1	3.9
10. Overall rating	4.40	3.95	4.61	4.44	4.40	4.1	4.1
Mean Overall Rating of College comparison group (class size over 60 & enrolled in course because required)	4.2	4.2	4.2	4.3	4.3	4.2	4.3
Mean Overall Rating of University comparison group (class size over 60 & enrolled in course because required)	4.0	4.1	4.2	4.1	4.1	4.3	4.1

Selected Peer reviewer and student comments

- Dr. Fike had a unique ability to draw even the more timid personalities into the discussion.
- It is clear the Dr. Fike enjoys teaching and is concerned with student learning.
- In that course, Karol is a natural teacher, providing excellent descriptions, examples and explanations of the topics covered.
- We were most impressed by Dr. Fike’s ability to actively engage student in the learning experience. She was obviously well liked and respected by her students. She had an enviable rapport with her class.

Course: Freshman Research Seminar – team taught 50% (Ohio State University)

SEI Question	SP 02	SP 03
# students enrolled	16	16
# evaluations completed	16	14
1. Instructor is well organized	4.25	4.36
2. Intellectually stimulating	4.31	4.43
3. Instructor interested in teaching	4.56	4.77
4. Encouraged independent thinking	4.63	4.71
5. Instructor well prepared	4.13	4.43
6. Instructor interested in helping students	4.63	4.79
7. Learned greatly from instructor	4.19	4.00
8. Created learning atmosphere	4.19	4.57
9. Communicated subject matter clearly	4.25	4.54
10. Overall rating	4.19	4.50
Mean Overall Rating of College comparison group (class size 5 to 20 and free elective)	4.6	4.4
Mean Overall Rating of University comparison group (class size 5 to 20 and free elective)	4.6	4.6

First Author Publications (myself or my students)

Book Chapter

Fike K and M F Spire. "Transportation of Cattle" 2006. Veterinary Clinics of North America: Food Animal Practice Vol 22, Issue 2, 2006:305-320.

Magazine Articles

Fike, KE. 2007. Here's the premium: Angus-based feeder premiums strongest for steers. *Angus Journal*; September.

Fike, KE and JE Kinder. 1996. More bull for your money. *Limousin World*; May.

Peters, KE and JE Kinder. 1995. More bull for your money. *Charolais Journal*; March.

Journal Articles

- Fike, KE**, F Kojima, B Lindsey, E Bergfeld, J Quintal, E Melvin, E Zanella, M Wehrman and J Kinder. 2004. Regulation of frequency of luteinizing hormone pulses by magnitude of acute change in circulating concentration of progesterone of female cattle *Anim Reprod Sci* 84: 279-291.
- Fike, KE**, ME Wehrman, BR Lindsey, EG Bergfeld, EJ Melvin, JA Quintal, EL Zanella, FN Kojima, and JE Kinder. 1999. Estrous synchronization in beef cattle with a combination of melengestrol acetate and an injection of progesterone and 17 β -estradiol. *J Anim Sci* 77:715-723.
- Fike, KE**, ML Day, EK Inskeep, JE Kinder, PE Lewis, RE Short, and HD Hafs. 1997. Estrus and luteal function in suckled beef cows that were anestrous when treated with an intravaginal device containing progesterone with or without a subsequent injection of estradiol benzoate. *J Anim Sci* 75:2009-2015.
- Fike, KE**, ME Wehrman, EGM Bergfeld, FN Kojima, and JE Kinder. 1997. Prolonged increased concentrations of 17 β -estradiol associated with development of persistent ovarian follicles do not influence conception rates in beef cattle. *J Anim Sci* 75:1363-1367.
- Fike, KE**, EG Bergfeld, AS Cupp, FN Kojima, V Mariscal, T Sanchez, ME Wehrman, HE Grotjan, DL Hamernik, RJ Kittok, and JE Kinder. 1997. Gonadotropin secretion and development of ovarian follicles during oestrous cycles in heifers treated with luteinizing hormone releasing hormone antagonist. *Anim Reprod Sci* 49:83-100.
- Fike, KE**, EG Bergfeld, AS Cupp, FN Kojima, V Mariscal, T Sanchez, ME Wehrman and JE Kinder. 1996. Influence of fenceline bull exposure on postpartum anestrous interval and pregnancy rate in beef cows. *Anim Reprod Sci* 41:161-167.
- Peters, KE**, EG Bergfeld, AS Cupp, FN Kojima, V Mariscal, T Sanchez, ME Wehrman, HE Grotjan, DL Hamernik, RJ Kittok, and JE Kinder. 1995. Luteinizing hormone has a role in development of fully functional corpora lutea (CL) but is not required to maintain CL function in heifers. *Biol Reprod* 51:1248-1254.

Departmental Publications

- Fike, K**, M Day, K Inskeep, J Kinder, P Lewis, R Short and H Hafs. 1998. Induction of estrus in anestrous suckled beef cows. *Nebraska Beef Report* pp 26-28.
- Fike, K**, M Wehrman, B Lindsey, E Bergfeld, E Melvin, J Quintal, E Zanella, F Kojima and J Kinder. 1998. A novel estrous synchronization program for cattle using melengestrol acetate. *Nebraska Beef Report* pp 29-33.
- Fike, K**, B Lindsey, E Bergfeld, F Kojima, J Quintal, E Zanella, E Melvin, M Wehrman, and J Kinder. 1998. Regulation of LH secretion by progesterone in heifers. *Nebraska Beef Report* pp 35-37.
- Fike, K**, M Wehrman, E Bergfeld, F Kojima and J Kinder. 1998. Prolonged elevated concentrations of estradiol do not affect conception rates in beef cattle. *Nebraska Beef Report* pp 38-40.
- Fike, KE**. 1995. Reproductive Anatomy and Physiology. In: Beef Basics II: Reproduction, Genetics, and Selection Home Study Course. Sponsored by: University of Nebraska Cooperative Extension and Institute of Agriculture and Natural Resources.
- Peters, K**, M Wehrman, E Bergfeld, A Cupp, F Kojima, T Sanchez, V Mariscal and J Kinder. 1994. Fenceline bull exposure effect on postpartum anestrous interval and pregnancy rate in cows. *Nebraska Beef Report* pp 12-13.

Journal Abstracts

- Ryan SE, DA Blasi, **KE Fike**, CO Anglin, AM Bryant, and BA Rickard. 2008. Read distance performance of low frequency radio frequency identification (RFID) panel transceivers varies across transponder manufacturer. *J Anim Sci* 86, (E-Suppl. 3):56.
- Dauch, D, **K Fike**, M Mussard, G Bridges, C Gasser, D Grum, M Davis, and M Day. 2005. Endocrine and follicular dynamics in beef heifers divergently selected for peripheral IGF-1 concentrations. *J Anim Sci* 83 (Suppl. 2):53.
- Osborne, JM, **KE Fike**, KA Grove, GD Fike, KH Hoblet, JE Kinder, and PH Hemsworth. 2004. Animal Welfare Education Modules: Enhancing the quality of education for students of food animal agriculture and health. *J Anim Sci* 82:(Suppl 2):105.
- Behlke, EJ, CR Burke, CL Gasser, ML Mussard, and **KE Fike**. 2003. Effects of long term treatment with GnRH agonist on testicular development and the attainment of puberty in bull calves. *J Anim Sci* 81 (Suppl. 2):20.
- Fike, KE** and AK Lahmers. 2003. Adding value to education: an undergraduate animal sciences internship program. *J Anim Sci* 81:(Suppl 1):26.
- Fike KE**, FN Kojima, EG Bergfeld, BR Lindsey, EJ Melvin, JA Quintal, EL Zanella, ME Wehrman, and JE Kinder. 1997. Magnitude of shift in concentration of progesterone (P4) in circulation does not alter LH secretion to the same extent as absolute concentration of P4 in heifers. *Biol Reprod* (Suppl 1) 56:120.
- Fike, KE**, ME Wehrman, BR Lindsey, EG Bergfeld, EJ Melvin, JA Quintal, EL Zanella, and JE Kinder. 1997. Estrous synchronization in beef cattle with melengestrol acetate (MGA) and an injection of progesterone (P4). *J Anim Sci* (Suppl 1) 75:232.
- Fike, KE**, ML Day, EK Inskeep, JE Kinder, PE Lewis, RE Short, and HD Hafs. 1996. Luteal activity and estrus in anestrus suckled beef cows after implants of progesterone with or without a subsequent injection of estradiol. *Congress Programme of the 13th Intl Congress on Anim Reprod* (Vol 2) P4-17.
- Peters, KE**, ME Wehrman, EGM Bergfeld, EJ Melvin, FN Kojima and JE Kinder. 1994. Protocol of progestin administration influences time to behavioral estrus but does not influence conception rates at the synchronized estrus after cessation of treatment in bovine females. *J Anim Sci* (Suppl 1) 73:89.
- Peters, KE**, EG Bergfeld, AS Cupp, FN Kojima, V Mariscal, T Sanchez, ME Wehrman, HE Grotjan, DL Hamernik, and JE Kinder. 1994. Suppression of pulsatile secretion of LH diminishes ovarian follicular development in heifers. *J Anim Sci* (Suppl 2) 72:78.
- Peters, KE**, EG Bergfeld, AS Cupp, FN Kojima, V Mariscal, T Sanchez, ME Wehrman and JE Kinder. 1993. Influence of fenceline bull exposure on postpartum anestrus interval and conception rate in beef cows. *J Anim Sci* (Suppl 1) 71:72.
- Peters, KE**, EG Bergfeld, AS Cupp, FN Kojima, V Mariscal, T Sanchez, ME Wehrman, H.E. Grotjan, D. Hamernik and J.E. Kinder. 1993 Pulsatile secretion of LH is not necessary for development of fully functional corpora lutea but is not required to maintain CL function in heifers. *J Anim Sci* (Suppl 1) 71:216.

Grant Research Funds Awarded

Source	Author	Date	Direct Costs (\$)
Ohio Agricultural Research and Development Center (OARDC) Research Enhancement Competitive Grants Program Seed Grant	K Fike	2001-03	19960
OARDC Research Enhancement Competitive Grants Program Industry Matching Grant	K Fike	2001-03	25000
Ohio State University Office of Research Seed Grant	K Fike	2001-02	9000
Select Sires, Inc.; Industry Match of OARDC Industry Matching Grant	K Fike	2001-02	10000
Ohio State University Technology Enhanced Learning and Research Center Faculty Innovator Grant; Co-investigator: Amy Lahmers	K Fike	2001	480

Grant Research Proposals Pending

Source	Authors	Date	Total Requested (\$)
United States Department of Agriculture Higher Education Challenge Grant	K Odde, K Fike , D Davis, D Nichols, and V Amanor-Boadu	Submitted Jan. 30, 2009	149569

Selected Extension Activities/Invited Presentations

Invited talk - ASTM RFID Performance Standard Taskforce Meeting; "Radio Frequency Identification Pilot Project Results" (November, 2008) – to 60 USDA National Animal Identification System leaders, academic colleagues, livestock industry and animal identification technology personnel

Invited talk – Kansas Animal Health Department Summer Meeting; "Radio Frequency Identification Pilot Project Results" (June, 2008) – to 30 Department veterinarians and staff

Delivered over 20 presentations impacting approximately 350 people regarding electronic animal identification technologies to livestock producers, teachers, industry professionals, legislative assistants, and students (May, 2006 to present)

Invited talk - Select Sires, Inc. male reproductive physiology think tank session entitled "Early Maturation Attempts in Nebraska and Ohio Using Agonists of GnRH" (October, 2002) – to 20 researchers and industry personnel

Farm Science Review, Molly Caren Agricultural Center, London, OH; co-organizer of Animal Sciences booth (September, 2002 & 2003)

Invited talk – Midwestern Sectional Meetings of American Society of Animal Science entitled "An Undergraduate Internship Program: Management to Maximize the Educational Experience" (March, 2002) - to approximately 40 students, academic colleagues, and industry personnel

Delivered presentation at **4-H Youth Expo** (summer, 2002) regarding reproduction science in beef, sheep, and swine to approximately 40 4-H youth.

Wrote reproductive management section for the Ohio State University youth dairy resource handbook (spring, 2002) – to be published and distributed to youth in the dairy industry in Ohio.

Invited talk - to dairy producers in Putnam County, OH (winter, 2002) – “Reproductive Management in Dairy Cattle” – to approximately 25 dairy producers and industry personnel.

Agricultural Biotechnology Day Laboratory presentation (spring, 2001) – “Use of Ultrasonography in Food and Companion Animals” – to 20 high school students that excel in science

Invited talk - at Tri-State Dairy Management Conference (autumn, 2001) entitled “Sexing Bovine Semen: When, How, and How Much?” – to approximately 70 producers and industry personnel

Delivered presentation at 4-H Youth Expo (summer, 2001) regarding reproduction science in beef, sheep, and swine to approximately 40 4-H youth.

Selected Awards and Honors

College of Food, Agricultural, and Environmental Sciences Rodney Plimpton Teaching Award (OSU, 2004)

Who’s Who Among America’s Teachers (2004)

University Career Services Award (OSU, 2003)

College of Food, Agricultural, and Environmental Sciences Advising Award (OSU, 2003)

Advisor of Denman Undergraduate Research Award Winner (OSU, 2003)

Outstanding Teaching Assistant Award for College of Agriculture (UNL, 1997)

Parents Association and Teaching Council Award (UNL, 1997)

John Hallman Memorial Award (UNL, 1997)

Milton E. Mohr Teaching Fellowship (UNL, 1996)

Widaman Trust Distinguished Graduate Assistant Award (UNL, 1995)

Selected Committees

Kansas State University

-Department of Animal Sciences & Industry

- Academic Quadrathlon Co-chair
- Spring Picnic

Midwest Section of American Society of Animal Sciences

- Teaching committee (2002-04; chair, 2004)
- Academic Quadrathlon committee (2002-2004)

Ohio State University

- Department of Animal Science

- Academic Affairs
- Co-coordinating Advisor (2003-04)
- Academic Quadrathlon Chair
- Internships, Placement

- College of Food, Agricultural, and Environmental Sciences

- Honors
- Ohio Agriculture Research and Development Center Annual Conference
- Career Services Advisory Board