

Curriculum Vitae

Matthew E. Wilson, Ph.D.

Professor

Division of Animal and Nutritional Sciences, School of Agriculture and Food, Davis

College of Agriculture, Natural Resources and Design

West Virginia University

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EDUCATION

Ph.D.	Iowa State University Major: Physiology of Reproduction Minor: Genetics	1999
M.S.	Iowa State University Major: Physiology of Reproduction	1996
B.S.	Purdue University Major: Animal Science	1994

PROFESSIONAL ACADEMIC EXPERIENCE

2013-Present	Professor, Division of Animal and Nutritional Sciences, Davis College of Agriculture, Natural Resources and Design, West Virginia University.
2010-2014	Interim Chair, Division of Animal and Nutritional Sciences, Davis College of Agriculture, Natural Resources and Design, West Virginia University.
2008-2013	Associate Professor, Division of Animal and Nutritional Sciences, Davis College of Agriculture, Natural Resources and Design, West Virginia University.
2002-2008:	Assistant Professor, Division of Animal and Nutritional Sciences, Davis College of Agriculture Forestry and Consumer Sciences, West Virginia University.
2000-2001:	Post-Doctoral Research Fellow, Division of Animal and Veterinary Sciences, Davis College of Agriculture Forestry and Consumer Sciences, West Virginia University.
1996-1999:	Graduate research assistant, Department of Animal Science, College of Agriculture, Iowa State University. Earned Ph.D. in the Physiology of Reproduction, with a minor in Genetics, under the direction of Dr. Stephen P. Ford.
1994-1996:	Graduate research assistant, Department of Animal Science, Iowa State University. Earned M.S. in the Physiology of Reproduction under the direction of Dr. Stephen P. Ford.

GRANTSMANSHIP (\$1,178,147)

- 2016 Principal Investigator, Gauss Foundation, entitled Support to achieve Assistance Dog International certification, **\$77,011** for three years. Outcome: **Funded** (\$77,011, 100%).
- 2015 Principle Investigator, Snee-Rhienhardt Foundation, entitled *Support for the WVU CARES Initiative for the procurement and care of service dogs*, **\$30,000** for one year. Outcome: **Funded** (\$30,000, 100%).
- 2015 Principle Investigator, Davis Michael Endowment, entitled *Effort to improve recruitment and networking as well as professional development activities related to the WVU CARES Initiative, including Project ROVER*, **\$3,785** for one year. Outcome: **Funded** (\$3,785, 100%).
- 2015 Principle Investigator, Davis Michael Endowment, entitled *Development of a health maintenance program and teaching laboratory for the service dog training program*, **\$9,910**. Outcome: **Funded** (\$9,910, 100%).
- 2014 Principle Investigator, Claude Worthington Benedum Foundation, entitled, *WVU Davis College Young Innovators Fellowship Program*, **\$211,000** for three years. Outcome: **Funded** (\$157,000, 74%).
- 2014 Principle Investigator, Farm Credit of the Virginias, entitled, *Scholarships in Support of WVU Davis College Young Innovators Fellowship Program*, **\$100,000**. Outcome: **Funded** (\$100,000, 100%).
- 2011 Principle Investigator, US Dept of Health and Human Services-CDC NIOSH, entitled, *Returning Our Veterans to Employment and Reintegration (ROVER)*, **\$273,702** for three years. Outcome: **Funded** (\$273,702, 100%).
- 2007 Project Director, USDA-NRICGP-41.0 Animal Reproduction, entitled *Dietary Manipulation of progesterone catabolism*. Funding Requested: **\$339,939** for three years. Outcome: **Funded** (\$339,939, 100%).
- 2007 Project Director, NIH-R01 National Heart, Blood and Lung Institute, entitled *Stimulation of early embryo growth improves development of the cardiovascular system*. Funding Requested: **\$1,295,375** for five years. Outcome: **Ranked and scored, but not funded**.
- 2007 Principal Investigator, WVU Faculty Travel Grant to participate in *the annual meeting of the Perinatal Research Society*. Funding requested: **\$720**. Outcome: **Funded**.
- 2006 Principal Investigator, Hatch Project, entitled *Improving reproductive efficiency in livestock*. Funding Required **\$792,289** for five years. Outcome: **Approved**.
- 2006 Principal Investigator, WVU Faculty Travel Grant to participate in *the Havemeyer Workshop*

- on Embryonic and Fetal Nutrition II*. Funding requested: **\$700**. Outcome: **Funded**.
- 2006 Principal Investigator, Daniel C. & Elizabeth E. Brown Faculty Development Grant to participate in *the Havemeyer Workshop on Embryonic and Fetal Nutrition II*. Funding requested: **\$1991.45**. Outcome: **Funded**.
- 2005 Principal Investigator, West Virginia University Faculty Senate, entitled *Growth hormone as a positive stimulus for fetal programming*. Funding Requested: **\$15,000** (\$15,000 limit) for one year. Outcome: **Funded** (\$14,000; 93%).
- 2004 Co-Project Director, USDA-NRICGP- 45.0 Functional Genomics of Agriculturally Important Organisms, entitled *Acquisition of a microarray hybridization station for the Division of Animal and Veterinary Sciences at West Virginia University*. Funding Requested: **\$14,668** for one year. Outcome: **Funded**.
- 2004 Project Director, WVU Research Corporation - Program to Stimulate Competitive Research (PSCoR), entitled *Modernization of cell culture facilities*. Funding Requested: **\$35,567** for one year. Outcome: **Funded**.
- 2003 Principal Investigator, WVU Faculty Travel Grant to participate in *the Havemeyer Workshop on Embryonic and Fetal Nutrition*. Funding requested: **\$700**. Outcome: **Funded**.
- 2002 Co-Investigator, Hatch Project 427/Northeast Regional Project 1007, entitled *Ovarian and environmental influences on embryonic/fetal mortality in ruminants*. Funding Required **\$900,000** for five years. Outcome: **Approved**.
- 2002 Davis College of Agriculture, Forestry and Consumer Sciences internal funding to update physiologic recording equipment for Animal Physiology Laboratory, ANPH 405. Funding requested: **\$23,925**. Outcome: **Funded**.
- 2002 Co-Investigator, USDA-NRICGP Equipment grant- 42.0 Animal Growth and Nutrient Utilization, entitled *Aquisition of a liquid scintillation counter for the Davis College of Agriculture at West Virginia University*. Funding requested: **\$11,550** for one year. Outcome: **Funded**.
- 2001 Principal Investigator, USDA-NRICGP Postdoctoral grant- 41.0 Animal Reproductive Efficiency grant, entitled *Investigation of the benefits of early gestational IGF-I in sheep*. Funding requested: **\$88,726** (\$90,000 limit) for two years. Outcome: **Funded**.
- 2001 Co-Investigator, USDA-ARS Specific Cooperative Agreement, entitled *Effect of feed additives to decrease ovarian function in the chicken*. Funding requested: **\$52,882**. Outcome: **Funded**.
- 1999 Co-Investigator, Carver Trust Grant, entitled *Development of a model for the study of prenatal stress*. Funding requested: **\$18,382** for one year. Outcome: **Funded**.

INVITED PRESENTATIONS

- July 15-19, 2012 *The challenges associated with sustaining livestock farms for undergraduate teaching programs.* Annual Meeting of American Dairy Science Association and American Society of Animal Science, Phoenix, Arizona.
- March 15-17, 2010 *Modification of the early gestational environment can have long term consequences on conceptus growth and development.* Annual Meeting of the Midwestern Section American Dairy Science Association American Society of Animal Science, Des Moines, Iowa
- March 17-19, 2008 *The early gestational uterine environment programs placental nutrient transport,* Annual Meeting of the Midwestern Section American Dairy Science Association American Society of Animal Science, Des Moines, Iowa
- November 25-28, 2007 *The role of the conceptus in determining placental efficiency and the capacity of the uterus;* 11th Biennial Conference of the Australasian Pig Science Association, Sofitel Brisbane, Queensland, Australia.
- May 29-June 1, 2006 *Growth hormone modulation of the early uterine environment and conceptus development in sheep;* Havemeyer Workshop on Embryonic and Fetal Nutrition, Ravello, Italy.
- November 13-16, 2004 *Influence of the embryo on extending luteal function in the pig;* Havemeyer Workshop on Maternal Recognition of Pregnancy in the Mare, Christ Church, Barbados.
- May 15-18, 2003 *Factors influencing placental growth and efficiency in the pig;* Havemeyer Workshop on Embryonic and Fetal Nutrition, Ravello, Italy.
- July 24-28, 2001 *Role of placental function in mediating conceptus growth and survival;* 93rd Annual Meeting of the American Society of Animal Science, Indianapolis.
- June 3-6, 2001 *Comparative Aspects of Placental Efficiency;* Sixth International Conference on Pig Reproduction, University of Missouri-Columbia.
- January 26, 1998 *Sharing the wealth: Lessons from the Chinese Meishan pig in understanding the controls of litter size in the pig,* H. Hugh Dukes Club, Iowa State University.

SEMINARS

- October 24, 2008 *Feeding for fertility: Insulin mediated dietary modulation of progesterone clearance in the dairy cow*, Department of Animal Science, North Dakota State University.
- January 19, 2007 *Insulin mediated dietary modulation of progesterone clearance*, Department of Animal Science, Purdue University.
- September 23, 2002 *Prenatal Development: Placental efficiency and a model of prenatal stress*, Department of Biology, West Virginia University.
- September 24, 2001 *Steroids in the egg: from sex determination in the turtle to a model of prenatal stress in the chicken*, Interdepartmental Endocrinology Program, Oregon State University.
- December 8, 1999 *The Role of the Conceptus in Determining Litter Size in the Pig*, Department of Animal Science, University of Nebraska Lincoln.
- November 3, 1999 *The Role of the Conceptus in Determining Litter Size in the Pig*, Division of Animal and Veterinary Science, West Virginia University.
- October 22, 1999 *The Role of the Conceptus in Determining Litter Size in the Pig*, USDA-ARS Gene Evaluation and Mapping Laboratory, Beltsville, MD.

PROFESSIONAL SERVICE ACTIVITIES

National

- Graduate Student Paper Competition Committee, Midwest Section, American Society of Animal Science, **2004-2008**.
- Graduate Student Paper Competition Committee, Midwest Section, American Society of Animal Science, **2009-2012**.
- Academic Quadrathlon Committee, Midwest Section, American Society of Animal Science, **2004-Present**.
- Physiology Section Committee, Midwest Section, American Society of Animal Science, **2007-2010**.
- Chair, Academic Quadrathlon Committee, Midwest Section, American Society of Animal Science, **2006**.
- Chair, Quiz Bowl Sub-committee, Academic Quadrathlon Committee, Midwest Section, American Society of Animal Science, **2007-2009**.
- Editorial Board, Journal of Animal Science, **2002-2005**.
- Editorial Board, Journal of Animal Science, **2010-2014**.
- Board of Directors, American Society of Animal Science, **2001-2003**.
- Session co-chair, *Effects of the Environment on Development and Function of Gametes*, Society for the Study of Reproduction Annual Meeting, Omaha, NE, **2006**
- Secretary NCERA-57 regional project in swine reproduction, **2007**
- Vice President NCERA-57 regional project in swine reproduction, **2008**

President NCERA-57 regional project in swine reproduction, **2009**
NCERA-57 Subcommittee for planning the 2008 Biennial Symposium on Pig Reproduction
2007-2008
Secretary/Treasurer, Northeast Section American Society of Animal Science/Northeast
Branch American Dairy Science Association, **2010-2011**
Vice-President, Northeast Section American Society of Animal Science/Northeast Branch
American Dairy Science Association, **2011-2012**
President, Northeast Section American Society of Animal Science/Northeast Branch
American Dairy Science Association, **2012-2013**
Section Editor-Poultry, National Image Gallery of the National Ag Library, USDA, **2010-**
2013
USDA ARS Project Plan Reviewer, NP-101 - Food Animal Production, **June 26, 2012**
Chair, Animal Science Chair's meeting, Tampa, FL, **Spring 2013**
BBSRC grant program, Reviewer, **2016**

State

Award committee, West Virginia Chapter of Gamma Sigma Delta, **2010-2014**
Past President, West Virginia Chapter of Gamma Sigma Delta, **2010-2011**
President, West Virginia Chapter of Gamma Sigma Delta, **2009-2010**
Vice-President, West Virginia Chapter of Gamma Sigma Delta, **2008-2009**
Secretary, West Virginia Chapter of Gamma Sigma Delta, **2007-2008**
Treasurer, West Virginia Chapter of Gamma Sigma Delta, **2006-2007**
Historian, West Virginia Chapter of Gamma Sigma Delta, **2005-2006**
Steering committee, Appalachian Grazing Conference, **2010-Present**

University

Graduate Faculty, regular member, **2002-present**
Undergraduate Academic Advisor, **2002-present**
Non-human Use Subcommittee of the Radiation Safety Committee, **2005-2010**
Ad Hoc panelist Academic Integrity Panel, **2005**
Ad Hoc panelist Academic Integrity Panel, **2008**
Animal Care and Use Committee, **2009-present**
Vice-Chair, Animal Care and Use Committee, **2012-2016**
Chair, Animal Care and Use Committee, **2016-present**
Faculty Senator, Representing the Davis College of Agriculture, Natural Resources and
Design **2008-2011, 2015-2018.**
Goldwater Scholars selection committee, **2016-present**

College

Davis College of Agriculture, Natural Resources and Design Dean and Director Search
Committee, **2011.**
Davis College of Agriculture, Forestry and Consumer Science Diversity Committee, **2003-**
2005.
Davis College of Agriculture, Forestry and Consumer Science Graduate Student
Paper/Poster Committee, **2002-2004.**
Davis College of Agriculture, Forestry and Consumer Science Recruitment Committee,
2007-2011.
Davis College Faculty Executive Committee, **2016-present**

Davis College Digital Measures Leader for campus-wide implementation, **2016-present**

Division

Member dietetics internship selection committee, **2010**.

Promotion and Tenure Committee, **2008-2009**.

Promotion and Tenure Committee, **2004-2005**.

Promotion and Tenure Committee, **2002-2003**.

Undergraduate Student Advisor.

Small Ruminant Species Committee.

Chair, Swine Species Committee.

Student Fees Committee.

Chair, Board of Governors Master of Science in Animal and Veterinary Science degree
Program Review, **2005**.

Interim Division Director, **2010-2014**

Division representative to the college Digital Measures committee, **2015-present**

TEACHING

A&VS 293Q Experience in Animal Science (2007)

A&VS 293R Pork Production Laboratory (2008-Present)

A&VS 693 ADTP: Journal Club (2000-Present)

A&VS 791 Reproductive Physiology Journal Club (2000-Present)

AGBI 512 Nutritional Biochemistry (2004-2005)

AGBI 513 Nutritional Biochemistry Laboratory (2004)

AGBI 612 General Biochemistry II (2003)

ANPH 301 Animal Physiology (2004-2011; 2015-Present)

ANPH 405 Animal Physiology Laboratory (2002-Present)

ANPH 424 Reproductive Physiology (2000-2011)

ANPR 353 Pork Production (2009-2011)

GRADUATE EDUCATION

Major Professor

Doctor of Philosophy Students

Beth Alyson Costine, **2004**. Dissertation entitled, "*Mechanisms of reduced luteal sensitivity to PGF₂ α in ruminants*".

Darron Louis Smith, **2005**. Dissertation entitled, "*Effect and mechanism of action of volatile fatty acids on the catabolism of progesterone*".

Jill Marie Koch, **2008** Dissertation entitled, "*Periconceptional treatment with growth hormone alters fetal growth and development in sheep*"

*2006 First Place, Davis College of Agriculture Forestry and Consumer Sciences Graduate Student Research Day, doctorate level poster competition.

*2007 Second place in the Graduate Student Competitive Research Posters at the Midwestern Section American Society of Animal Sciences Annual Meeting

*2007 First Place, Davis College of Agriculture Forestry and Consumer Sciences Graduate Student Research Day, doctorate level poster competition.

Caleb Owens Lemley, **2010** Dissertation entitled, "*Alterations in hepatic enzyme activity*"

and progesterone clearance in lactating dairy cows”

- *2008 Second Place, Davis College of Agriculture Forestry and Consumer Sciences Graduate Student Research Day, doctorate level poster competition.
- *2009 First place in the Graduate Student Competitive Research Posters at the Midwestern Section American Society of Animal Sciences Annual Meeting
- *2010 Second Place, Davis College of Agriculture Forestry and Consumer Sciences Graduate Student Research Day, doctorate level poster competition.
- *2010 Invited ADSA Young Dairy Scholar entitled, “Progesterone clearance in dairy cows fed an insulin stimulating diet”.

Tiffany Ann Wilmoth, **2012** Dissertation entitled, “*Modifications of Pre and Postnatal Development Due to Placental Efficiency and Maternal Exercise During Gestation*”

Lindsay Parenti, **2017** Dissertation entitled, “*ROVER*”.

Angela Dial, **2017** Dissertation entitled, “*Visual characteristics as design elements to provide recognized visual identifiers for service dogs*”

Master of Science Students

Jill Marie Koch, **2005**. Thesis entitled, “*Melengestrol acetate (MGA) as an effective alternative to induce molting in laying hens*”.

- *2005 First place in the Graduate Student Competitive Research Papers at the Midwestern Section American Society of Animal Sciences Annual Meeting
- *2005 First Place in the Davis College of Agriculture Forestry and Consumer Sciences Graduate Student Research Day for Master's level poster competition.
- *2005 Second place in the West Virginia University Chapter Sigma Xi graduate research day competition for Agriculture and Life Sciences.

Caleb Owens Lemley, **2007** Thesis entitled, “*Alterations in progesterone catabolic enzymes by insulin*”.

- *2006 Second place in the West Virginia University Chapter Sigma Xi graduate research day competition for Agriculture and Life Sciences.
- *2007 Second place in the Graduate Student Competitive Research Posters at the Midwestern Section American Society of Animal Sciences Annual Meeting
- *2007 Second Place in the Davis College of Agriculture Forestry and Consumer Sciences Graduate Student Research Day for Master's level poster competition.

Tiffany Ann Wilmoth, **2009** Thesis entitled, “*Variation in, and contributing factors of placental efficiency in swine*”.

Adam Eifert, **2013** Thesis entitled, “*The Effect of Melatonin or Maternal Nutrient Restriction on Cell Proliferation in the Ovine Placenta*”.

Amanda Hill, **2018** Thesis entitled, “*The role of migratory birds and their habitat utilization on the abundance of tick prevalence and the potential role in rickettsial disease life-cycle, a one-health approach*”.

Master of Agriculture Students

Seth Lee Mayersohn, **2002**

Brie Anne Mauser, **2006**

Committee Member

Doctor of Philosophy Students

Alison Brown Dixon, **2003**

Aritro Sen, **2006**

Jennifer Laura Ripley, **2006**

Khaarthik John, **2006**

Aaron Shawn Keiss, **2006**

Beth M. Stinefelt, **2007**

Stephanie Gatrell, **2011**

Swamy Tripurani, **2011**

Siri Ippagunta, **2012**

Bobbi Bailey, **2013**

Nathaniel Rice, **2015**

Adam Redhead, *anticipated* **2016**

Master of Science Students

Angela D. Higgins, **2004**

Jyothsna Tejomurtula, **2007**

Stephanie Pomeroy, **2008**

Callayan Paul, **2015**

Abiodun Adebisi, **2015**

AD HOC REVIEWER

Animal Reproduction Science
Biology of Reproduction
Domestic Animal Endocrinology
European Journal of Clinical Nutrition
Journal of Animal Science
Journal of Endocrinology
Nature Publishing Group
Professional Animal Scientist
Reproduction
The Veterinary Journal
USDA-ARS
USDA-CSREES NRICGP

PROFESSIONAL ASSOCIATIONS

American Society of Animal Science

American Dairy Science Association

Society for the Study of Reproduction
Society for the Study of Fertility
Perinatal Research Society
American Association for the Advancement of Science
Gamma Sigma Delta
Sigma Xi

AWARDS

Distinguished Animal Science Alumnus, Purdue University **2009**

Invited into membership in the Perinatal Research Society honorary **2007**

Nominee, American Society of Animal Science Early Career Achievement Award **2007**

Northeast American Society of Animal Science-American Dairy Science Association Young Scientist Award-Research **2006**

Outstanding Researcher, Division of Animal and Veterinary Science **2006**

Outstanding Junior Faculty Award of Merit, West Virginia Chapter of Gamma Sigma Delta, the Honor Society of Agriculture **2005**

Invited to membership in Gamma Sigma Delta, The Honor Society of Agriculture **2003**

AcademicKeys Who's Who in Agriculture Higher Education

Postdoctoral fellowship, USDA Cooperative State Research Education and Extension Service National Research Initiative Competitive Grants Program **2001-2002**

Second place, Graduate Student Competitive Research Paper Competition, Midwest Section of the American Dairy Science Association / American Society of Animal Science Annual Meeting in March **1999**

Best Graduate Student Oral Presentation, Iowa State University Biochemistry and Biophysics Spring Symposium **1997**

BOOK CHAPTER

1. **Wilson, M. E.** And L. L. Anderson. **2009**. Mechanistic aspects of foetal development relating to postnatal health and metabolism in pigs. In: *Managing Prenatal Development to Enhance Livestock Productivity*. pp. 161-202. Ed: P. Greenwood and A. Bell. FAO-IAEA
2. **Wilson, M. E.** **2007**. The role of the conceptus in determining placental efficiency and the capacity of the uterus. In: *Manipulating Pig Production XI*. pp. 128-135 Ed: J. E. Paterson and J. A. Barker. Australasian Pig Science Association Inc., Werribee, Victoria, Australia.
3. **Wilson, M. E.** and S. P. Ford. **2001**. Comparative aspects of placental efficiency. In:

Control of Pig Reproduction VI. pp. 223-232. Ed: R. D. Geisert and H. Niemann. Journals of Reproduction and Fertility Ltd., Cambridge, UK.

CONFERENCE PROCEEDINGS

1. **Wilson, M. E. 2007.** The role of the conceptus in determining placental efficiency and the capacity of the uterus. Proceedings of the 11th Biennial Conference of the Australasian Pig Science Association, November 25th-28th, Brisbane, Australia.
2. **Wilson, M. E.** and J. M. Koch. **2006.** Growth hormone modulation of the early uterine environment and conceptus development in sheep. Havemeyer Foundation Workshop on Embryonic and Fetal Nutrition, May 29th-June 1st, Ravello, Italy.
3. **Wilson, M. E. 2004.** Influence of the embryo on extending luteal function in the pig. Havemeyer Foundation Workshop on Maternal Recognition of Pregnancy in the Mare III., November 13th-16th, Christchurch, Barbados.
4. **Wilson, M. E.,** S. P. Ford and K. A. Vonnahme. **2003.** Factors influencing placental growth and efficiency in the pig. Havemeyer Foundation Workshop on Embryonic and Fetal Nutrition, May 15th - 18th, Ravello, Italy.
5. Lay, D. C., Jr. and **M. E. Wilson. 2001.** Methods and measurements to assess the physiological state of livestock. 52nd Annual Meeting of the European Association for Animal Production, August 26-29, 2001 Budapest, Hungary.

REFEREED JOURNAL PUBLICATIONS

1. Parenti, L., A. M. Foreman, **M. E. Wilson,** O. Wirth and B. J. Meade. **2016.** Selecting Quality Service Dogs (Part 3): Recommendations. *The Chronicle of the Dog.* Spring 2016:24-29.
2. Parrish, J.J., M.F. Smith, R.D. Geisert, D.L. Davis, **M.E. Wilson** and W.L. Flowers. **2015.** How to communicate with undergraduate students that lack an animal science or agricultural background. *Animal Frontiers* 5:54-59.
3. Foreman A. M., L. Parenti, **M. E. Wilson,** O. Wirth and B. J. Meade. **2015.** Selecting Quality Service Dogs (Part 2): Temperament Characteristics. *The Chronicle of the Dog* Winter 2015:25-32.
4. Parenti, L. O. Wirth, J. Meade and **M.E. Wilson. 2015.** Selecting and Breeding Quality Service Dogs (Part 1): Genetic and Health Considerations. *The Chronicle of the Dog* Summer 2015:71-77.
5. Baughman, P., A. Foreman, L. Parenti, J.R. Scotti, B.J. Meade, **M.E. Wilson** and O. Wirth. **2015.** APDT Research Spotlight: Project ROVER's survey of assistance dog providers. *The Chronicle of the Dog* Summer 2015:30-33.
6. Eifert, A. W., **M. E. Wilson,** K. A. Vonnahme, L. E. Camacho, P. Borowicz, D. A. Redmer, S. Romero, S. Dorsam, J. Haring and C. O. Lemley. **2015.** Effect of melatonin or maternal nutrient restriction on vascularity and cell proliferation in the ovine placenta. *Animal Reproduction Science* 153:13-21.
7. Lemley, C. O. , A. M. Meyer, T. L. Neville, D. M. Hallford, K. R. Maddock-Carlin, T. A. Wilmoth, **M. E. Wilson,** G. A. Perry, D. A. Redmer, L. P. Reynolds, J. S. Caton, and K. A. Vonnahme. **2014.** Dietary selenium and nutritional plane alter specific aspects of maternal

- endocrine status during pregnancy and lactation. *Domestic Animal Endocrinology* 46:1-11
8. Kiess, A. S., M. Manangi, B. M. Stinefelt, **M. E. Wilson** and K. P. Blemings. 2013. Lysine catabolism in chickens fed at or below their lysine requirement. *Poultry Science* 92 :2705–2712.
 9. Koch, J. M., C. O. Lemley, R. R. Magness and **M. E. Wilson**. 2013. Peri-conceptual growth hormone treatment alters the early uterine environment. *Open Journal of Animal Science* 3:121-126.
 10. Lemley, C. O. and **M. E. Wilson**. 2010. Effect of cytochrome P450 and aldo-keto reductase inhibitors on progesterone decay in primary bovine hepatic cell cultures. *Journal of Dairy Science* 93:4613-4624.
 11. Wilmoth, T. A., J. M. Koch, D. L. Smith and **M. E. Wilson**. 2010. Estradiol-17 β alters trophoblast proliferation in pig embryos. *Journal of Animal and Veterinary Advances* 9:782-786.
 12. Lemley, C. O., K. A. Vonnahme, L. R. Tager, K. M. Krause and **M. E. Wilson**. 2010. Insulin secretion, cytochrome P450 activity, liver blood flow and progesterone clearance in dairy cows fed a high cornstarch versus a high fiber diet. *Journal of Endocrinology* 205:233-241.
 13. Lemley, C. O., T. A. Wilmoth, L. R. Tager, K. M. Krause, and **M. E. Wilson**. 2010. Effect of a high cornstarch diet on hepatic cytochrome P450 2C and 3A activity and progesterone half-life in dairy cows. *Journal of Dairy Science* 93:1012-1021.
 14. Koch, J. M., T. A. Wilmoth and **M. E. Wilson**. 2010. Peri-conceptual growth hormone treatment alters fetal growth and development. *Journal of Animal Science* 88:1619-1625.
 15. O'Neil, M. R., G. P. Lardy, C. O. Lemley, **M. E. Wilson**, L. P. Reynolds, J. S. Caton, and K. A. Vonnahme. 2009. Estradiol-17 β and linseed meal interact to alter visceral organ mass and hormone levels from ovariectomized ewes. *Domestic Animal Endocrinology* 37:148-158.
 16. Lemley, C. O., J. M. Koch, K. P. Blemings and **M. E. Wilson**. 2009. Alterations in progesterone catabolic enzymes, CYP2C and CYP3A, in hepatocytes challenged with insulin and glucagon. *Journal of Animal and Veterinary Advances* 8:39-46.
 17. Kiess, A. S., B. M. Stinefelt, **M. E. Wilson**, H. Klandorf, K. P. Blemings. 2008. Murine hepatic amino adipate semialdehyde synthase appears to be post-translationally regulated. *Nutrition Research* 28:859-865.
 18. Galbreath, C. W., E. J. Scholljegerdes, G. P. Lardy, K. G. Odde, **M. E. Wilson**, J. W. Schroeder and K. A. Vonnahme. 2008. Effect of feeding flax or linseed meal on progesterone clearance rate in ovariectomized ewes. *Domestic Animal Endocrinology* 35:164-169.
 19. Lemley, C. O., J. M. Koch, K. P. Blemings, K. M. Krause and **M. E. Wilson**. 2008. Concomitant changes in progesterone catabolic enzymes, cytochrome P450 2C and 3A, with plasma insulin concentrations in ewes supplemented with sodium acetate or sodium propionate. *Animal: An International Journal of Animal Bioscience* 2:1223-1229.
 20. Lemley, C. O., S. T. Butler, W. R. Butler and **M. E. Wilson**. 2008. Short Communication: Insulin Alters Hepatic Progesterone Catabolic Enzymes, Cytochrome P450 2C and 3A, in Dairy Cows. *Journal of Dairy Science* 91:641-645.
 21. **Wilson, M. E.** and J. M. Koch. 2008. Growth hormone modulation of the early uterine environment and conceptus development in sheep. *Havemeyer Monograph Series* 21:24-26.

22. Koch, J. M., J. S. Moritz, D. C. Lay and **M. E. Wilson**. 2007. Effect of melengestrol acetate as an alternative to induce molting in hens on the expression of yolk proteins and turnover of oviductal epithelium. *Animal Reproduction Science* 102:14-23.
23. Koch, J. M., D. C. Lay Jr., K. A. McMunn and **M. E. Wilson**. 2007. Alternative method to induce molt that addresses hen well-being. *Poultry Science* 86:614-620.
24. Dixon, A. B., M. Knights, J. L. Winkler, D. J. Marsh, J. L. Pate, **M. E. Wilson**, R. A. Dailey, G. Seidel and E. K. Inskeep. 2007. Patterns of and factors affecting late embryonic and fetal mortality in sheep. *Journal of Animal Science* 85:1274-1284.
25. Costine, B. A., E. K. Inskeep, K. P. Blemings, J. A. Flores and **M. E. Wilson**. 2007. Mechanisms of luteal resistance to prostaglandin F₂ α during maternal recognition of pregnancy in ewes. *Domestic Animal Endocrinology* 32:106-121.
26. Higgins, A. D., J. T. Silverstein, J. Engles, **M. E. Wilson**, C. E. Rexroad III and K. P. Blemings. 2006. Starvation induced alterations in hepatic lysine metabolism in different families of rainbow trout (*Oncorhynchus mykiss*). *Fish Physiology and Biochemistry* 31:33-44.
27. Parsons, A., N. Buchanan, K. P. Blemings, **M. E. Wilson** and J. S. Moritz. 2006. Effect of corn particle size, pellet texture and feed form on broiler performance in the growing phase. *Journal of Applied Poultry Research* 15:245-255.
28. Smith, D. L., B. M. Stinefelt, K. P. Blemings and **M. E. Wilson**. 2006. Diet-induced alterations in progesterone clearance appear to be mediated by insulin signaling in hepatocytes. *Journal of Animal Science* 84:1102-1109.
29. Koch, J. M., J. S. Moritz, D. C. Lay Jr. and **M. E. Wilson**. 2005. Melengestrol Acetate in Experimental Diets as an Effective Alternative to Induce a Decline in Egg Production and Reversible Regression of the Reproductive Tract in Laying Hens I. Determining an Effective Concentration of Melengestrol Acetate. *Poultry Science* 84:1750-1756.
30. Koch, J. M., J. S. Moritz, D. L. Smith, D. C. Lay Jr. and **M. E. Wilson**. 2005. Melengestrol Acetate as an Effective Alternative to Induce a Decline in Egg Production and Reversible Regression of the Reproductive Tract in Laying Hens II. Effects on Post-Molt Egg Quality. *Poultry Science* 84:1757-1762.
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