

## **ERIN E. CONNOR**

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### **PROFESSIONAL EXPERIENCE (SINCE 2009)**

- 2019-present **Professor and Chairman**, Department of Animal and Food Sciences, University of Delaware, Newark
- 2009-present **Adjunct Professor**, Department of Animal and Avian Sciences, University of Maryland, College Park
- 2016-2019 **Research Molecular Biologist**, USDA-ARS, Animal Genomics and Improvement Laboratory (AGIL), Beltsville, MD
- 2014-2016 **Research Leader, Supervisory Research Molecular Biologist**, USDA-ARS, AGIL, Beltsville, MD
- Mar-May 2014 **Acting Director**, Beltsville Agricultural Research Center, Beltsville, MD
- Jan-Mar 2014 **Acting Assistant Director**, Beltsville Agricultural Research Center, Beltsville, MD
- 2011-2014 **Research Leader, Supervisory Research Molecular Biologist**, USDA-ARS, Bovine Functional Genomics Laboratory (BFGL), Beltsville, MD

### **EDUCATION**

- 1999 Ph.D., Animal Science, University of Maryland, College Park
- 1993 M.S., Wildlife Science, Virginia Polytechnic Institute and State University, Blacksburg
- 1989 B.S., Animal Science, University of Maryland, College Park

### **PROFESSIONAL AND HONOR SOCIETIES**

- American Dairy Science Association (ADSA)
- American Society of Animal Science (ASAS)
- Sigma Xi (University of Maryland Chapter)
- International Society for Animal Genetics (2002-2018)

### **AWARDS, HONORS, AND PATENTS (SINCE 2003)**

- 2014 USDA-ARS Extra Effort Award
- 2009 USDA-ARS Administrator's Outreach, Diversity, and Equal Opportunity Award
- 2008 Friends of Agricultural Research-Beltsville, Inc. Travel Grant
- 2008 Outstanding Alumnus Early Career Award, College of Agriculture and Natural Resources Alumni Chapter, University of Maryland
- 2007 Northeast Section ASAS/ADSA Young Scientist Award for Research
- 2003 U.S. Patent #6610496, Prediction of Growth Performance and Composition in Animals, Including Cattle, from Response to Growth Hormone Releasing Hormone

### **RESEARCH GRANTS (RECENT EXAMPLES)**

- 2019 VandeHaar, M.J., R.J. Tempelman, K.A. Weigel, H.M. White, F. Peñagaricano, C.R. Staples, J.E. Koltes, H.A. Ramirez-Ramirez, **E.E. Connor**, and P.M. Van Raden. Improving dairy feed efficiency, sustainability, and profitability by impacting farmer's breeding and culling decisions. Foundation for Food and Agriculture Research

- Seeding Solutions Grant – \$2M (\$136,611 to Connor)
- 2018 **Connor, E.E.** Improving gut health and function in dairy cattle through development of gut model systems. Pancosma SA Trust Fund Cooperative Agreement – \$50,000
- 2015 Miglior, F., P. Stothard, and 14 Co-applicants including **E.E. Connor**. Increasing feed efficiency and reducing methane emissions through genomics: a new promising goal for the Canadian dairy industry. Genome Canada Large Scale Applied Research Project Competition – \$7.8M (No direct funds to Connor; In-kind travel to annual project meetings and symposia)
- 2014 Bi, J. (**E.E. Connor**, and J.B. Cole – Collaborators). An integrative approach to identifying highly heritable subtypes of complex phenotypes. National Science Foundation, Advanced Biological Informatics Grant – \$561,717 (No funds to Connor)
- 2014 **Connor, E.E.** Evaluation of Sucram and GLP-2 to protect against the negative effects of scours and improve gut function in newborn dairy calves. Pancosma SA Material Transfer Research Agreement – \$40,503

## **SERVICES**

- 2020-present *Frontiers in Animal Science* Associate Section Editor of *Animal Management*
- 2016-2017 Member, ASAS 5-year Strategic Planning Committee
- 2013-2016 ADSA Production Council (Elected)
- 2013-2016 ADSA Journal Management Committee
- 2008-2013 *Journal of Dairy Science* Editorial Board Member
- 2010-2012 *Journal of Animal Science* Division Editor
- 2007-2011 Member, USDA-ARS, Beltsville Area Animal Care and Use Committee
- 2008-2011 ADSA/ASAS Joint Annual Meeting Growth and Development Symposium Committee (Vice Chairman [2010], Chairman [2011])
- 2008-2010 *Journal of Animal Science* Associate Editor
- 2007-2009 Northeast Section ASAS/ADSA Officer (Secretary/Treasurer [2007], Vice President [2008], President [2009])
- 2008-2009 Member, USDA-ARS Beltsville Area Diversity Taskforce and Communications Sub-Committee
- 2005-2006 USDA-CSREES Grant Panel Member for National Research Initiative and 1890 Institution Teaching and Research Capacity Building Grants Program

## **TEACHING EXPERIENCE**

- Spring 2021 Instructor – University of Delaware, Newark, Department of Animal and Food Sciences, ANFS865 *Graduate Seminar*
- Winter 2021 Co-Instructor – University of Delaware, Newark, Department of Animal and Food Sciences, ANFS100 *Animals and Human Culture*
- Fall 2020 Instructor – University of Delaware, Newark, Department of Animal and Food Sciences, ANFS865 *Graduate Seminar*
- Fall 1998-99 Teaching Assistant - University of Maryland, College Park, Department of Animal and Avian Sciences, Senior/graduate-level course “Current Topics in Animal Science: Endocrinology”
- Spring 1991-93 Instructor - Virginia Tech, Blacksburg, VA, Department of Forestry, Sophomore-level course “Introduction to Microcomputing in Natural Resources”

Fall 1991	<u>Teaching Assistant</u> - Virginial Tech, Blacksburg, VA, Department of Fisheries and Wildlife, Sophomore-level course "Principles of Fisheries and Wildlife Management"
Fall 1990	<u>Teaching Assistant</u> - Virginial Tech, Blacksburg, VA, Department of Fisheries and Wildlife, Senior-level course "Wildlife Population Ecology"

## PUBLICATIONS

1. Baldwin, R.L., VI, M. Liu, **E.E. Connor**, T. G. Ramsay, G.E. Liu, and C.-J. Li. Transcriptional reprogramming in rumen epithelium during the transition of pre-ruminant to the ruminant in cattle. *Frontiers Research Topics* (In Review)
2. Gao, Y., L. Fang, R.L. Baldwin, VI, **E.E. Connor**, J.B. Cole, L. Ma, C. Li, and G.E. Liu. Single-cell transcriptomic analyses of cattle ruminal epithelial cells before and after weaning. *Genomics* (In Review).
3. Gao, Y., S. Liu, R.L. Baldwin VI, **E.E. Connor**, J.B. Cole, L. Ma, L. Fang, C.-J. Li, and G.E. Liu. Functional annotation of regulatory elements in cattle genome reveals the roles of extracellular interaction and dynamic change of chromatin states in rumen development during weaning. *Genome Biology* (In Review).
4. Wu, X.-L., K. P Gaddis, J. Burchard, D. Norman, E. Nicolazzi, **E.E. Connor**, J.B. Cole, and J. Durr. An alternative Interpretation of residual feed intake by phenotypic recursive relationships in dairy cattle. *JDS Communications* (In Review).
5. Qu, Y., T.H. Elsasser, **E.E. Connor**, G.F. Schroeder, S. Kahl, and K.M. Moyes. The distribution of tocopherol isoforms in bovine tissues and mitochondria associated with short-term mixed tocopherol oil supplementation. *J. Dairy Sci.* (In Review)
6. Zhou, Y., S. Liu, Y. Hu, L. Fang, Y. Gao, H. Xia, S.G. Schroeder, B.D. Rosen, **E.E. Connor**, C. Li, R.L. Baldwin, J.B. Cole, C.P. Van Tassell, L. Yang, L. Ma, and G.E. Liu. 2020. Comparative whole genome DNA methylation profiling of cattle tissues reveals global and tissue-specific methylation patterns. *BMC Biology* 18:85. doi:10.1186/s12915-020-00793-5.
7. Lin, S., L. Fang, X. Kang, S. Liu, M. Liu, **E.E. Connor**, R.L. Baldwin VI, G.E. Liu, C.-J. Li. 2020. Establishment and transcriptomic analyses of a cattle rumen epithelial primary cells (REPC) culture by bulk and single-cell RNA sequencing to elucidate interactions of butyrate and rumen development. *Heliyon* 6:e04112. doi:10.1016/j.heliyon.2020.e04112.
8. Li, B., P.M. VanRaden, E. Guduk, J.R. O'Connell, D.J. Null, **E.E. Connor**, M.J. VandeHaar, R.J. Tempelman, K.A. Weigel, and J.B. Cole. 2020. Genomic prediction of residual feed intake in US Holstein dairy cattle. *J. Dairy Sci.* 103(3):2477-2486. doi: 10.3168/jds.2019-17332.
9. Li, B., L. Fang, D.J. Null, J.L. Hutchison, **E.E. Connor**, P.M. VanRaden, M.J. VandeHaar, R.J. Tempelman, K.A. Weigel, and J.B. Cole. (2019). High-density genome-wide association study for residual feed intake in Holstein dairy cattle. *J. Dairy Sci.* 102:11067-11080. doi:10.3168/jds.2019-16645.
10. Fang, L., S. Liu, M. Liu, X. Kang, S. Lin, B. Li, **E.E. Connor**, R.L. Baldwin 6th, A. Tenesa, L. Ma, G.E. Liu, and C.J. Li. 2019. Functional annotation of the cattle genome through systematic discovery and characterization of chromatin states and butyrate-induced variations. *BMC Biol.* 17(1):68. doi: 10.1186/s12915-019-0687-8.
11. **Connor, E.E.**, J.L. Hutchison, C.P. Van Tassell, and J.B. Cole. 2019. Defining the optimal period length and stage of growth or lactation to estimate residual feed intake in dairy cows. *J. Dairy Sci.* 102:6131-6143. doi: 10.3168/jds.2018-15407.
12. Zhou, Y., **E.E. Connor**, D.M. Bickhart, C. Li, R.L. Baldwin, S.G. Schroeder, B.D. Rosen, L. Yang, C.P. Van Tassell, and G.E. Liu. 2018. Comparative whole genome DNA methylation profiling of cattle sperm and somatic tissues reveals striking

- hypomethylated patterns in sperm. *GigaScience* 7(5). doi: 10.1093/gigascience/giy039.
- 13. Zhou, Y., **E.E. Connor**, G.R. Wiggans, Y. Lu, R.J. Tempelman, S.G. Schroeder, H. Chen, and G.E. Liu. 2018. Genome-wide copy number variant analysis reveals variants associated with 10 diverse production traits in Holstein cattle. *BMC Genomics* 19(1):314. doi: 10.1186/s12864-018-4699-5.
  - 14. **Connor, E.E.**, Y. Zhou, and G. Liu. 2018. The essence of appetite: Does olfactory receptor variation play a role? *J Anim Sci.* 96(4):1551-1558. doi: 10.1093/jas/sky068.
  - 15. Qu, Y., T.H. Elsasser, S. Kahl, M. Garcia, C.M. Scholte, **E.E. Connor**, G.F. Schroeder, and K.M. Moyes. 2018. The effects of feeding mixed tocopherol oil on whole-blood respiratory burst and neutrophil immunometabolic-related gene expression in lactating dairy cows. *J. Dairy Sci.* 101(5):4332-4342. doi: 10.3168/jds.2017-13902.
  - 16. **Connor, E.E.**, E.H. Wall, D.M. Bravo, C.M. Evock-Clover, T.H. Elsasser, R.L. Baldwin 6th, M. Santín, B.T. Vinyard, S. Kahl, and M.P. Walker. 2017. Reducing gut effects from *Cryptosporidium parvum* infection in dairy calves through prophylactic glucagon-like peptide 2 therapy or feeding of an artificial sweetener. *J. Dairy Sci.* 100:3004-3018.
  - 17. Hardie, L.C., M.J. VandeHaar, R.J. Tempelman, K.A. Weigel, L.E. Armentano, G.R. Wiggans, R.F. Veerkamp, Y. de Haas, M.P. Coffey, **E.E. Connor**, M.D. Hanigan, C. Staples, Z. Wang, J.C.M. Dekkers, and D.M. Spurlock. 2017. The genetic and biological basis of feed efficiency in mid-lactation Holstein dairy cows. *J Dairy Sci.* 100(11):9061-9075. doi: 10.3168/jds.2017-12604.
  - 18. Baldwin, R.L. 6<sup>th</sup> and **E.E. Connor**. 2017. Rumen Function and Development. *Vet Clin North Am Food Anim Pract.* 33(3):427-439. doi: 10.1016/j.cvfa.2017.06.001.
  - 19. Die, J.V., R.L. Baldwin, L.J. Rowland, R. Li, S. Oh, C. Li, **E.E. Connor**, and M.J. Ranilla. 2017. Selection of internal reference genes for normalization of reverse transcription quantitative polymerase chain reaction (RT-qPCR) analysis in the rumen epithelium. *PLoS One.* 12(2):e0172674. doi: 10.1371/journal.pone.0172674.
  - 20. Yao, C., G. de Los Campos, M.J. VandeHaar, D.M. Spurlock, L.E. Armentano, M. Coffey, Y. de Haas, R.F. Veerkamp, C.R. Staples, **E.E. Connor**, Z. Wang, M.D. Hanigan, R.J. Tempelman, and K. A. Weigel. 2017. Use of genotype × environment interaction model to accommodate genetic heterogeneity for residual feed intake, dry matter intake, net energy in milk, and metabolic body weight in dairy cattle. *J. Dairy Sci.* 100:2007-2016.
  - 21. Lu, Y., M.J. Vandehaar, D.M. Spurlock, K.A. Weigel, L.E. Armentano, C.R. Staples, **E.E. Connor**, Z. Wang, M. Coffey, R.F. Veerkamp, Y. de Haas, and R.J. Tempelman. 2017. Modeling genetic and non-genetic variation of feed efficiency and its partial relationships between component traits as a function of management and environmental factors. *J. Dairy Sci.* 100:412-427.
  - 22. Zhou, Y., L. Xu, D.M. Bickhart, E.H. Abdel Hay, S.G. Schroeder, **E.E. Connor**, L.J. Alexander, T.S. Sonstegard, C.P. Van Tassell, H. Chen, and G.E. Liu. 2016. Reduced representation bisulphite sequencing of ten bovine somatic tissues reveals DNA methylation patterns and their impacts on gene expression. *BMC Genomics* 17:779.
  - 23. **Connor, E.E.**, C.M. Evock-Clover, E.H. Wall, R.L. Baldwin 6th, M. Santin-Duran, T.H. Elsasser, and D.M. Bravo. 2016. Glucagon-like peptide 2 and its beneficial effects on gut function and health in production animals. *Domest. Anim. Endocrinol.* 56:S56-S65.
  - 24. Manzanilla-Pech, C.I.V., R.F. Veerkamp, R.J. Tempelman, M.L. van Pelt, K.A. Weigel, M. VandeHaar, T.J. Lawlor, D.M. Spurlock, L.E. Armentano, **E.E. Connor**, C.R. Staples,

- M. Hanigan, and Y. De Haas. 2016. Genetic parameters between feed-intake-related traits and conformation in 2 separate dairy populations—the Netherlands and United States. *J. Dairy Sci.* 99:443-457. (Corrigendum 99:4095).
25. Walker, M.P., C.M. Evock-Clover, T.H. Elsasser, S. Kahl, and **E.E. Connor**. 2015. Short communication: Glucagon-like peptide-2 and coccidiosis alter tight junction gene expression in gastrointestinal tract of dairy calves. *J. Dairy Sci.* 98:3432-3437.
26. **Connor, E.E.**, C.M. Evock-Clover, M.P. Walker, T.H. Elsasser, and S. Kahl. 2015. Comparative physiology of glucagon-like peptide-2 – Implications and applications for production and health of ruminants. *J. Anim. Sci.* 93:492-502.
27. **Connor, E.E.** 2015. Improving feed efficiency in dairy production systems – challenges and possibilities. *Animal* 9:395-408.
28. Lu, Y., M.J. Vandehaar, D.M. Spurlock, K.A. Weigel, L.E. Armentano, C. R. Staples, **E.E. Connor**, Z. Wang, N.M. Bello, and R.J. Templeman. 2015. An alternative approach to modeling genetic merit of feed efficiency in dairy cattle. *J. Dairy. Sci.* 98:6535-6551.
29. Templeman, R.J., D.M. Spurlock, M. Coffey, R.F. Veerkamp, L.E. Armentano, K.A. Weigel, Y. deHaas, C.R. Staples, **E.E. Connor**, M.D. Hanigan, Y.F. Lu, and M.J. Vandehaar. 2015. Heterogeneity in genetic variation and energy sink relationships for residual feed intake across research stations and countries. *J. Dairy Sci.* 98:2013-2026.
30. Xu, T., J. Sun, **E.E. Connor**, and J. Bi. 2015. Quantifying feed efficiency of dairy cattle for genome-wide association analysis. 2015 IEEE Int. Conf. Bioinform. Biomed. (BIBM), Washington, DC, USA, pp. 131-134. doi:10.1109/BIBM.2015.7359669.
31. Baldwin, R.L., VI1, A. Zhang, S.W. Fultz, S. Abubeker, C. Harris, E.E. Connor, and D.L. Van Hekken. 2014. Hot topic: Brown marmorated stink bug odor compounds do not transfer into milk in lactating dairy cattle by feeding bug contaminated corn silage. *J. Dairy Sci.* 97:1877-1884.
32. **Connor, E.E.**, R.L. Baldwin, VI, M.P. Walker, S.E. Ellis, C. Li, S. Kahl, H. Chung, and R.W. Li. 2014. Transcriptional regulators transforming growth factor- $\beta$ 1 and estrogen-related receptor- $\alpha$  identified as putative mediators of calf rumen epithelial tissue development and function during weaning. *J. Dairy Sci.* 97:4193-4207.
33. **Connor, E.E.**, J.L. Hutchison, H.D. Norman, K.M. Olson, C.P. Van Tassell, J.M. Leith, and R.L. Baldwin. 2013. Use of residual feed intake in Holsteins during early lactation shows potential to improve feed efficiency through genetic selection. *J. Anim. Sci.* 91:3978-3988.
34. Tao, S., **E.E. Connor**, J.W. Bubolz, I.M. Thompson, B. C. do Amaral, M.J. Hayen, and G.E. Dahl. 2013. Short Communication: Effect of heat stress during the dry period on gene expression of mammary tissue and peripheral blood mononuclear cells. *J. Dairy Sci.* 96:378-383.
35. **Connor, E.E.**, S. Kahl, T.H. Elsasser, R.L. Baldwin, R. Fayer, M. Santin-Duran, G.L. Sample, and C.M. Evock-Clover. 2013. Glucagon-like peptide 2 therapy reduces negative effects of diarrhea on calf gut. *J. Dairy Sci.* 96:1793-1802.
36. **Connor, E.E.**, R.L. Baldwin, VI, C. Li, R.W. Li, and H. Chung. 2013. Gene expression in bovine rumen epithelium during weaning identifies molecular regulators of rumen development and growth. *Funct. Integr. Genomics* 13:133-142.
37. VanRaden, P.M., D.J. Null, M. Sargolzaei, G.R. Wiggans, M.E. Tooker, J.B. Cole, T.S. Sonstegard, **E.E. Connor**, M. Winters, J.B.C.H.M. van Kaam, A. Valentini, B.J. Van Doormaal, M.A. Faust, and G.A. Doak. 2013. Genomic imputation and evaluation using

- high-density Holstein genotypes. *J. Dairy Sci.* 96:668-678.
38. Hou, Y., D.M. Bickhart, H. Chung, J.L. Hutchison, H.D. Norman, **E.E. Connor**, and G.E. Liu. 2012. Analysis of copy number variations in Holstein cows identify potential mechanisms contributing to differences in residual feed intake. *Funct. Integr. Genomics* 12:717-723. (Corresponding author).
39. **Connor, E.E.**, J.L. Hutchison, and H.D. Norman. 2012. Estimating feed efficiency of lactating dairy cattle using residual feed intake (Chapter 11). In *Feed Efficiency in the Beef Industry*. Hill, R.A. (ed.). ISBN: 978-0-470-95952-7; Wiley-Blackwell, NJ.
40. Wu, S., R.L. Baldwin, VI, W. Li, C. Li, **E.E. Connor**, and R.W. Li. 2012. The bacterial community composition of the bovine rumen detected using pyrosequencing of 16S rRNA genes. *Metagenomics* 1: Article ID 235571, 11 pages. doi:10.4303/mg/235571.
41. **Connor, E.E.**, R.L. Baldwin, VI, J.R. Blanton, Jr., S.E. Johnson, S. Poulos, and T.H. Welsh, Jr. 2012. GROWTH AND DEVELOPMENT SYMPOSIUM: Understanding and mitigating the impacts of inflammation on animal growth and development. *J. Anim. Sci.* 90:1436-1437. (Not Peer Reviewed)
42. **Connor, E.E.**, J.L. Hutchison, K.M. Olson, and H.D. Norman. 2012. TRIENNIAL LACTATION SYMPOSIUM: Opportunities for improving milk production efficiency in dairy cattle. *J. Anim. Sci.* 90:1687-1694. doi: 10.2527/jas.2011-4528.
43. Li, R.W., **E.E. Connor**, C. Li, R.L. Baldwin, VI, and M.E. Sparks. 2012. Characterization of the rumen microbiota of pre-ruminant calves using metagenomic tools. *Environ. Microbiol.* 14:129-139.
44. Hill, R.A., T.H. Welsh Jr, S.P. Poulos, N.K. Gabler, and **E.E. Connor**. 2011. GROWTH AND DEVELOPMENT SYMPOSIUM: Intestinal development and growth. *J. Anim. Sci.* 89:833-834. (Not Peer Reviewed)
45. Liu, G.E., T. Brown, D.A. Hebert, M.F. Cardone, Y. Hou, R. Choudhary, C. Amazu, **E.E. Connor**, M. Ventura, and L.C. Gasbarre. 2011. Initial analysis of copy number variations in cattle selected for resistance or susceptibility to intestinal nematodes. *Mamm. Genome*. 22:111-121.
46. Amaral, B.C., **E.E. Connor**, S. Tao, M.J. Hayen, J.W. Bubolz, and G.E. Dahl. 2011. Heat stress abatement during the dry period influences metabolic gene expression and improves immune status in the transition period of dairy cows. *J. Dairy Sci.* 94:86-96.
47. Sparks, M.E., Y. Huang, R.L. Baldwin VI, W. Li, **E.E. Connor**, C. Li, T.S. Sonstegard, S.G. Schroeder, B.J. Bequette, and R.W. Li. 2010. Detection of functional shifts in the rumen microbiota in response to propionate intake in cattle. (Chapter 9) In *Metagenomics and its Applications in Agriculture, Biomedicine and Environmental Studies*. Li, R.W. (ed.). ISBN: 978-1-61668-682-6; Nova Science Publishers, NY.
48. Li, R.W., M.E. Sparks, and **E.E. Connor**. 2010. Dynamics of the rumen microbiota (Chapter 8). In *Metagenomics and its Applications in Agriculture, Biomedicine and Environmental Studies*. Li, R.W. (ed.). ISBN: 978-1-61668-682-6; Nova Science Publishers, NY.
49. **Connor, E.E.**, R.L. Baldwin, A.V. Capuco, C.M. Evock-Clover, S.E. Ellis, and K.S. Scibica. 2010. Characterization of glucagon-like peptide 2 pathway member expression in bovine gastrointestinal tract. *J. Dairy Sci.* 93:5167-5178.
50. Baldwin, R.L. VI, J. Sumner-Thomson, **E.E. Connor**, R. Li, K.R. McLeod, and B.J. Bequette. 2010. Hepatic transcriptome of beef steers is differentially modulated by composition of energy-substrate supply in growing beef. G.M. Crovetto (Ed.), *Energy*

- and Protein Metabolism and Nutrition; Proc. 3rd Inter. Symp. Energy Protein Metab. Nutr. Parma, Italy. pp. 313-314. Wageningen Academic Publishers, The Netherlands.
51. McLeod, K.R., R.L. Baldwin, VI, and **E.E. Connor**. 2010. Influence of energy supply on expression of genes encoding for lipogenic enzymes and regulatory proteins in growing beef steers. Beef Research and Extension Report. KY Agr. Report SR-2010. pp.161-167.
52. Hill, R.A., **E.E. Connor**, S.P. Poulos, T.H. Welsh, and N.K. Gabler. 2010. GROWTH AND DEVELOPMENT SYMPOSIUM: Fetal programming in animal agriculture. J. Anim. Sci. 88 (13 Suppl): E38-39. (Not Peer reviewed)
53. Kadegowda, A.K.G., **E.E. Connor**, B.B. Teter, J. Sampugna, P. Delmonte, L.S. Piperova, and R.A. Erdman. 2010. Dietary trans fatty acid isomers differ in their effects on mammary lipid metabolism as well as lipogenic gene expression in lactating mice. J. Nutr. 140:919-924.
54. Silva, M.V.G.B., T.S. Sonstegard, R.M. Thallman, **E.E. Connor**, R.D. Schnabel, and C.P. Van Tassell. 2010. Characterization of *DGAT1* allelic effects in a sample of North American Holstein cattle. Anim. Biotech. 21:88-99.
55. **Connor, E.E.**, S. Kahl, T.H. Elsasser, J.S. Parker, R.W. Li, C. P. Van Tassell, R.L. Baldwin VI and S. M. Barao. 2010. Enhanced mitochondrial complex gene function and reduced liver size may mediate improved feed efficiency of beef cattle during compensatory growth. Funct. Integr. Genomics 10:39-51.
56. **Connor, E.E.**, R.W. Li, R.L. Baldwin, and C. Li. 2010. Gene expression in the digestive tissues of ruminants and their relationships with feeding and digestive processes. Animal 4(7):993–1007.
57. Amaral, B.C., S. Tao, J. Hayen, **E.E. Connor**, J. Bubolz, and G.E. Dahl. 2009. Heat stress abatement during the dry period: Does cooling improve transition into lactation? J. Dairy Sci. 92:5988-5999.
58. Amaral, B.C., **E.E. Connor**, S. Tao, J. Hayen, J. Bubolz and G.E. Dahl. 2009. Heat stress abatement during the dry period influences prolactin signaling in lymphocytes. Dom. Anim. Endocrinol. 38:38-45.
59. Cates, E.A., **E.E. Connor**, D.M. Mosser, and D.D. Bannerman. 2009. Functional characterization of bovine TIRAP and MyD88 in mediating bacterial lipopolysaccharide-induced endothelial NF- $\kappa$ B activation and apoptosis. Comp. Immunol. Microbiol. Infect. Dis. 32:477-490.
60. Araujo, R.N., T. Padilha, D. Zarlenga, T.S. Sonstegard, **E.E. Connor**, C. Van Tassel, W.S. Lima, E. Nascimento, and L.C. Gasbarre. 2009. Use of a candidate gene array to delineate gene expression patterns in cattle selected for resistance or susceptibility to intestinal nematodes. Vet. Parasitol. 162:106-115.
61. **Connor, E.E.**, S. Siford, T.H. Elsasser, C.M. Evock-Clover, C.P. Van Tassell, T.S. Sonstegard, V. Fernandes, and A.V. Capuco. 2008. Effects of increased milking frequency on gene expression in the bovine mammary gland. BMC Genomics 9:362 (14 pp.).
62. Capuco, A.V., **E.E. Connor**, and D.L. Wood. 2008. Regulation of mammary gland sensitivity to thyroid hormones during the transition from pregnancy to lactation. Exp. Biol. Med. 233(10):1309-1314.
63. **Connor, E.E.**, L. Matukumalli, A. Chockalingam, D.D. Bannerman, T.S. Sonstegard, E.D. Thomas, and C.P. Van Tassell. 2008. Association analysis of bovine

- bactericidal/permeability-increasing protein (BPI)* gene polymorphisms with somatic cell score in Holstein cattle. Anim. Genet. 39:456-457.
- 64. Liu, G., M.T. Weirauch, C.P. Van Tassell, R.W. Li, T.S. Sonstegard, L.K. Matukumalli, **E.E. Connor**, R.W. Hanson, and J. Yang. 2008. Identification of conserved regulatory elements in mammalian promoter regions: A case study using the PCK1 promoter. Geno. Prot. Bioinfo. 6:129-143.
  - 65. Baldwin, R.L., VI, S.W. El-Kadi, K.R. McLeod, **E.E. Connor**, and B.J. Bequette. 2007. Intestinal and ruminal epithelial and hepatic metabolism regulatory gene expression as affected by forage to concentrate ratio in bulls. In: I. Ortigues-Marty (Ed.), Energy and Protein Metabolism and Nutrition; Proceedings of the 2nd International Symposium on Energy and Protein Metabolism and Nutrition. Vichy, France. pp. 293-294. Wageningen Academic Publishers, The Netherlands.
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