

CURRICULUM VITAE

NAME

Speidel, Scott E

ADDRESS

Animal Sciences
College of Agricultural Sciences

Animal Sciences

PHONE

(970) 491-5419

EDUCATION

- 2011 Ph D, Colorado State University
- 2001 MS, University of Arizona
- 1998 BS, California State University Fresno

PUBLISHED WORKS

Refereed Proceedings or Transactions

- Culbertson, M.M., Speidel, S. E., Cockrum, R.R., Peel, R. K., Crews, D., Enns, R. M. *Optimum performance testing periods for determining feed efficiency and its parameters in beef cattle.* Western Section, American Society of Animal Sciences.
- Cockrum, R.R., Zeng, X., Berge, N.F., Neary, J.M., Garry, F.B., Holt, T. N., Blackburn, H.D., Thomas, S. P., Speidel, S.E., Garrick, D.J., Enns, R.M., Thomas, M.G. (2014). Angus cattle at high altitude: genetic relationships and initial genome wide association analyses of pulmonary arterial pressure. *10th World Congr. Appl. Livestock Prod.* WCGALP. https://asas.org/docs/default-source/wcgalp-proceedings-oral/236_paper_9105_manuscript_427_0.pdf?sfvrsn=2
- Culbertson, M.M., Speidel, S. E., Thomas, M.G., Keenan, L., Enns, R.M. (2014). Effect of genetics level of beef cow milk production on longevity in diverse environments. *10th World Congr. Appl. Livestock Prod.* WCGALP. https://asas.org/docs/default-source/wcgalp-posters/766_paper_9935_manuscript_1097_0.pdf?sfvrsn=2
- Speidel, S. E., S., Cockrum, R., Salak-Johnson, J. L., Chase, C. C. L., Thomas, M., Peel, R. K., Enns, R. M. (2014). Genetic analysis of receiving weight, ultrasound back fat, ultrasound rib eye area, ultrasound percent intramuscular fat, and bovine respiratory disease in feedlot cattle. *10th World Congr. Appl. Livestock Prod.* WCGALP. https://asas.org/docs/default-source/wcgalp-posters/519_paper_8807_manuscript_253_0.pdf?sfvrsn=2
- Zeng, X., Cockrum, R.R., Berge, N.F., Neary, J.M., Garry, F.B., Holt, T. N., Blackburn, H.D., Speidel, S.E., Garrick, D.J., Enns, R.M., Thomas, M.G. (2014). Genetic correlation and genome wide association study of pulmonary arterial pressure and post weaning growth traits in Angus heifers from a high altitude breeding program. *10th World Congr. Appl. Livestock Prod.* WCGALP. https://asas.org/docs/default-source/wcgalp-posters/428_paper_9752_manuscript_1034_0.pdf?sfvrsn=2

Berge, N.F., Speidel, S.E., Zeng, X., Culbertson, M.M., Thomas, M.G., Enns, R.M. (2014). Genetic relationships between pulmonary arterial pressure and performance traits in Colorado State University Beef Improvement Center Angus herd. *10th World Congr. Appl. Livestock Prod. WCGALP*. https://asas.org/docs/default-source/wcgalp-posters/430_paper_9946_manuscript_1110_0.pdf?sfvrsn=2

Boldt, R.J., Culbertson, M.M., Berge, N.F., Thomas, M.G., Holt, T. N., Speidel, S.E., Enns, R.M. (2014). Phenotypic analysis of pulmonary arterial pressure and feed intake data in cattle. *10th World Congr. Appl. Livestock Prod. WCGALP*. https://asas.org/docs/default-source/wcgalp-proceedings-oral/031_paper_9870_manuscript_1040_0.pdf?sfvrsn=2

Non-Refereed Journal Articles

Culbertson, M. M., Speidel, S. E., Peel, R. K., Cockrum, R., Thomas, M., Enns, R. M. (2015). Optimum measurement period for evaluating feed intake traits in beef cattle. *J. Anim. Sci.*, 93, 1-9.

Speidel, S. E., Peel, R. K., Crews, D., Enns, R. M. (2015). Random regression models for the prediction of days to weight, ultrasound rib eye area and ultrasound back fat depth in beef cattle. *Journal of Animal Science*.

Cockrum, R. R., Speidel, S. E., Salak-Johnson, J., Chase, C., Peel, R. K., Weaber, R. L., Loneragan, G. H., Wagner, J. J., Boddhireddy, P., Thomas, M., Prayaga, K., DeNise, S., Enns, R. M. Genetic parameters estimated at receiving for circulating cortisol, immunoglobulin G, interleukin 8, and incidence of bovine respiratory disease in feedlot beef steers. *Journal of Animal Science*.

Non-Refereed Proceedings or Transactions

Zeng, X., Speidel, S. E., Thomas, M., Enns, R. M. *Estimating Economic Values of Traits Belonging to Cattle in Maternal Beef Production. Proc. West. Sect. Am. Soc. Anim. Sci.* American Society of Animal Science.

Blackburn, H., Thomas, M., Enns, R. M., Speidel, S. E., Paiva, S. (2015). A livestock database for long term storage and use of genomic and other associated information. *Plant and Animal Genome XXIII* (pp. Abstract W142). Plant and Animal Genome XXIII.

Zeng, X., Holt, T. N., Enns, R. M., Speidel, S. E., Thomas, M. (2015). Angus cattle at high altitude: Relationship between age and pulmonary arterial pressure. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 119-121). Proc. West. Sect. Am. Soc. Anim. Sci..

Zamorano-Algandar, R., Correa-Calderon, A., Sanchez-Castro, M., Rincon, G., Medrano, J.F., Hernandez, A., Luna-Nevarez, G., Speidel, S. E., Enns, R. M., Thomas, M., Luna-Nevarez, P. (2015). Candidate gene molecular breeding value prediction of reproductive performance in Holstein dairy cows managed under heat stress conditions from southern Sonora in Mexico. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 249-252). Proc. West. Sect. Am. Soc. Anim. Sci..

Culbertson, M. M., Speidel, S. E., Thomas, M., Enns, R. M. (2015). Effects of beef cow milk production levels on longevity from Colorado State University's Beef Improvement Center. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 111-113). Proc. West. Sect. Am. Soc. Anim. Sci..

Hernandez, A., Sanchez-Castro, M., Zamorano-Algandar, R., Luna-Nevarez, P., Rincon, G., Medrano, J.F., Speidel, S. E., Enns, R. M., Thomas, M. (2015). Genotypes within the prolactin and GH-IGF1 pathways association with 305 d milk yield in heat stressed lactating Holstein cows. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 114-118). Proc. West. Sect. Am. Soc. Anim. Sci..

Cockrum, R., Holloway, C., Zeng, X., Crawford, N. F., Neary, J.M., Holt, T. N., Blackburn, H., Speidel, S. E., Enns, R. M., Thomas, M. (2015). Intrinsic response to hypoxic stress associated with cellular metabolism an

inflammation in beef cattle. *Plant and Animal Genome XXIII* (pp. Abstract P0169). Plant and Animal Genome XXIII.

Crawford, N. F., Speidel, S. E., Zeng, X., Holt, T. N., Thomas, M., Enns, R. M. (2015). Multivariate analysis of genetic relationships between pulmonary arterial pressure and performance traits in an Angus herd at high elevation. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 126-128). Proc. West. Sect. Am. Soc. Anim. Sci..

Saad, H.M., Enns, R. M., Thomas, M., Speidel, S. E. (2015). Performance losses due to selection for low birth weight versus calving ease: a simulation study in beef cattle. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 129-132). Proc. West. Sect. Am. Soc. Anim. Sci..

Canovas, A.A., Cockrum, R., Brown, R.D., Riddle, S.K., Neary, J.M., Holt, T. N., Krafur, G. M., Medrano, J.F., Islas-Trejo, A., Enns, R. M., Speidel, S. E., Stenmark, K.R., Thomas, M. (2015). Polymorphisms and splice variants in a polygenic disease induced by high-altitude in Angus cattle using RNA-Sequencing and systems biology. *Abstr. Soc. Españ. Genética.. Abstr. Soc. Españ. Genética..*

Bailey, D.W., Thomas, M., Holt, T. N., Stephenson, M.B., Enns, R. M., Speidel, S. E. (2015). Relationships of pulmonary arterial pressure and terrain use of beef cows grazing high-altitude foothills rangeland. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 99-103). Proc. West. Sect. Am. Soc. Anim. Sci..

Dias, M.M., Canovas, A., Mantilla-Rojas, C., Medrano, J.F., Thomas, M., Speidel, S. E., Enns, R. M., Rivera-Acuna, F., Luna-Nevarez, P., Riley, D.G. (2015). Single nucleotide polymorphisms associated with growth, fertility, and first-calf survival traits in Brangus heifers managed under semi-desert extensive conditions in southern Sonora. *Tex. A&M University CONACYT (MX) Symposium. Tex. A&M University CONACYT (MX) Symposium.*

Dias, M.M., Canovas, A., Mantilla-Rojas, C., Riley, D.G., Luna-Nevarez, P., Speidel, S. E., Enns, R. M., Dias, I.S.D.P., Souza, F.R.P., Medrano, J.F., Oliveira, H.N., Thomas, M. (2015). SNP query in candidate genes that affect puberty in *Bos indicus*-influenced heifers. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 104-107). Proc. West. Sect. Am. Soc. Anim. Sci..

Canovas, A., Cockrum, R., Brown, R.D., Riddle, S.K., Neary, J.M., Holt, T. N., Krafur, G. M., Garry, F. B., Medrano, J.F., Islas-Trejo, A., Enns, R. M., Speidel, S. E., Stenmark, K.R., Thomas, M. (2015). Transcriptomics and systems biology of high altitude disease in Angus cattle. *Plant and Animal Genome XXIII* (pp. Abstract P0310). Plant and Animal Genome XXIII.

Boldt, R. J., Speidel, S. E., Thomas, M., Enns, R. M. (2015). Variance components for genetic evaluation of body condition score in beef cattle. *Proc. West. Sect. Am. Soc. Anim. Sci.* (vol. 66, pp. 108-110). Proc. West. Sect. Am. Soc. Anim. Sci..

MacNeil, M. D., Enns, R. M., Newman, S., Neilsen, M., Mokolobate, M. C., Speidel, S. E., Scholtz, M. M., Cassady, J. P. (2015). *Background for Guidelines to Facilitate Enhanced Genetic Potentials for Cow Efficiency*. 47th Beef Improvement Federation Conference Proceedings.

Zeng, X., Speidel, S. E., Thomas, M., Enns, R. M. (2013). *Estimating Economic Values of Traits Belonging to Cattle in Maternal Beef Production*. *Proc. West. Sect. Am. Soc. An. Sci.*. American Society of Animal Science.

AES Report/Bulletin

Speidel, S. E., Enns, R. M. (2016). *Center for Genetic Evaluation of Livestock CRIS report*. CSU Agriculture Experiment Station.

Speidel, S. E. (2015). *Center for the genetic evaluation of livestock CRIS Report*. CSU Agriculture Experiment

Station.

Abstract

Welch, C., Speidel, S. E., Crews, D., Ahola, J. K., Hill, R. A. (2014). *Relationships between maintenance energy EPD and performance measures of progeny from Red Angus sires divergent for maintenance energy EPD* (e-suppl 2 ed., vol. 92). Journal of Animal Science.

Speidel, S. E., Thomas, M. (2013). *Cortisol, interleukin 8, and immunoglobulin G ratios predict treatment for bovine respiratory disease in feedlot cattle.* (vol. 91(E-Suppl. 2):486). J Anim Sci.

Technical Report

Zeng, X., Speidel, S. E., Enns, R. M. (2015). *Report to Powerline Genetics. Incorporation of external sire EPD into growth and carcass evaluations..* Powerline Genetics.

Boldt, R. J., Enns, R. M., Thomas, M., Speidel, S. E. (2015). *Report to the Red Angus Association of America. Research Update: Red Angus Next Generation Fertility genetic evaluation.* Red Angus Association of America.

Zeng, X., Speidel, S. E., Enns, R. M. (2015). *Report to Powerline Genetics. Evaluating the magnitude of EPD model changes..* Powerline Genetics.

Boldt, R. J., Speidel, S. E., Enns, R. M. (2015). *Report to the North American Limousin Foundation. Changes to genetic predictions corresponding to a change in association database providers..* North American Limousin Foundation.

Culbertson, M., Speidel, S. E., Enns, R. M. (in press). *Report to the Red Angus Association of America. Evaluation of Alternative Data Use for Mature Cow Maintenance Energy EPD..* Red Angus Association of America.

Speidel, S. E. *Report to the American Gelbvieh Association. Results of analysis for multi-breed stayability..* American Gelbvieh Association.

Speidel, S. E., Enns, R. M. (in press). *Report to the American Gelbvieh Association. Initial results of analysis for multi-breed Stayability..* American Gelbvieh Association.

Speidel, S. E., Zeng, X., Enns, R. M. *Report to the Angus Society of Australia: Results of a prototype aggregate stayability EBV..* Angus Society of Australia.

PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS

January 12, 2016, "Quantifying animal performance: A genetics perspective", Niman ranch supplier meeting.

December 10, 2015, "Influence of incomplete data reporting on genetic evaluation results", Powerline genetics multiplier meeting, Powerline genetics.

October 22, 2015, "Colorado State University Breeding and Genetics Station Report", NCERA-225: Implementation and strategies for national beef cattle evaluation, North Central Regional Association of State Agricultural Experiment Station Directors.

September 11, 2015, "Next Generation Red Angus Fertility Evaluation Research Update", Red Angus Association of America National Convention, Red Angus Association of America, (Presenter) Boldt, R. J.

June 25, 2015, "Angus cattle at high altitude: Relationship between age and pulmonary arterial pressure", Western

Section American Society of Animal Science, American Society of Animal Science, (Presenter) Zeng, X.

June 25, 2015, "Effects of beef cow milk production levels on longevity from Colorado State University's Beef Improvement Center", Western Section American Society of Animal Science, American Society of Animal Science, (Presenter) Culbertson, M. M.

June 25, 2015, "Genotypes within the prolactin and GH-IGF1 pathways association with 305 d milk yield in heat stressed lactating Holstein cows", Western Section American Society of Animal Science, American Society of Animal Science, (Presenter) Hernandez, A.

June 25, 2015, "Multivariate analysis of genetic relationships between pulmonary arterial pressure and performance traits in an Angus herd at high elevation.", western Section American Society of Animal Science, american Society of Animal Science, (Presenter) Crawford, N. F.

June 25, 2015, "Performance losses due to selection for low birth weight versus calving ease: a simulation study in beef cattle.", western Section American Society of Animal Science, American Society of Animal Science, (Presenter) Saad, H.

June 25, 2015, "Variance components for genetic evaluation of body condition score in beef cattle.", Western Section American Society of Animal Science, American Society of Animal Science, (Presenter) Boldt, R. J.

June 11, 2015, "Heterosis: Effects on Stayability", Beef Improvement Federation Annual Research Symposium, Beef Improvement Federation.

January 9, 2015, "Merging Traditional EPD and Genomic Breeding Values", American Gelbvieh Association Annual Convention, Denver, CO.

August 20, 2014, "Effect of genetic level of beef cow milk production on longevity in diverse environments.", 10th World Congress of Genetics Applied to Livestock Production, (Presenter) Culbertson, M., Vancouver, British Columbia, Canada, peer-reviewed/refereed.

August 20, 2014, "Genetic Correlation and genome wide association study of pulmonary arterial pressure and post weaning growth traits in Angus heifers from a high altitude breeding program.", 10th World Congress of Genetics Applied to Livestock Production, (Presenter) Zeng, X., Vancouver, British Columbia, Canada, peer-reviewed/refereed.

August 20, 2014, "Genetic relationships between pulmonary arterial pressure and performance traits in Colorado State University's Beef Improvement Center cowherd.", 10th World Congress of Genetics Applied to Livestock Production, (Presenter) Berge, N., Vancouver, British Columbia, Canada, peer-reviewed/refereed.

August 20, 2014, "Phenotypic analysis of pulmonary arterial pressure and feed intake data in cattle.", 10th World Congress of Genetics Applied to Livestock Production, (Presenter) Boldt, R., Vancouver, British Columbia, Canada, peer-reviewed/refereed.

August 18, 2014, "Angus cattle at high altitude: genetic relationships and initial genome wide association analyses of pulmonary arterial pressure.", 10th World Congress of Genetics Applied to Livestock Production, (Presenter) Cockrum, R., Vancouver, British Columbia, Canada, peer-reviewed/refereed.

August 18, 2014, "Genetic Analysis of receiving weight, ultrasound back fat, ultrasound rib eye area, ultrasound percent intramuscular fat, and bovine respiratory disease in feedlot cattle.", 10th World Congress of Genetics Applied to Livestock Production, (Presenter) Speidel, S. E., Vancouver, British Columbia, Canada, peer-reviewed/refereed.

June 19, 2014, "National Cattle Evaluation: Approaches to cow productivity and efficiency", Beef Improvement Federation National Convention, Beef Improvement Federation., Lincoln, NE.

July 7, 2013, "Cortisol, interleukin 8, and immunoglobulin G ratios predict treatment for bovine respiratory disease in feedlot cattle.", Joint Annual meetings, American Society of Animal Science, (Presenter) Speidel, S. E., Indianapolis, IN, peer-reviewed/refereed.

July 7, 2013, "Heritability and correlations of immune response parameters in cattle treated for bovine respiratory disease.", Joint Annual meetings, American Society of Animal Science, (Presenter) Cockrum, R. R., Indianapolis, IN, peer-reviewed/refereed.

OTHER ACTIVITIES/ACCOMPLISHMENTS – PUBLICATIONS/SCHOLARLY RECORD

(October 21, 2015 - October 23, 2015). Professional Meeting, "NCERA-225 Implementation and Strategies for National Beef Cattle Genetic Evaluation," Fargo, ND, United States.

(June 23, 2015 - June 26, 2015). Professional Meeting, "Western Section American Society of Animal Science," American Society of Animal Science, Ruidoso, NM, United States.

(June 9, 2015 - June 12, 2015). Conference Attendance, "Beef Improvement Federation Annual Research Symposium," Beef Improvement Federation, Biloxi, MS, United States.

(March 23, 2015 - April 6, 2015). Short Course, "Best Practices for Online Course Design," Colorado State University, Fort Collins, CO, United States.

(August 17, 2014 - August 22, 2014). Conference Attendance, "World Congress of Genetics Applied to Livestock Production," Vancouver, British Columbia, Canada.

TEACHING:

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u>Cr. Hrs.</u>	<u>Enrollment</u>
2016	Spring	ANEQ799 - Dissertation	18	11
2016	Spring	ANEQ330 - Principles of Animal Breeding	3	76
2016	Spring	ANEQ784 - Supervised College Teaching	18	31
2016	Spring	ANEQ699 - Thesis	18	9
2015	Fall	ANEQ575 - Computational Biology in Animal Breeding	3	0
2015	Fall	ANEQ575 - Computational Biology in Animal Breeding-Lab	0	0
2015	Fall	ANEQ581A2 - Livestock Variance Component Estimation	1	7
2015	Spring	ANEQ731 - Advanced Genetic Prediction	3	3
2015	Spring	ANEQ334 - Principles of Equine Genetics	3	78
2014	Fall	ANEQ575 - Computational Biology in Animal Breeding	3	5
2014	Fall	ANEQ575 - Computational Biology in Animal Breeding-Lab	0	5
2014	Fall	ANEQ792B - Seminar-Breeding/Genetics	1	8
2013	Fall	ANEQ575 - Computational Biology in Animal Breeding	3	3
2013	Fall	ANEQ575 - Computational Biology in Animal Breeding-Lab	0	3
2012	Fall	ANEQ575 - Computational Biology in Animal Breeding	3	3

Guest Lectures:

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u># of Guest Lectures</u>	<u>Delivery Mode</u>
2016	Spring	ANEQ474 - Swine Systems	2	Face to Face

2014	Fall	ANEQ500L - Applied Variance Component Estimation in Livestock Genetics	10	Distance
2014	Fall	ANEQ101 - Food Animal Science	2	Face to Face

EXTENSION/ENGAGEMENT ACTIVITIES/ACCOMPLISHMENTS

Field Day

Equine Genetics Short Course. Adult, Fort Collins, Colorado. Total number of participants: 6. Percent Responsible: 20%. 3rd Quarter 2015.

COMMITTEES

Livestock Judging Coach Search Committee Member, (December 1, 2015 - Present).

Instructor / Recruiter search committee member, (September 1, 2015 - Present).

Curriculum Committee, (September 9, 2014 - Present).

Equine Genetics Short Course, (November 7, 2015 - November 8, 2015).

Equine Genetics Search Committee, (January 1, 2015 - February 28, 2015).

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

NCERA-225. (August 1, 2015 - Present).

American Society of Animal Science. (January 1, 2014 - Present).

Reviewer, Journal Article, South African Journal of Animal Science. (July 1, 2015 - Present).

Reviewer, Journal Article, Small Ruminant Research Journal. (January 1, 2015 - Present).

Chairperson, Western Section American Society of Animal Science, Ruidoso, New Mexico. (April 1, 2015 - June 30, 2015).

OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH

For Profit Organization, Zoetis, Florham Park, NJ, United States. (December 2015 - Present).

Academic, Paco-Vicuna Association, Parker, Colorado, United States. (June 2015 - Present).

For Profit Organization, Powerline Genetics, Arapahoe, NE, United States. (January 2015 - Present).

Board Member, Kiwanis Club, Loveland, Colorado. (January 1, 2015 - Present).
