

**NC-1170
Publications
2011**

University of Arkansas (AR)

A. Peer-reviewed Journal Articles

Burks, J.R. and D.D. Rhoads. 2011. Sequence analysis of the angiotensin II Type 1 receptor (AGTR1) gene for mutations contributing to pulmonary hypertension in the chicken (*Gallus gallus*). *Inquiry* 12:49-59.

Froman, DP, AK Feltmann, K Pendarvis, AM Cooksey, SC Burgess, and DD Rhoads. 2011. A proteome-based model for sperm mobility phenotype. *Journal of Animal Science* 89:1330-1337.

Kong BW, Song JJ, Lee JY, Hargis BM, Wing T, Lassiter K, and Bottje WG. 2011. Gene expression in breast muscle associated feed efficiency in a single male broiler line using a chicken 44k microarray. I. Top up-regulated genes, networks, and biological functions. *Poultry Science*. 90(11):2535-47

Kong BW, Lee JY, Bottje WG, Lassiter K, and Foster DN. 2011. Genome-wide differential gene expression in immortalized DF-1 chicken embryo fibroblast cell line. *BMC Genomics*. 12(1):571.

Kuenzel, W.J., L. Medina, A. Csillag, D.J. Perkel and A. Reiner. 2011. The avian subpallium: new insights into structural and functional subdivisions occupying the lateral subpallial wall and their embryological origins. *Brain Res*. 1424: 67-101.

Wideman, RF, KR Hamal, MT Bayona, AG Lorenzoni, D Cross, F Khajali, DD Rhoads, GF Erf, and NB Anthony. 2011. Plexiform Lesions in the Lungs of Domestic Fowl Selected for Susceptibility to Pulmonary Arterial Hypertension: Incidence and Histology. *The Anatomical Record* 294:739-755.

Xie, J., W.J. Kuenzel, P.J. Sharp and A. Jurkevich. 2011. Appetitive and consummatory sexual and agonistic behaviour elicits FOS expression in aromatase and vasotocin neurons within the preoptic area and bed nucleus of the stria terminalis of male domestic chickens. *J. Neuroendocrinol.* 23: 232–243.

B. Abstracts

AA Al-Rubaye, NB Anthony, GF Erf, RF Wideman, DD Rhoads (2011) Using Quantitative PCR To Investigate Three Candidate Genes Related To Pulmonary Hypertension In The Chicken. *Plant and Animal Genome*, San Diego, CA, Jan 2011

Bottje WG, Kong BW, Lee JY, Song JJ, Lassiter K, and Wing T. 2011. Ingenuity Pathway Analysis® of Feed Efficiency Microarray Data. International Poultry Science Forum, Atlanta, GA. January 24-25.

N Fitri, S Krishnamoorthy, NB Anthony, RF Wideman, DD. Rhoads (2011) Genetic Analysis of a Region on Chicken Chromosome 1 for Contribution to Pulmonary Hypertension and Ascites in Different Broiler Lines. Plant and Animal Genome, San Diego, CA, Jan 2011

Kang, S.W., B. Tessaro, G. Nagarajan, and W.J. Kuenzel. 2011. Differential expression of arginine vasotocin and corticotrophin-releasing hormone receptor subtypes by acute and repetitive restraint stress in the anterior pituitary of male broilers. Poultry Sci. 90(E-Suppl. 1):12 (Abst. #36).

Kang, S.W., J. Lee, B.-W. Kong, W.G. Bottje and W.J. Kuenzel. 2011. Transcriptional profiling of stress response genes in the avian pituitary gland by chronic immobilization stress. Program No. 821.13. 2011 Neuroscience Meeting Planner. Washington, DC: Soc. Neuroscience, Online.

Kong BW, Lee JY, Bottje WG, and Lassiter K. 2011. Microarray analysis in early and late passage of chicken embryo fibroblast cells. In press. Annual Meeting of Poultry Science Association. St. Louis, MO. July 16-19.

Lassiter K, Lee JY, Piekarski A, Kong BW, Hargis BM, and Bottje WG. 2011. Cell Bioenergetics in early and late passage chicken embryo fibroblasts (CEF) and immortalized CEF (DF-1) cells in response to 4-Hydroxynonenal-induced oxidative stress. In press. Annual Meeting of Poultry Science Association. St. Louis, MO. July 16-19.

Lee JY, Bottje WG, and Kong BW. 2011. Global expression of chicken genes responding to live attenuated infectious laryngotracheitis virus (ILT) vaccine in chicken embryo lung cells. 30th Annual meeting of American Society for Virology. University of Minnesota, Minneapolis, MN. July 16-20.

SC Munnaluri, S LunBeck, DP Froman, DD Rhoads (2011) Genetic Analysis of Chromosomal Regions Contributing to Sperm Mobility Phenotype in Broilers. Plant and Animal Genome, San Diego, CA, Jan 2011

Nagarajan, G., S.W. Kang, R.F. Wideman and W.J. Kuenzel. 2011. Neuroanatomical characterization of the lower spinal cord and its possible influence on gait in chickens, *Gallus gallus*. Poultry Sci. 90(E-Suppl. 1):45-46 (Abst. #151).

Selvam, R., A. Jurkevich, Y. Du, M. Mikhailova, L.E. Cornett and W.J. Kuenzel. 2011. Validation of a polyclonal antibody against chicken arginine vasotocin receptor (VT4R) and distribution of VT4R in the brain of sexually mature chickens. Poultry Sci. 90(E-Suppl. 1):11 (Abst. #33).

Tessaro, B., S.W. Kang and W.J. Kuenzel. 2011. Use of FOS immunohistochemistry for morphological identification of neuronal activation by acute and chronic stress in broilers. Poultry Sci. 90(E-Suppl. 1):11-12 (Abst. #35).

University of California - Davis (CA)

Journals:

Robb, E., and M.E. Delany. In press. Polydactyly in an avian biomedical model: A genetic study of pre-axial variation and genomic maintenance. *Cytogenetic and Genome Research*

Zhang, Y., X. Zhang, T.H. O'Hare, B. Payne, J.J. Dong, C.F. Scheuring, M. Zhang, J.J. Huang, M.-K. Lee, M.E. Delany, H.-B. Zhang and J.B. Dodgson. 2011. A comparative physical map reveals the pattern of chromosomal evolution between the turkey (*Meleagris gallopavo*) and chicken (*Gallus gallus*) genomes. *BMC Genomics*. 12:447.

<http://www.biomedcentral.com/content/pdf/1471-2164-12-447.pdf>

O'Hare, T.H., and M.E. Delany. 2011. Molecular and cellular evidence for the alternate lengthening of telomeres (ALT) maintenance pathway in chicken. *Cytogenetic and Genome Research*. 135:65-78 DOI: 10.1159/000330125

<http://content.karger.com/ProdukteDB/produkte.aspDOI=10.1159/000330125>

Reed, K.M., M. Bauer, M. S. Monson, L. D. Chaves, B. Benoit, T.H. O'Hare and M.E. Delany. 2011. Defining the turkey MHC: Identification of expressed Class I and Class IIB genes independent of the B-locus. *Immunogenetics* 63:753-771 DOI 10.1007/s00251-011-0549-1 <http://www.springerlink.com/content/w19u35x024707662/>

Dodgson, J.B., M.E. Delany and H. Chang. 2011. Poultry genome sequences: Progress and outstanding challenges. *Cytogenetic and Genome Research* 134(1):19-26 DOI: 10.1159/000324413 <http://www.ncbi.nlm.nih.gov/pubmed/21335957?dopt=Abstract>

Robb, E.A., C.L. Gitter, H. Cheng and M.E. Delany. 2011. Single nucleotide polymorphism analysis of chicken genetic resources: Variation within and among MHC-congenic lines and mapping of developmental mutations. *J. Heredity* 102:141-156. (cover art) <http://jhered.oxfordjournals.org/content/early/2011/01/26/jhered.esq122.abstract>

Abstracts:

Zhang, Y., X. Zhang, T.H. O'Hare, B. Payne, J.J. Dong, C.F. Scheuring, M. Zhang, J.J. Huang, M.-K. Lee, M.E. Delany, H.-B. Zhang and J.B. Dodgson*. 2011. Chromosome evolution between the turkey and chicken genomes. 6th International Chick Meeting, Edinburgh, Scotland, UK. September 2011.

*Robb, E.A. and M.E. Delany. 2011. Genomic and genetic analyses define causative elements for two developmental defects in an avian biomedical model. American Society of Human Genetics/12th International Congress of Human Genetics. Montreal, CAN. October 10-15, 2011.

*Swanberg, S.E., T. H. O'Hare, M.E. Delany. 2011. Transcription of TERRA from avian telomeres. *Telomerase and Telomerase*. Cold Spring Harbor Laboratory, Cold Spring Harbor NY. May 2011

*Yang, Z., M.-K. Lee, X. Zhang, B. Payne, J.J. Park, J.J. Dong, C. Scheuring, M. Zhang, M.E. Delany, J. Dodgson, H.-B. Zhang. 2011. A BAC-based Integrated Physical, Genetic and Comparative Map of the Turkey, Chicken and Human Genomes. *International Plant and Animal Genomes XIX*, San Diego, CA.

Robb, E.A., and M.E. Delany*. 2011. Chicken developmental mutations that cause embryonic lethal syndromes: The search for causative elements by fine mapping and capture array. *International Plant and Animal Genomes XIX*, San Diego, CA (poultry workshop)

Dissertation:

O'Hare, T.H. 2011. Analysis of telomere length regulation in the chicken. University of California, Davis, CA. (Ph.D.)

Alternative Media (links remain active - no updates):

□ Swanberg, S., O'Hare, T., and M.E. Delany. Telomere Maintenance Pathway. GALLUS REACTOME <http://gallus.reactome.org/>

□ Gessaro, T., and M.E. Delany. Avian Genetic Resources Website <http://animalscience.ucdavis.edu/AvianResources/> Contains genetic stocks listing, curator contact information, photo gallery, a few historic genetic stocks papers as pdf's, etc.; other contributions for the site are welcome.

University of Delaware (DE)

Abstracts

Abasht, B., C. Chen, H. Huang, C. H. Wu, M. J. Duclos, E. LeBihan-Duval, J. Simon, L. A. Cogburn. Search for Genomic Footprints of Divergent Selection From Whole Genome Sequencing of Four Experimental Lines of Broiler Chickens. *PAG – XX*, January 14-18, 2012, San Diego, CA

City of Hope (COH)

Zhang L, Katselis GS, Moore RE, Lekpor K, Goto RM, Lee TD, Miller MM. 2011. Proteomic Analysis of Surface and Endosomal Membrane Proteins from the Avian LMH Epithelial Cell Line. *Journal of Proteome Research* 10:3973-3982.

University of Georgia (GA)

Chen C.Y., I. Misztal, I. Aguilar, S. Tsuruta, T.H. Meuwissen, S. E. Aggrey, T. Wing, and W. M. Muir, 2011. Genome-wide marker assisted selection combining all phenotypic information with genotypic data in one step: An example of using broiler chickens. *J. Anim. Sci.* 89: 23-28. Epub 2010 Oct 1.

Phongpa-Ngan P, A. Grider, J.H. Mulligan, S.E. Aggrey, and L. Wicker, 2011. Proteomic analysis and differentially expression in protein extracted from chicken with a varying growth rate and water-holding capacity. *J. Agric Food Chem.* Nov 22 [Epub ahead of print].

Shim, M.Y., A. B. Karnuah, N.B. Anthony, G.M. Pesti and S.E. Aggrey, 2011. The effect of broiler chicken growth rate on valgus, varus and tibial dyscondroplasia. *Poultry Sci.* 91: [Accepted]

Shim, M.Y., A. B. Karnuah, A. D. Mitchell, N.B. Anthony, G. M. Pesti, and S.E. Aggrey, 2011. The effect of growth rate on leg morphology, tibia breaking strength, tibia mineral density, tibia mineral ash and tibia bone ash in broilers. *Poultry Sci.* 91: [Accepted]

Iowa State University (IA)

Peer-Reviewed Journal Papers

Chuammitri, P., Redmond, S. B., Kimura, K., Andreasen, C. B., Lamont, S. J., and Palić, D. 2011. Heterophil functional responses to dietary immunomodulators vary in genetically distinct chicken lines. *Vet. Immunol. Immunopathol*, doi:10.1016/j.vetimm.2011.05.019

Ciraci, C., and Lamont, S.J., 2011. Avian-specific TLRs and downstream effector responses to CpG-induction in chicken macrophages. *Dev. Comp. Immunol.* 35: 392–398.

Coble, D. J., Redmond, S.B., Hale, B., and Lamont, S. J. 2011. Distinct lines of chickens express different splenic cytokine profiles in response to *Salmonella enteritidis* challenge. *Poultry Sci.* 90:1659–1663.

Jia, X., Nie, Q., Lamont, S.J., Zhang, X. Variation in sequence and expression of the avian FTO, and association with glucose metabolism, body weight, fatness and body composition in chickens. 2011. *Intl. J. Obesity.* advance online publication, 22 November 2011; doi:10.1038/ijo.2011.221 7

Kumar, S., Ciraci, C., Redmond, S., B., Chuammitri, P., Andreasen, C., B., Palić, D., and Lamont, S.J. 2011. Immune response gene expression in spleens of diverse chicken lines fed dietary immunomodulators. *Poultry Sci.* 90:1009–1013.

Peiris, L., Ralph, J., Lamont, S.J. and Dekkers, J.C. 2011. Predicting allele frequencies in DNA pools using high density SNP genotyping data. *Animal Genet.* 30:256-264

Redmond, S.B., Chuammitri, P., Andreasen, C. B., Palic, D., Lamont, S.J. 2011. Genetic control of chicken heterophil function in advanced intercross lines: associations with novel and with known *Salmonella* resistance loci and a likely mechanism for cell death in extracellular trap production. *Immunogenetics* 63: 449-458. DOI 10.1007/s00251-011-0523-y

Redmond, S.B., Chuammitri, P., Andreasen, C. B., Palic, D., Lamont, S.J. 2011. Proportion of circulating chicken heterophils and CXCLi2 expression in response to *Salmonella enteritidis* are affected by genetic line and immune modulating diet. *Vet. Immunol. Immunopath.* 140: 323-328.

Sandford, E.E., Orr, M., Balfanz, E., Bowerman, N., Xianyao Li, X., Zhou, H., Johnson, T.J., Kariyawasam, S., Liu, P., Nolan, L.K., and Lamont, S.J. 2011. Spleen transcriptome response to infection with avian pathogenic *Escherichia coli* in broiler chickens. BMC Genomics 12:469-481.

Sun, X., D Habier, R.L. Fernando, D.J. Garrick, and J.C.M. Dekkers. 2011. Genomic breeding value prediction and QTL mapping of QTLMAS2010 data using Bayesian methods. BMC Proceedings 5 (Suppl 3):S1.

Sunkara, L.T., Achanta, M., Schreiber, N.B., Bommineni, Y.R., Dai, G., Jiang, W., Lamont, S.J., Lillehoj, H.S., Beker, A., Teeter, R.G., and Zhang, G. 2011. Butyrate enhances disease resistance of chickens by inducing antimicrobial host defense peptide gene expression. PLoS ONE 6(11): e27225. doi:10.1371/journal.pone.0027225

Wolc, A., Stricker, C., Arango, J., Settar, P., Fulton, J.E., O' Sullivan, N.P., Habier, D., Fernando, R., Garrick, D.J., Lamont, S.J., and Dekkers, J.C.M. 2011. Breeding value prediction for production traits in layers using pedigree or genomic relationships in a reduced animal model. Genet. Select. Evol. 43:5-13

Wolc, A., J. Arango, P. Settar, J.E. Fulton, N.P. O'Sullivan, R. Preisinger, D. Habier, R. Fernando, D.J. Garrick, J.C.M. Dekkers. 2011. Persistence of accuracy of genomic estimated breeding values over generations in layer chickens. Genet. Sel. Evol. 43: DOI: 10.1186/1297-9686-43-23

Wolc, A., J. Arango, P. Settar, N.P. O'Sullivan, J.C.M. Dekkers. 2011. Evaluation of egg production in layers using random regression models. Poultry Sci. 90: 30-34

Abstracts

Bowerman, N., Habier D., Wolc A., Arango J., Settar P., Fulton J.E., O'Sullivan N.P., Preisinger R., Dekkers J.C.M. 2011. Linkage maps using high-density SNP data. XIX International Plant and Animal Genome Conference. http://www.intl-pag.org/19/abstracts/P05m_PAGXIX_574.html 8

Ciraci, C., and Lamont, S.J. 2011. Gene expression analysis and mechanism of action of chicken macrophage response to microorganism-derived nucleic acids. Plant & Animal Genome XIX, January 2011, San Diego, CA

Coble, D.J., Redmond, S.B., Hale, B., and Lamont, S.J. 2011. Distinct lines of chickens express different splenic cytokine profiles in response to *Salmonella enteritidis* challenge. Proc. 100th Annual PSA Meeting, St. Louis, Missouri July 2011

Coble, D.J., Sandford, E., Abernathy, J., Zhou, H., and Lamont, S.J. 2011. Impacts of *Salmonella enteritidis* infection on liver transcriptome in broilers. Plant & Animal Genome XIX, January 2011, San Diego, CA.

Dekkers, J.C.M., D. Habier, and R. Fernando. 2011. Whole genome selection in livestock using 384 SNP panels. XIX International Plant and Animal Genome Conference. http://www.intl-pag.org/19/abstracts/W90_PAGXIX_557.html

Deng, X., J. Arango, K. Kizilkaya, J. Zeng, W. Cai, J. Fulton, L. Peiris, C. Wang, X. Sun, P. Settar, N.P. O'Sullivan, S.J. Lamont, and J.C.M. Dekkers. 2011. Whole genome association analysis of Idiopathic Eosinophilic Enteritis in Brown Egg Layers. XIX International Plant and Animal Genome Conference. http://www.intl-pag.org/19/abstracts/P05m_PAGXIX_569.html

Lian, L., Ciraci, C., Chang, G., Hu, J., Lamont, S.J. 2011. NLRC5 knock-down in chicken macrophages alters response to LPS stimulation. Proc. 6th Intl. CHICK meeting, September 2011, Edinburgh UK

Redmond, S.B., Chuammitri, P., Andreasen, C. B., Palic, D., Lamont, S.J. 2011. Genome-wide analysis of chicken heterophil functional response to Salmonella on advanced intercross lines reveals associations with known resistance loci, novel loci, and a likely mechanism for cell death through extracellular trap production. Plant & Animal Genome XIX, January 2011, San Diego, CA.

Sandford, E., Orr, M., Li, X., Zhou, H., Johnson, T., Kariyawasam, S., Liu, P., Nolan, L., and Lamont, S.J. 2011. Blood leukocyte transcriptomics of broiler chicks infected with avian pathogenic *Escherichia coli*. Poultry Science Assoc. July 2011, St. Louis, MO

Sandford, E., Orr, M., Li, X., Zhou, H., Johnson, T.J., Kariyawasam, S., Liu, P., Nolan, L.K., and Lamont, S.J. 2011. Whole transcriptome response of peripheral blood leukocytes to avian pathogenic *Escherichia coli* infection in broiler chickens. Proc. 7th European Poultry Breeders Roundtable, October 5-7, 2011, Peebles Hydro, UK

Sun, X., R.L. Fernando, D.J. Garrick, and J.C.M. Dekkers. 2011. An iterative approach for efficient calculation of breeding values and genome-wide association analysis using weighted genomic BLUP. J. Anim. Sci. 89, E Suppl.2: 28. http://www.asas.org/abstracts/ASAS_2011_Sect_ABS_E-Supplement-2.pdf

Wang, C., D. Habier, A. Kranis, K. Watson, S. Avendano, D. Garrick, R. Fernando, S. Lamont, and J. Dekkers. 2011. Accuracy of genomic EBV using an evenly spaced low density SNP panel in broiler chickens. XIX International Plant and Animal Genome Conference. http://www.intl-pag.org/19/abstracts/P05m_PAGXIX_580.html

Wang, C., D. Habier, A. Kranis, K. Watson, S. Avendano, D. Garrick, R. Fernando, S. Lamont, and J. Dekkers. 2011. Accuracy of genomic EBV using an evenly spaced low density SNP panel in broiler chickens. J. Anim. Sci. 89, E Suppl.2: 30. http://www.asas.org/abstracts/ASAS_2011_Sect_ABS_E-Supplement-2.pdf

Wang, C., D. Habier, A. Wolc, A. Kranis, K.A. Watson, S. Avendano, D.J. Garrick, R. Fernando, S.J. Lamont, and J.C.M. Dekkers. 2011. Accuracy of genomic EBV using an evenly-

spaced, low-density, 384-SNP panel in broiler chickens. P73 in: Proceeding 7th European Symposium on Poultry Genetics. <http://www.roslin.ed.ac.uk/7espg/assets/7espg-edited-proceedings.pdf>

Wang Y., V. Brahmakshatriya, B. Lupiani, S. Reddy, B. S. Lamont, H. Zhou. 2011. Identification of differentially expressed microRNAs associated with avian influenza virus infected in two genetically distinct chicken lines. Proc. Plant & Animal Genome XIX, January 2011. San Diego

Wolc, A., J. Arango, P. Settar, J.E. Fulton, N.P. O'Sullivan, R. Preisinger, D. Habier, R. Fernando, D.J. Garrick, C. Wang, and J.C.M. Dekkers. 2011. Accuracy of imputation with low density SNP genotyping of selection candidates and multiple generations of low density genotyped dams. P75 in: Proceeding 7th European Symposium on Poultry Genetics. <http://www.roslin.ed.ac.uk/7espg/assets/7espg-edited-proceedings.pdf>

Wolc, A., Arango J., Settar P., Fulton J.E., O'Sullivan N.P., Preisinger R., Habier D., Fernando R., Garrick D.J., Lamont S.J., Dekkers J.C.M. 2011 Estimated breeding values accuracy and persistency in layers using marker and pedigree based relationship matrices. J. Anim. Sci. 89, E Suppl.2: 57. http://www.asas.org/abstracts/ASAS_2011_Sect_ABS_E-Supplement-2.pdf
Wolc, A., J. Arango, P. Settar, J. Fulton, N. O'Sullivan, R. Preisinger, D. Habier, D. Garrick, R. Fernando, S. Lamont, and J. Dekkers. 2011. Persistence of accuracy of estimated breeding values in layers using marker and pedigree based relationship matrices. XIX International Plant and Animal Genome Conference. http://www.intl-pag.org/19/abstracts/P05m_PAGXIX_566.html.

Wolc, A., J. Arango, P. Settar, J. Fulton, N. O'Sullivan, R. Preisinger, D. Habier, D. Garrick, R. Fernando, S. Lamont, and J. Dekkers. 2011. Persistence of accuracy of estimated breeding values in layers using marker and pedigree based relationship matrices. J. Anim. Sci. 89, E Suppl.2: 29. http://www.asas.org/abstracts/ASAS_2011_Sect_ABS_E-Supplement-2.pdf
Wolc A., Habier D., Bowerman N., Arango J., Settar P., Fulton J.E., O'Sullivan N.P., Preisinger R., Dekkers J.C.M. 2011. Efficiency of an evenly spaced low density SNP panel for predicting genomic breeding values in laying hens.

Wolc, A., J.M. Hickey, M. Sargolzaei, J. Arango, P. Settar, J.E. Fulton, N.P. O'Sullivan, R. Preisinger, D. Habier, R. Fernando, D.J. Garrick, C. Wang, and J.C.M. Dekkers. 2011. Comparison of the accuracy of genotype imputation using different methods. P76 in: Proceeding 7th European Symposium on Poultry Genetics. <http://www.roslin.ed.ac.uk/7espg/assets/7espg-edited-proceedings.pdf>

Zeng, J., A. Toosi, R.L. Fernando, J.C.M. Dekkers, and D. Garrick. 2011. Genomic selection of purebred animals for crossbred performance under dominance. XIX International Plant and Animal Genome Conference. http://www.intl-pag.org/19/abstracts/P05r_PAGXIX_688.html

Zeng, J., A. Toosi, R.L. Fernando, J.C.M. Dekkers, and D.J. Garrick. 2011. Genomic selection of purebred animals for crossbred performance under dominance. P82 in: Proceeding 7th European Symposium on Poultry Genetics. <http://www.roslin.ed.ac.uk/7espg/assets/7espg-edited-proceedings.pdf>

Dissertations:

Sandford, E.E., 2011. Whole transcriptome response of chicken spleen and peripheral blood leukocytes to avian pathogenic *Escherichia coli*. Ph.D. Dissertation, Iowa State University Library

Popular press articles

Animal Industry reports at: <http://www.ans.iastate.edu/report/air>

Balfanz, E., Sandford, E., Kaiser, M., G., and Lamont, S.J. 2011. Differential immunological gene expression after *Escherichia coli* infection in chickens, Iowa State University Animal Industry Report, 2011, A. S. Leaflet-R2618

Ciraci, C., and Lamont, S.J. 2011. The regulatory mechanism of response to CpG-ODN, a pathogen-derived molecule, in chicken macrophages. Iowa State University Animal Industry Report, 2011, A. S. Leaflet-R2617

Wang, C., Habier, D., Garrick, D. J., Fernando, R.L., Lamont, S.J., Dekkers, J.C.M., Kranis, A., Watson, K.A., Avendano, S. 2011. Accuracy of genomic EBV using an evenly spaced, low-density SNP panel in broiler chickens. Iowa State University Animal Industry Report, 2011, A. S. Leaflet-R2620

Wolc, A., Stricker, C., Arango, J., Settar, P., Fulton, J.E., O'Sullivan, N.P. Preisinger, R., Habier, D., Fernando, R., Garrick, D.J., Lamont, S.J., Dekkers, J.C.M. 2011. Breeding value prediction for production traits in layers using high-density SNP markers. Iowa State University Animal Industry Report, 2011, A. S. Leaflet-R2619

Purdue University (IN)

Chen, C., I. Misztal, I. Aguilar, A. Legarra, and W. Muir, 2011 Effect of different genomic relationship matrices on accuracy and scale. *J. Animal Science* 89: 2673-2679.

Chen, C., I. Misztal, I. Aguilar, S. Tsuruta, T. Meuwissen *et al.* 2011 Genome-wide marker-assisted selection combining all pedigree phenotypic information with genotypic data in one step: An example using broiler chickens. *J. Animal Science* 89: 23-28.

Groenen, M. A., H. J. Megens, Y. Zare, W. C. Warren, L. W. Hillier *et al.* 2011 The development and characterization of a 60K SNP chip for chicken. *BMC Genomics* 12.

Maceachern, S., W. M. Muir, S. Crosby, and H. H. Cheng, 2011 Genome-wide identification of allele-specific expression (ASE) in response to Marek's disease virus infection using next generation sequencing. *BMC Proc.* 5 Suppl 4: S14.

Warnock, J. Bindu Nanduri, Carol Andrea Pregonero Gamez, Juliet Tang, Daniel Koback, William M. Muir and Shane C. Burgess 2011. Gene Profiling of Aortic Valve Interstitial Cells under Elevated Pressure Conditions: Modulation of Inflammatory Gene Networks," In Press. *International Journal of Inflammation*

MacEachern, S., Muir, W.M., Crosby, S., and Cheng, H.H. 2012. Genome-wide identification and quantification of cis- and trans-regulated genes responding to Marek's disease virus infection via analysis of allele-specific expression. *Frontier Live. Gen.*, accepted.

University of Maryland (MD)

Peer-Reviewed Journal Papers

Higgins SE, Wolfenden AD, Tellez G, Hargis BM, Porter TE (2011) Transcriptional profiling of cecal gene expression in probiotic- and Salmonella-challenged neonatal chicks. *Poultry Science* 90:901-913

Proszkowiec-Weglarz M, Higgins SE, Porter TE (2011) Changes in Gene Expression During Pituitary Morphogenesis and Organogenesis in the Chick Embryo. *Endocrinology* 152:989-1000

Ellestad LE, Saliba J, Porter TE (2011) Ontogenic characterization of gene expression in the developing neuroendocrine system of the chick. *Gen Compar Endocrinol* 171:82-93

Heuck-Knubel K, Proszkowiec-Weglarz M, Narayana J, Ellestad LE, Prakobsaeng N, Porter TE (2012) Identification of *cis*-elements necessary for glucocorticoid induction of growth hormone gene expression in chicken embryonic pituitary cells. *Am J Physiol* (in press)

Wu C-Y, Jhingory S, and Taneyhill LA. 2011. The tight junction scaffolding protein cingulin regulates neural crest cell migration. *Dev Dyn* 240: 2309-2323.

Luo, J. Yu, Y. Zhang, H. Tian, F. Cheng, H. and *Song JZ. 2011 Down-regulation of promoter methylation level of *CD4* gene after MDV infection in MD-resistant chicken line. *BMC Proceeding* 2011, 5 (Suppl 4):S7doi:10.1186/1753-6561-5-S4-S7

Xie X, Yu Y, Liu G, Yuan Z, *Song JZ. 2011 Complexity and Entropy Analysis of DNA Methyltransferase. *J Data Mining in Genome and Proteomics* 1:105. doi:10.4172/2153-0602.1000105

Shang, S. Ding, Z. Dunn J. L. Lee, L. Heidari M. Song, JZ. Ernst C. Zhang, H. 2011. A comparative evaluation against a vv+ strain of marek's disease virus infection in a series of recombinant congenic strains of White Leghorn chickens. *Avian Diseases* 55(3):384-390. 2011. doi: 10.1637/9524-091310-Reg.1

Yu, Y. Apratim, M., Luo, J. Tian, F. Zhang, HM. Yuan, Y. Zhou, H. and *Song, JZ. 2011 Temporal Genes Expression induced by MDV in Marek's Disease-Resistant and -Susceptible Inbred Chickens. *BMC Genomics* 2011, 12:501doi:10.1186/1471-2164-12-501

Shang, S. Dunn J. L. Lee, L. Heidari M. Ernst C. Song, JZ. Zhang, H. 2011 Vaccine by chicken line interaction alters the protective efficacy against challenge with a very virulent plus strain of Marek's disease virus in White Leghorn chickens. *World Journal of Vaccines* (in press)

Tian, F. Luo, J. Zhang, H. Yu, Y. and *Song JZ. 2011 MicroRNA Expression Signatures Induced by Marek's Disease Virus Infection in Chickens. *Genomics* 2011 doi: 10.1016/j.ygeno.2011.11.004

Books and Chapters in Books

Tian F. and *Song, JZ. Epigenetics and microRNAs in Animal Health. *LIVESTOCK EPIGENETICS BOOK*. Wiley-Blackwell (in press)

Luo, J. Yu, Y. and *Song JZ. Epigenetics and Animal Health. *LIVESTOCK EPIGENETICS BOOK*. Wiley-Blackwell (in press)

Abstracts

Narayana J, Knubel K, Porter TE (2011) Glucocorticoid-regulated histone modifications and recruitment of the GR, Pit-1 and Ets1 transcription factors to the 5'-flanking region of the chicken growth hormone gene. Program 20th Plant and Animal Genome Conference

Mukherjee M, Porter TE (2011) Differential abilities of the chicken Pit-1 isoforms to regulate the chicken growth hormone promoter. Program Experimental Biology Meeting

Padmanabhan, R, Taneyhill LA. Investigating the role of endocytosis in the post-translational down-regulation of Cadherin6B in premigratory neural crest cells. *Society for Developmental Biology Mid-Atlantic Regional Meeting*, June 3-5, 2011. University of Pennsylvania, Philadelphia, PA, USA.

Jhingory, S, Wu, CY, and Taneyhill LA. The tight junction scaffolding protein cingulin regulates cellular delamination from the neuroepithelium. *Society for Developmental Biology 70th Annual Meeting*, July 21-25, 2011. Chicago, IL, USA.

Neiderer, T and Taneyhill LA. Investigating the role of claudin-1 in neural crest cell migration. *Society for Developmental Biology 70th Annual Meeting*, July 21-25, 2011. Chicago, IL, USA.

Mitra, A. & Song, JZ. 2011. A Novel Data-driven Method of Detecting Histone Modifications using Wavelets. Next-Generation Sequencing Congress, Boston, MA.

Luo, J. Mitra, A., Tian F. Chang S. Zhang H. Cui K. Zhao, K. Yu, Y. and *Song, JZ. Genome-wide Histone Methylation Analysis and New Pathway Predictions in MD-resistant and MD-susceptible Chickens after MDV Infection. Keystone Symposia, Environmental Epigenomics and Disease Susceptibility. March 27 – April 1, 2011.

Michigan State University (MI)

Dodgson, J.B., M.E. Delany and H.H. Cheng. 2011. Poultry genome sequences: progress and outstanding challenges. *Cytogenetics and Genome Research* 134:19-26.

Niikura, M., T. Kim, R.F. Silva, J. Dodgson and H.H. Cheng. 2011. Virulent Marek's disease virus generated from infectious bacterial artificial chromosome clones with complete DNA sequence and implication of viral genetic homogeneity in pathogenesis. *Journal of General Virology* 92:598-607.

Meydan, H., M. A. Yildiz, J. B. Dodgson, and H. H. Cheng. 2011. Allele-specific expression analysis reveals CD79B has a cis-acting regulatory element that responds to Marek's disease virus infection in chicken, *Poultry Science* 90:1206-1211.

Romanov, M.N., J.B. Dodgson, R.A. Gonser, and E.M. Tuttle. 2011. Comparative BAC-based mapping in the white-throated sparrow, a novel behavioral genomics model, using interspecies overgo hybridization, *BMC Research Notes* 4:211.

Zhang, Y., X. Zhang, T.H. O'Hare, W.S. Payne, J.J. Dong, C.F. Scheuring, M. Zhang, J.J. Huang, M.-K. Lee, M.E. Delany, H.-B. Zhang and J.B. Dodgson. 2011. A comparative physical map reveals the pattern of chromosomal evolution between the turkey (*Meleagris gallopavo*) and chicken (*Gallus gallus*) genomes, *BMC Genomics*, 12:447.

Zhang, Y., M.-K. Lee, X. Zhang, B. Payne, H.J. Park, J.J. Dong, C. Scheuring, M. Zhang, M.E. Delany, J. Dodgson, and H.-B. Zhang. 2011. A BAC-based Integrated Physical, Genetic and Comparative Map of the Turkey, Chicken and Human Genomes. *Proceedings, Plant and Animal Genome XIX*. (abstract)

Dodgson, J., Y. Zhang, X. Zhang, T.H. O'Hare, W.S. Payne, J.J. Dong, C.F. Scheuring, M. Zhang, J.J. Huang, M.-K. Lee, M.E. Delany, and H.-B. Zhang. 2011. Chromosome evolution between the turkey and chicken genomes. 6th International Chick Meeting. (abstract)

Warren, W., A. Zimin, L. Hillier, P. Minx, S. Hu, J. Dodgson, H. Cheng, M. Groenen, and R.K. Wilson. 2011. The continued upgrade of the chicken genome sequence assembly. 6th International Chick Meeting. (abstract)

University of Minnesota (MN)

Bauer M.M. and K.M. Reed. 2011. Extended sequence of the turkey MHC *B*-locus sequence variation in the highly polymorphic B-G loci. *Immunogenetics*, 63:209-221. *Epub 5 January 2011*.

Chaves L.D., G.M. Faile, J.A. Hendrickson, K. Mock, and K.M. Reed. 2011. A locus-wide approach to assessing variation in the avian MHC: The B-locus of the wild turkey. *Heredity*, 107:40-49. *Epub 22 December 22 2010; doi:10.1038/hdy.2010.153*.

Chaves L.D., S.B. Kreuth, M.M. Bauer, and K.M. Reed 2011. Sequence of a turkey BAC clone identifies MHC class III orthologs and supports ancient origins of immunological gene clusters. *Cytogenet Genome Res.* 132:55-63. *Epub 2010 Aug 24.*

Kong,B-W., J.Y. Lee, W.G. Bottje, K. Lassiter, J. Lee, and D.N. Foster. 2011. Genome-Wide Differential Gene Expression in Immortalized DF-1 Chicken Embryo Fibroblast Cell Line. *BMC Genomics.* In Press.

Nierobisz L.S., K.R.B. Sporer, G.M. Strasburg, K.M. Reed, S.G. Velleman, C.M. Ashwell, J.V. Felts, and P.E. Mozdziak. 2011. Differential expression of genes characterizing myofiber phenotype. *Animal genetics, in press. Published online: 19 SEP 2011 | DOI: 10.1111/j.1365-2052.2011.02249.x.*

Reed K.M., M.M. Bauer, M.S. Monson, L.D. Chaves, B. Benoit, T.H. O'Hare, and M.E. Delany. 2011. Defining the turkey MHC: Identification of expressed class I and class II-like genes independent of the *B*-locus. *Immunogenetics.* 63:753-771. *Epub 2011 Jun 28.*

Song. R., D. N. Foster, and G.C. Shurson 2011. Effects of feeding diets containing bacitracin methylene disalicylate (BMD) to heat-stressed finishing pigs. *J. Animal Sci.* 89:1830-1843,

Sporer K.R.B., W. Chiang, R.J. Tempelman, C.W. Ernst, K.M. Reed, S.G. Velleman, and G.M. Strasburg. 2011. Characterization of a 6K oligonucleotide turkey skeletal muscle microarray to profile gene expression changes during muscle development. *Animal Genet.* 42:75-82. *Epub 26 May 2010.*

Sporer K.R.B., R.J. Tempelman, C.W. Ernst, K.M. Reed, S.G. Velleman, and G.M. Strasburg. 2011. Transcriptional profiling identifies differentially expressed genes in developing turkey skeletal muscle. *BMC Genomics,* 12:143.

Mississippi State University (MS)

Peer-Reviewed Journal Papers

Edelmann, M.J., Nicholson, B., Kessler, B.M., (2011). Pharmacological targets in the ubiquitin system offer new ways of treating cancer, neurodegenerative disorders and infectious diseases. *Expert Review Mol Med* 13:e35.

Kessler, B.M., Edelmann, M.J. (2011) PTMs in conversation: activity and function of deubiquitinating enzymes regulated via post-translational modifications. *Cell Biochem Biophys.* 60(1-2):21-38.

McCarthy, F. M. , Gresham, C. R., Buza, T. J., Chouvarine, P., Pillai, L. R., Kumar, R., Ozkan, S., Wang, H., Manda, P., Arick, T., Bridges, S. M. and Burgess, S. C. (2011). "AgBase: supporting functional modeling in agricultural organisms." *Nucleic Acids Res* 39(Database issue): D497-506.

Bright, L. A., Mujahid, N., Nanduri, B., McCarthy, F. M., Costa, L. R., Burgess, S. C. and Swiderski, C. E. (2011). "Functional modelling of an equine bronchoalveolar lavage fluid proteome provides experimental confirmation and functional annotation of equine genome sequences." *Anim Genet* 42(4): 395-405.

Li, X., Swaggerty, C. L., Kogut, M. H., Chiang, H. I., Wang, Y., Genovese, K. J., He, H., McCarthy, F. M., Burgess, S. C., Pevzner, I. Y. and Zhou, H. (2011). "Systemic response to *Campylobacter jejuni* infection by profiling gene transcription in the spleens of two genetic lines of chickens." *Immunogenetics*. Jul 7. [Epub ahead of print].

Sanders, W. S., Wang, N., Bridges, S. M., Malone, B. M., Dandass, Y. S., McCarthy, F. M., Nanduri, B., Lawrence, M. L. and Burgess, S. C. (2011). "The proteogenomic mapping tool." *BMC Bioinformatics* 12: 115.

Books and Chapters in Books:

Ammari, M., McCarthy, F. M., Nanduri, B., Pinchuk, G. and Pinchuk, L. M. (2011). Understanding the pathogenesis of cytopathic and noncytopathic Bovine Viral Diarrhea Virus infection using proteomics. *Proteomics*, InTech Open Access Publishing: *Accepted*.

Abstracts

Schmidt, C., Chouvarine, P., Keeler, T., Jin, L., Decker, K., Shamovsky, V., D'Eustachio, P., Antin, P., McCarthy, F.M. "Birdbase: A Database of Avian Genes and Genomes." The 6th International Chick Meeting Roslin Institute, Sept. 17-20, 2011.

Nail, C., Chouvarine, P., Weber, J., Spencer, Y., Kumari, S., Burgess, S.C., Schmidt, C., Antin, P., McCarthy, F.M.. "Manual biocuration to support standardized chicken gene nomenclature at CGNC." The 6th International Chick Meeting Roslin Institute, Sept. 17-20, 2011.

Texas A & M University (TAMU)

Publications

Wang Y, N. Ghaffari, C. D. Johnson, U. M. Braga-Neto, H. Wang, R. Chen, H. Zhou. 2011 Evaluation of the coverage and depth of transcriptome by RNA-Seq in chickens. *BMC Bioinformatics* 12: Suppl 10, doi:10.1186/1471-2105-12-S10-S5.

Li X., C. L. Swaggerty, M. H. Kogut, H. Chiang, Y. Wang, K. J. Genovese, H. He, H. Zhou. 2011. Cecal transcriptome analysis of colonized and non-colonized chickens within two genetic lines that differ in cecal colonization by *Campylobacter jejuni*. *Animal Genetics* 42:491-500.

Li X., C. L. Swaggerty, M. H. Kogut, H. Chiang, Y. Wang, K. J. Genovese, H. He, F. McCarthy, S. Burgess, Y. Pevzner, H. Zhou. 2011. Systemic Response to *Campylobacter jejuni* Infection by Profiling Gene Transcription in the Spleens of Two Genetic Lines of Chickens. *Immunogenetics* in press.

Yu Y, J. Luo, A. Mitra, S. Chang, F. Tian, H. Zhang, P. Yuan, H. Zhou, J. Song. 2011 Temporal Transcriptome Changes Induced by MDV in Marek's Disease-Resistant and -Susceptible Inbred Chickens BMC Genomics 12:501.

Sandford E, M. Orr , E. Balfanz , N. Bowerman , X. Li , H. Zhou , T. J Johnson , S. Kariyawasam , P. Liu , L K Nolan and S. J Lamont. 2011. Spleen transcriptome response to infection with avian pathogenic Escherichia coli in broiler chickens. BMC Genomics 12:469.

Filant, J. H. Zhou, and T. Spencer. 2012. Neonatal progesterone exposure ablates endometrial gland development via disruption of epithelial-stromal interactions in the mouse uterus. Biology of Reproduction, accepted.

Presentations

Zhou H. X. Li, CL. Swaggerty, MH. Kogut, K. Drake, V. DiRita, and I. Pevzner. 2011. Host innate response to Campylobacter jejuni infection in the broiler bursa using systems biology approach. 16th International workshop on Campylobacter, Helicobacter & Related Organisms. Vancouver, Canada

Wang Y., Wang H., Chen R., H. Zhou. 2011. Evaluation of coverage and depth of transcriptome by RNA-Seq in chickens. Proceeding of Eighth MidSouth Computational Biology and Bioinformatics Society.

Wang Y, Shi Y, Song Y, Zhang Y, Yuan J, Dai S, Brahmakshatriya V, Lupiani B, Reddy SM, Lamont SJ, Zhou H. 2011. High-throughput proteomic analysis in chicken lung with avian influenza virus infection by MASS spectrometry. 100th Annual Poultry Science meeting, St Louis, MO

E. Sandford¹, M. Orr¹, X. Li, H. Zhou, T. Johnson, S. Kariyawasam, P. Liu, L. K. Nolan, and S. J. Lamont. 2011 Blood leukocyte transcriptomics of broiler chicks infected with avian pathogenic Escherichia coli. 100th Annual Poultry Science meeting, St Louis, MO

K. Stringfellow, Y. Wang, H. Zhou, Y. Farnell, D. Caldwell, J. Lee, S. Anderson, M.Mohnl, R. Beltran, G. Schatzmayr, S. Fitz-Coy, C. Broussard, and M. Farnell. 2011. Effect of probiotic administration on avian beta-defensin expression in coccidiosis vaccinated broilers. 100th Annual Poultry Science meeting, St Louis, MO

Nazmi A, Zhang J, Li X , Swaggerty CL, Kogut MH, Chiang HI, Wang Y, Genovese K., He H, Dirita VJ, Pevzner I, Zhou H. 2011. Gene expression profiles of ceca in different broiler lines infected with wild-type and mutant Campylobacter jejuni. 100th Annual Poultry Science meeting, St. Louis, MO

Wang X. Chen F., Stewart A., Kelley G., Zhou H., Cheng H., and Nahashon S. 2011 Potential candidate genes for fat deposition revealed by transcriptome and proteome analysis. 100th Annual Poultry Science meeting, St. Louis, MO

Abernathy J. X. Li, Y. Wang, H. Zhou. 2011.

Assessment of gene regulation of microRNA-155 in the chicken macrophage during *Salmonella typhimurium* infection. Proc. Plant & Animal Genome XIX, San Diego, CA.

Wang Y., V. Brahmakshatriya, B. Lupiani, S. Reddy, B. S. Lamont, H. Zhou. 2011. Identification of differentially expressed MicroRNAs associated with Avian Influenza Virus Infected in two genetically distinct Chicken Lines. Proc. Plant & Animal Genome XIX, San Diego, CA.

Coble D. E. Sandford, J. Abernathy, H. Zhou, S. Lamont. 2011. Impacts of *Salmonella enteritidis* infection on liver transcriptome in broilers. Proc. Plant & Animal Genome XIX, San Diego, CA.

USDA-ARS-ADOL (USDA)

Peer-reviewed manuscripts:

Niikura, M., Kim, T., Silva, R.F., Dodgson, J., and Cheng, H.H. 2011. Virulent Marek's disease virus generated from infectious bacterial artificial chromosome clones with complete DNA sequence and implication of viral genetic homogeneity in pathogenesis. *J. Gen. Virol.* 92:598-607.

Dodgson, J.B., Delany, M.E., and Cheng, H.H. 2011. Poultry genome sequences: progress and outstanding challenges. *Cytogen. Genome Res.* 134:19-26.

Robinson, C.M., Hunt, H.D., Cheng, H., and Delany, M. 2010. Mapping of Marek's disease herpesvirus integrations into chicken chromosomes indicates positional preference for telomeres and clonal relationships among tumors. *Herpesviridae* 1:5.

Robb, E.A., Gitter, C.L., Cheng, H.H., and Delany, M.E. 2011. Single nucleotide polymorphism analysis of chicken genetic resources: variation within and among MHC-congenic lines and mapping of developmental mutations. *J. Heredity* 102:141-156.

Meydan, H., Yildiz, M.A., Dodgson, J.B., and Cheng, H.H. 2011. Allele-specific expression analysis reveals CD79B has a cis-acting regulatory element that responds to Marek's disease virus infection in chickens. *Poultry Sci.* 90:1206-1211.

Groenen, M.A.M., Megens, H.-J., Zare, Y., Warren, W.C., Hillier, L.W., Crooijmans, R.P.M.A., Vereijken, A., Okimoto, R., Muir, W.M., and Cheng, H.H. 2011. The development and characterization of a 60K SNP chip for chicken. *BMC Genomics* 12:274.

MacEachern, S., Muir, W.M., and Cheng, H.H. 2011. Genome-wide identification of allele-specific expression (ASE) in response to Marek's disease virus infection

using next generation sequencing. BMC Proc. 5 (Suppl. 4):S14.

MacEachern, S., Muir, W.M., Crosby, S., and Cheng, H.H. 2012. Genome-wide identification and quantification of cis- and trans-regulated genes responding to Marek's disease virus infection via analysis of allele-specific expression. Frontier Live. Gen., accepted.

Luo, J., Zhang, H., Tian, F., Chang, S., Cheng, H.H., and Song, J. 2011. Downregulation of promoter methylation level of *CD4* gene after MDV infection in MD-susceptible chicken line. BMC Proc. 5 (Suppl. 4):S7

Lee L, Zhang, H.M., Heidari, M., Lupiani, B., and Reddy, S. 2011. Evaluation of factors affecting vaccine efficacies of recombinant Marek's disease virus lacking the Meq oncogene in chickens. Avian Dis. 55:172-179.

Xu, M., Zhang, H.M., Lee, L., Gao, H., Sharif, S., Silva, R., and Heidari, M. 2011. Gene expression profiling in rMd5- and rMd5-delta-meq infected chickens. Avian Dis. 55:358-367.

Chang, S., Ding, Z., Dunn, J.R., Lee, L., Heidari, M., Song, J., Ernst, C., and Zhang, H.M. 2011. A Comparative Evaluation of the Protective Efficacy of rMd5ΔMeq with HVT and CVI988/Rispens against a vv+ Strain of Marek's Disease Virus Infection in a Series of Recombinant Congenic Strains of White Leghorn. Avian Dis. 55:384-390.

Yu, Y., Luo, J., Apratim, M., Chang, S., Tian, F., Zhang, H.M., Yuan, P., Zhou, H., and Song, J. 2011. Temporal Transcriptome Changes Induced by MDV in Marek's Disease-Resistant and -Susceptible Inbred Chickens. BMC Genomics 12:501.

Tian, F., Luo, J., Chang, S., Zhang, H.M., and Song, J.Z. 2012. MicroRNA expression and methylation signatures induced by Marek's disease virus infection in chickens. Genomics, in press.

Chang, S., Dunn, J.R., Heidari, M., Lee, L., Ernst, C., Song, J., and Zhang, H.M. 2012. Vaccine by chicken line interaction alters the protective efficacy against challenge with a very virulent plus strain of Marek's disease virus in White Leghorn chickens. World J. Vaccines, in press.

University of Wisconsin (WI)

Long, N., Gianola, D., Rosa, G. J. M., and Weigel, K. A. Application of support vector regression to genome-assisted prediction of quantitative traits. Theor. Appl. Genet. 123: 1065-1074, 2011.

Long, N., Gianola, D., Rosa, G. J. M., and Weigel, K. A. Long-term impacts of genome-enabled selection. J. Appl. Genetics 52(4): 467-480, 2011.

Long, N., Gianola, D., Rosa, G. J. M., and Weigel, K. A. Marker-assisted prediction of nonadditive genetic values. *Genetica*, 139(7): 843-854, 2011.

Rosa, G. J. M., Valente, B. D., de los Campos, G., Wu, X.-L., Gianola, D. and Silva, M. A. Inferring causal phenotype networks using structural equation models. *Genetics Selection Evolution* 43: 6, 2011.

Silva, F. F., Varona, L., Resende, M. D. V., Bueno Filho J. S. S., Rosa, G. J. M. and Viana, J. M. S. A note on accuracy of Bayesian LASSO regression in GWS. *Livestock Science* 142: 310-314, 2011.

Valente, B. D., Rosa, G. J. M., Teixeira, R. B. and Torres, R. A. Searching for phenotypic causal networks involving complex traits: an application to European quails. *Genet. Sel. Evol.* 43:37, 2011.

Wu, X.-L., Beissinger, T. M., Bauck, S., Woodward, B., Rosa, G. J. M., Weigel, K. A., de Leon, N. and Gianola, D. A primer on high-throughput computing for genomic selection. *Frontiers in Genetics* 2:4, 2011. doi: 10.3389/fgene.2011.00004.

Virginia Tech (VT)

Speier, J., Yadgary, L., Uni, Z., and Wong, E.A. 2011 Expression of nutrient transporters and digestive enzymes in the yolk sac membrane and embryonic intestine. Annual meeting of the Poultry Science Association, St. Louis, MO. July 17-19, 2011.

Speier, J. 2011 Gene expression of nutrient transporters and digestive enzymes in the yolk sac membrane and small intestine of the developing embryonic chick, M.S. Thesis, Virginia Tech.