

PUBLICATIONS

Georgia

- Donoghue, K. A., R. Rekaya, J. K. Bertrand, and **I. Misztal**. 2004. Genetic evaluation of calving to first insemination using natural and artificial insemination mating data. *J. Anim. Sci.* 82: 362-367
- Hansen, M., **I. Misztal**, M. S. Lund, J. Pedersen, and L. G. Christensen. 2004. Undesired phenotypic and genetic trend for stillbirth in Danish Holsteins. *J. Dairy Science. J. Dairy Sci.* 87: 1477-1486
- Legarra, A., **I. Misztal** and J.K. Bertrand. 2004. Constructing Covariance Functions for Random Regression Models for growth in Gelbvieh beef cattle. *J. Anim. Sci.* 82:1564:1571.
- Donoghue, K. A., R. Rekaya, J. K. Bertrand, and **I. Misztal**. 2004. Threshold-linear analysis of measures of fertility in artificial insemination data and days to calving in beef cattle. *J. Anim. Sci.* 82:987-993.
- Tsuruta, S., **I. Misztal** and T. J. Lawlor. 2004. Genetic Correlations Among Production, Body Size, Udder, and Productive Life Traits Over Time in Holsteins. *J. Dairy Sci.* 87:1457-1468.
- Oseni, S., **I. Misztal**, S. Tsuruta, and R. Rekaya. 2004. Genetic components of days open under heat stress. *J. Dairy Sci.* 87:3022-3028.
- Oseni, S., S. Tsuruta, **I. Misztal**, and R. Rekaya. 2004. Genetic parameters for days open and pregnancy rates in US Holsteins using different editing criteria. *J. Dairy Sci.* 87: 4327-4333.
- Sapp, R. L., R. Rekaya, **I. Misztal**, and T. Wing. 2004. Male and Female Fertility and Hatchability in Chickens: A Longitudinal Mixed Model Approach. *Poultry Sci.* 83:1253-1259.
- Pérez-Enciso, M., and **I. Misztal**. 2004. Qxpak: a versatile mixed model application for genetical genomics and QTL analyses. *Bioinformatics.* 20(16):2792-2798.
- Tsuruta, S., **I. Misztal**, T. J. Lawlor, and L. Klei. 2004. Modeling final scores in US Holsteins as a function of year of classification using a random regression model. *Livest. Prod. Sci.* 91:199-299.
- Iwaisaki, H., S. Tsuruta, **I. Misztal**, and J. K. Bertrand. 2004. Estimation of correlation between maternal permanent environmental effects of related dams in beef cattle. *J. Anim. Sci. (Suppl. 1)* 82:5.
- Iwaisaki, H., S. Tsuruta, **I. Misztal**, and J. K. Bertrand. 2004. Genetic parameters estimated with multi-trait and linear spline random regression models using Gelbvieh early growth data. *J. Anim. Sci. (Suppl. 1)* 82:6.
- Sapp, R. L., R. Rekaya, **I. Misztal**, and T. Wing. 2004. Male and female fertility and hatchability in chickens: A longitudinal mixed model approach. *Poul. Sci. (Suppl. 1)* 83:8.
- Oseni, S., **I. Misztal**, S. Tsuruta, and R. Rekaya. 2004. Genetic component of heat stress. *J. Dairy Sci. (Suppl. 1)* 87:88.
- Garcia-Peniche, T. B., B. G. Cassell, **I. Misztal**, and R. E. Pearson. 2004. Comparison of Holstein, Brown Swiss and Jersey cows for age at first calving and first calving interval. *J. Dairy Sci. (Suppl. 1)* 87:129.

- Robbins, K. R., **I. Misztal**, J. K. Bertrand, A. Legarra, and S. Tsuruta. 2004. A practical longitudinal model for evaluating growth in Gelbvieh cattle. *J. Anim. Sci.* (Suppl. 1) 82:243.
- Tsuruta, S., **I. Misztal**, and T. J. Lawlor. 2004. Correlated traits used for indirect prediction of productive life in Holsteins. *J. Dairy Sci.* (Suppl. 1) 87:411.
- Oseni, S., **I. Misztal**, S. Tsuruta, and R. Rekaya. 2004. Genetic parameters for days open and pregnancy rate in US Holsteins. *J. Dairy Sci.* (Suppl. 1) 87:413.
- Bohmanova, J., and **I. Misztal**. 2004. Genetic evaluation of beef cattle for growth using records across a wide range of ages. *J. Anim. Sci.* (Suppl. 1) 82:451.
- Arango, J., **I. Misztal**, S. Tsuruta, M. Culbertson, and W. Herring. 2004. Estimation of genetic parameters for farrowing mortality, litter size and test performance of first parity Large White sows. *J. Anim. Sci.* (Suppl. 1) 82:455.

Michigan State

Auer, C. A., et al., **Rosa, G. J. M.**, et al., Wolt, J. Workshop report: extending the net fitness model to considerations of crop gene flow. 7th ISB News Report 1-12, January 2004 (<http://www.isb.vt.edu/news/2004/jan04.pdf>)

Cardoso, F. F., **Rosa, G. J. M.**, Tempelman, R. J. Inferência multi-raça, robusta e heteroscedástica em ganho pós-desmama de gado Nelore-Hereford via modelos de variâncias estruturais. 41st Annual Meeting of the Brazilian Society of Animal Science (SBZ), Campo Grande – Brazil, July 19-22, 2004.

Cardoso, F. F., **Rosa, G. J. M.**, Tempelman, R. J. Multiple breed genetic inference using heavy-tailed structural models for heterogeneous residual variances. *Journal of Animal Science*, 2004 (Accepted for publication)

Cardoso, F. F., **Rosa, G. J. M.**, Tempelman, R. J. Multiple-breed genetic inference using a heavy-tailed structural residual variances model. *J. Dairy. Sci.* 87 (Suppl. 1): 242 2004.

Chan, P. S., Caron, J. P., **Rosa, G. J. M.**, Orth, M. W. Glucosamine and chondroitin sulfate regulate gene expression and synthesis of nitric oxide and prostaglandin E2 in articular cartilage explants. *Osteoarthritis and Cartilage* (Accepted for publication)

Chan, P.S., Schlueter, A.E., Coussens, P.M., **Rosa, G. J. M.**, Haut, R.C., Orth, M.W. Gene expression profile of mechanically impacted bovine articular cartilage explants. *Journal of Orthopedic Research* (Accepted for publication)

De Leon, N., Coors, J. G., Kaepller, S. M., **Rosa, G. J. M.** Genetic control of prolificacy and related traits in the Golden Glow Maize Population: I. Phenotypic evaluation. *Crop Science*, 2004 (Accepted for publication)

Kim, K.-S., Costello, S., **Rosa, G. J. M.**, Mullen, A. M., Raney, N. E., Ernst, C. W. Evaluation of microsatellite markers on bovine chromosomes 1 and 5 for potential allelic associations with meat characteristics and growth traits in beef cattle. *J. Anim. Sci.* 82 (Suppl. 1): 414-415, 2004.

Lew, B. J., Spikovsky, S., **Rosa, G. J. M.**, Liesman, J. S., R. P. Radcliff, H. A. Tucker, Oliveira, M. D. S. and VandeHaar, M. J. Effects of diet and bST on gene expression profile of heifer mammary parenchyma. *J. Dairy. Sci.* 87 (Suppl. 1): 393 2004.

- Madsen, S. A., Chang, L.-C., Hickey, M.-C., **Rosa, G. J. M.**, Coussens, P. M., Burton, J. L. Microarray analysis of gene expression in blood neutrophils of parturient cows. *Physiological Genomics* 16: 212-221, 2004.
- Rosa, G. J. M.**, Gianola, D., Padovani, C. R. Bayesian longitudinal data analysis with mixed models and thick-tailed distributions using MCMC. *Journal of Applied Statistics* 31(7): 855-873, 2004.
- Rosa, G. J. M.**, Steibel, J. P., Tempelman, R. J. Reassessing design and analysis of two-color microarray experiments using mixed effects models. *Comparative and Functional Genomics* (Accepted for publication)
- Rosa, G. J. M.**, Tempelman, R. J. Bayesian Mapping Methodology. In: *Genetic Analysis of Complex Traits Using SAS*. Saxton, A. (Editor). Cary, NC: SAS Institute Inc., 2004.
- Sartori, R., Haughian, J. M., Shaver, R. D., **Rosa, G. J. M.**, Wiltbank, M. C. Comparison of ovarian function and circulating steroids in estrous cycle of Holstein heifers and lactating cows. *J. Dairy. Sci.* 87:905-920, 2004.
- Steibel, J. P., **Rosa, G. J. M.**, Tempelman, R. J. Thick-tailed and heteroskedastic linear models for the analysis of cDNA microarray data. *Joint Statistical Meetings 2004 Abstracts*, Toronto, Canada. August 8-12, 2004.
- Steibel, J. P., Suchyta, S., **Rosa, G. J. M.**. Tackling high variability in gene expression studies. *Genomics & Proteomics* (Accepted for publication)
- Steibel, J. P., Tempelman, R. J., **Rosa, G. J. M.**. Power and sample size calculations for two color microarray experiments with biological and technical replication. *J. Anim. Sci.* 82 (Suppl. 1): 415, 2004.
- Tempelman, R. J., **Rosa, G. J. M.**. Empirical Bayes Approaches to Mixed Model Inference in Quantitative Genetics. In: *Genetic Analysis of Complex Traits Using SAS*. Saxton, A. (Editor). Cary, NC: SAS Institute Inc., 2004.
- Bisognin, D.A., D.S. Douches, L. Buszka, G. Bryan, and **D. Wang**. 2005. Mapping late blight resistance in *Solanum microdontum* Bitter. *Crop Sci.* 45:340-345.
- Cornelious, B., P. Chen, Y. Chen, N. de Leon, J.G. Shannon, and **D. Wang**. 2004. Genetic mapping of QTLs underlying waterlogging tolerance in soybean. *Mol. Breed.* (submitted).
- Glover, K.D., **D. Wang**, P.R. Arelli, S.R. Carlson, S.R. Cianzio, and B.W. Diers. 2004. Near isogenic lines confirm a soybean cyst nematode resistance gene from PI 88788 on linkage group J. *Crop Sci.* 44:936-941.
- Guo, X., and **D. Wang**. 2004. Genetic mapping of genes underlying partial resistance to Sclerotina stem rot in soybean PI391589B. p. In ASA-CSSA-SSSA-CSSS Abstracts 2004 [CD-ROM], Madison, WI.
- Mansur, L., J.C. Oyarzo, **D. Wang**, and K. Chase. 2004. Genetic mapping of seed shape in three recombinant inbred populations of soybean (*Glycine max* L.). p. In Proc. World Soybean Res. Conf. VII, Foz do Iguac Brazil. Feb. 29 to Mar. 5, 2004.
- Wang, D.**, G.L. Graef, A.M. Procopiuk, and B.W. Diers. 2004. Identification of putative QTL that underlie yield in interspecific soybean backcross populations. *Theor. Appl. Genet.* 108:458-467.

Weebadde, C., **D. Wang**, and J. Hancock. 2004. Mapping QTL for day-neutralinity in strawberry. p. In Proceedings of the ASHS 2004 Annual Conference, Austin, Texas. July 17-20.

Iowa

- Caldo, R. A., **Nettleton, D.**, Wise, R. P. 2004. Interaction-dependent gene expression in Mla-specified response to barley powdery mildew. *The Plant Cell*. 16: 2514-2528.
- Ciobanu, D.C., J.W.M. Bastiaansen, S.M. Lonergan, H. Thomsen, **J.C.M. Dekkers**, G.S. Plastow, and M.F. Rothschild. 2004. New alleles in calpastatin gene are associated with meat quality traits in pigs. *J. Animal Sci.* 82:2829-2839
- Coccilone, S. M., **Nettleton, D.**, Snook, M. E., Peterson, T. 2004. Transformation of maize with the p1 transcription factor elevates silk maysin levels in concordance with a developmental hierarchy. *Plant Biotechnology Journal*. In press.
- DeCook, R., **Nettleton, D.**, Foster, C.M., Wurtele, E. 2004. Identifying differentially expressed genes in unreplicated multiple-treatment microarray timecourse experiments. *Computational Statistics and Data Analysis*. In press.
- Dekkers, J.C.M.** 2004. Commercial application of marker- and gene-assisted selection in livestock: strategies and lessons. *J. Anim. Sci.* 82: E313-328E
- Dekkers, J.C.M.**, and R. Chakraborty. 2004. Optimizing purebred selection for crossbred performance using QTL. *Genet. Sel. Evol.* 36: 297-324.
- Dorman, K. S.** 2004. Numerical methods for branching processes with applications to HIV drug resistance. Society for Mathematical Biology, Ann Arbor, MI.
- Dorman, K. S.**, K. Lange, J. S. Sinsheimer. 2004. In the garden of branching processes. *SIAM Review*. 46:202-229.
- Fang, F., M. Rischmiller, M. A. Suchard, **K. S. Dorman**. 2004. Recombination in Hepatitis B Virus: a survey with evidence for the presence of hotspots. VII International Meeting on Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases, Valencia, Spain.
- Fernando, R. L.** 2004. Incorporating molecular markers into genetic evaluation. 55th EAAP Conference, Bled, Slovenia.
- Fernando, R.L., D. Nettleton**, B.R. Southey, **J.C.M. Dekkers**, M.F. Rothschild, and M. Soller. 2004. Controlling the proportion of false positives in multiple dependent tests. *Genetics* 166: 611-619.
- Firat, M. Z., F. V. C. Pita, H. Gilbert, L. R. Totir, **R. L. Fernando**, and **J. C.M. Dekkers**. 2004. A strategy to improve the computational efficiency of mapping quantitative trait loci by the identity by descent method. *J. Anim. Sci.* 82 (Suppl.2) p.41
- Gilbert, H., M. Z. Firat, L. R. Totir, **J. C. M. Dekkers**, and **R. L. Fernando**. 2004. A new method to fine map a quantitative trait locus using linkage disequilibrium. *J. Anim. Sci.* Vol. 82 (Suppl. 1):415.
- Gilbert, H., M. Z. Firat, L. R. Totir, **J. C. M. Dekkers**, and **R. L. Fernando**. 2004. A new method to fine mapping quantitative trait locus using linkage disequilibrium. 55th EAAP Conference, Bled, Slovenia.

- Grapes, L., **J.C.M. Dekkers**, M.F. Rothschild, and **R. L. Fernando**. 2004. Comparing linkage disequilibrium-based methods for fine mapping quantitative trait loci. *Genetics* 166: 1561-1570.
- Grapes, L., M. Z. Firat, **J. C. M. Dekkers**, M. F. Rothschild, and **R. L. Fernando**. 2004. Optimal haplotype structure for linkage disequilibrium-based mapping of quantitative trait loci. *J. Anim. Sci.* 82 (Suppl.2) p.41
- Grapes, L., S. Rudd, **R. Fernando**, K. Megy, D. Rocha, M. Rothschild. 2004. Prospecting for pig SNPs in the human genome: have we struck gold? *J Anim. Sci.* Vol. 82 (Suppl. 1):453.
- Heifetz, E. M., H. Khatib, A. Nave, D. Heller, Y. Eitan, **J.C.M. Dekkers**, and M. Soller. 2004. The Jerusalem resource population: a multigeneration quasi-full-sib intercross population for high power and high resolution QTL mapping in poultry; initial QTL mapping results. *J. Anim. Sci.* 82 (Suppl.2) p.41.
- Kim, J.-J., H.-H. Zhao, H. Thomsen, M. F. Rothschild, and **J. C. M. Dekkers**. 2004. Detection of QTL for meat quality in an F2 cross in swine using combined line-cross and half-sib analysis. *J. Anim. Sci.* 82 (Suppl.2) p.42
- Jannink, J., R. Fernando**. 2004. On the Metropolis-Hastings acceptance probability to add or drop a QTL in MCMC-based Bayesian analyses. *Genetics* 166: 641-643.
- Jannink, J.L.** 2005. Selective phenotyping to accurately map QTL. *Crop Sci* 45:In Press.
- Kim, K.S., J.-J. Kim, **J.C.M. Dekkers**, and M.F. Rothschild. 2004. Polar overdominance imprinting is associated with growth and fat deposition in pigs. PAG XII p240
- Kim, J.-J. and **J. C. M. Dekkers**. 2004. A combined line-cross and halfsib model to detect and characterize QTL in an F2 outbred cross population. *J. Anim Sci.* 82 (Suppl. 1) p.415
- Kim, J.-J., H. Thomsen, K.-S. Kim, M. F. Rothschild, and **J. C. M. Dekkers**. 2004. A linear regression model to detect QTL with polar overdominance inheritance in a cross of outbred breeds. *J. Anim. Sci.* 82 (Suppl.2) p.42
- Kim, K.S., J.-J. Kim, **J. C. M. Dekkers** and M. F. Rothschild. 2004. Polar overdominant inheritance of a DLK1 polymorphism is associated with growth and fatness in pigs. *Mamm. Genome* 15:552-559.
- Lall, S., **Nettleton, D.**, DeCook, R., Che, P., and Howell, S. H. 2004. QTLs associated with adventitious shoot formation in tissue culture and the program of shoot development in *Arabidopsis*. *Genetics*. 167 1883-1892.
- Lee, S. H., Zhao, S.-H., Recknor, J. C., **Nettleton, D.**, Orley, S., Kang, S.-K., Lee, B.-C., Hwang, W.-S., Tuggle, C. K. 2004. Transcriptional profiling using a novel cDNA array identifies differential gene expression during porcine embryo elongation. *Molecular Reproduction and Development*. In press.
- Macêdo, M., S. Carpenter, J. A. Richt, J. L. Oaks, R. H. Mealey, T. C. McGuire, **K. S. Dorman**. 2004. Local dynamics of virus-host interactions as a marker of disease progression: analysis of clinical data in EIAV infected horses. VII International Meeting on Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases, Valencia, Spain
- Manly, K. F., **Nettleton, D.**, and Hwang, J. T. G. 2004. Genomics, prior probability, and statistical tests of multiple hypotheses. *Genome Research*. 14 997-1001.

- Minin, V. N., **K. S. Dorman**, M. A. Suchard. 2004. Proceedings of the Joint Statistical Meetings, Section on Bayesian Statistical Science. 92-97.
- Persyn, K. E., Xin, H., **Nettleton, D.**, Ikeguchi, A., and Gates, R. S. 2004. Feeding behaviors of laying hens with or without beak trimming. Transactions of the ASAE. 47(2) 591-596.
- Peterson-Burch, B. D., **Nettleton, D.**, Voytas, D. F. 2004. Genomic neighborhoods for *Arabidopsis* retrotransposons: genome sequence analysis reveals a role for targeted integration in the distribution of the Metaviridae. Genome Biology. 5 R78.
- Pita, F., **R. Fernando**, L. Totir. 2004. An improved approximation of the gametic covariance matrix for marker assisted genetic evaluation by BLUP. J Anim. Sci. Vol. 82 (Suppl. 1): 379.
- Piyasatian, N., **R. Fernando**, and **J. Dekkers**. 2004 Efficiency of selection on multiple QTL in a crossbred population. J Anim. Sci. Vol. 82 (Suppl. 1): 377.
- Steward, B. L., Tian, L. F., **Nettleton, D.** and Tang, L. 2004. Reduced-dimension clustering for vegetation segmentation. Transactions of the ASAE. 47(2) 609-616.
- Thomsen, H., **J. C. M. Dekkers**, H. K. Lee, and M. F. Rothschild 2004. Characterization of quantitative trait loci for growth and meat quality in a cross between commercial breeds of swine J. Anim. Sci. 82: 2213-2228
- Totir, L. R., **R. L. Fernando**, and **J. C. M. Dekkers**. 2004. Use of peeling and reverse peeling to estimate the power to map a recessive disease gene. J Anim. Sci. Vol. 82 (Suppl. 1):88.
- Totir, L. R., **R. L. Fernando**, **J. C. M. Dekkers**, S. A. Fernandez. 2004. The effect of the number of loci in finite locus models for genetic evaluation. Genet. Sel. Evol. 36 (1): 29-48
- Totir, L. R., **R. L. Fernando**, **J. C. M. Dekkers**, and S. A. Fernandez. 2004. A study on the minimum number of loci required for genetic evaluation using a finite locus model. Genet. Sel. Evol. 36 395-414
- Totir, L. R., **R. L. Fernando**, **J. C. M. Dekkers**, S. A. Fernandez, and B. Guldbrandtsen. 2004. Effect of using approximate gametic variance covariance matrices on marker assisted selection by BLUP. Genet. Sel. Evol. 36:29-48.
- Villanueva, B., **J.C.M. Dekkers**, J. A. Woolliams, and P. Settar. 2004. Maximizing genetic gain over multiple generations with quantitative trait locus selection and control of inbreeding. J. Anim Sci. 82: 1305-1314.
- Wolt, J. D., Y. Y. Shyy, P. Christensen, **K. S. Dorman**, M. Misra. 2004. Quantitative exposure assessment for confinement of maize biogenic systems. Environmental Biosafety Research. (Accepted).
- Wu, X.-L., and **J.-L. Jannink**. 2004. Optimal sampling of a population to determine QTL location, variance, and allelic number. Theoretical and Applied Genetics 108 (7): 1434-1442.
- Zhao, H., **Nettleton, D.**, M. Soller, and **J. C. M. Dekkers**. 2004. Linkage disequilibrium measures between markers as predictors of linkage disequilibrium between markers and QTL. J. Anim Sci. 82 (Suppl. 2) p.40.
- Zhao, H., J.-J. Kim , M. Perez-Enciso, and **J. C. M. Dekkers**. 2004. Detection of quantitative trait loci segregation within pure breeds in a Berkshire x Yorkshire F2 population. J. Anim Sci. 82 (Suppl. 1) p.454

Purdue

- Muir, W. M.**, D. Miles, and A. E. Bell. 2004. Long Term Selection Studies In *Tribolium Castaneum*, Alternative Selection Strategies, And Associated Nature Of Quantitative Genetic Variation. *Plant Breeding Reviews* 24(2):211-223.
- Howard, R. D., J. A. DeWoody, and **W. M. Muir**. 2004. Mating advantage of transgenic males provides opportunity for Trojan gene effect in a fish. *Proceeds of National Academy of Science* 101:2934-2938.
- Muir, W. M.** 2004. The threats and benefits of GM fish. *European Molecular Biology Organization EMBO* 5:2-7.
- Cheng, H. W. and **W. M. Muir**. 2004. Chronic social stress differentially regulates neuroendocrine responses in laying hens: II. Genetic basis of adrenal responses under three different social conditions. *Psychoneuroendocrinology*. 97:961-971.
- Muir, W. M.** and H. Cheng. 2004. Breeding for Productivity and Welfare. In: *Welfare of the Laying Hen: Poultry Science Symposium Series*, No. 27. Edited by G Perry. pp123-138. CABI Press Cambridge, MA..
- Muir, W. M.** and R. D. Howard 2004. Characterization of environmental risk of genetically engineered (GE) organisms and their potential to control exotic invasive species. *Aquatic Sciences Aquat. Sci.* 66: 414 –420
- Pedra, J. H., **W. M. Muir**, M. E. Scharf and B. R. Pittendrigh. 2005. Proteomic profiling of DDT resistant *Drosophila melanogaster* genotypes. *Proteomics* (In press).
- Festucci-Buselli, R. A., A. S. Carvalho-Dias, M. de Oliveira-Andrade, C. Caixeta-Nunes, H. Li, J. J. Stuart, **W. M. Muir**, M. E. Scharf and B. R. Pittendrigh 2005. Two Cytochrome P450s, Cyp6g1 and Cyp12d1, are associated with DDT resistance in both laboratory and field selected strains of *Drosophila melanogaster*. *Insect Molecular Biology* (in Press)
- J. H. Pedra, R. A. Festucci-Buselli, W. Sun, **W. M. Muir**, M. E. Scharf and B. R. Pittendrigh. 2005. Profiling of Abundant Proteins Associated with Dichlorodiphenyltrichloroethane (DDT)- Resistance in *Drosophila melanogaster* *Proteomics* (In press)
- Muir, W. M.** 2005. Incorporation of Competitive Effects in Breeding Programs for forest trees and Animals. *Genetics* (in press)
- H. A. Hostetler, P. Collodi, R. H. Devlin, and **W. M. Muir**. 2005. Improved Phytate Phosphorus Utilization by Japanese Medaka Transgenic for the *Aspergillus niger* Phytase Gene. *Zebrafish* (in press)
- H.-W. Cheng and **W. M. Muir** 2005. The effects of genetic selection for survivability and productivity on chicken physiological homeostasis *Worlds Poultry Sci* (In press)
- W.M. Muir**, J. Romero-Severson, S. D. Rider Jr., A. Simons, and J. Ogas. 2005. Application of One Sided t-tests and a Generalized Experiment Wise Error Rate to High-Density Oligonucleotide Microarray Experiments: An Example Using *Arabidopsis* (In Press)

UC Riverside

- Qu, Y. and **S. Xu**. 2004. Supervised cluster analysis for microarray data based on multivariate Gaussian mixture. *Bioinformatics* 20:1905-1913

- Zhang, Y. -M. and **S. Xu**. 2004. Mapping quantitative trait loci in F2 incorporating phenotypes of F3 progeny. *Genetics* 166:1981-1993
- Mao, Y. and **S. Xu**. 2004. Mapping QTL for traits measured as percentage. *Genetical Research* 83:159-168
- Beasley, T. M., D. Yang, N. Yi, D. C. Bullard, C. I. Amos, **S. Xu** and D. B. Allison. 2004. Joint tests for quantitative trait loci in experimental crosses. *Genetics, Selection & Evolution* 36:601-619.
- Xu, C., Y. -M. Zhang and **S. Xu**. 2005. An EM algorithm for mapping quantitative resistance loci. *Heredity* 94:119-128
- Mao, Y. and **S. Xu**. 2005. A Monte Carlo algorithm for computing the IBD matrices using incomplete marker information. *Heredity* (in press)
- Luo, L. Y. -M. Zhang and **S. Xu**. 2005. A quantitative genetics model for viability selection. *Heredity* (in press)
- Xu, C., Z. Li and **S. Xu**. 2005. Joint mapping of quantitative trait loci for multiple binary characters. *Genetics* (in press)
- Zhang, Y. -M., Y. Mao, C. Xie, H. Smith, L. Luo and **S. Xu**. 2005. Mapping QTL using naturally occurring genetic variance among commercial inbred lines of maize (*Zea mays* L.). *Genetics* (in press)
- Hansen, C., N. Yi, Y. -M. Zhang, **S. Xu**, J. Gavora and H. H. Cheng. 2005. Identification of QTL for production traits in chickens. *Animal Biotechnology* (in press)
- Wang, H., Y. -M. Zhang, X. Li, G. L. Masinde, S. Mohan, D. J. Baylink and **S. Xu**. 2005. Bayesian shrinkage estimation of QTL parameters. *Genetics* (in press)
- Jia, Z. Y. and **S. Xu**. 2005. Clustering expressed genes based on their association with a quantitative phenotype. *Genetical Research* (submitted)
- Qu, Yi and **S. Xu**. 2005. Clustering expressed genes with orthogonal polynomials based on their association with a quantitative phenotype. *Bioinformatics* (submitted)