



INIastress Consortium

Publications 2006

Abu-Khzam FN, Langston MA, Shanbhag P and Symons CT. "Scalable Parallel Algorithms for FPT Problems," *Algorithmica* 45 (2006), 269-284.

Alexander GM, Carden WB, Mu J, Kurukulasuriya NC, McCool BA, Nordskog BK, Friedman DP, Daunais JB, Grant KA, Godwin DW. The native T-type calcium current in relay neurons of the primate thalamus. *Neuroscience* 2006 Aug 11;141(1):453-61. PMID: 16690211.

Aliesky HA, Pichurin PN, Chen CR, Williams RW, Rapoport B, McLachlan SM. Probing the genetic basis for thyrotropin receptor antibodies and hyperthyroidism in immunized CXB recombinant inbred mice. *Endocrinology*. 2006 Jun;147(6):2789-800. PMID: 16543368.

Bao L, Wei L, Peirce JL, Homayouni R, Li H, Zhou M, Chen H, Lu L, Williams RW, Pfeffer LM, Goldowitz D, Cui Y (2006). Combining gene expression QTL mapping and phenotype spectrum analysis to uncover gene regulatory relations. *Mammalian Genome* 2006 Jun;17(6):575-83. PMID: 16783639.

Beare DJ, Kenny AJ, Kershaw PJ, McKenzie E, Devlin EM, Reid JB, Licandro P, K. Winpenny K, Haughton C, Langston MA, Skjoldal HR and Perkins AD. "Building Multi-Discipline, Multivariate Databases for use in Integrated Assessments: Experiences and Recommendations," *Proceedings, International Council for the Exploration of the Sea Annual Science Conference, Maastricht, The Netherlands, September, 2006.*

Becker HC, Nyrick H and Veatch LM. "Pregabalin is effective against behavioral and electrographic seizures during alcohol withdrawal." *Alcohol*. 2006 Jul-Aug;41(4):399-406. PMID: 16636010.

Becker HC, Baros AM. Effect of duration and pattern of chronic ethanol exposure on tolerance to the discriminative stimulus effects of ethanol in C57BL/6J mice. *J Pharmacol Exp Ther*. 2006 Nov;319(2):871-8. PMID: 16914560.

Carden WB, Alexander GM, Friedman DP, Daunais JB, Grant KA, Mu J, Godwin DW. Chronic ethanol drinking reduces native T-type calcium current in the thalamus of nonhuman primates. *Brain Res*. 2006 May 17;1089(1):92-100. May 2. PMID: 16631142.

Chesler EJ, Bystrykh L, de Haan G, Cooke MP, Su A, Manly KF, Williams RW. Reply to "Normalization procedures and detection of linkage signal in genetical-genomics experiments"> *Nat Genet*. 2006 Aug;38(8):856-8.

Chesler, E. J. "Bioinformatics of Behavior" in *Neurobehavioral Genetics*. (Jones B. and Mormede, P eds). (2006)

Chesler, E. J. "Book Review: Mutagenesis of the Mouse Genome" M. Justice and M. Bedell, Eds. *Genes, Brain and Behavior*, (2006).

Dubois D, Perlegas A, Floyd D, Weiner J, McCool B. Distinct Functional Characteristics of the Lateral/Basolateral Amygdala GABAergic System in C57BL/6J and DBA/2J Mice. *J Pharmacol Exp Ther*. 2006 May 1. PMID: 16651400. PMCID: PMC2276875.

Follesa P, Biggio F, Talani G, Murru L, Serra M, Sanna E, Biggio G. Neurosteroids, GABAA receptors, and ethanol dependence. *Psychopharmacology (Berl)*. 2006 Jun;186(3):267-80. Epub 2005 Sep 15. Review. PubMed PMID: 16163526.

Freeman WM, Gooch RS, Lull ME, Worst TJ, Walker SJ, Xu AS, Green H, Pierre PJ, Grant KA, Vrana KE. Apo-ii is an elevated biomarker of chronic non-human primate ethanol self-administration. *Alcohol Alcohol*. 2006 May-Jun;41(3):300-5. PMID: 16581821.

Funk D, Li Z, Le AD (2006) Effects of environmental and pharmacological stressors on c-fos and corticotropin-releasing factor mRNA in rat brain: relationship to the reinstatement of alcohol seeking. *Neuroscience*. 2006;138(1):235-43. PMID: 16359808.

Goldowitz D, Matthews DB, Hamre KM, Mittleman G, Chesler EJ, Becker HC, Lopez MF, Jones SR, Mathews TA, Miles MF, Kerns R, Grant KA. Progress in using mouse inbred strains, consomics, and mutants to identify genes related to stress, anxiety, and alcohol phenotypes. *Alcohol Clin Exp Res*. 2006 Jun;30(6):1066-78. PubMed PMID: 16737467.

Grueter BA, Gosnell HB, Olsen CM, Schramm-Sapyta, NL, Nekrasova T, Landreth GE and Winder, D.G. Extracellular-signal regulated kinase 1-dependent metabotropic glutamate receptor 5-induced long-term depression in the bed nucleus of the stria terminalis is disrupted by cocaine administration. *J Neurosci*. 2006 Mar 22;26(12):3210-9. PMID: 16554472; PubMed Central PMCID: PMC6674094.

Hemby S, O'Connor JA, McCool BA, Friedman D, Grant KA. "Ethanol-Induced regulation of GABAA alpha subunit mRNAs in prefrontal field of cynomolgus monkeys." *Alcohol Clin Exp Res*. 2006 Dec;30(12):1978-85. PMID: 17117962.

Hodge CW, Grant KA, Becker HC, Besheer J, Crissman AM, Platt DM, Shannon EE, Shelton KL. Understanding how the brain perceives alcohol: neurobiological basis of ethanol discrimination. *Alcohol Clin Exp Res*. 2006 Feb;30(2):203-13. PMID: 16441269.

Hodge CW, Miles MF, Sharko AC, Stevenson RA, Hillmann JR, Lepoutre V, Besheer J and Schroeder JP. The mGluR5 antagonist MPEP selectively inhibits the onset and maintenance of ethanol self-administration in C57BL/6J mice. *Psychopharmacology (Berl)* 83:429-438 (2006). PMID: 16292590; PubMed Central PMCID: PMC2854492.

Holdstock L, Penland SN, Morrow AL, de Wit H. Moderate doses of ethanol fail to increase plasma levels of neurosteroid 3alpha-hydroxy-5alpha-pregnan-20-one-like immunoreactivity in healthy men and women. *Psychopharmacology (Berl)*. 2006 Jun;186(3):442-50. PMID: 16240164.

John CE and Jones SR (2006) Exocytotic release of dopamine in ventral tegmental area slices from C57BL/6 and dopamine transporter knockout mice. *Neurochem Int* 49:737-745. PMID: 16901588.

John CE and Jones SR (2006) Fast scan cyclic voltammetry of dopamine and serotonin in mouse brain slices, in: *Methods and New Frontiers in Neuroscience Series: Electrochemical Methods in Neuroscience* AC Michael and LM Borland, Eds., CRC Press LLC, Boca Raton, FL

John CE, Budygin EA, Mateo Y, Jones SR. Neurochemical characterization of the release and uptake of dopamine in ventral tegmental area and serotonin in substantia nigra of the mouse. *J Neurochem*. 2006 Jan;96(1):267-82. PMID: 16300629.

John CE, Jones SR. Exocytotic release of dopamine in ventral tegmental area slices from C57BL/6 and dopamine transporter knockout mice. *Neurochem Int*. 2006 Dec;49(8):737-45. Epub 2006 Aug 9. PubMed PMID: 16901588.

Jones SR, Mathews TA, Budygin EA. Effect of moderate ethanol dose on dopamine uptake in rat nucleus accumbens in vivo. *Synapse*. 2006 Jun 2;60(3):251-255. PMID: 16752364.

Kash TL and Winder DG. (2006) Neuropeptide Y and corticotropin-releasing factor bi-directionally modulate inhibitory synaptic transmission in the bed nucleus of the stria terminalis. *Neuropharmacology*. 2006 Oct;51(5):1013-22. PMID: 16904135.

Kempermann G, Chesler EJ, Lu L, Williams RW, Gage FH (2006) Natural variation and genetic covariance in adult hippocampal neurogenesis. *Proceedings of the National Academy of Science USA* 103:780-785. PMID: 16407118, PMCID: PMC1325968.

Kennedy RE, Archer KJ, Miles, MF. Empirical Validation of the S-Score Algorithm in the Analysis of Gene Expression Data. *BMC Bioinformatics* 7(1):154 (2006).

Kennedy RE, Kerns RT, Kong X, Archer KJ, Miles, M.F. SScore: an R package for detecting differential gene expression without gene expression summaries. *Bioinformatics* 22(10):1272-1274 (2006).

Khisti RT, Wolstenholme J, Shelton KL, Miles MF Characterization of the Ethanol Deprivation Effect in Substrains of C57BL/6 Mice. *Alcohol* 40:119-26 (2006). PMID: 17307648; PubMed Central PMCID: PMC3082283.

Lan H, Chen M, Byers JE, Yandell BS, Stapleton DS, Mata CM, Mui TK, Flowers MT, Schueler KL, Manly KF, Williams RW, Kendzioriski, CM, Attie AD (2006) Combined expression trait correlations and expression quantitative trait locus mapping. *PLoS Genetics* 2:51-61. PMID: 16424919, PMCID: PMC1331977.

Li H, Chen H, Bao L, Manly KF, Chesler EJ, Lu L, Wang J, Zhou M, Williams RW, Cui Y. Integrative genetic analysis of transcription modules: towards filling the gap between genetic loci and inherited traits. *Hum Mol Genet*. 2006 Feb 1;15(3):481-92. PMID: 16371421.

Martin MV, Dong H, Vallera D, Lee D, Lu L, Williams RW, Rosen GD, Cheverud JM, Csernansky JG. Independent quantitative trait loci influence ventral and dorsal hippocampal volume in recombinant inbred strains of mice. *Genes Brain Behav*. 2006 Nov;5(8):614-23. PMID: 17081266.

Mathews TA, John CE, Lapa GB, Budygin EA, Jones SR. No role of the dopamine transporter in acute ethanol effects on striatal dopamine dynamics. *Synapse*. 2006 Sep 15;60(4):288-94. PMID: 16786536.

Morrow A.L., Porcu P., Boyd K.N. and Grant K.A. Hypothalamic-pituitary-adrenal axis modulation of GABAergic neuroactive steroids influences ethanol sensitivity and drinking behavior. *Dialogues in Clinical Neuroscience*, 2006; 8(4): 463-477. PMID: 17290803; PubMed Central PMCID: PMC3181829.

Mostallino MC, Mura ML, Maciocco E, Murru L, Sanna E, Biggio G. Changes in expression of the delta subunit of the GABA (A) receptor and in receptor function induced by progesterone exposure and withdrawal. *J Neurochem*. 2006 Oct;99(1):321-32. Epub 2006 Jul 31. PubMed PMID: 16879715.

Peirce JL, Broman KW, Lu L, Chesler EJ, Zhou G, Airey DC, Birmingham AE, Williams RW (2006) GRAIL Perm: A permutation method for appropriate interpretation of advanced intercross populations. *BMC Genetics*.

Peirce JL, Li H, Wang J, Manly KF, Hitzemann RJ, Belknap JK, Rosen GD, Sutter TR, Williams RW, Lu L: How replicable are mRNA expression QTLs? *Mammalian Genome*, 2006, 17(6):643-656. PMID: 16783644.

Peirce JL, Williams RW (2006) Expression and brain structure: black boxes between genes and behaviors. *Neurobehavioral Genetics: Methods and Applications*, 2nd ed (Jones B, Mormede P, eds). Taylor and Francis, Boca Raton.

Pierucci-Lagha A, Covault J, Feinn R, Khisti RT, Morrow AL, Marx CE, Shampine LJ, Kranzler HR. Subjective effects and changes in steroid hormone concentrations in humans following acute consumption of alcohol. *Psychopharmacology (Berl)*. 2006 Jun;186(3):451-61. PMID: 16341848.

Porcu P, Rogers LS, Morrow AL, Grant KA. Plasma pregnenolone levels in cynomolgus monkeys following pharmacological challenges of the hypothalamic-pituitary-adrenal axis. *Pharmacol Biochem Behav*. 2006 Aug;84(4):618-27. PMID: 16790266.

Porcu P, Grant KA, Green HL, Rogers LS, Morrow AL. Hypothalamic-pituitary-adrenal axis and ethanol modulation of *Psychopharmacology (Berl)*. 2006 Jun;186(3):293-301. PMID: 16133132.

Radcliffe RA, Lee MJ, Williams RW. Prediction of cis-QTLs in a pair of inbred mouse strains with the use of expression and haplotype data from public databases. *Mamm Genome*. 2006 Jun;17(6):629-42. PMID: 16783643.

Serra M, Mostallino MC, Talani G, Pisu MG, Carta M, Mura ML, Floris I, Maciocco E, Sanna E, Biggio G. Social isolation-induced increase in alpha and delta subunit gene expression is associated with a greater efficacy of ethanol on steroidogenesis and GABA receptor function. *J Neurochem*. 2006 Jul;98(1):122-33. PMID: 16805802.

Shifman S, Bell JT, Copley RR, Taylor M, Williams RW, Mott R, Flint J (2006) A high resolution single nucleotide polymorphism genetic map of the mouse genome. *PLoS Biology* 4:2227-2237. PMID: 17105354, PMCID: PMC1635748.

Sikela JM, Maclaren EJ, Kim Y, Karimpour-Fard A, Cai WW, Pollack J, Hitzemann R, Belknap J, McWeeney S, Kerns RT, Downing C, Johnson TE, Grant KJ, Tabakoff B, Hoffman P, Wu CC, Miles MF. DNA microarray and proteomic strategies for understanding alcohol action. *Alcohol Clin Exp Res*. 2006 Apr;30(4):700-8. PMID: 16573589, PMCID: PMC2709534.

Walker SJ Human and macaque transcriptomes: a comparison. In: *The Encyclopedia of Life Sciences*. John Wiley and Sons, Ltd. 2007.

Walker SJ, Grant KA. Peripheral blood alpha-synuclein mRNA levels are elevated in cynomolgus monkeys that chronically self-administer ethanol. *Alcohol*. 2006 Jan;38(1):1-4. PubMed PMID: 16762686.

Walker SJ, Wang Y, Chen F, Grant KA, Hellmann GM. Long versus short oligonucleotide arrays for the study of gene expression in nonhuman primates. 2006; *J Neurosci Methods*; 152:179-189. PMID: 16253343.

Williams RW (2006) Animal models in biomedical research: ethics, challenges, and opportunities. In: *Principles of molecular medicine*, 2nd ed. Runge MS, Patterson C, eds. pp. 53-60. Humana Press.

Wiren KM, Hashimoto JG, Alele PE, Devaud LL, Price KL, Middaugh LD, Grant KA, Finn DA. Impact of sex: determination of alcohol neuroadaptation and reinforcement. *Alcohol Clin Exp Res*. 2006 Feb;30(2):233-42. PMID: 16441272.

Woodward J, Ron D, Winder D, Roberto M. (2006) From blues states to upstates: ethanol regulation of NMDA receptor function. *Alcoholism: Clinical and Experimental Research* 30:359-367. PMID: 16441285.