



INIAstress Consortium Publications 2007

Abu-Khzam FN, Fellows MR, Langston MA and Suters WH. (2007) "Crown structures for vertex cover kernelization." *Theory of Computing Systems* 41, 411-430.

Abu-Khzam FN and Langston MA. "Linear-Time Algorithms for Planar Graphs of Fixed Disk Dimension," *Information Processing Letters* 101 (2007), 36-40.

Anderson NJ, Daunais JB, Friedman DP, Grant KA, McCool BA. Long-term ethanol self-administration by the nonhuman primate, *Macaca fascicularis*, decreases the benzodiazepine sensitivity of amygdala GABA(A) receptors. *Alcohol Clin Exp Res.* 2007 Jun;31(6):1061-70. PMID: 17428292, PMCID: PMC2288551.

Aziz RK, Kansal R, Abdeltawab NF, Rowe SL, Su Y, Carrigan D, Nooh MM, Attia RR, Brannen C, Gardner LA, Lu L, Williams RW, Kotb M: Susceptibility to severe Streptococcal sepsis: use of a large set of isogenic mouse lines to study genetic and environmental factors. *Genes and Immunity*, 2007, 8(5):404-15. PMID: 17525705.

Bao L, Peirce JL, Zhou M, Li H, Goldowitz D, Williams RW, Lu L, Cui Y. An integrative genomics strategy for systematic characterization of genetic loci modulating phenotypes. *Hum Mol Genet.* 2007 Jun 1;16(11):1381-90. PMID: 17428815.

Bao L, Zhou M, Ligang Wu, Lu L, Goldowitz D, Williams RW, Cui Y: PolymiRTS Database: linking polymorphisms in microRNA target sites with complex traits. *Nucleic Acids Research*, 2007 Jan;35(Database issue):D51-4. PMID: 17099235, PMCID: PMC1669716.

Biggio G, Concas A, Follesa P, Sanna E, Serra M. Stress, ethanol, and neuroactive steroids. *Pharmacol Ther.* 2007 Oct;116(1):140-71. Epub 2007 May 8. Review. PubMed PMID: 17555824; PubMed Central PMCID: PMC3000046.

Budygin EA, Oleson EB, Mathews TA, Läck AK, Diaz MR, McCool BA, Jones SR. Effects of chronic alcohol exposure on dopamine uptake in rat nucleus accumbens and caudate putamen. *Psychopharmacology (Berl).* 2007 Sep;193(4):495-501. Epub 2007 May 11. PubMed PMID: 17492432.

Budygin EA and Jones SR (2007) Electrochemical characterization of dopamine transporters, in: *Dopamine Transporters: Chemistry, Biology and Pharmacology*, Mark L. Trudell and Sari Izenwasser, Eds. A Wiley Series in Drug Discovery and Development, Binghe Wang, series ed.

Chen X, Che Y, Zhang L, Putman AH, Damaj, I, Martin BR, Kendler KS, and Miles MF. RhoA, encoding a Rho GTPase, is associated with smoking initiation. *Genes, Brain and Behavior*, 2007 Nov;6(8):689-97. PMID: 17284169.

Cook MN, Dunning JP, Wiley RG, Chesler EJ, Johnson, DK, Miller DR, and Goldowitz D. (2007) Neurobehavioral Mutants Identified in an ENU Mutagenesis Project. *Mammalian Genome* 18: 559 -572. PMID: 17629744.

Cotta C, Langston MA and Moscato P. "Combinatorial and Algorithmic Issues for Microarray Analysis," in *Approximation Algorithms and Metaheuristics* (T. F. Gonzales, editor), Taylor & Francis, 2007, 74.1-74.14.
Dazzi L, Seu E, Cherchi G, Barbieri PP, Matzeu A, Biggio G. Estrous cycle-dependent changes in basal and ethanol-induced activity of cortical dopaminergic neurons in the rat. *Neuropsychopharmacology*. 2007 Apr;32(4):892-901. Epub 2006 Jul 12. PubMed PMID: 16841076.

Dehne F, Fellows MR, Langston MA, Rosamond FA and Stevens K. "An $O^*(2O(k))$ FPT Algorithm for the Undirected Feedback Vertex Set Problem," *Theory of Computing Systems* 41 (2007), 479-492.

Dong H, Martin M, Colvin J, Ali Z, Borek J, Wang L, Lu L, Williams RW, Rosen GD, Csernansky JG, Cheverud J: Quantitative trait loci linked to thalamic and cortical gray matter volumes in BXD recombinant inbred mice: implications for the genetics of schizophrenia. *Heredity*, 2007, 99(1):1381-90. PMID: 17406662, PubMed Central PMCID: PMC4465230.

Gatti D, Maki A, Chesler EJ, Kosyk O, Kirova R, Lu L, Manly K, Qu Y, Williams RW, Perkins AD, Langston MA, Threadgill D and Rusyn I. "Genome-Level Analysis of Genetic Regulation of Liver Gene Expression Networks," *Hepatology* 46 (2007), 548-557. PMID: 17542012, PubMed Central PMCID: PMC3518845.

Griffin WC III, Middaugh LD, and Becker HC. Voluntary ethanol drinking in mice and ethanol concentrations in the nucleus accumbens. *Brain Research* 1138:208-213, 2007. PMID: 17275791.

Griffin WC III, Lopez MF, Yanke AB, Middaugh LD, and Becker HC. Chronic intermittent ethanol exposure that sustains high blood levels is critical for producing enhanced voluntary ethanol drinking in mice. *Alcoholism: Clinical and Experimental Research* 31(6): 24A, 2007.

Grueter BA, McElligott ZA, Winder DG. Group I mGluRs and long-term depression: potential roles in addiction? *Mol Neurobiol*. 2007 Dec;36(3):232-44. PMID: 17955198.

Hamre KM, Goldowitz D, Wilkinson S, Matthews DB. Screening for ENU-induced mutations in mice that result in aberrant ethanol-related phenotypes. *Behav Neurosci*. 2007 Aug;121(4):665-78. PMID: 17663592.

Hsu HC, Lu L, Yi N, Van Zant G, Williams RW, Mountz JD. Quantitative trait locus (QTL) mapping in aging systems. *Methods Mol Biol*. 2007;371:321-48. Review. PubMed PMID: 17634591.

Ivester P, Roberts LJ 2nd, Young T, Stafforini D, Vivian J, Lees C, Young J, Daunais J, Friedman D, Rippe RA, Parsons CJ, Grant KA, Cunningham C. Ethanol self-administration and alterations in the livers of the cynomolgus monkey, *Macaca fascicularis*. *Alcohol Clin Exp Res*. 2007 Jan;31(1):144-55. PubMed PMID:17207113.

John CE and Jones SR (2007) Voltammetric characterization of the effect of monoamine uptake inhibitors and releasers on dopamine and serotonin uptake in mouse caudate-putamen and substantia nigra slices. *Neuropharmacol* 52:1596-1605. PMID: 17459426, PMCID: PMC2041899.

Kash TL and Winder DG. NMDAR LTP and LTD Induction: 2B or Not 2BA...is that the question? *Debates in Neuroscience* (2007) 1:79-84.

Kirov S, Zhang B, Snoddy J. Association analysis for large scale gene set data. In: *Methods in Molecular Biology: Gene Function Analysis*, Humana Press, Totowa, NJ, 2007

McElligott ZA, Winder DG. $\alpha(1)$ -Adrenergic Receptor-Induced Heterosynaptic Long-Term Depression in the Bed Nucleus of the Stria Terminalis Is Disrupted in Mouse Models of Affective Disorders. *Neuropsychopharmacology*. 2007 Nov 28. PMID: 18046308, PubMed Central PMCID: PMC3046390.

Melendez RI, W. Griffin, Yanke AB, Overstreet MP, Olive MF, Becker HC. Deletion of NR2A subunit enhances neuronal glutamate uptake in the prefrontal cortex. Poster, Society for Neuroscience, San Diego, CA, 2007.

Miles MF. and Williams RW. Meta-analysis for microarray studies of the genetics of complex traits. Trends Biotechnol. 25:45-7 (2007). PMID: 17175052.

Miyairi I, Tatireddigari VR, Mahdi OS, Rose LA, Belland RJ, Lu L, Williams RW, Byrne GI. The p47 GTPases ligp2 and Irgb10 regulate innate immunity and inflammation to murine Chlamydia psittaci infection. J Immunol. 2007 Aug 1;179(3):1814-24. PMID: 17641048.

Morahan G. Williams RW (2007) Systems genetics: the next generation in genetics research? Novartis Found Symp 281:181-188. PMID: 17534074.

Morrow AL. Recent developments in the significance and therapeutic relevance of neuroactive steroids. Pharm. & Therapeutics, 116:1-6, (2007). PMID: 17531324, PMCID: PMC2047816.

The Mouse Phenotype Database Integration Consortium: Hancock JM, Adams NC, Aidinis V, Blake A, Blake JA, Bogue M, Brown SDM, Chesler E, Davidson D, Duran C, Eppig JT, Gailus-Durner V, Gates H, Gkoutos GV, Greenaway S, Hrabe M De Angelis, Kollias G, Leblanc S, Lee K, Lengger C, Maier H, Mallon A-M, Masuya H, Melvin DG, Muller W, Parkinson H, Proctor G, Reuveni E, Schofield P, Shukla A, Smith C, Toyoda T, Vasseur L, Wakana S, Walling A, White J, Wood J, Zouberakis M. Integration of mouse phenome data resources. Mammalian Genome Hsu HC, Lu L, Yi N, Zant GV, Williams RW, Mountz JD: Quantitative Trait Loci (QTL) Mapping in Aging Systems for METHODS IN MOLECULAR BIOLOGY (Biological Aging: Methods and Protocols), Humana Press, Totowa, New Jersey, 2007 PMID: 17436037, PubMed Central PMCID: PMC4230762.

Mozhui K, Hamre KM, Holmes A, Lu L, Williams RW. Genetic and structural analysis of the basolateral amygdala complex in BXD recombinant inbred mice. Behav Genet. 2007 Jan;37(1):223-43. Epub 2006 Nov 28. PubMed PMID: 17131200.

Peirce JL, Broman KW, Lu L, Williams RW (2007) A simple method for combining genetic mapping data from multiple crosses and experimental designs. PLoS One 2:31036. PMID: 17940600, PMCID: PMC2001185.

Rosen GD, Chesler EJ, Manly KF, Williams RW (2007) An informatics approach to systems neurogenetics. Neuroinformatics, ed. Crasto CJ, Humana Press, New York. Methods in Molecular Biology 401:287-303. PMID: 18368372.

Saxton AM, Langston MA and Voy BH. "Statistical Tools are Needed for Microarray Expression and Co-Expression," in Prediction with Regression: A Comparison of Methods (R. J. Freund, editor), American Statistical Association, 2007, 4381-4386

Serra M, Sanna E, Mostallino MC, Biggio G. Social isolation stress and neuroactive steroids. Eur Neuropsychopharmacol. 2007 Jan;17(1):1-11. Epub 2006 Apr 19. Review. PubMed PMID: 16626946.

Shively CA, Mietus JE, Grant KA, Goldberger AL, Bennett AJ, Willard SL. Effects of chronic moderate alcohol consumption and novel environment on heart rate variability in primates (Macaca fascicularis). Psychopharmacology (Berl). 2007 Jun;192(2):183-91. PMID: 17297637.

Song J, Lewis C, Lance E, Chesler EJ, Kirova, R, Langston MA, and Bergeson S. Inferring Transcriptional Regulation through Logical Networks from Temporal Mouse Brain Gene Expression Data. FOSBE, Stuttgart, Germany, 2007.

Walker SJ. (2007). DNA microarrays to study nonhuman primate gene expression. In: Methods Express, Mark Schena editor. pp. 201-224. Scion Publishing Ltd.

Williams S, Holloway A, Allen SA, Grisel JE. Effect of sex and b-E on EtOH self-administration in mice: old question, new findings. Alc. Clin. Exp. Res. 31: 314, 2007. Williams S, Holloway A, Allen SA, Grisel JE. Ethanol Self-Administration in b-E deficient transgenic mice. International Behavioral Neuroscience Society, Annual Meeting, June 2007 vol 16: 16.

Williams SB, Holloway A, Karwan K, Allen S, Grisel JE. Oral Self-Administration of Ethanol in Transgenic Mice Lacking b-E. *Impulse (Online journal)* 2007. Yang J, Zhu J, Williams RW (2007) Mapping the genetic architecture of complex traits in experimental populations. *Bioinformatics* 23:1527-1536. PMID: 17459962.

Zhang Y, Chesler EJ, Langston MA. On Finding Bicliques in Bipartite Graphs: a Novel Algorithm with Application to the Integration of Diverse Biological Data Types. Hawaii International Conference on System Sciences, Waikoloa, HI, 2007.