



INIStress Consortium Publications 2016

Alam G, Miller DB, O'Callaghan JP, Lu L, Williams RW, Jones BC. MPTP neurotoxicity is highly concordant between the sexes among BXD recombinant inbred mouse strains. *Neurotoxicology*. 2016 Jul;55:40-7. doi: 10.1016/j.neuro.2016.04.008. PubMed PMID: 27182044; PubMed Central PMCID: PMC5051270.

Anderson RI, Lopez MF, Becker HC. Forced swim stress increases ethanol consumption in C57BL/6J mice with a history of chronic intermittent ethanol exposure. *Psychopharmacology (Berl)*. 2016 Jun;233(11):2035-43. doi: 10.1007/s00213-016-4257-2. Epub 2016 Mar 2. PubMed PMID: 26935824; PubMed Central PMCID: PMC4864090.

Anderson RI, Lopez MF, Becker HC. Stress-Induced Enhancement of Ethanol Intake in C57BL/6J Mice with a History of Chronic Ethanol Exposure: Involvement of Kappa Opioid Receptors. *Front Cell Neurosci*. 2016 Feb 23;10:45. doi: 10.3389/fncel.2016.00045. eCollection 2016. PubMed PMID: 26941607; PubMed Central PMCID: PMC4763044.

Barr T, Girke T, Sureshchandra S, Nguyen C, Grant K, Messaoudi I. Alcohol Consumption Modulates Host Defense in Rhesus Macaques by Altering Gene Expression in Circulating Leukocytes. *J Immunol*. 2016 Jan 1;196(1):182-95. doi: 10.4049/jimmunol.1501527. Epub 2015 Nov 30. PubMed PMID: 26621857; PubMed Central PMCID: PMC4685011.

Barr T, Helms C, Grant K, Messaoudi I. Opposing effects of alcohol on the immune system. *Prog Neuropsychopharmacol Biol Psychiatry*. 2016 Feb 4;65:242-51. doi: 10.1016/j.pnpbp.2015.09.001. Epub 2015 Sep 14. Review. PubMed PMID: 26375241; PubMed Central PMCID: PMC4911891.

Becker HC, Lopez MF. An Animal Model of Alcohol Dependence to Screen Medications for Treating Alcoholism. *Int Rev Neurobiol*. 2016;126:157-77. doi: 10.1016/bs.irn.2016.02.006. Epub 2016 Mar 10. PubMed PMID: 27055614; PubMed Central PMCID: PMC6746169.

Brust TF, Morgenweck J, Kim SA, Rose JH, Locke JL, Schmid CL, Zhou L, Stahl EL, Cameron MD, Scarry SM, Aubé J, Jones SR, Martin TJ, Bohn LM. Biased agonists of the kappa opioid receptor suppress pain and itch without causing sedation or dysphoria. *Sci Signal*. 2016 Nov 29;9(456):ra117. PubMed PMID: 27899527; PubMed Central PMCID: PMC5231411.

Butler TR, Karkhanis AN, Jones SR, Weiner JL. Adolescent Social Isolation as a Model of Heightened Vulnerability to Comorbid Alcoholism and Anxiety Disorders. *Alcohol Clin Exp Res*. 2016 Jun;40(6):1202-14. doi: 10.1111/acer.13075. Epub 2016 May 7. Review. PubMed PMID: 27154240; PubMed Central PMCID: PMC5131257.

Cervera-Juanes R, Wilhem LJ, Park B, Lee R, Locke J, Helms C, Gonzales S, Wand G, Jones SR, Grant KA, Ferguson B. MAOA expression predicts vulnerability for alcohol use. *Mol Psychiatry*. 2016 Apr;21(4):472-9. doi: 10.1038/mp.2015.93. Epub 2015 Jul 7. PubMed PMID: 26148813; PubMed Central PMCID: PMC4705001.

Charpentier TH, Waldo GL, Lowery-Gionta EG, Krajewski K, Strahl BD, Kash TL, Harden TK, Sondek J. Potent and Selective Peptide-based Inhibition of the G Protein Gαq. *J Biol Chem.* 2016 Dec 2;291(49):25608-25616. PubMed PMID: 27742837; PubMed Central PMCID: PMC5207258.

Crowley NA, Bloodgood DW, Hardaway JA, Kendra AM, McCall JG, Al-Hasani R, McCall NM, Yu W, Schools ZL, Krashes MJ, Lowell BB, Whistler JL, Bruchas MR, Kash TL. Dynorphin Controls the Gain of an Amygdalar Anxiety Circuit. *Cell Rep.* 2016 Mar 29;14(12):2774-83. doi: 10.1016/j.celrep.2016.02.069. Epub 2016 Mar 17. PubMed PMID: 26997280; PubMed Central PMCID: PMC4814306.

Crowley SK, O'Buckley TK, Schiller CE, Stuebe A, Morrow AL, Girdler SS. Blunted neuroactive steroid and HPA axis responses to stress are associated with reduced sleep quality and negative affect in pregnancy: a pilot study. *Psychopharmacology (Berl).* 2016 Apr;233(7):1299-310. doi: 10.1007/s00213-016-4217-x. Epub 2016 Feb 9. PubMed PMID: 26856852; PubMed Central PMCID: PMC4803569.

Gioia DA, Alexander NJ, McCool BA. Differential Expression of Munc13-2 Produces Unique Synaptic Phenotypes in the Basolateral Amygdala of C57BL/6J and DBA/2J Mice. *J Neurosci.* 2016 Oct 26;36(43):10964-10977. PubMed PMID: 27798178; PubMed Central PMCID: PMC5098836.

Grayson DS, Bliss-Moreau E, Machado CJ, Bennett J, Shen K, Grant KA, Fair DA, Amaral DG. The Rhesus Monkey Connectome Predicts Disrupted Functional Networks Resulting from Pharmacogenetic Inactivation of the Amygdala. *Neuron.* 2016 Jul 20;91(2):453-66. doi: 10.1016/j.neuron.2016.06.005. PubMed PMID: 27477019; PubMed Central PMCID: PMC5233431.

Hardaway JA, Jensen J, Kim M, Mazzone CM, Sugam JA, Diberto JF, Lowery-Gionta EG, Hwa LS, Pleil KE, Bulik CM, Kash TL. Nociceptin receptor antagonist SB 612111 decreases high fat diet binge eating. *Behav Brain Res.* 2016 Jul 1;307:25-34. doi: 10.1016/j.bbr.2016.03.046. PubMed PMID: 27036650; PubMed Central PMCID: PMC4896639.

Karkhanis AN, Huggins KN, Rose JH, Jones SR. Switch from excitatory to inhibitory actions of ethanol on dopamine levels after chronic exposure: Role of kappa opioid receptors. *Neuropharmacology.* 2016 Nov;110(Pt A):190-7. doi: 10.1016/j.neuropharm.2016.07.022. Epub 2016 Jul 20. PubMed PMID: 27450094; PubMed Central PMCID: PMC5028299.

Karkhanis AN, Rose JH, Weiner JL, Jones SR. Early-Life Social Isolation Stress Increases Kappa Opioid Receptor Responsiveness and Downregulates the Dopamine System. *Neuropsychopharmacology.* 2016 Aug;41(9):2263-74. doi: 10.1038/npp.2016.21. Epub 2016 Feb 10. PubMed PMID: 26860203; PubMed Central PMCID: PMC4946054.

Ketchesin KD, Stinnett GS, Seasholtz AF. Binge Drinking Decreases Corticotropin-Releasing Factor-Binding Protein Expression in the Medial Prefrontal Cortex of Mice. *Alcohol Clin Exp Res.* 2016 Aug;40(8):1641-50. doi: 10.1111/acer.13119. Epub 2016 Jul 4. PubMed PMID: 27374820; PubMed Central PMCID: PMC4961588.

Liu SY, Tonggu L, Niu LN, Gong SQ, Fan B, Wang L, Zhao JH, Huang C, Pashley DH, Tay FR. Antimicrobial activity of a quaternary ammonium methacryloxy silicate-containing acrylic resin: a randomised clinical trial. *Sci Rep.* 2016 Feb 23;6:21882. doi: 10.1038/srep21882. PubMed PMID: 26903314; PubMed Central PMCID: PMC4763235.

Lopez MF, Anderson RI, Becker HC. Effect of different stressors on voluntary ethanol intake in ethanol-dependent and nondependent C57BL/6J mice. *Alcohol.* 2016 Mar;51:17-23. doi: 10.1016/j.alcohol.2015.11.010. Epub 2016 Jan 20. PubMed PMID: 26992696; PubMed Central PMCID: PMC4799834.

Lopez MF, Moorman DE, Aston-Jones G, Becker HC. The highly selective orexin/hypocretin 1 receptor antagonist GSK1059865 potently reduces ethanol drinking in ethanol dependent mice. *Brain Res.* 2016 Apr 1;1636:74-80. doi: 10.1016/j.brainres.2016.01.049. Epub 2016 Feb 4. PubMed PMID: 26851547; PubMed Central PMCID: PMC4808605.

McClintick MN, Grant KA. Aggressive temperament predicts ethanol self-administration in late adolescent male and female rhesus macaques. *Psychopharmacology (Berl)*. 2016 Dec;233(23-24):3965-3976. Epub 2016 Sep 14. PubMed PMID: 27627910; PubMed Central PMCID: PMC5341689.

McGuier NS, Griffin WC 3rd, Gass JT, Padula AE, Chesler EJ, Mulholland PJ. Kv7 channels in the nucleus accumbens are altered by chronic drinking and are targets for reducing alcohol consumption. *Addict Biol*. 2016 Nov;21(6):1097-1112. doi: 10.1111/adb.12279. PubMed PMID: 26104325; PubMed Central PMCID: PMC4689668.

Mulholland PJ, Chandler LJ, Kalivas PW. Signals from the Fourth Dimension Regulate Drug Relapse. *Trends Neurosci*. 2016 Jul;39(7):472-85. doi: 10.1016/j.tins.2016.04.007. Epub 2016 May 10. Review. PubMed PMID: 27173064; PubMed Central PMCID: PMC4930682.

Navarro M, Olney JJ, Burnham NW, Mazzone CM, Lowery-Gionta EG, Pleil KE, Kash TL, Thiele TE. Lateral Hypothalamus GABAergic Neurons Modulate Consummatory Behaviors Regardless of the Caloric Content or Biological Relevance of the Consumed Stimuli. *Neuropsychopharmacology*. 2016 May;41(6):1505-12. doi: 10.1038/npp.2015.304. PubMed PMID: 26442599; PubMed Central PMCID: PMC4832010.

Neuner SM, Garfinkel BP, Wilmott LA, Ignatowska-Jankowska BM, Citri A, Orly J, Lu L, Overall RW, Mulligan MK, Kempermann G, Williams RW, O'Connell KM, Kaczorowski CC. Systems genetics identifies Hp1bp3 as a novel modulator of cognitive aging. *Neurobiol Aging*. 2016 Oct;46:58-67. doi: 10.1016/j.neurobiolaging.2016.06.008. Epub 2016 Jun 17. PubMed PMID: 27460150; PubMed Central PMCID: PMC5018442.

Nimitvilai S, Lopez MF, Mulholland PJ, Woodward JJ. Chronic Intermittent Ethanol Exposure Enhances the Excitability and Synaptic Plasticity of Lateral Orbitofrontal Cortex Neurons and Induces a Tolerance to the Acute Inhibitory Actions of Ethanol. *Neuropsychopharmacology*. 2016 Mar;41(4):1112-27. doi:10.1038/npp.2015.250. Epub 2015 Aug 9. PubMed PMID: 26286839; PubMed Central PMCID: PMC4748436.

Pleil KE, Helms CM, Sobus JR, Daunais JB, Grant KA, Kash TL. Effects of chronic alcohol consumption on neuronal function in the non-human primate BNST. *Addict Biol*. 2016 Nov;21(6):1151-1167. doi: 10.1111/adb.12289. PubMed PMID: 26223349; PubMed Central PMCID: PMC4732920.

Porcu P, Barron AM, Frye CA, Walf AA, Yang SY, He XY, Morrow AL, Panzica GC, Melcangi RC. Neurosteroidogenesis Today: Novel Targets for Neuroactive Steroid Synthesis and Action and Their Relevance for Translational Research. *J Neuroendocrinol*. 2016 Feb;28(2). doi: 10.1111/jne.12351. Review. PubMed PMID: 26681259; PubMed Central PMCID: PMC4769676.

Putman AH, Wolen AR, Harenza JL, Yordanova RK, Webb BT, Chesler EJ, Miles MF. Identification of quantitative trait loci and candidate genes for an anxiolytic-like response to ethanol in BXD recombinant inbred strains. *Genes Brain Behav*. 2016 Apr;15(4):367-81. doi: 10.1111/gbb.12289. PubMed PMID: 26948279; PubMed Central PMCID: PMC4852167.

Rêgo HM, Alves TS, Bresciani E, Niu LN, Tay FR, Pucci CR. Can long-term dentine bonding created in real life be forecasted by parameters established in the laboratory? *Sci Rep*. 2016 Nov 25;6:37799. doi: 10.1038/srep37799. PubMed PMID: 27886272; PubMed Central PMCID: PMC5122885.

Resmini E, Santos A, Aulinás A, Webb SM, Vives-Gilabert Y, Cox O, Wand G, Lee RS. Reduced DNA methylation of FKBP5 in Cushing's syndrome. *Endocrine*. 2016 Dec;54(3):768-777. doi: 10.1007/s12020-016-1083-6. Epub 2016 Sep 23. PubMed PMID: 27664120; PubMed Central PMCID: PMC6391874.

Rinker JA, Mulholland PJ. Promising pharmacogenetic targets for treating alcohol use disorder: evidence from preclinical models. *Pharmacogenomics*. 2017 Apr;18(6):555-570. doi: 10.2217/pgs-2016-0193. Epub 2017 Mar 27. Review. PubMed PMID: 28346058; PubMed Central PMCID: PMC5558539.

Robinson SL, Alexander NJ, Bluett RJ, Patel S, McCool BA. Acute and chronic ethanol exposure differentially regulate CB1 receptor function at glutamatergic synapses in the rat basolateral amygdala. *Neuropharmacology*. 2016 Sep;108:474-84. doi: 10.1016/j.neuropharm.2015.12.005. Epub 2015 Dec 18. PubMed PMID: 26707595; PubMed Central PMCID: PMC4912876.

Rose JH, Karkhanis AN, Chen R, Gioia D, Lopez MF, Becker HC, McCool BA, Jones SR. Supersensitive Kappa Opioid Receptors Promotes Ethanol Withdrawal-Related Behaviors and Reduce Dopamine Signaling in the Nucleus Accumbens. *Int J Neuropsychopharmacol*. 2016 Apr 29;19(5). pii: pyv127. doi: 10.1093/ijnp/pyv127. Print 2016 May. PubMed PMID: 26625893; PubMed Central PMCID: PMC4886667.

Rose JH, Karkhanis AN, Steiniger-Brach B, Jones SR. Distinct Effects of Nalmefene on Dopamine Uptake Rates and Kappa Opioid Receptor Activity in the Nucleus Accumbens Following Chronic Intermittent Ethanol Exposure. *Int J Mol Sci*. 2016 Jul 27;17(8). pii: E1216. doi: 10.3390/ijms17081216. PubMed PMID: 27472317; PubMed Central PMCID: PMC5000614.

Salvatore MF, Calipari ES, Jones SR. Regulation of Tyrosine Hydroxylase Expression and Phosphorylation in Dopamine Transporter-Deficient Mice. *ACS Chem Neurosci*. 2016 Jul 20;7(7):941-51. doi: 10.1021/acscchemneuro.6b00064. PubMed PMID: 27124386; PubMed Central PMCID: PMC4956566.

Shi X, Walter NA, Harkness JH, Neve KA, Williams RW, Lu L, Belknap JK, Eshleman AJ, Phillips TJ, Janowsky A. Genetic Polymorphisms Affect Mouse and Human Trace Amine-Associated Receptor 1 Function. *PLoS One*. 2016 Mar 31;11(3):e0152581. doi: 10.1371/journal.pone.0152581. eCollection 2016. PubMed PMID: 27031617; PubMed Central PMCID: PMC4816557.

Siciliano CA, Calipari ES, Yorgason JT, Lovinger DM, Mateo Y, Jimenez VA, Helms CM, Grant KA, Jones SR. Increased presynaptic regulation of dopamine neurotransmission in the nucleus accumbens core following chronic ethanol self-administration in female macaques. *Psychopharmacology (Berl)*. 2016 Apr;233(8):1435-43. doi: 10.1007/s00213-016-4239-4. Epub 2016 Feb 19. PubMed PMID: 26892380; PubMed Central PMCID: PMC4814331.

Siciliano CA, Calipari ES, Yorgason JT, Mateo Y, Helms CM, Lovinger DM, Grant KA, Jones SR. Chronic ethanol self-administration in macaques shifts dopamine feedback inhibition to predominantly D2 receptors in nucleus accumbens core. *Drug Alcohol Depend*. 2016 Jan 1;158:159-63. doi: 10.1016/j.drugalcdep.2015.10.031. Epub 2015 Nov 10. PubMed PMID: 26627912; PubMed Central PMCID: PMC4698076.

Smith ML, Lopez MF, Archer KJ, Wolen AR, Becker HC, Miles MF. Time-Course Analysis of Brain Regional Expression Network Responses to Chronic Intermittent Ethanol and Withdrawal: Implications for Mechanisms Underlying Excessive Ethanol Consumption. *PLoS One*. 2016 Jan 5;11(1):e0146257. doi: 10.1371/journal.pone.0146257. eCollection 2016. PubMed PMID: 26730594; PubMed Central PMCID: PMC4701666.

Spencer KB, Mulholland PJ, Chandler LJ. FMRP Mediates Chronic Ethanol-Induced Changes in NMDA, Kv4.2, and KChIP3 Expression in the Hippocampus. *Alcohol Clin Exp Res*. 2016 Jun;40(6):1251-61. doi: 10.1111/acer.13060. Epub 2016 May 5. PubMed PMID: 27147118; PubMed Central PMCID: PMC4936407.

Su S, Zhu Y, Ye S, Qi Q, Xia S, Ma Z, Yu F, Wang Q, Zhang R, Jiang S, Lu L. Creating an Artificial Tail Anchor as a Novel Strategy To Enhance the Potency of Peptide-Based HIV Fusion Inhibitors. *J Virol*. 2016 Dec 16;91(1). pii: e01445-16. Print 2017 Jan 1. PubMed PMID: 27795416; PubMed Central PMCID: PMC5165219.

Sun Z, Zhu Y, Wang Q, Ye L, Dai Y, Su S, Yu F, Ying T, Yang C, Jiang S, Lu L. An immunogen containing four tandem 10E8 epitope repeats with exposed key residues induces antibodies that neutralize HIV-1 and activates an ADCC reporter gene. *Emerg Microbes Infect*. 2016 Jun 22;5:e65. doi: 10.1038/emi.2016.86. PubMed PMID: 27329850; PubMed Central PMCID: PMC4932654.

Tian F, Zhou L, Zhang Z, Niu L, Zhang L, Chen C, Zhou J, Yang H, Wang X, Fu B, Huang C, Pashley DH, Tay FR. Paucity of Nanolayering in Resin-Dentin Interfaces of MDP-based Adhesives. *J Dent Res.* 2016 Apr;95(4):380-7. doi: 10.1177/0022034515623741. PubMed PMID: 26701351; PubMed Central PMCID: PMC4802780.

Turecek J, Han VZ, Cuzon Carlson VC, Grant KA, Welsh JP. Electrical Coupling and Synchronized Subthreshold Oscillations in the Inferior Olive of the Rhesus Macaque. *J Neurosci.* 2016 Jun 15;36(24):6497-502. doi:10.1523/JNEUROSCI.4495-15.2016. PubMed PMID: 27307237; PubMed Central PMCID: PMC5015785.

Wang X, Pandey AK, Mulligan MK, Williams EG, Mozhui K, Li Z, Jovaisaitė V, Quarles LD, Xiao Z, Huang J, Capra JA, Chen Z, Taylor WL, Bastarache L, Niu X, Pollard KS, Ciobanu DC, Reznik AO, Tishkov AV, Zhulin IB, Peng J, Nelson SF, Denny JC, Auwerx J, Lu L, Williams RW. Joint mouse-human phenome-wide association to test gene function and disease risk. *Nat Commun.* 2016 Feb 2;7:10464. doi: 10.1038/ncomms10464. PubMed PMID: 26833085; PubMed Central PMCID: PMC4740880.

Yorgason JT, Calipari ES, Ferris MJ, Karkhanis AN, Fordahl SC, Weiner JL, Jones SR. Social isolation rearing increases dopamine uptake and psychostimulant potency in the striatum. *Neuropharmacology.* 2016 Feb;101:471-9. doi: 10.1016/j.neuropharm.2015.10.025. Epub 2015 Oct 23. PubMed PMID: 26525189; PubMed Central PMCID: PMC4681685.

Zhu Y, Su S, Qin L, Wang Q, Shi L, Ma Z, Tang J, Jiang S, Lu L, Ye S, Zhang R. Rational improvement of gp41-targeting HIV-1 fusion inhibitors: an innovatively designed Ile-Asp-Leu tail with alternative conformations. *Sci Rep.* 2016 Sep 26;6:31983. doi: 10.1038/srep31983. PubMed PMID: 27666394; PubMed Central PMCID: PMC5036048.

Zuo L, Tan Y, Li CR, Wang Z, Wang K, Zhang X, Lin X, Chen X, Zhong C, Wang X, Wang J, Lu L, Luo X. Associations of rare nicotinic cholinergic receptor gene variants to nicotine and alcohol dependence. *Am J Med Genet B Neuropsychiatr Genet.* 2016 Dec;171(8):1057-1071. doi: 10.1002/ajmg.b.32476. Epub 2016 Jul 30. PubMed PMID: 27473937; PubMed Central PMCID: PMC5587505.