

Bussey-Saksida Chambers**2024**

- Cho, S. Y., Kim, E. W., Park, S. J., Phillips, B. U., Jeong, J., Kim, H., Heath, C. J., Kim, D., Jang, Y., López-Cruz, L., Saksida, L. M., Bussey, T. J., Lee, D. Y., & Kim, E. (2024). Reconsidering repurposing: long-term metformin treatment impairs cognition in Alzheimer's model mice. *Translational Psychiatry* 2024 14:1, 14(1), 1–10. <https://doi.org/10.1038/s41398-024-02755-9>
- Doyle, M. (2024). Cholinergic Modulation of Parvalbumin Neurons in Attention. *Electronic Thesis and Dissertation Repository*. <https://ir.lib.uwo.ca/etd/9923>
- Haller, O. J., Semendric, I., Collins-Praino, L. E., Whittaker, A. L., & George, R. P. (2024). Changes in cognition and neuroinflammation in a rodent model of chemotherapy-induced cognitive impairment are variable both acutely and chronically. *BioRxiv*, 2024.02.22.581658. <https://doi.org/10.1101/2024.02.22.581658>
- Hervig, M. E.-S., Zühlsdorff, K., Olesen, S. F., Phillips, B., Božič, T., Dalley, J. W., Cardinal, R. N., Alsiö, J., & Robbins, T. W. (2024). 5-HT 2A and 5-HT 2C receptor antagonism differentially modulate reinforcement learning and cognitive flexibility: behavioural and computational evidence. *Psychopharmacology* 2024, 1–14. <https://doi.org/10.1007/S00213-024-06586-W>
- Li, S., May, C., Pang, T. Y., Churilov, L., Hannan, A. J., Johnson, K. A., & Burrows, E. L. (2024). Mice with an autism-associated R451C mutation in neuroligin-3 show intact attention orienting but atypical responses to methylphenidate and atomoxetine in the mouse-Posner task. *Psychopharmacology*, 241(3), 555–567. <https://doi.org/10.1007/S00213-023-06520-6/METRICS>
- Mayne, P., Das, J., Zou, S., Sullivan, R. K. P., & Burne, T. H. J. (2024). Perineuronal nets are associated with decision making under conditions of uncertainty in female but not male mice. *Behavioural Brain Research*, 461, 114845. <https://doi.org/10.1016/J.BBR.2024.114845>
- Noback, M., Bhakta, S. G., Talledo, J. A., Kotz, J. E., Benster, L., Roberts, B. Z., Nungaray, J. A., Light, G. A., Swerdlow, N. R., Brigman, J. L., Cavanagh, J. F., & Young, J. W. (2024). Amphetamine increases motivation of humans and mice as measured by breakpoint, but does not affect an Electroencephalographic biomarker. *Cognitive, Affective and Behavioral Neuroscience*, 24(2), 269–278. <https://doi.org/10.3758/S13415-023-01150-Z/FIGURES/3>
- Salmon, C., Li, S., Burrows, E. L., & Johnson, K. A. (2024). Translational validity of neuropsychological tasks of sustained attention between rodents and humans: A systematic review of three rodent tasks. *Journal of Neurochemistry*, 00, 1–20. <https://doi.org/10.1111/JNC.16117>
- Scholarship, W., Dzinic, L., & Supervisor, J. (2024). *Outclimbing Cognitive Decline: Age, Western Diet, Resistance Exercise, and the Brain*. <https://ir.lib.uwo.ca/etdhttps://ir.lib.uwo.ca/etd/10013>
- Wang, J., & Zhang, B. (2024). Repetitive traumatic brain injury-induced complement C1-related inflammation impairs long-term hippocampal neurogenesis. *NEURAL REGENERATION RESEARCH*, 19, 1–14. <https://doi.org/10.4103/2023>
- Yildirim, T. (2024). Comparing touchscreen-based tests of pattern separation for rodent models. *SFU Undergraduate Research Symposium Journal*, 4. <https://journals.lib.sfu.ca/index.php/ugrs/article/view/6433>

2023

- Cotter, K. M., Bancroft, G. L., Haas, H. A., Shi, R., Clarkson, A. N., Croxall, M. E., Stowe, A. M., Yun, S., & Eisch, A. J. (2023). Use of an Automated Mouse Touchscreen Platform for Quantification of Cognitive Deficits After Central Nervous System Injury. *Methods in Molecular Biology (Clifton, N.J.)*, 2616, 279–326. https://doi.org/10.1007/978-1-0716-2926-0_21
- Ding, Y., Li, L., Wang, S., Cao, Y., Yang, M., Dai, Y., Lin, H., Li, J., Liu, Y., Wang, Z., Liu, W., & Tao, J. (2023). Electroacupuncture promotes neurogenesis in the dentate gyrus and improves pattern separation in an early Alzheimer's disease mouse model. *Biological Research*, 56(1), 1–19. <https://doi.org/10.1186/S40659-023-00472-Z/FIGURES/8>
- Gaynor, L. S., Ravi, M., Zequeira, S., Hampton, A. M., Pyon, W. S., Smith, S., Colon-Perez, L. M., Pompilus, M., Bizon, J. L., Maurer, A. P., Febo, M., & Burke, S. N. (2023). Touchscreen-Based Cognitive Training Alters Functional Connectivity Patterns in Aged But Not Young Male Rats. *ENeuro*, 10(2). <https://doi.org/10.1523/ENEURO.0329-22.2023>
- Henry Hallock, A. L., Adiraju, S., Miranda-Barrientos, J., McInerney, J. M., Oh, S., DeBrosse, A. C., Li, Y., Carr, G. v, & Martinowich, K. (2023). Electrophysiological correlates of attention in the locus coeruleus - anterior cingulate cortex circuit during the rodent continuous performance test. *BioRxiv*, 2023.04.19.537406. <https://doi.org/10.1101/2023.04.19.537406>
- Islas-Preciado, D., Splinter, T. F. L., Ibrahim, M., Black, N., Wong, S., Lieblich, S. E., Liu-Ambrose, T., Barha, C. K., & Galea, L. A. M. (2023). Sex and BDNF Val66Met polymorphism matter for exercise-induced increase in neurogenesis and cognition in middle-aged mice. *Hormones and Behavior*, 148, 105297. <https://doi.org/10.1016/J.YHBEH.2022.105297>
- Leslie S. Gaynor¹, Meena Ravi, Sabrina Zequeira, Andreina M. Hampton, Wonn Pyon, Samantha Smith, Luis M. Colon-Perez, Marjory Pompilus, Jennifer L. Bizon, Andrew P. Maurer, M. F. and S. N. B. (2023). *Touchscreen-based cognitive training alters functional connectivity patterns in aged but not young male rats*. <https://doi.org/10.1523/ENEURO.0329-22.2023>
- Mercaldo, V., Vidimova, B., Gastaldo, D., Fernández, E., Lo, A. C., Cencelli, G., Pedini, G., de Rubeis, S., Longo, F., Klann, E., Smit, A. B., Grant, S. G. N., Achsel, T., & Bagni, C. (2023). Altered striatal actin dynamics drives behavioral inflexibility in a mouse model of fragile X syndrome. *Neuron*, 111(11), 1760-1775.e8. <https://doi.org/10.1016/J.NEURON.2023.03.008>
- Nishioka, T., Attachaipanich, S., Hamaguchi, K., Lazarus, M., de Kerchove d'Exaerde, A., Macpherson, T., & Hikida, T. (2023). Error-related signaling in nucleus accumbens D2 receptor-expressing neurons guides inhibition-based choice behavior in mice. *Nature Communications* 2023 14:1, 14(1), 1–15. <https://doi.org/10.1038/s41467-023-38025-3>
- Smith, B. L., Hassler, A., Lloyd, K. R., & Reyes, T. M. (2023). Perinatal morphine but not buprenorphine affects gestational and offspring neurobehavioral outcomes in mice. *NeuroToxicology*, 99, 292–304. <https://doi.org/10.1016/J.NEURO.2023.11.008>
- Smith, S. M., Garcia, E. L., Davidson, C. G., Thompson, J. J., Lovett, S. D., Ferekides, N., Federico, Q., Bumanglag, A. v., Hernandez, A. R., Abisambra, J. F., & Burke, S. N. (2023). Paired associates learning is disrupted after unilateral parietal lobe controlled cortical impact in rats: A trial-by-trial behavioral analysis. *Behavioural Brain Research*, 437, 114106. <https://doi.org/10.1016/J.BBR.2022.114106>

- Smith, S. M., Garcia, E. L., Montelongo, A., Davidson, C. G., Bakhtiar, D., Lovett, S. D., Maurer, A. P., & Burke, S. N. (2023). Muscimol inactivation of dorsal striatum in young and aged male rats does not affect paired associates learning performance. *Behavioral Neuroscience*. <https://doi.org/10.1037/BNE0000561>
- Stegemann, A., Liu, S., Retana Romero, O. A., Oswald, M. J., Han, Y., Beretta, C. A., Gan, Z., Tan, L. L., Wisden, W., Gräff, J., & Kuner, R. (2023). Prefrontal engrams of long-term fear memory perpetuate pain perception. *Nature Neuroscience* 2023 26:5, 26(5), 820–829. <https://doi.org/10.1038/s41593-023-01291-x>
- Visscher, J. (2023). *Effects of 5alpha-androstane-3alpha,17beta-diol (3alpha diol) on Attention and Cortical Dendritic Morphology in the 3xTg Mouse Model of Alzheimer's Disease*. <https://hdl.handle.net/10214/27416>
- Wheeler, E. C., Choi, P., de Howitt, J., Gill, S., Watson, S., Yu, S., Wahl, P., Diaz, C., Mohr, C., Zinski, A., Jiang, Z., Rossi, D., & Davis, J. F. (2023). Cannabis Sativa targets mediobasal hypothalamic neurons to stimulate appetite. *Scientific Reports* 2023 13:1, 13(1), 1–13. <https://doi.org/10.1038/s41598-023-50112-5>
- Yun, S., Soler, I., Tran, F., Haas, H. A., Shi, R., Bancroft, G. L., Suarez, M., de Santis, C. R., Reynolds, R. P., & Eisch, A. J. (2023). *Behavioral pattern separation and cognitive flexibility are enhanced in a mouse model of increased lateral entorhinal cortex-dentate gyrus circuit activity*. <https://doi.org/10.1101/2023.01.26.525756>
- Yun, S., Soler, I., Tran, F., Haas, H. A., Shi, R., Bancroft, G. L., Suarez, M., Santis, C. R. de, Reynolds, R. P., & Eisch, A. J. (2023). Behavioral pattern separation and cognitive flexibility are enhanced in a mouse model of increased lateral entorhinal cortex-dentate gyrus circuit activity. *BioRxiv*, 2023.01.26.525756. <https://doi.org/10.1101/2023.01.26.525756>
- 2022**
- Adhikari, A., Buchanan, F. K. B., Fenton, T. A., Cameron, D. L., Halmai, J. A. N. M., Copping, N. A., Fink, K. D., & Silverman, J. L. (2022). Touchscreen cognitive deficits, hyperexcitability and hyperactivity in males and females using two models of Cdkl5 deficiency. *Human Molecular Genetics*, 00, 1–19. <https://doi.org/10.1093/hmg/ddac091>
- Anhê, F. F., Zlitni, S., Barra, N. G., Foley, K. P., Nilsson, M. I., Nederveen, J. P., Koch, L. G., Britton, S. L., Tarnopolsky, M. A., & Schertzer, J. D. (2022). Life-long exercise training and inherited aerobic endurance capacity produce converging gut microbiome signatures in rodents. *Physiological Reports*, 10(5), e15215. <https://doi.org/10.14814/PHY2.15215>
- Bampali, K., Koniuszewski, F., Silva, L. L., Rehman, S., Vogel, F. D., Seidel, T., Scholze, P., Zirpel, F., Garon, A., Langer, T., Willeit, M., & Ernst, M. (2022). Tricyclic antipsychotics and antidepressants can inhibit $\alpha 5$ -containing GABAA receptors by two distinct mechanisms. *British Journal of Pharmacology*, 179(14), 3675–3692. <https://doi.org/10.1111/bph.15807>
- Bareiss, S. K., Johnston, T., Lu, Q., & Tran, T. D. (2022). The effect of exercise on early sensorimotor performance alterations in the 3xTg-AD model of Alzheimer's disease. *Neuroscience Research*, 178, 60–68. <https://doi.org/10.1016/J.NEURES.2022.01.003>
- Britten, R. A., Fesshaye, A., Ihle, P., Wheeler, A., Baulch, J. E., Limoli, C. L., & Stark, C. E. (2022). Dissecting Differential Complex Behavioral Responses to Simulated Space Radiation Exposures. *Radiation Research*, 197(3), 289–297. <https://doi.org/10.1667/RADE-21-00068.1>
- Castro, S. L., Tapias, V., Gathagan, R., Emes, A., Brandon, T. E., & Smith, A. D. (2022). Blueberry juice augments exercise-induced neuroprotection in a Parkinson's disease model through modulation of GDNF levels. *IBRO Neuroscience Reports*, 12, 217–227. <https://doi.org/10.1016/J.IBNEUR.2022.03.001>

- Clayton, Z. S., Gioscia-Ryan, R. A., Justice, J. N., Lubieniecki, K. L., Hutton, D. A., Rossman, M. J., Zigler, M. C., & Seals, D. R. (2022). Lifelong physical activity attenuates age- and Western-style diet-related declines in physical function and adverse changes in skeletal muscle mass and inflammation. *Experimental Gerontology*, *157*, 111632. <https://doi.org/10.1016/J.EXGER.2021.111632>
- Cunningham, J., Sheppard, L., Listik, E., & Wang, Q. (2022). Self-Paced Five-Choice Serial Reaction Time-Task for Mouse Behavioral Testing. *BIO-PROTOCOL*, *12*(8). <https://doi.org/10.21769/bioprotoc.4388>
- Desrochers, S. S., & Nautiyal, K. M. (2022). Serotonin 1B receptor effects on response inhibition are independent of inhibitory learning. *Neurobiology of Learning and Memory*, *187*. <https://doi.org/10.1016/j.nlm.2021.107574>
- Dexter, T. D., Palmer, D., Hashad, A. M., Saksida, L. M., & Bussey, T. J. (2022). Decision Making in Mice During an Optimized Touchscreen Spatial Working Memory Task Sensitive to Medial Prefrontal Cortex Inactivation and NMDA Receptor Hypofunction. *Frontiers in Neuroscience*, *0*, 723. <https://doi.org/10.3389/FNINS.2022.905736>
- Dickson, P. E., & Mittleman, G. (2022). Working memory and pattern separation in founder strains of the BXD recombinant inbred mouse panel. *Scientific Reports 2022 12:1*, *12*(1), 1–9. <https://doi.org/10.1038/s41598-021-03850-3>
- Herrera-Rivero, M., Bohn, L., Witten, A., Jüngling, K., Kaiser, S., Richter, S. H., Stoll, M., & Sachser, N. (2022). Transcriptional profiles in the mouse amygdala after a cognitive judgment bias test largely depend on the genotype. *Frontiers in Molecular Neuroscience*, *15*, 1025389. <https://doi.org/10.3389/FNMOL.2022.1025389/BIBTEX>
- Houle, J. D., & Detloff, M. R. (2022). Exercise as a therapeutic intervention for neuropathic pain after spinal cord injury. In *Spinal Cord Injury Pain* (pp. 443–463). Academic Press. <https://doi.org/10.1016/b978-0-12-818662-6.00018-2>
- Hussein, A., Tielemans, A., Baxter, M. G., Benson, D. L., & Huntley, G. W. (2022). Cognitive Deficits and Altered Cholinergic Innervation in Young Adult Mice Carrying a Parkinson's Disease LRRK2-G2019S Knockin Mutation. *Biorxiv.Org*. <https://doi.org/10.1101/2022.01.26.477929>
- Kljakic, O., Janičková, H., Skirzewski, M., Reichelt, A., Memar, S., Mestikawy, S. el, Li, Y., Saksida, L. M., Bussey, T. J., Prado, V. F., & Prado, M. A. M. (2022). Functional dissociation of behavioral effects from acetylcholine and glutamate released from cholinergic striatal interneurons. *The FASEB Journal*, *36*(2), e22135. <https://doi.org/10.1096/FJ.202101425R>
- Kostyalik, D., Kelemen, K., Lendvai, B., Hernádi, I., Román, V., & Lévy, G. (2022). Response-related sensorimotor rhythms under scopolamine and MK-801 exposures in the touchscreen visual discrimination test in rats. *Scientific Reports 2022 12:1*, *12*(1), 1–13. <https://doi.org/10.1038/s41598-022-12146-z>
- Liao, J., Dong, G., Wulaer, B., Sawahata, M., Mizoguchi, H., Mori, D., Ozaki, N., Nabeshima, T., Nagai, T., & Yamada, K. (2022). Mice with exonic RELN deletion identified from a patient with schizophrenia have impaired visual discrimination learning and reversal learning in touchscreen operant tasks. *Behavioural Brain Research*, *416*, 113569. <https://doi.org/10.1016/J.BBR.2021.113569>
- Masternak, M., Koch, A., Laulumaa, S., Tapken, D., Hollmann, M., Jørgensen, F. S., & Kastrup, J. S. (2022). Differences between the GluD1 and GluD2 receptors revealed by GluD1 X-ray crystallography, binding studies and molecular dynamics. *FEBS Journal*. <https://doi.org/10.1111/febs.16631>

- Mesich, J., Reynolds, A., Liu, M., & Laberge, F. (2022). Recovery-from-extinction effects in an anuran amphibian: renewal effect, but no reinstatement. *Animal Cognition*, 25(2), 359–368. <https://doi.org/10.1007/s10071-021-01558-5>
- Némethy, Z., Kiss, B., Lethbridge, N., Chazot, P., Hajnik, T., Tóth, A., Détári, L., Schmidt, É., Czurkó, A., Kostyalik, D., Oláh, V., Hernádi, I., Balázs, O., Vizi, E. S., Ledneczki, I., Mahó, S., Román, V., Lendvai, B., & Lévy, G. (2022). Convergent cross-species pro-cognitive effects of RGH-235, a new potent and selective histamine H3 receptor antagonist/inverse agonist. *European Journal of Pharmacology*, 916, 174621. <https://doi.org/10.1016/J.EJPHAR.2021.174621>
- Oberländer, K., Witte, V., Mallien, A. S., Gass, P., Bengtson, C. P., & Bading, H. (2022). Dysregulation of Npas4 and Inhba expression and an altered excitation–inhibition balance are associated with cognitive deficits in DBA/2 mice. *Learning & Memory*, 29(2), 55–70. <https://doi.org/10.1101/LM.053527.121>
- Openshaw, R. L., Pratt, J. A., & Morris, B. J. (2022). The schizophrenia risk gene Map2k7 regulates responding in a novel contingency-shifting rodent touchscreen gambling task. *Disease Models & Mechanisms*, 15(3). <https://doi.org/10.1242/DMM.049310>
- Pietrucci, C. L., Milton, L. K., Greaves, E., Stefanidis, A., van den Buuse, M., Oldfield, B. J., & Foldi, C. J. (2022). The BDNF Val66Met Polymorphism Does Not Increase Susceptibility to Activity-Based Anorexia in Rats. *Biology*, 11(5), 623. <https://doi.org/10.3390/BIOLOGY11050623>
- Queme, L. F., J. Dourson, A., Hofmann, M. C., Butterfield, A., Paladini, R. D., & Jankowski, M. P. (2022). Disruption of Hyaluronic Acid in Skeletal Muscle Induces Decreased Voluntary Activity via Chemosensitive Muscle Afferent Sensitization in Male Mice. *Eneuro*, 9(2), ENEURO.0522-21.2022. <https://doi.org/10.1523/eneuro.0522-21.2022>
- Smith, S. M., Zequeira, S., Ravi, M., Johnson, S. A., Hampton, A. M., Ross, A. M., Pyon, W., Maurer, A. P., Bizon, J. L., & Burke, S. N. (2022). Age-related impairments on the touchscreen paired associates learning (PAL) task in male rats. *Neurobiology of Aging*, 109, 176–191. <https://doi.org/10.1016/j.neurobiolaging.2021.09.021>
- 2021**
- Altidor, L. K. P., Bruner, M. M., Deslauriers, J. F., Garman, T. S., Ramirez, S., Dirr, E. W., Olczak, K. P., Maurer, A. P., Lamb, D. G., Otto, K. J., Burke, S. N., Bumanglag, A. v., Setlow, B., & Bizon, J. L. (2021). Acute vagus nerve stimulation enhances reversal learning in rats. *Neurobiology of Learning and Memory*, 184, 107498. <https://doi.org/10.1016/J.NLM.2021.107498>
- Alvarez, B. D., Morales, C. A., & Amodeo, D. A. (2021). Impact of specific serotonin receptor modulation on behavioral flexibility. *Pharmacology Biochemistry and Behavior*, 209, 173243. <https://doi.org/10.1016/J.PBB.2021.173243>
- Attoh-Mensah, E., Léger, M., Loggia, G., Fréret, T., Chavoix, C., & Schumann-Bard, P. (2021). Effects of chronic tramadol administration on cognitive flexibility in mice. *Psychopharmacology 2021 238:10*, 238(10), 2883–2893. <https://doi.org/10.1007/S00213-021-05903-X>
- Barnard, I. L., Onofrychuk, T. J., McElroy, D. L., & Howland, J. G. (2021). The Touchscreen-Based Trial-Unique, Nonmatching-To-Location (TUNL) Task as a Measure of Working Memory and Pattern Separation in Rats and Mice. *Current Protocols*, 1(9). <https://doi.org/10.1002/cpz1.238>
- Belarde, J. A., Chen, C. W., Rafikian, E., Yang, M., & Troy, C. M. (2021). Optimizing touchscreen measures of rodent cognition by eliminating image bias. *BioRxiv*, 2021.04.05.438342. <https://doi.org/10.1101/2021.04.05.438342>

- Bračić, M., Bohn, L., Krakenberg, V., Schielzeth, H., & Kaiser, S. (2021). Once an Optimist , Always an Optimist ? Studying Cognitive Judgment Bias in Mice. *Preprint*, 1–42. <https://ecoevortexiv.org/rvb68/>
- Burrows, E. L., May, C., Hill, T., Churliov, L., Johnson, K. A., & Hannan, A. J. (2021). Mice with an autism-associated <sc>R451C</sc> mutation in neuroligin-3 show a cautious but accurate response style in touchscreen attention tasks. *Genes, Brain and Behavior*. <https://doi.org/10.1111/gbb.12757>
- Cadney, M. D. (2021). *UC Riverside UC Riverside Electronic Theses and Dissertations Title Early-Life Effects of Diet, Exercise, and Maternal Environment on Adult Activity Levels in Mice Selectively Bred for High Voluntary Wheel-Running Behavior Publication Date*. <https://escholarship.org/uc/item/37874203#supplemental>
- Cavanagh, J. F., Gregg, D., Light, G. A., Olguin, S. L., Sharp, R. F., Bismark, A. W., Bhakta, S. G., Swerdlow, N. R., Brigman, J. L., & Young, J. W. (2021). Electrophysiological biomarkers of behavioral dimensions from cross-species paradigms. *Translational Psychiatry* 11:1, 11(1), 1–11. <https://doi.org/10.1038/s41398-021-01562-w>
- Chasse, R., Malyshev, A., Fitch, R. H., & Volgushev, M. (2021). Altered heterosynaptic plasticity impairs visual discrimination learning in adenosine A1 receptor knock-out mice. *Journal of Neuroscience*, 41(21), 4631–4640. <https://doi.org/10.1523/JNEUROSCI.3073-20.2021>
- Epp, J. R., Botly, L. C. P., Josselyn, S. A., & Frankland, P. W. (2021). Voluntary Exercise Increases Neurogenesis and Mediates Forgetting of Complex Paired Associates Memories. *Neuroscience*, 475, 1–9. <https://doi.org/10.1016/J.NEUROSCIENCE.2021.08.022>
- Ermine, C. M., Nithianantharajah, J., O'Brien, K., Kauhausen, J. A., Frausin, S., Oman, A., Parsons, M. W., Brait, V. H., Brodtmann, A., & Thompson, L. H. (2021). Hemispheric cortical atrophy and chronic microglial activation following mild focal ischemic stroke in adult male rats. *Journal of Neuroscience Research*. <https://doi.org/10.1002/JNR.24939>
- Haddad, F. L., Ghahremani, M., de Oliveira, C., Doornaert, E. E., Johnston, K. D., Everling, S., & Schmid, S. (2021). A novel three-choice touchscreen task to examine spatial attention and orienting responses in rodents. *ENeuro*, 8(4). <https://doi.org/10.1523/ENEURO.0032-20.2021>
- Heinz, D. E., Schöttle, V. A., Nemcova, P., Binder, F. P., Ebert, T., Domschke, K., & Wotjak, C. T. (2021). Exploratory drive, fear, and anxiety are dissociable and independent components in foraging mice. *Translational Psychiatry*, 11(1). <https://doi.org/10.1038/s41398-021-01458-9>
- Inayat, M., Cruz-Sanchez, A., Thorpe, H. H. A., Frie, J. A., Richards, B. A., Khokhar, J. Y., & Arruda-Carvalho, M. (2021). Promoting and Optimizing the Use of 3D-Printed Objects in Spontaneous Recognition Memory Tasks in Rodents: A Method for Improving Rigor and Reproducibility. *ENeuro*, 8(5), ENEURO.0319-21.2021. <https://doi.org/10.1523/eneuro.0319-21.2021>
- Janickova, H., Kljakic, O., Robbins, T. W., Saksida, L. M., Bussey, T. J., Prado, V. F., & Prado, M. A. M. (2021). Evaluating Sequential Response Learning in the Rodent Operant Touchscreen System. *Current Protocols*, 1(10). <https://doi.org/10.1002/CPZ1.268>
- Jobson, D. D., Hase, Y., Clarkson, A. N., & Kalaria, R. N. (2021). The role of the medial prefrontal cortex in cognition, ageing and dementia. *Brain Communications*, 3(3). <https://doi.org/10.1093/braincomms/fcab125>
- Kagan, B. J., Ermine, C. M., Frausin, S., Parish, C. L., Nithianantharajah, J., & Thompson, L. H. (2021). Focal ischemic injury to the early neonatal rat brain models cognitive and motor deficits with associated histopathological

- outcomes relevant to human neonatal brain injury. *International Journal of Molecular Sciences*, 22(9).
<https://doi.org/10.3390/ijms22094740>
- Kaukas, L., Holmes, J., Rahimi, F., ... L. C.-P.-B. brain, & 2021, undefined. (2021). Injury during adolescence leads to sex-specific executive function deficits in adulthood in a pre-clinical model of mild traumatic brain injury. *Elsevier*, 402, 166–4328. <https://doi.org/10.1016/j.bbr.2020.113067>
- Landreth, K., Simanaviciute, U., Fletcher, J., Grayson, B., Grant, R. A., Harte, M. H., & Gigg, J. (2021). Dissociating the effects of distraction and proactive interference on object memory through tests of novelty preference. *Brain and Neuroscience Advances*, 5, 239821282110031. <https://doi.org/10.1177/23982128211003199>
- Ledneczki, I., Horváth, A., Tapolcsányi, P., Éles, J., Molnár, K. D., Vágó, I., Visegrády, A., Kiss, L., Szigetvári, Á., Kóti, J., Krámos, B., Mahó, S., Holm, P., Kolok, S., Fodor, L., Thán, M., Kostyalik, D., Balázs, O., Vastag, M., ... Némethy, Z. (2021). HTS-based discovery and optimization of novel positive allosteric modulators of the $\alpha 7$ nicotinic acetylcholine receptor. *European Journal of Medicinal Chemistry*, 222, 113560.
<https://doi.org/10.1016/j.ejmech.2021.113560>
- Lopez-Cruz, L., Bussey, T. J., Saksida, L. M., & Heath, C. J. (2021). Using touchscreen-delivered cognitive assessments to address the principles of the 3Rs in behavioral sciences. In *Lab Animal* (Vol. 50, Issue 7, pp. 174–184).
<https://doi.org/10.1038/s41684-021-00791-2>
- Martis, L. S., Højgaard, K., Holmes, M. C., Elfving, B., & Wiborg, O. (2021). Vortioxetine ameliorates anhedonic-like behaviour and promotes strategic cognitive performance in a rodent touchscreen task. *Scientific Reports*, 11(1), 9113. <https://doi.org/10.1038/s41598-021-88462-7>
- Milinski, L., Fisher, S. P., Cui, N., McKillop, L. E., Blanco-Duque, C., Ang, G., Yamagata, T., Bannerman, D. M., & Vyazovskiy, V. v. (2021). Waking experience modulates sleep need in mice. *BMC Biology*, 19(1).
<https://doi.org/10.1186/s12915-021-00982-w>
- Morriss, N. J., Conley, G. M., Hodgson, N., Boucher, M., Ospina-Mora, S., Fagiolini, M., Puder, M., Mejia, L., Qiu, J., Meehan, W., & Mannix, R. (2021). Visual Dysfunction after Repetitive Mild Traumatic Brain Injury in a Mouse Model and Ramifications on Behavioral Metrics. *Journal of Neurotrauma*, 38(20), 2881–2895.
<https://doi.org/10.1089/neu.2021.0165>
- Norman, K. J., Koike, H., McCraney, S. E., Garkun, Y., Bateh, J., Falk, E. N., Im, S., Caro, K., Demars, M. P., & Morishita, H. (2021). Chemogenetic suppression of anterior cingulate cortical neurons projecting to the visual cortex disrupts attentional behavior in mice. *Neuropsychopharmacology Reports*, npr2.12176.
<https://doi.org/10.1002/npr2.12176>
- Onofrychuk, T. J., Cai, S., McElroy, D. L., Roebuck, A. J., Greba, Q., Garai, S., Thakur, G. A., Laprairie, R. B., & Howland, J. G. (2021). Effects of the cannabinoid receptor 1 positive allosteric modulator GAT211 and acute MK-801 on visual attention and impulsivity in rats assessed using the five-choice serial reaction time task. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 109(December 2020), 110235.
<https://doi.org/10.1016/j.pnpbp.2020.110235>
- Palmer, D., Dumont, J. R., Dexter, T. D., Prado, M. A. M., Finger, E., Bussey, T. J., & Saksida, L. M. (2021). Touchscreen cognitive testing: Cross-species translation and co-clinical trials in neurodegenerative and neuropsychiatric disease. In *Neurobiology of Learning and Memory* (Vol. 182, p. 107443).
<https://doi.org/10.1016/j.nlm.2021.107443>

- Rashmi Tripathi, G. mehta, Garima T. M. S. (2021). Various Test To Assess the Behaviour and Learning Skills in Rodent. *Annals of the Romanian Society for Cell Biology*, 25(6), 1990–2010. <https://www.annalsofrscb.ro/index.php/journal/article/view/5740>
- Rojas, G. R., Curry-Pochy, L. S., Chen, C. S., Heller, A. T., Grissom, N. M., & Grissom, N. (2021). Sequential delay and probability discounting tasks in mice reveal anchoring effects partially attributable to decision noise. *BioRxiv*, 2021.06.08.447620. <https://doi.org/10.1101/2021.06.08.447620>
- Sanchez-Bezanilla, S., Hood, R. J., Collins-Praino, L. E., Turner, R. J., Walker, F. R., Nilsson, M., & Ong, L. K. (2021). More than motor impairment: A spatiotemporal analysis of cognitive impairment and associated neuropathological changes following cortical photothrombotic stroke. *Journal of Cerebral Blood Flow & Metabolism*, 0271678X2110058. <https://doi.org/10.1177/0271678X211005877>
- Savolainen, K., Ihalainen, J., Hämäläinen, E., Tanila, H., & Forsberg, M. M. (2021). Phencyclidine-induced cognitive impairments in repeated touchscreen visual reversal learning tests in rats. *Behavioural Brain Research*, 404. <https://doi.org/10.1016/j.bbr.2020.113057>
- Schmidtke, D. (2021). Age affects procedural paired-associates learning in the grey mouse lemur (*Microcebus murinus*). *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-80960-y>
- Schmill, M. (2021). *UC Riverside UC Riverside Electronic Theses and Dissertations Title Neuroanatomical, Behavioral, and Physiological Correlates of High Voluntary Wheel Running*. <https://escholarship.org/uc/item/9hg938nf>
- Shepherd, A., Zhang, T., Hoffmann, L. B., Zeleznikow-Johnston, A. M., Churilov, L., Hannan, A. J., & Burrows, E. L. (2021). A Preclinical Model of Computerized Cognitive Training: Touchscreen Cognitive Testing Enhances Cognition and Hippocampal Cellular Plasticity in Wildtype and Alzheimer’s Disease Mice. *Frontiers in Behavioral Neuroscience*, 15(December), 1–15. <https://doi.org/10.3389/fnbeh.2021.766745>
- Sullivan, J. A., Dumont, J. R., Memar, S., Skirzewski, M., Wan, J., Mofrad, M. H., Ansari, H. Z., Li, Y., Muller, L., Prado, V. F., Prado, M. A. M., Saksida, L. M., & Bussey, T. J. (2021). New frontiers in translational research: Touchscreens, open science, and the mouse translational research accelerator platform. In *Genes, Brain and Behavior* (Vol. 20, Issue 1). Blackwell Publishing Ltd. <https://doi.org/10.1111/gbb.12705>
- Tanqueiro, S. R., Mouro, F. M., Ferreira, C. B., Freitas, C. F., Fonseca-Gomes, J., Simões do Couto, F., Sebastião, A. M., Dawson, N., & Diógenes, M. J. (2021). Sustained NMDA receptor hypofunction impairs brain-derived neurotrophic factor signalling in the PFC, but not in the hippocampus, and disturbs PFC-dependent cognition in mice. *Journal of Psychopharmacology*, 35(6), 730–743. <https://doi.org/10.1177/02698811211008560>
- Tran, B. N., Valek, L., Wilken-Schmitz, A., Fuhrmann, D. C., Namgaladze, D., Wittig, I., & Tegeder, I. (2021). Reduced exploratory behavior in neuronal nucleoredoxin knockout mice. *Redox Biology*, 45, 102054. <https://doi.org/10.1016/J.REDOX.2021.102054>
- Wittkowski, J., Fritz, R. G., Meier, M., & Schmidtke, D. (2021). Conditioning learning in an attentional task relates to age and ventricular expansion in a nonhuman primate (*Microcebus murinus*). *Behavioural Brain Research*, 399, 113053. <https://doi.org/10.1016/j.bbr.2020.113053>
- Xu, X., Cowan, M., Beraldo, F., Schranz, A., McCunn, P., Geremia, N., Brown, Z., Patel, M., Nygard, K. L., Khazaei, R., Lu, L., Liu, X., Strong, M. J., Dekaban, G. A., Menon, R., Bartha, R., Daley, M., Mao, H., Prado, V., ... Brown, A. (2021). Repetitive mild traumatic brain injury in mice triggers a slowly developing cascade of long-term and persistent behavioral deficits and pathological changes. *Acta Neuropathologica Communications*, 9(1), 60. <https://doi.org/10.1186/s40478-021-01161-2>

Yoo, S., Stremlau, M., Pinto, A., Woo, H., van Praag, H., & Curtis, O. (2021). Effects of combined anti-hypertensive and statin treatment on memory, fear extinction, adult neurogenesis, and angiogenesis in adult and middle-aged mice. *Cells*, 10(7), 1778. <https://doi.org/10.3390/cells10071778>

2020

Arnold, M. R., Greenwood, B. N., McArthur, J. A., Clark, P. J., Fleshner, M., & Lowry, C. A. (2020). Effects of repeated voluntary or forced exercise on brainstem serotonergic systems in rats. *Behavioural Brain Research*, 378, 112237. <https://doi.org/10.1016/J.BBR.2019.112237>

DeBrosse, A. C., Wheeler, A. M., Barrow, J. C., & Carr, G. v. (2020). Inhibition of Catechol-O-methyltransferase Does Not Alter Effort-Related Choice Behavior in a Fixed Ratio/Concurrent Chow Task in Male Mice. *Frontiers in Behavioral Neuroscience*, 14. <https://doi.org/10.3389/fnbeh.2020.00073>

DeBrosse, A., Wheeler, A. M., Barrow, J. C., & Carr, G. v. (2020). Effects of catechol-O-methyltransferase inhibition on effort-related choice behavior in male mice. *BioRxiv*, 2020.01.28.924142. <https://doi.org/10.1101/2020.01.28.924142>

Dumont, J. R., Salewski, R., & Beraldo, F. (2020). Critical mass: The rise of a touchscreen technology community for rodent cognitive testing. *Genes, Brain and Behavior*. <https://doi.org/10.1111/gbb.12650>

Fritz, R. G., Zimmermann, E., Meier, M., Mestre-Francés, N., Radespiel, U., & Schmidtke, D. (2020). Neurobiological substrates of animal personality and cognition in a nonhuman primate (*Microcebus murinus*). *Brain and Behavior*, 10(9). <https://doi.org/10.1002/brb3.1752>

Humby, T., Smith, G. E., Small, R., Davies, W., Carter, J., Bentley, C. A., Winstanley, C. A., Rogers, R. D., & Wilkinson, L. S. (2020). Effects of 5-HT 2C, 5-HT 1A receptor challenges and modafinil on the initiation and persistence of gambling behaviours. *Psychopharmacology*, 237(6), 1745–1756. <https://doi.org/10.1007/S00213-020-05496-X>

Jager, A., Dam, S. A., van der Mierden, S., Oomen, C. A., Arias-Vasquez, A., Buitelaar, J. K., Kozicz, T., & Glennon, J. C. (2020). Modulation of cognitive flexibility by reward and punishment in BALB/cJ and BALB/cByJ mice. *Behavioural Brain Research*, 378, 112294. <https://doi.org/10.1016/j.bbr.2019.112294>

Kim, E., White, M. A., Phillips, B. U., Lopez-Cruz, L., Kim, H., Heath, C. J., Lee, J. E., Saksida, L. M., Sreedharan, J., & Bussey, T. J. (2020). Coexistence of perseveration and apathy in the TDP-43Q331K knock-in mouse model of ALS–FTD. *Translational Psychiatry*, 10(1). <https://doi.org/10.1038/s41398-020-01078-9>

Lee, J., van den Buuse, M., Nithianantharajah, J., & Jones, N. C. (2020). Acute NMDA receptor antagonism impairs working memory performance but not attention in rats-Implications for the NMDAR hypofunction theory of schizophrenia. *Behavioral Neuroscience*, 134(4), 323–331. <https://doi.org/10.1037/bne0000402>

Li, S., May, C., Hannan, A. J., Johnson, K. A., & Burrows, E. L. (2020). Assessing attention orienting in mice: a novel touchscreen adaptation of the Posner-style cueing task. *Neuropsychopharmacology* 2020 46:2, 46(2), 432–441. <https://doi.org/10.1038/s41386-020-00873-8>

Luo, J., Tan, J., & Nithianantharajah, J. (2020). Associative Learning and Motivation Differentially Requires Neuroligin-1 at Excitatory Synapses. *BioRxiv*, 2020.01.01.890798. <https://doi.org/10.1101/2020.01.01.890798>

Mosser, C.-A., Haqqee, Z., Nieto-Posadas, A., Murai, K., Stefano, S., Williams, S., & Brandon, M. P. (2020). The McGill-Mouse-Marmoset Platform: A Standardized Approach for High-throughput Imaging of Neuronal Dynamics During Behavior. *BioRxiv*. <https://doi.org/10.1101/2020.02.06.937573>

- Smith, B. L., Laaker, C. J., Lloyd, K. R., Hiltz, A. R., & Reyes, T. M. (2020). Adolescent microglia play a role in executive function in male mice exposed to perinatal high fat diet. *Brain, Behavior, and Immunity*, *84*, 80–89. <https://doi.org/10.1016/j.bbi.2019.11.010>
- Toader, O., von Heimendahl, M., Schuelert, N., Nissen, W., & Rosenbrock, H. (2020). Suppression of Parvalbumin Interneuron Activity in the Prefrontal Cortex Recapitulates Features of Impaired Excitatory/Inhibitory Balance and Sensory Processing in Schizophrenia. *Schizophrenia Bulletin*. <https://doi.org/10.1093/schbul/sbz123>
- Trammell, T. S., Henderson, N. L., Madkour, H. S., Stanwood, G. D., & Graham, D. L. (2020). GLP-1R activation alters performance in cognitive tasks in a sex-dependent manner. *Neurological Sciences*. <https://doi.org/10.1007/s10072-020-04910-8>
- Wilkinson, M. P., Grogan, J. P., Mellor, J. R., & Robinson, E. S. J. (2020). Comparison of conventional and rapid-acting antidepressants in a rodent probabilistic reversal learning task. *Brain and Neuroscience Advances*, *4*, 239821282090717. <https://doi.org/10.1177/2398212820907177>
- Yang, J. H., Presby, R. E., Rotolo, R. A., Quiles, T., Okifo, K., Zorda, E., Fitch, R. H., Correa, M., & Salamone, J. D. (2020). The dopamine depleting agent tetrabenazine alters effort-related decision making as assessed by mouse touchscreen procedures. *Psychopharmacology*, *237*(9), 2845–2854. <https://doi.org/10.1007/s00213-020-05578-w>
- <2020**
- Arulsamy, A., Corrigan, F., & Collins-Praino, L. E. (2019). Age, but not severity of injury, mediates decline in executive function: Validation of the rodent touchscreen paradigm for preclinical models of traumatic brain injury. *Behavioural Brain Research*, *368*. <https://doi.org/10.1016/j.bbr.2019.111912>
- Braeckman, K., Descamps, B., Caeyenberghs, K., & Vanhove, C. (2018). Longitudinal DTI changes following cognitive training therapy in a mild traumatic brain injury rat model. *Frontiers in Neuroscience*, *12*. <https://doi.org/10.3389/conf.fnins.2018.95.00074>
- Braeckman, K., Descamps, B., Vanhove, C., & Caeyenberghs, K. (2019). Exploratory relationships between cognitive improvements and training induced plasticity in hippocampus and cingulum in a rat model of mild traumatic brain injury: a diffusion MRI study. *Brain Imaging and Behavior*. <https://doi.org/10.1007/s11682-019-00179-4>
- Brigman, J. L., Feyder, M., Saksida, L. M., Bussey, T. J., Mishina, M., & Holmes, A. (2008). Impaired discrimination learning in mice lacking the NMDA receptor NR2A subunit. *Learning & Memory (Cold Spring Harbor, N.Y.)*, *15*(2), 50–54. <https://doi.org/10.1101/LM.777308>
- Brutman, J. N., Sirohi, S., & Davis, J. F. (2019). Examining the Impact of Estrogen on Binge Feeding, Food-Motivated Behavior, and Body Weight in Female Rats. *Obesity*, *27*(10), 1617–1626. <https://doi.org/10.1002/oby.22582>
- Bussey, T. J., Holmes, A., Lyon, L., Mar, A. C., McAllister, K. A. L., Nithianantharajah, J., Oomen, C. A., & Saksida, L. M. (2012). New translational assays for preclinical modelling of cognition in schizophrenia: The touchscreen testing method for mice and rats. *Neuropharmacology*, *62*(3), 1191–1203. <https://doi.org/10.1016/j.neuropharm.2011.04.011>
- Cheng, Y., Wang, Z. M., Tan, W., Wang, X., Li, Y., Bai, B., Li, Y., Zhang, S. F., Yan, H. L., Chen, Z. L., Liu, C. M., Mi, T. W., Xia, S., Zhou, Z., Liu, A., Tang, G. bin, Liu, C., Dai, Z. J., Wang, Y. Y., ... Jin, P. (2018). Partial loss of psychiatric risk gene Mir137 in mice causes repetitive behavior and impairs sociability and learning via increased Pde10a. *Nature Neuroscience*. <https://doi.org/10.1038/s41593-018-0261-7>

- Cho, B. R., Kwak, M. J., Kim, W. Y., & Kim, J. H. (2018). Impulsive action and impulsive choice are differentially expressed in rats depending on the age at exposure to a gambling task. *Frontiers in Psychiatry*, 9(OCT), 503. <https://doi.org/10.3389/FPSYT.2018.00503/BIBTEX>
- Dam, S. A., Jager, A., Oomen, C. A., Buitelaar, J. K., Arias-Vasquez, A., & Glennon, J. C. (2019). Inhibitory control in BALB/c mice sub-strains during extinction learning. *European Neuropsychopharmacology*, 29(4), 509–518. <https://doi.org/10.1016/j.euroneuro.2019.02.007>
- Ding, Z., Brown, J. W., Rueter, L. E., & Mohler, E. G. (2018). Profiling attention and cognition enhancing drugs in a rat touchscreen-based continuous performance test. *Psychopharmacology*, 235(4), 1093–1105. <https://doi.org/10.1007/S00213-017-4827-Y>
- Fellows, L. K. (2007). The role of orbitofrontal cortex in decision making. *Annals of the New York Academy of Sciences*, 1121, 421–430. <https://doi.org/10.1196/annals.1401.023>
- Fitzpatrick, C. M., Maric, V. S., Bate, S. T., & Andreasen, J. T. (2018). Influence of intertrial interval on basal and drug-induced impulsive action in the 5-choice serial reaction time task. *Neuroscience Letters*. <https://doi.org/10.1016/j.neulet.2017.10.058>
- Freund, N., Jordan, C. J., Lukkes, J. L., Norman, K. J., & Andersen, S. L. (2019). Juvenile exposure to methylphenidate and guanfacine in rats: effects on early delay discounting and later cocaine-taking behavior. *Psychopharmacology*, 236(2), 685–698. <https://doi.org/10.1007/s00213-018-5096-0>
- Golden, C. E. M., Breen, M. S., Koro, L., Sonar, S., Niblo, K., Browne, A., Burlant, N., di Marino, D., de Rubeis, S., Baxter, M. G., Buxbaum, J. D., & Harony-Nicolas, H. (2019). Deletion of the KH1 Domain of Fmr1 Leads to Transcriptional Alterations and Attentional Deficits in Rats. *Cerebral Cortex*, 29(5), 2228–2244. <https://doi.org/10.1093/cercor/bhz029>
- Hailwood, J. M., Heath, C. J., Phillips, B. U., Robbins, T. W., Saksida, L. M., & Bussey, T. J. (2019). Blockade of muscarinic acetylcholine receptors facilitates motivated behaviour and rescues a model of antipsychotic-induced amotivation. *Neuropsychopharmacology*, 44(6), 1068–1075. <https://doi.org/10.1038/s41386-018-0281-8>
- Hailwood, J. M., Heath, C. J., Robbins, T. W., Saksida, L. M., & Bussey, T. J. (2018). Validation and optimisation of a touchscreen progressive ratio test of motivation in male rats. *Psychopharmacology*, 235(9), 2739–2753. <https://doi.org/10.1007/S00213-018-4969-6/FIGURES/5>
- Hambrecht-Wiedbusch, V. S., Latendresse, K. A., Avidan, M. S., Nelson, A. G., Phyle, M., Ajluni, R. E., & Mashour, G. A. (2019). General anesthesia does not have persistent effects on attention in rodents. *Frontiers in Behavioral Neuroscience*, 13. <https://doi.org/10.3389/fnbeh.2019.00076>
- Heath, C. J., Bussey, T. J., & Saksida, L. M. (2015). Motivational assessment of mice using the touchscreen operant testing system: Effects of dopaminergic drugs. *Psychopharmacology*, 232(21–22), 4043–4057. <https://doi.org/10.1007/S00213-015-4009-8>
- Heath, C. J., O’Callaghan, C., Mason, S. L., Phillips, B. U., Saksida, L. M., Robbins, T. W., Barker, R. A., Bussey, T. J., & Sahakian, B. J. (2019). A Touchscreen Motivation Assessment Evaluated in Huntington’s Disease Patients and R6/1 Model Mice. *Frontiers in Neurology*, 10. <https://doi.org/10.3389/fneur.2019.00858>
- Heath, Christopher J.; Bussey, Timothy J; Saksida, L. M. (2015). Touchscreen Assessment of Motivation and Reinforcement-Related Choice Behaviour in Mice. *Psychopharmacology*, 232(21–22), 4043–4057. <https://www.repository.cam.ac.uk/handle/1810/277100>

- Houlton, J., Zhou, L. Y. Y., Barwick, D., Gowing, E. K., & Clarkson, A. N. (2019). Stroke induces a BDNF-dependent improvement in cognitive flexibility in aged mice. *Neural Plasticity*, 2019. <https://doi.org/10.1155/2019/1460890>
- Hvoslef-Eide, M., Mar, A. C., Nilsson, S. R. O., Alsiö, J., Heath, C. J., Saksida, L. M., Robbins, T. W., & Bussey, T. J. (2015). The NEWMEDS rodent touchscreen test battery for cognition relevant to schizophrenia. In *Psychopharmacology* (Vol. 232, Issues 21–22, pp. 3853–3872). Springer Verlag. <https://doi.org/10.1007/s00213-015-4007-x>
- Hvoslef-Eide, M., Nilsson, S. R. O., Hailwood, J. M., Robbins, T. W., Saksida, L. M., Mar, A. C., & Bussey, T. J. (2018). Effects of anterior cingulate cortex lesions on a continuous performance task for mice. *Brain and Neuroscience Advances*, 2, 239821281877296. <https://doi.org/10.1177/2398212818772962>
- Jager, A., Kanters, D., Geers, F., Buitelaar, J. K., Kozicz, T., & Glennon, J. C. (2019). Methylphenidate Dose-Dependently Affects Aggression and Improves Fear Extinction and Anxiety in BALB/cJ Mice. *Frontiers in Psychiatry*, 10, 768. <https://doi.org/10.3389/fpsy.2019.00768>
- Janickova, H., Kljakic, O., Rosborough, K., Raulic, S., Matovic, S., Gros, R., Saksida, L. M., Bussey, T. J., Inoue, W., Prado, V. F., & Prado, M. A. M. (2019). Selective decrease of cholinergic signaling from pedunculo-pontine and laterodorsal tegmental nuclei has little impact on cognition but markedly increases susceptibility to stress. *FASEB Journal*, 33(6), 7018–7036. <https://doi.org/10.1096/fj.201802108R>
- Kim, C. H., Hvoslef-Eide, M., Nilsson, S. R. O., Johnson, M. R., Herbert, B. R., Robbins, T. W., Saksida, L. M., Bussey, T. J., & Mar, A. C. (2015). The continuous performance test (rCPT) for mice: A novel operant touchscreen test of attentional function. *Psychopharmacology*, 232(21–22), 3947–3966. <https://doi.org/10.1007/S00213-015-4081-0>
- Kim, E. W., Phillips, B. U., Heath, C. J., Cho, S. Y., Kim, H., Sreedharan, J., Song, H. T., Lee, J. E., Bussey, T. J., Kim, C. H., Kim, E., & Saksida, L. M. (2017). Optimizing reproducibility of operant testing through reinforcer standardization: Identification of key nutritional constituents determining reward strength in touchscreens. *Molecular Brain*, 10(1). <https://doi.org/10.1186/s13041-017-0312-0>
- Krakenberg, V., Woigk, I., Garcia Rodriguez, L., Kästner, N., Kaiser, S., Sachser, N., & Richter, S. H. (2019). Technology or ecology? New tools to assess cognitive judgement bias in mice. *Behavioural Brain Research*, 362, 279–287. <https://doi.org/10.1016/j.bbr.2019.01.021>
- Lim, J., Kim, E., Noh, H. J., Kang, S., Phillips, B. U., Kim, D. G., Bussey, T. J., Saksida, L., Heath, C. J., & Kim, C. H. (2019). Assessment of mGluR5 KO mice under conditions of low stress using a rodent touchscreen apparatus reveals impaired behavioural flexibility driven by perseverative responses. *Molecular Brain*, 12(1). <https://doi.org/10.1186/s13041-019-0441-8>
- Lindström, S. H., Sundberg, S. C., Larsson, M., Andersson, F. K., Broman, J., & Granseth, B. (2019). VGLUT1 Deficiency Impairs Visual Attention and Reduces the Dynamic Range of Short-Term Plasticity at Corticothalamic Synapses. *Cerebral Cortex*. <https://doi.org/10.1093/cercor/bhz204>
- Mantanona, C. P., Alsiö, J., Elson, J. L., Fisher, B. M., Dalley, J. W., Bussey, T., & Pienaar, I. S. (2019). Altered motor, anxiety-related and attentional task performance at baseline associate with multiple gene copies of the vesicular acetylcholine transporter and related protein overexpression in ChAT::Cre+ rats. *Brain Structure and Function*. <https://doi.org/10.1007/s00429-019-01957-y>
- Mar, A. C., Nilsson, S. R. O., Gamallo-Lana, B., Lei, M., Dourado, T., Alsiö, J., Saksida, L. M., Bussey, T. J., & Robbins, T. W. (2017). MAM-E17 rat model impairments on a novel continuous performance task: effects of potential

- cognitive enhancing drugs. *Psychopharmacology*, 234(19), 2837–2857. <https://doi.org/10.1007/S00213-017-4679-5>
- Markou, A., Salamone, J. D., Bussey, T. J., Mar, A. C., Brunner, D., Gilmour, G., & Balsam, P. (2013). Measuring reinforcement learning and motivation constructs in experimental animals: Relevance to the negative symptoms of schizophrenia. *Neuroscience and Biobehavioral Reviews*, 37(9), 2149–2165. <https://doi.org/10.1016/j.neubiorev.2013.08.007>
- Meda, S., Freund, N., Norman, K. J., Thompson, B. S., Sonntag, K.-C., & Andersen, S. L. (2019). The use of laser capture microdissection to identify specific pathways and mechanisms involved in impulsive choice in rats. *Heliyon*, 5(8), e02254. <https://doi.org/10.1016/j.heliyon.2019.e02254>
- Phillips, B. U., Dewan, S., Nilsson, S. R. O., Robbins, T. W., Heath, C. J., Saksida, L. M., Bussey, T. J., & Alsiö, J. (2018). Selective effects of 5-HT2C receptor modulation on performance of a novel valence-probe visual discrimination task and probabilistic reversal learning in mice. *Psychopharmacology*, 235(7), 2101–2111. <https://doi.org/10.1007/S00213-018-4907-7>
- Piantadosi, P. T., Lieberman, A. G., Pickens, C. L., Bergstrom, H. C., & Holmes, A. (2019). A novel multichoice touchscreen paradigm for assessing cognitive flexibility in mice. *Learning and Memory*, 26(1), 24–30. <https://doi.org/10.1101/lm.048264.118>
- Radke, A. K., Kocharian, A., Covey, D. P., Lovinger, D. M., Cheer, J. F., Mateo, Y., & Holmes, A. (2018). Contributions of nucleus accumbens dopamine to cognitive flexibility. *European Journal of Neuroscience*. <https://doi.org/10.1111/ejn.14152>
- Radke, A. K., Zweifel, L. S., & Holmes, A. (2019). NMDA receptor deletion on dopamine neurons disrupts visual discrimination and reversal learning. *Neuroscience Letters*, 699, 109–114. <https://doi.org/10.1016/j.neulet.2019.02.001>
- Rendall, A. R., Perrino, P. A., LoTurco, J. J., & Fitch, R. H. (2019). Evaluation of visual motion perception ability in mice with knockout of the dyslexia candidate susceptibility gene Dcdc2. *Genes, Brain and Behavior*, 18(5). <https://doi.org/10.1111/gbb.12450>
- Shepherd, A., Lim, J. K. H., Wong, V. H. Y., Zeleznikow-Johnston, A. M., Churilov, L., Nguyen, C. T. O., Bui, B. V., Hannan, A. J., & Burrows, E. L. (2019). Progressive impairments in executive function in the APP/PS1 model of Alzheimer's disease as measured by translatable touchscreen testing. *BioRxiv*, 742494. <https://doi.org/10.1101/742494>
- Shepherd, A., May, C., Churilov, L., Adlard, P. A., Hannan, A. J., & Burrows, E. L. (2019). Evaluation of attention in APP/PS1 mice shows impulsive and compulsive behaviours. *Genes, Brain and Behavior*. <https://doi.org/10.1111/gbb.125944>
- Tammig, R., Dumeaux, V., Langlois, L., Ellegood, J., Qiu, L., Jiang, Y., Lerch, J. P., & Bérubé, N. G. (2019). Atrx Deletion in Neurons Leads to Sexually-Dimorphic Dysregulation of miR-137 and Spatial Learning and Memory Deficits. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3387657>
- van den Boom, B. J. G., Mooij, A. H., Misevičiūtė, I., Denys, D., & Willuhn, I. (2019). Behavioral flexibility in a mouse model for obsessive-compulsive disorder: Impaired Pavlovian reversal learning in SAPAP3 mutants. *Genes, Brain and Behavior*, 18(4). <https://doi.org/10.1111/gbb.12557>

Zhang, W., Liu, J., Feng, J., Jia, M., Zhang, G., & Wen, X. (2018). Downregulation of 5-hydroxytryptamine₇ receptor in the medial prefrontal cortex ameliorates impulsive actions in animal models of schizophrenia. *Behavioural Brain Research*, 341, 212–223. <https://doi.org/10.1016/j.bbr.2017.12.023>