2018 publications arising from use of NSWBB tissue

Journal articles

1. Baldo B *et al* (2018). SIRT1 is increased in affected brain regions and hypothalamic metabolic pathways are altered in Huntington disease. Neuropathol Appl Neurobiol. 2018 Jul 18. [Epub ahead of print].
2. Bazov I *et al* (2018). Neuronal Expression of Opioid Gene is Controlled by Dual Epigenetic and Transcriptional Mechanism in Human Brain. Cereb.Cortex; 28(9):1-14.
3. Bazov I *et al* (2018). Dynorphin and κ-Opioid Receptor Dysregulation in the Dopaminergic Reward System of Human Alcoholics. Mol Neurobiol. 55(8):7049-7061.
4. Couttas TA *et al* (2018). Age-Dependent Changes to Sphingolipid Balance in the Human Hippocampus are Gender-Specific and May Sensitize to Neurodegeneration. J. Alzheimers Dis.; 63(2): 503-514.
5. Crews FT *et al* (2017). Toll-like receptor signaling and stages of addiction. Psychopharmacology; 234(9-10):1483-1498.
6. Farg MA *et al* (2017). The DNA damage response (DDR) is induced by the C9orf72 repeat expansion in amyotrophic lateral sclerosis. Hum. Mol. Genet.;26(15): 2882-2896.
7. Fifita JA *et al* (2017). Genetic and Pathological Assessment of hnRNPA1, hnRNPA2/B1, and hnRNPA3 in Familial and Sporadic Amyotrophic Lateral Sclerosis. Neurodegener Dis; 17(6): 304-312.
8. Forrest SL *et al* (2018). Retiring the term FTDP-17 as MAPT mutations are genetic forms of sporadic frontotemporal tauopathies. Brain 2018; 141(2): 521-534.
9. Fröhlich D *et al* (2018). Expression Pattern of the Aspartyl-tRNA Synthetase DARS in the Human Brain. Front Mol Neurosci; 11: 81.
10. Gatta E (2017). Emerging Role of One-Carbon Metabolism and DNA Methylation Enrichment on δ-Containing GABAA Receptor Expression in the Cerebellum of Subjects with Alcohol Use Disorders (AUD). Int. J. Neuropsychopharmacol.; 20(12): 1013-1026.
11. Genoud S *et al* (2017). Subcellular compartmentalisation of copper, iron, manganese, and zinc in the Parkinson's disease brain. Metallomics. 9(10):1447-1455.
12. Guerreiro R *et al* (2018). Investigating the genetic architecture of dementia with Lewy bodies: a two-stage genome-wide association study. Lancet Neurol. Jan;17(1):64-74.
13. Hansson A *et al* (2018). Oxytocin Reduces Alcohol Cue-Reactivity in Alcohol-Dependent Rats and Humans. Neuropsychopharmacology; 43(6):1235-1246.
14. Kovacs GG *et al* (2017). Multisite Assessment of Aging-Related Tau Astrogliopathy (ARTAG). J Neuropathol Exp Neurol. Jul 1;76(7):605-619
15. Kun-Rodrigues C *et al* (2017). Analysis of C9orf72 repeat expansions in a large international cohort of dementia with Lewy bodies. Neurobiol Aging. 2017 Jan; 49: 214.e13–214.e15.
16. Lee MR *et al* (2017). Effect of alcohol use disorder on oxytocin peptide and receptor mRNA expression in human brain: A post-mortem case-control study. Psychoneuroendocrinology; 85:14-19.
17. Mathews KJ *et al* (2017). Evidence for reduced neurogenesis in the aging human hippocampus despite stable stem cell markers. Aging Cell;16(5):1195-1199.
18. Matosin N *et al* (2018). Effects of common GRM5 genetic variants on cognition, hippocampal volume and mGluR5 protein levels in schizophrenia. Brain Imaging Behav;12(2):509-517.
19. O'Rourke MB *et al* (2018). Optimal Preparation of Formalin Fixed Samples for Peptide Based Matrix Assisted Laser Desorption/Ionization Mass Spectrometry Imaging Workflows. J Vis Exp. 16;(131).
20. Rubio-Araiz A *et al* (2017). Disruption of blood-brain barrier integrity in postmortem alcoholic brain: preclinical evidence of TLR4 involvement from a binge-like drinking model. Addict Biol; 22(4):1103-1116.

21. Shepherd CE *et al* (2018). Region- and Cell-specific Aneuploidy in Brain Aging and Neurodegeneration. Neuroscience 374326-334.
22. Tan RH *et al* (2017). Assessment of amyloid β in pathologically confirmed frontotemporal dementia syndromes. Alzheimers Dement (Amst). May 29;9:10-20.
23. Tan RH *et al* (2017). Distinct TDP-43 inclusion morphologies in frontotemporal lobar degeneration with and without amyotrophic lateral sclerosis. Acta Neuropathol Commun. Oct 27;5(1):76.
24. Tan RH *et al* (2017). Multiple neuronal pathologies are common in young patients with pathologically proven Frontotemporal lobar degeneration. Neuropathol Appl Neurobiol. [Epub ahead of print].
25. Trist BG *et al* (2017). Amyotrophic lateral sclerosis-like superoxide dismutase 1 proteinopathy is associated with neuronal loss in Parkinson's disease brain. Acta Neuropathol. 134(1): 113-127.
26. Trist BG *et al* (2018). Accumulation of dysfunctional SOD1 protein in Parkinson's disease is not associated with mutations in the SOD1 gene. Acta Neuropathol. Jan;135(1):155-156.
27. Vetreno RP *et al* (2018). Persistent Adult Neuroimmune Activation and Loss of Hippocampal Neurogenesis Following Adolescent Ethanol Exposure: Blockade by Exercise and the Anti-inflammatory Drug Indomethacin. Front Neurosci; 12: 200.
28. Warden AS *et al* (2017). Gene expression profiling in the human alcoholic brain. Neuropharmacology; 122:161-174.
29. Wellings TP *et al* (2017). Altered neurofilament protein expression in the lateral vestibular nucleus in Parkinson's disease. Exp Brain Res 235(12): 3695-3708.
30. Woerman AL *et al* (2018). MSA prions exhibit remarkable stability and resistance to inactivation. Acta Neuropathol. 2018 Jan;135(1):49-63.
31. Yang Y *et al* (2017). von Economo Neuron Density and Thalamus Volumes in Behavioral Deficits in Frontotemporal Dementia Cases with and without a C9ORF72 Repeat Expansion. J Alzheimers Dis. 2017;58(3):701-709.
32. Zhao Y *et al* (2018). Reduced LRRK2 in association with retromer dysfunction in post-mortem brain tissue from LRRK2 mutation carriers. Brain 141(2): 486-495.

Oral presentations

1. Clark S *et al* (2017). Alcohol Brain Methylation and Biomarker Discovery Project. Research Society on Alcoholism, Denver, Colorado.
2. Cooper A (2017). Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. Australasian Neuroscience Society Meeting, Sydney.
3. Cooper A (2017). Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. Queenstown Research Week, New Zealand.
4. Cooper,A (2017). Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. Grand Rapids Challenge, Grand Rapids, USA.
5. Cooper A (2017). Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. Parkinsons Disease Conference, Cairns, Qld.
6. Genoud S *et al* (2017). Alterations in biometals and metalloproteins in the soluble fraction of the Parkinson's disease brain. Inter-University Neuroscience and Mental Health Conference, Western Sydney University, Australia.
7. Genoud S *et al* (2017). Biometal dyshomeostasis and metalloprotein disruptions in the soluble fraction of the Parkinson's disease brain. Bosch Young Investigators Symposium, University of Sydney, Australia.

8. Kapoor M (2017). Analysis of Whole Genome-transcriptomic Organization in Brain to Identify Genes Associated with Alcoholism. Research Society on Alcoholism, Denver, Colorado.
9. Karababa A *et al* (2017). Ammonia affects iron homeostasis in cultured rat astrocytes and in human cerebral cortex in hepatic encephalopathy. DeLiver Symposium, Düsseldorf, Germany.
10. Kirik D (2018). Investigating Imaging and Wet Biomarker Outcomes in Synucleinopathy Animal Models. MultiSyn Final Meetin, Tübingen, Germany.
11. Ling H (2018). Rapidly progressive corticobasal degeneration: an aggressive variant. 119th Meeting of the British Neuropathological Society, London.
12. McCann E *et al* (2017). Analysis of genetic variation and immunopatholgy of CHCHD10 in Australian familial and sporadic amyotrophic lateral sclerosis. Australasian Neuroscience Society Meeting, Sydney.
13. Mayfield RD (2017). Transcriptome Sequencing Reveals Novel Splice Variants in Human Alcoholic Brain. American College of Neuropsychopharmacology, Palm Springs, California.
14. Mayfield RD *et al* (2017). Cross-species molecular dissection across alcohol behavioral domains. Alcoholism and Stress: A Framework for Future Treatment Strategies, Pisa, Italy.
15. Navarrete F (2017). Genetic and pharmacological cannabinoid CB2 receptor manipulation modulates alcohol-induced reinforcing effects. Socidrogalcohol, Oviedo, Spain.
16. Stevens CH *et al* (2017). Increased tau phosphorylation in amyotrophic lateral sclerosis. Proteostasis and disease symposium, Wollongong, Australia.
17. Stevens CH *et al* (2017). Increased phosphorylated and insoluble tau in motor neuron disease. Australasian Neuroscience Society Meeting, Sydney.
18. Sutherland G (2017). The importance of transcriptomics in understanding changes in the human brain. 9th Forefront Scientific Meeting, Sydney.
19. Sytnyk V (2017). Disruption in synaptic adhesion in Alzheimer's disease. Australasian Neuroscience Society Meeting, Sydney.
20. Tan RH *et al* (2017). 11c-Pittsburgh Compound B and pathological assessment of β-amyloid in frontotemporal dementia syndromes SFN Washington, USA.
21. Trist BG *et al* (2017). Copper dyshomeostasis and oxidative stress in Parkinson's disease. Forefront Research Group Meeting, Sydney, Australia.
22. Trist *et al* (2017). Metal-deficient superoxide dismutase 1 associated with neurodegeneration in Parkinson's disease. 2017 Bosch Young Investigator's Symposium, Sydney.
23. Trist *et al* (2017). Metal dyshomeostasis, oxidative stress and protein aggregation; a toxic triad underlying neuronal loss in Parkinson's disease? Inter-university Neuroscience and Mental Health Conference, Sydney.
24. Trist BG *et al* (2017). Metal-deficient superoxide dismutase 1 associated with neurodegeneration in Parkinson's disease. 2017 Bosch Young Investigator's Symposium, Sydney, Australia.

Poster presentations

1. Bohnsack JP *et al* (2018). The lncRNA BDNF-AS is upregulated in human postmortem amygdala and is an epigenetic regulator in early onset of alcohol use disorders. Research Society on Alcoholism, San Diego, California.
2. Brown S *et al* (2017). An assessment of presynaptic markers, synaptophysin and vGluT1, in the nucleus accumbens in schizophrenia. Biological Psychiatry Australia, Wollongong.
3. Coleman L *et al* (2017). Ethanol activates 'death receptor' signaling to cause neurodegeneration. Society for Neuroscience, Washington DC.
4. Couttas T *et al* (2017). Ceramides, associated with insulin resistance, increase with age in the human hippocampus. Australian Dementia Forum, Melbourne.
5. de la Monte SM (2017). Imaging Mass Spectrometry of White Matter Lipid Profile Changes in Human Alcohol-Related Neurodegeneration. Research Society on Alcoholism, Denver, Colorado.
6. Duly A *et al* (2017). Dysregulated micro RNA expression in Parkinson's Disease Provides a Shared Mechanism to the Dysfunction of Several Pathways Associated With Parkinson's: Endocytosis,

Autophagy, Mitochondrial function and Lysosomal homeostasis. Australasian Neuroscience Society Meeting, Sydney.

7. Gatta E *et al* (2018). Differential genome-wide methylation in alcohol use disorder subjects: focus on the cortico-limbic glucocorticoid receptors. Research Society on Alcoholism, San Diego, California.
8. Genoud S *et al* (2017). Alterations in biometals and metalloproteins in the soluble fraction of the Parkinson's disease brain. Australasian Neuroscience Society Meeting, Sydney.
9. Genoud S *et al* (2018). Soluble Iron and copper dyshomeostasis affect metalloprotein metallation in the Parkinson's disease brain. International Neuroscience Winter Conference, Solden, Austria.
10. Hansson AC *et al* (2017). Oxytocin reduces alcohol cue-reactivity in alcohol dependent rats and humans. ESBRA Congress, Crete, Greece.
11. Katzeff J *et al* (2017). Expression studies of top 10 GWAS genes in multiple system atrophy brain. Brain and Mind Centre Symposium, Sydney.
12. Lack AT *et al* (2017). Cytotoxic t cells are significantly increased in subtypes of frontotemporal lobar degeneration. Australasian Neuroscience Society Meeting, Sydney.
13. Liu W *et al* (2017). The change of cell death signaling in the hippocampus of alcoholic human and rat brain following adolescent intermittent ethanol exposure. Society for Neuroscience, Washington DC.
14. Lourenco G *et al* (2017). Whole transcriptome analysis (RNA-Seq) reveals distinct gene and isoform expression profiles and alternative splicing defects in c9orf72-related and sporadic frontotemporal lobar degeneration (FTLD-TDP). Australasian Neuroscience Society Meeting, Sydney.
15. Paasila P *et al* (2017). Spatiotemporal relationships between pathological changes and microglial subtypes in differentially affected areas of the Alzheimer's disease brain. Australasian Neuroscience Society Meeting, Sydney.
16. Paasila P *et al* (2018). Microglial subtypes in differentially affected areas of the Alzheimer's disease brain. Australian Dementia Forum, Sydney.
17. Poljak A *et al* (2017). Proteomics of the Alzheimer's disease brain: neuropathology and neuroresilience. AAIC2017, London UK.
18. Qin L *et al* (2017). Increased neuroimmune gene induction, microglial and astrocyte activation, and neurodegeneration in post-mortem human alcoholic brain. Society for Neuroscience, Washington DC.
19. Sait Hasirci A *et al* (2017). Proinflammatory Cytokine Mcp-1 Immunoreactivity In Ventral Tegmental Area Of Human Alcohol Use Disorder Patients. Research Society on Alcoholism, Denver, Colorado.
20. Shepherd C *et al* (2018). Tau pathology is associated with reduced neuronal expression of the senescence marker P16INK4a. Australian Dementia Forum, Sydney.
21. Smith C (2017). Differential Lipid Histopathology in Alzheimer's Disease. Australasian Neuroscience Society Meeting, Sydney.
22. Tan RH *et al* (2018). Distinct TDP-43 inclusions suggest divergent pathomechanisms in FTLD and FTLD-ALS. Fight MND, Melbourne.
23. Thygesen J *et al* (2017). An Alcohol Dependence GWAS From the United Kingdom. World Congress on Psychiatric Genetics, Orlando, Florida.
24. Trist BG *et al* (2017). Lessons learnt from SOD1 dysfunction in Parkinson's disease and familial amyotrophic lateral sclerosis. Australasian Neuroscience Society Meeting, Sydney.
25. Trist BG *et al* (2017). Novel superoxide dismutase-1 proteinopathy is associated with Lewy pathology and neuronal loss in Parkinson's disease. 2017 Joint Meeting of the International Society for Neurochemistry and European Society for Neurochemistry, Paris.
26. Vetreno R *et al* (2017). Voluntary exercise prevents adolescent binge ethanol-induced loss of hippocampal neurogenesis in adulthood by blocking induction of the neuroimmune signalling. Research Society on Alcoholism, Denver, Colorado.

27. Yang S *et al* (2017). A multidisciplinary approach to identify novel familial Motor Neuron Disease genes. 13th MND Australia Research Conference, Sydney.
28. Yang S *et al* (2018). A functional pipeline for the validation of novel motor neuron disease candidate genes. FightMND Australasian MND Symposium, Melbourne.
29. Zhang H (2017). MicroRNA Transcriptome Changes in Multiple Brain Regions of Subjects with Alcohol Use Disorders. Research Society on Alcoholism, Denver, Colorado.
30. Zhao Y *et al* (2017). LRRK2 is decreased in the brain of patients with LRRK2 mutations and is associated with dysfunction of the retromer complex. Australasian Neuroscience Society Meeting, Sydney.