

# Sydney Brain Bank (SBB) publications arising from the use of SBB tissue 2013-2020

Please note that the reporting year is from April-April so a full data set is not yet available for 2020

## 2013 publications arising from use of SBB tissue

## **Journal articles**

- 1. Bleasel, J. M., J. H. Hsiao, et al. Increased expression of ABCA8 in multiple system atrophy brain is associated with changes in pathogenic proteins. *J Parkinsons Dis* 2013; 3(3): 331-339.
- 2. Davies, K. M., D. J. Hare, et al. Localization of copper and copper transporters in the human brain. *Metallomics* 2013; 5(1): 43-51.
- 3. Hsiao, J. H., Y. Fu, et al. Elevation in sphingomyelin synthase activity is associated with increases in amyloid-beta peptide generation. *PLoS One* 2013; 8(8): e74016.
- 4. Murphy KE, Cottle L, Gysbers AM, Cooper AA, Halliday GM. ATP13A2 (PARK9) protein levels are reduced in brain tissue of cases with Lewy bodies. *Acta Neuropathol Commun* 2013; 1(1): 11.
- 5. Pamphlett, R. and S. Kum Jew. Heavy metals in locus ceruleus and motor neurons in motor neuron disease. *Acta Neuropathol Commun* 2013; 1(1): 81.
- 6. Reyes S, Cottam V, et al. Variability in neuronal expression of dopamine receptors and transporters in the substantia nigra. *Mov Disord* 2013; 28(10): 1351-9.
- 7. Reyes S, Fu Y, et al. Trophic factors differentiate dopamine neurons vulnerable to Parkinson's disease. *Neurobiol Aging* 2013; 34(3): 873-86.
- 8. Sutherland, G. T., B. Chami, et al. Oxidative stress in Alzheimer's disease: Primary villain or physiological by-product? *Redox Rep* 2013; 18(4): 134-141.
- 9. Wang J, Gouda-Vossos A, et al. DNA extraction from fresh-frozen and formalin-fixed, paraffinembedded human brain tissue. *Neuroscience Bulletin* 2013; 29(5): 649-54.

- 1. Chami, B. Oxidative damage in the early stages of Alzheimer's Disease. *Society for Free Radical Research Australasia*, Sydney, 2013.
- 2. Chami, B. Oxidative damage in the early stages of Alzheimer's Disease. *Australian Society of Medical Research National Scientific Conference*, Ballarat, 2013.
- 3. Leshchyns'ka, I. Cell adhesion molecules' role in synaptic transmission: offering new insight into brain disorder mechanisms. *BABS Research Symposium: Improving tomorrow through science*, Sydney, 2013.
- 4. Niedermayer, G., J. Kril, et al. Immunoglobulins in Frontotemporal Lobar Degeneration. *Australian Neuroscience Society Meeting*. Melbourne, 2013.
- 5. Stevens C, Lewis S, and Halliday GM. Variability in α- and β-synuclein in Parkinson's disease and multiple system atrophy. *Australian Neuroscience Society Meeting*, Melbourne, 2013.
- *6.* Sytnyk, V. Mechanisms of abnormal synaptic adhesion in Alzheimer's disease. *7th A+PD Symposium*, Queensland Brain Institute, 2013.
- 7. Sytnyk, V. NCAM2-mediated synaptic adhesion in the maintenance of glutamatergic synapses. *The Hunter Meeting*, Pokolbin, NSW, 2013.

- 1. Bleasel, J. M., J. H. Hsiao, et al. Altered expression of ABCA8 in multiple system atrophy brain. International *Conference on Alpha-synuclein in Parkinson's Disease & Related Neurodegenerative Disease*, Dubai, Unites Arab Emirates, 2013.
- 2. Britton A, McGinley C, et al. Neuronal loss and pathology in language-associated regions of logopenic variant of progressive aphasia. *12th National Conference of Emerging Researchers in Ageing*, Sydney, 2013.
- 3. Chare L et al. Alzheimer's disease in clinical versus pathological frontotemporal dementia cohorts V How big is the clinicopathological mismatch? *The 9th International Conference on Frontotemporal Dementias*, Canada, 2013.
- 4. Chare L et al. New criteria for frontotemporal dementia syndromes: clinical and pathological diagnostic implications. The TOW Research Awards, Australia, 2013.
- 5. Halliday, G. and S. Kim. Potential role of ABCA8 in oligodendrocyte. *Australian Neuroscience Society* 33rd Annual Meeting. Melbourne, 2013.
- 6. Huang Y et al. Cytokines associated with Parkinson's disease. XIX World Congress on Parkinson's Disease and Related Disorders, Shanghai, China 2011.
- 7. Kim S & Halliday GM. Evidence for lipid dystrophy in multiple system atrophy brain. XX World Congress on Parkinson's Disease and Related Disorders, Geneva, Switzerland, 2013.
- 8. Kim S & Halliday GM. Potential role of ABCA8 in oligodendrocyte. *Australian Neuroscience Society Meeting,* Melbourne, 2013.
- 9. Martinez Olivares C et al. Genetic influence of MAPT on the pathology of Parkinson's disease. *Australian Neuroscience Society, 31st Annual Meeting,* Auckland, 2011.
- 10. Mills, J. D., T. Kavanagh, et al. Unique transcriptome patterns of grey and white matter corroborate structural and functional heterogeneity in the human frontal lobe. *XX World Congress on Parkinson's Disease and Related Disorders,* Geneva, Switzerland, 2013.
- 11. Mills, J. D., S. Kim, et al. Differential isoform expression of the alpha- and beta-synuclein genes in multiple system atrophy brain. *34th Lorne Genome Conference*, Lorne, 2013.
- 12. Murphy, K., A. A. Cooper, et al. A subcellular organelle isolation method for frozen post- mortem human brain tissue. *Australian Neuroscience Society Meeting*, Adelaide, 2013.
- Murphy, K., A. A. Cooper, et al. Decreased lysosomal autophagy rather than lysosomal degeneration associates with α-synuclein pathology in Parkinson's disease. *Alpha- synuclein in Parkinson's Disease and Related Neurodegenerative Diseases: from mechanisms to therapeutic strategies*. Dubai, UAE, 2013.
- 14. Wang G et al. Relationships between non-motor symptoms in Parkinson's disease, and their genetic and pathologic basis. *17th International Congress of Parkinson's disease and Movement Disorders*, Sydney, Australia, 2013.
- 15. Zhou, J., Y. Huang, et al. Changes in α-synuclein phosphorylation and associated kinases in Parkinson's disease. *The International Conference on α-synuclein in Parkinson's Disease & Related Neurodegenerative Diseases*, Dubai, United Arab Emirates, 2013.
- 16. Zhou, J., Y. Huang, et al. Increasing α-synuclein Ser129 phosphorylation in Parkinson's disease is associated with increasing kinase levels. *The 11th International Conference on Alzheimer's & Parkinson's Disease,* Florence, Italy, 2013.

# Journal articles

- 1. Abbott SK et al. Altered ceramide acyl chain length and ceramide synthase gene expression in Parkinson's disease. *Mov Disor*, 2014; 29(4): 518-26.
- 2. Bleasel JM et al. Lipid dysfunction and pathogenesis of multiple system atrophy. *Acta Neuropathol Commun* 2014; 2(15).
- 3. Bras J et al. Genetic analysis implicates APOE, SNCA and suggests lysosomal dysfunction in the etiology of dementia with Lewy bodies. *Human Molecular Genetics* 2014; 1;23(23):6139-46.
- 4. Chare L et al. New criteria for frontotemporal dementia syndromes: clinical and pathological diagnostic implications. *Journal of Neurology, Neurosurgery, and Psychiatry* 2014; 85(8): 865-70.
- Cheshire, P., K. Bertram, et al. Influence of single nucleotide polymorphisms in COMT, MAO-A and BDNF genes on dyskinesias and levodopa use in Parkinson's disease. *Neurodegen Dis* 2014; 13(1): 24-28.
- 6. Coupland K, et al. DNA methylation of the MAPT gene in Parkinson's disease cohorts and modulation by vitamin E in vitro. *Mov Disord* 2014; 29(13): 1606-1614.
- 7. Couttas TA et al. Loss of the neuroprotective factor Sphingosine 1-phosphate early in Alzheimer's disease pathogenesis. *Acta Neuropathol Commun* 2014;29(2): 150
- 8. Davies K et al. Copper pathology in vulnerable brain regions in Parkinson's disease. *Neurobiol Aging* 2014; 35(4): 858-866.
- 9. Don AS et al. Altered lipid levels provide evidence for myelin dysfunction in multiple system atrophy. *Acta Neuropathol Commun* 2014; 29 (2):150.
- 10. Hall H et al. Hippocampal Lewy pathology and cholinergic dysfunction are associated with dementia in Parkinson's disease. *Brain* 2014; 137(Pt 9): 2493-508.
- Halliday GM and Murphy KE. Reply: Lysosomal dysfunction in Parkinson's disease. *Brain* 2015; 138(Pt 4): e340. Kim WS et al. Alpha-synuclein biology in Lewy body diseases. *Alzheimer's Research & Therapy* 2014; 6(5): 73.
- Mills JD et al. Long intervening non-coding RNA 00320 is human brain-specific and highly expressed in the cortical white matter. *Neurogenetics* 2015;16(3): 201-13. Murphy KE et al. Reduced glucocerebrosidase is associated with increased α- synuclein in sporadic Parkinson's disease. *Brain* 2014; 137(Pt 3): 834-48.
- 13. Murphy KE and Halliday GM. Glucocerebrosidase deficits in sporadic Parkinson disease. *Autophagy* 2014; 10(7): 1350-1
- 14. Rahman T, Davies DS, et al. Cofilin rods and aggregates occur with tau pathology and the development of Alzheimer's disease. *J Alzheimers Dis* 2014; 42(4):1443-60.
- 15. Tan RH et al. Beyond the temporal pole: limbic memory circuit in the semantic variant of primary progressive aphasia. *Brain* 2014; 137(Pt 7): 2065-76.
- 16. Wong JH et al. Exploring myelin dysfunction in multiple system atrophy. *Experimental Neurobiology* 2014; 23(4): 337-44.

- 1. Double KL. Metals in neurodegenerative diseases. *Asian Biol Inorganic Chemistry*, Australia, 2014.
- 2. Double KL. Neuronal Vulnerability in Parkinson's Disease. Neurotrauma Australia, 2014.
- 3. Hancock SE et al. The changes seen in human hippocampus phospholipids during Alzheimer's disease are not a magnification of those seen in normal ageing. *Australian Society for Medical Research, Australia*, 2014.
- 4. Tan R. TDP-43 in the hypoglossal nucleus identifies amyotrophic lateral sclerosis in behavioural variant frontotemporal dementia. *Inter-University Neuroscience & Mental Health Conference*, Sydney, 2014.

Virachit S, Werry E, et al. Growth factors are altered in neurogenic regions of the Parkinson's disease brain. *Dementia, Ageing and Neurodegenerative Diseases Group*, Adelaide, 2014.

- 5. Virachit S, Werry E et al. Growth factors are altered in neurogenic regions of the Parkinson's disease brain. *Dementia, Ageing and Neurodegenerative Diseases Group,* Adelaide, Australia, 2014.
- 6. Wang G, Huang Y, et al. Relationships between non-motor symptoms in Parkinson's disease, and their genetic and pathological basis. *17th International Congress of Parkinson's Disease and Movement Disorders,* Sydney, 2014.

- 1. Chare L et al. New criteria for frontotemporal dementia syndromes impact most on language variants. *Society for Neuroscience*, USA, 2014.
- 2. Chare L et al. Survival in the language variants of FTD. *International Conference on Frontotemporal Dementias,* Canada, 2014.
- 3. Couttas TA et al. Breakdown of Myelin Lipids as a Precursor to Alzheimer's Disease Pathogenesis. *Alzheimer's and Parkinson's Disease Symposium,* UNSW, Sydney, 2014.
- 4. Fatima M et al. Spreading of pathology in motor neuron disease. *Inter-University Neuroscience & Mental Health Conference*, Sydney, 2014.
- 5. Gabery S et al. Gene expression changes in emotion and metabolism regulating neuropeptide systems in the hypothalamus in clinical Huntington's disease. *Hereditary disease foundation HD2014: The Milton Wexler Celebration of Life*, USA, 2014.
- 6. Gabery S et al. Gene expression changes in emotion and metabolism regulating neuropeptide systems in the hypothalamus in clinical Huntington's disease. *8th European Huntington's Disease Network Plenary Meeting*, Spain, 2014.
- 7. Marshall L et al. Understanding the Cause and Progression of Sporadic Alzheimer's Disease. *Alzheimer's and Parkinson's Disease Symposium*, UNSW Sydney, 2014.
- 8. Norris et al. Phosphatidylcholines are elevated in the mitochondrial and microsomal membranes of the human hippocampus in Alzheimer's disease, while phosphatidylethanolamines are reduced. *APD/CADD Symposium*, Australia, 2014.
- 9. Steel A et al. The PI3K/Akt Pathway is not involved in early Alzheimer's disease. *Alzheimer's and Parkinson's Disease (A&PD) Symposium*, Australia, 2014.
- 10. Virachit, S., E. Werry, et al. Growth factors are altered in neurogenic regions of the Parkinson's disease brain. *Australian Neuroscience Society Conference*. Adelaide, 2014.
- 11. Virachit, S., E. Werry, et al. Growth factors are altered in neurogenic regions of the Parkinson's disease brain. *XX World Congress on Parkinson's Disease and Related Disorders*. Geneva, Switzerland, 2014.
- 12. Virachit, S., E. Werry, et al. Levels of growth factors are altered in the hippocampus of the Parkinson's disease brain. *Brain Sciences Symposium*, University of New South Wales, 2014.
- 13. Virchaldt S. Levels of growth factors are altered in the hippocampus in Parkinson's disease. 18th *International Congress of Parkinson's Disease and Movement Disorders*, Sweden, 2014.
- 14. Yang, Y., C. Shepherd, et al. Hippocampal glia are affected more than neurons in the very elderly without significant neuropathologies, 2014
- 15. Yang Y et al. Hyperploidy is associated with hippocampal cell loss and not just Alzheimer's disease pathology. *8th A+PD / 3rd CADD symposium*, Australia, 2014.
- 16. Yang Y et al. Aneuploidy is increased in Lewy body diseases. *Inter-University Neuroscience and Mental Health Conference*, Australia, 2014. Yousef P. The early pathogenesis of Alzheimer's Disease is characterised by oxidative stress and increased Heme oxygenase-1 activity. *22nd Meeting of the Society for Free Radical Research (Australasia*), Australia, 2014.
- 17. Yousef P & Witting P. The early pathogenesis of Alzheimer's Disease is characterised by oxidative stress and increased Heme oxygenase-1 activity. *8th International Conference on Heme Oxygenases, BioIron and Oxidative Stress*, Australia, 2014.

#### **Journal articles**

- 1. Abbott SK et al. Fatty acid composition of the anterior cingulate cortex indicates a high susceptibility to lipid peroxidation in Parkinson's disease. *Journal of Parkinson's disease* 2015; 5(1): 175-85.
- 2. Coupland KG et al. Effect of PSEN1 mutations on MAPT methylation in early-onset Alzheimer's disease. *Curr Alzheimer Res* 2015; 12(8):745-51.
- 3. Fatima M et al. Spread of pathology in amyotrophic lateral sclerosis: assessment of phosphorylated TDP-43 along axonal pathways. *Acta Neuropathol Commun* 2015; 3(1), 47.
- 4. Gabery S et al. Selective loss of oxytocin and vasopressin in the hypothalamus in early Huntington disease: a case study. *Neuropathology and Applied Neurobiology* 2015; 41(6): 843-8.
- 5. Huang Y et al. SNCA Gene, but Not MAPT, Influences Onset Age of Parkinson's Disease in Chinese and Australians. *Biomed Res Int.* 2015; 2015:135674.
- 6. Leshchyns'ka I et al. Aβ-dependent reduction of NCAM2-mediated synaptic adhesion contributes to synapse loss in Alzheimer's disease. *Nat Commun* 2015; 6:8836. McCann H et al. Unusual α-synuclein and cerebellar pathologies in a case of hereditary myoclonus-dystonia without SGCE mutation. *Neuropathology and Applied Neurobiology* 2015; 41(6):837-42.
- 7. Lourenco GF et al. Long noncoding RNAs in TDP-43 and FUS/TLS-related frontotemporal lobar degeneration (FTLD). *Neurobiol Dis* 2015; 82:445-54.
- 8. McCann H et al. Restricted disease propagation in multiple system atrophy with prolonged survival. *Neuropathology and Applied Neurobiology* 2015;41(5):681-5.
- 9. McCann H et al. Unusual  $\alpha$ -synuclein and cerebellar pathologies in a case of hereditary myoclonusdystonia without SGCE mutation. *Neuropathology and Applied Neurobiology* 2015; 41(6):837-42.
- 10. Mills JD et al. High expression of long intervening non-coding RNA OLMALINC in the human cortical white matter is associated with regulation of oligodendrocyte maturation. *Molecular Brain* 2015;10 (8): 2.
- 11. Mills JD et al. Transcriptome analysis of grey and white matter cortical tissue in multiple system atrophy. *Neurogenetics* 2015;16(2): 107-22.
- 12. Murphy KE et al. Lysosomal-associated membrane protein 2 isoforms are differentially affected in early Parkinson's disease. *Mov Disord* 2015; 30(12): 1639-47.
- 13. Riley BE et al. Systems-based analyses of brain regions functionally impacted in Parkinson's disease reveals underlying causal mechanisms. *PLoS One* 2015; 29;9(8).
- 14. Tan RH et al. TDP-43 proteinopathies: pathological identification of brain regions differentiating clinical phenotypes. *Brain* 2015; Oct;138(Pt 10):3110-22.
- 15. van Eersel J et al. Early-onset axonal pathology in a novel P301S-Tau transgenic mouse model of frontotemporal lobar degeneration. *Neuropathology and Applied Neurobiology* 2015; 41(7): 906-25.
- 16. Yue Yang et al. Aneuploidy in Lewy body diseases. *Neurobiol Ageing* 2015; 36(3): 1253-60.

- 1. Don A. Defective myelin lipid biosynthesis in pre-clinical Alzheimer's Disease identified through LCxMS/MS analysis. *Virtual Symposium on Applied Separation Sciences*, online, 2015.
- 2. Dzamko N. Leucine-rich repeat kinase 2 and toll-like receptor inflammatory signalling. *International Neurochemistry Society Meeting*, Cairns, 2015.
- 3. Ling H et al. Neuropathological diagnostic accuracy of corticobasal degeneration: A review of 140 cases. *Annual meeting of the British Neuropathology Society*, London, 2015.
- 4. Sytnyk V. The role of the neural cell adhesion molecules in formation and maintenance of excitatory synapses. *4th CADD symposium*, UNSW, Sydney, 2015.

- 5. Trist BG et al. A novel proteinaceous aggregate associated with neuronal loss in Parkinson's disease. Dementia, Ageing and Neurodegenerative Diseases Groups (DANDIS) to the 25th ISN-APSN Joint Biennial Meeting, Australia, 2015.
- 6. Wellings T et al. Deiters' neurons the elephant in the vestibular system. *Neuro-Otology Society of Australia ASM*, Melbourne, 2015.

- 1. Couttas T et al. Loss of ceramide synthase 2, an essential enzyme for myelin lipid biosynthesis, drives myelin degeneration in Alzheimer's Disease. *International Society for Neurochemistry*, Cairns, 2015.
- 2. Davies D et al. Cofilin-actin aggregates and microglial cell morphology changes in Alzheimer's Disease. *Sydney Glia Meeting*, Manly, 2015.
- 3. Double, K. Reduced subventricular zone neurogenesis in Parkinson's disease is associated with increased phosphorylated alpha-synuclein. *25th ISN Meeting, 13th APSN & 35th ANS Meeting,* Cairns, 2015.
- 4. Fatima, M., & Kril, J. Spread of pathology in motor neuron disease: assessment of pTDP-43 along axonal pathways. *25th ISN Meeting, 13th APSN & 35th ANS Meeting,* Cairns, 2015.
- 5. Fernandez-Enright, F. Gene profiling in different stages of Alzheimer's disease: a genome-wide study. *25th ISN Meeting, 13th APSN & 35th ANS Meeting,* Cairns, 2015.
- 6. Hancock SE et al. Phosphatidylcholines are elevated in the mitochondrial and microsomal membranes of the human hippocampus in Alzheimer's disease, while phosphatidylethanolamines are reduced. *Australian and New Zealand Society for Mass Spectrometry Conference Australia*, 2015.
- Huang Y et al. Reduction of ROCK1 in human brain with Alzheimer's disease. *International Society of Neurochemistry meeting*, Cairns, 2015. Lim, J., & Sutherland, G. T. The PI3K/Akt/GSK3beta pathway is not involved in early Alzheimer's disease. *25th ISN Meeting*, *13th APSN & 35th ANS Meeting*, Cairns, 2015.
- 8. Ling H et al. Neuropathological diagnostic accuracy of corticobasal degeneration: A review of 140 cases. *International Movement Disorders Society Congress*, San Diego, 2015.
- 9. Lourenco GF et al. Disruption of nuclear structure in TDP-43-related frontotemporal lobar degeneration (FTLD) with and without c9orf72 repeat expansion. *Asia Pacific FTD and MND Meeting*, Sydney, 2015.
- 10. Michael J et al. Characterisation of glial and neuronal pathology in non- Alzheimer's Disease tauopathies. *Inter-University Neuroscience & Mental Health Conference*, Sydney, 2015.
- 11. Trist BG et al. A novel proteinaceous aggregate associated with neuronal loss in Parkinson's disease. *25th ISN-APSN Joint Biennial Meeting*, Australia, 2015.
- 12. Yang Y et al. Cell number and DNA content are not affected in normal ageing a liquid stereological study. *Universitas 21 Graduate Research Conference Celebrating Ageing Research*, New Zealand, 2015.
- 13. Youssef P et al. Increased HO-1 activity with no evidence of oxidative stress in the early pathogenesis of Alzheimer's disease. *Societies for Free Radical Research Australasia and Japan (SFRRAJ),* Christchurch, New Zealand, 2015.

#### **Journal articles**

- 1. Chami B et al. The rise and fall of insulin signalling in Alzheimer's disease. *Metab Brain Dis* 2016; 31(3):497-515.
- 2. Coupland KG et al. Role of the Long Non-Coding RNA MAPT-AS1 in Regulation of Microtubule Associated Protein Tau (MAPT) Expression in Parkinson's Disease. *PLoS One.* 2016; 23:11(6):e0157924.
- 3. Davies KM et al. Copper dyshomoeostasis in Parkinson's disease: implications for pathogenesis and indications for novel therapeutics. *Clin Sci (Lond)* 2016; 130(8):565-74.
- 4. Ittner A et al. Site-specific phosphorylation of tau inhibits amyloid-β toxicity in Alzheimer's mice. *Science.* 2016; 18;354(6314):904-908.
- 5. Jayasena T et al. Application of Targeted Mass Spectrometry for the Quantification of Sirtuins in the Central Nervous System. *Sci Rep.* 2016; 20;6:35391.
- 6. Landeck N et al. A novel multiplex assay for simultaneous quantification of total and S129 phosphorylated human alpha-synuclein. *Mol Neurodegener*. 2016;11(1):61.
- 7. Leyton CE et al. Distinctive pathological mechanisms involved in primary progressive aphasias. *Neurobiol Aging* 2016; 38:82-92.
- 8. Tan RH et al. Cerebellar neuronal loss in ALS cases with ATXN2 intermediate repeat expansions. *Annals of Neurology* 2016; 79(2): 295-305.
- 9. Wang G et al. Variants in the SNCA gene associate with motor progression while variants in the MAPT gene associate with the severity of Parkinson's disease. *Parkinsonism Relat Disord* 2016; 24:89-94.
- 10. Xu CJ et al. The Emerging Therapeutic Role of NGF in Alzheimer's Disease. *Neurochem Res.* 2016;41(6):1211-8.

- 1. Dzamko N et al. A comprehensive analysis of LRRK2 expression in human PD brain. *Leucine Rich Repeat Kinase 2: Ten Years Along the Road to Therapeutic Intervention*, Greenlands, UK, 2016.
- 2. Cooper A. Investigating the contributions of alternative splicing and long non-coding RNA in Parkinson's Disease. *Linking genomics and neurobiology to understand the brain and its diseases*, Garvan Institute, Sydney, Australia, 2016.
- 3. Halliday G et al. Dysfunctional lysosomes occur prior to any degenerative changes in the brains of patients with Parkinson's disease. *Annual Conference of the Japanese Neuroscience Society*, Yokohama, Japan, 2016.
- 4. Lim J et al. Perturbations in Insulin/IGF1 Signalling in Alzheimer's disease (AD) and its contribution to AD Pathogenesis. *Australasian Neuroscience Society Annual Meeting*, Hobart, Australia, 2016.
- 5. Ling H et al. Hierarchical pathological progression of corticobasal degeneration. *British Neuropathological Society*, 2016.
- 1. Wellings T et al. A novel neuropathology involving Deiters' neurons of the lateral vestibular nucleus in Parkinson's disease with postural instability. *Neuro-otology Society of Australia*, Newcastle, Australia, 2016.
- 2. Youssef P et al. Increased levels of nrf-2/ ho-1 in the early pathogenesis of Alzheimer's disease. 23rd Joint meeting of the Society for Redox Biology and Medicine and Society for Free Radical Research International, San Francisco, CA, USA, 2016.

- 1. Fatima M et al. Imaging-pathology correlates in the corticospinal tract in motor neuron disease. *Australian Society for Medical Research Annual Meeting*, Sydney, 2016.
- 2. Gao J et al. Activation of toll-like receptor 2 increases alpha-synuclein levels in neuronal cells. *Australasian Neuroscience Society Annual Meeting*, Hobart, Australia, 2016.
- 3. Genoud S et al. Metallation alterations of superoxide dismutase 1 and metallothionein-II in the Parkinson's disease brain. *Australian Biology of Aging*, Coogee, Australia, 2016.
- 4. Genoud S et al. Metallation alterations of superoxide dismutase 1 and metallothionein-ii in the Parkinson's disease brain. *Australasian Neuroscience Society Annual Meeting*, Hobart, Australia, 2016.
- 5. Tan R et al. Prevalence of Amyloid pathology and PiB positivity in frontotemporal dementia. *ICFTD*, Munich, Germany, 2016.
- 6. Trist BG et al. A novel vulnerability specific pathology in the Parkinson's brain provides support for coinciding neuropathological paradigms. *Australian Biology of Aging*, Coogee, Australia, 2016.
- 7. Trist BG et al. A pathological link between Parkinson's disease and Amyotrophic Lateral Sclerosis? 20th International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany, 2016.
- 8. Trist BG et al. Superoxide dismutase-1; a potential mediator of neuronal degeneration under copperdeficient conditions in the Parkinson's disease brain? *Australasian Neuroscience Society Annual Meeting*, Hobart, Australia, 2016.

#### Journal articles

- 1. Davies DS et al. Microglia show altered morphology and reduced arborization in human brain during aging and Alzheimer's disease. *Brain Pathol.* 2017; 27(6):795-808.
- 2. Dzamko N et al. Toll-like receptor 2 is increased in neurons in Parkinson's disease brain and may contribute to alpha-synuclein pathology. *Acta Neuropathol.* 2017:133(2):303-319.
- 3. Dzamko N et al. LRRK2 levels and phosphorylation in Parkinson's disease brain and cases with restricted Lewy bodies. *Mov Disord*. 2017;32(3):423-432.
- 4. Genoud S et al. Subcellular compartmentalisation of copper, iron, manganese, and zinc in the Parkinson's disease brain. *Metallomics* 2017; 9(10):1447-1455.
- 5. Kovacs GG et al. Multisite Assessment of Aging-Related Tau Astrogliopathy (ARTAG). *J Neuropathol Exp Neurol* 2017; Jul 1;76(7):605-619.
- 6. Kun-Rodrigues C et al. Analysis of C9orf72 repeat expansions in a large international cohort of dementia with Lewy bodies. *Neurobiol Aging* 2017; Jan; 49: 214.e13–214.e15.
- 7. Sutherland GT et al. Epidemiological Approaches to Understanding the Link Between Type 2 Diabetes and Dementia. *J Alzheimers Dis.* 2017; 59(2):393-403.
- 8. Tan RH et al. Assessment of amyloid β in pathologically confirmed frontotemporal dementia syndromes. *Alzheimers Dement (Amst)* 2017; May 29;9:10-20.
- 9. Tan RH et al. Distinct TDP-43 inclusion morphologies in frontotemporal lobar degeneration with and without amyotrophic lateral sclerosis. *Acta Neuropathol Commun* 2017; Oct 27;5(1):76.
- 10. Tan RH et al. Multiple neuronal pathologies are common in young patients with pathologically proven frontotemporal lobar degeneration. *Neuropathol Appl Neurobiol* 2017; [Epub ahead of print].
- 11. Trist BG et al. Amyotrophic lateral sclerosis-like superoxide dismutase 1 proteinopathy is associated with neuronal loss in Parkinson's disease brain. *Acta Neuropathol* 2017; 134(1): 113-127.
- 12. Wellings TP et al. Altered neurofilament protein expression in the lateral vestibular nucleus in Parkinson's disease. *Exp Brain Res* 2017; 235(12): 3695-3708.
- 13. Yang Y et al. Increased an euploidy is not a universal feature across  $\alpha$ -synucleinopathies. *Mov Disord.* 2017; 32(3):475-476.
- 14. Yang Y et al. 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.

- 1. Cooper A. Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 2. Cooper A. Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. *Queenstown Research Week*, New Zealand, 2017.
- 3. Cooper A. Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. *Grand Rapids Challenge*, Grand Rapids, USA, 2017.
- 4. Cooper A. Neurogenomic analyses of multiple brain regions from idiopathic Parkinson's disease patients reveals insights into neuroinflammation. *Parkinsons Disease Conference*, Cairns, 2017.
- 5. Genoud S et al. 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, 2017.
- 6. Genoud S et al. Biometal dyshomeostasis and metalloprotein disruptions in the soluble fraction of the Parkinson's disease brain. *Bosch Young Investigators Symposium*, University of Sydney, Australia, 2017.

- 7. Stevens CH et al. Increased tau phosphorylation in amyotrophic lateral sclerosis. *Proteostasis and disease symposium*, Wollongong, Australia, 2017.
- 8. Stevens CH et al. Increased phosphorylated and insoluble tau in motor neuron disease. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 9. Sytnyk V. Disruption in synaptic adhesion in Alzheimer's disease. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 10. Tan RH et al. 11c-Pittsburgh Compound B and pathological assessment of β-amyloid in frontotemporal dementia syndromes, *SFN*, Washington, USA, 2017.
- 11. Trist BG et al. Copper dyshomeostasis and oxidative stress in Parkinson's disease. *Forefront Research Group Meeting*, Sydney, Australia, 2017.
- 12. Trist et al. Metal-deficient superoxide dismutase 1 associated with neurodegeneration in Parkinson's disease. *Bosch Young Investigator's Symposium*, Sydney, 2017.
- 13. Trist et al. 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, 2017.

- 1. Affleck A et al. Increases in clusterin protein levels occur in the earliest stages of Alzheimer's disease and are associated with pathological changes in tau and Aβ. *Brain Sciences UNSW*, Sydney, Australia, 2017.
- 2. Couttas T et al. Ceramides, associated with insulin resistance, increase with age in the human hippocampus. *Australian Dementia Forum*, Melbourne, 2017.
- 3. Duly A et al. 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, 2017.
- 4. Genoud S et al. Alterations in biometals and metalloproteins in the soluble fraction of the Parkinson's disease brain. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 5. Katzeff J et al. Expression studies of top 10 GWAS genes in multiple system atrophy brain. *Brain and Mind Centre Symposium*, Sydney, 2017.
- 6. Lack AT et al. Cytotoxic t cells are significantly increased in subtypes of frontotemporal lobar degeneration. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 7. Lourenco G et al. 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, 2017.
- 8. Paasila P et al. Spatiotemporal relationships between pathological changes and microglial subtypes in differentially affected areas of the Alzheimer's disease brain. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 9. Poljak A et al. Proteomics of the Alzheimer's disease brain: neuropathology and neuroresilience. *AAIC2017*, London, UK, 2017.
- 10. Smith C. Differential Lipid Histopathology in Alzheimer's Disease. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 11. Trist BG et al. Lessons learnt from SOD1 dysfunction in Parkinson's disease and familial amyotrophic lateral sclerosis. *Australasian Neuroscience Society Meeting*, Sydney, 2017.
- 12. Trist BG et al. Novel superoxide dismutase-1 proteinopathy is associated with Lewy pathology and neuronal loss in Parkinson's disease. *Joint Meeting of the International Society for Neurochemistry and European Society for Neurochemistry*, Paris, 2017.
- 13. Zhao Y et al. 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, 2017.

14. Crockford DR et al. Characterising astrocytes in neurologically normal control brain tissue, 37th Annual Meeting of the *Australasian Neuroscience Society*, Sydney, 2017.

# Journal articles

- 1. Baldo B et al. Quantification of Total and Mutant Huntingtin Protein Levels in Biospecimens Using a Novel alphaLISA Assay. *eNeuro* 2018;5(4):ENEURO.0234-18.2018.
- 2. Forrest SL et al. Retiring the term FTDP-17 as MAPT mutations are genetic forms of sporadic frontotemporal tauopathies. *Brain* 2018; 141(2): 521-534.
- 3. Foxe D et al. Intrafamilial Phenotypic Variability in the C9orf72 Gene Expansion: 2 Case Studies. *Front Psychol* 2018 Sep 3;9:1615.
- 4. Guerreiro R et al. Investigating the genetic architecture of dementia with Lewy bodies: a two-stage genome-wide association study. *Lancet Neurol* 2018; Jan;17(1):64-74.
- 5. Lumsden AL et al. Dysregulation of Neuronal Iron Homeostasis as an Alternative Unifying Effect of Mutations Causing Familial Alzheimer's Disease. *Front Neurosci* 2018;12:533.
- 6. O'Rourke MB et al. Optimal Preparation of Formalin Fixed Samples for Peptide Based Matrix Assisted Laser Desorption/Ionization Mass Spectrometry Imaging Workflows. *J Vis Exp.* 2018;16;(131).
- 7. Parakh S et al. ERp57 is protective against mutant SOD1-induced cellular pathology in amyotrophic lateral sclerosis. *Hum Mol Genet* 2018; 27(8): 1311-1331.
- 8. Schwartz RS et al. Impact of small vessel disease on severity of motor and cognitive impairment in Parkinson's disease. *J Clin Neurosci* 2018; 58:70–74.
- 9. Shepherd CE et al. Region- and Cell-specific Aneuploidy in Brain Aging and Neurodegeneration. *Neuroscience* 2018; 374326-334.
- 10. Shen LL et al. The ProNGF/p75NTR pathway induces tau pathology and is a therapeutic target for FTLD-tau. *Mol Psychiatry* 2018;23(8):1813–1824.
- 11. Trist BG et al. Accumulation of dysfunctional SOD1 protein in Parkinson's disease is not associated with mutations in the SOD1 gene. *Acta Neuropathol* 2018; Jan;135(1):155-156.
- 12. Trist BG et al. A Proposed Mechanism for Neurodegeneration in Movement Disorders Characterized by Metal Dyshomeostasis and Oxidative Stress. *Cell Chem Biol* 2018; 25 (7), 807-816.
- 13. Woerman AL et al. MSA prions exhibit remarkable stability and resistance to inactivation. *Acta Neuropathol* 2018 Jan;135(1):49-63.
- 14. Youssef P et al. Evidence supporting oxidative stress in a moderately affected area of the brain in Alzheimer's disease. *Sci Rep* 2018; 8(1): 11553.
- 15. Zhao Y et al. Reduced LRRK2 in association with retromer dysfunction in post-mortem brain tissue from LRRK2 mutation carriers. *Brain* 2018; 141(2): 486-495.

- 1. Cooper A. Early diagnosis and slowing disease progression in Parkinson's Disease. *Parkinson's ACT*, Canberra, 2018.
- 2. Cooper A. Australian Parkinson's Mission. *Linked Clinical Trials and Grand Challenges in Parkinsons Disease*. Van Andel Research Institute, Grand Rapids, Michigan, 2018.
- 3. Gabery S. Effects on SIRT1 and hypothalamic metabolic pathways in Huntington disease. *Nordic Huntington Disease Research Meeting*, Lund University, Sweden, 2018.
- 4. Kirik D. Investigating Imaging and Wet Biomarker Outcomes in Synucleinopathy Animal Models. *MultiSyn Final Meeting*, Tübingen, Germany, 2018.
- 5. Ling H. Rapidly progressive corticobasal degeneration: an aggressive variant. *119th Meeting of the British Neuropathological Society*, London, 2018.
- 6. Tan R et al. Distinct TDP-43 inclusion morphologies in FTLD and FTLD-ALS. *International symposium on ALS/MND*, Glasgow, 2018.
- 7. Trist B. Identification of a shared pathway to neuronal death in post-mortem Parkinson's disease and amyotrophic lateral sclerosis. *Australasian Neuroscience Society*, Brisbane, 2018.

- 1. Bhatia S et al. Differential expression of apolipoprotein D in Alzheimer's disease and frontotemporal dementia brain. *NNIDR Australian Dementia Forum*, Sydney, 2018.
- 2. Forrest SL et al. Unravelling astrocytic pathology in frontotemporal lobar degeneration. *International Conference on Frontotemporal Dementias,* Sydney, 2018.
- 3. Gabery S et al. Sirt1 is increased in affected brain regions in Huntington disease impacting hypothalamic metabolic pathways. *European Huntington Disease Network (EHDN) Plenary Meeting*, Vienna, Austria, 2018.
- 4. Genoud S et al. Soluble Iron and copper dyshomeostasis affect metalloprotein metallation in the Parkinson's disease brain. *International Neuroscience Winter Conference*, Solden, Austria, 2018.
- 5. Grima N et al. Genetic and immunopathological analysis of CHCHD10 in Australian amyotrophic lateral sclerosis and frontotemporal dementia, *MNDRIA Annual Meeting*, Melbourne, 2018.
- 6. Grima N et al. Analysis of genetic variation and pathology of CHCHD10 in cases of Australian amyotrophic lateral sclerosis and frontotemporal dementia. *Macquarie Neurodegeneration Meeting*, Macquarie University, 2018.
- 7. Paasila P et al. Microglial subtypes in differentially affected areas of the Alzheimer's disease brain. *Australian Dementia Forum*, Sydney, 2018.
- 8. Shepherd C et al. Tau pathology is associated with reduced neuronal expression of the senescence marker P16INK4a. *Australian Dementia Forum*, Sydney, 2018.
- 9. Shepherd C et al. Tau pathology is associated with reduced neuronal expression of the senescence marker P16INK4a. Australian Society for Medical Research, Sydney, 2018.
- 10. Tan RH et al. Distinct TDP-43 inclusions suggest divergent pathomechanisms in FTLD and FTLD-ALS. *Fight MND*, Melbourne, 2018.

#### Journals

- 1. Agarwal S et al. Predictors of survival and progression in behavioural variant frontotemporal dementia. *Eur. J. Neurol.* 2019; 26(5): 774-779.
- 2. Aoyagi A et al. Aβ and tau prion-like activities decline with longevity in the Alzheimer's disease human brain. *Sci Transl Med* 2019;11(490).
- 3. Baldo B et al. SIRT1 Is Increased in Affected Brain Regions and Hypothalamic Metabolic Pathways Are Altered in Huntington Disease. *Neuropath Appl Neurobiol* 2019; 45 (4), 361-379.
- 4. Bhatia S et al. Apolipoprotein D Upregulation in Alzheimer's Disease but Not Frontotemporal Dementia. *J Mol Neurosci* 2019; 67 (1), 125-132.
- 5. Forrest SL et al. Heritability in frontotemporal tauopathies. *Alzheimers Dement (Amst)* 2019; 11:115–124.
- 6. Forrest SL et al. Coexisting Lewy body disease and clinical parkinsonism in frontotemporal lobar degeneration. *Neurology* 2019;92(21):e2472–e2482.
- 7. Forrest SL et al. Cellular and regional vulnerability in frontotemporal tauopathies. *Acta Neuropathol*. 2019;138(5): 705-727.
- 8. Guerreiro R et al. Heritability and genetic variance of dementia with Lewy bodies. *Neurobiol Dis* 2019;127:492–501.
- 9. Hsiao JT et al. Reductions in COQ2 Expression Relate to Reduced ATP Levels in Multiple System Atrophy Brain. *Front Neurosci* 2019;13:1187.
- 10. Karch CM et al. Tau Consortium Stem Cell Group. A Comprehensive Resource for Induced Pluripotent Stem Cells from Patients with Primary Tauopathies. *Stem Cell Reports* 2019 Nov 12;13(5):939-955.
- 11. Kun-Rodrigues C et al. A comprehensive screening of copy number variability in dementia with Lewybodies. *Neurobiol Aging* 2019;75:223.e1–223.e10.
- 12. Lee JS et al. Arylsulfatase A, a genetic modifier of Parkinson's disease, is an  $\alpha$ -synuclein chaperone. Brain 2019;142(9): 2845-2859.
- 13. O'Rourke MB et al. Higher Mass Accuracy MALDI-TOF/TOF Lipid Imaging of Human Brain Tissue in Alzheimer's Disease. *Curr Protoc Mol Biol* 2019; 126(1): e86.
- 14. Paasila PJ et al. The relationship between the morphological subtypes of microglia and Alzheimer's disease neuropathology. *Brain Pathol* 2019;29(6):726–740.
- 15. Pottier C et al. Genome-wide analyses as part of the international FTLD-TDP whole-genome sequencing consortium reveals novel disease risk factors and increases support for immune dysfunction in FTLD. *Acta Neuropathol* 2019;137(6):879-899.
- 16. Shehadeh J et al. Expression of tyrosine hydroxylase isoforms and phosphorylation at serine 40 in the human nigrostriatal system in Parkinson's disease. *Neurobiol Dis* 2019;130:104524.
- 17. Shepherd CE et al. Brain Banking for Research into Neurodegenerative Disorders and Ageing. *Neurosci Bull* 2019;35(2):283–288.
- 18. Stevens CH et al. Increased Tau Phosphorylation in Motor Neurons From Clinically Pure Sporadic Amyotrophic Lateral Sclerosis Patients. *J Neuropathol Exp Neurol* 2019;78(7):605–614.
- 19. Strohäker T et al. Structural heterogeneity of  $\alpha$ -synuclein fibrils amplified from patient brain extracts. *Nat Commun* 2019;10(1):5535.
- 20. Tan RH et al. The underacknowledged PPA-ALS: A unique clinicopathologic subtype with strong heritability. *Neurology* 2019;92(12):e1354–e1366.
- 21. Tan RH et al. Von Economo Neurons in Behavioral Variant Frontotemporal Dementia with UnderlyingAlzheimer's Disease. *J Alzheimers Dis* 2019;69(4):963–967.
- 22. Trist BG et al. Oxidative stress in the aging substantia nigra and the etiology of Parkinson's disease. *Aging Cell* 2019;18(6): e13031.

- 23. Virachit S et al. Levels of glial cell line-derived neurotrophic factor are decreased, but fibroblast growth factor 2 and cerebral dopamine neurotrophic factor are increased in the hippocampus in Parkinson's disease. *Brain Pathol* 2019;29(6):813–825.
- 24. Woerman AL et al. Multiple system atrophy prions retain strain specificity after serial propagation in two different Tg(SNCA\*A53T) mouse lines. *Acta Neuropathol* 2019;137(3):437–454.
- 25. Yang Y et al. TDP-43 levels in the brain tissue of ALS cases with and without C9ORF72 or ATXN2 gene expansions. *Neurology* 2019;93(19):e1748–e1755.

## **Oral presentations**

- 1. Ooi L. Networks in differentiation identifies selective vulnerability of pluripotent stem cells and motor neurons to ubiquitin proteasome system stress. *Cold Spring Harbour Laboratory Network Biology Conference*, New York USA, 2019.
- 2. Ooi L. Pluripotent stem cells in neurogenerative disease. *Gage Conference*, Canberra Boys Grammar School, ACT, 2019.
- 3. Ooi L. Hyperexcitability during normal aging and amyotrophic lateral sclerosis is governed by changes in M-current and H-current. *International Kv7 Channels Symposium*, Naples, Italy, 2019.
- 4. Oyston L et al. MCMBP is a new PD gene. *Cold Spring Harbor Laboratory Network Biology Conference*, New York USA, 2019.
- 5. Purushothuman S et al. Lysosomal and autophagosome-protein changes in late-stage pathologicallyconfirmed human post-mortem brains cohorts with Alzheimer's disease compared with Lewy body disease and mixed-type disease pathology: Evidence from two distinct brain regions. *Australian Dementia Forum*, Tasmania, 2019.
- 6. Sytnyk V. The role of neuronal growth regulator 1 in dopamine mishandling in Parkinson's disease. *Australian Neuroscience Society Imaging Workshop*, Adelaide, 2019.
- 7. Sytnyk V. The role of neuronal growth regulator 1 in dopamine mishandling in Parkinson's disease. *UNSW Dopamine Symposium*, Sydney, 2019.

- 1. Affleck AJ et al. Heterogeneous anti-hypertensive medication usage is associated with Alzheimer disease neuropathologic scores. *11th ForeFront Scientific Meeting*, The University of Sydney, 2019.
- 2. Beauchamp LC et al. Perturbations of the dopaminergic pathway in the olfactory bulb may contribute to prodromal Parkinson's disease-related hyposmia. *Society for Neuroscience*, Chicago, USA, 2019.
- 3. Bok E et al. Small leucine-rich repeat proteoglycan: A novel pathogen candidate for Parkinson's disease. *Society for Neuroscience,* Chicago, USA, 2019.
- 4. Forrest SL et al. Unravelling astrocytic pathology in frontotemporal lobar degeneration. *Light Microscopy Australia*, Brisbane, 2019.
- 5. Huynh B et al. Dementia in Parkinson's disease is associated with more severe locus coeruleus pathology. *11th ForeFront Scientific meeting*, The University of Sydney, 2019.
- Huynh B et al. Parkinson's disease with dementia is associated with more severe locus coeruleus pathology compared to those without dementia. *FENS regional meeting* (FRM2019), Belgrade, Serbia, 2019.
- 7. Lack A et al. Cytokine expression in presenilin 1 Alzheimer's disease. *World Congress of Inflammation*, Sydney, 2019.
- 8. Lack A et al. Cytokine expression in presenilin 1 Alzheimer's disease. *Alzheimer's Association International Conference*, Sydney, 2019.
- 9. Lee M et al. The role of Biglycan as an endogenous pathogen in Parkinson's disease. *The 6th annual Glia conference 2019 of the Korean Society for Brain and Neural Science*, Seoul, Korea, 2019.
- 10. Leshchyns'ka I et al. NEGR1 and dopamine mishandling in Parkinson's disease. *11th ForeFront Scientific Meeting*, Sydney, 2019.

- 11. Leshchyn'ska I et al. The neural cell adhesion molecule L1 is overexpressed in the motor cortex of individuals with motor neuron disease. *11th ForeFront Scientific Meeting*, Sydney, 2019.
- 12. McCann EP et al. Genetic and immunopathological analysis of CHCHD10 in Australian amyotrophic lateral sclerosis and frontotemporal dementia and transgenic TDP-43 mice. *30th International Symposium on ALS/MND*, Perth, 2019.
- 13. Mazumder S et al. Cellular Changes in the Substantia Nigra and Subthalamic Nucleus during Parkinson Disease pathology and Deep Brain Stimulation Treatment. *Australian Society for Medical Research NSW*, Sydney, 2019.
- 14. Mazumder S et al. Cellular Changes in the Substantia Nigra and Subthalamic Nucleus during Parkinson Disease pathology and Deep Brain Stimulation Treatment. *Australian Neuroscience Society*, Adelaide, 2019.
- 15. Mohan A. Differential expression of synaptic, neuroinflammatory and neurotransmission-related genes a microarray study of regional differences in the ageing human brain. *Alzheimer's Association International Conference*, Los Angeles, USA, 2019.
- 16. Paasila P et al. Microglial activation in the motor cortex of Alzheimer's disease cases and inferior temporal cortex of non-demented individuals with high Alzheimer's-type pathology. *Alzheimer's Association International Conference*, Sydney, 2019.
- 17. Shepherd C et al. Disease and mutation-specific increases in T lymphocytes in FTLD-tau. *NHMRC National Institute for Dementia Research*, Tasmania, 2019.
- 18. Wen L et al. Nix mediated mitophagy: a new therapeutic approach to Parkinson's disease. *11th ForeFront Scientific Meeting*, The University of Sydney, 2019.

#### Journals

- 1. Amadoru S et al. Comparison of amyloid PET measured in Centiloid units with neuropathological findings in Alzheimer's disease. *Alzheimers Res Ther* 2020; Mar 4;12(1):22.
- 2. Dobson-Stone C et al. CYLD is a causative gene for frontotemporal dementia amyotrophic lateral sclerosis. *Brain* 2020; Mar 1;143(3):783-799.
- 3. Forrest SL et al. Are mutations in MAPT associated with GGT type III? *Neuropathol Appl Neurobiol* 2020; Jun;46(4):406-409.
- 4. Forrest SL et al. A Practical Approach to Differentiate the Frontotemporal Tauopathy Subtypes. J *Neuropathol Exp Neurol* 2020; Oct 1;79(10):1122-1126.
- 5. Ling H et al. Fulminant corticobasal degeneration: a distinct variant with predominant neuronal tau aggregates. *Acta Neuropathol* 2020; Apr;139(4):717-734.
- 6. McCann EP et al. Genetic and immunopathological analysis of CHCHD10 in Australian amyotrophic lateral sclerosis and frontotemporal dementia and transgenic TDP-43 mice. J. Neurol. Neurosurg. Psychiatry 2020; 91(2):162-171.
- 7. Moore KM et al. Age at symptom onset and death and disease duration in genetic frontotemporal dementia: an international retrospective cohort study. *Lancet Neurol* 2020;19(2): 145-156.
- 8. Newman M et al. Accelerated loss of hypoxia response in zebrafish with familial Alzheimer's diseaselike mutation of presenilin 1. *Hum Mol Genet* 2020; Aug 11;29(14):2379-2394.
- 9. Orme T et al. Analysis of neurodegenerative disease-causing genes in dementia with Lewy bodies. *Acta Neuropathol Commun* 2020; Jan 29;8(1):5.
- 10. Oyston LJ et al. Reply: CYLD variants in frontotemporal dementia associated with severe memory impairment in a Portuguese cohort. Brain 2020; Aug 1;143(8):e68.
- 11. Phan K et al. Uncovering pathophysiological changes in frontotemporal dementia using serum lipids. Sci Rep 2020;10(1): 3640.
- 12. Piras IS et al. ESHRD: deconvolution of brain homogenate RNA expression data to identify cell-typespecific alterations in Alzheimer's disease. *Aging (Albany NY)* 2020; Mar 2;12(5):4124-4162.
- 13. Piras IS et al. Transcriptional profiling of multiple system atrophy cerebellar tissue highlights differences between the parkinsonian and cerebellar sub-types of the disease. *Acta Neuropathol Commun* 2020: Jun 3;8(1):76.
- 14. Shepherd CE et al. Intracellular and secreted forms of clusterin are elevated early in Alzheimer's disease and associate with both Aβ and tau pathology. *Neurobiol Aging* 2020; 89:129-131.
- 15. Shepherd CE et al. Alzheimer's amyloid-β and tau protein accumulation is associated with decreased expression of the LDL receptor-associated protein in human brain tissue. *Brain Behav* 2020; Jul;10(7):e01672.
- 16. Symons GF et al. The Neurological Consequences of Engaging in Australian Collision Sports. J Neurotrauma 2020; Mar 1;37(5):792-809
- 17. Tan RH, Halliday GM. Author response: The underacknowledged PPA-ALS: A unique clinicopathologic subtype with strong heritability. *Neurology* 2020; Feb 11;94(6):283.
- 18. Trist B et al. Superoxide dismutase 1 in health and disease: How a front-line antioxidant becomes neurotoxic. *Angew Chem Int Ed Engl.* 2020 Mar 6. Epub ahead of print.

## **Oral presentations**

## Poster presentations

1. Lok HC et al. Novel rare variants in CYP27A1 gene are associated with increased protein instability and variable neurodegenerative diseases. *Australian Functional Genomics Conference*, Sydney, 2020.