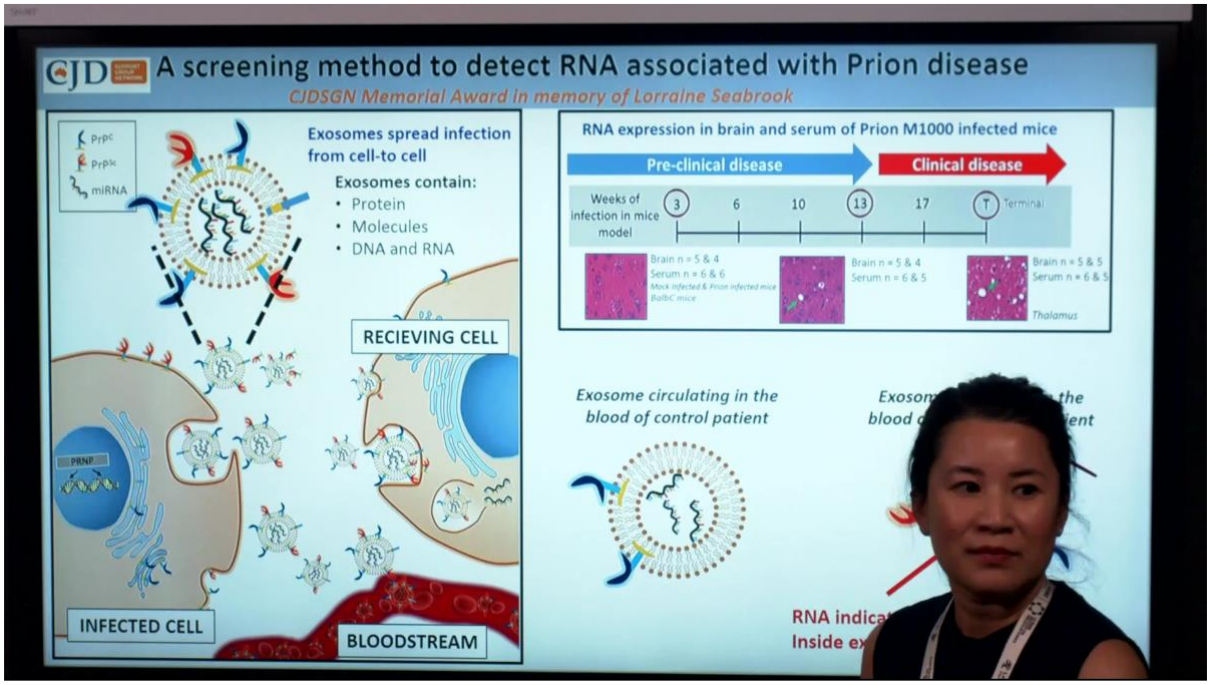
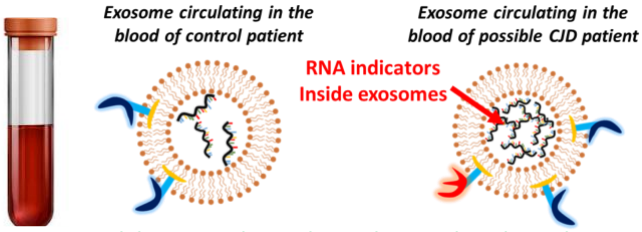
Lesley was awarded a CJDSGN Memorial award in memory of Lorraine Seabrook in 2017 to develop a blood-based diagnostic test that involves detecting RNA markers associated with prion disease.
She initially used a prion mice model to identify these prion-associated RNA markers in the blood of mice. These RNA markers can be found circulating the in the bloodstream within biological bubbles called exosomes.
Using her 2017 award, she collaborated with Prof. Inga Zerr in Germany who provided clinical CJD samples and she tested these RNA indicators in human samples.
Of the 21 CJD patients she tested, her RNA indicators appeared in the CJD patients and the diagnostic test was able to confirm CJD diagnosis to 86% accuracy. Of the 19 non-dementia controls, she was able to confirm these patients were still healthy at the accuracy of 89%. This gives the test an average of 87.7% accuracy for testing for CJD. Further testing was required so she applied for more funding in 2018.



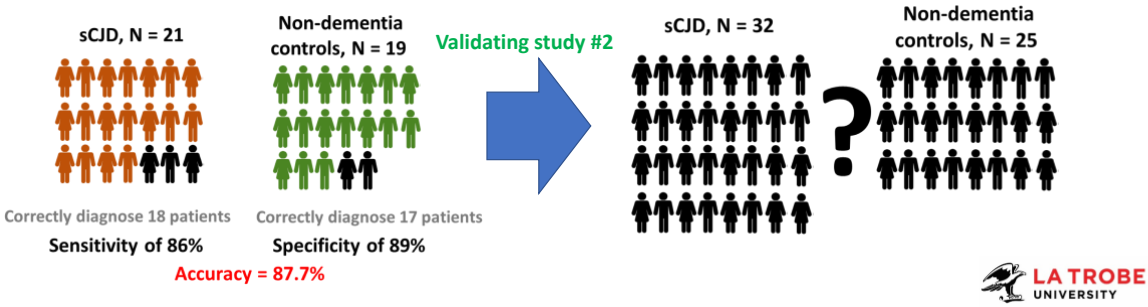
In 2019 Lesley received $12,000 ‘CJDSGN Memorial Award memory of Adrian Chesterton, Norma Crawley and Danilo Banzon to continue her work and to fund the analysis of more CJD samples from Germany. These samples are currently being analyzed and we are hoping to publish the work at the end of this year.

A screening method to detect RNA associated with Prion disease



Validating RNA biomarkers in human clinical samples

2019 CJDSGN Award in Memory of Adrian Chesterton, Norma Crawley and Danilo Banzon



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