Dementia
RESEARCH COMMUNITY

Research by:
Dr Jennilee Davidson
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Project title
Developing a test to evaluate therapeutic delivery which is advancing crucial research into Frontotemporal Dementia (FTD).

About the researcher
Dr Jennilee Davidson's fascination with the nervous system sparked a journey that began with undergraduate studies in Canada and has now led to a Research Fellowship at Sydney's Macquarie University.

About the project
Frontotemporal dementia (FTD) is the most common form of dementia in individuals under 60, often linked to the accumulation of a toxic protein in the brain that causes neuron degeneration and leads to death within a few years. Research shows that removing this toxic protein allows neurons to survive, potentially halting or slowing disease progression. However, there is no current way to monitor the effectiveness of treatments, as no imaging or blood tests are available. This leaves patients and doctors uncertain about the treatment's success and hinders clinical trials.

To address this, we are developing a novel blood test to track the efficacy of therapies targeting this toxic protein. This test, the first of its kind, aims to provide an accessible and reliable way to monitor treatment progress in real-time. Once proven effective, the test could be extended to other forms of dementia caused by different toxic proteins, enhancing the ability to assess a wide range of future therapies and improving the clinical trial process. The goal is to offer a simple, practical tool for both patients and clinicians, facilitating faster treatment evaluations and better patient outcomes.