## 1. PROJECT:

Phase 3 Clinical Trial – Randomised double-blind placebo-controlled Phase 3 trial of Lithium Carbonate in MND, a sub-study of a Multi-arm, Adaptive, Groupsequential trial NETwork to evaluate drug efficacy in patients with MND (MAGNET)





Above: Professor Matthew Kiernan | Below: The Forefront MND clinic at the University of Sydney (L-R): Eleanor Ramsey, Dhayalen Krishnan, Professor Matthew Kiernan, Ying-Ting Hsu, Hannah Timmins, Srestha Mazumder, Tiffany Li, Fawaz Mahfouz, Dr Sicong Tu

## **PRINCIPAL INVESTIGATOR:**

Professor Matthew Kiernan The University of Sydney, NSW

Although previous clinical trials showed that the drug Lithium Carbonate was not beneficial for MND patients, researchers have identified a group of patients that may have responded to the drug when looking more closely at trial data. The prognosis for MND patients with changes in the unc13A gene, who generally have a more rapid disease course, appeared to improve when given lithium carbonate. Because these results were identified by re-examining data from multiple trials after their completion, they need to be confirmed in a new trial. The objective of this international, multicentre study is to specifically test the effectiveness of lithium carbonate in this group of unc13A-determined MND patients. The Australian arm of this phase 3 trial aims to enrol 57 patients at 7 sites across Australia in Sydney, Adelaide, Perth, Brisbane and Melbourne.

## **KEY HIGHLIGHTS:**

This trial will test the effectiveness of a drug in a specific group of MND patients that have changes in a gene called unc13A. The trial is an international study with the Australian arm including 57 MND patients at 7 sites across the country.

## AMOUNT INVESTED BY FIGHTMND IN THIS RESEARCH PROJECT: \$1,287,280

"The MAGNET clinical trial will launch precision medicine in MND, by establishing whether we can use an individual's genetic signature to determine if they are more likely to benefit from the investigative drug's neuroprotective effects." – Professor Matthew Kiernan

