

# 1. BILL GUEST MID-CAREER RESEARCH FELLOWSHIP

The Bill Guest Mid-Career Research Fellowship is named in recognition of the extraordinary contribution of Bill Guest AM, the inaugural Chairman at FightMND

## PROJECT:

Clearing TDP-43 pathology for MND therapy

## PROJECT LEAD:

Dr Adam Walker – Bill Guest Mid-Career Research Fellow The University of Queensland, QLD

TDP-43 protein is essential for keeping motor neurons healthy. However, in 97% of MND cases, TDP-43 protein becomes harmful to motor neurons by changing its structure and sticking together, causing them to progressively die. The aim of this fellowship is to use a wide variety of advanced cell and animal techniques to study why TDP-43 protein changes and clumps together and why this leads to motor neuron death. Projects will also examine how cellular pathways in motor neurons can be manipulated to prevent their death, and slow or halt MND progression.

## KEY HIGHLIGHTS:

Dr Adam Walker was awarded the Bill Guest Mid-Career Research Fellow in 2022, named in honour of inaugural FightMND board chairman Bill Guest AM. Dr Walker will lead a team to study several facets of TDP-43 pathology in MND to uncover new treatment strategies.

**AMOUNT INVESTED BY FIGHTMND IN THIS BILL GUEST MID-CAREER RESEARCH FELLOWSHIP:**  
\$680,000

## Q&A:

*Why is this important and how will it benefit patients?*

This project will allow us find ways to apply our knowledge of how problems with the TDP-43 protein cause nerves to die, to identifying the most promising strategy to stop that in people living with MND. By understanding the disease mechanisms and testing which genes and proteins can protect nerves, we will be able to design new therapies for MND in the future.



Above: Dr Adam Walker | Below: Senior Research Assistant Dr Purba Nag and PhD student Sean Keating in Dr Walker's lab

***“I’m excited to see our basic science research now moving closer towards finding ways that we can apply new knowledge to helping people with MND.” – Dr Adam Walker***