

2025 CURE & CARE INVESTMENT



A MESSAGE FROM

DR BEC SHEEAN



FightMND Director of Cure Research and Programs

FightMND is proud to announce it is investing nearly \$22.9 million into motor neurone disease (MND) research and care in 2025. This investment reflects our determination to drive progress and improve the lives of people living with MND.

This funding includes:

- \$21.5 million into research and infrastructure projects so we can get closer to finding effective treatments, and a cure.
- \$1.4 million to improve care, extend quality of lives and integrate the real-world experiences of people living with MND through research and programs such as the Lived Experienced network.

The projects funded this year reflect the complexity of MND and the need for a multi-pronged approach to tackling it. Across Australia and through global partnerships, researchers are testing new therapies in clinical trials, bringing promising treatments from the lab to Australian patients.

We're driving progress on multiple fronts. FightMND supports drug development through novel and repurposed compounds and advancing discovery research into the biology of MND, including genetics, metabolism, neuroinflammation and protein dysfunction. Through our IMPACT program, we fund projects that translate scientific breakthroughs into clinical solutions, such as biomarkers, improved disease models and gene and stem cell therapies.

We're also investing in the future by supporting fellowships, scholarships and national infrastructure to strengthen Australia's global leadership in MND research. Alongside cure-focused efforts, we're committed to improving care today. Funding initiatives in nutrition, respiratory support, care co-ordination, and practical toolkits to manage symptoms. By investing in both care and cure, we're improving lives now while working toward future breakthroughs.

To the researchers and clinicians leading these projects, your work is the engine of progress. You are pushing boundaries, asking bold questions and building the evidence base that will one day transform how we treat and care for people with MND. FightMND is proud to stand behind your efforts and we thank you for your relentless pursuit of answers.

To our donors, fundraisers and the FightMND Army, this investment is only possible because of you. Your generosity fuels every breakthrough, every trial and every moment of progress. You are not just supporting research. You are giving strength to those facing the unimaginable.

Your belief in a better future is what makes this work possible. Thank you for standing with us. Thank you for fighting the Beast.

IN 2025 WE INVESTED NEARLY **\$22.9 MILLION** INTO MND RESEARCH AND CARE.

\$21.5M



into powering MND research
to bring us closer to a cure.

\$1.4M



to improve care, extend quality of
lives and integrate the real-world
experiences of people living
with MND through research
and programs such as the Lived
Experienced Network.

Thank you for living it forward for those in the fight against MND.
Together we're changing the future for people with MND.

CURE

INVESTMENT

At FightMND, we invest in research and support for the MND sector.

Our core values, integrity, urgency, efficiency, boldness and community guide our decisions. They shape how we work across Australia and around the world.

We focus our efforts on four key pillars to drive progress toward a cure:

FUNDING WORLD CLASS RESEARCH

We support leading research projects through a competitive grants program aligning with the National Health and Medical Research Council (NHMRC) grants process.

CAPACITY BUILDING

We grow the MND research workforce by offering scholarships and fellowships.

INFRASTRUCTURE

We fund essential facilities and tools that enable high-quality research.

KNOWLEDGE EXCHANGE

We connect researchers across Australia and globally to share insights and discoveries.

These investments ensure that MND research in Australia remains competitive and world leading. Driving us closer to better treatments and a cure for MND.

THIS IS WHAT PROGRESS LOOKS LIKE. YOUR CONTRIBUTION IS CREATING CHANGE.

6

drugs progressed from
the lab to clinical trial

37

Drug Development
projects in the pipeline

17

clinical
trials

700+

patients access
to trials



BUILD

- **8** sites collected data for the national genetic database
- **150** stem cell samples banked from MND patients
- **1** National MND Proteomics Facility



GROW

- **24** research fellowships
- **4** PhD scholarships
- **1** clinical investigator award



CONNECT

- **70+** delegates attend Global MND Research Roundtable
- **32** scientific seminar series presentations

CLINICAL TRIALS

Clinical Trial grants support researchers testing how well potential treatments work in real-life situations. A clinical trial is a carefully planned study where clinicians and scientists test out a new drug or therapy to see if it is safe and helps people. The process is completed in stages and follows strict rules to protect those taking part.

Clinical trials usually happen in four main phases. Phase I checks if the treatment is safe and what dose should be used. Phase II looks at whether the treatment works and what side effects it might have. Phase III looks at the treatment in a larger group of patients and can compare the new treatment to current ones to see if it is better. Phase IV assesses the treatment in a broad and diverse group of patients, replicating the real-world population. Each phase helps researchers learn more and move closer to finding better ways to treat or even cure MND.

PROJECT:

MetFlex 2: A phase II trial to assess the efficacy of Trimetazidine modulation of metabolic flexibility in motor neurone disease (MND)

PROJECT SUMMARY:

This clinical trial, conducted in Australia, The Netherlands, UK and Italy, tests a re-purposed drug called Trimetazidine in 132 MND patients. FightMND supported earlier clinical development of Trimetazidine as an MND therapy, which showed initial promise. This new trial will provide strong data on Trimetazidine's potential to advance as an MND therapy.

This grant is supported by funding from the Australian Government Department of Health, Disability and Ageing under The Public Health and Chronic Disease Program.



PROJECT LEAD

Associate Professor Shyuan Ngo

INSTITUTION

The University of Queensland, Qld

AMOUNT FUNDED

\$2,000,000



PROJECT LEAD

Professor Perry Bartlett

INSTITUTION

NuNerve, Qld

AMOUNT FUNDED

\$1,800,000

PROJECT:

A phase II study to evaluate the efficacy, safety, pharmacokinetics and immunogenicity of NUN-004 in patients with motor neurone disease (MND).

PROJECT SUMMARY:

This phase II clinical trial will recruit 75 patients in Australia to evaluate the potential of a drug called NUN-004 as a treatment for MND. FightMND has supported the pre-clinical development and Phase I clinical studies of NUN-004, and this further funding will enable the team to evaluate the suitability of this drug as an MND therapy.

“

This program demonstrates that basic neuroscientific discoveries made in Australia can be developed all the way through from preclinical studies into product manufacture into promising clinical trials that are at the forefront internationally.

”



DRUG DEVELOPMENT PROJECTS

Drug Development projects help create new medicines for MND. They focus on getting drugs ready for final testing before they can be used in clinical trials.

In 2025, three projects received funding to support this important work. These grants help researchers:

- Discover and develop drugs targeting key parts of the body affected by MND.
- Complete pre-clinical studies. These are tests done in a laboratory, or on models, like cells, to check if a drug is safe and might work. These studies must happen before any testing on humans starts.

By investing in these early steps, we help move potential therapies closer to the clinic.



PROJECT LEAD

Professor Bradley Turner

INSTITUTION

The Florey,
The University of
Melbourne, Vic

AMOUNT FUNDED

\$547,962

PROJECT:

Stage 1 - Developing next-generation APC mimic peptides as a therapeutic approach for MND

PROJECT SUMMARY:

Many things can go wrong in the motor neurones of MND patients, and most current drugs can only target one thing. This project will test the suitability of a drug that not only targets multiple aspects of the disease but is low cost and easy to manufacture.

PROJECT:

Stage 1 - Repurposing Diazepam as a new therapeutic approach for MND

PROJECT SUMMARY:

Diazepam is an approved therapy for anxiety, seizures, muscle spasms and other conditions. This study will test its suitability as an MND treatment. If successful, this could lead to accelerated clinical trials, given Diazepam's proven safety profile.



PROJECT LEAD

Professor Julie Atkin

INSTITUTION

Macquarie
University, NSW

AMOUNT FUNDED

\$550,000

“

For the vast majority of MND cases, there is no effective treatment and the disease is poorly understood. Motor neurone disease is also very difficult to diagnose, taking over one year on average. Hence by supporting these types of research projects, FightMND is making significant advances in the field.

”



PROJECT:

Stage 2 - Preclinical advancement of AEZS-130 to target metabolism and pathophysiology in MND

PROJECT SUMMARY:

This project will determine if an approved drug, AEZS-130, could be repurposed for MND. Targeting the body’s energy systems, this drug could be fast-tracked to clinical trial for MND patients if shown to have potential in models of disease.



PROJECT LEAD

Associate Professor
Frederik Steyn

INSTITUTION

The University of
Queensland, Qld

AMOUNT FUNDED

\$1,198,164



DISCOVERY PROJECTS

Discovery projects aim to find out why MND occurs and what drives its progression. These projects focus on identifying the underlying causes and mechanisms of the disease. This helps researchers understand how MND develops and changes over time. By testing new ideas and methods, researchers can learn more about MND and find ways to treat it.

In 2025, six projects received Discovery grant funding to support this important early-stage research.



PROJECT LEAD

Professor Joseph Nicolazzo

INSTITUTION

Monash
University, Vic

AMOUNT FUNDED

\$997,557

PROJECT:

Fatty acid binding protein 5 at brain barriers: a contributor to motor neurone disease

PROJECT SUMMARY:

This project explores whether decreased levels of a specific protein located at the protective barriers of the brain and spinal cord may accelerate MND progression by preventing the body's natural anti-inflammatory compounds from reaching these critical areas. Professor Nicolazzo and his team will also examine if a drug may alleviate this effect and allow the body to defend itself against MND progression.

“

The outcomes of our research are expected to lead to the development of a therapeutic approach to reduce neuroinflammation in MND. Such a therapeutic approach would not be expected to be used alone, but rather in combination with current and future standard of care approaches, given the multifaceted nature of MND.

”



PROJECT LEAD

Dr Fleur Garton

INSTITUTION

The University of
Queensland, Qld

AMOUNT FUNDED

\$949,163

PROJECT:

Developing and applying novel polygenic score approaches in MND for risk prediction, stratification, and precision medicine

PROJECT SUMMARY:

This project will integrate common and rare genetic signatures of MND into a risk score which can inform individuals of their risk for developing the disease. Capturing data from thousands of cases globally, this risk score can speed up diagnosis and open avenues for targeted therapies.



PROJECT LEAD

Associate Professor
Benjamin Parker

INSTITUTION

The University of
Melbourne, Vic

AMOUNT FUNDED

\$998,903

PROJECT:

Characterising and Targeting the Neuromuscular Junction in MND using Proximity Proteomics

PROJECT SUMMARY:

MND is believed to begin with the breakdown of communication between nerve cells and muscles. This project will examine proteins in both muscle and nerve tissue to better understand how this critical connection is lost in the earliest stages of the disease. The study will also evaluate whether targeting the most promising of these proteins could offer potential therapeutic benefits for patients. Associate Professor Parker is a first-time recipient of FightMND funding.

PROJECT:

Discovery of novel microglial targets for MND using immuno-competent spinal organoids

PROJECT SUMMARY:

The inflammatory response is thought to be a major driver of MND, but how cells that produce this response contribute to disease is not well understood. This project will study the inflammatory cells from MND patients to understand how and why they cause motor neurones to deteriorate, providing new insights for drug design.



PROJECT LEAD

Associate Professor Shyuan Ngo

INSTITUTION

The University of Queensland, Qld

AMOUNT FUNDED

\$1,000,000

PROJECT:

Investigating the pathogenic mechanisms of ANNEXIN A11 and TDP-43 co-aggregation in MND

PROJECT SUMMARY:

TDP-43 is a key protein, forming harmful clumps in 97% of MND cases. This project will examine how another protein, ANNEXIN A11, interacts with TDP-43 to accelerate disease progression and how this interaction may be disrupted as a therapeutic strategy.



PROJECT LEAD

Associate Professor
Marco Morsch

INSTITUTION

Macquarie University, NSW

AMOUNT FUNDED

\$1,000,000



PROJECT LEAD

Dr Luke McAlary

INSTITUTION

University of
Wollongong, NSW

AMOUNT FUNDED

\$995,570

PROJECT:

**Mutations, Genes, and Chemicals
– How do they contribute to early
TDP-43 dysfunction?**

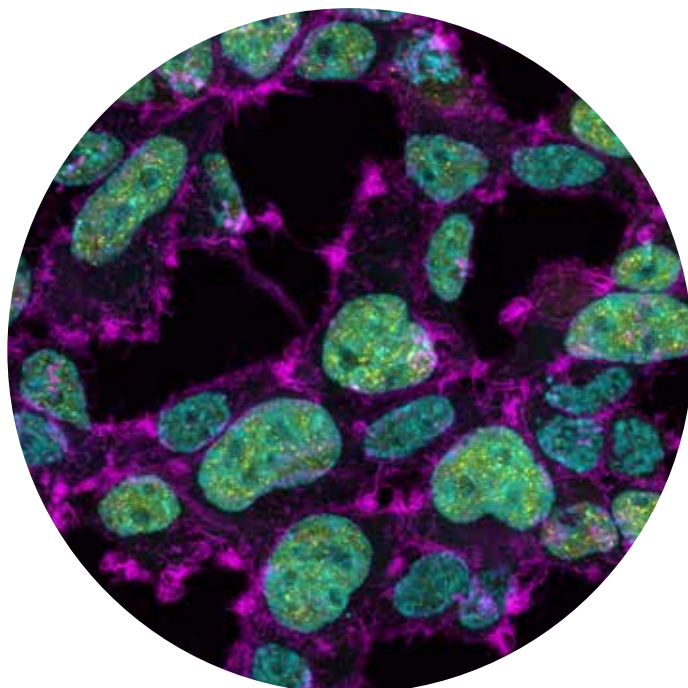
PROJECT SUMMARY:

We know that TDP-43 misbehaves in most cases of MND, however we do not know exactly why. This study will take a systematic approach to understanding the earliest occurrence of TDP-43 misbehaviour. These results may identify new ways to treat MND.

“

I hope that our research will transform the diagnosis, understanding, therapy, and prevention aspects of MND. If we are successful in even just one part of this project, we will have made a strong contribution to improving the lives of those who do have, and those who will develop, MND.

”



IMPACT PROJECTS

IMPACT stands for IMProving and ACceleration Translation. These projects work to solve the problems slowing down research and treatment for MND. They focus on the reasons why some drugs and clinical trials haven't worked in the past. IMPACT projects are helping to:

- Design cutting-edge therapies using a patient's own cells.
- Create treatments targeting the genes that cause MND.
- Understand how MND affects people differently, so treatments can be more personalised.
- Find special signs in the body, called molecular markers, to help doctors diagnose MND earlier or see if a treatment is working.
- Build better lab models to study MND and test new treatments.

DISEASE HETEROGENEITY

Researchers study disease heterogeneity to find out why MND starts at different ages, affects different parts of the body and progresses at different speeds in different people.

PROJECT:

MND as a syndrome – Genomic approaches to untangling heterogeneity in disease

PROJECT SUMMARY:

MND is variable in when, where and how it manifests in different people. There is currently no way of determining how disease will progress in an individual. This study will use data from many individuals with MND to see if a person's genetics can give clues as to how their disease will progress, enabling more targeted treatment plans and recruitment into clinical trials.

	
PROJECT LEAD Professor Allan McRae	
INSTITUTION The University of Queensland, Qld	AMOUNT FUNDED \$299,959

DISEASE BIOMARKERS

There is no definitive way to diagnose or track the progression of MND. Biomarker research aims to change this.

A biomarker is something measurable in the body, such as a protein or chemical, indicating when a disease begins or how it progresses. By finding reliable biomarkers for MND, clinicians could diagnose the disease earlier, start treatment sooner and monitor how well treatments are working.



PROJECT LEAD

Dr Dezerae Cox

INSTITUTION

University of
Wollongong, NSW

AMOUNT FUNDED

\$299,999

PROJECT:

**Seeking single SODs:
Single molecule methods to
characterise pathogenic SOD1
associated with MND**

PROJECT SUMMARY:

This project will develop new technology to detect when a known MND-associated protein called SOD1 is abnormal in motor neurones, alerting doctors earlier of when disease is developing or progressing. This can also be used in clinical trials to understand if SOD1-targeting therapies are working effectively. Dr Cox is a first-time recipient of FightMND funding.

“

Our goal is to give clinicians and researchers a reliable test to measure harmful SOD1 protein clumps in people living with MND. This could make a big difference by showing if a treatment is working much earlier than is currently possible. In the long run, it could help speed up diagnosis, guide people into the right clinical trials, and as a result make new therapies available to more patients faster. For families, this means less waiting, more certainty, and more hope.

”

PROJECT:

Developing skeletal muscle protein biomarkers to aid assessment of functional treatment response in MND

PROJECT SUMMARY:

Current measures of functional improvement for MND treatment response rely on subjective measures of body function. This project aims to use proteins found in the muscle as a more specific marker of improved body function and positive response to treatment.



PROJECT LEAD

Associate Professor
Peter Crouch

INSTITUTION

The University of
Melbourne, Vic

AMOUNT FUNDED

\$300,000

PROJECT:

Exploiting the protein Corona for blood-based biomarker validation and precision medicine in motor neuron disease

PROJECT SUMMARY:

A major barrier in using blood to find markers of disease is that markers of MND are often very low in abundance and the signal is often drowned out by common proteins. This project will validate new technology that increases the sensitivity of MND marker detection in blood and test its capacity to identify MND cases. Professor Nisbet is a first-time recipient of FightMND funding.



PROJECT LEAD

Professor David Nisbet

INSTITUTION

The University of
Melbourne, Vic

AMOUNT FUNDED

\$247,849

DISEASE MODELS

Before a drug can be trialled in humans, we need accurate cell and animal models of MND. These models test which therapies have the most benefit without harmful side effects. Models also provide vital insights into how MND develops and progresses.

PROJECT:

Using iPSC-derived organoids to understand TDP-43 pathology

PROJECT SUMMARY:

MND affects not just the motor neurones, but many other cells which serve to support healthy motor neurone function. This project will use patient-derived cells to model these supporting cell types to understand how disease pathways, such as TDP-43, spread between motor neurones and other cells.



PROJECT LEAD

Dr Samantha Barton

INSTITUTION

The Florey,
The University of
Melbourne, Vic

AMOUNT FUNDED

\$299,965



“

This is a strong collaboration between University of Sydney and the Florey Institute that utilises world leading stem cell and mouse modelling expertise. We will establish a model system that can be extrapolated to many experimental questions so will be an invaluable resource for the MND scientific community.

”



PROJECT LEAD

Professor Trent Woodruff

INSTITUTION

The University of
Queensland, Qld

AMOUNT FUNDED

\$300,000

PROJECT:

A patient-derived microglia-brain organoid model to improve drug translation for MND

PROJECT SUMMARY:

The immune cells of the nervous system are thought to drive MND progression through increased inflammation. In this project, researchers will use patient-derived cells to model these immune cells and test whether they can be used to screen for drugs that are effective at targeting inflammation in MND.



STEM CELL THERAPY

Stem cell therapy is a type of research that looks at using special cells isolated from the patient themselves to help treat MND. This research can explore potential ways to protect or restore damaged motor neurone cells in disease.



PROJECT LEAD

Associate Professor
Marco Peviani

INSTITUTION

University of
Pavia, Italy

AMOUNT FUNDED

\$297,423

PROJECT:

Engineering hematopoietic stem cells to empower the neurosupportive and immunomodulatory properties of microglia: a novel stem cell gene therapy strategy for motor neurone disease

PROJECT SUMMARY:

This project will test whether stem cells from MND patients can be turned into a therapy that protects their motor neurones from further damage. The team will test this approach in the laboratory to assess its suitability with the view to move this therapy into patients in the clinic. Associate Professor Peviani is a first-time recipient of FightMND funding.

“

We are always keen to collaborate with other researchers to learn from one another and accelerate progress toward the successful clinical translation of our results. This project involves the collaboration with Laval University, Quebec, Canada. Through FightMND, we hope to establish new collaborations with Australian researchers and internationally, and to contribute to the development of standardised procedures for the characterisation and testing of novel stem cell-based therapeutic approaches in preclinical MND models.

”

PROJECT:

Towards a cell-based therapy for neurodegeneration through engineered parvalbumin interneurons

PROJECT SUMMARY:

Overactivity of motor neurones contributes to their progressive deterioration in MND. This overactivity occurs partly because regulatory neurones that normally help control motor neurone function become depleted in MND patients. This research project will investigate methods to restore these regulatory neurones as a potential therapeutic strategy to preserve motor neurone health and slow disease progression. Dr Sreedharan is a first-time recipient of FightMND funding.



PROJECT LEAD

Dr Jemeen Sreedharan

INSTITUTION	AMOUNT FUNDED
Kings College London, UK	\$299,868



THE DR IAN DAVIS OAM AWARD

Dr Ian Davis OAM believed conquering MND required supporting patient focused research marked by excellence, innovation and scientific rigour.

To honour his legacy, the Dr Ian Davis OAM Award celebrates outstanding research and innovation. Awarded for the first time in 2024, it is awarded to the top-ranked grant of the year.

ABOUT DR IAN DAVIS

Dr Ian Davis was passionate about research. He graduated as Dux of Bachelor of Medicine and Surgery at Flinders University in 2006, achieving first class honours. After undertaking physician training at St Vincent's Hospital in Melbourne, he specialised in Haematology at the Peter MacCallum Cancer Centre. However, in 2011 Ian was diagnosed with motor neurone disease. He was just 33 years old.



Following his diagnosis, Ian channelled his energy into driving MND awareness, drug discovery and clinical trials for Australians living with MND. His frustration with the lack of awareness and research progress in MND drove him to establish FightMND alongside Neale Daniher AO and Pat Cunningham in 2014.

Ian's background in cancer research was vital in shaping FightMND's research strategy. Pivotal to this was strategic and targeted investment in patient-focused research. Through his tireless work and campaigning, Ian has helped establish Australia as one of the world's leading MND research hubs.

Ian died from MND in November 2018. His legacy lives on through the MND community, working to drive awareness and find a cure for this insidious disease.

“

Ian was a brilliant mind and an incredible mentor and friend. His vision for MND research has seen a complete change in the research landscape, a shift in research focus in the sector and an excitement and enthusiasm in the entire MND community.

His contribution to the MND field continues to live on and grow through his legacy at FightMND.

”

**- Dr Bec Sheean
Director, Cure Research and Programs
FightMND**

GENE THERAPIES

Gene therapies look to correct defects in key genes causing MND to start or progress.

PROJECT:

Using an improved gene therapy approach to target the NMJ in MND mouse models

PROJECT SUMMARY:

The breakdown of signalling between muscles and nerves is an early sign seen in all people with MND and gradually reduces quality of life as it spreads. This project will test a new genetic therapy focused on delaying the impairment in signals moving from muscles to nerves and vice-versa, thereby preserving muscle function.



PROJECT LEAD

Professor Aaron Russell

INSTITUTION

Deakin
University, Vic

AMOUNT FUNDED

\$299,932

THE MASSEY CHARITABLE TRUST GRANT

FightMND is proud to have the Massey Charitable Trust's support since 2020. This is the Trust's fourth funding round.

Their ongoing support has funded critical research projects enhancing our understanding of MND, bringing us closer to effective treatments. Their generosity impacts laboratories and the lives of people and families affected by MND. We thank the Trust for its commitment to making a lasting difference in the fight against the Beast.

PROJECT:

Can we stop the spread of disease in MND?

PROJECT SUMMARY:

While we don't understand how MND spreads through the brain and body, we do know that MND affects two distinct brain regions and muscle. The team at University of Tasmania have developed a unique model of MND that separately houses the brain areas affected by MND and muscle. They are using this model to investigate how MND spreads from one area to another and identify ways to stop MND from progressing.

PROJECT LEAD

Professor Tracey Dickson
and Associate Professor
Catherine Blizzard

INSTITUTION

University of
Tasmania, Tas

AMOUNT FUNDED

\$70,000



MID-CAREER RESEARCH FELLOWSHIPS

Mid-Career Research Fellowships play a vital role in advancing MND research. They encourage exceptional scientists to dedicate their careers to MND. These four-year fellowships help build teams, develop independent research programs, and connect researchers. This enables researchers to become leaders in the MND research sector.

The research funded by these fellowships focuses on uncovering the causes of MND and disease mechanisms. This is key to finding new treatments and, one day, a cure. The impact of these fellowships is significant. They foster a strong community of MND researchers, helping speed up discoveries that can change lives.

In 2025, FightMND is awarding two Mid-Career Research Fellowships.

BILL GUEST MID-CAREER FELLOWSHIP

The Bill Guest Mid-Career Research Fellowship is named in honour of Bill Guest AM. As FightMND’s inaugural Chair, he helped define the organisation’s vision and lasting impact. Bill stepped down from the Board in mid-2025. He leaves a legacy of leadership and passion for MND research.



PROJECT LEAD

Dr Fleur Garton

INSTITUTION	AMOUNT FUNDED
The University of Queensland, Qld	\$720,000

PROJECT:

Mapping MND: Utilising genetic and multi-omic strategies to identify novel treatment targets and disease mechanisms

PROJECT SUMMARY:

The genetic signature of MND has the potential to unlock many answers about risk, diagnosis, progression and treatment options. Dr Garton’s Fellowship will harness the latest technologies in large-scale genetic analysis to interrogate thousands of MND cases for genetic clues that will improve diagnosis and treatment.

MID-CAREER RESEARCH FELLOWSHIP



PROJECT LEAD

Associate Professor David Wright

INSTITUTION

Monash
University, Vic

AMOUNT FUNDED

\$719,840

PROJECT:

Multisensory stimulation and focused ultrasound as therapeutic strategies targeting glymphatic dysfunction and blood-brain barrier impairment in MND

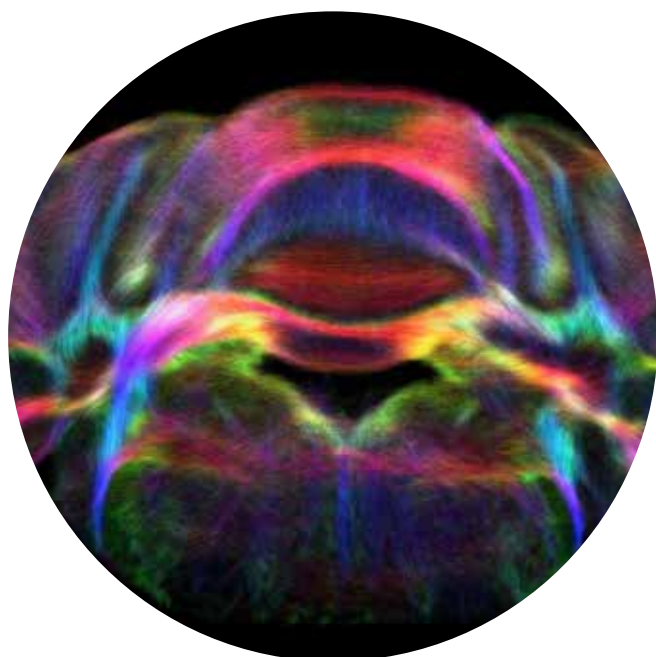
PROJECT SUMMARY:

The natural ability of the brain to clear waste products is compromised in MND, contributing to motor neurone death and disease progression. In his fellowship, A/Prof Wright will examine how brain waste clearance may characterise disease progression. He will also test an innovative, non-invasive therapy to improve brain waste-clearance and thus slow disease progression.

“

So much of our time as researchers is spent applying for grants just to keep careers and projects alive. The FightMND Mid-Career Research Fellowship changes that by providing four years of dedicated salary and research support. This stability gives me the freedom to focus fully on advancing MND research, build stronger collaborations and take on bold, high-impact projects that would otherwise be too risky or time-consuming.

”



EARLY-CAREER RESEARCH FELLOWSHIP

Early-Career Research Fellowships support the next generation of scientists to build their careers in MND research. The four-year fellowship gives researchers the chance to launch their own projects, work with other researchers and grow as MND experts.

Their work looks at what causes MND and how it develops, aiming to find better treatments and, one day, a cure.

PROJECT:

A suite of imaging biomarkers for clinical management for MND

PROJECT SUMMARY:

MRI imaging of the brain and other parts of the body has the potential to serve as a powerful diagnostic tool and a means for doctors to track and predict disease progression. Dr Shaw will be integrating several MRI readouts to form personalised overviews of MND, to inform clinicians for faster diagnosis, disease monitoring and personalised care.



PROJECT LEAD

Dr Thomas Shaw

INSTITUTION

The University of
Queensland, Qld

AMOUNT FUNDED

\$545,000

ANGIE CUNNINGHAM BIOMEDICAL PHD SCHOLARSHIP AND GRANT-IN-AID

The Angie Cunningham Biomedical PhD Scholarship and Grant-in-Aid was created to honour the legacy of Angie Cunningham. The wife of FightMND Co-Founder, Patrick Cunningham, Angie faced MND with remarkable strength. A world-class tennis player, Vice President of Player Relations at the WTA, and devoted mother, she refused to let her diagnosis define her. Even as the disease progressed, Angie remained a powerful advocate. She worked to drive awareness, inspire hope and spark change.

It reflects her deep belief in mentorship, curiosity and the power of research to create change. Awarded annually by FightMND, the scholarship supports early-career researchers pursuing bold, high-impact projects aimed at understanding, treating and ultimately curing MND.

PROJECT:

Leveraging population-based and clinical genomic data to identify modifiers of motor neurone disease onset and drug repurposing opportunities

PROJECT SUMMARY:

This PhD project will interrogate large genetic and clinical databases to identify reasons why MND onset and progression is delayed in some patients with familial disease. These findings will be used to help identify already approved drugs which can be re-purposed and fast-tracked as therapeutics for MND.



PHD CANDIDATE

Ms Xiaoyi Liu

SUPERVISOR

Professor Melanie Bahlo

INSTITUTION

WEHI, Vic

AMOUNT FUNDED

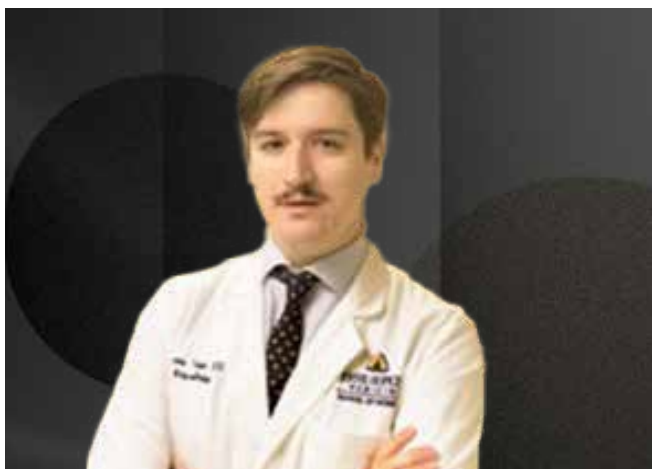
\$220,000

ALS SCHOLARS IN THERAPEUTICS SCHOLARSHIPS

The ALS Scholars in Therapeutics scholarships is a two-year program designed to engage clinician-scientists and post-doctoral fellows to gain training and experience in therapy development for amyotrophic lateral sclerosis (ALS, also known as MND). This is conducted at their home institution with an option for industry experience in year two. These scholarships work to identify, support and mentor the next generation of researchers.

FightMND contributes to these scholarships in partnership with the Sean M. Healey and AMG Centre for ALS at Massachusetts General Hospital, ALS Finding a Cure.

The total funding amount invested towards these scholarships in 2025 is \$480,000.



PROJECT LEAD

Dr Arens Taga

INSTITUTION

John Hopkins University, USA

PROJECT:

Exploring the pathophysiological role and the therapeutic potential of β 1-importin in C9orf72 MND

PROJECT SUMMARY:

Dr Taga will examine how and why a protein that helps repair damaged neurons, called β 1-importin, forms harmful clumps in familial MND. This project will also examine if restoring healthy β 1-importin can improve neurone repair. in disease.



PROJECT LEAD

Dr Elizaveta Okorokova

INSTITUTION

University of California,
Davis, USA

PROJECT:

Restoring communication in MND patients through multimodal brain-computer interfaces

PROJECT SUMMARY:

This study will develop a next-generation way to enhance communication for people living with MND who are no longer able to speak. Using computer systems to directly translate neural thought into speech synthesis, this project hopes to restore natural communication to patients.



PROJECT LEAD

Dr Miriam Linsenmeier

INSTITUTION

Stanford University, USA

PROJECT:

Engineering nuclear import receptor-derived therapeutics to counter TDP-43 proteinopathy in MND

PROJECT SUMMARY:

The protein, TDP-43, forms toxic clumps in 97% of MND cases. This project will test a drug candidate that both clears toxic TDP-43 clumps and restores the normal function of the protein. This drug is modelled on a protein that normally carries out this clearance function in healthy neurons.

INFRASTRUCTURE

National research infrastructure grants focus on establishing, strengthening and sustaining national-scale infrastructure for MND research in Australia.

These grants aim to increase investment into innovative and essential MND research infrastructure and foster partnerships for co-developing research facilities.

PROJECT:

The National NeuroProteomics Infrastructure Facility for Motor Neurone Disease and Neurodegenerative Diseases

PROJECT SUMMARY:

The National NeuroProteomics Facility (NNPF) dedicated to MND research is urgently needed to accelerate the discovery of disease mechanisms, identify critical biomarkers, enhance early diagnosis, and develop targeted therapies. The facility will establish a robust proteomics infrastructure, providing a national critical nexus for MND research and clinical applications, guided by world-leading expertise in neuroproteomics.

The NNPF will offer researchers access to cutting-edge proteomics technologies, enabling them to study the role of proteins in MND progression. This includes advanced mass spectrometry and bioinformatics tools to uncover the molecular drivers of disease, helping to develop biomarkers for earlier diagnosis and new therapeutic targets.



PROJECT LEAD

Associate Professor Albert Lee and
Professor Roger Chung

INSTITUTION

Macquarie University,
NSW

AMOUNT FUNDED

\$2,000,000

LONGITUDE PRIZE ON ALS

The Longitude Prize on ALS is an international challenge prize to incentivise the use of AI-based approaches to transform drug discovery for the treatment of amyotrophic lateral sclerosis (ALS), the most common form of motor neurone disease (MND).

The prize is designed and delivered by Challenge Works by Nesta and principally funded by the MND Association (UK) in association with FightMND and other international funders including Nesta, the Alan Davidson Foundation, My Name's Doddie Foundation, LifeArc, Answer ALS, The Packard Center at John Hopkins University and The 10,000 Brains Project.

The Prize is working with a range of global data and technology partners including Project MinE, ALS Compute, Answer ALS, New York Genome Centre, ALS Therapy Development Institute (ALS TDI), Amazon Web Services (AWS) and DNANexus, as well as research partner UK MND Research Institute.

PROJECT:

Longitude Prize on ALS

The logo for the Longitude Prize on ALS. It features the words "LONGITUDE" and "PRIZE" in a dark blue, sans-serif font, stacked vertically. To the right of these words is a vertical line, followed by the words "ON" and "ALS" in a gold, sans-serif font, also stacked vertically.



CARE

INVESTMENT

While the search for an effective treatment or cure is underway, FightMND is supporting the MND community through its investment in care research and initiatives.

FightMND is not a care provider. This is the role of MND Clinics, MND Australia, the state MND associations, MND&Me and other organisations serving the MND community.

FightMND's care investments focus on three key priorities, developed in consultation with the MND community:

EVIDENCE

Funding care-focused research to inform the best practices for supporting people with MND, their carers and families.

STANDARDS

Investing in the creation of national standards and guidelines for MND care.

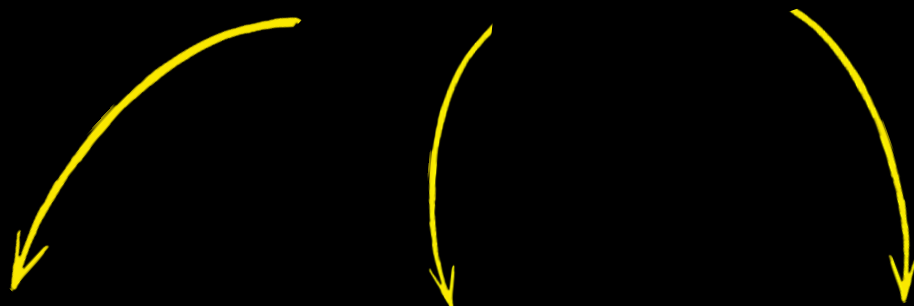
SUPPORT

Providing targeted support through organisations that deliver MND care and services.

These efforts aim to enhance the quality of life for Australians living with MND and their caregivers.

**OUR CARE INVESTMENT STRATEGY IS
FOCUSED ON DELIVERING REAL-WORLD
IMPACT FOR PEOPLE LIVING WITH MND,
NOW AND INTO THE FUTURE.**

IT IS GUIDED BY THREE KEY PRIORITIES:



EVIDENCE

**investing in
care-focused research**

- **\$1.17M** invested in innovations to improve quality of life and extend survival
- **\$0.99M** invested in research to inform best practice MND care
- **\$0.20M** invested in Clinical Care PhD scholarships to support the next generation of researchers



STANDARDS

**development of national
standards for MND care**

- **\$2.00M** invested into developing National MND clinical care guidelines



SUPPORT

**investing in
targeted support**

- **\$8.46M** invested in equipment and at home needs
- **\$3.67M** invested in initiatives to improve care and the quality of life for people with MND and their families

CARE RESEARCH PROJECTS

Care research grants support research projects seeking to improve the quality of life of people diagnosed with, or affected by, MND through improved social, physical and emotional care.



PROJECT LEAD

Associate Professor
Frederik Steyn

INSTITUTION

The University of
Queensland, Qld

AMOUNT FUNDED

\$250,000

PROJECT:

**Tailoring Nutrition in MND:
A Co-Designed Study Linking Lipid
Profiles with Dietary Intake**

PROJECT SUMMARY:

Dietary fat is suggested to help people living with MND maintain weight or slow disease progression, however the evidence is inconsistent, and people are left unsure of what to eat. This project aims to bring clarity by looking at how different types of dietary fat impact health in MND, and by working with people living with MND to ensure any dietary recommendations are practical, realistic, and person-centred.

“

This work adds much-needed clarity to an area where guidance is currently lacking. While many studies have looked at diet in MND, few have focused specifically on dietary fats, and even fewer have integrated lab-based evidence with the experiences of people living with the disease. By examining both scientific data and real-world barriers to dietary change, we are helping to build a stronger foundation for future guidelines. Our research also brings an Australian perspective, which is critical given local dietary patterns and preferences that may differ from those in international studies.

”

PROJECT:

Machine Learning for identification of patient ventilator asynchrony

PROJECT SUMMARY:

Non-invasive ventilation (NIV) may be required by patients with MND to improve their breathing, however the ventilator can fall “out-of-sync” with the patient’s breathing pattern, and affect their sleep, quality of life, and life expectancy. This project will be developing software that will use artificial intelligence (AI) to detect and correct the “out-of-sync” patterns of the ventilator and eliminate the need for time-consuming manual adjustments by clinical specialists.



PROJECT LEAD

Mr Anthony Stell

INSTITUTION

The University of
Melbourne, Vic

AMOUNT FUNDED

\$227,056

PROJECT:

Optimising the impact of the MND Care Coordinator in the Australian context

PROJECT SUMMARY:

Motor neurone disease care coordinators can bridge service and eligibility gaps, serve as a consistent point of contact, and help individuals navigate a fragmented healthcare system, however, there remains a lack of understanding on the scope and variation of these roles, who has access, and why access is inconsistent. Using a co-design approach, this project will develop a framework that defines the essential components, skills, competencies and training required for effective MND care coordination, and inform equitable policy and service design across Australia.



PROJECT LEAD

Dr. Karen Hutchinson

INSTITUTION

University of
New South
Wales, NSW

AMOUNT FUNDED

\$249,312

CHRIS ROSS MND RESEARCH GRANT

The Chris Ross MND Research Grant was established to honour the legacy of Chris Ross, a passionate MND advocate who dedicated his life to raising awareness and funds for MND research. Diagnosed with bulbar onset MND at just 31, Chris inspired many through his campaigns, Beat the Beast and Run4Rossy. The Ross family lost Chris to MND in 2023, but his mission continues. The Run4Rossy team remains committed to raising \$1 million for MND research and bringing hope to others impacted by the disease.

This grant supports care-focused research projects that aim to improve the quality of life for people living with MND. Awarded in consultation with the Run4Rossy Committee, the grant reflects Chris’s commitment to empowering the MND community and driving progress in care innovation.

The Chris Ross MND Research Grant is being awarded for the first time in 2025.



PROJECT LEAD

Dr. Alison Yaxley

INSTITUTION	AMOUNT FUNDED
Flinders University, SA	\$248,339

PROJECT:

MND Ed: The development and evaluation of a toolkit for patients and families to support their nutrition, hydration and swallowing

PROJECT SUMMARY:

This project aims to develop and evaluate an accessible, web-based toolkit to support people with MND and their families in managing their nutrition, hydration and swallowing issues throughout the course of their disease. This toolkit will be both evidence-based and person-centred, and designed in collaboration with people living with MND and their families.

CARE SUPPORT PROJECTS

Care Support projects develop, innovate and implement ways to improve how people living with and affected by MND are supported and cared for in Australia.

PROJECT:

The MND Lived Experience Network

PROJECT SUMMARY:

The MND Lived Experience Network was launched in 2024 as a new way to connect people with lived experience of MND with organisations and other groups who are seeking their input. With co-funding from FightMND, MND Australia will continue to support people with lived experience of MND to be contributing partners in activities and decisions that affect them most.



PROJECT LEAD

Ms. Julie Labra

INSTITUTION

MND Australia

AMOUNT FUNDED

\$210,000

CLINICAL CARE PHD SCHOLARSHIP AND GRANT-IN-AID

FightMND recognises that improving care is as critical as finding a cure. In 2025, this commitment was reflected in the launch of a new clinical care research initiative, marked by the awarding of the organisation’s inaugural Clinical Care PhD Scholarship and Grant-in-Aid.

This initiative represents a strategic investment in early-career researchers focused on advancing evidence-based, person-centred care for people living with MND. By supporting innovation in clinical care, FightMND aims to enhance quality of life and ensure that those affected by MND receive the highest standard of support.

PROJECT:

SCOPE MND (Secretion and Cough Optimisation for people living with MND)

PROJECT SUMMARY:

This project aims to improve how care is delivered to people living with MND who are experiencing cough and secretion issues by understanding how people currently navigate services for these issues and their challenges and identify the problems clinicians face when delivering cough and secretion interventions. In collaboration with people living with MND, a new model-of-care will be developed.



PROJECT LEAD

Ms Lauren Donnelly

SUPERVISORS

Dr. Samantha Bunzli
and Dr. Shana Taubert

INSTITUTION	AMOUNT FUNDED
Griffith University, Qld	\$199,330



Please contact our Programs team on 1800 344 486
or researchgrants@fightmnd.org.au for more information.

PO Box 3073
Burnley North VIC 3121
fightmnd.org.au

Last updated: October 2025