



RESEARCH  
ADVOCACY  
CURE

# 2025 RESEARCH SNAPSHOT





**RESEARCH  
ADVOCACY  
CURE**

MS Australia is Australia's national multiple sclerosis (MS) not-for-profit organisation that empowers researchers to identify ways to treat, prevent and cure MS, seeks sustained and systemic policy change via advocacy, and acts as the national champion for Australia's community of people affected by MS.

MS Australia represents and collaborates with its Member Organisations, people with MS, their carers, families and friends and various national and international bodies to:



**Fund MS research as part of the worldwide effort to solve MS**



**Publish and promote the latest evidence-based information and resources**



**Support the needs of those affected by MS**

**A WORLD  
WITHOUT MS**

Cover photos (clockwise from top left): Dr Grant Parnell, The University of Sydney; Ms Drishya Mainali, The University of Sydney; Dr Barbara Brayner, Deakin University; Dr Jessica Fletcher, Menzies Institute for Medical Research, University of Tasmania; Dr Rocio de la Fuente Gonzalez & Dr Sheng Yu Ang, Monash University.



**ABOUT** **MS** **GRANTS**  
AUSTRALIA

MS Australia has a robust and transparent research strategy that involves scientific experts thoroughly critiquing all our research to ensure that we are targeting the research priorities identified by the MS community in Australia.

The International Research Review Board serves as a scientific advisory group to MS Australia. They assist in identifying the strengths of Australian research and help ensure that MS Australia's strategy complements the global MS research effort.

Our Research Management Council consists of a multidisciplinary team that oversees the peer-review process of all funding applications and funding allocations for investigator-driven research. Every research application is evaluated on both its scientific merit and relevance to MS. The grant process is conducted with integrity and transparency, and is modelled on the most stringent grant review systems worldwide, including the Australian Government's National Health and Medical Research Council review process.

For more information on the scientific committees, research strategy and funded projects please visit [www.msaustralia.org.au](http://www.msaustralia.org.au).



# PROJECTS STARTED IN 2025 FUNDED BY MS AUSTRALIA

## CAUSES & PREVENTION

### GENETICS & EPIDEMIOLOGY

#### MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS

Dr Nicholas Blackburn is studying families that have many relatives with MS to learn how MS develops.

#### GARVAN INSTITUTE OF MEDICAL RESEARCH, NSW

Dr Seyhan Yazar is investigating early signs of MS using cellular signatures together with clinical characteristics to help with earlier diagnosis.

#### THE FLOREY INSTITUTE OF NEUROSCIENCE AND MENTAL HEALTH, VIC

Associate Professor Justin Rubio is investigating drug targets for progressive MS using advanced genetic analyses.



### IMMUNOLOGY

#### THE UNIVERSITY OF ADELAIDE, SA

Dr Iain Comerford is investigating how inflammatory immune cells are switched on in MS.

#### THE UNIVERSITY OF SYDNEY, NSW

Associate Professor Umaimainthan Palendira is using advanced tools to map immune cell types, locations and interactions in MS and non-MS brain lesions to better understand the disease process.

#### THE UNIVERSITY OF SYDNEY, NSW

Dr Grant Parnell is investigating the connection between EBV and the genetic risk of MS progression.

#### THE UNIVERSITY OF WESTERN AUSTRALIA, WA

Dr Stephanie Trend is investigating the functions of a type of white blood cell and how they respond to MS treatments. MSWA

#### WORKING ACROSS AUSTRALIA\*

The EBV in MS Platform brings together Australian researchers investigating the role of EBV in MS, and the potential to target EBV to prevent or treat MS.

\*Please note this project also includes work against the Developing Better Treatments stream (see below)

## DEVELOPING BETTER TREATMENTS



#### THE UNIVERSITY OF MELBOURNE, VIC

Dr Vivien Li is developing a new way to treat MS using a person's own blood immune cells. MSWA

#### ST VINCENT'S CENTRE FOR APPLIED MEDICAL RESEARCH, NSW

Dr Melissa Khoo is working to improve the safety of a cellular therapy using T regulatory cells from people with MS.

#### THE FLOREY INSTITUTE OF NEUROSCIENCE AND MENTAL HEALTH, VIC

Professor Trevor Kilpatrick seeks to understand how MERTK protein affects MS and determine which people might benefit most from treatments targeting this protein. MSWA

#### WORKING ACROSS AUSTRALIA

The EBV in MS Platform brings together Australian researchers investigating the role of EBV in MS, and the potential to target EBV to prevent or treat MS.



## A CURE FOR MS VIA REPAIR & REGENERATION OF CELLS



#### ST VINCENT'S CENTRE FOR APPLIED MEDICAL RESEARCH, NSW

Dr Malini Visweswaran is examining whether T-regulatory cells from a person without MS are more effective than those from a person with MS in promoting nerve repair in MS.



**NEUROBIOLOGY**

**THE UNIVERSITY OF SYDNEY, NSW**

Dr Monokesh Sen is studying how extracellular vesicles might help communicate with and support myelin-producing cells.

**GRIFFITH UNIVERSITY, QLD**

Associate Professor Justin Kavanagh is exploring how MS affects nerves that control muscles.

**ROYAL PRINCE ALFRED HOSPITAL, NSW**

Dr Kai-Hei 'Franki' Tse is investigating the relationship between abnormal levels of a protein called tau in the brain, myelin loss and nerve damage in progressive MS.

MSWA



**THE UNIVERSITY OF SYDNEY, NSW**

Ms Drishya Mainali will be travelling to an overseas laboratory to learn how to isolate and characterise tiny cellular particles that transmit messages between cells, with a focus on people with MS.

**THE UNIVERSITY OF SYDNEY, NSW**

Mr Samuel Klistorner is using advanced technology to detect subtle changes in MS lesions and identify biomarkers for early detection of disease progression.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Valery Fuh-Ngwa is developing new ways to analyse health outcomes, comparing the effectiveness of different treatments in active MS, and studying progression of disability in people living with MS.

MSWA

**THE UNIVERSITY OF MELBOURNE, VIC**

Dr Nathaniel Lizak is investigating the best way to use disease modifying therapies to prevent disability in MS.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Yi Chao Foong is investigating the effectiveness of disease modifying therapies in older people with MS.

**THE UNIVERSITY OF NEWCASTLE, NSW**

Dr Oun Al-iedani is developing an MRI model using artificial intelligence to monitor and predict MS progression.

MSWA

**GRIFFITH UNIVERSITY, QLD**

Associate Professor Justin Kavanagh is investigating whether electrical muscle stimulation improves motor symptoms in MS.

**MONASH UNIVERSITY, VIC**

Dr Daniel Merlo is using apps to measure changes in memory and thinking in people with MS who are over 50 years of age.

MSWA

**MONASH UNIVERSITY, VIC**

Dr Wei Yeh is studying immune therapies to prevent relapses and disability in MS and myelin oligodendrocyte glycoprotein antibody-associated disease (MOGAD).

MSWA

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Jessica Fletcher is investigating the Olig2 protein inside myelin-producing cells to find ways to selectively boost myelin repair.

**MONASH INSTITUTE OF PHARMACEUTICAL SCIENCES, VIC**

Dr Sheng Yu Ang and Dr Rocio de la Fuente Gonzalez are searching for new drug molecules that will promote myelin repair in MS.

**MONASH UNIVERSITY, VIC**

Mr Jack McDonald is studying drugs that target the GPR17 protein found on immature myelin-producing cells to understand how it contributes to myelin repair.

**THE FLOREY INSTITUTE OF NEUROSCIENCE AND MENTAL HEALTH, VIC**

Ms Michele Binder is developing a novel therapy based on the Mertk gene to promote myelin repair in people with MS.

**THE UNIVERSITY OF SYDNEY, NSW**

Professor Alexander Klistorner is testing remyelination therapies for their effectiveness in preventing damage caused by slow-burning inflammation in MS.

**SOCIAL & APPLIED RESEARCH**

**MONASH UNIVERSITY, VIC**

MSWA

Professor Susan Davis AO is studying the impact of common midlife circumstances and menopause on the quality of life of women with MS.



**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Julie Campbell is investigating whether women and marginalised groups living with MS earn less income.

**THE UNIVERSITY OF MELBOURNE, VIC**

Professor Adam Vogel is using advanced technology to assess cognitive function in MS to monitor disease progression.

**DEAKIN UNIVERSITY, VIC**

Dr Barbara Brayner is investigating the link between dietary fat and the risk of MS onset and progression.

**MURDOCH UNIVERSITY, WA**

MSWA

Associate Professor Yvonne Learmonth is co-designing an intervention and toolkit for MS healthcare professionals to promote exercise in people with MS.

**THE UNIVERSITY OF MELBOURNE, VIC**

Associate Professor Litzia Kiroopoulos is evaluating a web-based program to support people with MS with mild to moderate depression.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Mr Glen Henson is using health economics to advance our understanding of how MS impacts quality of life.



CAUSES & PREVENTION

DEVELOPING BETTER TREATMENTS

A CURE FOR MS VIA REPAIR & REGENERATION OF CELLS

**PROJECTS STARTED IN 2025 FUNDED BY MS AUSTRALIA**

SENIOR FELLOWSHIP

TRAVEL

MSWA

In addition to its regular contribution to MS Australia's research, MSWA contributed a further \$2.4 million toward the 2025 Major Grant Round which allowed for the funding of an additional 10 projects.



# ON-GOING PROJECTS FUNDED BY MS AUSTRALIA

## CAUSES & PREVENTION

### GENETICS & EPIDEMIOLOGY

#### WORKING ACROSS AUSTRALIA AND NZ

ANZgene is a major collaboration mapping the genetic make-up of people with MS, to identify which genes influence MS susceptibility and progression.

#### MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS

Dr Nicholas Blackburn is investigating how rare genetic changes contribute to MS.

#### MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS

Dr Bennet McComish is unravelling how MS prevalence has evolved.

#### MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS

Dr Xin Lin is working toward finding biological markers of MS for better diagnosis and prognosis.

#### THE UNIVERSITY OF QUEENSLAND, QLD

Professor Denise Doolan is investigating the diagnosis of MS based on Epstein-Barr virus (EBV) proteome screening.

### IMMUNOLOGY

#### THE UNIVERSITY OF WESTERN AUSTRALIA, WA

Dr Stephanie Trend is exploring what is triggering immune reactions in people with MS.

#### THE UNIVERSITY OF ADELAIDE, SA

Ms Megan Monaghan is exploring markers present on CD4+ T cells to uncover a specific type of immune cell that causes damage in MS.



## DEVELOPING BETTER TREATMENTS

#### WORKING ACROSS AUSTRALIA AND NZ

The PrevANZ Vitamin D Prevention Trial is measuring whether vitamin D can prevent MS in people at high risk of developing the disease.

#### THE UNIVERSITY OF SYDNEY, NSW

Dr Kieren Po is looking at optimising disease modifying therapy for people with MS.

#### THE UNIVERSITY OF MELBOURNE, VIC

Dr Sifat Sharmin is working toward preventing disability in children with MS.

#### THE UNIVERSITY OF SYDNEY, NSW

Associate Professor Anthony Don is developing a blood test to predict and track therapeutic response in MS.

#### MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS

Dr Xin Lin is using large international datasets and advanced statistical methods to validate and discover biomarkers of MS.

#### GRIFFITH UNIVERSITY, QLD

Professor Simon Broadley is leading a clinical trial of rituximab to reduce the development of other autoimmune diseases during alemtuzumab treatment for MS (RAMBLE trial).

#### GRIFFITH UNIVERSITY, QLD

Ms Sofia Jimenez Sanchez is investigating the immune characteristics of participants in the RAMBLE trial.

#### THE UNIVERSITY OF ADELAIDE, SA

Dr Iain Comerford is using models of MS to target specific proteins involved in the MS disease process.

#### AUSTRALIAN NATIONAL UNIVERSITY, ACT

Associate Professor Anne Bruestle is exploring the information blood cells provide, to potentially discover factors that could be used as biomarkers for MS activity or treatment effectiveness.



## A CURE FOR MS VIA REPAIR & REGENERATION OF CELLS

#### THE UNIVERSITY OF MELBOURNE, VIC

Professor Tomas Kalincik is investigating the use of haematopoietic stem cell transplantation to prevent and reverse MS disability.

#### THE FLOREY INSTITUTE OF NEUROSCIENCE AND MENTAL HEALTH, VIC

Associate Professor Justin Rubio is using human genomics to identify drug targets for progressive MS.



MAJOR COLLABORATIONS/PLATFORMS

INCUBATOR GRANT

SCHOLARSHIP

PROJECT GRANT

POSTDOCTORAL FELLOWSHIP

PAIRED FELLOWSHIP

**NEUROBIOLOGY**

**WORKING ACROSS AUSTRALIA**

The MS Australia Brain Bank, based at The University of Sydney, is securing valuable MS tissue from donors across Australia, to be used by researchers to advance our understanding of the neuropathology of MS.

**THE UNIVERSITY OF SYDNEY, NSW**

Professor Alexander Klistorner is unravelling the mechanisms of progressive MS.

**CURTIN UNIVERSITY, WA**

Dr Mark Hackett is investigating whether a compound that causes myelin damage results in copper deficiency in the brain.

**THE UNIVERSITY OF MELBOURNE, VIC**

Professor Tomas Kalincik is investigating the effects of treatments on long-term disability outcomes in MS.

**WORKING ACROSS AUSTRALIA**

Haematologists and neurologists around Australia are running the Australian MS Haematopoietic Stem Cell Transplant (AH SCT) Register. They track the effectiveness of this chemotherapy treatment with bone marrow transplants to treat MS.

**WORKING ACROSS AUSTRALIA AND INTERNATIONALLY**

MS Australia is a managing member of the International Progressive MS Alliance to accelerate treatments for progressive MS.

**THE UNIVERSITY OF SYDNEY, NSW**

Dr Heidi Beadnall is using automated brain MRI measures to aid decision-making in MS clinical practice.

**UNIVERSITY OF NEW SOUTH WALES, NSW**

Associate Professor Gila Moalem-Taylor is developing a new therapeutic approach for neuropathic pain in MS.

**THE UNIVERSITY OF SYDNEY, NSW**

Dr Chenyu Wang and Professor Michael Barnett are using advanced computer systems and AI imaging for disease management.

**THE UNIVERSITY OF SYDNEY, NSW**

Dr Dongang Wang is using advanced AI technology to improve prediction of disease progression in MS.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Professor Kaylene Young is investigating pathways to protect and repair the brain and spinal cord.

**MONASH UNIVERSITY, VIC**

Ms Danica Nheu is developing a new therapeutic approach to repair the brain and spinal cord in MS.

**THE UNIVERSITY OF SYDNEY, NSW**

Associate Professor Laura Piccio is targeting immune cells of the brain to enhance remyelination in MS.

**THE FLOREY INSTITUTE OF NEUROSCIENCE AND MENTAL HEALTH, VIC**

Dr Sarrabeth Stone is investigating a molecular control switch in brain cells in myelin repair.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Jessica Fletcher is investigating how to stop MS progression.

**WORKING ACROSS AUSTRALIA**

PLATYPUS - PPlatform Adaptive Trial for remYelination and neuroProtection in mUltiple Sclerosis - multi-arm, multi-stage (MAMS) clinical trial which will test repurposed drugs to help people with progressive MS.

**SOCIAL & APPLIED RESEARCH**

**WORKING ACROSS AUSTRALIA**

The Australian MS Longitudinal Study (AMSL) is tracking the practical issues in the lives of people affected by MS, including quality of life, economic impact and employment.

**THE UNIVERSITY OF QUEENSLAND, QLD**

Dr Suzanne McDonald is identifying personalised triggers of fatigue in MS.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Julie Campbell is measuring the economic impacts of MS to aid resourcing.



**WORKING ACROSS AUSTRALIA AND NZ**

The MS Australia Clinical Trials Network coordinates information about MS trials for the MS community.

**WORKING ACROSS AUSTRALIA AND NZ**

InforMS is developing an online MS Patient-Centred Portal to facilitate self-management of healthcare by people with MS and shared decision-making with their care team.

**THE UNIVERSITY OF MELBOURNE, VIC**

Ms Rebekah Allison Davenport is improving the clinical understanding of sexual dysfunction, depression and anxiety in MS.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Professor Ingrid van der Mei is improving outcomes for people with MS through digital technologies.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Alice Saul is exploring the role of pain in MS.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Professor Bruce Taylor is looking at the National Disability Insurance Scheme (NDIS) and if it works well for people with MS.

**THE UNIVERSITY OF MELBOURNE, VIC**

Dr Steve Simpson-Yap is investigating diet quality and patient health outcomes over 10 years in people with MS.

**THE UNIVERSITY OF MELBOURNE, VIC**

Associate Professor Claudia Marck is developing improved information and resources to guide decision-making around smoking for people with MS.

**MENZIES INSTITUTE FOR MEDICAL RESEARCH, TAS**

Dr Laura Laslett is investigating pathways to treatments for better sleep in people with MS.

**UNIVERSITY OF WOLLONGONG, NSW**

Ms Karen Zozak is evaluating dietary advice for MS.

**UNIVERSITY OF WOLLONGONG, NSW**

Professor Yasmine Probst is conducting a lifestyle clinical trial for weight loss in adults living with MS.

**THE UNIVERSITY OF MELBOURNE, VIC**

Ms Isabelle Weld-Blundell is researching screening tools to assess the social needs of people living with MS.

CAUSES & PREVENTION

DEVELOPING BETTER TREATMENTS

ON-GOING PROJECTS FUNDED BY MS AUSTRALIA

A CURE FOR MS VIA REPAIR & REGENERATION OF CELLS



SENIOR FELLOWSHIP

TRAVEL

**A WORLD  
WITHOUT MS**



MULTIPLE SCLEROSIS AUSTRALIA  
Suite 3.01, 18 Flour Mill Way, Summer Hill NSW 2130  
1300 010 158  
[info@msaustralia.org.au](mailto:info@msaustralia.org.au)  
[www.msaustralia.org.au](http://www.msaustralia.org.au)