

ABOUT MS AUSTRALIA



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, coordinate, educate and advocate for MS research as part of the worldwide effort to solve MS
- Provide the latest evidence-based information and resources
- Help meet the needs of people affected by MS

ABOUT MS AUSTRALIA GRANTS



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.



RESEARCH
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CURE



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ADVOCACY
CURE



SNAPSHOT

PROJECTS STARTED IN 2022 FUNDED BY MS AUSTRALIA

	CAUSES AND PREVENTION	DEVELOPING BETTER TREATMENTS	A CURE FOR MS VIA REPAIR OR REGENERATION OF CELLS
NEUROBIOLOGY	<p>University of Sydney, NSW Associate Professor Alexander Klistorner is unravelling the mechanisms of progressive MS.</p>	<p>University of Melbourne, VIC Dr Steve Simpson-Yap is investigating the effects of treatments on long-term disability outcomes in MS.</p> <p>University of Melbourne, VIC Dr Izanne Roos is working towards preventing disability in patients with severe forms of MS.</p> <p>Monash University, VIC Dr Yi Chao Foong is investigating smart phone apps to predict asymptomatic progression and treatment failure in MS.</p>	<p>Monash University, VIC Dr Steven Petratos is developing a new therapeutic approach for brain repair in MS.</p> <p>Menzies Institute for Medical Research, TAS Dr Kalina Makowiecki is identifying the missing link between myelin loss and neurodegeneration.</p> <p>University of Queensland, QLD Dr Lachlan Rash is developing a new drug to detect and treat nerve damage in MS.</p>
GENETICS AND EPIDEMIOLOGY	<p>Monash University, VIC Associate Professor Anneke van der Walt is looking at the risk of cervical precancer and cancer in women with MS.</p>		<p>Florey Institute of Neuroscience and Mental Health, VIC Dr Sarabeth Stone is investigating regulators of brain immune cell function that promote brain tissue healing.</p> <p>Florey Institute of Neuroscience and Mental Health, VIC Ms Michele Binder is developing a sophisticated system to test progressive MS treatments.</p>
IMMUNOLOGY	<p>Telethon Kids Institute, WA Dr Stephanie Trend is investigating the role of neutrophils, a type of white blood cell, in MS.</p> <p>Monash University, VIC Dr Hugh Reid is investigating the molecular basis for the immune attack on the brain in MS.</p>	<p>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.</p> <p>University of Adelaide, SA Dr Iain Comerford is working to stop T cells, a type of immune cell, entering the brain in MS.</p>	<p>University of Melbourne, VIC Professor Tomas Kalincik and Professor Trevor Kilpatrick are working towards early detection and treatment of progression in MS.</p> <p>Menzies Institute for Medical Research, TAS Associate Professor Kaylene Young is investigating pathways to protect and repair the central nervous system.</p>
SOCIAL AND APPLIED RESEARCH		<p>Murdoch University, WA Dr Yvonne Learmonth is working towards delivering healthcare provider training for remote exercise delivery in MS.</p> <p>Monash University, VIC Dr Daniel Merlo is working towards detecting early changes in memory and speed-of-thinking to improve care in MS clinical practice.</p> <p>Macquarie University, NSW Dr Milena Gandy is working towards advancing the psychological care of adults with MS.</p> <p>Curtin University, WA Associate Professor Lucinda Black is shedding light on diet in MS to improve disease outcomes.</p> <p>University of Melbourne, VIC Ms Rebekah Allison Davenport is improving the clinical understanding of sexual dysfunction, depression and anxiety in MS.</p> <p>University of Tasmania, TAS Ms Terry Purton is investigating a nutrition intervention to improve cognitive symptoms in MS.</p> <p>Menzies Institute for Medical Research, TAS Professor Ingrid van der Mei is improving outcomes for people with MS through digital technologies.</p> <p>University of Wollongong, NSW Associate Professor Yasmine Probst is investigating evidence-based food focus for people with MS and healthcare professionals.</p> <p>University of Melbourne, VIC Dr Litza Kiroopoulos is investigating biomarkers of depression in individuals with MS and depression.</p> <p>University of Wollongong, NSW Dr Vivienne Guan is developing an image-based food tracking tool for people living with MS.</p>	

NEUROBIOLOGY

GENETICS AND EPIDEMIOLOGY

IMMUNOLOGY

SOCIAL AND APPLIED RESEARCH

CAUSES AND PREVENTION

- 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.
- Monash University, VIC**
Professor Jonathan Baell is developing a new imaging test to assess the progression of MS in clinical trials.
- University of Tasmania, TAS**
Associate Professor Brad Sutherland is examining the role of the blood brain barrier to determine how MS begins.
- Brain and Mind Centre, NSW**
Associate Professor Todd Hardy is investigating blood markers of myelin integrity in MS.

DEVELOPING BETTER TREATMENTS

- Working across Australia**
Haematologists and neurologists around Australia are running the Australian MS Haematopoietic Stem Cell Transplant (AHSCT) 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.
- La Trobe University, VIC**
Dr Jacqueline Orian is exploring the role of platelets in MS with the aim of developing a new MS therapy.
- Brain and Mind Centre, NSW**
Dr Chenyu Wang will use MRI to monitor silent disease progression in MS.
- Menzies Institute for Medical Research, TAS**
Dr Kalina Makowiecki is determining how losing nerve cell insulation in the brain causes memory problems in MS.
- Curtin University, WA**
Ms Lillian Toomey is investigating whether damage to myelin support drives MS at a molecular level.
- Flinders University, SA**
Dr Minh-Son To is performing artificial intelligence analysis of brain imaging in MS.

A CURE FOR MS VIA REPAIR OR REGENERATION OF CELLS

- University of Sydney, NSW**
Associate Professor Anthony Don is investigating lipid signalling receptors to assess their ability to protect and restore myelin in MS.

- Working across Australia**
ANZgene is a major collaboration mapping the genetic make-up of people with MS to identify which genes influence MS susceptibility and why.
- Westmead Institute for Medical Research, NSW**
Professor Sanjay Swaminathan is looking into controlling Epstein-Barr virus (EBV) as a therapy for MS.
- University of Technology Sydney, NSW**
Associate Professor Alessandro Castorina is investigating a plant-derived amino acid as a novel environmental risk factor for MS.
- Monash University, VIC**
Dr Michael Zhong is looking at the effect of foetal cells in maternal blood on MS during pregnancy.

- Working across Australia and New Zealand**
The PrevANZ Vitamin D Prevention Trial is measuring whether vitamin D can prevent MS in people at high risk of developing the disease.



- Monash University, VIC**
Dr Mastura Monif is looking at the role of a receptor on an immune cell type called monocytes to see if it could be a new therapeutic target in MS.
- University of Queensland, QLD**
Dr Jun Yan is using mini-brains to see how brain cells are affected by a molecular pathway involved in inflammation.
- Deakin University, VIC**
Dr Wolfgang Marx is exploring if there are differences in gut bacteria associated with symptoms of MS, diet and medication use.

- The Walter and Eliza Hall Institute of Medical Research, VIC**
Professor Gabrielle Belz is generating neuroprotective immune molecules in the gut.
- Australian National University, ACT**
Associate Professor Anne Bruestle is exploring a new approach to improve the delivery, effectiveness and safety of existing MS treatments.
- St Vincent's Hospital, NSW**
Dr Jennifer Massey is working to understand the immune system changes following AHSCT.
- St Vincent's Centre for Applied Medical Research, NSW**
Dr Malini Visweswaran is examining immune cells in people undergoing AHSCT for MS.
- Florey Institute of Neuroscience and Mental Health, VIC**
Dr Vivien Li is developing a therapy for MS based on modifying cell signals to prevent immune system activation.
- Alfred Health and Monash University, VIC**
Dr Wei Yeh is determining how vitamin D affects the immune system in MS as well as predictors of relapse in pregnancy.
- Westmead Institute for Medical Research, NSW**
Mr Ali Afrasiabi is working to target EBV in immune cells as a potential new MS therapy.
- Hunter Medical Research Institute, NSW**
Professor Rodney Scott is developing a blood test for specific DNA fragments from brain cells to differentiate between types of MS.



- Working across Australia**
The Australian MS Longitudinal Study is tracking the practical issues in the lives of people affected by MS, including quality of life, economic impact and employment.
- Curtin University, WA**
Associate Professor Lucinda Black is exploring the role of dietary polyunsaturated fatty acids in both the onset and the progression of MS.
- University of Melbourne, VIC**
Dr Charles Malpas is studying different aspects of thinking and memory impairment in MS to develop a model for use in the clinic.

- Working across Australia and New Zealand**
The MS Australia Clinical Trials Network coordinates information about MS trials for the MS community.
- Working across Australia**
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.
- Murdoch University, WA**
Dr Yvonne Learmonth is exploring crisis resilience in people living with MS with the aim of developing guidelines for managing MS in emergencies.
- Neuroscience Research Australia, NSW**
Dr Phu Hoang is investigating walking patterns in MS in order to develop guidelines for healthcare professionals to use when treating leg weakness.
- University of Melbourne, VIC**
Dr Litzia Kiriopoulou is conducting a cognitive behavioural therapy trial for depression in people with MS.
- University of Melbourne, VIC**
Dr Claudia Marck is developing improved information and resources to guide decision making around smoking for people with MS.
- Monash University, VIC**
Dr Lisa Grech is researching depression in MS, exploring the detection and treatment of depression through healthcare services.
- The University of Wollongong, QLD**
Dr Vivienne Guan is developing a mobile phone app to tailor advice and assist people with MS to make healthier food choices.
- Deakin University, VIC**
Dr Wolfgang Marx is exploring the role of diet on mental health in people with MS.
- University of Tasmania, TAS**
Dr Julie Campbell is creating and testing health economics information to assist with better funding decisions to help people with MS.
- Menzies Institute for Medical Research, TAS**
Ms Alice Saul is examining the role of diet in symptoms and progression of MS.
- La Trobe University, VIC**
Dr Maryam Zoghi is investigating non-invasive brain stimulation for pain reduction in people with MS.
- Curtin University, WA**
Mrs Rebecca Russell is developing an online nutrition education program for people with MS.