



RESEARCH AUSTRALIA

SNAPSHOT

PROJECTS STARTED IN 2014 FUNDED BY MS RESEARCH AUSTRALIA

IDENTIFYING THE TRIGGERS FOR MS

GENETICS & EPIDEMIOLOGY

The Florey Institute of Neuroscience and Mental Health, VIC

Professor Trevor Kilpatrick is investigating functional implications of genetic variation in a specific gene called MERTK and its role in MS susceptibility.

Hunter Medical Research Institute, NSW

Dr Vicki Maltby is profiling molecules that control gene activity in the immune cells of people with MS, to identify factors contributing to disease onset and prognosis.

Bond University, QLD

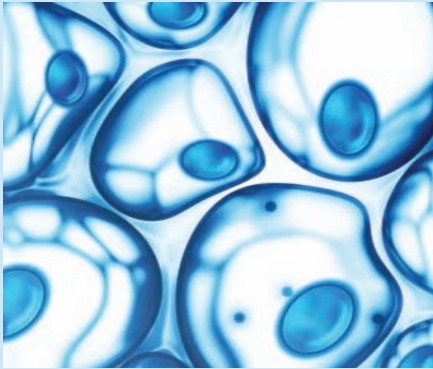
Katherine Sanders is profiling molecules that control gene activity in tissue taken from MS lesions in the brain and body fluids to develop biomarkers for MS prognosis.

DEVELOPING BETTER TREATMENTS



A CURE FOR MS VIA REPAIR OR REGENERATION OF CELLS

NEUROBIOLOGY



University of Sydney, NSW

Associate Professor Alexander Klistorner will use the MS Research Australia Ian Ballard Travel Award to visit the Hadassah Hebrew University Medical Center to participate in a joint project that will investigate demyelination in the visual system in MS.

Dr Heidi Beadhall is exploring the use of magnetic resonance imaging (MRI) to measure brain tissue loss in people with MS in clinical practice.

University of Melbourne, VIC

Dr Simon Murray is looking at novel ways to promote remyelination and repair in the MS damaged brain and spinal cord.

Dr Stanislaw Mitew is investigating the normal turnover of myelin in the healthy and MS brain and investigating ways to improve remyelination for repair.

IMMUNOLOGY & VIROLOGY



University of NSW

Associate Professor David Brown is investigating a specific molecule that can modulate the innate immune system and may provide a new treatment option for progressive MS.

SOCIAL & APPLIED RESEARCH



University of Queensland, QLD

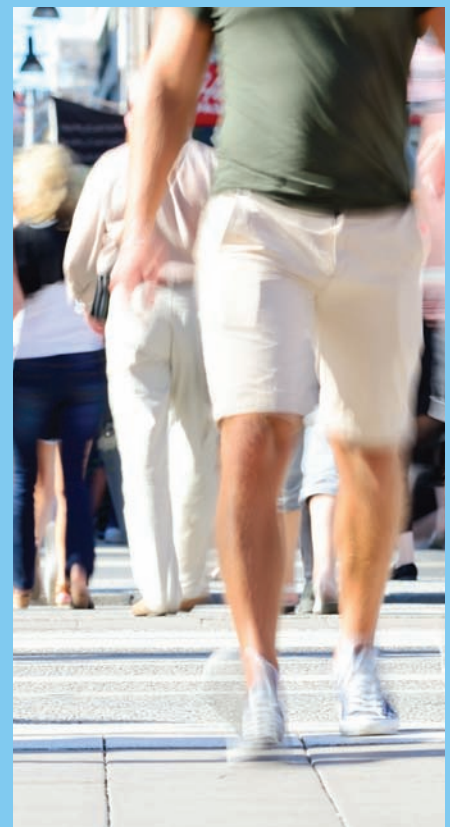
Dr Anna Hatton is running a clinical trial to test whether wearing textured shoe insoles may increase sensory feedback to improve the gait of people with MS.

University of NSW

Dr Phu Hoang is running a clinical trial to test an interactive training system to reduce falls in people with MS.

Monash University, VIC

Louise Kurczycki has validated a screening tool to identify continence problems in people with MS and will now test whether treatment initiated by continence nurses will improve bladder and bowel problems in people with MS.



KEY

SCHOLARSHIP

FELLOWSHIP

PROJECT GRANT



RESEARCH AUSTRALIA

SNAPSHOT

ONGOING PROJECTS FUNDED BY MS RESEARCH AUSTRALIA

GENETICS & EPIDEMIOLOGY

IDENTIFYING THE TRIGGERS FOR MS

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 why.

Westmead Millennium Institute, NSW

A/Professor David Booth is investigating how MS susceptibility genes affect the immune system.

Griffith University, QLD

Professor Simon Broadley is working on antibody detection and genetic screening in a rare variant of MS, neuromyelitis optica (NMO).

Deakin University, VIC

Dr Stuart Smith is profiling the gut bacteria of people with MS to identify new mechanisms underlying disease.

Hunter Medical Research Institute, NSW

Dr Rod Lea is providing bioinformatics support primarily to the MS Research Australia platforms, ANZgene and Proteomics, working across Australia and New Zealand.

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.

Murdoch University, WA

Professor Steve Wilton is developing therapeutic compounds that are capable of suppressing the activity of genes implicated in development of MS.

James Cook University, QLD

Dr Margaret Jordan (awarded a prestigious MSRA-NHMRC Betty Cuthbert Fellowship) is determining how genetic risk factors affect the function of immune cells in MS.

Menziess Research Institute Tasmania, TAS

Dr Steve Simpson Jr is creating an algorithm to predict disease activity and disease course for people with MS.

A CURE FOR MS VIA REPAIR OR REGENERATION OF CELLS



NEUROBIOLOGY

Working across Australia

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

Working across Australia

Professor Allan Kermodé at the Sir Charles Gardiner Hospital, WA, works with Professor Jim Wiley and colleagues around Australia on the **Australian MS Haematopoietic Stem Cell Treatments Register**. They track the efficacy of haematopoietic stem cell treatments (bone marrow transplants) to treat MS.

Baker IDI, Heart & Diabetes Institute, VIC

Professor Karlheinz Peter is investigating the role of platelets in MS inflammation and the potential use of imaging platelets for the early diagnosis of MS.

Working across Australia

Professor Shaun McColl at the University of Adelaide leads the **Proteomics research platform** in a national collaboration to identify the key proteins involved in MS.

St Vincent's Hospital, NSW

Professor Bruce Brew is optimising tryptophan metabolism in stem cells to promote MS repair.

University of Sydney, NSW

Dr Linda Ly is using new proteomics methods to identify the molecules involved in brain repair.

Monash Immunology and Stem Cell Laboratories, VIC

Jae Lee, under the supervision of Dr Steven Petratos, is blocking a molecule known to cause axonal damage in MS, as an option for repair.

IMMUNOLOGY & VIROLOGY

Royal Melbourne Hospital, VIC

Dr Mark Stein is measuring the levels of blood hormones in people with MS to see whether they could be used to identify those most at risk of developing MS.

University of Sydney, NSW

Dr Scott Byrne is investigating the mechanisms behind UV suppression of the immune system, particularly the role of B regulatory cells.

University of Queensland, QLD

Professor Michael Pender continues his work on immune cells and the role of infection with Epstein-Barr Virus (EBV) in the development of MS.

University of New South Wales, NSW

Dr Edwin Lim is interrogating a biological pathway known to regulate inflammation which may slow down MS progression.

Monash University, VIC

Jie-yu Chung, under the supervision of A/Professor Frank Alderuccio, is working on overriding the immune system to treat MS.

Baker IDI Heart & Diabetes Institute, VIC

Ashish Nair, with Professor Karlheinz Peter, is working on a new method to diagnose early stage MS.

University of Adelaide, SA

Dr Iain Comerford is studying the role of white blood cell signalling in MS with the aim of preventing neuroinflammation.

Garvan Institute of Medical Research, NSW

Dr Sue Liu is identifying ways to improve immune defence against infections in people with MS receiving B cell depleting therapies.

SOCIAL & APPLIED RESEARCH

Menziess Research Institute Tasmania, TAS

Dr Ingrid van der Mei manages the **MS Life Study**, which is tracking the issues of practical importance in the lives of people affected by MS including quality of life, economic impact and employment.

Working across Australia

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

University of Sydney, NSW

Wendy Longley is investigating the clinical benefits of a neuropsychological assessment in MS.

