THE OFFICIAL NEWSLETTER OF MULTIPLE SCLEROSIS RESEARCH AUSTRALIA – THE RESEARCH ARM OF MS AUSTRALIA

MSRA Next

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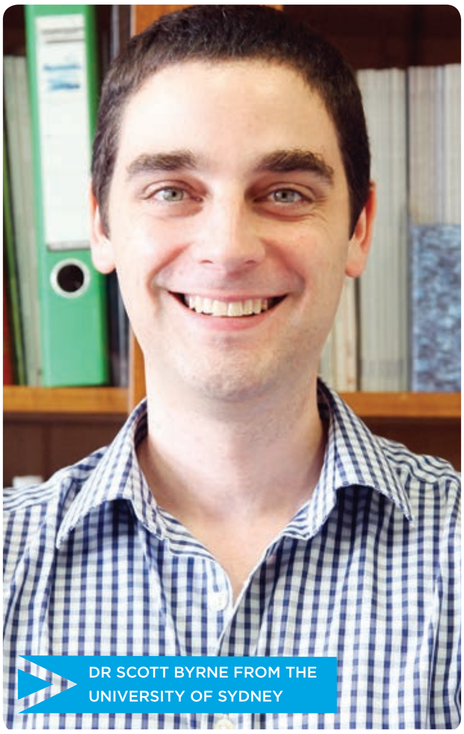
# Australia's capacity increased in MS research A further $2.1 million in 2013



DR SCOTT BYRNE FROM THE UNIVERSITY OF SYDNEY

**In announcing $2.14 million funding for new research in 2013, MSRA clearly demonstrates its achievement in increasing MS research in this country.**

The 14 new grants will be awarded across universities and medical research institutes from all states. The funded research will range from the investigation of MS biomarkers to diagnose and monitor MS, to others tackling regenerative medicine.

Together with the ongoing projects already receiving funding, the new grants bring our research portfolio to a total of 42 projects in social and applied research, immunology, neurobiology, epidemiology and genetics.

A number of three-year project grants, allowing a more thorough pursuit of a particular line of investigation, have been awarded. Prof Michael Pender from the University of Queensland will continue his work looking at the link between Epstein-Barr virus and MS; while Dr Iain Comerford from the University of Adelaide will investigate immune cell signalling with the aim of promoting repair in the central nervous system.

Two young researchers can build on previous MSRA grants to continue their work. Dr Scott Byrne from the University of Sydney, who received an MSRA incubator grant in 2011, will now receive a project grant to investigate the mechanisms by which sunlight affects immune cell function. Dr Ben Emery, from the Florey Neuroscience Institutes at the University of Melbourne, will receive a project grant to continue his research into the factor he discovered, that controls myelin formation during development and may promote remyelination following damage.

Prof Allan Kermode, from the University of Western Australia, has received a project grant to investigate a range of environmental, infectious and genetic factors in a group of people with MS. He will develop a detailed profile of MS to assist diagnosis and monitoring of MS. Ms Louise Kurczycki, an MS Nurse from Monash University, has been funded to conduct a clinical trial into bladder and bowel problems in MS and determine whether early intervention by a continence nurse might be beneficial (see page 3 for further details).

Building Australia's capacity to conduct MS research is a major part of the MSRA research strategy, so funding up-and-coming researchers is very important. In 2013 four new Research Fellows and three new Scholars are announced. The prestigious MSRA-National Health and Medical Research Council (NHMRC) Betty Cuthbert Fellowship goes to Dr Margaret Jordan at James Cook University. Dr Jordan's work looks at the interaction between genetic risk factors and the immune system (see page 3 for further details). MSRA Postdoctoral Fellowships are awarded to Dr Sue Liu of the Garvan Medical Research Institute and Dr Steve Simpson at the Menzies Research Institute Tasmania. More information on all our grant recipients and their research are on the MSRA website.

'This funding is a great boost for MS research in Australia. We are proud to be able to make a significant contribution to the worldwide effort to find a cure for MS,' said Jeremy Wright, CEO of MSRA, 'This is a great step forward made possible through the enormous generosity of our donors and supporters.' ■

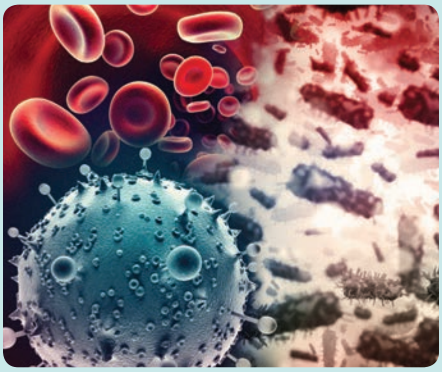
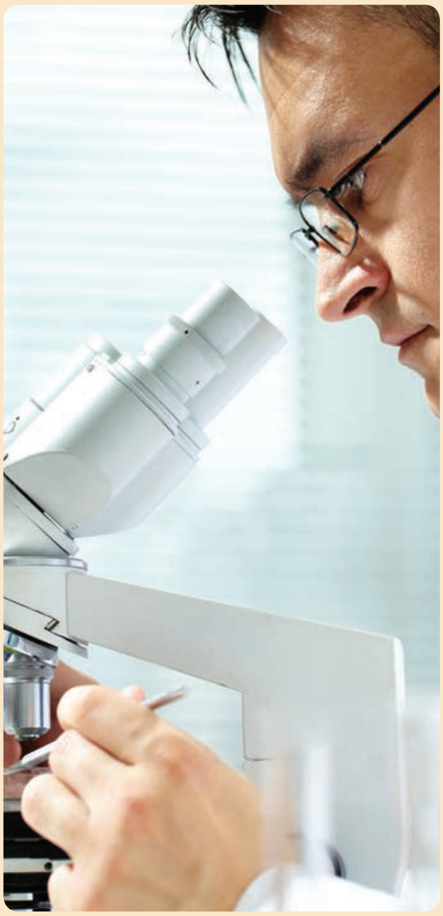
# SNAPSHOT

## of MSRA-funded projects starting 2013

MS
RESEARCH AUSTRALIA

### KEY

- ■ INCUBATOR GRANT
- 🟥 VACATION SCHOLARSHIP
- 🟨 MAJOR COLLABORATIONS AND INFRASTRUCTURE
- 🟦 SCHOLARSHIP
- 🟩 FELLOWSHIP
- 🟪 PROJECT GRANT

|  | IDENTIFYING THE TRIGGERS FOR MS | DEVELOPING BETTER TREATMENTS | A CURE FOR MS VIA REPAIR OR REGENERATION OF CELLS |
|---|---|---|---|
| GENETICS & EPIDEMIOLOGY | **Hunter Medical Research Institute, NSW**<br>🟩 Dr Rod Lea will provide bioinformatics support primarily to the MSRA platforms, ANZgene and Proteomics, working across Australia and New Zealand. | **James Cook University, QLD**<br>🟩 Dr Margaret Jordan (awarded a prestigious Betty Cuthbert Fellowship) will determine how genetic risk factors affect the function of immune cells in MS.<br>**Menzies Research Institute Tasmania**<br>🟩 Dr Steve Simpson Jr aims to create an algorithm to predict disease activity and disease course for people with MS. | **University of Melbourne**<br>🟪 Dr Ben Emery will determine which genes are influenced by a molecule called a myelin regulatory factor (MRF) that controls myelination during development. |
| NEUROBIOLOGY |  | **La Trobe University, VIC**<br>🟥 Tao Nelson, under the supervision of Dr Jacqueline Orian, will create a model to test neuroprotective effects of fingolimod. | **Monash Immunology and Stem Cell Laboratories, VIC**<br>🟦 Jae Lee, under the supervision of Dr Steven Petratos, will block a molecule known to cause axonal damage in MS, as an option for repair.<br>🟪 Dr Natalie Payne will be travelling to international laboratories to learn techniques for stem cell research. |
| IMMUNOLOGY & VIROLOGY | **University of Sydney**<br>🟪 Dr Scott Byrne will investigate the mechanisms behind UV suppression of the immune system, particularly the role of B regulatory cells.<br>**University of Queensland**<br>🟪 Prof Michael Pender continues his work on immune cells and infection with Epstein-Barr Virus (EBV) in the development of MS.<br>**University of Western Australia**<br>🟪 Prof Allan Kermode will look at the overall interaction of genetic and environmental risk factors and EBV in MS. | **University of Adelaide**<br>🟪 Dr Iain Comerford is studying the role of white blood cell signalling in MS with the aim of preventing neuroinflammation.<br>🟥 Duncan McKenzie, under the supervision of Prof Shaun McColl, will study the role of immune cell movements into the nervous system.<br>**Garvan Institute of Medical Research, NSW**<br>🟩 Dr Sue Liu will identify ways to improve immune defence against infections in people with MS receiving B cell depleting therapies. |  |
| SOCIAL & APPLIED RESEARCH |  | **Monash University, VIC**<br>🟥 Louise Kurczycki will study whether treatment initiated by a continence nurse will help to improve bladder and bowel problems in people with MS. |  |

# A winner for Betty Cuthbert Fellowship for 2013

**Giving her research a four year run, Dr Margaret Jordan, from James Cook University, QLD, has been awarded the MSRA-National Health and Medical Research Council (NHMRC) Betty Cuthbert Fellowship for 2013.**

This prestigious fellowship is a partnership between MSRA and the Australian government's medical research funding arm. Dr Jordan will be working with supervisor Prof Alan Baxter on functional genetics, considered by many to be the next phase of genetic research in MS.

After a global effort, a large number of genes have been found that increase the risk of MS. However, how these genes actually contribute to risk, for example through their impaired function or their effect on cellular processes, is not known. This type of research represents the next stage of the many genetic studies that have been undertaken around the world. Dr Jordan will look at three genes in detail, known as *RGS1*, *HHEX* and *THEMIS*. The first phase will look at immune cells grown in the laboratory and the second will use laboratory models to determine differences in susceptibility to MS.

Dr Jordan completed her PhD at James Cook University in 2011 and, as well as her ongoing research projects, she has been involved in the supervision of university students in her lab and lectures on laboratory techniques. 'MSRA is delighted to award the Betty Cuthbert Fellowship to such an outstanding young scientist,' said Mr Jeremy Wright, CEO of MSRA, 'Once the functional changes being driven by genes are identified, researchers will have a better understanding of the workings of MS at the cellular level; potentially identifying new targets for treatment. We await her results with great interest.' ■

# Addressing bladder and bowel symptoms in MS

**Could a routine screening tool identify bladder and bowel symptoms in people with MS before they become a problem?** If so perhaps early intervention by a specialist continence nurse could improve management and care of the problem?

MS Nurse, Louise Kurczycki, has been awarded an MSRA grant in 2013 to investigate these questions.

The recent National MS Needs Analysis Report commissioned by MSRA revealed that over 67% of Australians with MS experience bladder and bowel symptoms.

The symptoms, including incontinence, can have a profound effect on an individual's quality of life and self-esteem and have a particular impact on social activities and employment.

If left untreated some urinary problems can also have serious long term health effects and may exacerbate relapses. Despite this, symptoms are often disregarded or tolerated by people with MS, and overlooked or poorly managed by health professionals.

Ms Kurczycki has developed a screening tool to identify bladder and bowel problems in people with MS. In a pilot study, it revealed that many people had symptoms which they had not previously mentioned to their neurologist or MS nurse.

In this project Ms Kurczycki will collaborate with MS nurses around Australia to refine the screening tool and conduct a clinical trial to see if intervention with a specialist continence nurse is more effective than the standard information and advice usually provided to people with MS.

'We are hoping that early detection of any continence issues via appropriate and targeted screening and regular monitoring will ensure open dialogue between patients and health professionals,' said Ms Kurczycki. 'These might then facilitate referral to an appropriate practitioner to ensure a better outcome for patients.' ■

NURSE LOUISE KURCZYCKI FROM MONASH UNIVERSITY

# Kiss start to the year – wear, dare and share… everywhere!

**Things are hotting up for this year's Kiss Goodbye to MS campaign.** Throughout May you are encouraged to 'wear, dare and share' to raise vital funds for MS research and support services. We anticipate many colourful ideas – featuring red and featuring kisses!

**Wear:** Select a red lipstick, an item of red clothing, or a kiss lip sticker on the cheek or collar and get sponsored to wear it throughout the month of May.

**Dare:** Whilst wearing red lipstick might be daring enough for some, others will go to extreme lengths to Kiss Goodbye to MS. So why not use this opportunity to do something outrageous to raise funds? Perhaps a skydive, a bungee jump, a marathon or another epic sporting challenge – the list is endless!

**Share:** Hold a Kiss Goodbye to MS event and spread the word on social media. Photo opportunities abound for everyone to share on Facebook, Twitter, Instagram and more! ■

# Little Swim, Big Success!

**Kiss Goodbye to MS got off to a flying start this year with an epic ocean swim from Sydney's Palm Beach to Whale Beach on Sunday, 27 January.**

The Big Swim – a 2.7km event started 40 years ago – now has a little sister, the 1km 'Little Big Swim'. Hundreds of red lipped swimmers sported our lovely Kiss Goodbye to MS tattoos on cheeks (and thighs!) and braved pouring rain. They dived into rough surf all smiles… and all ended up back on the sand, tired but thrilled.

It was inspirational to know these participants raised over $20,000, with top fundraiser, Dimitri Cachia (pictured centre), raising over $6,000 alone! Dimitri's achievement is especially impressive. His fitness allows him to mostly use his upper body strength as his MS limits the mobility of his legs. ■

# Merchandise

**Those checking our Kiss Goodbye to MS Facebook page will have seen a sneak preview of some of the fabulous 'kiss' merchandise we will have available.** Featuring bright red lips, funky merchandise items, including umbrellas, t-shirts, scarves, mugs, pens and pin badges, will be available from early April at **www.kissgoodbyetoms.org** ■

# Volunteers needed for M to S sausage sizzle

**We are so excited about this – Bunnings is partnering with Kiss Goodbye to MS on a national sausage sizzle from 1 to 12 May this year, featuring Bunnings stores from Mackay, all the way around Australia to Smithfield!** We need volunteers for this to work – is there a Bunnings near you? If so please help us and be part of a Kiss Goodbye to MS team. Perhaps a group of you could manage a morning or afternoon session on just one of the days in May, even for just a few hours. All proceeds will go towards the Kiss Goodbye to MS campaign and full instructions will be provided – please email **kgtms@msaustralia.org.au** or call **1300 356 467** if you would like to get involved. ■

# What's a challenge if not an opportunity?

**Sarah Ross-Smith is a founding member of Foundation 5 Million Plus and recalls thinking it was a crazy idea but somehow got carried along in the dream...**

I first became involved in a fledgling group of people with MS called 'Foundation 5 million' (F5m) in 2005 which had this crazy idea. If say 2,500 people with MS raised $2,000 we would be able to take enormous steps forward in MS research – in our own disease – an idea given to us by the visionary late Ian Ballard.

When I was diagnosed in 2003, I distinctly remember saying firmly to my friends and family that I didn't want to make new 'MS' friends. I had enough friends of my own, without adding people who simply happened to have the same disease.

**Meeting Ian Ballard changed this view entirely. I am proud to be a part of the F5m+ achievements. Proud that we have collected over $6.5m through grassroots fundraising. And so proud that each and every one of us, in our own way, has made a difference in fighting this disease. We are not part of some problem that needs to be solved, we are part of the solution.**

Knowing the money we raise is directed to some of the most innovative and cutting edge MS research in Australia is pretty exciting. The F5m+ funding subcommittee has this year committed $626,000 to fund four researchers (Dr Emery, Dr Comerford, Prof Pender and Dr Payne) who are focussed on finding a cure.

Perhaps more importantly for me, is that F5m+ has profoundly changed the way I face the challenges that MS throws at me. F5m+ set out to become a fundraising group, but it has evolved to forge bonds that have sustained us through the tough times. Early on, we discovered, much to our own surprise, that a group of people with MS getting together can actually be empowering, positive and even fun. Our regular meetings are typically alive with energy and excitement, not maudlin at all. I leave brimming with ideas and buzzing at the events lined up. I am so grateful to have met these people who make me laugh, make me determined to find a cure for MS and who, despite my initial opposition, have become friends.

With every challenge, there is an opportunity. And that opportunity is now to set up F5m+ Canberra and forge a new group. F5m+ Melbourne is underway and now it's the national capital's opportunity to get involved. Register your interest via **info@f5m.org.au** ■

SARAH ROSS-SMITH WITH HER SON XAVIER AND HUSBAND TRAVIS

## PADDLE To BATTLE MS 2013

**Stand up... on the water?** Yep... the 'Paddle to Battle MS' is a course of races on Stand Up Paddle (SUP) Boards at Collaroy Beach, Saturday 16 March. The first of this type of event in Sydney is causing great interest, and categories include open mens and womens, master mens and womens and under 18s. Displays of boards and associated products, raffles and a silent auction will be held. A Naish Nalu 10'6.5 GT wood veneer SUP board, adjustable paddle and a Naish T-Shirt signed by Kai Lenny, Hawaiian Stand Up World Series 2012 champion, will be auctioned. The event is a joint effort by Jamieson Park Paddle (JPP) Health, Pacifica Ocean Paddlers Club and Collaroy Surf Life Saving Branch. All funds raised go to Foundation 5 Million Plus (F5m+) for MS research.

It will be a fantastic family oriented community event and organisers have had overwhelming response from local clubs and businesses. The Mayor of Warringah Council, Mayor Michael Regan, has kindly made a donation from his discretionary fund. 'There are still opportunities for sponsorship. Fuel TV has offered to air for free a clip of the event supporting this worthy cause so we urge more groups to get involved,' said Fionna Guy on the organising team. No board, no worries... Naish will be supplying boards and paddles for competitors registered in the amateurs, master and junior races in an attempt to engage the community.

For further information, including registrations, head to the website **http://paddleToBattleMS.gofundraise.com.au** ■

MS RESEARCH AUSTRALIA

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