

Kiss Goodbye to MS 2012

In May this year, to coincide with World MS Day, you may see many people wearing red lipstick. Different shades, different ages... different genders! They are all doing so with one thing in mind – to Kiss Goodbye to MS.

Now in its third year, Kiss Goodbye to MS (KGTMS) will run throughout May 2012 and culminate on World MS Day, Wednesday 30 May.

KGTMS had a rousing start to the year thanks to the hard work of the Beyond Outrageous yacht crew. You may recall from *Next's* December issue that they re-branded their yacht with big red lips on the sail for the Sydney to Hobart race and raised almost \$20,000 towards MS research.

So, why not follow their example and get involved – by following our call to action of **'wear, dare and share'**! Get sponsored to WEAR red lipstick, DARE others to take part, and SHARE the message with a 'Kiss Goodbye to



MS' fundraising event. This cheeky appeal does have a strong message behind it; to get the country talking about MS and to seek donations to help find a cure.

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\$3.7 million in grants

Twenty new Australian multiple sclerosis research projects will get off the ground in 2012. They represent a total MSRA investment of \$3.7 million (\$1.7m new research grants plus \$2m for the long awaited vitamin D MS prevention trial). These grants are awarded to promising studies looking into the causes, better treatments and a cure for MS.

The newly-funded projects (further details on page 2) run over the next one to four years. They pursue important developments and also increase Australia's capacity for MS research through scholarships and incubator grants to young scientists.

The National Health and Medical Research Council (NHMRC) has also made a significant investment in MS research projects, starting in 2012. 'It is gratifying to know that the NHMRC has so far allocated \$5.8 million to major MS research programs many of which had previously been

supported by us. So there is a multiplier effect of MSRA funds and a happy validation of our choice of projects' said Jeremy Wright, CEO of MSRA.

In another exciting development, the much awaited vitamin D MS prevention clinical trial (PrevANZ) will commence patient recruitment in 2012. This 'gold-standard' placebo controlled trial will determine the efficacy of high dose vitamin D to prevent MS in people at high risk of developing the condition – those experiencing their very first episode of MS symptoms.

'This year is shaping up well for Australian MS research. *Next* readers – scientists, people with MS and donors – can feel proud of these results. To be able to make such a significant contribution to the global pursuit of a cure for MS is because of the enormous generosity of our supporters and the calibre of the science,' Jeremy Wright said. ■

SNAPSHOT of MSRA-funded projects starting 2012



Genetics & Epidemiology

Identifying the triggers for MS

At Griffith University

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

At the University of Western Australia

■ Alexander Wood, under the supervision of Prof Allan Kermode, will investigate the incidence and progression of MS in Western Australians by analysing long term brain scan changes and season of birth effects.

Developing better treatments

At the Menzies Research Institute Tasmania

■ Dr Ingrid van der Mei will examine the role of lipids in the progression of MS.

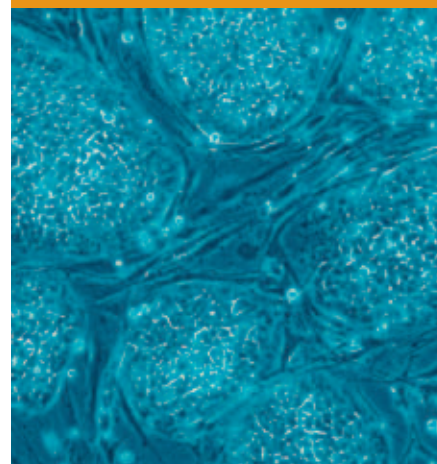
At Griffith University

■ Dr Wajih ul Hassan Bukhari, under the supervision of Prof Simon Broadley, will determine the frequency and clinical features of NMO in Australia and validate a diagnostic blood test.

At the University of Melbourne

■ Dr Tomas Kalincik will assess the outcomes of different treatment decisions and develop tools to assist neurologists to tailor MS treatments for individuals.

A cure for MS via repair or regeneration of cells



Neurobiology

At the University of New South Wales

■ May Wong, under the supervision of Dr John Parratt, will identify brain targets of immune activation in MS.



At the University of Melbourne

■ Dylan Morris, under the supervision of Prof Helmut Butzkueven, will validate a blood biomarker for monitoring neurodegeneration to assist with development of neuroprotective treatments for MS.

■ Kasra Taghian, under the supervision of Dr Steven Petratros, will work on limiting nerve damage in MS.



At St Vincent's Hospital, Sydney

■ Prof Bruce Brew will seek to optimise tryptophan metabolism in adult stem cells to promote MS repair mechanisms.

At the Menzies Research Institute Tasmania

■ Dr Kaylene Young will assess if new insulating cells in the brain could be the key to therapeutic repair in MS.

At the University of Melbourne

■ Dr Mirella Dottori will investigate if human stem cells can repair myelin.

At the University of Sydney

■ Dr Linda Ly will use new proteomic tools to identify the molecules involved in brain repair and its failure in MS.

Immunology & Virology

At The Children's Hospital Westmead

■ Dr Fabienne Brilot-Turville is investigating the earliest signs of brain inflammation in children who develop MS.

At the Garvan Institute of Medical Research

■ Dr Marcel Batten will explore the role of the GPR65 protein in susceptibility to MS.

At the University of Queensland Centre for Clinical Research

■ Dr Judith Greer will investigate whether levels of auto-antibodies in the blood and CSF correlate with the course and progression of MS.

At Monash University

■ A/Prof Frank Alderuccio will test a gene therapy to increase numbers of immune suppressing regulatory T cells to treat experimental MS.

■ Jie-yu Chung, under the supervision of A/Prof Frank Alderuccio, will work on overriding the immune system to treat MS.

At Baker IDI, Melbourne

■ Ashish Nair, under the supervision of Prof Peter Karlheinz, will work on a new method to diagnose early stage MS.

At Westmead Millennium Institute

■ Prof Graeme Stewart will identify how genetic variation in the immune gene IL7R influences MS risk and if it can predict those who will not respond to interferon treatment.



Social & Applied Research



At LaTrobe University

■ Dr Sophie Hill will research how people with MS use the internet and social media to learn about treatment options.

At Neuroscience Research Australia

■ Prof Stephen Lord will identify the predictors of falls in people with MS, to enable better targeted interventions to prevent falls.



■ SCHOLARSHIP ■ FELLOWSHIP ■ PROJECT GRANT
■ INCUBATOR GRANT ■ VACATION SCHOLARSHIP

Stepping up stem cell research for MS

Three new grants awarded in the 2012 MSRA funding round will further boost Australia's increasing contribution to the field of stem cell research for MS.

As treatments improve to halt the progression of MS in those newly diagnosed, the emphasis necessarily remains on aiming to repair existing damage to the nervous system in people already living with MS. A growing body of research around the world suggests that some types of stem cells have the potential to re-grow damaged myelin and protect exposed nerve fibres.

One type of stem cell receiving particular attention at the moment is the induced Pluripotent Stem (iPS) cell. iPS cells are made in the laboratory by reprogramming specialised adult cells, for example skin cells, so that they function as stem cells capable of generating other types of tissue, such as brain. In a world-first, Australian researcher, Prof Claude Bernard and colleagues at Monash University, Melbourne, recently announced that they could make iPS cells from the cells of people with MS. This effectively provides an 'MS in a dish' experimental model in which to investigate the disease mechanism and test new treatments.

Now, upcoming researcher, Dr Mirella Dottori, at the Centre for Neuroscience, University of Melbourne, has received a one year incubator grant of \$25,000 from MSRA. This will kick-start her research into the regenerative potential of iPS cells. In this project Dr Dottori will use these cells to produce oligodendrocyte precursor cells (OPCs). OPCs mature into oligodendrocytes – the cells that form the myelin sheath around nerves. She will test whether OPCs derived from iPS cells are capable of forming myelin on nerve cells grown in a laboratory dish. This is an essential first step, before testing whether iPS cells transplanted into the brain could generate new myelin.

Using a different approach, Dr Kaylene Young at the Menzies Research Institute Tasmania, will investigate the biology of the natural OPCs present in the brain. Dr Young has been awarded a two year project grant of \$180,000 to investigate how OPCs function and whether they can be stimulated to overcome the limitations to myelin repair that exist in MS.



CLOCKWISE FROM TOP LEFT: PROF CLAUDE BERNARD, DR MIRELLA DOTTORI, DR KAYLENE YOUNG AND PROF BRUCE BREW.

Prof Bruce Brew at St Vincent's Hospital, Sydney, will also investigate ways to enhance the natural repair mechanisms in the brain with a three year project grant of \$390,000. Inflammation in the MS brain appears to disturb the normal processing of the essential amino acid tryptophan which is involved in many repair mechanisms. Prof Brew aims to see if restoring the kynurenine pathway of tryptophan metabolism in neural stem cells and OPCs will restore their capacity for repair in the MS brain.

To read more about these and other new projects please visit www.msra.org.au

Movement in falls

Research shows that up to 60% of people with MS will have experienced a fall in the previous six months. A large proportion of these end in an injury requiring medical attention.

Preventing falls and increasing the confidence to move about without fear of a fall is, therefore, of primary importance in maintaining health and quality of life for people with MS.

Many of the symptoms typical of MS – poor balance, muscle weakness, visual impairments, altered sensation and impaired thinking – can contribute to the risk of falling. But the key to preventing falls is understanding which combination of symptoms pose the greatest risk.

Prof Stephen Lord of Neuroscience Research Australia (NeuRA) in Randwick, Sydney, has been awarded a two-year MSRA project grant of \$110,000. He will investigate the key factors that determine the risk of falling in people with MS. Prof Lord is a leading international researcher in the field of applied physiology and falls in older people. His particular focus is to identify risk factors and evaluate prevention strategies. He has already designed a Physiological Profile Assessment tool for identifying the profile of risk factors known as FallScreen®. This tool is now used by researchers and clinicians around the world.

Prof Lord will work with prominent neurologist, Prof Simon Gandevia, and Dr Phu Hoang, a NeuRA researcher and senior physiotherapist at MS – ACT/NSW/VIC. They will apply various tests of balance plus psychological, health and lifestyle factors, to determine the profile of symptoms that contribute to a risk of falling.



■ PROF STEPHEN LORD.

A pilot study has confirmed the tests are feasible for people with MS to complete without causing fatigue and has already generated some valuable insights. Over the next two years the team will expand the study to a total of 300 people with MS.

The end result will be a clinical assessment tool, specific for MS, to help predict falls. It will lay a solid foundation from which exercise and other prevention programs can be designed for safe, appropriate and effective falls prevention. ■

Clinical research

People with MS already using approved therapies can still contribute to clinical research. Trialling new therapies can help towards improved management of MS and clinical studies increase our understanding of the condition.

With 'add-on' clinical trials people may be given existing therapies and investigational therapies together.

Epidemiological (population-based) studies can reveal trends in prevalence and identify potential triggers. One such study currently recruiting in the Sydney metropolitan

area is the MIDAS study, which will map the incidence, prevalence and clinical features of MS.

To find out more about clinical research and search for trials in your area visit www.mstrials.org.au ■



Amazing everyday people!

As the Olympic year gets into gear let's look at the extraordinary efforts of F5m+ people. They test themselves each day... and we are in awe!

Felicity Pyrlis, a person with MS, recently swam the Portsea Classic Ocean swim with friend Elif raising close to \$4,000. Felicity said, 'Doing this swim has actually been a really great thing for me. When I was diagnosed 6 years ago, I was concerned my future would include suffering and disability, however that has not been the case. I have had two children, completed specialist training in medicine, am happily married and just completed an ocean swim. I am so happy to join the passionate F5m+ fundraisers working hard for MS research.'



ELIF EKINCI (LEFT) AND FELICITY PYRLIS (RIGHT).

On March 10, **Sean Sampson** starts his ride from Brisbane to Melbourne. If you know people in any of the towns that he will ride through, please encourage them to show their support to Sean. He is hoping for a wave from the locals along the way as well as financial support for his huge fundraising effort. To view the route and to support him visit www.brisbane2melbourne.com

F5m+/MSRA is one of the five charities The Amazing People Project will support in 2012. This fundraising project aims to raise \$250,000 in 250 days. To be a part of this great project please visit www.theamazingpeopleproject.com

Craig Gerrard, Kym Butcher and Mat Ward – are South Australian legends! These guys not only took part in the Bussleton Ironman receiving 'Ironman Finishers' medals but also raised over \$5,200 for F5m+. ■



IRONMAN FINISHERS – (L – R) CRAIG GERRARD, KYM BUTCHER AND MAT WARD.

Where to direct the F5m+ funds?

An F5m+ funds allocation sub-committee has been officially formed and will now start discussing which research projects F5m+ will support. We are excited to announce the sub-committee:

- Corrinne Bartholomew
- Graham Bryce
- Beth Clement
- Claudia Guajardo
- Mike Hemingway (inaugural co-chair)
- Steward MacLennan
- Cory Pearce
- Sarah Ross-Smith (inaugural co-chair)
- Jacqui Tracy

All committee members are people living with MS and all of them are committed to finding a CURE for multiple sclerosis. To view the committee members' backgrounds please visit the F5m+ website www.F5mplus.org.au

The committee would like to hear suggestions from the F5m+ community about which areas, in general terms, we might consider funding from these MSRA research categories:

- Prevention research – looking at the environmental influences of MS (Vitamin D/EBV)
- MS genetics studies – investigating the mechanisms and potential diagnosis of MS
- Neuropathology – research into the 'cause' of MS via human MS tissue research
- Repair and regeneration research – to 'cure' cells damaged by MS

Your suggestions should be sent to:

F5m+, PO Box 1246,
Chatswood NSW, 2057 ■

Kiss Goodbye to MS 2012 continued

Everyone can participate in Kiss Goodbye to MS by making a donation, holding an event, sharing the message on Facebook and Twitter or buying kiss pins and lipstickers. Visit www.kissgoodbyetoms.org or 'like' Kiss Goodbye to MS on Facebook for more details.

These are strong messages to put on everyone's lips. So throughout May, and especially on World MS Day (30 May), wearing red lipstick is a great way to get the conversation started. It's a sexy, positive and strong way to show support and spread the word. And all the guys? Well they can wear a lipsticker to show support!

If you'd like to find out more about organising a Kiss Goodbye to MS fundraising event in your workplace or community, or for details on KGTMS events taking place in your local area, please visit www.kissgoodbyetoms.org, or contact us at info@msra.org.au or phone 1300 356 467. ■



MSRA Partners



Blake Dawson



Yes, I want to help MS Research Australia

Mail this form or donate online www.msra.org.au Donations over \$2 are tax deductible

☐ My one off tax deductible donation is \$ _____

☐ I want to support MSRA on an ongoing basis.

Please charge \$ _____ to my credit card per month until notified.

☐ Please debit my: ☐ Visa Card ☐ Mastercard ☐ Amex

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Exp: ____ / ____ Signature: _____

☐ OR I have enclosed my: Cheque/Money Order payable to MS Research Australia.

Title: _____ First Name: _____ Surname: _____

Address: _____

Suburb: _____ Postcode: _____

Telephone (W): _____ (H): _____

Email: _____

☐ Please note here if your donation is made in memory of someone or for a function.

name of person / function name:

☐ Please send me information on how I may support MSRA in my Will.

☐ Check this box if you do not wish to receive future updates from MSRA



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