THE OFFICIAL NEWSLETTER OF MULTIPLE SCLEROSIS RESEARCH AUSTRALIA

MSRA IS THE RESEARCH ARM OF MS AUSTRALIA

# Backing winners... rich rewards in further funding!

#### Government extends MSRA-funded projects

MSRA-funded projects have attracted an extra \$2.99m in the latest annual round of grants from the National Health and Medical Research Council (NHMRC), recognising the high quality of MS research and talent in Australia.

NHMRC Project Grants are awarded to Australia's medical researchers based on the excellence of the research. Thousands compete for a limited pool of federal government grants, so winning one is no easy feat.

"I congratulate the MS research recipients of the NHMRC funding, all of whom continue on from previous MSRA grants. It is a testament to their talent, tenacity and results," said Prof Bill Carroll, Scientific Chairman, MSRA Research Management Council.

Dr Tobias Merson, from Melbourne's Florey Neuroscience Institutes, was identified as a rising star in 2007. He received an MSRA Betty Cuthbert Fellowship to investigate drivers for repair mechanisms after oligodendrocyte death. Two years later his excellent research was extended and now Dr Merson has been rewarded with a coveted NHMRC Project Grant.

Jeremy Wright, MSRA's Executive Director, believes the 2010 allocations are a fantastic return on the original investment in these researchers and their projects.

"Supporting our youngest and brightest scientists is a priority – it's these individuals who will make vital MS discoveries and be our future scientific leaders," said Mr Wright.

Before MSRA applies funding to a research project, a rigorous six month process sees world and national experts identify and evaluate the projects and researchers most likely to generate valuable results for MS.

The ANZgene Consortium, which in June this year identified two genetic regions linked to MS susceptibility, was one such project. Its work and success was made possible by generous funding from MSRA donors. It has

now attracted an additional \$1.1m from the NHMRC. This allows ANZgene researchers to more thoroughly interrogate the regions to discover their significance in influencing MS risk.

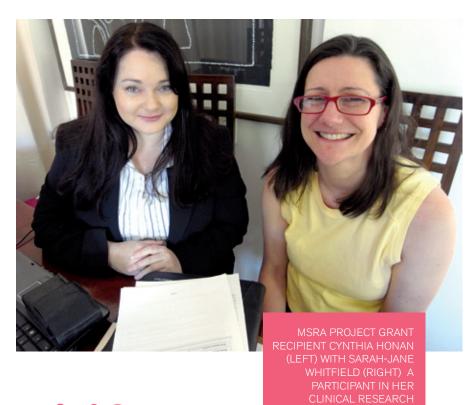
"We are encouraged that MSRA has been a catalyst for further funding of this MS research. For our donors this means that their investment has been doubled, highlighting the value of supporting us," Mr Wright said.

For more information on all MS researchers funded by the NHMRC, visit the website www.msra.org.au



DR TOBIAS MERSON (LEFT) AND HIS RESEARCH TEAM.





# Working Life and MS

Australians with MS withdraw from employment at a higher rate than people with any other chronic disease – even during 2003-2007, which was a time of relative economic prosperity according to the Australian MS Longitudinal Study, 2009. The poor employment outlook for People with MS (PwMS) occurred despite employment programs run by the Australian government, private agencies and MS Societies.

On Saturday 17 October, MSRA hosted a workshop on Employment and MS to identify why PwMS lose their jobs and what can be done. The workshop was chaired by Chris Gillies, Chairman of MS Limited and an MSRA Director.

"Employment is an important issue and in order to create useful resources, the MS societies need to understand the factors influencing unemployment," Ms Gillies said.

Dr Diane Playford, a clinical researcher from UCL Institute of Neurology (UK) has evaluated an approach to help PwMS stay employed. The UK approach recognises that issues preventing PwMS from working tend to be both disease and work related, "with patients simply being isolated and unaware of sources of help".

Further clinical research is underway in Australia through the University of New England where Cynthia Honan is examining some of the most likely influences on early departure from work including difficulties that PwMS may experience in the workplace and some of the physical

and mental symptoms of MS. An MSRA Project Grant recipient, Cynthia is recruiting PwMS to participate in the study which involves completing a questionnaire and undertaking some assessment tasks.

"Employment service providers and clinicians assisting those with MS in employment related matters, need to understand why PwMS leave the workforce so they can develop more effective vocational rehabilitation and intervention programs," said Cynthia.

If you would like to participate in Cynthia's clinical research you can contact her directly on 0402 818 147 or by email at chonan@une.edu.au

In collaboration with the MS Societies and clinical researchers in Australia and abroad, MSRA will spearhead initiatives to tackle this complex issue.

The outcomes from this workshop will be available on the MSRA website www.msra.org.au. Ms Gillies added "effective management strategies have an important role in helping PwMS remain employed".

For a list of clinical trials and clinical research visit the MSRA Clinical Trials Register www.mstrials.org.au

O'Connor RJ, Cano SJ, Ramió i Torrentà L, Thompson AJ, Playford ED. Factors influencing work retention for people with MS: cross-sectional studies using qualitative and quantitative methods. J Neurol. 2005 Aug;252(8):892-6. Epub 2005 May 20. PubMed PMID: 15895310.

### Can Stem Cell Therapies Treat MS?

MS representatives who met recently in London included 27 stem cell and MS experts from the MS societies of Australia, Italy, UK, US and Canada. They reached a consensus and clarified world understanding of stem cell therapies and their potential capability for treating MS.

Most importantly they developed a set of guidelines for scientists to compare and accelerate possible approaches. They also committed to develop a brief public information paper on stem cell therapies for MS.

A/Prof Richard Burt from Northwestern University Feinberg School of Medicine, (Chicago, USA) has been working to develop a stem cell treatment for over 20 years. He explained how bone marrow and blood derived stem cells are the body's own immune stem cells. After years of collecting data from animals a protocol has now been established by the FDA (in the US) for a test on humans. A/Prof Burt stressed the importance of stem cell research and that such new therapies for multiple sclerosis are promising.

"However, proving stem cell transplants work better than standard therapies requires a randomised control trial." Until they are proven effective, such trials will need to be performed under appropriately reviewed University and FDA registered protocols.

As Prof Bill Carroll, Scientific Chairman of MSRA's Research Management Council emphasised, "the use of neural stem cells to treat MS is still experimental; there is no such proven stem cell therapies available anywhere in the world for people with MS. Those clinics promising breakthrough MS cures should be viewed with caution." He does explain, however, the possibilities afforded by bone



marrow stem cell treatment and its ability to "modify or even reconstitute the aberrant immune system, slowing or preventing further injury".

There are registered stem cell clinical trials available (see below) however, beyond these, no therapy – no matter how expensive – has been proven safe and effective.

Clinical trials can potentially give suitable people with MS early access to beneficial new treatments. It may still be some years before a stem cell-based therapy for people with MS becomes available but only clinical trials will prove a treatment is safe and effective.

To find out more about registered stem cell clinical trials, visit www.clinicaltrials.gov (Search using the NCT numbers listed below).

- Stem Cell Therapy for Patients With Multiple Sclerosis
   Failing Interferon A Randomized Study (NCT00273364)
- Nonmyeloablative Allo Stem Cell Transplant for Severe Autoimmune Diseases (NCT00849745)
- Oligodendrocyte Progenitor Cell Culture From Human Brain (NCT00283023)
- Autologous Mesenchymal Stem Cell (MSC) Transplantation in MS (NCT00813969)
- Rajavtihi Neuronal Adult Stem Cells Project (RNASc) (NCT00927108)

## Meeting of MS minds ... Progress

Rising stars of Australian MS research met with local and international researchers at a recent scientific conference hosted by MS Research Australia in Sydney.

MSRA's 3rd biennial 'Progress in MS Research' conference was not only about research, it also lent itself to two other very productive sessions. One was a research update to the public and the other had an emphasis on employment issues for people with MS (PwMS).

The scientific sessions attracted 110 local and international academic and industry professionals, chaired by Prof Bill Carroll, Scientific Chairman, MSRA Research Management Council.

As hosts, MSRA ensured it was a national symposium including the best and brightest from Australia and overseas. The format was designed to give all researchers the latest perspectives in their individual fields including Neuropathology, Proteomics, Genetics, Virology, Stem cells and employment and MS.

Highlights included;

- Dr Michael Barnett from the University of Sydney gave an update on the current understanding of early neuropathological changes in MS-afflicted tissue.
- A/Prof Richard Burt from Northwestern University (USA) showed results of his stem cell transplants for relapsing-remitting MS patients.
- Prof Michael Pender from the University of Queensland and Prof Simon Mallal of Royal Perth Hospital, discussed their advances in the EBV relationship to MS.
- Prof Jun-ichi Satoh from Meiji Pharmaceutical University (Japan), presented a bioinformatics approach to identifying proteins in complicated biological pathways.
- Dr Diane Playford, from UCL Institute of Neurology (UK) displayed how her UK model assists PwMS to maintain their jobs despite their increasing disabilities.

## Brain Bank already paying dividends



Since its launch in February 2008, the MSRA Brain Bank (MSRABB), with its Australia-wide donor program has enabled the collection of high quality post-mortem material from people with MS.

Dr Michael Barnett from the University of Sydney is one of the first researchers to utilise the resources to study MS plaques in detail. He calls the MSRABB a "world class" set-up, which will advance understanding of the causes of MS and potentially lead to the discovery of targeted therapies.

Dr Barnett said "human tissue is essential to progressing MS research. For the first time we have access to both optimal



DR MICHAEL BARNETT (RIGHT) CONTINUING HIS RESEARCH.

fresh and fixed human brain tissue. This means that we are no longer reliant on inadequate animal models of the disease or human tissue from existing archives that have been embedded in paraffin for years, sometimes decades, substantially reducing the quality."

"Although animal tissue is very useful, MS is a human disease which animal models do not faithfully replicate: I believe that the MSRABB will allow us to progress towards effective treatments."

"The availability of fresh tissue allows new scientific technologies, such as proteomics (the large-scale study of proteins, particularly their structures and functions) to be applied to the research of MS."

"Because retrieval is prompt, within 6 - 8 hours of death, the MSRABB can provide scientists with specimens that are very well preserved including the proteins and genetic material".

Interest from researchers and donors is encouraging but funding is still needed to carry out this vital research.

"It's not just brain tissue that is needed. People may also consider leaving a bequest to MSRA to ensure that this valuable resource is available long into the future," said Jeremy Wright, Executive Director of MSRA.

To receive further information about the MSRA Brain Bank please visit www.msbrainbank.org.au or call 1300 672 265.

For information on the MSRA bequest program please visit www.msra.org.au or call 1300 356 467.

PROF GRAEME STEWART

PRESENTED AT THE

#### in MS Research Conference

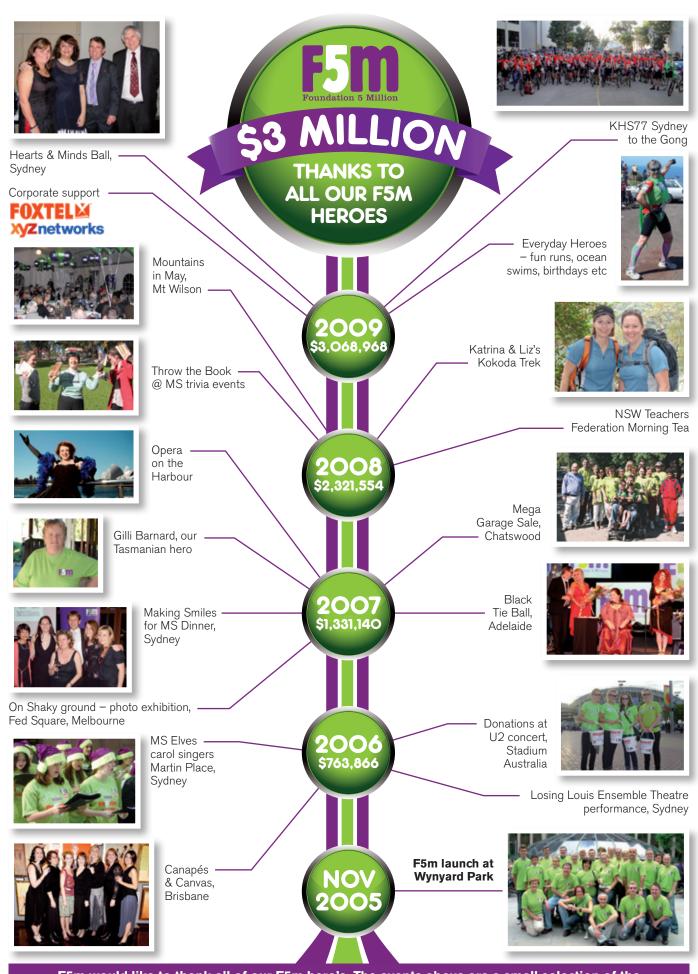
 Scientists from the Ausimmune study, the ANZgene Consortium and Dr Sreeram Ramagopalan from the University of Oxford (UK) clarified the effects of genes and the environment on MS.

In recognition of our young MS investigators, MSRA awarded Dr Melissa Gresle the prize for best poster presentation and Ms Vilija Jokubaitis won for the best oral presentation. Both are from the Florey Neuroscience Institutes.

Following on from the scientific conference a public lecture provided PwMS with the opportunity to hear from local and international researchers on the latest findings in MS research and drugs presented at the conference. The lecture was not only informative but encouraging for the MS community who know that despite there being no current cure, the best minds in scientific research are collectively working towards the same goal.

To view excerpts from the public lecture please visit www.msra.org.au
The scientific conference and the public lecture were both extremely
successful and would not have been possible if it were not for the major
sponsors the Macquarie Group Foundation and MSRA Industry Round Table
members Biogen Idec, Sanofi Aventis, Bayer Schering Pharma, Merck Serono
and Novartis.





F5m would like to thank all of our F5m hero's. The events above are a small selection of the many wonderful moments that have taken place since 2005.

Join in the fun, no matter how large or small.

Call 1300 356 467 www.f5m.org.au

## 1,000kms in 10 days

Cory Pearce, his family and friends are not people to shy away from a challenge. Cory, who was diagnosed with MS in 2004, and his supporters, will be conquering 1000kms in 10 days to raise \$100,000 for MS research.

They will paddle, bike and hike through beautiful regional Victoria in March 2010.

Cory is looking for people who want to join the challenge, for just one day, or the whole 10 day journey.

"You don't have to be super-fit to get involved. My mum, who is in her 50s, will walk 100 km along The Great Ocean Walk with my aunty," said Cory, whose cousins are also cycling the event through Birchip, north-west Victoria, the countryside of their childhood.

"And if you are not so keen on joining us in the challenge, we are calling on everyone we know for sponsorship. Any little bit will help us reach our goal."

"Look out for us kayaking on the Murray River, biking from Swan Hill to Port Campbell and walking The Great Ocean Walk".

For more details about participating or making donations, visit www.ms1000.org.au, call 1300 356 467 or visit www.f5m.org.au

















Blake Dawson





#### I want to help MS Research Australia

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