Every dollar raised is placed into research.

The Trish Multiple Sclerosis Research Foundation is staffed by a team of volunteers, and donations are gratefully received.

- www.trishmsresearch.org.au
- Cheque to:
  PO Box 511,
  Collaroy Beach NSW 2097
- 0410 410 491

All donations of $2.00 and over are tax deductible (DGR 900490691)

ABN 22 089 078 464
The Trish MS Ball

The Trish Multiple Sclerosis Research Foundation’s highly anticipated annual Ball lived up to its theme of Kissing Goodbye to MS at the Hilton Sydney Grand Ballroom on Saturday 13 September, raising over $175,000 for vital MS research.

Hundreds of supporters were present at the “Kiss Goodbye to MS” themed ball, which was hosted by the Chief Political Reporter for Sky News, Kieran Gilbert, who was supported by the Foundation’s inaugural Master of Ceremonies, Bill Gilbert.

The evening began with a video presentation produced pro bono again this year by DMC Digital, which showcased the great hope that a cure is not far away.

Guests were treated to an inspiring pro bono performance from world-renowned concert pianist Simon Tedeschi, who is one of Australia’s most renowned and sought-after pianists. Simon has been awarded several prestigious prizes and has performed in major concert halls around the world and for world leaders such as George W. Bush, Nelson Mandela, and the Dalai Lama.

Guest Speaker Mark Tedeschi AM QC, Senior Crown Prosecutor for NSW captivated guests with his thoughts on the jury system in New South Wales in comparison to the judge only system in the Oscar Pistorius trial in South Africa.

Gemma Veling gave a moving speech, prior to the Live Auction which was again expertly conducted by the Foundation’s honorary Auctioneer, Craig Marshall, Century 21 Cordeau Marshall Group.

Kieran Gilbert interviewed Professor Graeme Stewart AM who reminded guests that when the Trish Foundation started in 2001, the world was aware of one genetic factor that contributed to MS.

“By 2007, it had gone to two. In 2011, it got to 50 odd, 110 in November last year, now 160,” said Professor Stewart. “All these genes fit into patterns of pathways that control the immune system and drive the immune system to attack the brain. This is a very exciting time and things are going extremely well.”

Guests were treated to a sensational rendition of “You Raise Me Up” from acclaimed soprano Toni Powell and her star pupil Jessica Zylstra. Kambala’s Chamber Orchestra made a great contribution entertaining guests during pre-dinner drinks and our guests danced the night away to the 5-piece Band, Hit Machine.

Joint Patrons Hon Barry O’Farrell, State Member for Ku-ring-gai and Dr Brendan Nelson, Director Australian War Memorial gave memorable speeches and continued their significant support of the Foundation.

Trish’s mum Carol Langsford, Chairman of the Foundation, expressed her gratitude to those who support the event and cause.

“Year after year this event continues to raise much needed funds for MS research. We are passionate about saving the suffering caused by this disease and I am blown away by the generosity of our Sponsors and guests and am truly thankful for their fantastic support”.

“So many people, companies and organisations made very generous and significant contributions to the success of our Ball and the funds we raised for MS research and we really are incredibly grateful to each of them.”

Heartfelt gratitude to the Trish Foundation’s major Sponsors for their great generosity and significant contribution to our cause.
The Trish Kiss Goodbye to MS Ball next year will be held on Saturday 12th September 2015 at Hilton Sydney.

Sincere gratitude

... to the Trish Foundation’s valued, generous and big-hearted supporters, Sponsors and donors for contributing to the over $3 million raised for vital MS research projects.

... to the Trish Foundation’s Joint Patrons, Hon Barry O’Farrell, Federal Member for Ku-ring-gai and Dr Brendan Nelson, Director Australian War Memorial.

... to the Trish Foundation’s Honorary Auditor since inception, Peter Done.
**Cheviot Wine Group’s great generosity**

Cheviot Wine Group in collaboration with The Kiss Goodbye to MS campaign has developed two wines, The Bench at Red Hill Estate Cabernet Sauvignon and Chardonnay.

This exciting collaboration is another extremely generous initiative from our wonderful supporters at Cheviot. Look out for these little wonders in your local retailers, if it’s not available – ask the retailer to source from Cheviot Wine Group. Cheviot will be ever so generously donating $1 from the sale of every bottle to MS Research Australia.

This is extraordinarily generous support of MS research and our heartfelt appreciation is extended to Frank Fabrizio, Managing Director, Cheviot Wine Group and his dedicated team.

---

**Our great appreciation**

... to Susan Harris, Tournaments Coordinator Tennis NSW for dedicating a Raffle at the 10 & under State Teams Championships to the Trish Foundation, giving our funds for research a great boost.

... to Bobby Barter for compiling his ‘Book for Trish, her star forever twinkles’ and to Bill Shaw, Express Digital Print North Sydney, for printing the special book pro bono.

... to Trish’s school ‘mates’, the Class of ‘89 for donating funds for our research following their 25 year reunion.

... to Kerry Dock and Stewart Whicker, Expo Tennis for dedicating their Expo Tennis Days to the Trish Foundation and raising substantial funds for our research.

... to Ben Dulhunty, Fitness Relevation for raising funds for the Foundation at Lane Cove Tennis Club and to Emma Forsdick for encouraging this generous support.

---

**Vale Lorna Thomas MBE**

Our deepest sympathy and sincere appreciation to Rob and Jennie Thomas who requested donations in lieu of flowers on the sad passing of wonderful Trish Foundation supporter Lorna Thomas MBE, an Honorary Life Member of Cricket NSW and Life Member of the MCC Lords.

---

**Call out to our big-hearted supporters**

Your vote or votes could give the Foundation many additional dollars for research – and as we all know, every dollar counts.

The Dick Smith Foods Foundation will donate $1 million to charity in 2014 and the supporters of Dick Smith Foods will be the sole decision makers as to where the money will go.

Recently Dick and Pip Smith gave the total intellectual property for Dick Smith Foods to a new Foundation, The Dick Smith Foods Foundation. In the twelve-month period between 1 January and 31 December 2014, $1 million will be donated based on votes received.

“On 8th July 2014, the first round of 38 charities received a share in $510,000 donations. These first 38 charities are now ineligible to receive a donation in the second round at the end of 2014. Voting for the second round of donations has now commenced.”

It’s very simple! Just take a photograph of any Dick Smith Foods product(s) in your pantry and text or email it to charity@dicksmithfoods.com.au together with your nomination to support the Trish Multiple Sclerosis Research Foundation. You can also include your name and it will be added to the website so you know your vote has been recorded.

We would be extremely grateful if you could assist the Trish Foundation by buying Dick Smith products and voting in this way – how fantastic it would be if your vote assists us to be awarded $10,000, $20,000 or even $50,000!

---

**Kiss Goodbye to MS Bar Night**

Our Kiss Goodbye to MS Bar Night next year will be hosted by Jim Granger and his staff, The Lane Sydney, who are again providing very generous support.

Valued volunteers John Ganderton, Cindy Dock and Bree Calderwood are contributing to the organisation of this special fundraiser, with support from John Roberts, Tom Reynolds, Emma Forsdick, Daniel Farrar and Board member Sue Woodward.

The Foundation is extremely grateful to Jim Granger and his staff and these valued volunteers.
Variety is the Spice of Life

The importance of establishing – and maintaining - a healthy work-life balance is undisputed, and the saying “never get so busy making a living that you forget to have a life” is often mentioned in conversations with family and friends in an attempt to remind ourselves what is truly important.

Looking solely at Professor Trevor Kilpatrick’s professional commitments – head of the Multiple Sclerosis (MS) Division at The Florey Institute of Neuroscience and Mental Health (the largest brain research group in the Southern Hemisphere), neurologist and Head of the MS Unit at the Royal Melbourne Hospital, and Director of the Centre for Neuroscience and the Melbourne Neuroscience Institute at The University of Melbourne – you may assume his work is his life. But spend some time getting to know him and it’s clear his work in the field of MS research is a passion and one which is whole-heartedly supported by his family.

Professor Kilpatrick always wanted to carve a career as an MS researcher. He initially trained as a neurologist and then undertook a PhD at the Walter and Eliza Hall Institute of Medical Research.

“I commenced my scientific career with the specific intention of focusing on research relevant to multiple sclerosis,” he comments. “My initial thought was to focus on interrogating the immune system like most MS researchers at the time but I was quickly convinced by key researchers at the WEHI that MS was a complex problem that required a multi-faceted approach. As a result, I became interested in understanding the determinants of the neurological damage which occurs in MS and how best to either prevent or to repair it.”

“One of the excitements of the job is that each day is varied and interesting. My responsibilities range from core commitment to my research program, to, as a medical practitioner, seeing and helping people with multiple sclerosis as well as patients with other neurological diseases.”

Professor Kilpatrick’s passion for MS research is clearly directed towards enhancing our ability to help people with this disease.

“Over the last 20 years there has been a revolution in our capacity to treat the disease but for a significant proportion of people, the available treatments remain inadequate. On the other hand, whereas 30 years ago many might have considered MS related research ‘a graveyard for aspiring scientists’, the fact that there have been many successes in both our understanding of the drivers of MS and in the development of partially effective therapeutic strategies has given us confidence that our aims for further advances are realistic rather than fanciful,” he observes.

A significant component of Professor Kilpatrick’s work focuses on neural stem cell biology and he has been the recipient of multiple awards and prizes for excellence in this field. While there is no known cure for MS, new research shows that inherited factors and the environment play a key role in susceptibility to the disease. This forms the basis of his current research which is being funded by the Trish Foundation.

He explains more about his current work: “Recent work in our laboratory has shown that variation in a gene called MerTK is one of the inherited factors associated with MS. We have identified a number of different inheritable variations in the MerTK gene that are associated with the risk of developing MS but it is not as yet clear whether these changes are themselves causal or if they are linked to other, as yet unidentified, changes in this gene. Therefore, in the work generously funded by the Trish Foundation we are further exploring variations in the MerTK gene to determine if we can identify rare genetic variations that are highly linked to MS susceptibility…”

It is hoped that identification of the variations in the MerTK gene can be used to identify a subgroup of people at greater risk of developing MS. This could potentially provide counselling and preventative opportunities as well as specific treatment strategies that will either diminish disease activity or enhance the capacity for the nervous system to be repaired.

Despite all his achievements Professor Kilpatrick is refreshingly humble. He credits his attitude to a Senior Colleague who once said to him “your career is the here and now, rather than future aspirations.” He expands on this: “This is an important point for young researchers to consider, indicating that anyone at any stage of their career can contribute substantively and that it is important to live life to the fullest on a day by day basis.”

His mantra of living life to the fullest every day is something he shares with his family. Professor Kilpatrick’s wife and two young children, aged 8 and 11 years old, always make time for family outings, whether it be at the beach, playing tennis, or even just reading books together. It’s clear the Kilpatrick family share a special bond with his children fortunate enough to accompany him on his work travels which he hopes will “serve to open their horizons”.

Professor Kilpatrick has been the recipient of the Sunderland Award, AMRAD Postdoctoral Award and the inaugural Leonard Cox Award. More recently, Professor Kilpatrick and his Group were awarded the Australian Museum’s Jamie Callachor Eureka Prize for Medical Research (2008) in recognition of their extraordinary contribution to medical research into multiple sclerosis.

“The Holy Grail in terms of MS will be to establish ways in which to repair the damage that is extant in people who unfortunately already have significant disability due to past immune attacks.”
Tackling Progressive MS

A 2014 MS Research Australia project grant holds particular promise for tackling the progressive forms of MS. This is an important area of research, since there are currently no treatment options for these forms of the disease.

Associate Professor David Brown at the University of NSW, has been awarded $250,000 over three years, co-funded by the Trish MS Research Foundation, to investigate a molecule known as MIC-1/GDF15 that appears to play a key role in regulating cells of the innate immune system. The innate immune system is generally the ‘first line’ of defense against perceived threats to the body. It is also involved in long term clean-up and repair responses to damage.

The MIC-1/GDF15 molecule is being developed internationally as a new therapy for a number of diseases including obesity and inflammation. Preliminary evidence from A/Professor Brown’s laboratory suggests that MIC-1/GDF15 also modulates the innate immune system and that it may be an effective treatment for progressive MS.

The focus of this project will be the mechanisms by which MIC-1/GDF15 regulates the cells of the innate immune system, such as dendritic cells and the microglial cells of the brain. He also aims to use laboratory models of MS to obtain evidence that MIC-1/GDF15 could be used as a therapeutic agent in autoimmune disease.

Since MIC-1/GDF15 is in Phase I clinical trials for appetite suppression, much of the safety work in humans is underway. This means that if Associate Professor Brown can confirm a role for MIC-1/GDF15 in MS there will be an exciting opportunity to rapidly progress his experimental results into direct benefits for people with progressive forms of MS.

With his considerable experience with this molecule and the tools and methods already developed at the University of NSW, Associate Professor Brown is well positioned to make rapid progress on this exciting project.

Incubator Grants

Incubator grants specifically provide seed funding for the early stages of new research efforts, with the aim of generating preliminary data needed to support future larger grant applications.

On average, recipients of Incubator Grants are able to leverage twenty seven (27) times the initial funding with prestigious grants from other funding bodies, including the National Health and Medical Research Council.

The Foundation is pleased to announce, with very generous support from guests at The Trish MS Ball who are making generous contributions, the following Incubator Grant has been approved for funding:

Do MS associated genetic changes in vitamin D metabolism genes affect the function of T-cells?

Investigators: Professor Heinrich Körner, Menzies Research Institute Tasmania and Professor Bruce Taylor, Menzies Research Institute Tasmania.

Two additional Incubator Grants have also been approved for funding:

• What is driving neuromyelitis optica? Investigators: Dr Ben Crossett, University of Sydney and Associate Professor Michael Barnett, University of Sydney

• Novel drugs from cone snail venom for the treatment of MS Investigator: Dr Charles Galea, Monash Institute of Pharmaceutical Sciences

NHMRC funding

MS Research Australia and the Trish Foundation, welcome the National Health and Medical Research Council’s (NHMRC) recent Fellowships funding announcement, with a total of $1.05 million awarded to MS researchers.

This includes a Practitioner Fellowship for clinician researcher, Associate Professor Helmut Butzkueven and a Senior Research Fellowship for laboratory-based researcher, Associate Professor David Booth. Both MS researchers receiving funding in this round have a close focus on ensuring that research discoveries are translated directly into clinical benefit for people with MS.

NHMRC CEO Professor Warwick Anderson said ‘Practitioner Fellowships are prestigious, highly competitive, sought after awards for researchers who perform in the top 10% of their field’.

Associate Professor David Booth has been supported by an MS Research Australia Senior Research Fellowship over the last five years which has enabled him to make enormous progress in his research including contributing significantly to the MS Research Australia-supported ANZgene MS Genetics Consortium and the international discovery of more than 100 genes that contribute to MS susceptibility.

Associate Professor Helmut Butzkueven was one of the first researchers to receive an MS Research Australia Fellowship in 2006, co-funded by the Trish MS Research Foundation, after MS Research Australia was established. Both his clinical and research expertise have gone from strength to strength and he now runs a large MS research laboratory as well as heading MS clinics at Royal Melbourne Hospital and Box Hill Hospital. Helmut has also contributed significantly to the ANZgene Consortium and is a principal investigator in the PrevANZ vitamin D MS Prevention trial.

Trish Foundation Chairman, Carol Langsford said, “We are thrilled that Associate Professor Booth and Associate Professor Butzkueven both of whom the Trish Foundation has previously supported, have secured this additional funding.”

PrevANZ Vitamin D Prevention Trial

The PrevANZ Vitamin D Prevention Trial, to which the Trish Foundation contributed, continues recruitment in Australia and New Zealand, with 50 patients enrolled already. This Trial is the first in the world to begin and the first dose ranging trial, with the power to prove that Vitamin D is a safe and effective method for preventing MS.
Dr Edwin Lim,  
Post-doctoral Fellow

The Trish Multiple Sclerosis Research Foundation, in partnership with MS Research Australia, has been supporting Dr Edwin Lim with a post-doctoral Fellowship since 2011. Dr Lim has been undertaking ground-breaking research into potential new therapeutic targets for alleviating the progression of MS.

Dr Lim, from Macquarie University in Sydney, has been using novel methods to investigate a metabolic pathway that may be important in the chronic inflammation in the brain in progressive MS. This pathway is known as the kynurenine pathway, and it is a normal metabolic pathway used to break down amino acids (tryptophan) in the body. However, activation of this kynurenine pathway also produces break down products that may be toxic to the brain cells that produce myelin.

Now, nearing the end of his four-year Fellowship, Dr Lim has studied people with MS as well as animal models of MS, in order to examine the role of kynurenine pathway in producing inflammation and identify which components of the kynurenine pathway are most important in MS. The results from this innovative project are likely to lead to new diagnostic or therapeutic targets for MS.

Dr Lim’s work to date has been extremely productive, resulting in two publications and a book chapter, with one additional manuscript currently submitted for publication, and further three in preparation. This work represents a very exciting advance in our understanding of the molecular causes of inflammation in MS and has huge potential for future therapeutic development.

Reprogramming the immune system in MS

Dr Christopher Siatskas, from Monash University, has for many years been researching potential methods to manipulate the immune system to reverse the damage caused by multiple sclerosis (MS). He has recently finished a three-year project grant (2011-2013) from the Trish MS Research Foundation in partnership with MS Research Australia to pursue these important research questions.

While a number of treatment options currently exist for MS, none of them are yet able to cure the disease. To overcome this bottleneck, new therapies are required.

Dr Siatskas’ work investigated a new approach to restore the immune system’s tolerance to self (“self-tolerance”) in a laboratory model of mice with MS-like illness. His approach used a gene therapy method that directly targets the self-reacting cells in the thymus. The thymus is the organ where immune cells are trained to recognize the difference between ‘self’ cells and dangerous cells. Importantly, his work aimed to compare these treatment strategies in both young and aged mice, to more accurately study the effects of aging on the immune system. Aged mice may be a better reflection of the human MS condition, and it is important to understand how the immune system changes with age.

His experiments tested gene therapy in combination with a specific antibody treatment targeted against several different proteins found on the surface of immune cells. Dr Siatskas demonstrated that treatments targeted against specific protein molecules were able to induce self-tolerance and suppress disease activity in the young animals with MS-like disease, but the older mice did not respond to the treatment, failing to develop self-tolerance or have any reductions in disease severity.

Dr Siatskas’ work has been extremely productive, so far resulting in five publications in medical journals, with several more underway.

“Given that all available treatments for MS offer patients only partial relief from symptoms, the significance of these regenerative and gene therapy-based approaches to re-establish immune self-tolerance provides a genuine opportunity to develop a more targeted strategy to reverse autoimmune diseases such as MS.”
New Scholar funded by the Trish Foundation

Talented young MS researcher, Ms Katherine Sanders has got off to a flying start after receiving an MS Research Australia postgraduate scholarship, funded by the Trish Foundation, earlier this year.

Working under the supervision of Associate Professor Lotti Tajouri at Bond University and collaborating with Associate Professor Jeannette Lechner-Scott at the Hunter Medical Research Institute in NSW, Ms Sanders is investigating the role of microRNAs in the immune system in MS. MicroRNAs are molecules involved in controlling genetic activity in different cell types and may reveal clues about the biology of MS as well as potentially providing markers to track disease activity and progression.

Ms Sanders was selected from a highly competitive field to attend a Summer School on Genetics in MS run by the European Committee for Treatment and Research in MS (ECTRIMS). She was awarded an ECTRIMS international travel grant and a Bond University travel award to support her attendance at the Summer School which was held in Tallinn, Estonia.

Ms Sanders reports that it was a whirlwind couple of days.

‘I had the opportunity to hear from the world’s leading MS researchers about their progress in understanding the role of genetics in MS, and to discuss with them the future directions of projects in this field. Getting to know my peers and their research interests was a highlight of the course.’

‘I gave a poster presentation of a pilot project I recently conducted on a DNA insert found in the progesterone receptor gene. I received great feedback from the course participants on how this avenue of investigation may be further explored.’

Ms Sanders was also awarded an educational grant by the Americas Committee for Treatment and Research in MS (ACTRIMS) to attend the joint ECTRIMS/ACTRIMS conference in Boston, USA, in September 2014. She presented another poster on her work on microRNAs at this conference.

In winning these additional travelling scholarships, Ms Sanders has really confirmed the high potential that led to her selection for an MS Research Australia Scholarship funded by the Trish Foundation and we look forward to seeing further exciting progress from her over the next few years.

“I would like to thank the Foundation for the support you have provided me and I look forward to sharing with you some exciting results in the near future,” Ms Sanders said.

Acknowledgements

The Trish Foundation is honoured and privileged to receive extremely generous support. Thank you VERY much to all the companies, people and organisations who continue to make generous and significant contributions to our funds for research, some of whose logos appear below.