

December 2010

2011 will be a landmark year for MND research in Australia.

MND Australia is driving MND research in Australia to a new level. \$1.395 million has been provided through the MND Research Institute of Australia (MNDRIA) for new research projects investigating cause, care, control and cure of motor neurone disease commencing in 2011. This is a record distribution which is more than double the amount that was awarded for projects in 2010 and about ten times the amount that was awarded six years ago.

MND research grants are allocated in a hotly contested national competition each year. This year MNDRIA received 42 applications from researchers who collectively asked for \$3 million to support their proposals. Fifteen projects have been awarded new grants to commence in 2011 and this year applicants from every State of Australia have been successful.

MNDRIA supports both emerging and established researchers to develop new projects so they can generate results that will put them in a position to attract funding for larger projects through government sources such as the National Health & Medical Research Council (NHMRC) This year the seed funding from MNDRIA has achieved its aim. NHMRC has

awarded \$2.67 million to six MND projects from Victoria, NSW, and Tasmania. Thirteen new grants will be provided by MNDRIA in 2011 (*page 4*). This is an investment in the future and time will tell how much additional funding this will lead to from NHMRC and other sources in the years ahead.

MNDRIA encourages young researchers to take up motor neurone disease as their dedicated field of interest through the award of postdoctoral fellowships to provide salary for a three-year period. Two new Bill Gole Postdoctoral MND Research Fellowships have been awarded to commence in 2011 (*page 3*). Another two postdoctoral fellowships in MND research have been awarded by NHMRC (\$687,000).

More people than ever before are taking up the challenge to take the next leap forward in MND research. As they strive to find the way ahead in cause, care, control and cure of MND, they will be backed by \$4.75 million. The start up grants provided by MNDRIA are paying dividends.

The year 2011 will culminate in the International ALS/MND Symposium in Sydney (*page 8*). Researchers from all round the world will gather to present their results, exchange ideas and take the opportunity to form collaborations.



A growing band of inspired researchers gather at the annual MNDRIA Scientific Meeting which this year was held at Monash University Victoria on Monday 25 October 2010. Fifty researchers from all over Australia attended the meeting and took the opportunity to learn from one another and share their ideas.

Those who received MNDRIA funding in 2010 are pictured above with members of the MND Research Committee:

(L to R): Dr Robert Henderson (Qld), Prof Dominic Rowe, Chair, MND Research Committee (NSW), Dr Susan Mathers (Vic), Prof James Vickers (Tas), Dr Anna King (Tas), Dr Shu Yang (NSW), Dr Mary-Louise Rogers (SA), Kate Lewis (Tas), Dr Peter Crouch (Vic), Dr Julie Atkin (Vic), Dr Qiao-Xin Li (Vic), Dr Robyn Wallace (Qld), Dr Bradley Turner (Vic), Prof Dominic Thyagarajan (Vic), Dr Justin Yerbury (NSW), Dr Ian Blair (NSW) and, at centre front, Ass Prof Roger Pamphlett (NSW).

MND Research Institute of Australia Inc

Executive report July 2009 – June 2010

The year in review

The merger of the MND Research Institute of Australia with MND Australia was approved at special general meetings of both organisations in November 2009 and came into effect in May 2010. While the MND Research Institute of Australia continues to be an Approved Research Institute through which all research grants are awarded and administered according to the guidelines required by the Australian Taxation Office, MND Australia now has total responsibility for management and administration of the Institute. Richard Snowden and Cory Hillier from Mallesons Stephen Jacques Solicitors once again provided pro bono legal advice to ensure that all ATO requirements were met. The Board of the Research Institute is now the same as the Board of MND Australia with all administration officially transferred to MNDA on 30 June 2010.

Research Grants

The MND Research Committee members continue in their important role of reviewing grant applications and determining how the available funds will be allocated. A record \$675,000 was awarded for new grants commencing in 2010. In the calendar year 2010 a total of \$738,830 has been provided for fourteen grants-in-aid, four concurrent Bill Gole Postdoctoral Fellowships, one PhD scholarship, one travel grant and support for the MND Research Tissue Bank.

Information

Advance, the bi-annual newsletter of MNDRIA, now has a circulation of 4,800 copies which are distributed nationally and requested by State and National libraries. This report not only gives information about MND research in Australia to the MND community, but also provides feedback to the many donors who provide the funds for the research. An International MND Research Report which is funded by MND Victoria and produced quarterly for MNDA by Bill Gole MND Research Fellow, Dr Justin Yerbury is sent to all MND Associations for distribution to their members. Both of these publications are now distributed internationally through the International Alliance of ALS/MND Associations.

Meetings

The annual MNDRIA Research Meeting provides the opportunity for researchers funded by MNDRIA to present the outcome of their work to their peers and to MNDRIA members. The MNDRIA Research Meeting was held in Melbourne in 2008, in Sydney in 2009 and returns to Melbourne in 2010. This special meeting now attracts researchers from most Australian States.

Donations and bequests

Major donors continue their generous support for named grants:

The Bill Gole Post Doctoral MND Research Fellowship (anonymous), the Peter Stearne Grant for Familial MND Research (the Stearne family), the Roth Charitable Foundation Grant, the Charles & Shirley Graham Grant (MND Queensland) and four grants funded by MND Victoria: the MND Victoria Grant, the Zo-eè Grant, the Mick Rodger Benalla Grant and the Mick Rodger Grant.

Bequests are received as an unexpected windfall and in 2009/2010 bequests accounted for 35% of all funds received. The major proportion of this came from a single bequest but a growing number of smaller bequests contribute to the amount received each year. Contributions from MND Associations accounted for 26% of all funds received. The many loyal MNDRIA supporters who contribute regularly each year provided a further 33% of income in 2009/2010. A bi-annual appeal letter produces a steady income stream and also acts as a way of staying in touch with regular supporters and providing feedback about the research results that have been achieved through past donations. Unsolicited donations, frequently in memory of a loved one, are becoming more common. Increasing use of the internet (via the MNDRIA website at www.mndresearch.asn.au or people setting up their own MND research webpage at www.GoFundraise.com.au) now accounts for 2% of all donation income.

All of this fantastic support helped to achieve the long time goal of having one million dollars available for research for the first time in 2009.

Volunteers

Voluntary help is given in many ways by many people to boost MND research in Australia. These include: the research committee members (*page 8*) who review all the grant applications and make sure that available funds are appropriately allocated; people who organise or participate in special fundraising events; regular volunteers who willingly help whenever they are needed, particularly Maureen Burmeister, Paula Trigg, Libby Gole and Alan Hauserman.

We are all working together to achieve our goal of having one million dollars available for MND research every year and the vision of a world free from MND.

Janet Nash
Executive Officer Research

MNDRIA listing on the Australian Competitive Grants Registry (ACGR)

The ACGR lists schemes that provide competitive research grants to Higher Education Providers (Universities etc). The income Universities receive from schemes listed on the ACGR is used in determining the allocation of the Australian Government's Research Block Grants. Research Block Grants contribute to infrastructure costs associated with the funded research projects. When a research project is funded by an organisation that is listed on the ACGR, the government contributes an additional amount, presently about 30 cents (and ultimately about 50 cents) per dollar, to support the project. To be eligible for listing on the ACGR, MNDRIA must provide a minimum level of funds for grants each year. This level was previously set at \$200,000 but has now been raised to \$1 million. Fortunately MNDRIA is able to meet the requirements for ACGR listing this year but this new level is one more incentive to ensure that we provide at least \$1 million for grants every year. **With ACGR listing, \$1 million can be transformed to \$1.5 million.**

MND research grants for 2011

A record total of **\$1,395,000** has been awarded by MNDRIA for new grants commencing in 2011. Together with three fellowships continuing from previous years, the award of two new three-year postdoctoral fellowships brings a total of five fellowships to be funded by MNDRIA concurrently in 2011. With a greater level of funds available for distribution this year, it has been possible to award twelve substantial grants-in-aid to projects around Australia. Additional funds are provided to support the MND Research Tissue Bank of Victoria and Dr James Burrell's PhD scholarship (2009 - 2011) continues.

Bill Gole Postdoctoral Fellowships for MND Research 2011 - 2013

While grants-in-aid support MND *projects*, MND research fellowships and scholarships support the *person* and aim to encourage young scientists to develop a specific interest in MND research.

Bill Gole Postdoctoral Fellowship for MND Research

Catherine Blizzard

Menzies Research Institute, University of Tasmania
Investigating the cause of site-specific excitotoxicity in ALS.

Motor neuron disease is caused by a loss of function of the nerve cells controlling the muscles. This loss of function of the nerve cells may be due to over excitation of nerve cells, either at the muscle or at the site of the nerve cell bodies, the spinal cord. I aim to explore these two possibilities on the toxic site leading to nerve cell degeneration. This will enable the role that over excitation of the nerve cells could play in the disease progression to be determined.

Catherine Blizzard submitted her PhD thesis in September 2010 and is the third person from the Menzies Research Institute to receive a Bill Gole Postdoctoral Fellowship. The inaugural Bill Gole Fellowship went to Dr Roger Chung in 2005 for his project *Excitotoxicity and cytoskeletal alterations in the pathogenesis of motor neurone disease*. Roger is still very actively involved in MND research. The second went to Dr Anna King who completes her three year fellowship at the end of 2010 for the project *Investigating the causes and consequence of axonal pathology in ALS*. And now Catherine. There is no doubt that the Menzies Research Institute is playing a significant role in



Anna Sokolova, Catherine Blizzard and Professor James Vickers

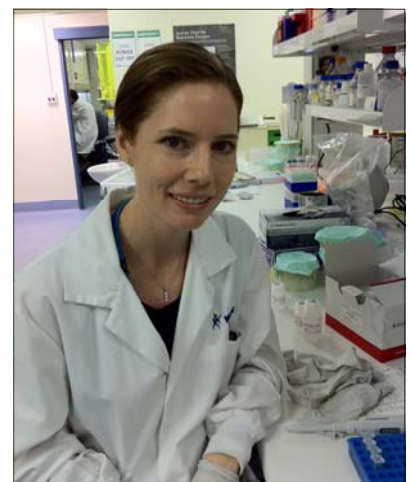
training young scientists in MND research. Funding from MNDRIA has been pivotal in training and retaining these young scientists. Their dedication to MND research continues. Following the seed funding that has been provide by MNDRIA, Roger Chung and Anna King are now part of a team headed by Dr Tracey Dickson and Professor James Vickers which has just been awarded project funding of \$379,034 from NHMRC.

Bill Gole Postdoctoral Fellowship for MND Research

Dr Rachael Duff

Centre for Medical Research, University of Western Australia
The application of new generation genetic techniques to motor neuron disease.

The majority of MND patients have sporadic disease of unknown cause. However, for approximately 10% of patients, MND runs in families. A number of genes causing this inherited MND have been identified, but for the majority of patients with inherited MND the causative gene is unknown. In this project I aim to find the disease gene in MND families where it has not been identified. I aim to use new genetic technology only available in the last few months. I also aim to investigate genetic factors controlling which family members do or don't get familial MND and to investigate genetic susceptibility in sporadic MND. This research will allow accurate diagnosis and family planning for families with inherited MND, improve our understanding of the way the genes result in disease, and this will in turn provide information about possible routes to treatment for MND.



NHMRC postdoctoral fellowships in MND research

The number of young researchers dedicated to motor neurone disease continues to grow. Two new four-year fellowships commencing in 2011 have been awarded by NHMRC to:

Kendle Maslowski, Garvan Institute of Medical Research, NSW
The role of the neuronal apoptosis inhibitor protein in the immune system.

Dr Eneida Mioshi, University of NSW
Assessment of everyday life disability in Motor Neurone Disease.

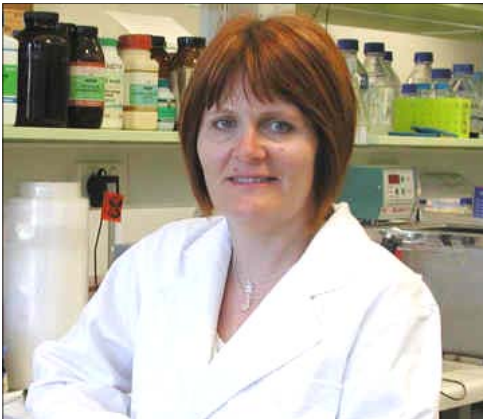
Grants-in-aid awarded for MND research in Australia in 2011

Grants-in-aid are intended as start up funding for new projects that can 'grow' to produce data that can attract more significant funding from granting bodies such as the NHMRC. Twelve new projects have been awarded grants-in-aid for 2011: five in Victoria, three in Queensland, two in New South Wales and one in both South Australia and Western Australia. Grants for 2011 were offered at a higher level than has previously been possible and this attracted applications of excellent quality.

Zo-eè MND Research Grant

Dr Julie Atkin

MND Research Group, La Trobe University, Victoria
Novel therapeutic agents for motor neuron disease with optimal pharmacokinetic properties.



There is currently no effective treatment for MND. However we have exciting new evidence that a drug called BMC prevents motor neurons from dying and this may be a

novel treatment for human MND. This drug, whilst being effective, cannot normally enter the brain from the rest of the body. This is due to the 'blood brain barrier' (BBB), which is a type of filter which prevents some materials from the blood entering the brain. The BBB is a common problem for drugs which have the potential to cure patients with neurological disorders. However some materials are able to cross this barrier, such as those which are soluble in fats and some drugs can be made to cross the BBB by making them more fat soluble. In this study we wish to modify the chemical structure of our drug, so that it is now more fat-soluble and hence more likely to cross the BBB. This has great potential for the treatment of MND in the future.



Mick Rodger MND Research Grant

Dr David Berlowitz

Institute for Breathing and Sleep, Austin Hospital, Victoria
Identifying who will benefit from Non Invasive Ventilation in Motor Neurone Disease in a clinical cohort.

Motor Neurone Disease (MND) is a condition characterised by progressive muscle

weakness with no known cure. The rate and pattern of this weakness varies within individuals but regardless of this, the inability to breathe effectively is the usual cause of death in

almost all people with MND. Treatment of this breathing failure with a mask and a machine has been shown to improve survival and, in some people, quality of life. However, it is unclear whether the improvement that we see in well controlled research trials translates into the real world. This project will use the data we have been collecting at Bethlehem Hospital in Melbourne since 2002 and combine it with the national Australian MND registry to determine how much of a difference to survival using a mask and a breathing machine makes in MND and who is most likely to benefit from this treatment. This information will help medical and other health professionals better answer a patient who poses the question "how much benefit will using a machine overnight give to a person like me?"

Peter Stearne Grant for Familial MND

Dr Ian Blair

Northcott Laboratory, ANZAC Research Institute, NSW.
Using next-generation DNA sequencing strategies to identify new MND genes.



To date, the only proven causes of MND are gene mutations. Despite recent gene discoveries, current insights have been insufficient to develop effective treatments. Identification of the genes that cause or predispose to MND will lead to the unravelling of the underlying biology leading to effective disease diagnosis and treatment. Our studies indicate that the defective gene is yet to be identified in around 80% of familial MND cases. The aim of this project is to gain a better understanding of MND through identification of new genes that cause the disease. We propose to use state-of-the-art ("next generation") genetic screening strategies in MND families to locate new MND genes. Once identified, these new disease genes will lead to development of models, which are tools for investigating the causes of MND and for evaluating proposed treatments.

Deborah Brine MND Research Grant

Dr Pamela McCombe

University of Queensland Centre for Clinical Research
Comprehensive assessment of MND patients as a means to studying progression and identifying disease subtypes.



Patients with MND vary in many features – such as the age of onset, the part of the body that is first affected, whether cognitive function is affected and the rate of progression of disease and the length of survival. In this study we will measure the progression of weakness, cognitive function, MRI images of the brain, measurements

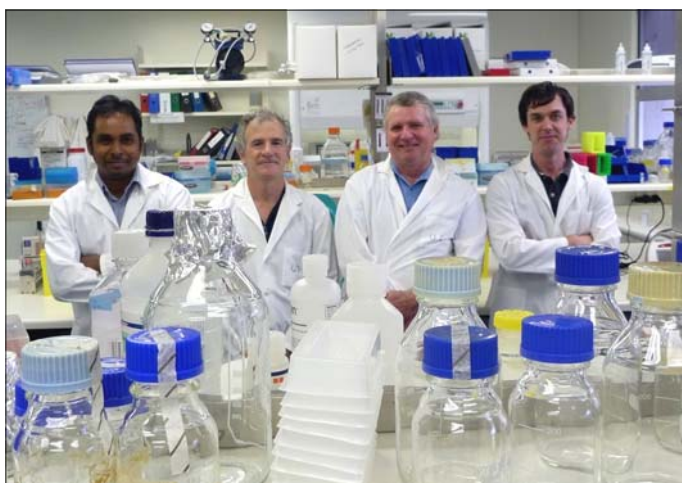
of the number of motor nerve cells in the spinal cord and the level of a protein called neurofilament which is released into the blood from damaged nerve cells. These measurements will be done over time in patients with MND. We will check the validity and reliability of the measurements, and whether these measurements can be used to monitor disease progression. We will also perform a pilot statistical analysis to see if we can assign patients into different groups according to these measurements. This study is important because measurements of disease progression are needed for clinical trials and also because of the possibility that MND is comprised of subgroups that behave differently and that may have different pathogenesis.

Charles & Shirley Graham MND Research Grant

Dr Peter Noakes

School of Biomedical Sciences, University of Queensland
The role of the innate immune system during the progression of motor neuron disease: the search for new therapeutic targets.

This project aims to establish the importance of the innate



Neuroimmunology group working on motor neuron disease.

Dr Pamela McCombe (top of page) and (L to R) Drs Thiruma Arumugam, Peter Noakes, Stephen Taylor and Trent Woodruff.

immune system in controlling the progression of MND and how manipulating selected innate immune receptors might be able to slow down motor neuron death. Our planned work on human *post mortem* MND nervous tissue is first aimed at supporting our findings in MND animal models. Our planned blood work is aimed at determining the levels of C5a, a key inflammatory mediator we believe to promote the disease process in MND, and its receptors in white blood cells, which carry out the destructive actions of C5a in MND affected patients (early and late stage) and the proper scientific controls i.e. non-affected.

MND Victoria Research Grant

Dr Moira O'Connor

Curtin University,
Western Australia
*Children's pilot study:
The experiences and psychosocial needs of children 11-16 years of age who have a parent living with MND.*



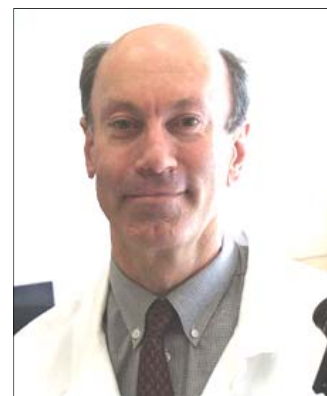
The aim of this research is to explore the experiences and

psychosocial needs of 11-16 year old children and adolescents who have a parent with Motor Neurone Disease (MND). The project will focus on asking children and adolescents which factors promote or inhibit their coping and adjustment, investigate children's and adolescents' unmet needs, and examine the potential role of systems that children and families have contact with - such as schools, primary care settings and the MND Associations (MNDAWA and MND Victoria) - in providing support and information. This data will provide a basis for much-needed support programs for children and adolescents who have a parent with MND.

Grant-in-aid

Ass/Prof Roger Pamphlett

Stacey MND Laboratory,
University of Sydney
Looking for abnormal gene expression in ALS spinal cords using next-generation sequencing.



The cause of the most common form of MND, sporadic MND, remains unknown. Although sporadic MND does not run in families, many researchers think that an abnormal gene is the problem causing this disease. Since the parents of patients with sporadic MND are not affected by the disease, their genes are likely to be normal. We therefore hope to find the abnormal gene in MND patients by comparing their genes with their unaffected parents' genes. A recent powerful technique (next-generation sequencing) means that we are now able to examine the active parts (the exons) of all the genes. Any newly-arising genetic abnormalities in the

MND patients can be detected by this method. We think we therefore have a good chance of finding a genetic cause for sporadic MND. Truly effective therapy is most likely to arise once the cause of MND is known. Any future gene therapy for MND (which has been very effective in animals models) depends on this genetic cause being found.

Roth Foundation MND Research Grant

Dr Mary-Louise Rogers & Prof Robert Rush



Human Physiology, School of Medicine, Flinders University SA
Targeted down regulation of SOD1G93A in MND mice.

Motor neuron disease is an illness of nerves controlling muscles, which results in a creeping paralysis and death; there is no effective treatment. We have recently found that an antibody can increase the life span of the MND mouse model. We have also developed a technology to enable antibodies to deliver genes into nerves. We now plan to use the technology to deliver therapeutic genes into motor nerves of the MND mouse using the therapeutic antibody and determine if we can further increase the lifespan of the MND mouse. Successful outcomes of this research will encourage development of treatments for this devastating disease.

Grant-in-aid

Dr Lachlan Thompson



Division of Brain Injury & Repair, Florey Neuroscience Institutes, Victoria
Development of a stem cell therapy for motor neuron disease.

Unlike other parts of the body, the nervous system has a very poor capacity to repair itself. This means that damage, for example through the

neurodegenerative process that occurs in motor neuron disease (MND), is irreversible and has permanent functional consequences for the patient. Most of the experimental therapies under development are protective strategies that aim to stop or slow the on-going disease process but do not in any way address the damage that has already occurred. There is thus a tremendous need for the development of restorative treatments that are capable of reversing the impairments caused by the disease. Stem cells are seen as having significant potential in this context. The basic idea behind a stem cell-based treatment for MND is that new neurons grown from stem

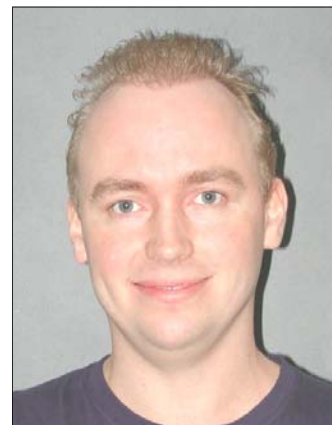
cells in the laboratory can replace those lost to the disease after transplantation into the patient. Our research team has had success on this front in the Parkinson's disease field and we have recently generated preliminary evidence to suggest that the approach may be adapted for the treatment of MND.

Mick Rodger Benalla MND Research Grant

Dr Bradley Turner

Florey Neuroscience Institutes, University of Melbourne
Are endosomal transport defects a primary cause of MND?

Unravelling the first and common pathological events in MND is critical to developing effective treatments for this disorder. We recently showed that a cell transport pathway inside motor neurons called the "endosome" is defective in test tube and animal models of MND. We will therefore examine how early this defect arises in MND and whether people with MND have this abnormality. These studies may aid our understanding of early factors that trigger MND and determine whether the endosome pathway may be considered a useful target for MND therapy.



Grant-in-aid

Dr Robyn Wallace

Queensland Brain Institute
Identifying genes that are regulated by TDP-43 and FUS using high-throughput sequencing.

Genetic mutations associated with MND have been identified in both TDP-43 and FUS genes. Protein tangles that aggregate in affected nerve cells are a pathological hallmark of MND and studies of MND patient cells have demonstrated that both TDP-43 and FUS proteins are principal components of these nerve cell aggregates. TDP-43 and FUS are both involved in gene regulation. However, the gene targets of these two proteins in the nervous system are currently unknown and their role in the pathogenesis of MND remains unclear. The aim of this project is to identify genes that are regulated by the TDP-43 and FUS proteins. A recently developed mouse model will also allow us to specifically identify genes targets that are affected by MND-causing TDP-43 mutations. Gene targets of TDP-43 and FUS will be screened in MND patients. These studies will improve our understanding of what causes MND, identify potential biomarkers and new candidate MND genes, and provide rational targets for the future development of new therapies.





Grant-in-aid

Dr Anthony White

Dept of Pathology, University of Melbourne, Victoria

Does TDP-43 aggregation cause translation arrest in motor neurons?

Motor neuron disease is a rapidly progressing illness affecting adults and often results in death within 2-5 years

of diagnosis. No effective treatments or cure exists. Despite extensive research, the processes underlying motor neuron cell death are still poorly understood. The recent discovery that abnormal metabolism of TDP-43 (a mRNA binding protein) is a key mediator of motor neuron death is a great step forward. TDP-43 undergoes fragmentation into smaller pieces (called C-terminal fragments, CTFs), followed by aggregation into clumps, which are modified by phosphorylation and ubiquitination. However, little is known of the key early processes that lead to TDP-43 fragmentation and aggregation or how this results in motor neuron cell death. We have found that cells exposed to particular oxidative stresses reveal widespread accumulation of fragmented TDP-43 in cytoplasmic RNA stress granules. This process is controlled by caspase activity and the signaling kinase JNK. Some of these granules also contained ubiquitinated proteins analogous to that found in motor neurons of spinal cord from MND patients. Our studies support a sequential progression of TDP-43 cleavage under stress followed by accumulation in stress granules with other mRNA binding proteins and progression of granules to protein aggregates if cells are subjected to prolonged stress. This project will investigate whether this processing of TDP-43 under chronic stress results in aggregation of proteins that would normally stabilize the mRNA of neuroprotective proteins such as VEGF, HO-1, GLUT1, SMN and HIF1 α . This would lead to a loss of translation (translation arrest) of these protective proteins. We will also investigate how small levels of copper delivered to cells reverse this process and may provide a unique means of inhibiting motor neuron degeneration. The outcomes of this project will provide a significant advance in our understanding of TDP-43 in motor neuron disease and may lead to development of novel treatment approaches for patients with the disease.

MND Research Tissue Bank of Victoria



Professor Catriona McLean

Mental Health Research Institute, Victoria

Research into many neurological disorders including MND is compromised by the lack of experimental models and relies heavily on studying human post mortem central nervous system (CNS) tissue. The limited availability of high quality tissue is a rate-limiting step for

research. In particular, research efforts using new technologies in pathology and molecular biology that have been shown to be particularly suited to using post-mortem tissue are being hampered. Post-mortem tissue obtained through both forensic and hospital autopsy is on the decline, and legislation prevents un-consented tissue from being a viable source, therefore making tissue access for research a problematic area.

Fortunately, the *mndRTBv* is a unique Australian resource that both underpins and enhances the MND research efforts in Australia.

The *mndRTBv* is a repository of fluids (blood and cerebrospinal fluid (CSF)), brains and spinal cords obtained from people diagnosed with MND. The *mndRTBv* addresses the availability issue for high quality CNS tissue and is a valuable resource for clinicians and researchers engaged in the search for a cure for MND. Furthermore, banked tissue is definitively diagnosed and made more valuable with the collation of clinical data, which has the capacity to improve research outcomes, and to provide a better understanding into the causes of MND. Researchers in Australia can now utilise human MND tissue linked to comprehensive clinical and pathological data. In the past gaining tissue from overseas was prohibitively expensive at \$1000/gm of tissue and once again deterred projects design from incorporating human tissues.

Grants awarded in previous years continue in 2011 for three postdoctoral fellowships and one PhD Scholarship:

Dr Shu Yang, ANZAC Research Institute, NSW
Bill Gole Postdoctoral Fellowship 2010 - 2012

Investigating the role of recently identified mutant genes in MND pathogenesis.

Dr Justin Yerbury, University of Wollongong, NSW
Bill Gole Postdoctoral Fellowship 2009 - 2011

Probing molecular mechanisms of microglial and astrocyte activation in ALS.

Dr Jennica Winhammar, Neuroscience Research Australia
Bill Gole Postdoctoral Fellowship 2008 - 2010 (period

extended due to maternity leave).
Clinical trial to assess the neuroprotective properties of a sodium channel blocking agent in motor neurone disease.

Dr James Burrell, Neuroscience Research Australia, NSW.
PhD Scholarship for MND Research 2009 - 2011, co-funded with NH&MRC

Cognition and behaviour in motor neuron disease.

Project grants for MND research awarded by NHMRC:

- Dr Julie Atkin & Prof Malcolm Horne, Vic: \$307,524
- Dr Ian Blair & Prof Garth Nicholson, NSW: \$487,524
- Drs Peter Crouch, Qiao-Xin Li & Paul Donnelly, Vic: \$592,368
- Dr Tracey Dickson, Prof James Vickers, Dr Roger Chung and Dr Anna King, Tasmania: \$379,034
- Dr Bradley Turner, Vic: \$513,390
- Dr Justin Yerbury & Dr Leila Luheshi, NSW: \$390,812

MNDRIA congratulates all these researchers on this outstanding achievement and we all look forward to some exciting outcomes.

MND Research Institute of Australia

Office Bearers and Members 2010

MND Australia is the principal member of the MND Research Institute of Australia.
The operations of both organisations are the responsibility of MND Australia.

DIRECTORS

The board of the MND Research Institute is the same as the board of MND Australia, consisting of an independent elected President and a nominated representative from each member MND Association board, the chair of the MNDRIA research committee and up to three co-opted special tenure directors.

DIRECTORS

President: Ralph Warren
Vice President: David Ali, VIC
Treasurer: Bob Howe, NSW
Secretary: Tim Hynes, TAS
David Schwarz, QLD
Stephen Warren, SA
David Whiteman, WA
Professor Dominic Rowe, Research Committee

Special Tenure Directors

Bill O'Reilly
Ian Rodwell

EXECUTIVE OFFICER: Janet Nash

AUDITOR: C M Pitt & Co

RESEARCH COMMITTEE

The Research Committee of MNDRIA reviews research grant applications and determines the distribution of funds within the set policies, and according to the criteria for scientific assessment.

Research Committee Members

Chairman: Professor Dominic Rowe, NSW
Professor Perry Bartlett, QLD
Dr David Berlowitz, VIC
Professor Nigel Laing, WA
Professor Matthew Kiernan, NSW
Dr Susan Mathers, VIC
Assoc Prof Pamela McCombe, QLD
Professor John Pollard, NSW
Professor Dominic Thyagarajan, VIC
Professor James Vickers, TAS



International ALS/MND Symposium Sydney 2011

- **29 November**
 - Allied Professionals Forum
- **30 November to 2 December**
 - ALS/MND Symposium
 - Scientific and Clinical streams
- **More details**
 - www.mndaust.asn.au
 - www.mndassociation.org



Photo: Tourism Australia

Donations

Research funded by the MND Research Institute of Australia is dependent on donations.

To contribute to this vital work, please send your gift to:

MND Research Institute of Australia
PO Box 990, Gladesville NSW 1675

Donations can be made by cheque (payable to MND Research Institute of Australia) or credit card (Visa or MasterCard) or online at www.mndresearch.asn.au.

All donations of \$2 and over are tax deductible.

Bequests

Your Will can provide an important way of making a gift that can have lasting influence on MND research and give hope for the future.

If you would like to consider the MND Research Institute of Australia in your Will by providing a Bequest from your Estate, please contact your solicitor.

For more details,
phone Janet Nash, MNDRIA Executive Officer on
02 8877 0990 or email info@mndresearch.asn.au.

ACKNOWLEDGEMENT: We wish to thank Snap Printing, North Ryde, NSW for their generous support in printing this Review.