

# REVIEW OF THE NSW SPINAL CORD INJURY AND RELATED NEUROLOGICAL CONDITIONS GRANTS PROGRAM 2007

## TERMS OF REFERENCE

### AIM OF THE REVIEW

To make recommendations to the NSW Government on the provision of grant support under the *Spinal Cord Injury and Related Neurological Conditions Grant Program* ('the Program').

### OBJECTIVES OF THE REVIEW

1. Examine the extent to which the program objectives remain relevant and appropriate.
2. Examine the appropriateness of the funding guidelines, eligibility and selection criteria.
3. Identify new types of funding assistance for future funding rounds under the Program.
4. Address timing and other operational issues for future program delivery.
5. Achieve alignment of the Spinal Grants Program with the principles outlined in the NSW Medical Research Plan.

### MODUS OPERANDI

- A Review Panel comprising OSMR officers and independent external members will be established to oversee the Review of the Program.
- The Review Panel will be convened until the report and Panel recommendations are forwarded to the Minister for endorsement/ approval.
- The Review Panel will be supported by a Secretariat provided by OSMR.
- Meetings: The Panel will meet once during the period of the Review.
- Reporting: The Review Panel will provide recommendations to the NSW Minister for Science and Medical Research at the conclusion of the Review. The report will address the aims and objectives of the Review as outlined in the Review Terms of Reference.

### PROCESS FOR THE REVIEW

1. Develop timetable for the Review
2. Develop Terms of Reference for the Review
3. Establish Review Panel to be supported by a Secretariat provided by the Medical Research Team, OSMR
4. Review relevant papers and develop background material on the Program for consideration of the Review Panel
5. Public Consultation phase:
  - Publish notice of Review on OSMR website with Review Terms of Reference
  - Advertise in *Sydney Morning Herald* calling for submissions which address the Review Terms of Reference
  - Directly notify current recipients and other stakeholders of a call for submissions

- Review submissions and prepare summary report for consideration of the Panel.
  - Meet with Program Grant recipients
6. Review Panel meeting – ½ -1 day – review information; discuss options; make recommendations
  7. Report on Review Panel recommendations prepared
  8. Review Panel endorsement of report sought
  9. Report forwarded to Minister for Science and Medical Research

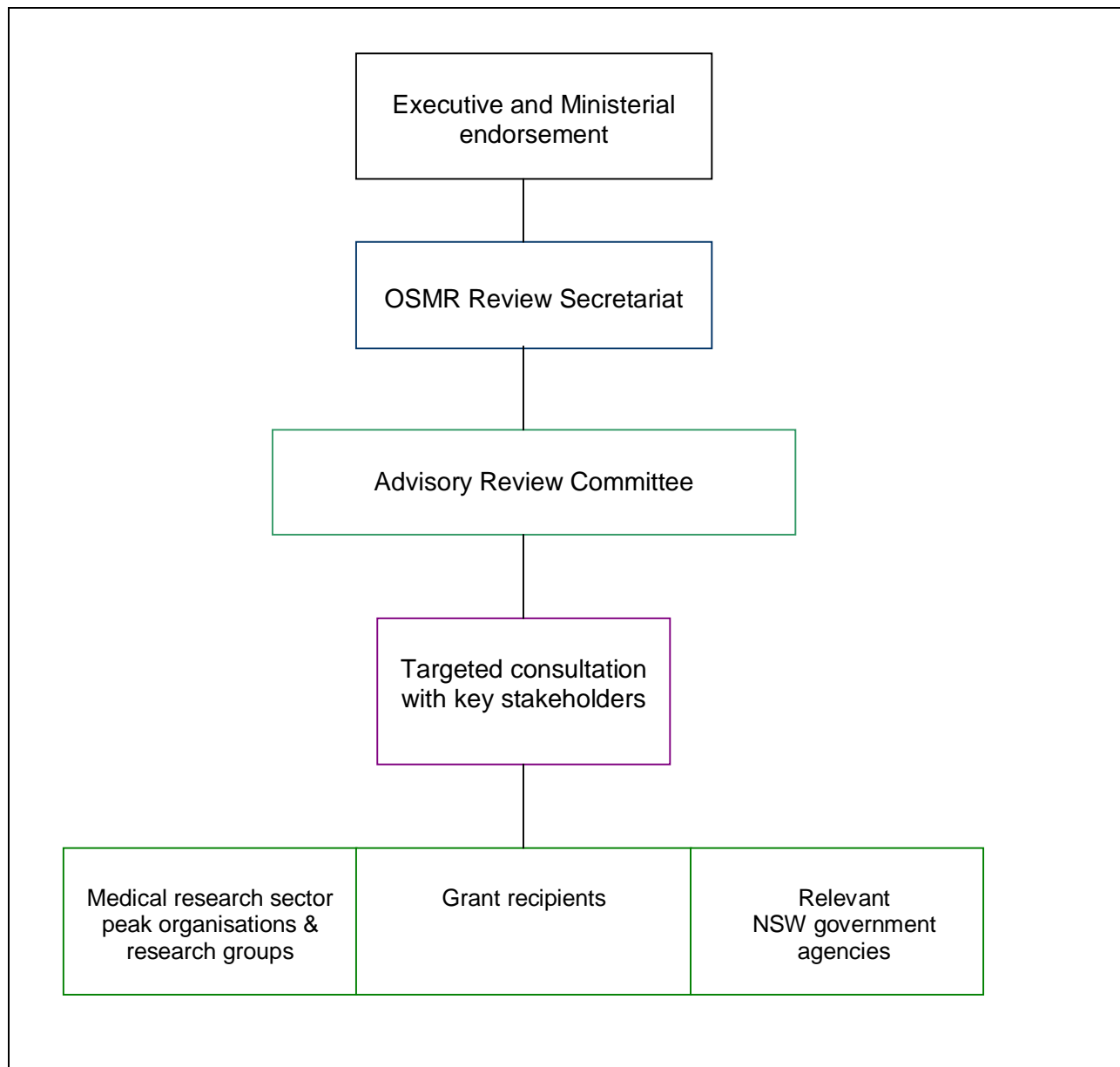
### **OUTCOMES SOUGHT FROM THE REVIEW**

1. Achieve alignment of the Spinal Grants Program with the NSW Medical Research Plan.
2. Maintain and grow health & medical research capacity in fields relevant to spinal cord injury and related neurological conditions in NSW.
3. Maximise the value gained from State investment in health & medical research under this Program.

***It is important to note that a restricted funding round for Project and Program grants will be announced in February 2008. The eligibility and selection criteria for this round will be determined by the review process and details will be released on completion of the review. An additional round of competitive funding will be announced in late 2008 and will include any additional research funding streams or new types of funding assistance recommended by the committee.***

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## REVIEW ARRANGEMENTS



# **REVIEW OF THE NSW SPINAL CORD INJURY AND RELATED NEUROLOGICAL CONDITIONS GRANTS PROGRAM 2007**

## **BACKGROUND INFORMATION**

### **NSW GOVERNMENT SUPPORT FOR THE PROGRAM**

The NSW Government's original commitment in 2003 allocated \$10.9 million in research grant funding over four years to the Program to promote biomedical research into spinal injury, disorders and neurological conditions.

Administered by the NSW Government's Office for Science and Medical Research (OSMR), this initial State Government investment was designed to inject significant funding into this area to create research critical mass and accelerate outcomes in ways that can make a difference to the lives of people with spinal cord injury and related conditions, such as Motor Neurone and Parkinson's Disease.

An additional \$11 million has been committed by the NSW Government for spinal cord injury research, bringing the Government's total investment in this area to \$22 million. Funds will be allocated under competitive processes and will be available to all NSW researches working in this area.

More broadly, this support is provided as part of the NSW Government's strategic objectives for fostering growth and innovation in health and medical research to achieve better economic, technological, health and environmental outcomes for the people of NSW. From this perspective, key aims are:

- to foster excellence in and position NSW as a leader in science and medical research.
- to optimise the effectiveness of the NSW Government's investment in science and medical research.
- to facilitate translation of research effort into policy and practice, addressing health and environmental priorities.
- to promote collaborations and attract increased investment in science and medical research to NSW; and
- to continuously identify new areas of science and medical research which may have applicability to NSW.

### **SPINAL CORD INJURY AND RELATED NEUROLOGICAL CONDITIONS PROGRAM OBJECTIVES**

The key objectives of the Spinal Cord Injury and other Neurological Conditions Research Grants Program are:

- to establish a critical mass of research relevant to spinal cord injury and other neurological conditions;
- to develop, attract, or retain relevant research talent to New South Wales; and
- to make significant scientific discoveries that have a positive impact on the lives of those with spinal cord injuries.

The Program comprises the following three tiers:

1. **Research Program Grants** - These grants are directed to high quality research programs led by a director or senior investigator with a significant track record in biomedical research which has relevance to or an impact on spinal cord injury and other neurological conditions.
2. **Research Project Grants** - These grants are directed to post doctoral researchers whose current research indicates a significant potential in a field relevant to spinal cord injury and other neurological conditions.
3. **Travel Scholarships** - These scholarships are designed for advanced PhD students to present their research at prestigious international conferences and/or institutions.

To date, three funding rounds have been conducted:

- Round 1 in 2003/2004;
- Round 2 in 2004/2005; and
- Round 3 in 2006, with grant funding in this Round provided for Travel Scholarships only.

Related initiatives supported through the NSW Government's Office for Science and Medical Research are:

- **The Spinal Exchange Visiting Fellowships Program.** Commenced in 2005, this NSW Government program brings an internationally renowned clinician, practitioner or clinical researcher to take up a Visiting Fellowship in NSW for a period of up to 6 months.
- **The Australian and New Zealand Spinal Cord Injury Network (ANZSCIN).** The NSW Government is supporting establishment of this national network, which draws researchers, clinicians and key stakeholders from all over Australia and across the Tasman. Its aim is to accelerate the spinal research effort.

For further information refer [www.osmr.nsw.gov.au](http://www.osmr.nsw.gov.au)

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### LIST OF GRANT RECIPIENTS

<b>Round 1 Program grants ( 2004/05 – 2007/08 )</b>	
University of Sydney Associate Professor Janet Keast	Program Grant of \$2 million over four years for <i>Pain following spinal cord injury (SCI): understanding mechanisms to develop treatments.</i>
University of Sydney Rehabilitation Studies Unit Dr James Middleton	Program Grant of \$1 million over four years for <i>Enhancing Recovery and Independence after Spinal Cord Injury</i>
University of Sydney Professor John Pollard	Program Grant of \$1 million over four years for <i>Glial and neuroinflammatory mechanisms of neuronal degeneration and regeneration: The functional states of microglia in the central nervous system and macrophages in the peripheral nervous system.</i>
University of New South Wales Professor Phil Waite	Program Grant of \$1 million over four years for <i>Repair of the injured spinal cord: trialing potential cell therapies.</i>
<b>Round 1 Project grants ( 2004/05- 2005/06 )</b>	
Prince of Wales Medical Research Institute Dr Penelope McNulty	Project Grant of \$200,000 over two years for <i>Neurophysiological investigation of single motor unit (SMU) properties, and sensorimotor integration and control in subjects with spinal cord injury</i>
Prince of Wales Medical Research Institute Dr Marcus Stoodley	Project Grant of \$191,490 over two years for <i>Cerebrospinal fluid flow in post-traumatic syringomyelia.</i>
<b>Round 1 Travel scholarships ( 2004/05 )</b>	
University of Sydney Dr Michael Barnett	Travel Scholarship of \$7,090 to attend the Australasian Association of Neurologists Annual General meeting in Perth and to then to travel to New York to present research at the Albert Einstein Hospital College of Medicine.
The Children's Hospital at Westmead Ms Biljana Ilkovski	Travel Scholarship of \$4,800 to attend the 9 <sup>th</sup> International Congress of the World Muscle Society in Gothenborg, Sweden and then to visit collaborative research laboratories in Helsinki, Finland.
Dr Brian Owler	Travel Scholarship of \$8,000 to travel to the Academic Neurosurgical Unit, University of Cambridge.
Brain Injury Rehabilitation Unit Mr Grahame Simpson	Travel Scholarship of \$9,350 to travel to the following: CRISE in Quebec Canada for five days; Centre for Suicide Research, Oxford University in the UK for five days; and finally the Lishman Unit of Maudsley Hospital, South London and Maudsley Trust in the UK for three days.
<b>Round 1 Program grants ( 2005/06 )</b>	
University of New South Wales Professor Elspeth McLachlan	Program Grant of \$1.5 million over four years for <i>Altered Nerve and Muscle Excitability after Spinal Cord Injury – Challenges for Functional Recovery.</i>
<b>Round 2 Project grants ( 2005/06 – 2006/07 )</b>	
University of Sydney	Project Grant of \$250,000 over two years for <i>The role of</i>

Professor Max Bennett	<i>astrocytes in nociceptor pain transmission in the spinal cord.</i>
University of New South Wales Professor Elizabeth Burcher	Project Grant of \$250,000 over two years for <i>Receptor changes in the bladder following spinal cord injury.</i>
The University of Sydney Professor Iain Campbell	Project Grant of \$310,000 over two years for <i>Signal transduction mechanisms in interleukin-6-induced inflammation and injury in the central nervous system.</i>
Prince of Wales Medical Research Institute Dr Matthew Kiernan	Project Grant of \$175,000 over two years for <i>Origins and patterns of neuronal degeneration in motor neurone disease</i>
Prince of Wales Medical Research Institute Professor George Paxinos	Project Grant of \$200,000 over two years for <i>The spinal cord of the rat and the human: Atlases and 3D models.</i>
Garvan Institute of Medical Research Dr Bryce Vissel	Project Grant of \$400,000 over two years for <i>Glutamate receptors as targets for treating spinal cord injury and neurological disease.</i>
<b>Round 2 Travel scholarships ( 2005/06 – 2006/07 )</b>	
University of Newcastle Mr Brett Graham	Travel Scholarship of \$8,340 to attend the Society for Neurosciences 35 <sup>th</sup> Annual Meeting in Washington DC and visit the laboratories of Dr Troy Margrie and professor Maria Fitzgerald at the University College London.
Prince of Wales Medical Research Institute Dr Ostoja Vucic	Travel Scholarship of \$6,000 to present research on cortical excitability in motor neurone disease patients at the 13 <sup>th</sup> Annual Meeting, International Alliance of ALS/MND Associations and 16 <sup>th</sup> International Symposium on ALS/MND, Dublin Ireland.
University of Sydney Ms Jennica Winhammer	Travel Scholarship of \$4,200 to present research on motor neurone disease at the 16 <sup>th</sup> International Symposium on ALS/MND, Dublin Ireland.
<b>Round 3 Travel scholarships</b>	
Prince of Wales Medical Research Institute Ms Elizabeth Clarke	Travel Scholarship of \$5,500 as a contribution to the costs for presenting research focused on understanding the differences in spinal cord injury mechanisms and neurophysiology between children and adults at the 5 <sup>th</sup> World Congress of Biomechanics, in Munich, Germany, and the International Collaboration on Repair Discoveries at the University of British Columbia in Vancouver, Canada.
University of New South Wales Miss Angela Laird	Travel Scholarship of \$8,233 as a contribution to the costs for presenting research on the impact of treadmill training on the development of autonomic dysreflexia and locomotor ability at the 6 <sup>th</sup> annual Federation of European Neuroscience Forum and also to visit spinal cord injury laboratories in Zurich, Switzerland, and Gothenberg, Sweden.
Prince of Wales Medical Research Institute Professor Elspeth McLachlan	Travel Grant of \$1,500 to be used as a contribution for Dr. Jane Butler and Dr James Brock, Prince of Wales Medical Research Institute, and Dr Luke Henderson, University of Sydney, to attend and present their work at the IBRO Special Interest Forum.



## **SUMMARY OF NSW HEALTH & MEDICAL RESEARCH PLAN**

- The Health & Medical Research Plan sets out a more strategic approach to health and medical research in NSW with the following objectives:
  - Reverse the decline of the health and medical research sector in NSW
  - Enhance NSW position as a leading State in health and medical research
  - Improve health outcomes through the application of research findings and retaining quality clinicians
  - Provide better economic returns to NSW.
- The strategies underpinning this approach to health and medical research are to:
  - Aggregate medical research at ten designated research hubs in NSW
  - Develop governance arrangements for the management of research within each research hub
  - Consolidate statewide research-enabling technologies and resources
  - Enhance the State's capacity to attract and retain high quality researchers
  - Better align State funding for health and medical research to NSW Government priorities.
- The six components of the 10 year Health and Medical Research Plan are:
  - Capital development of research institutes within designated hubs to build capacity through aggregation of research groups
  - Enhancement of research infrastructure and priority programs
  - Investment in research capacity through targeted people programs
  - Development of state-wide research platforms in key enabling technologies and services
  - Development of partnerships through research networks (clinical & population based networks)
  - Enhanced public/private funding partnerships
- The capital development plan aims to:
  - Invest capital funds into developing the medical research hubs in NSW
  - Bring together existing but disaggregated research groups within hubs
  - Facilitate relocation of research groups between hubs to build critical capacity in research strengths within NSW
  - Provide a framework for governance of research funding provided to hubs.
- The ten designated research hubs are centred around existing geographical clusters of research groups at:
  - Central Sydney – Camperdown (RPAH/Concord)
  - Darlinghurst (Garvan/Victor Chang/St Vincent's)
  - Hunter (Newcastle centred)
  - Illawarra (Wollongong centred)
  - Northern Sydney (RNSH)
  - South Eastern Sydney - Randwick (POW/St George)
  - South Western Sydney (Liverpool/Macarthur)

- Western Sydney (Westmead/Nepean)
  - A Distributed Rural Network (Lismore centred)
  - Australian Technology Park.
- The State wide research enabling platforms and services already under development. Some have been progressed in conjunction with other agencies:
    - Animal house facilities
    - Proteomics and genomics and bioinformatics
    - Imaging
    - Tissue banks, cell banks and DNA banks
    - Research ethical review and governance
    - Data linkages, including data registries and health informatics
    - Clinical trials coordination and research informatics centre
    - Health Services and Population Health research
- The People Programs objectives are to:
    - Reverse the loss of researchers from NSW
    - Attract and retain high quality researchers and clinicians in NSW
    - Build critical mass in research teams in priority areas
    - Facilitate research collaborations across the State.
- Clinical Research Networks are being established with the aims to:
    - Facilitate multicentre clinical trials across the research hubs
    - Support collaborations across research hubs
    - Target funding to NSW Government priorities
    - Increase the capacity to attract additional research funding to NSW
    - Facilitate the translation of research outcomes into effective policies and practices across Government.
- The following proposed clinical research networks have been advanced:
    - Paediatric Pharmaceutical Clinical Trials Network
    - Cardiovascular Research Network
    - Pregnancy & Newborn Research Network
    - Diabetes Research Network
    - Immunology & Allergy Research Network
    - Aboriginal Health Research Network
    - Spinal Cord Injury Network
    - Mental Health & Neuroscience Network
    - Complementary Medicines Research Network