



Australian Neuroscience Society Newsletter

No. 3

October, 2010

www.ans.org.au



ANS 2011: See you in Auckland, Jan 31 - Feb 3



President's Perspective

Plans for the Auckland meeting continue apace with the Local Organising Committee Chair, Professor Louise Nicholson and her great team working extremely hard to ensure the meeting's success. Once again, we have an outstanding line-up of Plenary speakers namely, Tobias Bonhoeffer of the Max-Planck-Institut für Neurobiologie, Peter Dunkley of the University of Newcastle, Terence O'Brien of the Royal Melbourne Hospital and Seong Seng Tan of the Florey Neuroscience Institutes. There is also a very exciting line-up of Symposia and in addition, David Vaney and I are continuing the tradition of a Presidential Symposium, this time for postdoctoral researchers within 5 years of the award of their PhD. The field was once again highly competitive and the speakers for 2011 are Jane Carland (UNSW), Andrew Clarkson (Otago), Rohan Walker (Newcastle) and Stephanie Wölfle (ANU). ANS 2011 will be another terrific meeting and the LOC and Council look forward to welcoming you to Auckland.

Links with other Societies continue to develop. The issue of advocacy was the main focus at a recent meeting between the Society for Neuroscience, the Federation of European Neuroscience Societies, the Japan Neuroscience Society and the Australian Neuroscience Society at Neuro2010 in Kobe. SfN raised the issue of advocacy and the fact that their Society has considerable experience and success in this area. For example, together with other professional Societies and lobby groups, they helped leverage substantial funding in the Recovery Act for the National Institutes of Health (\$10bn) and the National Science Foundation (\$3bn). It was suggested that SfN might be able to make various materials and expertise available to other neuroscience societies. The issue will be discussed further at SfN in San Diego.

I have continued to visit different States to raise awareness and discuss ANS's role as a peak body with interested members. The current discussion document is on the ANS website. (http://www.ans.org.au/uploads/neuroissuesdocs/ANS_Peak_body_Discussions.pdf.) At the same time, I have taken the opportunity to talk to early career researchers and have had some very productive discussions. So far, I have visited the Brain and Mind Research Institute, Neurosciences Research Australia, Monash University, the Menzies Research Institute, the Florey

Neuroscience Institutes, the University of Melbourne, the University of Sydney, the Garvan Institute and the University of Newcastle. At the time of going to press in October, I will visit Flinders University as well as Sally and Chris Jay in Adelaide, ANU and Queensland University; the University of Western Australia will bring up the rear in November and I very much look forward to meeting with New Zealand members in Auckland at a lunch-time session, date to be confirmed. Supporting early career researchers as much as possible is a recurring theme as is the issue of forming stronger links with the professions, such as neurology and ophthalmology, and their societies, from two points of view: namely, organising joint scientific symposia and meetings and the crucial linked issue of advocacy and the profile of neuroscience and its funding in Australia and New Zealand. I will gather together the points made at these meetings and we will need to make sure that, as one member eloquently put it, we get action "beyond the ANS website".

See you in Auckland!

Sarah Dunlop, ANS President

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ANS PRESIDENT:

Professor Sarah Dunlop
School of Animal Biology
University of Western Australia
35 Stirling Hwy Crawley 6009

Tel: +61-8-6488-1403
sarah@cyllene.uwa.edu.au

ANS SECRETARY:

A/Professor Ann Turnley
Centre for Neuroscience
University of Melbourne
Victoria 3010

Tel: +61-3-8344-3981
turnley@unimelb.edu.au

ANS TREASURER:

Professor Jacqueline Phillips
Macquarie University
Macquarie Drive
Sydney NSW 2109

Tel: +61-2-9850-4000
treasurer@ans.org.au

ANS EDITOR:

Professor David Small
Menzies Research Institute
199 Macquarie Street
Hobart, Tasmania 7000

Tel: +61-3-6226-7700
d.h.small@menzies.utas.edu.au

ANS ANNUAL MEETING 2011

AN INVITATION TO THE SKYCITY CONVENTION CENTRE, AUCKLAND FOR ANS 2011

New Zealand is the exciting location for the 31st Annual Meeting of the Australian Neuroscience Society. It is world renowned for its diverse landscapes, pristine wilderness and exciting outdoor activities. The conference will be held in Auckland, New Zealand's largest city which is set on the beautiful Hauraki Gulf and is home to three of New Zealand's eight major universities.

Our Plenary Lecturers for this international meeting are Tobias Bonhoeffer of the Max-Planck-Institut für Neurobiologie, Peter Dunkley of the University of Newcastle, Terence O'Brien of the Royal Melbourne Hospital and Seong Seng Tan of the Florey Neuroscience Institutes. The symposia, oral communications and posters will reflect the cutting edge of neuroscience in New Zealand, Australia and overseas.

Located under the landmark Sky Tower, the forthcoming venue at Sky City Convention Centre is close to major tourist attractions such as the historic Auckland Museum and bustling recreational waterfront. Dubbed 'The City of Sails', Auckland is set on a narrow volcanic isthmus of land between the Waitemata and Manukau harbours, frequently dotted with yachts and pleasure boats.

The blend of islands, Polynesian culture, glistening harbours and modern city environment creates a lifestyle ranked amongst the best in the world. Surrounded by hills and bush land, Auckland offers diverse natural beauty from the golden sands of the East Coast beaches to the black sands of the West Coast and the spectacular Hauraki Gulf with its many islands.

We invite you to come to ANS 2011 and discover why Auckland is one of the best places in the world to live - and visit.

For further details of registration and abstract submission please visit the website at: www.sallyjayconferences.com.au/ans2011

Louise Nicholson, Chair, Organising Committee ANS 2011

ANS 2011 PLENARY LECTURES AND SYMPOSIA

ANS Overseas Lecture

Tobias Bonhoeffer, Max-Planck-Institut für Neurobiologie, Germany

ANS Plenary Lecture

Seong-Seng Tan, Florey Neuroscience Institutes, Melbourne

Lawrie Austin Lecture

Peter Dunkley, University of Newcastle, Newcastle

Eccles Lecture

Terence O'Brien, University of Melbourne, Melbourne

The Presidential Symposium

Chairs: Sarah Dunlop (ANS President) and David Vaney (ANS Past President)

The Presidential Symposium will feature talks by four outstanding postdoctoral scientists who have received their PhD within the last 5 years: Jane Carland (UNSW), Andrew Clarkson (Otago), Rohan Walker (Newcastle) and Stephanie Wölfle (ANU).

Functional, and function of, neurogenesis in the adult brain

Organiser and Chairs: Maurice A. Curtis, University of Auckland, NZ and Perry Bartlett, The Queensland Brain Institute, QLD

Human Neurodegenerative Diseases

*Organiser: Richard Faull, University of Auckland
Chairs: Richard Faull, University of Auckland and Louise Nicholson, University of Auckland, NZ*

Models & mechanisms in the neurobiology of addiction

Organiser and Chair: Andrew Lawrence, Florey Neuroscience Institutes, VIC

Neuronal trafficking in health and disease

*Organisers: Frederic Meunier and Elisabeth Coulson, Queensland Brain Institute, QLD
Chair: Elisabeth Coulson, Queensland Brain Institute, QLD*

Enteric neuropathologies: searching for the sources of gastrointestinal disorders

*Organiser: Kulmira Nurgali, Victoria University, VIC
Chairs: Paul Bertrand, Department of Physiology, University of New South Wales, NSW and Kulmira Nurgali, Victoria University, VIC*

ISN symposium on Neurochemistry: Vital roles in systems neuroscience

*Organiser: Caroline Rae, Neuroscience Research Australia, NSW
Chairs: Caroline Rae, Neuroscience Research Australia, NSW and Phil Beart, Florey Neuroscience Institutes, VIC*

Genetic and epigenetic mechanisms in memory and synaptic plasticity

Organiser and Chair: Clarke Raymond, The John Curtin School of Medical Research, ANU, ACT

Neuromodulators, plasticity and behaviour: dopamine made me do it

Organiser and Chair: John Reynolds, University of Otago, Dunedin NZ

Function and dysfunction in the developing nervous system

*Organiser: Linda Richards, Queensland Brain Institute, QLD
Chair: Seong-Seng Tan, Florey Neuroscience Institutes, VIC*

Estrogen and the central nervous system

*Organisers: Jenny Wong and Cynthia Shannon Weickert, Neuroscience Research Australia, NSW
Chair: Cynthia Shannon Weickert, Neuroscience Research Australia, NSW*

Central Nervous System Myelination and Remyelination

*Organisers: Junhua Xiao, The University of Melbourne and Melinda Fitzgerald, The University of Western Australia, WA
Chairs: Melinda Fitzgerald, The University of Western Australia, WA and Simon Murray, The University of Melbourne, VIC*

2011 ANS Awards and Prizes - Call for Nominations

See ANS website (www.ANS.org.au) for full details. Nominations for all 2011 prizes and awards are due by November 22nd, 2010 and should be submitted to the ANS Secretary, Ann Turnley (turnley@unimelb.edu.au). Applicants must be Members in good standing on the 30th June in the year of nomination. The 2011 ANS Awards and Prizes will be awarded at the 2011 ANS meeting in Auckland.

AW Campbell Award: for the best contribution by a member of the society in their first five postdoctoral years.

Nina Kondelos Prize: for outstanding contribution to basic or clinical neuroscience research by a female neuroscientist.

Paxinos-Watson Prize: for the most significant neuroscience paper published by a full member of the society. For 2011, the Paxinos-Watson Prize will be for papers published in 2009.

ANS Council Positions - Call for Nominations

ANS Council calls for nominations for ANS Council positions that fall vacant in 2011. Council positions that are falling vacant are:

- President-Elect (to be President 2012-2013 and Past-President 2014)
- New South Wales State Representative: the current representative, Peregrine Osborne, has served in this position for 4 years and is ineligible to be renominated.
- Queensland State Representative: the current representative, Lizzie Coulson, has served in this position for 2 years and is eligible to be renominated.
- Tasmania State Representative: the current representative, Rob Gasperini, has served in this position for 2 years and is eligible to be renominated.

To nominate for a position, please fill out a nomination form and send to the ANS Secretariat, Sally Jay Conferences (ans@sallyjayconferences.com.au or fax 08 8362 0038) by November 22nd, 2010. Nomination forms are available for download from the ANS website (<http://www.ans.org.au/ans-membership/nomination-form/>).

In the event of more than one nomination for a position, a postal ballot must be held prior to the 2011 AGM and details will be provided in the December ANS newsletter. The Society strongly encourages multiple nominations for each Council position in order to ensure the best possible representation for ANS members.

ANS emails and SPAM filters

There have been several issues where members have not received emails from the ANS secretariat (Sally Jay) because of University SPAM filters. This is problematic when things such as conference registration acknowledgments and receipts are filtered out.

While these are in general also sent by hard copy, please add ANS@sallyjayconferences.com.au to the "safe senders" or "trusted source" list to avoid possible filtering. If you are expecting an email from ANS or Sally Jay and have not received it, check your junk email.

Australian Course in Advanced Neuroscience (ACAN)

ACAN is an intensive 3-week practical training course in cellular neuroscience. Owned and operated by the Australian Neuroscience Society, ACAN is designed for scientists based in Australia and New Zealand who would like to:

- learn advanced techniques in neurophysiology and fluorescence imaging
 - brush up on the fundamentals of cellular neuroscience
 - form contacts and collaborations with other neuroscientists
- By the end of the course, students will be experienced in patch clamping, calcium imaging, brain-slice preparation and electrophysiological data analysis, and will have gained a solid understanding of ion channels, neuronal excitability, synaptic plasticity, confocal microscopy, computational neuroscience and many other topics.

For full details about the course, including the program, visit: <http://www.ans.org.au/acan>

ACAN 2011 will be held at Queensland University's Moreton Bay Research Station, North Stradbroke Island, near Brisbane, from 27 March to 16 April 2011.

Applications for ACAN 2011 will open in mid-November 2010. The application deadline will be Monday 13 December 2010.

In order to apply, you must:

- be a currently-enrolled PhD student, or
- be a postdoctoral fellow or junior faculty, preferably no more than 5 years after completing your PhD
- preferably be a full-time resident of Australia or NZ, but a small number of applicants from other countries may be accepted

In your application you must include:

- your CV
- a cover letter that clearly states how you will apply the skills taught in the course
- a statement about the source of funding that will allow you to attend the course
- a reference from your supervisor
- a completed application form

Scholarships from the Neurological Foundation of New Zealand are available for NZ citizens/permanent residents.

For full instructions on how to apply for the course, please visit: <http://www.ans.org.au/acan>

John Bekkers
Director, ACAN

Travel requirements for ANS Auckland 2011

As the annual ANS meeting in 2011 is being held in New Zealand, we would like to remind you that if you are not from New Zealand you will need to have a valid passport and, depending on nationality, possibly also a visa to enter the country. This will be most relevant to students who have not yet travelled overseas. Supervisors are asked to pass on this information to their staff and students who are not yet ANS members and who may need to organise these documents before they can attend the meeting. See <http://www.immigration.govt.nz/migrant/stream/visit/> for further information. If you require a visa you should apply for this by early December.

NEWS FROM ANS STATE REPRESENTATIVES

Tasmania

On 29 September 2010 the first “**Neural injury and Regeneration**” symposium was held at the Baha’i centre of learning in Tasmania, Hobart. This symposium brought together some of Australians leading researchers in the field of Neurotrauma and spinal cord injury research, as well as invited international guest speaker Prof. James Fawcett from the University of Cambridge.

This symposium provided an exciting opportunity for students and researchers from around Australia to share their work and ideas on improving functional outcomes in people with spinal or brain injuries. Speakers such as Prof. James Fawcett (Cambridge), Prof. Norman Saunders (University of Melbourne) and Dr. Tracey Dickson (Menzies Research Institute), provided interesting insights from a wide range of animal models on the capacity for neural regeneration after axonal transection. These speakers highlighted critical differences in axonal sprouting between the peripheral and central nervous systems after injury, as well as providing comparisons to that seen during development.

The rewiring of the visual system after lesions in primate models, presented by Dr. James Bourne (Monash), also provided an exciting platform to further investigate key mechanisms associated with regeneration. Dr. Massimo Hilliard (QBI) discussed specific mechanisms such as axonal fusion seen in the regeneration of *C. elegans* neurons after injury and Prof. Sarah Dunlop (UWA and ANS President) provided a thoroughly engaging presentation on translating basic research into clinical trials for spinal cord injury.

The afternoon session of the symposium primarily focused on the key factors associated with secondary damage after traumatic brain injury (TBI). A/Prof. Christina Morganti-Kossmann (NTRI) presented on the distinct inflammatory responses seen in both diffuse and focal brain injuries, using results from both human and animal studies.

Interestingly, Dr. Ben Goss (QUT) presented on stimulating inflammation to reduce secondary degeneration after spinal cord injury. Prof. Robert Vink (University of Adelaide) discussed the mechanisms associated with ICP after TBI, indicating the potential of Substance-P antagonists as a novel approach to the treatment of elevated ICP.

The last sessions of the symposium, looked at studies on neural regeneration from current *in vivo* 2-photon microscopy (Dr. Alison Canty) and the mechanistic processes associated with secondary axonal degeneration and growth cone dynamics from *in vitro* models (Dr. Jerome Staal and Dr. Lisa Foa).

In summary, this symposium highlighted the high-level of exciting research throughout Australia and the need for continued collaboration between groups. Indeed, the diversity of experimental models utilized by groups throughout Australia provides a unique and multifaceted approach in the study of TBI and spinal cord injuries. It was decided that further gatherings similar to this symposium would provide a great opportunity to further strengthen the wealth of brain and spinal trauma research within Australia.

Western Australia

On Friday the 27th of August, the Combined Biological Sciences Meeting (CBSM) was held in Perth. The ANS sponsored student poster prize for a poster in Neuroscience was won by Fanny De Busserolles, a PhD student of Prof Shaun Collin. Fanny’s poster was entitled “Spatial Resolving Power and Sensitivity in Lanternfish: Adaptations to the Deep-Sea Environment”. It was good to see ANS student members taking the opportunity to showcase their work via selected oral presentations and posters to a large and diverse audience.



Fanny De Busserolles receives the ANS sponsored student poster prize from WA ANS Rep Lindy Fitzgerald.

On Friday the 3rd of September the Symposium of Western Australian Neuroscience (SWAN) was held at the University of Western Australia. The program began with a keynote presentation by Professor Chris Lind entitled “Neurosurgery for Parkinson’s disease-Brain structures, techniques and outcomes”. His presentation was followed by “Deep brain stimulation- a patient’s perspective” by Mrs Tara Preston, who is a patient of Professor Lind.

The combination of doctor and patient was both informative and moving and was well received by the over 80 registrants, which included Parkinson’s disease patients, their carers, health professionals, neuroscience researchers, postgraduate and undergraduate students. After an enjoyable afternoon tea organised by Louise Goodes of the WA Neurotrauma Research Program and members of the SWAN organising committee, there was a three minute thesis competition for Honours and Postgraduate students. The winner of the first prize of \$500, which was sponsored by the Australian Neuroscience Society, was awarded to Ms Bernadette Majda.

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Key Journals

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NEWS FROM ANS STATE REPRESENTATIVES

Western Australia (contin.)



Tony Hume (Curtin University) presents the ANS sponsored 3 minute thesis prize to winning student Bernadette Majda.

The Symposium concluded with a three minute research competition for our more senior research people and the prize of a quality bottle of wine was awarded to Professor Nigel Laing for his highly entertaining presentation entitled "Nigel Laing: 30 years in science" featuring multiple hats, Mickey mouse ears and a toy snake. Thanks to the organising committee chaired by Dr Jenny Rodger and the Australian Neuroscience Society for their support.

Lindy Fitzgerald (WA Rep)



UPCOMING CONFERENCES

See the ANS website for further details: www.ans.org.au/upcoming-conferences/

The Australian Society for Medical Research satellite meeting of the 5th AH&MR Congress: Professional Development Program 2010 "Steps to Success"

The key ingredients to running a successful research group. Monday 15th November, 2010.

Federation of Asian-Oceanian Neuroscience Societies (FAONS): 2010 Congress

In India 25-28 November.

This will be held jointly with the XXVIII Annual Meeting of the Indian Academy of Neurosciences in Lucknow.

Asian-Pacific Regional Committee (APRC)/International Brain Research Organisation (IBRO) School

to be held at the National Brain Research Centre, Manesar, India from 29th November – 10th December 2010.

The Australian Society for Psychiatric Research (ASPR) 2010 Conference "Glial-Neuronal Networks in Neuropsychiatry"

Sunday 5 to Wednesday 8 December 2010, Swiss Grand Bondi, Sydney, Australia

International Symposium on ALS/MND,

11-13 December, 2010, Orlando, Florida, USA.

The 4th Mt Lofty Workshop on Frontier Technologies for Nervous System Function & Repair

December 17–19, 2010, Mt Lofty House, Adelaide Hills, SA.

XXVth International Symposium on Cerebral Blood Flow, Metabolism and Function & Xth International Conference on Quantification of Brain Function with PET (BRAIN '11 & BRAINPET'11),

Barcelona, Spain May 24-28th, 2011.

IBRO World Congress,

Florence, Italy, July 14-19, 2011.

23rd Biennial Meeting of the ISN/ESN,

28th August-1st September 2011, Athens, Greece.

ANS POLICY ON REQUESTS FOR PUBLICITY VIA EMAIL CIRCULATION

The standing policy of the ANS is to minimize email traffic to members. This is done by bundling brief announcements or news which needs to be disseminated between print newsletters into (at most) monthly plain text email circulars. Attachments are not sent with email to members, with very few exceptions (such as our core business of an annual Society meeting). This is to reduce both the risk of virus transmission via attachments received from outside sources, and the volume (ie. cost) of email traffic through University or Institute based servers. Meetings and other significant announcements (such as job vacancies) will also receive Society publicity, via links to appropriate web pages from the ANS web site, and by subsequent inclusion into the next print ANS newsletter when appropriate. Requests for these publicity services should be directed either to the Secretary, or to Sally Jay Conferences.

ANS WEBSITE AND NEWSLETTER

The ANS website is on-line at <http://www.ans.org.au/>. Members are encouraged to regularly check the website for updated information on positions vacant, travel awards and national and international neuroscience meetings. While announcements and news items cannot always be broadcasted as an email to ANS members, they are promptly loaded on the ANS website and so it is always worth a regular check of the news page. Current and recent newsletters are available to be downloaded in PDF format and information about ANS, including the current list of council members, historical facts and how to apply for ANS Awards and Prizes is readily available. For further information or requests to place announcements on the ANS website, please contact Ann Turnley (email turnley@unimelb.edu.au, phone 03 8344 3981). Similarly, we are very happy to include information or news items in the ANS newsletter. Anticipated copy deadlines are set out below. Material for inclusion can be topics for discussion, meeting announcements, meeting reports, prizes and awards received by ANS members, obituaries, and any other items of potential interest to members of our society.

DONATIONS TO ANS RESEARCH (GIFT) FUND

Members are reminded that donations to the ANS Research (Gift) Fund are tax deductible. If you wish to make a donation, please email the ANS Treasurer, Prof Jackie Phillips at: jacqueline.phillips@asam.mq.edu.au all donations, regardless of amount, are most welcome.

DEADLINES FOR FUTURE NEWSLETTERS

December 2009: 2nd December 2010

Address and contact details for the ANS secretariat:

Sally Jay Conferences can be contacted by the following means:-

Mail: PO Box 2331 KENT TOWN SA 5071

Phone: (08) 8362 0038

Fax: (08) 8362 0038

(International – Phone/fax: 618 8362 0038)

Email: ans@sallyjayconferences.com.au

Web: www.ans.org.au

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