AuPS News

December, 2012

President's report 2012

Another busy and eventful year draws to a close. Our annual scientific meeting at UNSW in Sydney has just finished to universal acclaim. The quality of our plenary speakers, Joe Lynch, Håkan Westblad and Lutz Birnbaumer, was exceptional and it was great to feel part of the international scientific community. The symposia I attended were first class and the quality of the student presentations seems to continue to improve. And of course the harbour cruise was a memorable event blessed by a beautiful warm evening. The opportunity to present Honorary Membership to Roger Dampney and some of the student prizes in front of a very large audience was a special bonus. Our thanks go especially to Gary Housley and his local organising team.

A member of the Council of the Japanese Physiological Society (2500 members!) has approached AuPS suggesting some form of linkage between our meetings. One possibility is a joint symposium at both the Japanese and Australian meetings with members of each societies contributing. The Council will give this some thought but if you have novel ideas about how to advance such partnerships let me or a Council member know.

The Council has been deliberating for at least a year as to whether to make a bid for the IUPS to come to Australia in 2021 or 2025. The attractions are obvious; a huge influx of excellent foreign scientists and the opportunity to hear the leading exponents of many aspects of physiology. And of course the organisers would ensure that Australian physiologists are strongly represented. However the risks are very substantial; with a budget of approximately AUS $2 million only a small viral epidemic or medium sized volcano can turn a projected budget surplus into a bankruptcy for the AuPS. We have had a budget prepared by a professional conference organizer and, with what we believe are realistic assumptions, the budget shows a very substantial loss. After considerable debate and some input from the Christchurch IUPS 2001 organisers, we have decided not to make a bid. But the opportunity returns every 4 years, so if there are young enthusiasts out there, let us know.

NHMRC results were released a month or so ago and were disappointing for many AuPS members. Anecdotally there is a feeling that Basic Science is being squeezed at the expense of Clinical Medicine and Public Health. However, to my surprise, examination of the data provided by NHMRC does

not support this view. Of the 731 new project grants awarded in 2012, 59% were categorised Basic Science, 28% Clinical Medicine, 9% Public Health and 4% Health Service research. And the percentage of grants going to Basic Science has actually increased slightly over the last 4 years (55% in 2009, 56% in 2010, 57% in 2011, and 59% in 2012). Furthermore, the success rate in Basic Science (23%) was higher than in Clinical Science (17%) or Public Health (18%). Thus assuming these classifications of grants are accurate, Basic Science is holding up well against other areas of medical research. One of the difficulties for physiologists within the NHMRC system is that they do not have a dedicated Grant Research Panel labelled Physiology in contrast to Biochemistry, Pharmacology, Neuroscience, Infectious Diseases and Immunology. However it is only surmise that Physiology is disadvantaged by this situation. The recent national review of Medical Research confirms that Australia has obvious strengths in Basic Science but our success in converting scientific findings into clinical improvements is less clear. Thus it is likely that over the next few years the Clinical Science funding will increase relative to Basic Science in an effort to improve our translational outcomes. One thing we should do is to take whatever opportunities present to serve on Grant Review Panels or to nominate suitable individuals for this task. The presence of basic scientist on these panels is our best defence against that loss of influence that could occur in the future.

president@aups.org.au

AuPS would like to congratulate Dr Kate Murphy, as one of the Victorian Young Tall Poppy awardees for 2012

The Victorian Young Tall Poppy Science Awards recognise the achievements of outstanding young researchers in the sciences including medical research. These prestigious awards acknowledge recipients' research achievements together with their capacity and commitment to communicate science to the broader community.

Kate is the 2011 AuPS McIntyre Prize winner, a former AuPS councillor and regularly presents her work at AuPS Scientific meetings. Kate's research investigates the mechanisms causing cancer cachexia and identifies and tests potential treatments for this condition. Identifying effective treatments for cancer cachexia has enormous implications for improving the quality of life and reducing mortality for thousands of cancer patients worldwide. Kate is a key player in the Scientists in Schools program with Catholic Ladies College where she is a role model for promoting careers in science. She has communicated her research at international and national scientific meetings and her expert knowledge more broadly to the community through magazine articles and in multiple interviews on radio and national television.

The award is a testament to Kate's research achievements and her passion and commitment to promoting science and medical research.

A contribution from Professor Gordon Lynch,
The University of Melbourne.

Sydney 2012 Joint AuPS/PSNZ/ASB Meeting

Terrific meeting!!!

AuPS invited Lecture by Prof. Joe Lynch on glycine receptors was presented to a packed theatre.

With plenty of opportunities to talk Physiology…

..whilst enjoying the harbour.

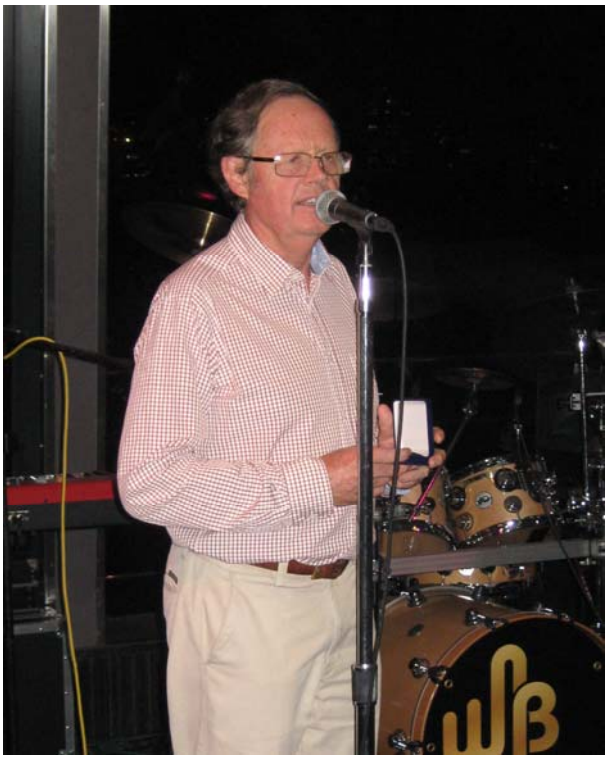
Busy poster sessions…

…and interesting trade displays

Conference Dinner on the Harbour

CONGRATULATIONS!!!!

Dr James Bell being awarded the AK McIntyre Prize by Simon Rushworth from SDR Scientific (left), and posing with a very proud postdoctoral supervisor, Prof Lea Delbridge (right). The prize consists of a medal, certificate and the sum of $1000. Thanks SDR.



Prof Roger Dampney, The University of Sydney, awarded Honorary AuPS membership.

A/Prof David Saint (The University of Adelaide), winner of the Michael Roberts Excellence in Physiology Education Award. This award, sponsored by Wiley-Blackwell, in addition to $1000, includes a medal and an invitation to make a symposium presentation.

CONGRATULATIONS!!!!

The postdoctoral publication prize

The prize was awarded to **Dr Stefan Gehrig (The University of Melbourne)** and accepted on his behalf by Prof Gordon Lynch (pictured) and presented by Simon Rushworth from SDR Scientific. This annual $500 award is for the best original paper published by an AuPS member during their first 4 postdoctoral years.

The PhD publication prize

The prize was awarded to **Dr Heshan Peiris (Flinders University)** and accepted on his behalf by A/Prof Damien Keating (pictured) and presented by Simon Rushworth from SDR Scientific. This annual, $500 award is for the best original paper published by an AuPS member during the course of their PhD studies.

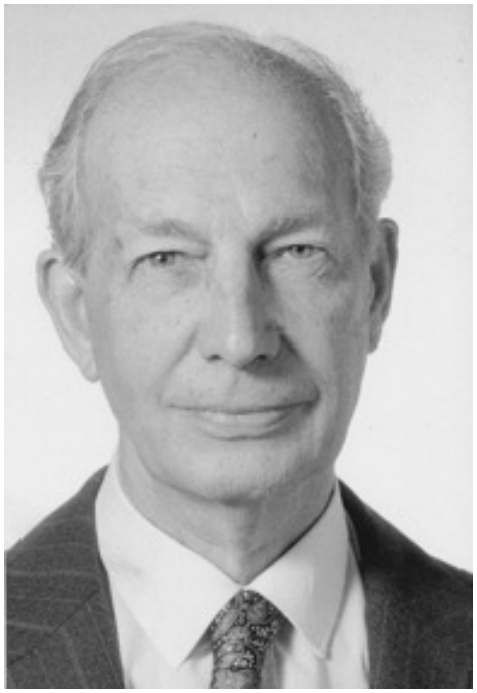
Best student oral presentation prizes

Michaela Kreissl (pictured left) from Sydney University - Neurogenetics Research Unit being awarded best oral presentation by Simon Rushworth from SDR Scientific for her outstanding presentation titled, 'Mutations in the α-tropomyosin-slow gene (TPM3) cause sarcomeric dysfunction in slow muscle fibres'. The prize consists of a certificate and the sum of $250**. Anne Harasta (pictured right) from University of NSW** was awarded second prize by Prof David Allen, which was worth $100 and sponsored by Wiley Blackwell.

Best student poster presentation prizes

Christine Dixon (University of Queensland) was awarded best poster. The prize is sponsored by SDR and consists of a certificate and the sum of $250. The second prize worth $100 and sponsored by Wiley Blackwell went to **Jeremy Pinyon (University of NSW)**.

Vale Professor Peter Orlebar Bishop



We record with sorrow the death of Peter Bishop (AO; MB BS 1940; DSc 1967) in 2012. Peter was a founding member of the Australian Physiological Society, and was its first Treasurer. He was also an Honorary Member. He was a distinguished Australian visual neuroscientist. Born in Tamworth, he later lived in Armidale, where his father was a surveyor. His schooling was initially in primary and high school in Armidale, but later he attended the senior years at Barker College in Sydney. Although he enrolled in 1935 to study medicine at the University of Sydney, he noted later that his own preference would have been to study engineering. He sat twice for the Leaving Certificate to secure a scholarship, enabling him to enrol at university. As a student, he developed a keen interest in neuroanatomy.

Along with his colleagues, Peter graduated early from his medical studies because the outbreak of World War 2 saw early graduations as students contributed to the war effort. Initially he was appointed as a hospital resident in neurosurgery. Subsequently, as a junior resident medical officer, he published an article on the Nature of Consciousness which drew attention to his interests. Professor Sir Harold Dew, a founder of neurosurgery in Australia, supported his development. However, Peter was called up and joined the navy early in 1942, serving as a Surgeon Lieutenant in several ships, in both Australian and British fleets. It is recorded that while he was serving in the navy in the Atlantic and at Madang, Peter dissected a number of brains stored under his bunk.

After the war, in 1946 he returned and worked briefly with Professors Dew and Phillips at the University of Sydney. His interests were tending more towards neurophysiology rather than neuroanatomy, and subsequently, he was awarded a fellowship to study at the National Hospital for Nervous Diseases in England. Having initially spent nine months in clinical activities, he subsequently opted to undertake laboratory work from 1947 to 1950, studying brain function with Professor JZ Young at University College, London. That change of preference necessitated a rapid immersion into electronics and technology, since he was required not only to design, but also to build, his own equipment.

Returning to Sydney, Peter was initially supported for three years and provided with a space for a laboratory in the Department of Surgery. The National Health & Medical Research Council provided funding to purchase equipment in 1950 and 1951to install in Sydney. Although he was required to design, acquire and build his equipment, he did not have an academic position. Nevertheless, he elected to study the properties of a central neural tract, and was assisted by the first four interested and enthusiastic students who had enrolled in the newly-instituted BSc(Med) degree, to carry out supervised research for one year during their medical programs. Subsequently, Peter's particular interests included stereopsis, and his group contributed to designing a novel approach to developing a stereoscopic map of the brain.

After his appointment as a member of the medical faculty in Sydney, he and his colleagues faced significant challenges for the small numbers of staff as numbers of students progressively increased. They needed to be taught and supported. Peter was expected not only to prepare and teach in lectures on many varied topics relating to physiology, but also to design laboratory equipment and support the development of students' skills in practical classroom work. In 1951

when he became a senior lecturer, the numbers of students were increasing, and at the same time students were demanding more individual attention. Practical classes were regularly overloaded, creating challenges for the limited numbers of staff available to teach. Increasing numbers of students in the classes offered only very limited opportunities for individual students to participate actively. In addition, classroom equipment was limited and more often than not failed to meet modern standards and expectations. Nevertheless, with the aid of talented technical staff, he developed equipment to support his research. Despite his heavy teaching load, he continued to encourage and support interested students to undertake a year in research. Much of the research was performed on cats, necessitating long sessions, but he thought it more appropriate for the occasional female students to work on rats.

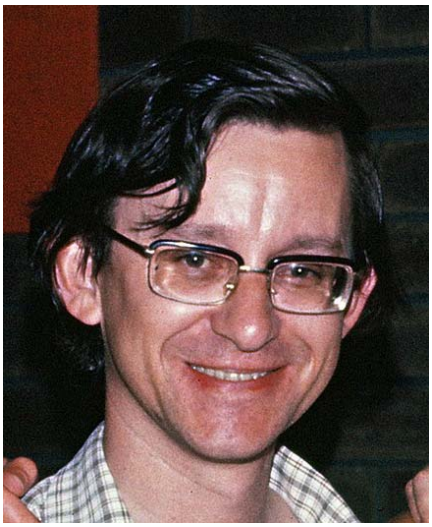
By 1956, Paul Korner and Liam Burke had been appointed to the staff, providing welcome support. They brought new skills and knowledge, developing and encouraging novel approaches. During the 1960s, Peter's interest was in stereopsis – the study of perception in depth. He explored the ways in which a cell in one side of the brain receives information from both eyes. By 1962, up to 1500 students were enrolled annually in different programs in the physiology department.

Later, in 1967, Peter was awarded the DSc degree by the University of Sydney for his published research, and was elected as a Fellow of the Australian Academy of Science. In the same year, he accepted an invitation to join the John Curtin School at the Australian National University. There he was better able to concentrate on research, working with a wider range of local and international colleagues and supporting a diversity of graduate students. He noted then that he had good access to a range of equipment: some of it designed and developed "in house". Another interest had been in squints or strabismus. Significantly, he continued to attract a number of distinguished local and international and colleagues with whom to collaborate. He became a Fellow of the Australian Academy of Science (1967), Fellow of the Royal Society (1977) and was awarded the honorary degree of Doctor of Medicine (Sydney). He was awarded the prestigious Australia Prize in 1993.

His substantial contributions have been recognised in several different ways. For example, in 1986 he became an Officer of the Order of Australia for "service to medical science, particularly in the field of physiology". Other significant achievements included the award in 2001 of the Centenary Medal for service to Australian society and science in the field of neurophysiology. In 1993 he was recognised as "one of the three or four world leaders in visual science". Throughout, he remained modest, thoughtful and committed to supporting colleagues and students, implementing and testing his scientific ideas. The highly prized P.O. Bishop medal has been awarded annually to the top student in the Bachelor of Science (Medical) degree at the University of Sydney.

A contribution from Emeritus Professor Ann Sefton
University of Sydney.

Vale Dr Ray Johnstone



One of the great characters of Australian physiology, Jeffrey Raymond Johnstone (PhD) died in Perth, Western Australia on the 15th October this year, aged 69 years. Ray was born in Fremantle, Western Australia in 1943. He obtained his honours degree in Physiology in the laboratory of Brian Johnstone in Perth where he collaborated on various aspects of cochlear function, including the first electrical network analysis of the fluid compartments of the mammalian inner ear. He subsequently completed a PhD at Monash University in 1970 under the supervision of Richard Mark. His PhD thesis, cheekily (but accurately) entitled "The efference copy neurone" comprised less than 30 pages and contained the results obtained from only one neurone. The thesis was unassailable from a scientific standpoint, providing incontrovertible evidence for the existence of the much sought after efference copy mechanism in the visual system. It was an early example of Ray's inimitable style; at one and the same time scientifically rigorous and a poke in the eye of convention. From Monash, Ray travelled to Keele University in the UK, where with Pat Wilson he performed detailed measurements on the vibration of the basilar membrane in the inner ear, using a novel capacitance probe technique. He then moved to the Physiological Laboratory at Cambridge and collaborated on seminal experiments in visual processing with Fergus Campbell. Ray returned to Perth in 1973 as an NHMRC Fellow continuing his work on inner ear physiology as well as making substantial contributions to vision science in collaboration with John Ross and other renowned collaborators. In the later part of his scientific career, Ray developed a keen interest in public health issues and became notorious (and admired by many) for his fearless public attacks on what he saw as loose science in the area of the epidemiology of smoking, diet, exercise and health. His homepage (http://members.iinet.net.au/~ray/) contains a list of his provocative publications in this field. Ray was a well-rounded intellectual and had a keen interest in music and books. Along with his scientific activities he also ran a bookshop for over 20 years, specializing in old and rare books mainly on science and chess.

Ray's beloved wife Valerie Alder pre-deceased him. They are survived by their two daughters Victoria and Elizabeth both of whom are pursuing careers in biological science, as well as Valerie's children by a previous marriage, Bart and Ceri. Ray suffered for many years from painful spondolytis and had been wheelchair bound for several years after breaking his neck in a fall at home. He retained his fine and argumentative mind until the very end. He will be sorely missed and those who knew him will never forget his unique personality.

A contribution from Emeritus Professor Don Robertson
The University of Western Australia

Clinical and Experimental Pharmacology and Physiology
Editor-in-Chief

Wiley is seeking to appoint a new Editor-in-Chief for *Clinical and Experimental Pharmacology and Physiology*. The successful candidate will be invited to be a member of the senior editorial team during 2013 as a transitionary step until their full appointment as EIC on January 1, 2014. The Editor-in-Chief will oversee the selection of editorial content for publication in the journal, liaising with the Editors and the Publisher to maximize the journal's visibility, quality and scientific reputation.

EDITOR-IN-CHIEF'S DUTIES

The Editor-in-Chief will be asked to perform the following primary duties, in consultation with the Editorial Team and subject to the Publisher's overall direction:

a) To help formulate an editorial strategy for the journal, including matters such as subject and geographical coverage, editorial team, manuscript handling, article types (e.g. Frontiers-in-Research review series', special issues, thematic issues), and impact factor;

b) to solicit the submission of high quality contributions to the journal, to invite review articles, select supplements and to help oversee any other special features of the journal as appropriate;

c) to evaluate submitted Contributions in liaison with the Editorial Team, and to select suitable Contributions for the review process for the journal;

d) to arrange for and supervise the independent peer review of Contributions, and in liaison with the Editors to make or request the Contributor to make revisions as appropriate and to reject any Contribution deemed unsatisfactory;

e) to share editorial responsibility for the timely submission to the Publisher of the final Contributions in form, content and style satisfactory to the Publisher;

f) in consultation with the Publisher, to select any new members of the Editorial Team;

SELECTION CRITERIA

The successful candidate will be an outstanding individual with an internationally-recognized track record of scientific publications and a commitment to the journal's stated aims. They will be an experienced peer reviewer, with strong critical analysis and appraisal skills. They will have proven success in building teams, and will collaborate effectively with colleagues internationally. They will be willing and able to commit up to 10 hours per week to the editorial work of the journal. They will be comfortable using modern communication tools.

APPLICATION PROCEDURE

Candidates are invited to submit their Curriculum Vitae and a covering letter outlining their suitability for the role. **Applications should be sent by email to the Publishing Manager (Julia Ballard, jballard@wiley.com) by 15 December 2012.** Shortlisted candidates will be asked to complete a questionnaire regarding their interest and aptitude for the role. Final interviews will take place by telephone or in person in January 2013.

IUPS 2013

21–26 July 2013 Birmingham, UK

37th Congress of the International Union of Physiological Sciences

http://www.iups2013.org/

mbhd2013.stanford.edu

9th Molecular Biology of Hearing and Deafness Conference

June 22-25, 2013

Stanford University Campus

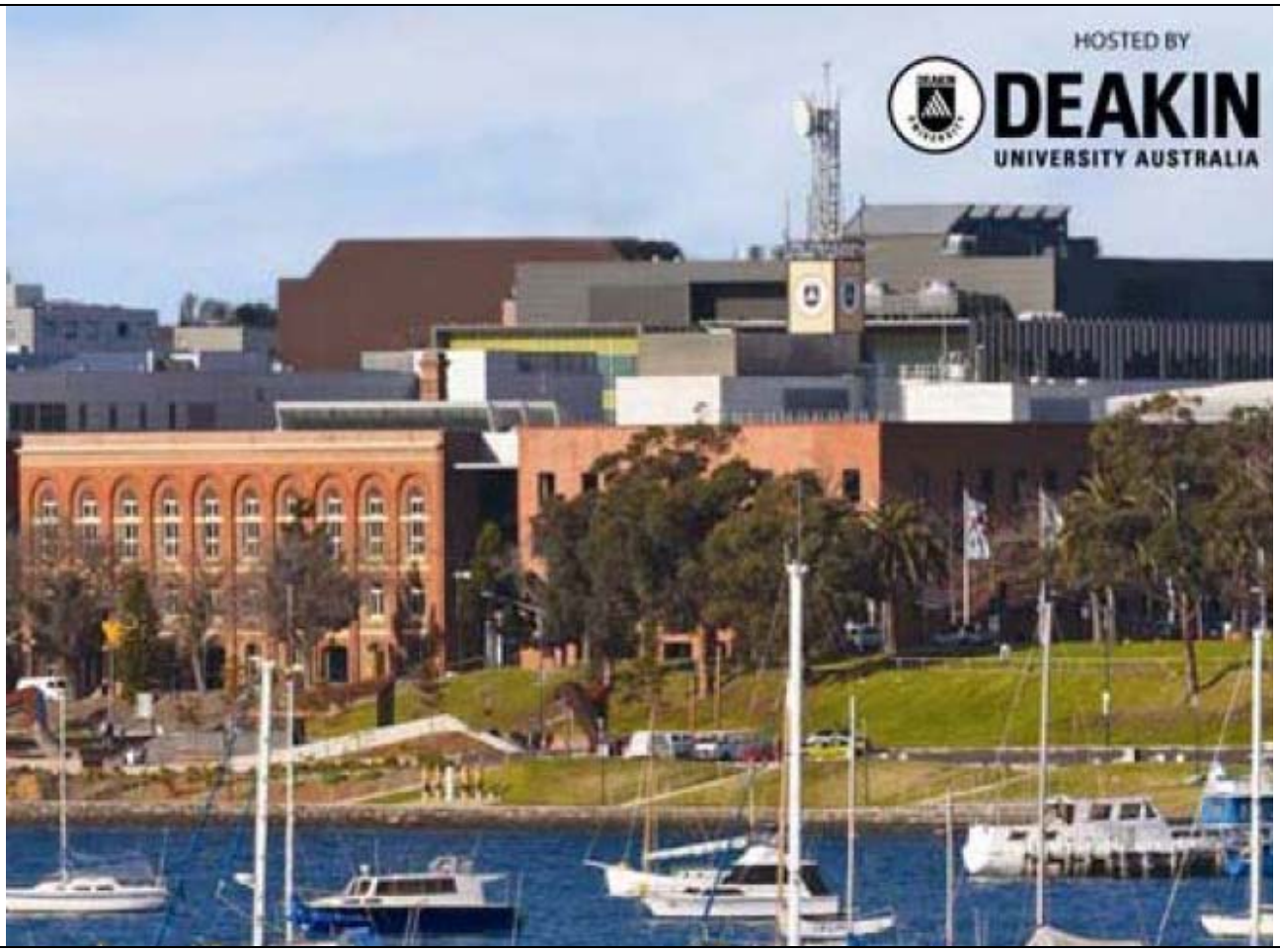
- Early Registration: January 9, 2013
- Abstract Deadline: April 17, 2013
- Travel stipends for students and postdocs available. Visit website.
- Questions? Send email to: mbhd-2013@stanford.edu

http://mbhd2013.stanford.edu/

AuPS Supporters

2013 Australian Physiological Society Meeting
8-11 December 2013.

Deakin University Waterfront Campus, in Geelong, Victoria.



This issue of AuPS News was compiled by Glenn Wadley and with many thanks to the generous contributors.

The next issue of AuPS News will be distributed to members in March 2013.
All contributions for AuPS News should be sent to: newsletter@aups.org.au before the end of February.