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## 50<sup>th</sup> Anniversary Celebration.

The AUPS Historical Seminar and Cocktail Party held on the evening of 1<sup>st</sup> February 2010 during the recent joint ANS/AuPS meeting was attended by about 190 people, which included current members as well as former members of AuPS. The seminar was chaired by Geoff Burnstock, and the speakers were Paul Korner and Uwe Proske. Paul delivered a very entertaining talk in which he discussed the origins of the society, with particular reference to people who played a key role in setting up the society, such as Victor Macfarlane, Pansy Wright, Peter Bishop and Jack Eccles. In his talk Uwe Proske highlighted the life and work of the late Archie McIntyre, who attended the first meeting of the society and who also made enormous contributions to Australian physiology, both in his research and his great encouragement and support of younger physiologists. Both of these talks were greatly appreciated by the audience, which included a number of people who had attended the inaugural meeting of the society which was held at the University of Sydney 50 years ago – Liam Burke, Bill Levick, Joe Hoh, as well as Paul Korner and Geoff Burnstock.



Audience at the Inaugural Meeting of the Australian Physiological Society, May 1960

After the seminar there was a Cocktail Party in the Anderson Stuart building, which was where the inaugural meeting was held. There was a display of photographs taken at meetings of the society in the 1960s and 1970s, as well as items of equipment dating back to the same period. These included some of the original equipment used by Jack Eccles when he was working at the Australian National University.

The seminar and cocktail party was a great opportunity to acknowledge and celebrate the contributions of the men and women who laid the foundations of Australian physiology and neuroscience.

It is planned to have the talks at the historical symposium, as well as photographs taken at the Cocktail Party afterwards, to be available on the AuPS members website in the next few weeks. I am very grateful to Liam Burke for providing many of the photographs used in the display, to Rod Westerman for the loan of some historic equipment, John Cossey for setting up the equipment display, and to Cindy Guy, Jaimie Vandenberg, Anuwat Dinudom and Adel Mitry for help in organising this function.

Roger Dampney  
26 February 2010.





Cocktail party in the Anderson Stuart courtyard, following the historical seminar.

## The Historical Displays attracted great Interest



Interest in the photos from earlier meetings, led to discussion about who was who, archives and documenting images at all meeting. A majority of the library collection was bequeathed by Peter Bishop, of interest was his chart of collaborations (right, below) . Many more images are coming to the AuPS website soon, please feel free to contribute to the archive and it's documentation. (photos, Clive Jeffery, University of Sydney).





Highlights of the meeting included the Society Special Lectures

**The AuPS Invited lecture**

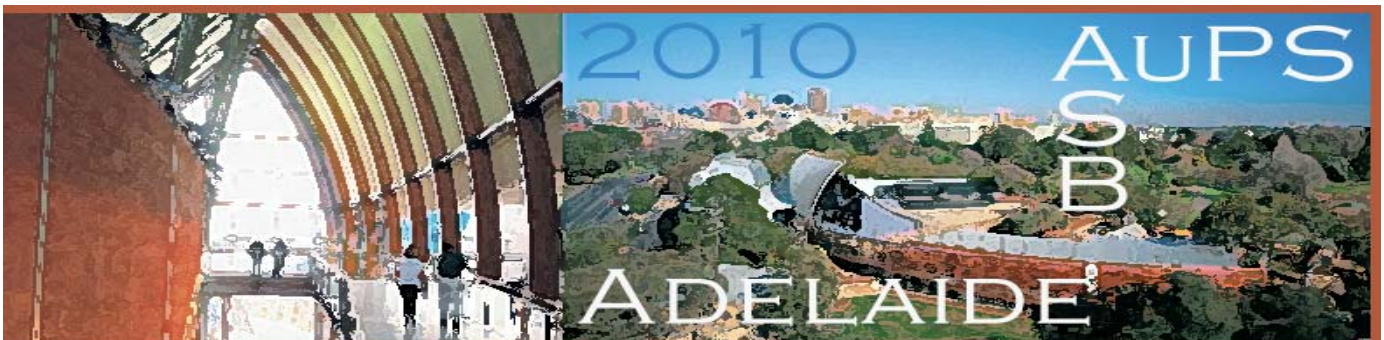


Presented by outgoing AuPS President, David Adams The presentation on 'Analgesic conotoxins modulating pain pathways' provided insight into the discovery, research and actions of these natural products and highlighted the diversity of nature and the promise of therapeutics, where specific actions can be demonstrated. Shown here receiving the award and congratulations on an excellent presentation from Graham Lamb.

**The Physiological Society (UK) Exchange Lecture.**

David Attwell presented an outstanding lecture entitled; ' Brain Power: How the brain's energy supply determines the computational power of neurons'. Widely lauded as the best plenary presentation of the meeting the talk was an inspirational presentation of a seemingly flawless story of discovery and ingenuity.

This was the final in the British-Australian Exchange series. David, shown here with AuPS President, David Allen



# The Australian Physiological Society Council, 2010.

## New Member Profiles



### **Treasurer**

#### Peter Thorn

Associate Professor, University of Queensland.

Previously, Cambridge University, Department of Pharmacology.

Research interest, the regulation of secretion in epithelial cells. I started my research career as an electrophysiologist interested in the relationship of ion channels to cell behaviour. That was at the start of patch-clamping in the UK in the early 1980s and I obtained my PhD by studying the single channel behaviour of a chloride channel in the somatic muscle of the parasitic worm, *Ascaris suum*. For my first post-doc I moved on to study the role of ion channels in secretion.

Since then, over the last 14 years I have focussed on the study of stimulus secretion-coupling in epithelial cells from exocrine glands.

These important glands are essential in body functions ranging from the secretion of saliva and tears through to the secretion of digestive enzymes in the pancreas. Secretory dysfunction is associated with disabling and sometimes fatal diseases such as cystic fibrosis and pancreatitis.

#### Daniel Markovich

Professor, University of Queensland

Research interests lie in the study of the physiology, pathophysiology and regulation of mammalian ion transporters, involved in mediating transcellular movement of ions (sulfate, chloride, phosphate) across epithelial cells of the kidney, small intestine, liver and brain. In the last few years, several transporters have been cloned, characterised and knock out mice generated in his laboratory.

Current research topics include:

- Functional genomics and physiomics of ion transporters
- Integrative and molecular physiology of sulfate transporters
- Phenotypic characterisation of sulfate transporter gene knock-out mice
- The role of sulfate transporters and sulfation in human diseases



#### Yue-kun Ju

Senior Research Fellow, University of Sydney.

Trained as a medical doctor at The Fourth Military Medical University (FMMU), China and also gained a Masters Degree of Medicine. In 1994 graduated, PhD from John Curtin School Australian National University under the supervision of Peter Gage and A/Prof. David Saint. Now in Sydney with Prof. David Allen

Research interests include TRPC gene expression and store-operated Ca channels activity in mammalian sino-atrial node and their involvement in cardiac arrhythmias.



### Matthew Watt

Associate Professor, Monash University, Victoria.

Research focus is related to the relationship between defective fat metabolism, obesity and insulin resistance. This includes the acute regulation of triglyceride lipases and their impact on lipolysis, lipid metabolism and cellular homeostasis in adipose tissue, skeletal muscle and liver.

Investigative approaches combine physiology with molecular / genetic perturbations in mammalian culture.



### Robyn Murphy

Robyn was awarded her PhD in muscle biochemistry from Deakin University, Burwood, in May 2003. Following a postdoctoral year working with Profs Graham Lamb and George Stephenson in the Muscle Cell Research Group at Dept of Zoology, La Trobe University, she was awarded an NHMRC Peter Doherty postdoctoral fellowship, which she undertook with Prof Graham Lamb. Robyn's research focuses on examining skeletal muscle function at the level of single muscle fibres using physiological and biochemical methodologies. In particular, she is interested in various calcium dependent processes, including understanding the function of the calcium dependent proteases, calpains, and the regulation of various proteins involved in cellular calcium handling. In addition, she is involved in understanding the effects of perturbations in calcium regulation, such as in certain disease states.

Robyn's postdoctoral years were intermitted with two periods of maternity leave and part-time work. In January 2010, Robyn took up a Senior Lecturer position in Dept of Zoology, La Trobe University.

Many thanks to Graham Lamb for his long term as a most diligent, AuPS Public Officer.

## AuPS annual prize winners are:

### **A.K. McIntyre Award**

Dr. Renae Ryan, Sydney University  
(supported by AuPS and SDR)

### **PhD Student Publication Prize**

Mastura Monif, Melbourne University.

### **Postdoc Publication Prize**

Dr. Robyn Murphy, Latrobe University

### **Student Oral Prizes**

Heshan Peiris, Flinders University  
(supported by SDR Clinical Technology)

Jordan Willcox, University of Guelph  
(supported by Wiley-Blackwell)



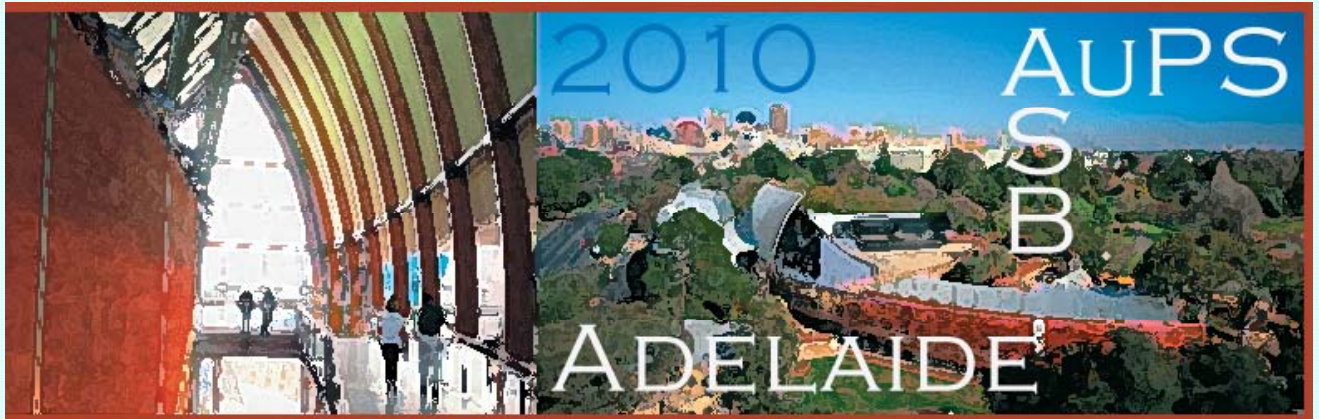
### **Student Poster Prizes**

Ivana Kuo, Australian National University  
( supported by SDR Clinical Technology)

Robiul Islam, University of QLD  
( supported by Wiley-Blackwell)

Congratulations to all the prize winners.  
Many of the contests were extremely close.  
Also, thank you very much to all the judges  
and sponsors.





## Next Meeting

**Deadline for the receipt of symposium proposals is 30<sup>th</sup> March 2010.**

Proposals should include:

- Title of the symposium, Organiser (chair) and contact information
- A list of 4-6 speakers and tentative titles of their presentations.
- Proposed budget for the symposium (not to exceed \$2000 total)

**Confirmed keynote speakers** include Prof Robert Kass, Pharmacology, Columbia University, and A/Prof Dirk van Helden, Human Physiology, University of Newcastle.

For more information, contact the local organiser Andrea Yool,  
[andrea.yool@adelaide.edu.au](mailto:andrea.yool@adelaide.edu.au) or visit <http://www.aups.org.au/Meetings/201011/>

# MUSCLE 2010

## Gage conference on muscle

*The 2010 Gage Muscle Conference will be held from April 14th - 16th 2010 at Canberra Boys Grammar School, ACT*

*The Gage Conferences (previously Curtin Conferences) are live-in conferences based on the USA Gordon Research Conferences which aim to provide maximum opportunities for interaction between experts in a field*

**Themes**

- Molecular mechanisms in Ca<sup>2+</sup> signalling in heart and skeletal muscle
- Excitation-contraction coupling in health and disease (cardiac and skeletal)
- Muscle as a metabolic organ
- Muscle aging and Injury
- Muscular Dystrophies
- Inherited myopathies
- Other neuromuscular disorders

**REGISTER NOW!** <http://www.gageconf.org.au>

## Funding and Promotion Opportunities

### **Fresh Science 2010.**

Help us identify the best under-publicised research produced in the past year or so by early-career scientists.

This year Fresh Science will be held in Melbourne from Monday 7 to Thursday 10 June. The event serves as a communication boot camp for early-career researchers - getting their stories out to local, national and international media, and giving them essential communication skills.

We will select 16 early-career researchers and bring them to Melbourne where they will receive media training and then present their work to the media, schools and the public.

Now in its 13th year, Fresh Science is supported by the Federal Government, New Scientist and Museum Victoria.

### **In essence we're looking for:**

- early-career researchers (from honours students to no more than five years post-doc)
- a peer-reviewed result which has had no media coverage
- ability to present ideas in plain English.

Nominations close at 5pm on Thursday 25 March 2010.

For information on why and how to nominate.

<http://freshscience.org.au/>

### **Australia to US Fellowship Applications**

Now accepting applications for 2010 Australia to US Fellowships

The Association offers Fellowships of up to US\$25,000 to Australian researchers wishing to undertake advanced research (graduate or postgraduate) in the U.S.

Through these Fellowships, the Association encourages intellectual collaboration and innovation, building on the strong economic and social partnerships between Australia and the United States.

### **Fields of research supported by the Fellowships:**

- Biology (biopharmaceuticals)
- Medicine
- Science
- Technology

### **General Requirements:**

- Applicant's research or study must be at a postgraduate or postdoctoral level
- Proof of acceptance into a U.S. educational institution
- Applicant must be an Australian citizen or permanent resident of Australia
- The Fellowships are intended to support part of the costs of one year of research/study in the U.S. (applicants must submit a proposed budget)
- Applicants should devote full time to their research or study

**Deadline:** April 15th 2010

**Further Information:** [www.americanaustralian.org/australian\\_to\\_usa\\_apps/](http://www.americanaustralian.org/australian_to_usa_apps/)



## FEAST 2010

Australian Academy of Science - international grants: Scientific visits to Europe  
The Australian Academy of Science is inviting applications from Australian professional scientists to visit Europe between 1 July 2010 and 31 March 2011 to collaborate with researchers in European countries.

Applicants must propose a collaborative research project, or specific activity, which has been developed in consultation with host scientists. The duration of the visits must be 14 to 40 days.

Information, deadlines and application forms are available on the web site:  
[www.science.org.au/internat/programs.htm](http://www.science.org.au/internat/programs.htm) (to Asia, North America, Europe)  
[www.science.org.au/internat/europe.htm](http://www.science.org.au/internat/europe.htm) (to Europe)

This project is supported by the Department of Innovation, Industry, Science and Research's International Science Linkages - Science Academies Programme.

## 2010 Australian Museum

Eureka Prizes, the premier national science awards program, networks.

Perhaps consider entering or nominating a colleague?

You can find a complete listing of our prizes at <http://eureka.australianmuseum.net.au/enter>

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**APPLICATION for THE A K McINTYRE PRIZE  
SPONSORED BY SDR CLINICAL TECHNOLOGY**

This prize, named in honour of the Society's first President, is awarded annually to members of the Society who are judged to have made significant contributions to Australian physiological science over their pre-doctoral and early post-doctoral years.

Applicants must be financial Ordinary Members of the Society, and must normally have completed their doctoral degree not more than 5 years prior to the time of their application (although they may apply during their 6<sup>th</sup> postdoctoral year). Think about applying for the 2011 meeting now.

**The Prize consists of a medal and the sum of \$1000.**

More information can be found on the following webpage:

<http://www.aups.org.au/Prizes/McIntyre.html>

## New Products



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- Intracellular Fluid (ICF)
- Fat Free Mass (FFM)
- Fat Mass (FM)



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## Meetings in 2010

CALL FOR SYMPOSIA PROPOSALS for the AuPS / ASB 2010 Conference  
Adelaide 28<sup>th</sup> Nov to 1<sup>st</sup> Dec, 2010



**DECEMBER 2010**  
National Wine Centre, South Australia

The joint meeting of  
**the Australian  
Society for Biophysics &  
the Australian  
Physiological Society**

**AUPS/ASB  
ADELAIDE  
2010**

### **2010 American Thoracic Society International Conference**

May 14-19, 2010 New Orleans, Louisiana

The Advance Program with registration form will be available in January 2010 at

[www.thoracic.org](http://www.thoracic.org)

For more information, please contact the ATS International Conference Department  
[conference@thoracic.org](mailto:conference@thoracic.org).

This issue of AuPS News was compiled by Simon Potocnik with many thanks to the generous contributors.

The next issue of AuPS News will be distributed to members in June 2010. All contributions for AuPS News should be sent to: [newsletter@ups.org.au](mailto:newsletter@ups.org.au) by May 31<sup>st</sup>, 2010.

## Meetings in 2011

### **Perth AuPS meeting 2011**

This will be a combined meeting with ASCEPT and HBPRCA and so should be a week of scientific presentations of considerable interest to a wide range of AuPS members. The meeting is planned for the week beginning Sunday 4<sup>th</sup> December and there will be a number of shared sessions and symposia as well as dedicated sessions for the individual societies involved. AuPS and ASCEPT will run as is traditional, from Sunday to Wednesday. The local organizing committee consists of staff from The University of Western Australia (Associate Professors Livia Hool and Lynette Fernandes and Professor Don Robertson).

We urge all AuPS members to support this meeting. AuPS meetings in Perth have traditionally been an opportunity for participants to not only attend the meeting but to go on to enjoy the climate, beaches and many other tourist attractions that "The West" has to offer.