

AuPS News

June 2015

Michael Roberts Education Award Winner 2014 Dr Deanne Skelly

President

Prof Graham Lamb
La Trobe University
president@auaps.org.au

National Secretary

Prof Matthew Watt
Monash University
secretary@auaps.org.au

Treasurer

Dr Bradley Launikonis
University of Queensland
treasurer@auaps.org.au

Editor

Prof. David Allen
The University of Sydney
editor@auaps.org.au

IT Manager & Production Editor

Hon A/Prof Dave Davey
ITmanager@auaps.org.au

Webmaster & Assoc Editor

Dr Glenn Wadley
Deakin University
webmaster@auaps.org.au
newsletter@auaps.org.au

Student Representatives

Tahnee Kennedy
The University of Melbourne
t.kennedy2@student.unimelb.edu.au

Nicole Vargas
Charles Sturt University
nvargas@csu.edu.au

Councillors

Dr James Bell
The University of Melbourne
belljr@unimelb.edu.au

Prof Lea Delbridge
The University of Melbourne
imd@unimelb.edu.au

Prof Aaron Russell
Deakin University
aaron.russell@deakin.edu.au

Dr Deanne Skelly (nee Hryciw)
The University of Melbourne
deanne.skelly@unimelb.edu.au

Dr Robert Lee-Young
Baker Heart & Diabetes Inst.
Robert.Lee-Young@bakeridi.edu.au

Public Officer
AuPS Secretary

[AuPS Website](#)



What is your background in physiology education and research?

After completing my undergraduate and honours degree at the University of Adelaide, I was fortunate to meet Professor Allan Bretag (University of South Australia). He actively encouraged me to join his laboratory and undertake a PhD with him in 1995. His research was focused on chloride ion channels and the investigation of the relationship between their structure and function. We regularly had lab meetings with his collaborators Professor Michael Roberts and Associate Professor Grigori Rychkov. It was at my first lab meeting that I met Michael Roberts. This was in the mid-1990s, and what I remember of Michael was that he had this ability to make you feel welcome, and valued.

Following the completion of my PhD, I was fortunate to be appointed as a Postdoctoral Fellow at Johns Hopkins University working with Professor William Guggino (in 1999). This was a stimulating and exciting time. While I was in Baltimore I was appointed as a lecturer teaching a subject for the Masters in Biotechnology course. Following my long days in the lab, each Thursday evening, I would teach a class of mature students, most of who were working in laboratories around Baltimore. I enjoyed this, immensely, and vowed to continue teaching when I returned to Australia.

In 2001, at a conference at the Gold Coast, I met my mentor and now collaborator Professor Philip Poronnik. I joined Phil's lab at The University of Sydney and then the University of Queensland in 2002. Phil is a well-rounded academic who has strengths in both educational research and scientific research. Everything Phil does is with passion. He knew of my love of teaching, and he actively encouraged me to undertake a Graduate Certificate in Higher Education at The University of Queensland (which I completed in 2005). I think it is important for scientists to have some training in education, as communicating your research findings is not the same as teaching and actively engaging a class of 500 students! While undertaking my Graduate Certificate, I developed a keen interest in scientific communication. This has involved projects where students "translate" scientific data into a lay-persons language. An area that I think requires more development in the undergraduate student, is the ability to understand scientific language, and be able to communicate this to people with limited scientific backgrounds.

In 2008, I was appointed as a Lecturer at Victoria University. While at Victoria University I established my own independent scientific research group, as well as continued to build my interests in educational research. During this time, with my collaborator Dr Kathy Tangalakis, we developed a peer assisted learning program, with members of the Learning Support Services at Victoria University. The involvement of the Learning Support Services Group was critical to ensuring that the program was valid, and built soundly on the principals of educational research. This was highly successful, and is still in use at Victoria University today. This project reminded me of the diversity of our student cohorts, as well as the need to utilise peer networks in promoting good study practices.

In 2012 I was appointed as a Lecturer at The University of Melbourne. Here, I am continuing with my passions in both educational research and scientific research. Again, I am focused on methods for enhancing scientific communication in undergraduate students. I foster the view that an active and dynamic environment promotes effective learning, and that student engagement is a key aspect of any undergraduate degree. Importantly I am still working on methods to enhance scientific communication in my students, and develop in them a passion for scientific enquiry.

My service to the field of educational research has resulted in my organisation of the Teaching symposium associated with the AuPS meeting in Geelong (co-chair of the session), as well as assistance with the pre-conference workshop on education. My educational research has also been presented both nationally and internationally, across a number of forums. I am also an assistant editor for the World Journal of Education, and regularly provide peer review on manuscripts from all over the world.

Where does physiology education need to head in the next 5 years?

I believe that engagement of students with Physiological concepts and their relevance to real world scenarios is key to developing and promoting the field of Physiology. It is imperative that students understand that their current knowledge is based on enquiry and critical scholarship. I believe that to educate well in Physiology, one must have current, firsthand knowledge of the way science evolves, to provide students with genuine experience and knowledge. In essence I aim to encourage a sense of curiosity in the biological world, which is essential for the future advancement of our discipline. I am proud to be an active scientific and educational researcher. My mentor Phil Poronnik encouraged me to become a balanced academic with strengths and passions in both areas, which is what I am achieving.

One area that requires consideration for the future is the nature of face-to-face education. With the explosion of on-line learning, students can do a large amount of their study in a virtual world. We must ensure that they see benefit in attending class, through a genuine, valued experience that engages them with the content.

It was a great honour to win the Michael Roberts award last year, and it was especially pleasing that my former PhD supervisor Professor Allan Bretag was in the room. I am greatly appreciative that the AuPS has recognised my contributions to the field of educational research, while I maintain my strong interests in both educational and scientific research. I believe that you can be a balanced academic, with interests in both education and scientific research, so long as you have the passion to do so.

Deanne was awarded The Michael Roberts Excellence in Physiology Education prize at the AuPS 2014 Scientific Meeting. Deanne will present the Roberts Award Lecture at the 2015 AuPS meeting in Hobart. Nominations for the 2015 Roberts award will be opening soon, and will close in October. Please keep an eye on the AuPS website for more details.

Mid-year update from AuPS National Secretary

The successful running of the AuPS annual meeting in Brisbane capped off a busy 2014. The attendance was terrific, the science was outstanding and the organisation by Brad Launikonis and his team was seamless.

We welcomed Aaron Russell and Lea Delbridge to Council and farewelled Nikki Beard and David Saint, who we thank for their contribution to the running of the Society. Specifically, Nikki contributed to developing relationships with new sponsors of the AuPS and David was heavily involved with education-based activities.

Robyn Murphy and Aaron Russell attended the 'Science Meets Parliament' event as the AuPS representatives and have reported on their experiences in this newsletter.

The AuPS implemented a gender equity statement in 2015, which was triggered by the growing awareness of issues pertaining to gender inequities in science and the implementation of similar statements / policies at several major scientific bodies and institutions. The policy reads, *"The AuPS strives to achieve gender equity in all aspects of the Society's activities. The Society endeavours to achieve this equity through female and male representation on Council, conference organising committees, session chairs at scientific meetings as well as through invitations to high quality speakers of both sexes in line with the gender balance in our Society."* Statistics which accompany the statement can be viewed on the AuPS website. This took considerable work and careful consideration, and together we will strive to ensure fair representation within the AuPS.

Looking forward, the 2015 annual scientific meeting will be a joint venture hosted by the University of Tasmania's Faculty of Health and the Menzies Institute for Medical Research. This will be held from Sunday 29th November to Wednesday 2nd December. Steve Rattigan and his local organizing committee have put together a terrific program that includes 11 International speakers and provides representation across most of the major interest groups of the Society. The plenary speakers are world leaders in their disciplines and include Prof. Stefan Broer (ANU) and Prof. Bret Goodpaster (Burnham Medical Research Institute, Orlando, USA). The final details of the program are being finalized but I can say that the conference dinner, which is included in the cost of registration, will be held at the world famous Museum of Old and New Art (MONA), which will be reached by river cruise. In keeping with the format of previous years, we will once again take the opportunity to present a number of our annual prizes during the dinner. These include presentation of the Michael Roberts Teaching Award, AK McIntyre Award, the Post-Doctoral and PhD publication prizes. The call for applicants for these prizes will be made in August and September. Further details of the meeting are on the website and also detailed in this Newsletter.

We are forward planning for the 2016 AuPS meeting, which will be held in Adelaide. The local organising committee headed by Janna Morrison, David Saint and Damien Keating is currently busy sourcing potential venues. We are hoping to make this a joint meeting and are in discussions for a future date. The call for symposia for Adelaide 2016 will be made in August this year, with submissions likely to be closed around the end of October.

Good luck with the grant rebuttals and I look forward to seeing as many of you as possible at Hobart 2015.

Matthew Watt
AuPS National Secretary



Science meets Parliament

24 and 25 March, 2015. Canberra

By Robyn Murphy (La Trobe University) and Aaron Russell (Deakin University)

For about the past 20 years, the peak body in science and technology, Science & Technology Australia (STA, formally the Federation of Australian Scientific and Technological Societies FASTS) has held 'Science meets Parliament' (SmP). One of the main aims of STA is to keep science on the national agenda, and this two day conference provided exposure of the nation's parliament for 200 delegates, representing diverse sciences such as physiology, plant ecology through to quantum physics and astronomy. This year we represented the AUPS at SmP.

The first day of SmP was at the Canberra Convention Centre. It was focused on preparing delegates to meet with their allocated parliamentarian the following day. From the outset, it helped to define the role of a politician and to understand they are people making difficult decisions about complex matters. The other piece of information that resonated was that politicians are genuinely interested in science, BUT, they have to make economic decisions. The two days helped us understand this reality. During the first day, we received insight from journalists (now do they work a busy schedule or what! another article in itself), lobbyists, policy advisors. This concluded with an interactive session of science communication where we were required to "sell" our scientific research within 60 seconds. This was important to be able to do, because even though we were allocated 15-45 min with a dedicated politician, the dynamic world of politics and potential bell ringing (meaning the senate must return to the house to vote) meant your captive audience could be lost as quickly as you stepped foot in the door. We were reminded that scientists think and write in a unique way. Many others just never get on the same page as us and this is where due consideration can pay off. We were taught the "...andbut ...therefore....." style, which can turn a finding of interest into a story with meaning – and all in 60 seconds or less. Basically, cut away the fluff and definitely cut out all the detail. It was excellent to have some practice of this new craft before the real deal in Parliament House.

During the course of the first day, the gap between thinking like a scientist (easily done) and understanding how a parliamentarian thinks (harder to do) narrowed. In fact, one awakening was to appreciate that even if they wanted to, politicians cannot think like a scientist when making their decisions and doing their job. Another realisation was that overall, politicians believe in the absolute importance of undertaking scientific endeavour. Their difficulty is in keeping to budget and appeasing the people they represent. Did you know that on a list of priorities based on the general population, science comes in at a lowly 8th! Perhaps that explains our lowly rank compared to other OECD countries and their relative dollars spent on science and innovation. Top of the list of importance by the public was the Economy, followed by Health and then Education. That priority list demonstrates the importance of ensuring our discussions with politicians address these factors and don't just try to sell the science! Nobel Laureate, Brian Schmidt AC reminded us that despite this, it is still our job to keep raising the profile of science to ensure that politicians and the public continue to care. To keep science in the public view requires persistence, and hence time, and to do so we must remain highly informed and highly engaged.



Pre-dinner drinks, Foyer, Parliament House.

Delegates had a couple of opportunities to meet with politicians. Informally, this took place at the Gala dinner that was held in the Great Hall of Parliament House on our first evening. In amongst eating a lovely dinner, we listened to various presentations including by The Hon Ian MacFarlane, Minister for Industry and Science and The Hon Bill Shorten, Leader of the Opposition and were entertained by MC Adam Spencer. There was barely an eyelid batted at the sea of individuals gently rising and exiting the Great Hall amidst the speeches, as the senate bell rang on a couple of occasions. Once the formalities were over the Hall was amass with people mingling and 'pick the politician' began. It provided an informal setting to grab an opportunity to say a few words of importance and perhaps take a selfie (Robyn was happy with hers, below).



The Hon Bill Shorten and Robyn Murphy

Science meets Parliament was a great experience, the first time we've received such insight into how politicians think and what is required for them to go about their business. Being in parliament just for a night and a day was very special. On the second day we had the unique opportunity to discuss matters with Politicians. We went in small groups (2-3 of us; 6 handpicked young scientists also had an impromptu meeting with the Prime Minister) to meet privately with a nominated politician for 15-45 min. We both met with insightful, intelligent, passionate and extremely hard-working and busy Senators. Not everyone had fantastic meetings with their respective politician, however most were pleasantly, and sometimes passionately rewarded.

From our experience at SmP there were several take home messages. Our various jobs demand us to think in particular ways, however our ability to communicate this meaningfully is vital. In order to speak together, there is a need to understand how information can be disseminated from one brain to another – both very intelligent, but likely processing and understanding the information in a very different way. For example, the job of a policy maker is decision-making, yet our job as scientists is to create knowledge. This is further demonstrated with a quote by Christine Livingston, President of the Business Council of Australia that helped put that one into perspective. ***"I hear, I forget. I see, I remember. I do, I understand"***. We as scientists do a lot, and understand what we do. If we tell someone the details of our work, they are likely to forget. If they see something, it will help them remember, but understanding it might be outside the realm of what is possible. There were a few other key quotes that resonated various aspects of the scientist trying to edge into the eyes and ears of a politicians. A take home quote from Hugh White AO, Professor of Strategic Studies, ANU was ***"If you're not at the table, you're on the menu."*** Perhaps apt incentive if you want to make change.

There was so much more to SmP, so many insightful, good, pragmatic things said by an array of impressive speakers. The one thing that we can share confidently, is the need for scientists to be able to articulate what they do, why they do it and who should care about what is done. The Hon. Kim Carr made the point that we, as scientists, all share the need to be more retail – to make what we do relevant to the general public. Get that mantra correct in our heads will be equipping ourselves well for the discussions with non-scientists. We say, “Try this one at home”, the 60 second “.....andbut therefore” mantra, and see how you go!

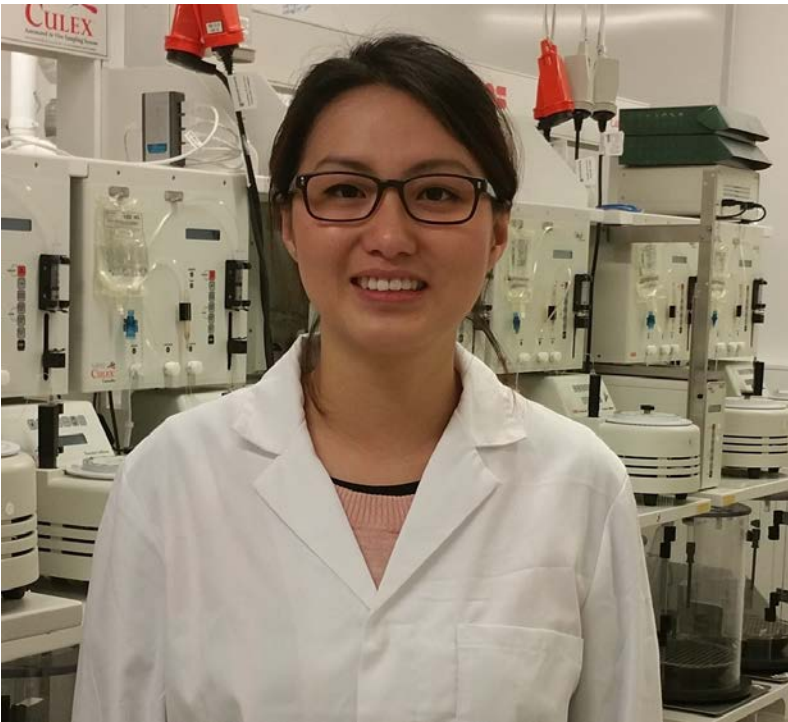
Further information

If you are interested in learning a little more about SmP, or about STA, more information can be found on the [STA website](#). There are links to many of the speeches and presentations we listened to. If you have the opportunity to attend in the future then we believe that it is a worthwhile experience. Opportunities will more likely avail themselves to active members. Also, if you would like to read some other personal accounts of SmP, there are others available via the STA website. One that we liked in particular is an article for [The Conversation](#) by Dr Olivia Carter.



Parliament House at sunrise. Photos by Robyn Murphy

Student Profile – Enyuan Cao Monash University



What is your research background – how did you get interested in Physiology?

I received my Bachelor degree in Pharmacy at the Monash Institute of Pharmaceutical Sciences. I initially became interested in research during undergraduate work experience in the lab. I then completed one year honours research training, in collaboration with AstraZeneca in Sweden, aimed to enhance the pharmacological effect of immune-modulators by targeted drug delivery to lymphatic lymphocytes. Since the start of my honours year, I knew I wanted to pursue a PhD working on lymphatic function and its relation to immune diseases, which later became my PhD project focusing on

intestinal lymph-adipose interactions in immuno-metabolic diseases.

What was your award winning poster?

My poster, '*The impact of intestinal lymph exposure on adipocyte function and insulin resistance*', was the exciting start of my PhD project. In this study we found that intestinal lymph exposure (especially high fat diet fed lymph) to adipocytes alters adipocyte differentiation, lipid storage, morphology and secretory profile *in vitro*. These collective changes in adipocytes were consistent with pathogenic changes that promote insulin resistance (IR) *in vivo*. This study is the first step to establish the potential link between intestinal lymph access to adipose, adipose function and whole body IR development.

What do you do to relax?

I enjoy watching movies and movie commentaries. I also like painting and sketching.

What is the research direction you would like to take in the next 3-5 years?

Immune and metabolic dysfunctions promote the development of almost all chronic diseases. In the future, I would like to continue working to broaden our understanding of lymphatic function in immune-metabolic changes and chronic disease, and explore potential lymph-directed treatment strategies for these diseases.

Enyuan was awarded the SDR best poster prize at the AuPS 2014 Scientific Meeting in Brisbane.

AuPS CONFERENCE

29 NOV - 2 DEC 2015

Hosted by the University of Tasmania's
Faculty of Health and the
Menzies Institute for Medical Research



Image: Tourism Tasmania & Stuart Crosssett



Image: Willie Smith's Organic Apple Cider Grove, Tourism Tasmania & Nick Osborne

Research Symposia (with over 11 international speakers!)

- Stem Cells & Regenerative Medicine
- Novel mechanisms that regulate the physiological attributes of muscle
- The sarcoplasmic reticulum of skeletal muscle
- Linking mitochondria with health and disease
- Controlling the excitable heart
- SERCA and NaK properties and regulation in skeletal muscle
- Cardiovascular metabolo-pathology
- Age, sex and cardiovascular protection strategies
- New Insights into exercise-induced mitochondrial adaptations
- Sex-specific effects of programming: how gender plays a role in determining your disease risk.
- Physiological mechanisms controlling microvascular flow and muscle metabolism
- Lipid Metabolism in Health & Disease – novel techniques to assess lipids



Physiology Education Symposium

- What do we want our physiology graduates to know and be able to do?

AuPS Invited Plenary Lecturer: Prof Stefan Broer, Australian National University.

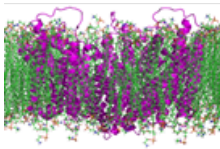
Amino acid transport - translating basic discovery into improving health

Invited Plenary Speaker: Prof Bret Goodpaster, Sanford Burnham Medical Research Institute

Roberts Education Prize Lecturer: Dr Deanne Skelly, The University of Melbourne.

Conference Dinner: MONA: Museum of Old and New Art

Local contact: Prof Stephen Rattigan S.Rattigan@utas.edu.au
[Meeting website](#)



Brain Transporters: From Genes and Genetic Disorders to Function and Drug Discovery

We are pleased to announce that [Registration](#) and [Abstract submission](#) are open for;
Brain Transporters: From Genes and Genetic Disorders to Function and Drug Discovery.

This 3 day meeting will be held from Aug 20th -23rd in Palm Cove and is a satellite meeting to the International Society for Neurochemistry meeting in Cairns (23-27 August). This will be wonderful opportunity to see some of the leading researchers in the field of Brain Transporters speak in Australia. There are additional speaking slots reserved for Australian Speakers and also for Young Investigators. Students and Early Career Researchers are particularly encouraged to attend.

Confirmed speakers include:

Susan Amara	NIMH	Mike Kavanaugh	University of Montana
Phil Beart	University of Melbourne	Joe Mindell	NINDS/NIH
Randy Blakely	Vanderbilt University	Arturo Ortega	CINVESTAV-IPN Mexico City
Olga Boudker	Cornell University	Mike Robinson	University of Pennsylvania
Lynette Daws	University of Texas	Connie Sanchez	Lundbeck
Volker Eulenburg	University of Erlangen	Rebecca Seal	University of Pittsburgh
Ulrik Gether	University of Copenhagen	Ji Sze	Albert Einstein College of Medicine

Registration Fees: Before Mar 30, 2015

Researcher/Academic	\$250
Post Doc	\$225
Student	\$175
Social Guest	\$125

Registration Fees: After Mar 30, 2015

Researcher/Academic	\$350
Post Doc	\$325
Student	\$275

Palm Cove is situated 30 minutes north of Cairns and 40mins south of Port Douglas. It is approximately 20 minutes from Cairns International & Domestic Airport.

We hope to see you in Palm Cove.

Organising Committee: Robert Vandenberg, Renae Ryan and Stefan Broer. **Program Committee:** Rob Vandenberg, Renae Ryan, Stefan Broer, Randy Blakely, Mike Robinson, Arturo Ortega and Phil Beart

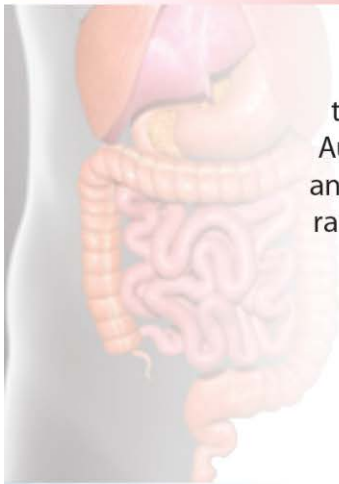




54th National Scientific Conference
15-18th November 2015, Stamford Plaza, Adelaide

Bugs, Bowels & Beyond

Innovations in Digestive Health and Disease Research



Our exciting program will bring together leading international and Australian-based scientists, clinicians and health professionals with a wide-ranging focus on conditions affecting the digestive tract.

THEMES

- Microbiome
- Obesity and nutrition
- Inflammatory bowel conditions
- Gastrointestinal cancers
- Pancreatic and liver diseases
- Gut, brain and microbiota

FIRKIN ORATION Professor Eran Elinav

Weizmann Institute of Science, Israel.
Professor Elinav is a clinician and scientist leading a team that investigates interactions between the innate immune system, the intestinal microbiota and their effects on health and disease.



EDWARDS ORATION Professor Nicholas Talley

Pro Vice Chancellor, Faculty of Health, University of Newcastle
Professor Talley is an icon of Australian health and medical research with over 1,000 publications and recipient of more than \$10 million in research funding. His team investigates the molecular basis and treatment of Irritable Bowel Syndrome (IBS), as well as the link between bacteria and dyspepsia, gastroesophageal reflux disease (GORD) and gastritis.



INVITED SPEAKERS



Professor Mark Morrison,



Dr Vicki Whitehall,
Colon Cancer



Dr Ilse Rooman,
Pancreatic Cancer



Associate Professor Phil Sutton,

ISCCB 2015

18th International Symposium on Chromaffin Cell Biology
August 17-21, 2015 | The Pullman Reef Casino Hotel, Cairns

On behalf of the organising committee, it is our great pleasure to invite you to register for **ISCCB 2015**. [on-Line registration is now open](#).

Invited speakers include: **Nobel Laureate** Erwin Neher | Nils Brose | Mike Cousin | Peter Dunkley | Lee Eiden | Anna Fejtova | Volker Haucke | Ron Holz | Richard Huganir | Reinhard Jahn | Michael Kozlov | Manfred Lindau | Tom Martin | Jens Rettig | Josep Rizo | Phil Robinson | Ruediger Rudolf | Corey Smith | Jakob Sorensen | Matthijs Verhage | Ling-Gang Wu | Tao Xu | Robert Zorec and many more.

There are still plenty of slots available in sessions and in The famed "Wine and Cheese" sessions for talks selected from abstracts. Poster sessions will also be held and are classically highly interactive. Early Bird registration closes June 1 and please visit the [website](#) and register online as soon as possible to help us organise the event.

Exhibition and Sponsorship packages are noted on the [website](#). The Exhibition is held together with the Poster displays and refreshments in the Urchin Rooms. Exhibitors are invited to present in the Wine And Cheese Session. ISCCB 2015 precedes the ISN 2015 Meeting in Cairns.

Social events include a Welcome Reception and Conference Dinner. Excursions to the World Heritage listed Great Barrier Reef and Daintree Rainforest will be offered for the Thursday excursion day and as pre/post touring options. Note that the excursion is not included in the registration. However, an email with all the details of the excursion will be sent to you upon registration.

We look forward to welcoming you to beautiful Cairns for the exciting 18th ISCCB.

Best wishes

Fred Meunier and Damien Keating
Convenors

TOPICS INCLUDE

- exocytosis
- endocytosis
- neurotransmission
- secretory granule formation and trafficking
- calcium regulation
- stress signals and physiology
- hypertension and neuroendocrine tumor biology

SPEAKERS

Speakers are noted in the [program](#) and in the online [Speaker Blurbs](#).
We are delighted to welcome an eminent group of presenters to the Cairns Symposium.

REGISTRATION and ABSTRACTSUBMISSION

Submit your abstract [on-Line](#) with registration. Please **book your accommodation** at the conference hotel, on-Line **with registration**.

EXHIBITION and SPONSORSHIP

Invitation and exhibition options [here](#).

ISCCB 2015 SECRETARIAT

MTCi | PO Box 717 Caringbah, Sydney | NSW 1495 | Australia
Tel: +61 2 9524 1799 | Mobile/Cell: +61 419 688 581 | eMailisccb2015@mtci.com.au



The University of Queensland, 30 November to 3 December 2014
Was proudly sponsored by:



**Aurora
Scientific
Inc.**

Aurora Scientific Inc. is a leading science and technology firm providing high performance measurement instrumentation to a niche market of scientific researchers in over 33 countries around the world. Their 300 Series Muscle Levers and High-Speed Length Controllers, 400 Series Force Transducers, 600 Series Data Acquisition Hardware and Software, 700 Series Electrical Stimulators and 800 Series Test Apparatus are used to investigate varied areas of scientific inquiry including heart and stroke research, exercise physiology, injury recovery and adaptation and neuro-muscular disease progression. ASI's 500 Series line includes micro-seismic transmitters and data loggers as well as data acquisition and analysis capabilities for ground penetrating radar with applications in the mining industry. ASI's 100 and 200 Series of Fast-Response Gas Sensors provide solutions to neuroscience researchers and to military and environmental specialists. ASI has offices in Canada, Ireland and Hong Kong and a distributor in Japan. For more information about Aurora Scientific Inc., visit www.AuroraScientific.com or call: in Australia and New Zealand +852-3188-9946.



ADInstruments has empowered physiologists to fast-track life changing research and inspired teachers to make a difference to student learning. Get the latest on our complete solutions for data acquisition and analysis at AuPS including latest LabChart software, NIBP system, wireless EMG and more.

AuPS Supporters



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 September 2015. All contributions for AuPS News should be sent to: newsletter@ups.org.au before the end of August.