

AuPS News – December 2018

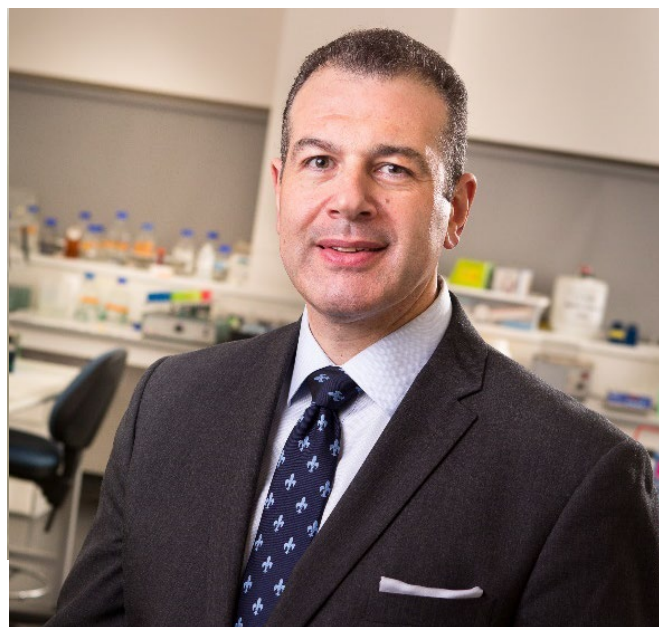
President's Report:

Prof. Gordon Lynch, University of Melbourne

I write this report just a few weeks after the 2018 annual scientific conference which was held at The University of Sydney. The meeting was a great success, based on the quality of the scientific presentations, award lectures, symposia, conference dinner and high level of interactions among members. The Local Organising Committee led by A/Prof. Bill Phillips, together with Dr. Melissa Cameron, Dr. Trevor Lewis, Prof. Stewart Head and A/Prof. Andrew Moorhouse, are to be thanked and congratulated for making the annual conference such a success.

Prof. Livia Hool led the conference program with the Society's Invited Lecture 'Taming the beast: targeting the L-type calcium channel to reduce cardiovascular morbidity and mortality'. Livia skillfully described some of the electrophysiological underpinnings of cardiovascular disease and through several hard-hitting emotional videos made a convincing argument regarding the importance of fundamental mechanistic understanding to advance development of effective therapies. It was an excellent lecture.

Following the presentation of the Invited Lecturer medal, the welcome reception was held in the charming courtyard of the Anderson Stewart



Building. A highlight of the evening was the offering of selected excellent wines from the estate of Prof. David Allen, including Pinot Noir, Shiraz, Chardonnay and Sauvignon Blanc. The reception was well attended and provided a wonderful start to the conference.

This year's ECR workshop for students and early postdoctoral researchers featured career advice from A/Prof. Enzo Porrello and A/Prof. Nir Enyon, two of the Society's emerging leaders, who described their career journeys from students to postdocs to group leaders. The workshop was followed by a mixer held at the Rose Hotel.

The Society's Plenary Lecturer for 2018 was Prof. Walter Boron from Case Western Reserve University. Prof. Boron, an internationally acclaimed

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and distinguished researcher, academic leader and educator, is especially known for his textbook ‘Medical Physiology – A Cellular and Molecular Approach’, co-authored with Emile Boulpaep, which is now in its 3rd Edition. The lecture highlighted some of the amazing historical underpinnings of modern physiology and during question time, Prof. Boron’s love for experimental physiology certainly came to the fore!

The Conference Dinner was held at Dockside, Cockle Bay Wharf, in Darling Harbour, and a fun night was had by all. The highlights of the evening included presentations to winners of the Society’s awards. The first of these was the Ph.D. Publication Prize awarded to Dr. Lorna Daniels, currently at the University of Auckland and formerly from the University of Otago. Lorna was judged the winner with her publication “Inhibition of calcium/calmodulin-dependent kinase II restores contraction and relaxation in cardiac muscle from type 2 diabetic rats”, published in *Cardiovascular Diabetology*.

The Society’s most prestigious award, the A.K. McIntyre Medal, named in honour of Prof. Archie McIntyre, our Society’s first President, was awarded to Dr. Tanya Cully. Tanya was selected for this honour based on her outstanding contributions to Australian physiological sciences during her doctoral and early postdoctoral years. As she is currently undertaking postdoctoral training at Baylor College in Texas, Tanya’s award was accepted by her Ph.D. mentor, A/Prof. Brad Launikonis, himself a former winner of the A.K. McIntyre Medal!

One of the most significant honours the AuPS can bestow is Honorary Membership, awarded to a retired member in recognition of their contributions to the Society, and meant to encourage their ongoing connection with the discipline. A highlight of the evening, especially for me, was awarding Honorary Membership to Prof. Stephen Rattigan, from the Menzies Institute for Medical Sciences and University of Tasmania. Steve had no idea that he was receiving this honour and was coaxed into attending the dinner through skillful arrangements

(and deceptive diversionary tactics) from former mentees including Dr. Renée Ross and Associate Professor Michelle Keske, among others.

Steve is a long-standing member of the Society, recognised internationally for his important contributions to understanding microvascular blood flow in skeletal muscle, especially in relation to insulin resistance and diabetes. Steve was also the Chair of the Local Organising Committee for the AuPS meeting in Hobart in 2015 – a meeting that many of us remember quite fondly for its exceptional scientific quality and enjoyable social events. It was a great pleasure to present Steve with Honorary Membership and we look forward to his ongoing engagement with the Society.



Prof. Stephen Rattigan receiving the AuPS Honorary Membership during the conference

On the final day of the conference, Associate Professor Glenn Wadley gave the Michael Roberts Lecture entitled “Adventures in flipping the classroom” presented in an enjoyable interactive style. This lecture was later followed by the AuPS Education Workshop chaired by Dr. Julia Choate and

A/Prof. Andrew Moorhouse on the topic of “MCQs and SAQs in Australian Physiology”.

The Annual General Meeting included reports from Council on various matters, including membership, finance and general business and it provided an opportunity for lively debate and discussion. The AuPS welcomes such interactions and members are encouraged to provide their thoughts and suggestions about any aspect of the Society for consideration by Council.

And so ended another annual scientific meeting. We look forward with anticipation to the 2019 meeting which will be held at the Australian National University in Canberra. Local secretaries are Prof. Stefan Broer and A/Prof. Nikki Beard.



Enjoying the council dinner in Sydney during the 2018 AuPS Annual Meeting

At the end of my first year as President, I am pleased to report that the Australian Physiological Society is flourishing, based on a steadily increasing membership and a solid financial position. The AuPS Council has worked diligently throughout year and I especially thank Dr. Deanne Skelly for her administrative leadership of the Society as National-

Secretary. I also thank Prof. Aaron Russell as outgoing Treasurer for his diligence and attention to the Society’s finances and welcome Dr. Severine Lamon into that role. Details regarding newly elected Councillors and their specific roles will be described in forthcoming newsletters. Suffice it to say, the AuPS Council is both diverse and vibrant, with a very positive attitude towards making 2019 a successful one for the Society’s membership. To that end, Council will endeavour to invest in activities especially directed to our students and early career researchers, who are the future of our discipline and the AuPS. Watch for new initiatives to be announced in early 2019.

To conclude my report, I would like to highlight three areas I feel should be of general interest to our members. These include: the role of our Society in preparing the next generation of physiology leadership in Australia; the future of physiology as a discipline within the changing research funding landscape; and the effective use of social media to promote physiology and our Society.

The role of the AuPS in training the next generation of leaders in Physiology

The Society takes its role in training young physiologists very seriously and to this end offers a number of unique awards to help differentiate Australia’s next generation of discipline leaders. For our postdoctoral researchers we have the Society’s most prestigious award, the A. K. McIntyre Medal, awarded to those who have excelled in their doctoral and early postdoctoral years and who have made important contributions to the discipline and our Society. We also have a Postdoctoral Publication Award that recognises outstanding scholarship and research excellence in Physiology.

I therefore encourage our talented early career researchers to work hard and distinguish themselves through competing for these prestigious awards.

For our student members, the Society offers awards for oral and poster presentations at the annual scientific meeting. We want the competition to be

fierce, not just to recognise those that win, but to ensure the standard of the discipline rises in accordance with the sciences internationally. The Society also offers a student publication award, a student research grant scheme, and even a student research training opportunity, which is designed to provide unique insight into how physiology research is conducted in different settings around Australia.

The discipline of physiology in Australia's changing funding landscape

The traditional sources of research grant funding in Australia continue to cause some level of consternation among members. The ARC DP and LP schemes can be very challenging and certainly difficult to string together consistently even if you are lucky to receive them. With the NHMRC, we face uncertainty in this first iteration of the new Investigator, Ideas and Synergy grants schemes, with strict rules for eligibility within and between schemes.

In an era of big data where unbiased sequencing and omics are quickly replacing qPCR and targeted protein identification, the necessity for collaboration is more important than ever. Systems physiology offers a great opportunity to interpret and make physiological relevance of bioinformatics. Physiologists have an important role to play as part of, or by leading, diverse complementary teams investigating fundamental mechanistic and translational biology. To be successful we need to cooperate with those outside our discipline and, of course, with each other. This requires a concerted effort of support and cooperation as a discipline if we are to compete successfully within the new funding schemes.

The promotion of physiology and the Australian Physiological Society through social media

The Society's website is looking professional and improving all the time, thanks to the efforts of AuPS Councillor, Dr. Renée Ross. The Society also has a fledgling presence on Twitter and needs the strong support of its membership to tweet and retweet achievements, news and information relevant to the AuPS. Other societies and individuals are doing this very successfully, especially those linked with cardiovascular medicine and physiotherapy. They are seemingly very collegial and supportive of each other on social media.

For the AuPS to have a strong presence and voice on social media, it requires willingness and cooperation from each of us, something that is achievable. Social media activities can be tracked and reported on throughout the year. Appropriate social media activity will help promote the Australian Physiological Society, profile our members and showcase their achievements.

Until next time, happy tweeting!

Gordon (@GordonSLynch)

Prof. Gordon S. Lynch

President, Australian Physiological Society

Congratulations to Professor Marcello Costa, Awarded Lifetime Achievement Award

Long term AuPS member, Professor Marcello Costa, has been awarded a “Lifetime Achievement Award” for advancing “the entire field and such advances have been recognised by all the societies of the world Federation of Neurogastroenterology and Motility”. Prof Costa is Matthew Flinders Distinguished Professor and Professor of Neurophysiology, Human Physiology, College of Medicine and Public Health.

This award was recognition of a long career in contributing to neurogastroenterology, a field that seeks to understand the neurological underpinnings of various gastroenterological diseases. Prof Costa’s speech follows, which thanks his family, colleagues, and champions the importance of science.

Prof Costa's speech to the Federation of Neurogastroenterology and Motility (Amsterdam Sep 2018) follows, which thanks his family and colleagues, as well as champions the importance of science.

‘Thanks Roberto for the almost grandiose summary of my humble achievements.

First of all I wish to congratulate the neurogastroenterology community for introducing this award. Other senior researchers before me would have been worthy recipients and many of the younger generation I am sure will receive it.

53 years ago I published my first paper on the gut with my supervisor and mentor Giorgio Gabella in Turin. Five years later Geoff Burnstock invited me to Australia. I ask Daniela If she would marry me and come to Melbourne. She said yes.

By the way a few weeks ago I asked her if she would come to Amsterdam with me and she said yes again. Thank you Daniela my loved wife, my life companion.



Prof Costa receiving the Lifetime Achievement Award at the World Federation of Neurogastroenterology and Motility, Amsterdam, September 2018.

In 1975 my next mentors Laurie Geffen and John Chalmers appointed me to the new Medical School at Flinders where I am still, and I will acknowledge my younger mentors in my talk later this morning.

I published less than 300 papers but I did so with more than 180 colleagues. Many will be here today. Thank you.

With some I have worked for a long time. 17 years with John Furness who taught me the proper Australian language and Simon Brookes for the subsequent 30 years (210 w in 1 min) who taught me the proper English. Neither I am afraid succeeded.

Scientists are the glue of humankind. Never like now are we needed to counteract the increasing isolationism of so many communities and countries towards dangerous nationalisms.

The best way to resist is to keep an open society alive by holding rigorous yet amicable peer review systems. We should also resist the temptation to accept any pseudoscience even if under the umbrella

of traditional medicines. “Electro-acupuncture”? Seriously?

I have received many accolades. But there is no greater satisfaction than being recognised by one’s peers.

Today is the peak of my scientific career, and I would like to share it with all those friends and colleague who allowed me to have so much fun for such a long time.

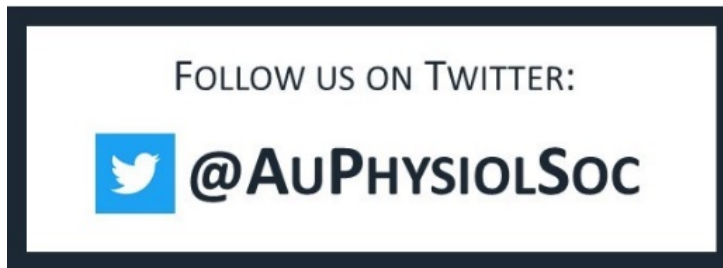
I wish all of you to enjoy this exciting meeting and I hope to see all of you in Adelaide in 2 years time.

Thank you."

Prof Costa to the Federation of Neurogastroenterology and Motility (Amsterdam Sep 2018)



Do you tweet???



We are increasing our ways of communicating our achievements to the wider world with our recent launch of the AuPS Twitter account.

Don't forget to follow us and use our twitter handle when you want to communicate the achievements of our members [@AuPhysiolSoc](https://twitter.com/AuPhysiolSoc)

Upcoming Events:



Welcome FAOPS2019

9th FAOPS
Federation of the Asian and Oceanian Physiological Societies
CONGRESS

Philosophy of life: Function and Mechanisms

KOBE, JAPAN March 28-31, 2019
Kobe Convention Center

in conjunction with The 96th Annual Meeting of
the Physiological Society of Japan

NEWS!
Now accepting abstracts (until 2 Oct, 2018)
and early registration (until 31 Oct, 2018)!
(see Registration & Accommodation)

Highlights from the 2018 AuPS Annual Meeting



The meeting was officially opened with the AuPS invited lecture.

Prof Livia Hool, The University of Western Australia, gave the invited lecture entitled,

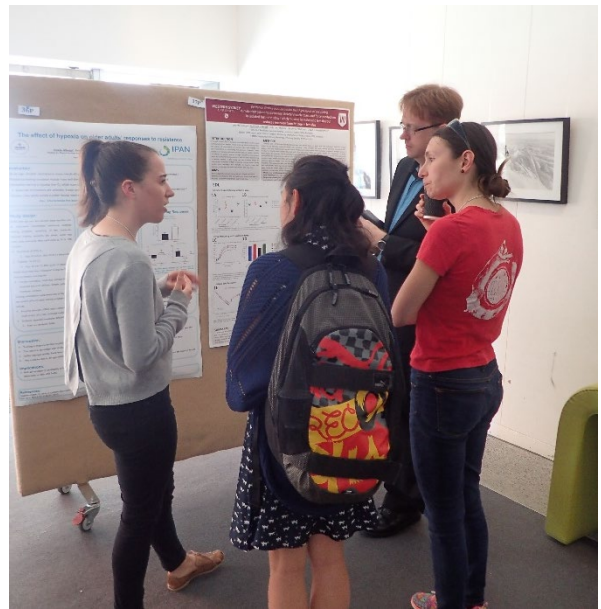
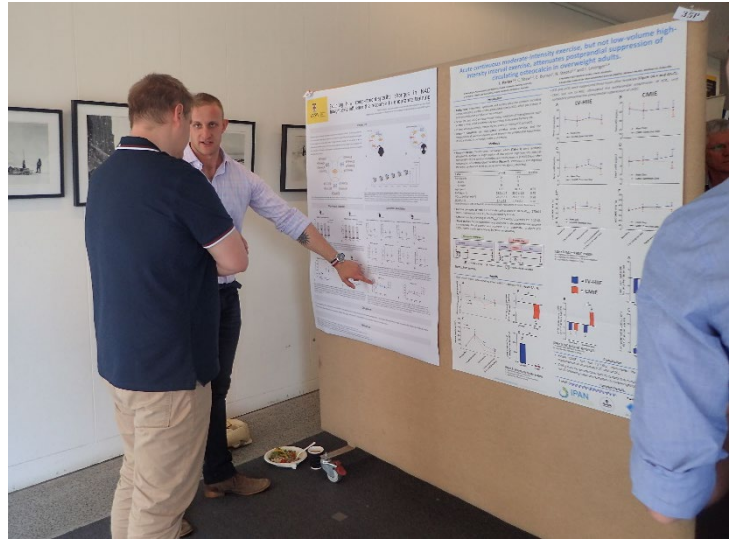
‘Taming the beast: targeting the L-type calcium channel to reduce cardiovascular morbidity and mortality’.



Welcome Reception in the Anderson Stuart Building Courtyard, The University of Sydney



Lively debate at the poster session



Early Career Researcher Workshop and Mixer



Michael Roberts Award Lecture and Symposia



Conference Dinner at Dockside, Cockle Bay Wharf, Darling Harbour



Congratulations to all 2018 Prize Winners!!

The A.K. McIntyre Award

Dr Tanya Cully, Baylor College of Medicine, USA



Dr Tanya Cully (Formerly of University of Queensland, currently Baylor College of Medicine, USA) was awarded the **AK McIntyre Prize** (donated by SDR Scientific). The prize consists of a medal, certificate and the sum of \$1000. Former PhD mentor A/Prof. Bradley Launikonis (pictured) collected the prize in Sydney on Tanya's behalf.

PhD Student Publication Prize

Dr Lorna Daniels,
The University of Auckland.

[Daniels et al. Inhibition of calcium/calmodulin-dependent kinase II restores contraction and relaxation in isolated cardiac muscle from type 2 diabetic rats. Cardiovascular Diabetology 2018, 17:89.](#)

This annual, \$500 award is for the best original paper published by an AuPS member during the course of their PhD studies and is sponsored by SDR Scientific.



Student presentation prizes

Best oral presentation prizes:

Winner:

Simon Wells, University of Melbourne.

Acute oestradiol slows conduction and prolongs action potential duration in the left atrium, but not in cardiomyocyte culture

The prize was sponsored by SDR Scientific and consists of a certificate and the sum of \$250.



Runner up:

Eleia Chan, University of Melbourne.

STBD1 regulation of myocardial glycogen content.

The prize were sponsored by SDR Scientific and consists of a certificate and the sum of \$100. .

Best poster presentation prizes:

Winner:

Danielle Hiam, Victoria University.

The influence of GWAS-based gene variants on the bone-remodelling marker Osteocalcin in the Gene SMART study.

The prize is sponsored by SDR and consists of a certificate and the sum of \$250.

Runner up:

Giselle Allsopp, Deakin University.

The effect of hypoxia on older adults' muscle strength and mass responses to resistance training.

The prize consists of a certificate and the sum of \$100 and is also sponsored by SDR Scientific.

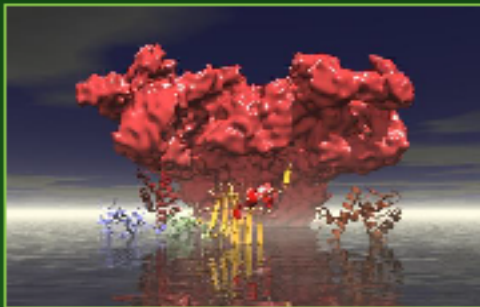


GRS *Gordon Research Seminars*

Announcing the 2019 Gordon Research Seminar on:

Muscle: Excitation-Contraction Coupling

Integrating knowledge on Basic Mechanisms and New Techniques to Advance Treatment of EC Coupling Disease



Date and Location:

May 18 – 19, 2019
Renaissance Tuscany Il Ciocco
Lucca (Barga), Italy

Organizers:

Chairs: Carlo Manno and Amy Hanna

Meeting Description:

The GRS for early career researchers will be held on the two days prior to the associated GRC. The program will encompass a range of topics related to EC coupling including structure/function of ion channels, regulation of compartmental Ca^{2+} handling and mechanisms of pathophysiology in muscle.

Mentorship Component:

“Strategies for Funding Success and Career Opportunities”
Q & A with international panel of established researchers from academia and industry.

Associated Gordon Research Conference (GRC):

This GRS will be held in conjunction with the “Muscle: Excitation-Contraction Coupling” Gordon Research Conference (GRC). Those interested in attending both meetings must submit an application for the GRC in addition to an application for the GRS

More details and online application are available at:

<http://www.grc.org/muscle-excitation-contraction-coupling-grs-conference/2019>



2019 SCIENTIFIC MEETING

A JOINT MEETING OF

**THE AUSTRALIAN PHYSIOLOGICAL SOCIETY
&
THE AUSTRALIAN SOCIETY FOR BIOPHYSICS**

Hosted by The Australian National University
Canberra, ACT

1st - 4th DECEMBER 2019

aups.org.au

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

The next issue of AuPS News will be distributed to members in March 2019.

All contributions for AuPS News should be sent to: newsletter@aups.org.au before the end of February.

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