



AuPS Scientific Meeting 2021

Hosted by Griffith University

CONFERENCE PROGRAMME Physiology Education Stream

Attendance at the Gold Coast

Griffith University, Gold Coast Campus: Parklands Drive, Southport (G03 building)

For those attending the Gold Coast, please register at the reception desk outside G03 Theatre 1 and 2.

Physiology Education Stream

The Education Stream will be facilitated from the Gold Coast (G01_3.35) or you may stream this via the online platform (Please note this will NOT be streamed through the hubs, you will need to join the platform directly)

Please contact the AuPS Education officer A/Prof Andrew Moorhouse if you have any questions (a.moorhouse@unsw.edu.au)

Please note that all times below are for the Gold Coast AEST , UTC/GMT + 10hrs (+1 for Hobart/Melbourne/ Sydney, +30min for Adelaide, -2 for Perth)
* denotes Speaker at GC.

Sunday, 21st November

17:00 Welcome & AuPS Historical Symposium
Location: G03_theatre 2 or streamed via the online platform

17:00 AEST (GC)	<i>Chair: Robyn Murphy</i>	
	Pioneers of the Australian Physiological Society	Roger Dampney
	European Influences on Australian Physiology	John Carmody
	Women in physiology	Judith Whitworth
	Highlights of Australian Physiology in the 21st century	Angela Dulhunty

Monday, 22nd November

Please note that all times below are for the Gold Coast AEST , UTC/GMT + 10hrs (+1 for Hobart/Melbourne/ Sydney, +30min for Adelaide, -2 for Perth)
* denotes Speaker at GC.

9:00 **AuPS Invited Lecture**
Location: G03_theatre 1

AEST (GC) Chair: Robyn Murphy

9:00 Deconvoluting metabolism at the lipid droplet Prof Matthew Watt

10:00 - 10:30 Morning tea

10:30 Session 3: G01_3.35 (online)

AEST (GC) **Physiology Education Free Communication 1:
Academic and Student Experiences**

Chair: Christian Moro

10:30 New to an academic position - bridging the gap between researchers and teachers Severine Lamon

10:45 Academics' experiences of students with mental health issues: challenges and changes in teaching practice Julia Choate

11:00 Easing transition burden for 1st year physiology students: Biology Bridging Resource Betty Exintaris and Nilushi Karunaratne

11:15 A Lightboard video supports numeracy skills in 1st year cell biology students Ann Parkinson

11:30 Can we reduce the impact of the Covid pandemic on teaching and clinical research in medical sciences? Fatima Shad Kaneez

11:45 A faculty approach for creating an inclusive and connected community campus environment for international students during the COVID-19 pandemic Betty Exintaris and Nilushi Karunaratne

12:30-13:00 LUNCH

13:00 Poster Session (live at each hub)

14:00 **AuPS Michael Roberts Prize Lectures**
Location: G03_theatre 1

AEST (GC) Chair: Glenn Wadley

14:00 **2019 Prize Winner**
How can we effectively clear the hurdles to reach the Physiology finals? A/ Prof Andrew Moorhouse

14:30 **2020 Prize Winner**
Maintaining an Individualised Student-Centred Experience in Blended, technology-Enhanced Learning Dr Charles Sevigny

15:00 - 15:30 Afternoon Tea

15:30 Session 3: G01_3.35 (online)

AEST (GC) **Physiology Education Workshop**

Chair: Kathy Tangalakis & Andrew Moorhouse

15:30 **Core Concepts in Physiology Education:
Developing Assessments and Curricula Activities**

A set of seven Core Concepts in Physiology Education have recently been developed by Australian Educators, adapted from those published by the American Physiological Society and the Physiological Society UK.

Teams of academics are currently 'unpacking' each core concept into subthemes and the National Biosciences Assessment Collaboration has incorporated them into an Assessment Framework which will allow us to map to assessments.

In this workshop we will form small teams to develop learning and assessment activities aligned to these unpacked concepts that can be used as a resource in the different courses in which Physiology content is taught.

This will be an online and hands-on workshop with further details sent to registered participants.

17:30

Tuesday, 23rd November

Please note that all times below are for the Gold Coast AEST , UTC/GMT + 10hrs (+1 for Hobart/Melbourne/ Sydney, +30min for Adelaide, -2 for Perth)
* denotes Speaker at GC.

8:30	Session 3: G01_3.35 (online)	
AEST (GC)	Physiology Education Symposium: Innovations in Physiology Education <i>Chair: Julia Choate</i>	
8:30	Embedding employability across the physiology degree: Integration versus a stand-alone course	*Deanne Hryciw
9:00	Supporting innovations in physiology education through staff reflection	Kate Carrol & Sharon Fleknoe
9:30	Absent but still engaged: Connecting with diverse student cohorts around threshold concepts using interactive, online modules	Sarah Etherington
10:00	Less is more: Teaching using core physiology concepts and competencies	Dee Silverthorn
10:30 - 11:00	Morning tea	
11:00	Session 3: G01_3.35 (online)	
AEST (GC)	Physiology Education Free communication 2: Virtual vs Face to Face Teaching Activities <i>Chair: Puspha Sinnayah</i>	
11:00	Comparing the Effectiveness of Online and Face-to-Face Practicals Using a Learning Outcome Framework.	*Yit Chiun Lim
11:15	Equally engaging both face to face and online students during live lectures with interactive polling.	*Christian Moro
11:30	Students' perceptions of challenges in internal and external delivery modes of a physiology course	*Kay Colthorpe
11:45	Adapting to blended learning: Does strategy choice or engagement impact performance?	*Louise Ainscough
12:00	Are Virtual Physiology Laboratories Effective for Student Learning Compared with Traditional In-Person Laboratories?	Ari Pinar
12:15	The face-to-face teaching of Gross Anatomy following COVID-19 from a student's perspective	Rudi Klein
12:30	Students want lectures: Survey of student perception of learning experience during CoVID19 lockdown	Joseph Rathner
13:00-13:30	LUNCH	
13:30	ADI research/product presentation followed by Poster finalists session (streamed via online platform)	
14:45	Session 3: G01_3.35 (online)	
AEST (GC)	Physiology Education Free communication 3: Teaching Methods and Learning Strategies <i>Chair Louise Ainscough</i>	
14:45	Effective Methods Utilised by Biomedical Science Students to Improve Science Communication	*Luli Faber
15:00	Embedding art into histology: Visual Thinking Strategies (VTS) to enhance visual literacy.	*Jordan Patti
15:15	Professional identity of biomedical science students: the interplay between skills, attributes, and self-esteem	*Emma Richards
15:30	Peer Evaluation in collaborative assessments in Physiology using Buddycheck	Puspha Sinnayah
15:45	Bring on Blended Learning: Student's evaluation of their online learning resources.	Kristina Anevka
16:00	Online Collaborative Team work: Can it really work or are we Zooming towards disaster?	Angelica Fong
17:00	AuPS Plenary Lecture Location: G03_theatre 1	
AEST (GC)	<i>Chair: Deanne Hryciw</i> Analgesic α -conotoxins: Role of peripheral GABAB receptors, calcium and potassium channels in neuron excitability and nociception.	
		Prof David Adams
18:30	Conference Dinner at Skypoint SkyPoint is located at the top of the Q1 Building (Surfers Paradise Boulevard)	

Poster presentations:

All posters are available to view as video recordings. Speakers will also be present at either GC or their Conference Hubs

Intrinsic mechanosensitivity and widespread coupling discovered in non-neural cells of spiral ganglion cultures	Yahdiel Abihu - UNSW
The efficacy of a home-based resistance training program to increase muscular outcomes in young females	Sarah Alexander - Deakin University
CHARACTERISATION OF PERICYTE CHANGES IN HEALTHY AND TYPE 2 DIABETIC MUSCLES	Emily Attrill - UTAS
Revealing a new cause of Parkinson's disease through a novel gene discovery – the pathological role of Kir4.2 channel	Xiaoyi Chen - Griffith Uni
The maternal microbiota has an influential role on the developing offspring's enteric nervous system	Benjamin Czapla - Uni Melbourne
Redox ratio in the left ventricle of the growth restricted fetus is linked to cardiac output	Catherine Dimasi - UniSA
Tracking mitochondrial Ca ²⁺ changes during repetitive Ca ²⁺ waves in muscle fibres from a RYR1 gain-of-function mutant mouse.	Rhayanna Gaglianone - UQ
Investigating the Relationship Between Intramuscular Testosterone and Skeletal Muscle Adaptations in Pre-Menopausal Females Undertaking a 12-Week Resistance Training Program	Briana Gatto - Deakin Uni
Therapeutic effect of spermidine supplementation on the mdx mouse phenotype	Nicholas Giourmas - VU
Ischemic preconditioning improves the anaerobic threshold in healthy males and females	Matthew Goldsmith - Western Sydney Uni
Use of genetically-encoded calcium indicators to measure intracellular calcium signalling dynamics between cell-in-cell structures	Ellen Janke - UQ
The future is female: A framework to design female physiology research	Olivia Knowles - Deakin Uni
Vitamin D Receptor protein expression in murine and human skeletal muscle	Hannah Lalunio - Uni Melbourne
Redistribution of calcium content in skeletal muscle fibres mediated by SR Ca ²⁺ leak	Cedric Lambole - UQ
Effects of hypochlorous acid and hydrogen peroxide on skeletal muscle function: implications for the pathophysiology of Duchenne muscular dystrophy	Thomas Lea - UWA
Acute exercise increases serum lipocalin-2 and attenuates the postprandial decrease in osteoglycin and lipocalin-2 in young men.	Lewan Parker - Deakin Uni
Transgene targeting of inner ear sensory neuron subpopulations	Lily Pearson - UNSW
Transient Receptor Potential Canonical Channel is active in the tubular (t-) system of muscle fibres with mutant RYR1.	Quyhn Phan
Cardiac lipid accumulation contributes to severe diastolic dysfunction in female Heart Failure with preserved Ejection Fraction (HFpEF) and diabetic comorbidity.	Hanneke Raaijmakers - Uni Melbourne
Aerobic exercise strategies for fatty liver disease: a systematic review and meta-analysis	Angelo Sabag - Uni Western Sydney
Optimizing Small RNA-Sequencing Library Preparation from Mitochondrial RNA	Jessica Silver - Deakin Uni
Development and validation of a single fibre malignant hyperthermia diagnostic assay	Daniel Singh - UQ
Characterising cerebrovascular changes in obesity and type 2 diabetes	Nicole Sumargo - UTAS
Mucopolysaccharidosis Type I mice exhibit global skeletal muscle weakness	Irene Tsioutsias - UWA
Liver one-carbon metabolism affects gene expression independent from protein lysine methylation	Yuquin Wu - Monash Uni
THE EFFECTS OF METFORMIN AND INSULIN TREATMENT DURING PREGNANCY ON ONE-CARBON METABOLISM	Dayna Zimmerman - UQ
Altered placental stress response in gestational diabetes	Olivia Holland - Griffith