



AUPS STUDENT AND ECR FORUM

26TH NOVEMBER 2020

Time (AEDT)	Welcome
9:00 am to 9:10 am	Welcome – President AuPS Gordon Lynch
Keynote Speaker	
9:10 am to 9:40am	Novel insights into the roles of matrix metalloproteinases (MMPs) in skeletal muscle - Robyn Murphy
Oral Presentations	
9:40 am to 9:47 am	Establishing an Imaging Assay to identify Potential New Therapeutics that enhance the Neuronal K-Cl Co-transporter – M.E. Straney
9:48 am to 9:55 am	Stress: a novel regulator of Duchenne muscular dystrophy pathogenesis? – A. Lindsay
9:56 am to 10:03 am	Haemodynamics and cerebral oxygenation of neonatal piglets in the immediate ex utero period supported by either mechanical ventilation or an ex utero oxygenator – J.R.T. Darby
10:04 am to 10:11 am	Defining the placental androgen signalling axis in the presence of an inflammatory challenge – A.S. Meakin
10:12 am to 10:19 am	Exploring the contribution of hypothyroidism-induced placental dysfunction in pregnancy to the development gestational diabetes mellitus – N.L. Kent
10:20 am 10:27 am	Pericyte and vascular changes are associated with the development of amyloid pathology – C.G. Foster
10:28 am to 10:35 am	The M1 muscarinic receptor is expressed by myenteric neurons and promotes gastrointestinal smooth muscle contraction – A. Saito
10:36am to 10:43 am	Characterisation of non-nutritive capillaries in skeletal muscle using contrast enhanced ultrasound and fluorescent vascular casting – E. Attrill
Break	
10:43 am to 10:55 am	Short Break

Time (AEDT)	Oral Presentations
10:55 am to 11:02 am	Cardiac maturation across late gestation and the neonatal period in pigs – C. Dimasi
11:03 am to 11:10 am	Feasibility of cardiac magnetic resonance (CMR) feature tracking (FT) in the adolescent sheep model of myocardial infarction – S.K.S. Cho
11:11 am to 11:18 am	Altered Mitochondrial Translation Initiation Disrupts Respiratory Complex Assembly and Leads to Cardiomyopathy – L.A. Hughes
11:19 am to 11:26 am	Myofibre-type specific differences in disease manifestation of dysferlinopathy – E.M. Lloyd
11:27 am to 11:34 am	Active regulation of red cell mechanics by nitric oxide and calcium – L. Kuck
11:35 am to 11:42 am	The Influence of Sex on DNA Methylation in Human Skeletal Muscle – S. Landen
11:43 am to 11:50 am	DNA methylation differences between three types of skeletal muscle fibre at rest and in response to high intensity interval training – A. Palmer
11:51 am to 11:58 am	Uncovering Robust DNA Methylation Marks for Skeletal Muscle Biological Ageing – K. Seale
12:05 pm to 12:12 pm	Quantitative Proteomics to Identify Mitochondrial Proteins in Skeletal Muscle Single Fibres of Healthy Humans – E. Reisman
12:13 pm to 12:20 pm	The effect of sleep restriction, with or without high-intensity interval exercise, on myofibrillar protein synthesis in healthy young men – N.J. Saner
12:21 pm to 12:28 pm	The effects of hypoxia on older adults' hormonal responses to resistance exercise – G.L. Allsopp
12:29 pm to 12:36 pm	Agonistic antibody against Fn14 drives positive feedback loop and MyoD expression in acute muscle injury model – A. Pascoe
Break	
12:36 pm to 1:00pm	Lunch Break – Computing of prizes and audience ballot for best flash talk
Keynote Speaker – A.K. McIntyre winner	
1:00 pm to 1:30 pm	How Ca ²⁺ and ROS influenced my scientific career path – Tanya Cully
Closing	
1:30 pm to 1:35 pm	Closing
AGM and Awards	
1:35 pm to 2:45 pm	Annual general meeting and Award presentations

Links to Video Poster Presentations

Luke Pearce	Mutation and gender effects on ryanodine receptor Ca ²⁺ leak. https://vimeo.com/480691018
Crystal Seng	Characterising Mitochondrial Ca ²⁺ across a spectrum of SR-RyR1 Ca ²⁺ leak https://vimeo.com/480093576
Daniel Singh	Resistance of ryanodine receptor 1 to activation by cytoplasmic Ca ²⁺ is essential for thermogenesis in mammalian skeletal muscle https://vimeo.com/481122316