

# MEDSCI NZ

# PROGRAMME

# 2018

## ORGANISING COMMITTEE

Dr Marie Ward (Co-Chair)  
Dr Joanne Davidson (Co-Chair)  
Dr Rebecca Campbell (Co-vice chair)  
Dr Jeff Erickson (Co-vice chair)  
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A/Prof Rajesh Katare (PSNZ)  
Prof Allan Herbison (CNE)  
A/Prof Greg Anderson (NZSE)  
Prof Ahmed Al-Jumaily (Biomed Tech)  
Dr Andrew Lowe  
A/Prof Loulin Huang  
Dr June-Chiew Han (ABI)

University of Auckland  
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University of Otago  
University of Auckland  
University of Otago  
University of Otago  
University of Otago  
Auckland University of Technology  
Auckland University of Technology  
Auckland University of Technology  
University of Auckland

[m.ward@auckland.ac.nz](mailto:m.ward@auckland.ac.nz)  
[joanne.davidson@auckland.ac.nz](mailto:joanne.davidson@auckland.ac.nz)  
[rebecca.campbell@otago.ac.nz](mailto:rebecca.campbell@otago.ac.nz)  
[jeff.erickson@otago.ac.nz](mailto:jeff.erickson@otago.ac.nz)  
[j.dean@auckland.ac.nz](mailto:j.dean@auckland.ac.nz)  
[rajesh.katare@otago.ac.nz](mailto:rajesh.katare@otago.ac.nz)  
[allan.herbison@otago.ac.nz](mailto:allan.herbison@otago.ac.nz)  
[greg.anderson@anatomy.otago.ac.nz](mailto:greg.anderson@anatomy.otago.ac.nz)  
[ahmed.aljumaily@aut.ac.nz](mailto:ahmed.aljumaily@aut.ac.nz)  
[andrew.lowe@aut.ac.nz](mailto:andrew.lowe@aut.ac.nz)  
[loulin.huang@aut.ac.nz](mailto:loulin.huang@aut.ac.nz)  
[j.han@auckland.ac.nz](mailto:j.han@auckland.ac.nz)

## CONFERENCE MANAGERS



If you have any queries regarding MedSci or Queenstown, please contact Dinamics at the Registration Desk.  
Phone: +64 27 450 2611  
Email: [elizabeth@dinamics.co.nz](mailto:elizabeth@dinamics.co.nz)  
Website: <http://www.dinamics.co.nz/>

## MedSci 2018 Programme at a glance

### Monday 27<sup>th</sup> August 2018

4:00 pm – 6:00 pm	Medsci Poster session
6:00 pm – 6:10 pm	Opening: Peter Shepherd, Queenstown Research Week Chair
6:10 pm – 6:25pm	Prof. Juliet Gerrard (PM Chief Science Advisor) Official Opening
6:25 pm – 7:30 pm	Queenstown Research Week Plenary Lecture: Prof. Elizabeth Blackburn
7:30 pm – 9:00 pm	QRW Social

### Tuesday 28<sup>th</sup> August 2018 – Societies Day

9.00 am – 10.00 am	MedSci Plenary Lecture: Dee Silverthorn		
10.00 am – 10.30 am	Morning Tea		
10.30 am – 12.30 pm	Session 1A: PSNZ Bullivant Prize Finalists	Session 1B: NZSE Nancy Sirett Lecture and Student Oral Award Finalists	Session 1C IBTec Student Oral Award Finalists and Free Communications
12.30 pm – 1.30 pm	Lunch and separate PSNZ and NZSE AGM's		
1:30pm – 2:30pm	Plenary Lecture: James Pearson		
2.30 pm – 3.30pm	Session 2A: PSNZ Hubbard Prize Finalists	Session 2B: Free Communications	Session 2C: Free Communications
3.30 pm – 4.00 pm	Afternoon Tea		
4.00 pm – 6.00 pm	Session 3A: Free Communications and PSNZ	Session 3B: Infoblitz Presentations & free communications	Session 3C: Workshop: Ongoing challenges in teaching medical sciences 5.30pm: Free Communications
7.00 pm	MedSci Dinner + Prize-giving (Crowne Plaza Hotel 360 Restaurant)		

### Wednesday 29<sup>th</sup> August 2018 – Symposia Day

9.00 am – 10.00 am	MedSci Plenary Lecture: Simon Malpas	
10.00 am – 10.30 am	Morning Tea	
10.30 am – 12.30 pm	Symposium 1A (PSNZ): Perinatal brain damage & neurotherapeutic strategies	Symposium 1B (IBTec): Respiratory Diagnostics and Therapies
12.30 pm – 1.30 pm	Lunch and MedSci AGM	
1.30 pm – 3.30 pm	Symposium 2A (PSNZ): Mechanobiology in health & disease	Symposium 2B (CNE): Hormones & social behaviours
3.30 pm – 4.00 pm	Afternoon Tea	
4.00 pm – 6.00 pm	Symposium 3A (ABI): Super-resolution microscopy: Biology at the nanoscale	Symposium 3B (NZSE): Uterine function and dysfunction
7.00 pm	Fashionomics	

## Monday 27<sup>th</sup> August 2018

4:00pm –  
6:00pm

### MEDSCI POSTER SESSION

*Sponsored by Bio-Rad Laboratories*

### Summary of Poster Abstracts

No.	Presenter	Title
<b>NZSE Posters</b>		
M1	Caroline Ancel	Using genetic manipulations to understand the sex-specific role of RFRP-3 in the regulation of reproduction
M2	Papi Gustafson	Suppression of the response to restraint stress in the lactating mouse
M3	Zin Khant Aung	Central prolactin receptor activation contributes to the hyperphagia of lactation
M4	Siew Hoong Yip	Adaptation of tuberoinfundibular dopaminergic neurons to estrous cycle and lactation
M5	Teodora Georgescu	Characterisation of the acute effects of prolactin upon prolactin receptor-expressing neurones in the mouse hypothalamus
<b>IBTec Posters</b>		
M6	Gautam Anand	Developing tissue simulant to mimic the dielectric behaviour of human blood for multi-frequency bioimpedance analysis
M7	Anubha Kalra	Development of Conductive Polymer Composites for Electrocardiography Sensing
M8	Ekta Dahiya	Estimating reference values of aortic pulse wave velocity for the New Zealand population
M9	Sandra Grau Bartual	Effect of Positive Pressure Oscillations on Cultured Human Epithelial Cells
M10	Kevin Roos	An investigation into the effects of pressure oscillations on airway smooth muscle in chronic asthma
<b>ABI Posters</b>		
M11	Jarrah Dowrick*	Rested state contraction of cardiac muscle: beyond the contribution from the sarcoplasmic reticulum
<b>MedSci Posters</b>		
M12	Prisca Mbikou	Characterising the role and therapeutic potential of novel peptide DWORF in heart disease.
M13	Rachael Augustine	Characterisation of periventricular nucleus kisspeptin neuron projections to oxytocin neurons in pregnancy and lactation
M14	Zsuzsanna Barad	Mapping O-linked glycosylation in the brain during pregnancy
M15	Kirsten Carter <sup>#</sup>	Prolactin Acutely Influences Running Wheel Activity But Not Ambulatory Activity in Female Mice
M16	Caroline Decourt	Delay in puberty onset after neonatal underfeeding can be reversed by silencing AgRP neurons in male mice
M17	Devon Nolan	Hyperuricemia driving pancreatic beta cell death through Rictor, a subunit of mTORC2

M18	Aidan Sherrington <sup>#</sup>	Sexually dimorphic corticosteroid negative feedback in hypothalamic CRH neurons
M19	Claire Twyman	Uric acid as a modulator of endothelial sodium channels in the vasculature
M20	Paris Brocherie	Is pancreatic $\beta$ -cell death under hyperuricemic conditions facilitated by the mTOR-Raptor complex?
	<b>Physiological Society of New Zealand Posters</b> (*PSNZ Student Poster Presentation Prize candidate, # Hypothalamic Neuroscience and Neuroendocrinology of Australasia (HNNA) Student Poster Prize candidate)	
M21	Emily Brown <sup>*#</sup>	Mechanosensitivity of transient receptor potential vanilloid channels
M22	Ethan Cain	The emerging role of the antioxidant uric acid in the pancreatic $\beta$ -cell viability
M23	Rebecca Campbell	Selective activation of arcuate nucleus GABA neurons promotes luteinizing hormone secretion in mice
M24	Elodie Desroziers	Impaired sexual behaviour in a mouse model of PCOS2
M25	Tumanu Futi	Soluble klotho changes epithelial sodium channel activity
M26	Nilanjan Ghosh <sup>*</sup>	Therapeutic modulation of microRNA-320 to prevent diabetic cardiomyopathy using Locked Nucleic Acid oligonucleotides
M27	Sarah Holland <sup>**</sup>	Elucidating the effect of prenatal androgen excess on male reproductive function and metabolism
M28	Romy Kerbus <sup>**</sup>	Dose dependent central insulin resistance in response to high fat diet
M29	Luis James Knight <sup>*</sup>	The Role of the Cystine/Glutamate Antiporter in Glutamate Metabolism in the Mouse Retina
M30	Anna Krstic <sup>*</sup>	The inotropic response to prostaglandin F <sub>2</sub> $\alpha$ in a rat model of right ventricular hypertrophy
M31	Shalini Kumar <sup>**</sup>	Chronic prolactin administration increases kisspeptin expression in virgin mice
M32	Asha Mangain <sup>*</sup>	Identifying the role of connexin-43 gap junctions as intracellular transporter of microRNAs
M33	Mridula Pachan <sup>*</sup>	Carotid chemoreceptor stimulation increases coronary blood flow in heart failure
M34	Puja Paudel <sup>*</sup>	Epithelial sodium channel in human arteries – an emerging player for blood pressure regulation
M35	Michael Perkinson <sup>*#</sup>	Alpha-Melanocyte-Stimulating Hormone Switches from Inhibition to Excitation of Oxytocin Neurons in Lactation
M36	Shivani Sethi <sup>**</sup>	Central regulation of the diabetic heart
M37	Jack Smeeton <sup>*</sup>	$\alpha$ -adrenergic control of the diabetic heart
M38	William Henry Smith	Comparing continuous and fluctuating high glucose levels on AC16 cardiomyocytes
M39	Luke Worthington <sup>*</sup>	CaMKII Inhibition as a Novel Target to Control the Early Progression of Atherosclerosis
M40	Eulalia Coutinho	Role of arcuate nucleus AgRP/NPY neurons in LH secretion and fertility
M41	Michi Kasai	Transient loss of very low and low frequency fetal heart rate variability after severe asphyxia in near-term fetal sheep
M42	Christopher Lear	Vasopressin is an early biomarker of neural injury after hypoxia-ischemia in near-term fetal sheep

M43	Yoshiki Maeda*	Fetal heart rate variability: a biomarker for evolving fetal hypoxic-ischaemic brain injury
M44	Mak Sarwar*	Unseen to be seen: A hidden microenvironment regulates ovarian cancer cell behaviour.
M45	Yadi Chen*	Lens channels regulate intracellular hydrostatic pressure
M46	Niah Khan*	Role of CaMKII and Alpha-Adrenergic Stimulation in Diabetic Heart Function
M47	Rebecca Bower	Toward a cell-based model of metastatic prostate cancer: isolation and characterisation of metastatic prostate cancer cells derived from an orthotopically implanted SCID mouse model

6.00 pm - 6.10 pm	<p style="text-align: center;"><b>Welcome and Conference Opening</b></p> <p style="text-align: center;"><b>Peter Shepherd, Queenstown Research Week Chair</b></p> <p style="text-align: center;">Queenstown Room, Level 5, Rydges Hotel</p>
6.10 pm – 6.25pm	<p style="text-align: center;"><b>Queenstown Research Week Official Opening</b></p> <p style="text-align: center;"><b>Prof. Juliet Gerrard, Prime Minister’s Chief Science Advisor</b></p> <p style="text-align: center;">Queenstown Room, Level 5, Rydges Hotel</p>
6.25 pm - 7.30 pm	<p style="text-align: center;"><b>Queenstown Research Week Plenary Lecture</b></p> <p style="text-align: center;">introduced by Peter Mace</p> <p style="text-align: center;"><b>Professor Elizabeth Blackburn</b></p> <p style="text-align: center;">2009 Nobel Prize in Physiology or Medicine for discovery of how chromosomes are protected by telomeres and the enzyme telomerase University of California, San Francisco</p> <p style="text-align: center;"><i>Sponsored by: Health Sciences, University of Otago</i></p> <p style="text-align: center;"><b>Queenstown Room, Level 5, Rydges Hotel</b></p>
7.30 pm - 9.00 pm	<p style="text-align: center;"><b>Queenstown Research Week Welcome Function</b></p> <p style="text-align: center;"><i>Sponsored by Abacus DX</i></p> <p style="text-align: center;"><b>Trades Area, Level 4, Rydges Hotel</b></p>

<b>Tuesday 28<sup>th</sup> August 2018</b>			
<b>MedSci Plenary Lecture, Societies' Free Communications</b>			
<b>MedSci Plenary Lecture</b>			
9.00 am - 10.00 am	<b>Dee Silverthorn</b> <i>Challenges in interactive teaching and learning of physiology: how we must all adapt</i> Clancy's Room Chair: Tony MacKnight		
10.00 am - 10.30 am	<b>Morning Tea: Trade Exhibition Area, Level 4</b>		
<b>Societies' Presentations</b>			
10.30 am - 12.30 pm	Session 1A: <b>PSNZ Bullivant Prize Finalists</b> <b>Room: Clancy's Room</b> <b>Chairs:</b> Joanne Davidson & Michelle Munro	Session 1B: <b>NZSE Nancy Sirett Lecture and Student Oral Award Finalists</b> <i>(sponsored by Medi'Ray)</i> <b>Room: Dart Room, QT Building</b> <b>Chairs:</b> Greg Anderson & Eulalia Coutinho	Session 1C <b>IBTec Student Oral Award Finalists and Free Communications</b> <b>Room: Rees Room, QT Building</b> <b>Chairs:</b> Andrew Lowe & Dr Gautam Anand
10.30 am - 10.45 am	<b>1A.1 Bullivant Prize Contestant 1:</b> Marco Annandale <i>The impact of glucose and fructose exposure on cardiomyocyte glycogen accumulation and cell viability</i>	<b>1B.1 Nancy Sirett Lecture:</b> Prof Jillian Cornish, University of Auckland <i>Lactoferrin, an endogenous growth factor, immunomodulator and antimicrobial, is anabolic to bone</i>	<b>1C.1 IBTec Prize Contestant 1:</b> Dr Ekta Dahiya <i>Estimating reference values of aortic pulse wave velocity for the New Zealand population</i>
10.45 am - 11.00 am	<b>1A.2 Bullivant Prize Contestant 2:</b> Benjamin Lear <i>The evolution of neuroinflammation and myelination after hypoxia-ischaemia in preterm fetal sheep</i>		<b>1C.2 IBTec Prize Contestant 2:</b> Srinivasan Govindan <i>Biodegradable polymer blends/composites, with high performance characteristics, for packaging application</i>
11.00 am - 11.15 am	<b>1A.3 Bullivant Prize Contestant 3:</b> Pinky Lal <i>Elucidating the effect of shear stress on the expression of ENaC in endothelial cells.</i>		<b>1C.3 IBTec Prize Contestant 3:</b> Sandra Grau Bartual <i>Effect of Positive Pressure Oscillations on Cultured Human Epithelial Cells</i>
11.15am - 11.30 am	<b>1A.4 Bullivant Prize Contestant 4:</b> Shalini S. Kumar <i>Chronic prolactin administration increases kisspeptin expression in virgin mice</i>		<b>1C.4 IBTec Prize Contestant 4:</b> Xiyong Huang <i>Vulnerability of follicular stem cells to sun exposure</i>
11.30 am - 11.45 am	<b>1A.5 Bullivant Prize Contestant 5:</b> Simerdeep Dhillon <i>Cardiovascular and neural effects of delayed recombinant human erythropoietin treatment after asphyxia in preterm fetal sheep</i>	<b>1B.2 NZSE Prize Contestant 1:</b> Eleni Hackwell <i>Central prolactin action is required for maintaining lactational diestrus in mice</i>	<b>1C.5 IBTec Prize Contestant 5:</b> Mostafa Nikpour <i>Two-wheeled wheelchair stability control using a movable mechanism</i>

11.45 am - 12.00 pm	<b>1A.6 Bullivant Prize Contestant 6:</b> Rachel Lund <i>Optimisation of an Androgen Bioassay for Measurement of Clinically Relevant Samples – Breast Cancer as a Clinical Focus</i>	<b>1B.3 NZSE Prize Contestant 2:</b> India Sawyer <i>Role of RFRP neurons in puberty onset and depression</i>	<b>1C.6 IBTec Prize Contestant 6:</b> Kevin Roos <i>An investigation into the effects of pressure oscillations on airway smooth muscle in chronic asthma.</i>
12.00 pm - 12.15 pm	<b>1A.7 Bullivant Prize Contestant 7:</b> Kelly Zhou <i>The effect of ischemia and hypothermia on axonal and myelin integrity</i>	<b>1B.4 NZSE Prize Contestant 3:</b> Rachel Nunn <i>Preoptic neurons are sufficient to mediate at least some of leptin's effects on fertility</i>	<b>1C.7 IBTec Prize Contestant 7:</b> Huiyang Zhang <i>A Review of Different Methods for Skin Stretch Sensing</i>
12.15 pm - 12.30 pm	<b>1A.8 Bullivant Prize Contestant 8:</b> Monique Scott <i>Endosomal SNX proteins are required for recycling of the epithelial sodium channel</i>	<b>1B.5 NZSE Prize Contestant 4:</b> Bradley Jamieson <i>Investigating the projections of suprachiasmatic nucleus vasopressin neurons to preoptic kisspeptin neurons</i>	<b>1C.8 IBTec Prize Contestant 8:</b> Elias Ghadam Soltani <i>Modelling Thermoregulation of The Human Body Upper Limb</i>
12.30 pm	<b>PSNZ AGM – Clancys Room</b>		<b>NZSE AGM – Dart Room, QT Building</b>
12.30 pm - 1.30 pm	<b>Lunch: Trade Exhibition Area, Level 4, Rydges Hotel</b>		
<b>Societies' Presentations</b>			
1.30 pm – 2.30pm	<b>Plenary Lecture James Pearson</b> <i>Effects of early programmed insulin resistance on adult cardiac function in rats</i> <b>Clancy's Room</b> <b>Chair: Daryl Schwenke</b>		
	Session 2A: <b>PSNZ Hubbard Prize Finalists</b> <b>Room: Clancy's Room</b> <b>Chairs: Rajesh Katare &amp; Rebecca Campbell</b>	Session 2B: <b>Free Communications</b> <b>Room: Dart Room, QT Building</b> <b>Chairs: Gus Grey &amp; Rohit Ramchandra</b>	Session 2C: <b>Free Communications</b> <b>Room: Rees Room, QT Building</b> <b>Chairs: Adam Denny and Teodora Georgescu</b>
2:30 – 3:00	<b>2A.1 Hubbard Prize Contestant 1,</b> Amelia Power <i>Impaired Ca<sup>2+</sup> handling precedes mitochondrial dysfunction in right ventricular hypertrophy</i>	<b>2B.1</b> Joon Kim <i>A duet of stress adaptation and negative feedback tunes stress neuron activity dynamics</i>  <b>2B.2</b> Rohit Ramchandra <i>The role of carotid chemoreceptors in the maintenance of hypertension</i>	<b>2C.1</b> Fiona McDonald <i>Annexin II light chain p11 interacts with ENaC to increase functional activity at the membrane</i>  <b>2C.2</b> Chidinma Okolo <i>Regulation of RyR2 by O-linked glycosylation</i>
3:00 – 3:30	<b>2A.2 Hubbard Prize Contestant 2,</b> Toan Pham <i>Cardiac mechanoenergetics in right-ventricular failure induced by pulmonary arterial hypertension</i>	<b>2B.3</b> Yonis Abukar <i>Targeting the Brain for the Treatment of Heart Failure</i>  <b>2B.4</b> Daryl Schwenke <i>Oxytocin is Sympathetic to a broken heart</i>	<b>2C.3</b> Victoria King <i>The effect of chronic inflammation on the circadian development of fetal EEG activity in preterm fetal sheep</i>  <b>2C.4</b> Anthony Davies <i>Rewarming after therapeutic hypothermia for neonatal hypoxic-ischemic encephalopathy - is fast or slow rewarming better?</i>
3.30 pm - 4.00 pm	<b>Coffee Break: Trade Exhibition Area, Level 4, Rydges Hotel</b>		

## Societies' Presentations

<b>4:00 – 6:00 pm</b>	<b>Session 3A</b> PSNZ Prizes <b>Room: Clancys Room</b> <b>Chairs:</b> Marie Ward & Jeff Erickson	<b>Session 3B:</b> <b>Free communications &amp; Infoblitz Presentations</b> <b>Room: Dart Room, QT Building</b> <b>Chairs:</b> Gus Grey & Lorna Daniels	<b>Session 3C</b> <b>Workshop: Ongoing challenges in teaching medical sciences &amp; Free Communications Continued.</b> <b>Room: Rees Room, QT Building</b> <b>Chair:</b> Grant Butt
4:00 - 4:30	<b>3A.1: Early-Career Prize Contestant 1:</b> Elodie Desroziers <i>The impact of chronic activation of arcuate GABA neurons on fertility</i>	<b>3B.1</b> June-Chiew Han <i>A century-old cardiac conundrum regarding the force-length relation</i>  <b>3B.2</b> Sarbjot Kaur <i>Role of cAMP binding protein Epac in excitation-contraction (E-C) coupling in rat cardiac muscle</i>	<b>3C.</b> A/Prof Diane Kenwright Dr Amanda Charlton
4:30 – 5:00	<b>3A.2: Early-Career Prize Contestant 2:</b> Joanne Davidson <i>Can we further refine therapeutic hypothermia for perinatal hypoxic-ischaemic brain injury?</i>	<b>3B.3</b> Denis Loiselle <i>Heretical Thoughts Regarding Cardiac Muscle</i>  <b>3B.4</b> Lorna Daniels <i>Impaired cardiomyocyte diastolic function is linked with glycogen accumulation in the diabetic heart</i>	
5:00 – 5:30	<b>3A.3</b> Mid Career Award Johanna Montgomery <i>Plasticity in the central and peripheral nervous systems and its role in disorders of the brain and heart</i>	<b>3B.5</b> Amy Garrett <i>Cardiac muscle samples working against a real-time model of the vasculature dynamic impedance</i>  <b>3B.6</b> Gus Grey <i>Ocular lens function and aging visualised with mass spectrometry</i>	
5:30 – 6:00	<b>3A.4</b> Bjorn Knollman <i>Targeting RyR2 Ca release channels for preventing cardiac arrhythmia – a bench to bedside story</i>	<b>3B.7</b> Amy Ruddenklau  <b>3B.8</b> Ireland Jacobs:  <b>3B.9</b> Luke Orange  <b>3B.410</b> Yasmin Tawngdee  <b>3B.11</b> Phoebe Ross  <b>3B.12</b> Mehwish Abbasi	
<b>7.00 pm</b>	<b>Free Communications Continued:</b> <b>3C.2</b> Sama Mugloo <i>Characterising the role of vascular ENaC for blood pressure regulation</i>  <b>3C.3</b> Adam Denny <i>High-density Lipoprotein Cholesterol: towards reversing the pathology of Facioscapulohumeral Muscular Dystrophy</i>		
MedSci Dinner + Prize-giving (Crowne Plaza Hotel 360 Restaurant)			



<b>Wednesday</b>			
<b>MedSci Plenary Lecture and Societies' Symposia,</b>			
<b>MedSci Plenary Lecture</b>			
9.00 am - 10.00 am	<b>Simon Malpas</b> <i>Commercialising research; problems, pitfalls and potential</i> Clancy's Room Chair: Colin Brown		
10.00 am - 10.30 am	<b>Morning Tea: Trade Exhibition Area, Ground Floor</b>		
<b>Societies' Symposia</b>			
10.30 am - 12.30 pm	<b>Symposium 1A (PSNZ):</b> Perinatal Brain Damage and Neurotherapeutic Strategies <b>Room: Clancy's Room</b> <b>Chairs:</b> Dr. Guido Wassink & Dr. Joanne Davidson	10.30 am - 12.30 pm	<b>Symposium 1B (IBTec):</b> <i>Respiratory Diagnostics and Therapies</i> <b>Room: Dart Room, QT Building</b> <b>Chairs:</b> Ahmed Al-Jumaily & Andrew Lowe
10.30 am - 11.00 am	<b>S1A.1:</b> Associate Professor Suzie Miller, Ritchie Centre, Hudson Institute of Medical Research, Australia <i>Preclinical studies to inform the use of cord blood stem cells for preterm brain injury</i>	10.30 am - 11.00 am	<b>S1B.1:</b> David Kaczka, University of Iowa, USA <i>Optimizing ventilation in the injured lung using multifrequency oscillation</i>
11.00 am - 11.30 am	<b>S1A.2:</b> Dr Bobbi Fleiss, Centre for the Developing Brain, King College London, United Kingdom <i>The role of microglia in perinatal brain injury</i>	11.00 am - 11.30 am	<b>S1B.2:</b> Peter Noble, University of Western Australia sponsored by Thermo Fisher Scientific <i>Physiological insights into the pathogenesis and treatment of obstructive disease</i>
11.30 am - 12.00 pm	<b>S1A.3:</b> Dr Tim Foster, University of Otago, Wellington <i>Gestational age and associated health and educational outcomes: Life outcomes to adolescence for premature infants in New Zealand</i>	11.30 am - 12.00 pm	<b>S1B.3:</b> Prudence Murray, Fisher and Paykel Healthcare <i>SleepStrong - Experiences of an Employee Sleep Health Wellness Initiative</i>
12.00 pm - 12.30 pm	<b>S1A.4:</b> Dr Guido Wassink, University of Auckland <i>Protecting the newborn brain – are cocktails better served with ice?</i>	12.00 pm - 12.30 pm	<b>S1B.4:</b> Ian Sun, Fisher and Paykel Healthcare <i>New Trends in CPAP development</i>
12.30 pm	<b>MedSci AGM – Clancy's Room</b>		
12.30 pm - 1.30 pm	<b>Lunch: Trade Exhibition Area, Level 4, Rydges Hotel</b>		
<b>Societies' Symposia</b>			
1.30 pm - 3.30 pm	<b>Symposium 2A (PSNZ):</b> <i>Mechanobiology in health and disease</i> <b>Room: Clancy's Room</b> <b>Chair:</b> Martin Fronius & Sama Mugloo	1.30 pm - 3.30 pm	<b>Symposium 2B (CNE):</b> <i>Hormones and social behaviours</i> <b>Room: Dart Room, QT Building</b> <b>Chair:</b> Dave Grattan & Elodie Desroziers
1.30 pm - 2.00 pm	<b>S2A.1:</b> Prof Jens Waschke, University Munich, Germany <i>Modulation of tissue integrity via stabilization of desmosomes in health and disease</i>	1.30 pm - 2.00 pm	<b>S2B.1:</b> Dr Kumi Kuroda, Riken Brain Sciences Institute, Tokyo, Japan <i>Role of MPOA neural circuit in parental care and infanticide</i>

2.00 pm – 2.30 pm	<b>S2A.2:</b> Prof Heather Drummond, University of Mississippi, USA <i>Vascular epithelial Na<sup>+</sup> channels mediate myogenic arterial responsiveness</i>	2.00 pm – 2.30 pm	<b>S2B.2:</b> Dr Michael Bowen, University of Sydney, Australia <i>Rebalancing the addicted brain: prosocial compounds for treating substance use disorders</i>
2.30 pm – 3.00 pm	<b>S2A.3:</b> Prof John Evans, University of Otago, Christchurch <i>An alliance of Biophysics, Biochemistry and Genetics initiates cancers</i>	2.30 pm – 3.00 pm	<b>S2B.3:</b> Dr Kristina Smiley, University of Otago <i>Prolactin and parental care in the Zebra Finch</i>
3.00 pm – 3.30 pm	<b>S2A.4:</b> Dr Adam Ware, University of Otago, Dunedin <i>Epithelial sodium channel, ENaC, as a potential therapeutic target for breast cancer</i>	3.00 pm – 3.30 pm	<b>S2B.4:</b> Dr Rosemary Brown, University of Otago <i>The modulation of maternal behaviour by prolactin</i>
3.30 pm – 4.00 pm	<b>Coffee Break: Trade Exhibition Area, Level 4</b>		
<b>Societies' Symposia</b>			
4.00pm – 6.00pm	<b>Symposium 3A (ABI):</b> Super-resolution Microscopy: Biology at the Nanoscale <b>Room: Clancy's Room</b> <b>Chairs:</b> David Crossman & June-Chiew Han	4.00pm – 6.00pm	<b>Symposium 3B (NZSE):</b> Uterine function and dysfunction <b>Room: Dart Room, QT Building</b> <b>Chairs:</b> Jane Girling & Stephen Bunn
4.00 pm – 4.40 pm	<b>S3A.1:</b> Professor Robert Gourdie, Virginia Tech Carilion Research Institute <i>sponsored by Integrated DNA Technologies Pte. Ltd</i> <i>Nanodomains and Electrical Conduction at Cardiac Gap Junctions</i>	4.00 pm – 4.30 pm	<b>S3B.1:</b> Pradeep Tanwar, University of Newcastle <i>sponsored by Integrated DNA Technologies Pte. Ltd</i> <i>Obesity epidemic fuelling the surge of endometrial cancers: How fat cells drive endometrial hyperplasia and cancer development?</i>
4.40 pm – 5.00 pm	<b>S3A.2:</b> Associate Professor Johanna Montgomery, University of Auckland <i>sponsored by Thermo Fisher Scientific</i> <i>Elucidating Nanoscale Determinants of Synaptic Function</i>	4.30 pm – 5.00 pm	<b>S3B.2:</b> Jane Girling, University of Otago <i>Beyond GWAS – how do we utilize genetic information to better understand a complex disease like endometriosis?</i>
5.00 pm – 5.20 pm	<b>S3A.3:</b> Dr Michelle Munro, University of Otago <i>Super Resolved Calcium Channel Organization</i>	5.00 pm – 5.30 pm	<b>S3B.3:</b> Laura Parry, University of Melbourne <i>Treatment of preeclampsia in pregnancy: pitfalls and possibilities</i>
5.20 pm – 5:40 pm	<b>S3A.4:</b> Dr David Baddeley, University of Auckland <i>sponsored by Bio-Strategy</i> <i>High content super-resolution microscopy</i>	5:30 pm – 6:00	<b>S3B.4:</b> J Frank Bloomfield, Liggins Inst, University of Auckland <i>Potential therapies for fetal growth restriction secondary to placental insufficiency</i>
5.40 pm – 6.00 pm	<b>S3A.5:</b> Dr David Crossman, University of Auckland <i>Fibrosis at the Nanoscale in the Failing Human Heart</i>		
7.00 pm – 9.00pm	<b>Fashionomics</b> <i>Sponsored by Thermo Fisher Scientific</i> <b>Trades Area, Level 4, Rydges Hotel</b> <b>(with drinks)</b>		