

CONFERENCE PROGRAMME

Thursday 25th July 2024

Time	Session/ Activity	Venue
13:00 - 14:00	Welcome Refreshments and Registration	Great Hall
14:00 - 15:10	Keynote: Andrew Allen, University of Melbourne, Australia Vital interactions: Exploring the relationships between respiratory and autonomic neural networks. Sponsor: Elsevier (with an introduction to Autonomic Neuroscience: Basic and Clinical)	Bramall
15:10 - 16:00	Poster Session 1 Theme: Basic - Bioelectronic Medicine P1 - Alberto Esteban-Linares – A microfabricated Parylene cuff electrode for branched nerve stimulation P2 - Dzifa Kwaku – Exploring Hemodynamic Responses to Electrical Stimulation of Renal Nerves: A Potential Therapeutic Approach for Drug-Resistant Hypertension Theme: Basic - Cardiovascular P5 - Aparajita Bhatnagar – Microgravity induced impairment of baroreflex sensitivity in rats is associated with sympathovagal imbalance but not with changes in structure of carotid artery P6 - Larissa Correa – Temporal profile of changes in cholinesterase activity induced by Ketamine-Xylazine anaesthesia P7 - Yu-Wen Dai – A study of Schwann cells in human and murine heart P8 - Mohanad Mahdi – Correlation of staging and risk factors with cardiovascular autonomic neuropathy in patients with type II diabetes mellitus P9 - Thais Silva – Galectin-3 Inhibitor Modulates Autonomic Nervous System P10 - Finbar Argus - A Computation Model of the Postganglionic Sympathetic Neuron for predicting drug response Theme: Basic - Gut and metabolism P25 - Tomoya Sawamura – Evidence that inhibitory regulation of oxytocinergic neurons to the spinal defecation center is manifested by hindpaw inflammatory pain in rats Theme: Basic - Integrative Control P29 - Joost Wagenar – Towards sustainable scientific data management solutions in the age of scale and multi-modal data-integration P30 - Mabelle Lin – Scaffold Mapping Tools for Mapping Data to Anatomical Scaffolds P31 - Christian Reynolds – Exposure to a diet rich in linoleic acid promotes nociceptive hypersensitivity and elevated systemic blood pressure in both spinal-intact and spinalized rats P32 - Deborah Romeu – Exploring the connections between C1 and liver-related DMV neurons involved in the autonomic control of glucose homeostasis P33 - Karla Sampaio – Volatile and injectable anaesthetics effects on cardiorespiratory and biochemical parameters in rats: enlightening anaesthetic choice according to the outcome studied Theme: Basic - Neuroscience	Great Hall

	<p>P41 - Elise Collard – Methodologies for Vagus ElectroNeuroGram (VENG) analysis</p> <p>P42 - Anna Katharina Kau – Food perception promotes autonomic response to anticipate consumption and guides motivated behaviour</p> <p>P43 - Ko Yamanaka – Gene expression and cardiovascular effects of nucleus tractus solitarii dopamine D1 receptors in stress-induced hypertension and its counteraction by exercise</p> <p>P51 - Pippa Wittenberg – On the regulation of arterial blood pressure by an intracranial baroreceptor</p> <p>Theme: Clinical - Cardiovascular</p> <p>P52 - Angelica Carandina – Indoor air pollution impacts cardiovascular autonomic control during sleep and inflammatory profile</p> <p>P53 - Peter Latchman – Neurologically based cardiovascular risk in young men after COVID-19</p> <p>Theme: Clinical - Integrative Control</p> <p>P59 - Thalia Babbage – Effect of YMCA GoldFit exercise participation on the chemoreflex control of breathing in older adults</p> <p>Theme: Clinical - Neuroscience</p> <p>P60 - Costanza Scatà – Characterization of dysautonomia in patients with Ehlers-Danlos Syndrome and its relationship with anxiety and sleep quality. The importance of comprehensive care</p>	
15:30 - 16:00	Afternoon Refreshments	Great Hall
16:00 - 18:00	<p>Symposium Presentations Session 1</p> <p>Theme: Bioelectronic Medicine</p> <p>Symposium Title: Bioelectronic Medicine</p> <p><i>Chairs: Ellis Meng, University of Southern California and Victor Pikov, Medipace Inc</i></p> <p>O1 - Olujimi Ajijola, University of California – Axonal modulation therapy for bioelectronic treatment of cardiovascular diseases (20 minutes)</p> <p>O2 - Chris Wilson, Loma Linda University – Saving premature infants from sudden death using vagus nerve stimulation (20 minutes)</p> <p>O3 - Emil Hewage, ReShape Lifesciences – Bioelectronics for treating diabetes (20 minutes)</p> <p>O4 - Daniel Chew, Galvani Bioelectronics – Recent studies on splenic nerve stimulation in pigs and humans (20 minutes)</p> <p>O5 - Victor Pikov, Medipace – Inc preliminary data on sacral nerve stimulation in humans to treat colitis (20 minutes)</p>	Bramall
16:00 - 18:00	<p>Symposium Presentations Session 1</p> <p>Theme: Cardiovascular</p> <p>Symposium Title: Central nervous control of blood pressure, brain blood flow, and cognitive health</p> <p><i>Chairs: Emma Hart, University of Bristol and Sam Lucas, University of Birmingham</i></p> <p>O6 - Alex Gourine, University College London – Regulation of arterial blood pressure by an intracranial baroreceptor (20 minutes)</p> <p>O7 - Fiona McBryde, University of Auckland – Defending blood flow to the brain in hypertension, diabetes and ischemic stroke (20 minutes)</p> <p>O8 - Emma Hart, University of Bristol – Cerebrovascular variants and the role of the selfish brain in hypertension (20 minutes)</p> <p>O9 - Sam Lucas, University of Birmingham – Cerebral blood flow, aging and physiological stress (20 minutes)</p> <p>Selected Abstracts</p>	G33

	<p>O10 - Emi Narai – Divergent roles of orexinergic and non-orexinergic neurons in the hypothalamic perifornical area in eliciting behavioral and autonomic cardiovascular responses (20 minutes)</p> <p>O11 - Tina Vrabec – Closed loop control of Norepinephrine to attenuate sympathetic response to cardiac stressors (20 minutes)</p>	
16:00 - 18:00	<p>Symposium Presentations Session 1</p> <p>Theme: Integrative control</p> <p>Symposium Title: Brainstem integrator for viscerosensation and autonomic regulation</p> <p><i>Chairs: Andrew M Allen, University of Melbourne and Julian FR Paton, University of Auckland</i></p> <p>O12 - Ambre Linossier, Aix-Marseille University – GABAergic neurons of the pre-Bötzinger complex regulate respiratory sinus arrhythmia and blood pressure via the autonomic nervous system (20 minutes)</p> <p>O13 - Zoe Adams, University of Bristol – New insights into deep stimulation for correcting autonomic imbalance (20 minutes)</p> <p>O14 - James P Fisher, University of Auckland – Sympathetic neurocirculatory responses to central chemoreflex activation in human hypertension (20 minutes)</p> <p>O15 - Stefan Trapp, University College London, UK – The two faces of GLP-1: gut hormone and NTS neurotransmitter – does it matter for physiology? (20 minutes)</p> <p>O16 - Stuart McDougall, University of Melbourne, Australia – CaMPing in the brainstem (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O17 - Beata Graff – Higher periodicity and irregularity of respiratory pattern during wakefulness in subjects with newly diagnosed sleep apnea (20 minutes)</p>	WG5
18:00 - 20:00	Welcome Reception	Great Hall

Friday 26th July 2024

Time	Session/ Activity	Venue
08:00 - 09:00	Registration and Refreshments	Great Hall
09:00 - 11:00	<p>Symposium Presentations Session 2</p> <p>Theme: Bioelectronics</p> <p>Symposium Title: Utilising NIH SPARC resources for ANS research</p> <p><i>Chairs: Peter Hunter and David Paterson, Auckland Bioengineering Institute</i></p> <p>O18 - Jack Cheng, Ariege Bizanti & Mabelle Lin – Spatial mapping of neural data with 3D scaffolds (20 minutes)</p> <p>O19 - Nicole Pelot & Joost Wagenaar – Dashboard of the human vagus: from gross to micro anatomy (20 minutes)</p> <p>O20 - Igor Efimov, David Brooks & Alan Garry – Data visualisation and modelling to support cardiovascular control studies (20 minutes)</p> <p>O21 - John Osborn & Maryann Martone – SPARC Infrastructure supporting Functional studies of vagal stimulation (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O22 - Zoe Adams – Sympathetic action potential recruitment during transient cessation of deep brain stimulation for severe refractory hypertension (20 minutes)</p>	Bramall

	<p>O23 - David Nickerson – Interactive maps of nerve-organ anatomy and function on the SPARC Portal (20 minutes)</p>	
09:00 - 11:00	<p>Symposium Presentations Session 2</p> <p>Theme: Cardiovascular</p> <p>Symposium Title: You're so vein" – new insights into the function and autonomic regulation of the 'forgotten' venous circulation</p> <p><i>Chairs: Fiona McBryde and James Fisher, University of Auckland</i></p> <p>O24 - Tonja Emans, University of Auckland – Sympathetic regulation of the 'forgotten' venous circulation – a new therapeutic target for blood pressure control? (20 minutes)</p> <p>O25 - Mickey Fan, University of Auckland – Venous capacity and compliance in hypertensive adults: influence of hypoxia and hyperoxia (20 minutes)</p> <p>O26 - Melanie Dani, Imperial College London – New horizons in the ageing autonomic nervous system: orthostatic hypotension and supine hypertension (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O27 - Wolfgang Kummer – Tuft cells trigger neurogenic inflammation in the urethra (20 minutes)</p> <p>O28 - Kayleigh Scotcher – Immunohistochemical characterisation of the superior hypogastric plexus and hypogastric nerves in the adult human (20 minutes)</p> <p>O29 - Adriana Barbosa Ribeiro – The treatment of oral inflammation influenced the regulation of hemodynamic responses such as blood pressure and heart rate variability (20 minutes)</p>	G33
09:00 - 11:00	<p>Symposium Presentations Session 2</p> <p>Theme: Integrative control</p> <p>Symposium Title: Anatomical, functional, and molecular mapping of autonomic innervation of organs</p> <p><i>Chairs: Jack Cheng and John Tompkins</i></p> <p>O30 - Jack Cheng, University of Central Florida - Spinal afferent innervation in flat-mounts of the rat heart and stomach: anterograde tracing (20 minutes)</p> <p>O31 - Jerry Yu, USA – Integration of Molecular, Morphological, and Physiological Aspects of Mechanosensors in the Lung (20 minutes)</p> <p>O32 - John Tompkins, USA – Morphology, synaptics, and membrane excitability of intracardiac neurons from mice, pigs and humans: targets of clinical neuromodulation for cardiac disease (20 minutes)</p> <p>O33 - Hanjun Wang, USA – Cardiac Spinal Afferents: A New Therapeutic Target in Treating Chronic Heart Failure (20 minutes)</p>	WG5
11:00 - 11:30	<p>Mid-morning Refreshments</p>	Great Hall
11:30 - 13:00	<p>Poster Session 2</p> <p><u>Theme: Basic - Bioelectronic Medicine</u></p> <p>P3 - Sue Tappan – The collaborative SPARC Portal for peripheral neuromodulation data, modelling and device design</p> <p><u>Theme: Basic - Cardiovascular</u></p> <p>P11 - Amatul Ahmad – Plasticity in human intracardiac neurons from patients with Atrial Fibrillation</p> <p>P12 - Om Lata Bhagat – Heart Rate Variability during Short-Term Head-Down Tilt</p> <p>P13 - Vera K. Jandackova – Heart rate variability and air pollution</p>	Great Hall

P14 - Yuma Sato – The midbrain dopaminergic areas mediate the cardiovascular response induced by the activation of the lateral habenula

P15 - Thais Silva – Mice with overexpression of vesicular acetylcholine transporter have increased cardiac parasympathetic activity

P16 - Hidefumi Waki – Exercise Mitigates Stress-Induced Hypertension and Brain Inflammation by Modulating Molecular Pathways in the Amygdala and Hypothalamus

P17 - Jinan Sabouné – Muscle sympathetic nerve activity responses to the cold pressor test in women across the third and fourth decades of life

P18 - Thatiany Jardim Batista – Liraglutide improvement of chemoreflex function in ovariectomized female rats is associated with a reduction in oxidative stress

Theme: Basic - Gut and metabolism

P26 - Natsufu Yuki – Involvement of neurons projecting from the hypothalamus to the medullary raphe in stress-induced defecation in rats

Theme: Basic - Integrative Control

P34 - Maryann Martone – The SPARC SCKAN multi-species knowledge base of ANS connectivity

P35 - Vitor Minassa – Comparing cardiorespiratory responses after organophosphate poisoning in Wistar and pre-hypertensive SHR in situ

P36 - Zeljka Minic – Supratentorial inhibition of regional sympathetic nerve activity

P37 - Simon McMullan – Inhibitory control of motor and respiratory components of orienting by the substantia nigra pars reticulata is state-dependent

Theme: Basic - Neuroscience

P44 - Jack Cheng – Quantitative Analysis of CGRP-IR Afferent Axons in the Mouse Stomach Using Zeiss Arivis Vision4D for Automated Tracing

P45 - Maci Heal – Automated 3D stereology for cell counting using artificial intelligence technology yields rapid, unbiased results analogous to manual stereological methods

P46 - Alla Korsak – On the mechanisms of exercise-induced autonomic neuroplasticity

P47 - Davi Oliveira – Neuroanatomy of the Thoracic Sympathetic Neural Networks revealed by whole-torso imaging

Theme: Clinical - Cardiovascular

P54 - Daniel D. Hodgkiss – Ergogenic effects of invasive and non-invasive spinal cord stimulation strategies following spinal cord injury: a case-series

P55 - Gabriel Rodrigues – Cardiac vagal modulation and inflammation are upregulated in exceptional human longevity

P64 - Sakshi Gupta – What is the most effective treatment for congenital Long QT syndrome?

P65 - Amna Nazzar – Examining sex differences in autonomic function and its influence on cardiovascular disease prevalence in women; particularly stress induced cardiomyopathy

P66 - Georgia Pratley – The use of selective noradrenaline reuptake inhibitors and serotonin-noradrenaline reuptake inhibitors to treat psychiatric disorders as a cause of Takotsubo Syndrome

Theme: Clinical - Neuroscience

P61 - Jin Yong Jeong – Thoracic sympathetic nerve block before sympathectomy for irreversible treatment of primary hyperhidrosis

13:00 - 14:00

Lunch

Great Hall

14:00 - 15:00

Keynote 2: Melanie Gareau, University of California, USA

“It takes guts: The developing microbiota-gut-brain axis”

Sponsor: BBSRC

Bramall

	BBSRC Presentation	
15:00 - 15:30	Afternoon Refreshments	Great Hall
15:30 - 17:30	<p>Symposium Presentations Session 3</p> <p>Theme: Integrative control</p> <p>Symposium Title: Neuroimaging of cardiovascular and respiratory control in humans</p> <p><i>Chair: Vaughan Macefield, Monash University</i></p> <p>O34 - Luke Henderson, University of Sydney – Identification of the sympathetic connectome in humans (20 minutes)</p> <p>O35 - Rebecca Glarin, University of Melbourne – Functional brainstem imaging of sympathetic drive using MSNA coupled fMRI at ultra-high field (20 minutes)</p> <p>O36 - Kevin Shoemaker, University of Western Ontario – The roles of the forebrain in cardiovascular control in exercising humans (20 minutes)</p> <p>O37 - Olivia Harrison, University of Otago – Ultra-high-field imaging of networks related to breathing and breathlessness (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O38 - Marie-Claire Seeley – The manifestation of Autonomic Disorders in Post-Acute Sequelae of Covid-19 (PASC) (20 minutes)</p> <p>O39 - Mariya Patel – Resting-state brain activity, sympathetic outflow and vascular function in adiposity – investigating the link using combined magnetoencephalography and microneurography (20 minutes)</p>	Great Hall
15:30 - 17:30	<p>Symposium Presentations Session 3</p> <p>Theme: Bioelectronics</p> <p>Symposium Title: Working towards selective vagus nerve stimulation to modulate autonomic function</p> <p><i>Chairs: Lindsea Booth, Florey Institute and Alexander Gourine, University College London</i></p> <p>O40 - James Fallon, University of Melbourne – Stimulation parameters for directional vagus nerve stimulation (20 minutes)</p> <p>O41 - Nicole Thompson, University College London – Deciphering the anatomical and functional organisation of the cervical vagus for spatially selective neuromodulation (20 minutes)</p> <p>O42 - Stuart McDougall, The Florey - Selectively targeting the afferent vagus (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O43 - Svetlana Mastitskaya – Neural mechanisms of cardioprotection (20 minutes)</p> <p>O44 - Julia Shanks – Cardiac vagal nerve activity increases during exercise to enhance coronary artery blood flow (20 minutes)</p>	Bramall
15:30 - 17:30	<p>Symposium Presentations Session 3</p> <p>Theme: Cardiovascular</p> <p>Symposium Title: Breaking news in cardiac autonomic regulation</p> <p><i>Chair: Keith Brain, University of Birmingham</i></p> <p><u>Selected Abstracts</u></p> <p>O45 - Elizabeth Akin – Use of high-resolution, live-cell imaging to investigate the molecular mechanisms of sympathoexcitation in cardiac sympathetic neurons (15 minutes)</p>	G33

	<p>O46 - Mark Badrov – Sympathetic response to exercise predicts exercise capacity of patients with heart failure across the left ventricular ejection fraction spectrum (15 minutes)</p> <p>O47 - Nadja Zeltner – A modular platform to generate functional sympathetic neuron-innervated heart assembloids (15 minutes)</p> <p>O48 - Carol Bussey – Anti-arrhythmic potential of P2X3 inhibition (15 minutes)</p> <p>O49 - Claire Feetham – PrRP/GPR10 signalling has an important role in energy balance and cardiovascular regulation (15 minutes)</p> <p>O50 - Shaoping Hou – Transplanting embryonic neural progenitor cells to restore cardio-electric disorders following spinal cord injury (15 minutes)</p> <p>O51 - Mridula Pachen – Addressing the enigma of treating heart failure with preserved ejection fraction with P2X3 receptor antagonism (15 minutes)</p> <p>O52 - Arianna Scalco – Cardiac sympathetic innervation is disrupted in a mouse model of hypertension-induced heart failure (15 minutes)</p>	
15:30 - 17:30	<p>Symposium Presentations Session 3</p> <p>Theme: Gut and Metabolism</p> <p>Symposium Title: Recent insights into the role of the vagus nerve in brain-gut communication and therapeutic implications of vagus nerve stimulation in the treatment of gastrointestinal disorders</p> <p><i>Chairs: Valentin Pavlov, Feinstein Institutes for Medical Research and Bruno Bonaz, CHU Grenoble</i></p> <p>O53 - Nicole Pelot, Duke University – Quantified anatomy of human vagus nerves from brainstem to abdomen (20 minutes)</p> <p>O54 - Sophie Payne, Bionics Institute – Fixing faulty plumbing with better wiring: current and future vagus nerve stimulation approaches for Crohn’s disease (20 minutes)</p> <p>O55 - Qasim Aziz, Queen Mary University of London – Role of the vagus nerve in modulating visceral pain hypersensitivity, intestinal permeability and inflammation in health and GI disease (20 minutes)</p> <p>O56 - Bruno Bonaz, CHU Grenoble – Invasive vagus nerve stimulation in Crohn’s disease: A 10-year prospective study follow-up (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O57 - Warren Grill – Sacral nerve stimulation to control colonic motility (20 minutes)</p> <p>O58 - Yvonne Hsu – Differential developmental blueprints of organ-intrinsic nervous systems (20 minutes)</p>	WG5
17:30 - 19:00	Free Time	
19:00 - 00:00	Dinner	Council House

Saturday 27th July 2024

Time	Session/ Activity	Venue
08:00 - 09:00	Registration and Refreshments	Great Hall
09:00 - 11:00	<p>Symposium Presentations Session 4</p> <p>Theme: ECR focus: Breaking abstracts</p> <p><i>Chair: Dimitris Nathanael, James Saleeb-Mousa and Andy Holmes</i></p> <p><u>Selected Abstracts</u></p>	Bramall

	<p>O59 - Ariege Bizanti – Remodeling of Ventricular Catecholaminergic Axons Following Chronic Intermittent Hypoxia in Mice (15 minutes)</p> <p>O60 - Demitris Nathanael – CD73 inhibition reverses chronic hypoxia induced carotid body hyperactivity (15 minutes)</p> <p>O61 - Joe Braun – A neural footprint of central cardiovascular control during acute mental stress in humans (15 minutes)</p> <p>O62 - Giada Cattelan – In vitro modelling of the neurocardiac junction with a novel human iPSC-based co-culture system: new perspectives for the investigation of cardiac autonomic regulation (15 minutes)</p> <p>O63 - Olivia Gold – The accelerator and brake modulatory system of carotid body sensitivity (15 minutes)</p> <p>O64 - Marie-Claire Seeley – Functional Brain Imaging Reveals Cerebral Hypoperfusion Patterns in Postural Orthostatic Tachycardia Syndrome (POTS): A Retrospective Study (15 minutes)</p> <p>O65 - Nirupama Unnikrishnan – Stromal cell derived factor-1 (SDF-1) acts on CXCR4 and CXCR7 in the rostral ventrolateral medulla (RVLM) to regulate blood pressure (15 minutes)</p>	
<p>09:00 - 11:00</p>	<p>Symposium Presentations Session 4</p> <p>Theme: Gut and Metabolism</p> <p>Symposium Title: Targeting GI vasodilatory hormones for the treatment of postprandial syndromes in autonomic disorders</p> <p><i>Chair: Cyndya A. Shibao, Vanderbilt Autonomic Dysfunction Center</i></p> <p>O66 - Christopher Mathias, Queen Square Institute of Neurology – Postprandial syndromes in autonomic disorders: pathophysiology and treatment (20 minutes)</p> <p>O67 - Cyndya A. Shibao, Vanderbilt Autonomic Dysfunction Center – Increased Glucose-dependent insulinotropic polypeptide (GIP) in postprandial syndromes (20 minutes)</p> <p>O68 - Simon Veedfald, University of Copenhagen – Neural modulation of entero-pancreatic hormone secretion (20 minutes)</p> <p>O69 - Sophie Woge Nielsen – Glucose-dependent insulinotropic polypeptide receptor antagonism in humans (20 minutes)</p>	<p>G33</p>
<p>09:00 - 11:00</p>	<p>Symposium Presentations Session 4</p> <p>Theme: Integrative control</p> <p>Symposium Title: Neural control & autonomic regulation during exercise: recent innovations</p> <p><i>Chairs: Satoshi Koba, Tottori University and Marc Kaufman, Penn State College of Medicine</i></p> <p>O70 - Masaki Mizuno, University of Texas Southwestern Medical Center – An integrative approach to better understand the mechanisms of the exercise pressor reflex in health and disease (20 minutes)</p> <p>O71 - Markus Amann, University of Utah – The exercise pressor reflex: a flow-raising or a pressure-raising mechanism? (20 minutes)</p> <p>O72 - Satoshi Koba, Tottori University – Subcortical circuit mechanisms for central command regulation of sympatho-motor coordination (20 minutes)</p> <p>O73 - Vaughan Macefield, Monash University – The relative contributions of central command and the metaboreflex to the increases in sympathetic vasoconstrictor drive to contracting muscle (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O74 - Jonathan Moore – Effect of pulmonary artery mechanoreceptor input on sympathetic vasomotor outflow during exercise in healthy humans (20 minutes)</p> <p>O75 - Julia Shanks – Reinstating respiratory sinus arrhythmia in heart failure improves cardiac responses to exercise (20 minutes)</p>	<p>WG5</p>

11:00 - 11:15	Mid-morning Refreshments	Great Hall
11:15 - 13:15	<p>Symposium Presentations Session 5</p> <p>Theme: Gut and Metabolism</p> <p>Symposium Title: Glucose sensing affecting autonomic activity</p> <p style="text-align: center;"><i>Chairs: Fiona McBryde and Pratik Thakkar, University of Auckland</i></p> <p>O76 - Stefan Trapp, University College London – Are GLP-1 producing pre-proglucagon neurons of the lower brainstem a useful target for obesity and diabetes treatment? (20 minutes)</p> <p>O77 - Silvia V Conde, NOVA Medical School – Carotid body, autonomic function and dysmetabolism: is there something new under the sun? (20 minutes)</p> <p>O78 - Pratik Thakkar, University of Auckland – GLP1 receptor agonist ameliorates high blood pressure and high blood sugar in a rat model of “glucotension” (20 minutes)</p> <p>Selected Abstracts</p> <p>O80 - Alessandra Occhinegro – The blockade of sympathetic mediated inhibition of immunity improves bacterial clearance in pigs (20 minutes)</p>	Bramall
11:15 - 13:15	<p>Symposium Presentations Session 5</p> <p>Theme: Integrative control</p> <p>Symposium Title: Bidirectional association between depression and autonomic nervous system alteration: new insights into therapeutic strategies</p> <p style="text-align: center;"><i>Chairs: Nicola Montano, University of Milan and Caroline Sévoz-Couche, Sorbonne Université</i></p> <p>O81 - Andrea Sgoifo, University of Parma – Antidepressant activity and cardioprotective effects of endocannabinoid neuromodulation enhancement in socially stressed rats (20 minutes)</p> <p>O82 - Caroline Sévoz-Couche, Sorbonne Université – Evaluation of Ketamine effects on autonomic nervous system in patients with depressive disorders (20 minutes)</p> <p>O83 - Xiaoran Zhang, Sun Yat-sen University – Mesenchymal Stromal Cells Alleviate Murine Depressive and Anxiety-like Behaviors via a Lung Vagal-to-Brain Axis (20 minutes)</p> <p>O84 - Angelica Carandina, University of Milan – The effects of repetitive transcranial magnetic stimulation (rTMS) and transcutaneous auricular vagal nerve stimulation (tVNS) on depressive symptoms: evidence from DEPONEST and DIGEST studies (20 minutes)</p> <p>Selected Abstracts</p> <p>O85 - Ayse Dereli – Cardiorespiratory Responses to Hypercapnia Are Altered Differentially in Different Types of Epilepsy Models (20 minutes)</p> <p>O86 - Amanda Marshall – Exploring the interaction of hypermobility with brain fog induction in people with Postural Orthostatic Tachycardia using lower body negative pressure (20 minutes)</p>	G33
11:15 - 13:15	<p>Symposium Presentations Session 5</p> <p>Theme: Bioelectronics</p> <p>Symposium Title: Interrogating the physiology of the human vagus nerve</p> <p style="text-align: center;"><i>Chair: Vaughan Macefield Monash University</i></p> <p>O87 - Nicole Pelot, Duke University – Anatomical parameterization and physiological validation of computational modelling of vagus nerve stimulation (20 minutes)</p> <p>O88 - Matteo Maria Ottaviani, University of Ancona – Ultrasound-guided microneurography of the human vagus nerve (20 minutes)</p>	WG5

	<p>O89 - David Farmer, Monash University – 'Single-unit recordings of vagal neurones with cardiac rhythmicity in the human (20 minutes)</p> <p>O90 - Mikaela Patros, Monash University – Activation of vagal axons by vagal nerve stimulation (20 minutes)</p> <p><u>Selected Abstracts</u></p> <p>O91 - Joana Sacramento – Blockade of P2X3 ATP receptors decreases carotid body-mediated hypoxic ventilatory responses in high-fat rats (20 minutes)</p>	
13:15 - 14:00	Lunch	Great Hall
13:15 - 14:00	<p>ISAN AGM</p> <p><i>Chair: Valentine Pavlov</i></p> <p>International Secretary - Vaughan Macefield</p>	Great Hall
14:00 - 15:00	<p>Keynote 3: Jessica Filosa, Augusta University, USA</p> <p>Blood pressure variability impaired neurovascular outputs in middle-aged mice</p>	Bramall
15:00 - 16:00	<p>Poster Session 3</p> <p><u>Theme: Basic - Bioelectronic Medicine</u></p> <p>P4 - Dzifa Kwaku – Three-Dimensional Reconstruction of Renal Tissue: Mapping Renal Nerve Trajectories</p> <p><u>Theme: Basic - Cardiovascular</u></p> <p>P19 - Jack Cheng – Identification of Spinal Afferent Innervation in the Rat Heart: Atria and Ventricles: Anterograde Tracing</p> <p>P20 - Carol T. Bussey – Autonomic mechanisms of disturbed circadian rhythm in the diabetic heart</p> <p>P21 - Rubens Fazan Jr. – Cardiovascular variability and baroreflex function are altered in rats with femoral artery catheterization</p> <p>P22 - Gabriel Gavazza Noé – Distinct autonomic effects of single and intermittent chlorpyrifos exposure in the contextual fear conditioning test in rats</p> <p>P23 - Daryl Briggs, James Hunt, Spardha Raut – High-resolution ex-vivo structural and functional analysis of sympathetic innervation using a novel confocal fluorescence technique</p> <p>P24 - Katharina Scherschel – Neuro-glia interaction in the heart</p> <p><u>Theme: Basic - Integrative Control</u></p> <p>P38 - Samantha Kraft – Integrated Dashboard for large-scale visualization of the anatomical connectivity of the human Vagus Nerve</p> <p>P39 - Mabelle Lin – Mapping the Vagus Nerve with Anatomical Scaffolds</p> <p>P40 - Karla Rodrigues – Respiratory pattern and responses to hypercapnia of adenosine A2A knockout mice submitted to sustained hypoxia</p> <p><u>Theme: Basic - Neuroscience</u></p> <p>P48 - Rui Chang – Differential developmental blueprints of organ-intrinsic nervous systems</p> <p>P49 - Olivia Gold – Mechanisms underlying long-term facilitation in the carotid body</p> <p>P50 - Song Yao – Blockade of CCR2 receptors in the brain prevents hypertension in renovascular hypertensive rats</p> <p><u>Theme: Clinical - Cardiovascular</u></p> <p>P56 - Riccardo Asnaghi – Autonomic Impairment in Parkinson's Disease and Multiple System Atrophy Patients during Valsalva Maneuver</p>	Great Hall

	<p>P57 - Helio Salgado – Modulation of Oral Microbiota and Inflammatory Cytokines in Hypertensive and Healthy Complete Denture Wearers</p> <p>P58 - Harvey Walsh – Effects of interval versus continuous exercise on cerebral vascular flow-mediated dilatation</p> <p>Theme: Clinical - Neuroscience</p> <p>P62 - Sae Uchida – The basal forebrain cholinergic system linking olfaction and cognitive function: from basic studies to clinical application</p> <p>Theme: Clinical - Gut and Metabolism</p> <p>P63 - Rasmus Syberg Rasmussen – The gut hormone GIP contributes to the postprandial gastrointestinal hyperaemia in humans</p>	
<p>15:30 - 16:00</p>	<p>Afternoon Refreshments</p>	<p>Great Hall</p>
<p>16:00 - 16:30</p>	<p>Closing Ceremony</p>	<p>Bramall</p>