

Australasian Society for Autonomic Neuroscience

established 2023

www.australasianautonomic.org

SATURDAY, DEC 2: Forgan Smith Building, Lecture Theatre E109, UQ

| 11.00.10.00 | |
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| 11:30-13:00 | Registration & Lunch |
| 13:00-13:15 | Launch of The Australasian Society for Autonomic Neuroscience Vaughan Macefield |
| 13:15-15:15 | Identifying central brain pathways driving cardiovascular reactivity during mental stress Braun J, Patel M, Kameneva T, Keatch C, W Woods, Lambert E Analysis of neuromuscular function and cell distribution in the Hirschsprung disease colon Carbone SE, Mahdavian N, Rajasekhar P2, Lam T, King S, Poole D Cardiovascular and locomotor responses elicited by chemogenetic activation of the medial and lateral hypothalamus under two different promoters Carrive P, Jamie Dracup, Assareh N, Prasad A, McNally G Prenatal maternal amoxicillin exposure influences perinatal enteric nervous system development Czapla BJ, Poon SSB, Parathan P, Bornstein JC, Foong JPP Premotor organisation of laryngeal control in mice Eymael AN, Burke P, McMullan S, Dempsey B The wanderer's heart: identification of cardiac-rhythmic neurons in microneurographic recordings of the human vagus nerve Farmer DGS, Patros M, Ottaviani MM, Wright L, Dawood T, Macefield VG |

| 15:15-15:45 | Afternoon Tea |
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| 15:45-17:45 | Session 2: Chair – Simona Carbone |
| | Disentangling myelinated visceral afferents of the pelvic plexus using adeno-associated viral transfection Fuller-Jackson JP, Bowden LD, Chan J, Osborne PB, Keast JR |
| | Interrogating gastric enteric neurons to align genotype and phenotype Furness JB, Laddach AC, Gajanaike C, Hunne B, Di Natale MR, Oliveira A, Progatzky F, Heanue TA, Adams CD, Pachnis V |
| | Functional brainstem imaging of sympathetic drive using MSNA-coupled fMRI at ultra-high field Glarin R, Rim D, Henderson LA, Macefield VG |
| | Critical role of lateral habenula circuits in the control of stress-induced palatable food consumption Herzog H |
| | Gastrointestinal dysfunction in a mouse model of autism spectrum disorder and potential therapeutics Hill-Yardin EL, Lin V, Li Y, Mohsenipour M, Abo-Shaban T, Mou K, Filappone RT, Alamoudi MU, Perez AJ, Munira MS, Williams JK, Hosie S, Balasuriya GK, Bornstein JC, Nurgali K, Franks AE |
| | Central pathways of the inflammatory reflex McAllen RM, McKinley MJ, Martelli D |
| 19:30-23:30 | Conference Dinner |
| | Customs House www.customshouse.com.au 399 Queen Street, Brisbane |
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SUNDAY, DEC 3: Forgan Smith Building, Lecture Theatre E109, UQ

| 9:00-11:00 | Session 3: Chair – Elisa Hill-Yardin |
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| | Electrical stimulation of the dorsolateral prefrontal cortex inhibits vestibular signalling and vestibulosympathetic reflexes in humans McCarthy B, Rim D, Sesa-Ashton G, Datta S, Wong R, Crawford LS, Dawood T, Henderson LA, Macefield VG |
| | Evidence for vagal sensory neural involvement in influenza pathogenesis and disease McGovern AE, Verzele NAJ, Chua BY, Short KR, Moe AAK, Edwards IN, Bielefeldt-Ohmann H, Reading PC, Trewella MW, Mazzone SB |
| | State-dependency of nocturnal swallowing in healthy adults: Incidence, motor function and coordination with breathing Margaret Monroe, Sophie Carter, Danny Eckert, Lynne Bilston, Anna Hudson, Jane Butler, Simon Gandevia, Graham Kerr, Peter Burke |
| | Investigating resting-state brain activity in lean and overweight/obese individuals using magnetoencephalography Patel M, Braun J, Woods W, Kameneva T, Keatch C, Lambert E |
| | Chronic vagus nerve stimulation reduces muscle sympathetic nerve activity in drug-resistant epilepsy Patros H, Simpson, Sivathamboo S, O'Brien TJ, Macefield VG |
| | Using faecal microbiota transplant to investigate the effects of Huntington's disease gut microbiota on brain and gut function in mice Qin W, Masson BA, Renoir T, Gubert C, Hannan AJ |
| 11:00-11:30 | Morning Tea |
| 11:30-13:10 | Session 4: Chair – David Farmer |
| | The effect of long-term recurrent intermittent hypercapnia on central respiratory chemoreflex function Kim D, Nedoboy P, Oh A, Farnham M, Kumar NN |
| | The association between grey matter volume, mean blood pressure, and muscle sympathetic nerve activity in hypertensive humans Rim D, Fatouleh R, Schlaich M, Dawood T, Henderson L, Macefield V |
| | Functional differentiation of enteric neurons and glia from human iPSCs Rowland E, Daniszewski M, Yildiz GS, Bergner AJ, Hao MM, |

| | Neurovascular transduction and baroreflex sensitivity in the context of severe COPD Sesa-Ashton G, Macefield V Development of a fully-implantable, wireless battery-free optogenetic device for control of the enteric nervous system and gut-brain axis in freely-moving animals Spencer, NJ, Efimov A, Kim J, Travis J, Vázquez-Guardado A, Hibberd T, Sorensen J, Hu H, Rogers JA | |
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| 13:10-14:30 | Lunch AGM of The International Society for Autonomic Neuroscience | |
| 14:30-16:30 | Session 5: Chair – Melissa Reichelt Symptoms associated with exercise intolerance and resting heart rate following mild traumatic brain injury in adults: results from the prospective observational CREST concussion recovery study Thorne J, Hellewell SC, Cowen G, Ring A, Jefferson A, Chih H, Gozt AK, Buhagiar F7, Thomas E, Papini M, Bynevelt M, Celenza A, Xu D, Honeybul S, Pestell CF, Fatovich D, Fitzgerald M How space dust settles our mind: discovery of the cell and receptor target of the mood stabiliser lithium Thorpe DW, Peterson RA, Humenick A, Ootsuka Y, Blessing WW, Keating DJ The mood stabiliser lithium affects autonomic and behavioural functions via peripheral mechanisms of actions Ootsuka Y, Blessing WW, Thorpe DW, Humenick A, Jones L, Peterson R and Keating DJ Stromal cell derived factor-1 (SDF-1) acts on both CXCR4 and CXCR7 in the rostral ventrolateral medulla (RVLM) to regulate blood pressure Unnikrishnan N, Korim WS, Yao ST Targeted stimulation of Npff neurons induces a torpor-like state in mice Lei Zhang Integration of autonomic reflexes in the nucleus of the solitary tract Zhu H, Furuya W, Bassi J, Connely-Huf A, Allen A, McDougall S | |
| 16:30-18:00 | Farewell Drinks | |
| 13.30 10.00 | Announcement of Marcello Costa Award Announcement of Journal of Physiology Awards ASAN 2024 | |