

## ISAN 2009

Tuesday 1 - Friday 4 September 2009  
Manly Pacific Hotel, Sydney, Australia

Tuesday 1 September 2009	
4:30pm	Registration Opens
5:30pm - 6:15pm	<b>Opening Ceremony</b> <b>Conference Opening &amp; Welcome</b> <i>Chair of ISAN: Vaughan Macefield</i> <i>Chair of EFAS: Pietro Cortelli</i> <b>ISAN and its Journal</b> <i>Geoff Burnstock, introduced by Janet Keast</i> Room: The Grand Ballroom
6:15pm - 7:15pm	<b>Plenary Session 1</b> <i>Sponsored by the Australian Neuroscience Society Neurochemistry Funds</i> <b>"Nicotinic synapse formation and the regulation of neural development"</b> <b>Darwin K. Berg (University of California, San Diego, USA)</b> <i>Chair: Geoff Burnstock</i> Room: The Grand Ballroom
7:15pm - 8:30pm	<b>Welcome Reception</b> Venue: Grand Ballroom Foyer, Manly Pacific

Wednesday 2 September 2009			
8:00am	Registration Opens		
8:45am - 9:45am	<b>Plenary Session 2</b> Sponsored by the Australian Physiological Society <b>"Injury and the sympathetic nervous system"</b> <b>Elsbeth M. McLachlan (Prince of Wales Medical Research Institute, Sydney, Australia)"</b> <i>Chair: Wilfrid Jänig</i> Room: The Grand Ballroom		
9:45am - 10:15am	Morning Tea		
10:15am - 12:15pm	<b>Symposium 1: Molecular control of autonomic neuron development</b> Sponsored by the Company of Biologists and the ARC/NHMRC Research Network in Genes and Environment in Development (NGED) <i>Chairs: Heather Young and Colin Anderson</i> Room: The Grand Ballroom	<b>Symposium 2: Control of neuronal functions by the endothelium in the autonomic and neuroendocrine brain</b> <i>Chairs: Julian Paton and Sergey Kasparov</i> Room: Cutler Room	<b>Symposium 3: Autonomic neuropathies - recent advances</b> <i>Chairs: Philip Low and Steve Vernino</i> Room: Barton Room
	10:15am - 10:45am <b>S1.1 CXCR4 drives neural crest cells to the sympathetic ganglia in chick</b> <i>P.M. Kulesa (USA)</i>	10:15am - 10:45am <b>S2.1 Neurovascular coupling: NMDA, nitric oxide, radicals and beyond</b> <i>C. Iadecola (USA)</i>	10:15am - 10:45am <b>S3.1 Pathogenesis of autoimmune autonomic ganglionopathy</b> <i>S. Vernino (USA)</i>
	10:45am - 11:15am <b>S1.2 Development and maintenance of noradrenergic properties in sympathetic neurons</b> <i>H. Rohrer (Germany)</i>	10:45am - 11:15am <b>S2.2 Hypothalamic vascular glial plasticity in control of hormone release</b> <i>V. Prevot (France)</i>	10:45am - 11:15am <b>S3.2 Clinical Syndromes of Autoimmune Autonomic Ganglionopathy</b> <i>P.A. Low (USA)</i>
	11:15am - 11:45am <b>S1.3 Phox2b and the autonomic control of breathing</b> <i>C. Goidis (France)</i>	11:15am - 11:45am <b>S2.3 Detrimental role of endothelial nitric oxide in motor peripheral neuropathies in the adult rat</b> <i>C. Rodriguez Sunico (Spain)</i>	11:15am - 11:45am <b>S3.3 Treatment of autoimmune autonomic ganglionopathy</b> <i>R. Freeman (USA)</i>
	11:45am - 12:00pm <b>S1.4 The transcription factor Hand2 is necessary for differentiation and cell type-specific gene expression of sympathetic and enteric neurons in murine embryos</b> <i>M.J. Howard (USA)</i>	11:45am - 12:00pm <b>S2.4 Distinct cellular patterns of superoxide production in the rostral ventrolateral medulla during oxidative and emotional stress in murines</b> <i>D.N. Mayorov (Australia)</i>	11:45am - 12:00pm <b>S3.4 Impaired corpus cavernosum responses to cavernous nerve stimulation in diabetic rats: effects of treatment with erythropoietin-delta</b> <i>N.E. Cameron (UK)</i>
	12:00pm - 12:15pm <b>S1.5 Sympathetic and parasympathetic adult rat pelvic ganglion neurons utilize distinct cyclic nucleotide signaling pathways to mediate Semaphorin 3A-induced growth cone collapse</b> <i>M.R. Nangle (Australia)</i>	12:00pm - 12:15pm <b>S2.5 Photostimulation of channelrhodopsin2(ChR2)-transfected C1 neurons increases sympathetic nerve discharge (SND) and blood pressure in Sprague Dawley rats</b> <i>S.B.G Abbott (Australia &amp; USA)</i>	12:00pm - 12:15pm <b>S3.4 Induction of Neural Crest Stem Cells from Human ES-derived Neural Progenitor Cells: Migration and Differentiation in Avian Embryos and Explants of Embryonic Mouse Gut</b> <i>D.F. Newgreen (Australia)</i>

12:15pm - 1:15pm	Lunch		
1:15pm - 3:15pm	Poster Session & Afternoon Tea Room: Gilberts Room		
3:15pm - 5:15pm	<b>Symposium 4: Neurotrophic factors in autonomic nervous system development</b> Sponsored by Bioscientific Pty Ltd. Chairs: Hermann Rohrer and Don Newgreen Room: The Grand Ballroom	<b>Symposium 5: Inflammation and sensory mechanisms</b> Chairs: John Furness and Joel Bornstein Room: Cutler Room	<b>Symposium 6: Human evaluation of autonomic activity</b> Chairs: Isabel Rocha and Stefan Dawid-Milner Room: Barton Room
	3:15pm - 3:45pm <b>S4.1 Novel regulators of sympathetic innervation in the developing mouse</b> A. Davies (UK)	3:15pm - 3:35pm <b>S5.1 Somatostatin modulates mast cell-induced responses in murine spinal neurons and satellite cells</b> J-P. Timmermans (Belgium)	3:15pm - 3:45pm <b>S6.1 Autonomic Nervous System evaluation in humans</b> I. Rocha (Portugal)
	3:45pm - 4:15pm <b>S4.2 Signals and cell behaviors in the development and pathology of the enteric nervous system</b> H. Enomoto (Japan)	3:35pm - 3:55pm <b>S5.2 Reactions of enteric and sympathetic ganglia to a brief inflammatory stimulus in the guinea-pig ileum</b> J.B. Furness (Australia)	3:45pm - 4:15pm <b>S6.2 Delineating human sympathetic nervous system pathophysiology: Translation from mechanisms to clinical management</b> M. Esler (Australia)
	4:15pm - 4:45pm <b>S4.3 Neurturin and GDNF effects on maturation and plasticity of urogenital innervation</b> J.R. Keast (Australia)	3:55pm - 4:15pm <b>S5.3 Bone morphogenic protein-4 is a mediator of estrogen-induced sensory axon plasticity in the rat vagina</b> P.G. Smith (USA)	4:15pm - 4:45pm <b>S6.3 History taking and efferent cardiac vagal assessment employing the heart rate</b> W. Struhal (Austria)
		4:15pm - 4:30pm <b>S5.4 Placodal and Neural Crest Vagal C-fibers innervating murine airways: Localization and phenotypic differences</b> C. Nassenstein (USA & Germany)	4:45pm - 5:00pm <b>S6.4 Examination of the short-term reproducibility of heart rate variability in humans</b> A.S. Leicht (Australia)
		4:30pm - 4:45pm <b>S5.5 Localisation and function of transient receptor potential ion channel melastatin subtype 8 (TRPM8) in mouse colonic primary afferent nerve fibres.</b> A.M. Harrington (Australia)	5:00pm - 5:15pm <b>S6.5 Mental Sweating: A reliable autonomic marker of emotional arousal</b> H. Sequeira (France)
		4:45pm - 5:00pm <b>S5.6 Stretch, but not capsaicin, is an effective stimulus for adenosine tri-phosphate (ATP) release in the porcine bladder mucosa</b> P. Sadananda (Australia)	
		5:00pm - 5:15pm <b>S5.7 Sustained P2X3 facilitation of acetylcholine release contribute to bladder hyperactivity in humans with benign prostatic hyperplasia</b> P. Correia-de-Sá (Portugal)	

	Hot Topics 1 <i>Chair: Yrsa Sverrisdottir</i> Room: The Grand Ballroom	Hot Topics 2 <i>Chair: David Linden</i> Room: Cutler Room	Hot Topics 3 <i>Chair: Wilfred Jänig</i> Room: Barton Room
5:30pm - 6:00pm	5:30pm - 5:40pm <b>Hot 1.1 (P1.1) Autonomic nervous system and its association with brain function in major depressive disorder</b> <i>T. Dawood, D. Barton, E. Lambert, D. Laude, J-L. Elghozi, F. Socratous, S. Hennebry, G. Lambert (France)</i>	5:30pm - 5:40pm <b>Hot 2.1 (P2.3) Human cortical regions associated with the sympathetic vasoconstrictor response to simulated central and obstructive apneas</b> <i>D.S. Kimmerly, B.L. Morris and J.S. Floras (Canada)</i>	5:30pm - 5:40pm <b>Hot 3.1 (P7.8) Role of cAMP dependent effectors and voltage gated calcium channels in the rat rostral ventrolateral medulla and in the spinal cord in the tonic and reflex control of arterial pressure in hypertension and normotension</b> <i>A.K. Goodchild, V.J. Tallapragada, S. Hassan and N.N. Kumar (Australia)</i>
	5:40pm - 5:50pm <b>Hot 1.2 (P1.28) Acute effects of levodopa administration on cardiovascular responses to tilt test in patients with parkinsonism</b> <i>P. Guaraldi, G. Calandra-Buonaura, R. Terlizzi, L. Solieri and P. Cortelli (Italy)</i>	5:40pm - 5:50pm <b>Hot 2.2 (P4.25) Gastric leptin plays a role in controlling sympathetic vasomotor outflow to the gut in Sprague-Dawley rats</b> <i>D. Sartor (Australia)</i>	5:40pm - 5:50pm <b>Hot 3.2 (P7.7) Exposure to chronic intermittent hypoxia promotes exaggerated sympathetic reflexes but blunted adrenergic vascular reactivity in Sprague-Dawley rats</b> <i>A.Q. Silva and A.M. Schreihofner (USA)</i>
	5:50pm - 6:00pm <b>Hot 1.3 (P1.37) Changes of the enteric nervous system in Alzheimers disease</b> <i>K. Schäfer, S. Semar, M. Letiembre, M. Klotz, T. Wyss-Coray, Y. Liu, K. Fassbender and W. Schulz-Schaeffer (Germany and Belgium)</i>	5:50pm - 6:00pm <b>Hot 2.3 (P7.26) Recording from single postganglionic sympathetic axons in conscious rats during development of cardiovascular disease</b> <i>M.M. Knuepfer, S.K. Burris, M. Busauskas and H. Yemane (USA)</i>	5:50pm - 6:00pm <b>Hot 3.3 (P7.23) Effects of activation of ghrelin receptors in the spinal cord on cardiovascular function in the rat</b> <i>R. Bron, D.M. Ferens, L. Yin, B. Hunne, K. Ohashi-Doi, P.D. Kitchener, Y. Shimizu and J.B. Furness (Australia &amp; Japan)</i>

Thursday 3 September 2009			
8:45am - 9:45am	<p align="center"><b>Plenary Session 3</b>  <b>"Clinical approaches to function and dysfunction of the central autonomic nervous system"</b>  <b>Max J. Hilz (University of Erlangen-Nuremberg, Germany &amp; New York University School of Medicine, USA)</b>  <i>Chair: Pietro Cortelli</i>  Room: The Grand Ballroom</p>		
9:45am - 10:15am	<p align="center">Morning Tea</p>		
10:15am - 12:15pm	<p><b>Symposium 7: Central cardiovascular control: plasticity in response to normal physiological challenges</b>  Sponsored by Foundation for High Blood Pressure Research  <i>Chairs: Ida Llewellyn-Smith and Ann Schreihöfer</i>  Room: The Grand Ballroom</p>	<p><b>Symposium 8: Neural control of gut functions</b>  Sponsored by School of Medicine, University of Western Sydney  <i>Chairs: Alberto Travagli and Elyanne Ratcliffe</i>  Room: Cutler Room</p>	<p><b>Symposium 9: Autonomic disorders in Parkinson's Disease</b>  Sponsored by Prince of Wales Medical Research Institute  <i>Chairs: Glenda Halliday and Sheila Fleming</i>  Room: Barton Room</p>
	<p>10:15am - 10:45am  <b>S7.1 Pregnancy: CNS Plasticity in Control of Sympathetic Outflow in Rats</b>  <i>C.M. Heesch (USA)</i></p>	<p>10:15am - 10:45am  <b>S8.1 Plasticity of vagal brainstem circuits in the control of gastrointestinal function</b>  <i>K.N. Browning (USA)</i></p>	<p>10:15am - 10:45am  <b>S9.1 Neuropathology in the autonomic system in patients with Parkinson's disease</b>  G.M. Halliday (Australia)</p>
	<p>10:45am - 11:15am  <b>S7.2 Altered autonomic control of cardiovascular function in obesity: insights from obese Zucker rats</b>  <i>A.M. Schreihöfer (USA)</i></p>	<p>10:45am - 11:15am  <b>S8.2 Regulation of excitability of GLP-1 releasing NTS neurons - do these cells signal satiety?</b>  <i>S. Trapp (UK)</i></p>	<p>10:45am - 11:15am  <b>S9.2 Autonomic dysfunction in the Parkinson's Disease Clinic</b>  <i>D.B. Rowe (Australia)</i></p>
	<p>11:15am - 11:45am  <b>S7.3 Identifying neurocircuitry controlling cardiovascular function in humans using functional neurosurgery: implications for exercise control</b>  <i>D.J. Paterson (UK)</i></p>	<p>11:15am - 11:45am  <b>S8.3 Roles of axon guidance molecules in the development of the vagal innervation of the gut</b>  <i>E.M. Ratcliffe (Canada)</i></p>	<p>11:15am - 11:45am  <b>S9.3 Autonomic dysfunction in mice overexpressing human wildtype alpha synuclein</b>  <i>S.M. Fleming (USA)</i></p>
	<p>11:45am - 12:00pm  <b>S7.4 Oestrogen receptor expression in autonomic nuclei of the rat brain: Changes associated with levels of circulating oestrogen</b>  <i>E.J. Spary (UK)</i></p>	<p>11:45am - 12:00pm  <b>S8.4 Inferior mesenteric ganglion neurons of the guinea pig are hyperexcitable and exhibit non-cholinergic fast synaptic transmission during and following recovery from hapten-induced colitis</b>  <i>D.R. Linden (USA)</i></p>	<p>11:45am - 12:00pm  <b>S9.4 Parkinson Disease with Orthostatic Hypotension: Distinctions from Parkinson Disease without Orthostatic Hypotension and from Pure Autonomic Failure</b>  <i>D.S. Goldstein (USA)</i></p>
	<p>12:00pm - 12:15pm  <b>S7.5 Sleep Disordered Breathing and High Altitude Hypoxia: gender related differences. The HIGHCARE project</b>  <i>C. Lombardi (Italy)</i></p>	<p>12:00pm - 12:15pm  <b>S8.5 Anatomical characterization of the extrinsic innervation of the adult mouse jejunum</b>  <i>L.L. Tan (Australia)</i></p>	<p>12:00pm - 12:15pm  <b>S9.5 Is orthostatic hypotension in Parkinson's disease a vascular regulatory problem?</b>  <i>J.T. Groothuis (The Netherlands)</i></p>

12:15pm - 1:15pm	Lunch		
12:30pm - 1:15pm	<b>General Meeting</b> Room: The Grand Ballroom		
1:15pm - 3:15pm	<b>Poster Session &amp; Afternoon Tea</b> Room: Gilberts Room		
3:15pm - 5:15pm	<b>Symposium 10: Autonomic mechanisms contributing to the control of the long term blood pressure level</b> <b>Sponsored by Foundation for High Blood Pressure Research</b> <i>Chairs: Gunnar Wallin and Mike Joyner</i> Room: The Grand Ballroom	<b>Symposium 11: Gastrointestinal chemoreception and autonomic impact on energy balance</b> <b>Sponsored by Ajinomoto</b> <i>Chairs: Kunio Torii and Yvette Tache</i> Room: Cutler Room	<b>Symposium 12: Music and the autonomic nervous system</b> <i>Chairs: Luciano Bernardi and Jean-Luc Elghozi</i> Room: Barton Room
	3:15pm - 3:45pm <b>S10.1 Baseline sympathetic activity and blood pressure in normotension</b> <i>M.J. Joyner (USA)</i>	3:15pm - 3:45pm <b>S11.1 Chemosensing in the GI tract</b> <i>H.E. Raybould (USA)</i>	3:15pm - 3:45pm <b>S12.1 Dynamic interactions between musical, cardiovascular and cerebral rhythms in man</b> <i>L. Bernardi (Italy)</i>
	3:45pm - 4:15pm <b>S10.2 Autonomic Mechanisms Sustaining Hypertension in Humans</b> <i>I. Biaggioni (USA)</i>	3:45pm - 4:15pm <b>S11.2 Role of Gustducin, Taste Receptors and Transient Receptor Potential Channel M5 in Gastrointestinal Chemosensation</b> <i>R.F. Margolskee (USA)</i>	3:45pm - 4:15pm <b>S12.2 The perception of music: intensity and affect</b> <i>F. Bailes (Australia)</i>
	4:15pm - 4:45pm <b>S10.3 Chronic lowering of blood pressure by baroreflex activation: it's still the kidneys</b> <i>T.E. Lohmeier (USA)</i>	4:15pm - 4:45pm <b>S11.3 Mechanism of gastric vagal modulation by Umami</b> <i>T. Tanaka (USA)</i>	4:15pm - 4:45pm <b>S12.3 Playing wind instruments is associated with changes in blood pressure and heart rate</b> <i>J.L. Elghozi (France)</i>
	4:45pm - 5:00pm <b>S10.4 Muscle Sympathetic Nerve Activity is related to a surrogate marker of Endothelial function</b> <i>Y. B. Sverrisdóttir (Sweden)</i>	4:45pm - 5:00pm <b>S11.4 Mechanisms of forebrain neural response to the gut nutrients in rats</b> <i>T. Tsurugizawa (Japan)</i>	4:45pm - 5:15pm <b>S12.4 Right middle cerebral artery stroke dampens cardiovascular responses to music, left middle cerebral artery stroke decreases blood pressure response to pleasant music</b> <i>M.J. Hilz (Germany &amp; USA)</i>
	5:00pm - 5:15pm <b>S10.5 Independent control of burst amplitude in the cardiac and renal sympathetic nerves during volume changes in the normal state and in heart failure</b> <i>R. Ramchandra (Australia)</i>	5:00pm - 5:15pm <b>S11.5 Nutrient induced segmentation is mediated by serotonin and cholecystokinin in isolated guinea pig small intestine</b> <i>J.C. Bornstein (Australia)</i>	

	Hot Topics 4 <i>Chair: Yasutake Shimizu</i> Room: The Grand Ballroom	Hot Topics 5 <i>Chair: Jaimie Polson</i> Room: Cutler Room	Hot Topics 6 <i>Chair: Pascal Carrive</i> Room: Barton Room
5:30pm - 6:00pm	5:30pm - 5:40pm <b>Hot 4.1 (P3.7) Cellular mechanism of action of Prostaglandin E2 on mouse urinary bladder</b> <i>S. Kobayter, J.S. Young and K.L. Brain (UK)</i>	5:30pm - 5:40pm <b>Hot 5.1 (P7.3) Different approaches to evaluate an interaction of purinergic and nitregeric mechanisms in the NTS neurons of rats</b> <i>E.M. Granjeiro, G.P. Pajolla, D. Accorsi-Mendonça, L.G.H. Bonagamba, R.M. Leão and B.H. Machado. (Brazil)</i>	5:30pm - 5:40pm <b>Hot 6.1 (P7.1) Highlights on a new pathway involved in alteration of reflex bradycardia in response to stress: study in rats and mice</b> <i>F. Netzer, J.-F. Bernard and C. Sévoz-Couche (France)</i>
	5:40pm - 5:50pm <b>Hot 4.2 (P3.11) Rapid contractile phenotype of vascular smooth muscle is controlled by trophic influence of sympathetic nerves</b> <i>O.S. Tarasova, V.A. Puzdrova, N.V. Tarasova, S.V. Mochalov, A.V. Vorotnikov and R. Schubert (Russia &amp; Germany)</i>	5:40pm - 5:50pm <b>Hot 5.2 (P7.4) Whole cell patch recording of sympathetic pre-motor neurons in the medulla oblongata in the in situ arterially perfused preparation of the neonatal rat</b> <i>T. Koganezawa, N. Terui, A.E. Pickering and J.F.R. Paton (Japan &amp; UK)</i>	5:40pm - 5:50pm <b>Hot 6.2 (P8.3) Parasympathetics protect rat brain from stroke</b> <i>W.T. Talman, D. Easker, D.N. Dragon and L.H. Lin (USA)</i>
	5:50pm - 6:00pm <b>Hot 4.3 (P3.17) Dysautonomia precedes cardiomyopathy in a mouse model of muscular dystrophy</b> <i>R. Sabharwal, R.M. Weiss and M.W. Chappleau (USA)</i>	5:50pm - 6:00pm <b>Hot 5.3 (P7.5) Effects of basal forebrain stimulation on nerve growth factor secretion and blood flow in the parietal cortex in adult and aged rats</b> <i>H. Hotta, F. Kagitani and S. Uchida (Japan)</i>	5:50pm - 6:00pm <b>Hot 6.3 (P8.9) Neuropeptide Y gene polymorphisms influence the emotional response to acute infectious illness</b> <i>U. Vollmer-Conna, B. Piraino and A. Lloyd (Australia)</i>
7:30pm - 12:30pm	<b>Congress Dinner</b> Venue: WatersEdge		

Friday 4 September 2009			
9:15am - 10:15am	<p align="center"><b>Plenary Session 4</b>  Sponsored by Brain Sciences UNSW  <b>"Dissecting axes of autonomic control in humans: Insights from neuroimaging"</b>  Hugo D. Critchley (University of Sussex, United Kingdom)  Chair: Vaughan Macefield  Room: The Grand Ballroom</p>		
10:15am - 10:45am	Morning Tea		
10:45am - 12:45pm	<p align="center"><b>Symposium 13: Chemo-baroreflex interactions in physiological and pathological conditions</b>  Sponsored by Foundation for High Blood Pressure Research  Chairs: Pietro Cortelli and Luciano Bernardi  Room: The Grand Ballroom</p>	<p align="center"><b>Symposium 14: Advances in sympathetic junctional transmission</b>  Sponsored by The Physiological Society (UK)  Chairs: Keith Brain and James Brock  Room: Cutler Room</p>	<p align="center"><b>Symposium 15: Linking emotional stress to autonomic function</b>  Sponsored by ADInstruments  Chairs: Pascal Carrive and Roger Dampney  Room: Barton Room</p>
	<p align="center">10:45am - 11:15am  <b>S13.1 Baroreflex modulation during sleep and obstructive sleep apnea syndrome (OSAS)</b>  P. Cortelli (Italy)</p>	<p align="center">10:45am - 11:15am  <b>S14.1 Differences in sympathetic neuroeffector transmission to arteries and veins in salt-sensitive hypertension in rats</b>  J. Galligan (USA)</p>	<p align="center">10:45am - 11:15am  <b>S15.1 The activity of the sympathetic nervous system in conditions characterized by high emotional stress</b>  E. Lambert (Australia)</p>
	<p align="center">11:15am - 11:45am  <b>S13.2 Chemo-baroreflex interactions at high altitude and during respiratory conditioning</b>  L. Bernardi (Italy)</p>	<p align="center">11:15am - 11:45am  <b>S14.2 Sympathetic neurotransmission in rat pressurised arteries</b>  W.R. Dunn (UK)</p>	<p align="center">11:15am - 11:45am  <b>S15.2 Orexinergic modulation of the autonomic activity during emotional stress</b>  T. Kuwaki (Japan)</p>
	<p align="center">11:45am - 12:15pm  <b>S13.3 Chronic and transient baroreflex dysfunction: a human case series</b>  D.L. Jardine (New Zealand)</p>	<p align="center">11:45am - 12:15pm  <b>S14.2 Anomaly and Accident: Discoveries in Search of a Gap Junction Uncoupler</b>  R. Manchanda (India)</p>	<p align="center">11:45am - 12:15pm  <b>S15.3 5-HT1A agonists - magic bullets for protecting the heart during stress</b>  E. Nalivaiko (Australia)</p>
	<p align="center">12:15pm - 12:30pm  <b>S13.4 Cardiovascular responses to intermittent obstructive apnea in conscious rats</b>  S.L. Cravo (Brazil)</p>	<p align="center">12:15pm - 12:30pm  <b>S14.4 Double alpha-1-adrenoceptor subtype knockout mice illustrate the pharmacology and distribution of the individual alpha-1-adrenoceptor subtypes</b>  J.C. McGrath (UK)</p>	<p align="center">12:15pm - 12:30pm  <b>S15.4 Orexin receptor antagonism and 5-HT-1A/7 receptor activation reduce cardiovascular reactions to psychological stress, but not to cold exposure</b>  D.M.L. Vianna (Australia)</p>
	<p align="center">12:30pm - 12:45pm  <b>S13.5 Hypertension in juvenile rats submitted to chronic intermittent hypoxia is not associated with baroreflex dysfunction</b>  B.H. Machado (Brazil)</p>	<p align="center">12:30pm - 12:45pm  <b>S14.5 The effects of <math>\Delta^9</math>-tetrahydrocannabinol on sympathetic cotransmission in the mouse vas deferens</b>  J.A.G. Kennard (UK)</p>	<p align="center">12:30pm - 12:45pm  <b>S15.5 Oxytocin mediation of behavioral and cardiac reactivity to acute stressors in socially isolated prairie voles</b>  A.J. Grippo (USA)</p>
12:45pm - 1:45pm	Lunch		

1:45pm - 3:45pm	<b>Poster Session &amp; Afternoon Tea</b> Room: Gilberts Room		
	<b>Symposium 16: Thermoregulation</b> <i>Sponsored by Florey Neuroscience Institutes</i> <i>Chairs: Robin McAllen and Bill Blessing</i> Room: The Grand Ballroom	<b>Symposium 17: Ion channels, neuromodulators and ganglionic regulation</b> <i>Sponsored by RMIT Health Innovations Research Institute</i> <i>Chairs: John Horn and David Adams</i> Room: Cutler Room	<b>Symposium 18: The autonomic nervous system in spinal cord injury - bench to bedside</b> <i>Sponsored by Victorian Neurotrauma Initiative</i> <i>Chairs: Christopher Mathias and Janet Keast</i> Room: Barton Room
3:45pm - 6:00pm	3:45pm - 4:10pm <b>S16.1 Episodic thermogenesis in brown adipose tissue: warming up the brain</b> <i>Y. Ootsuka (Australia)</i>	3:45pm - 4:15pm <b>S17.1 Nociceptors Regulate Calcium Channel Drug Sensitivity using Alternative Splicing</b> <i>A. Andrade (USA)</i>	3:45pm - 4:15pm <b>S18.1 Effects of spinal cord injury on the innervation of sympathetic and parasympathetic preganglionic neurons in circuits controlling the pelvic viscera</b> <i>I.J. Llewellyn-Smith (Australia)</i>
	4:10pm - 4:35pm <b>S16.2 Fever versus anapyrexia: let the battle begin</b> <i>A. Steiner (USA)</i>	4:15pm - 4:45pm <b>S17.2 Receptor-specific modulation of K<sup>+</sup> and Ca<sup>2+</sup> channels of rat sympathetic ganglia by phosphoinositide signals</b> <i>M.S. Shapiro (USA)</i>	4:15pm - 4:45pm <b>S18.2 Cardiovascular Autonomic Assessment in Spinal Cord Injured Rats and Humans</b> <i>V.E. Claydon (Canada)</i>
	4:35pm - 5:00pm <b>S16.3 Where temperature and fever circuits meet</b> <i>M. Tanaka (Australia)</i>	4:45pm - 5:15pm <b>S17.3 Voltage-Gated Calcium Channel Regulation by Arachidonic Acid: A Fatty Acid Tail</b> <i>A. Rittenhouse (USA)</i>	4:45pm - 5:15pm <b>S18.3 Adaptations of the vasculature following spinal cord injury</b> <i>J.A. Brock (Australia)</i>
	5:00pm - 5:25pm <b>S16.4 The ways up and the ways down: dissecting neural pathways for thermoregulation</b> <i>K. Nakamura (USA &amp; Japan)</i>	5:15pm - 5:45pm <b>S17.4 Ganglionic Integration is More Than a Coincidence - Chapter 2: A comparison of microelectrode and whole-cell patch recordings</b> <i>J.P. Horn (USA)</i>	5:15pm - 5:30pm <b>S18.4 Patterns of blood pressure abnormality in spinal cord injury compared to other autonomic neuropathies</b> <i>C.J. O'Callaghan (Australia)</i>
	5:25pm - 5:40pm <b>S16.5 Distinguishing neuronal populations within the lamina terminalis mediating cardiovascular, body fluid and thermoregulatory homeostasis</b> <i>M.J. McKinley (Australia)</i>	5:45pm - 6:00pm <b>S17.5 Purinergic signalling in the mouse pulmonary neuroepithelial body microenvironment</b> <i>D. Adriaensen (Belgium)</i>	5:30pm - 6:00pm <b>S18.5 Selective activation of muscle and cutaneous nociceptors does not trigger autonomic dysreflexia in human spinal cord injury: a comparison of spinal somatosympathetic reflexes triggered by myelinated and unmyelinated afferents</b> <i>V.G. Macefield (Australia)</i>
	5:40pm - 6:00pm <b>S16.6 A small group of neurons in the medulla fine-tune body temperature control thermoregulation and fever by regulating heat loss in the Wistar rat I</b> <i>C.J. Lindsey (Brazil)</i>		
		<b>Farewell Drinks</b> Venue: Grand Ballroom Foyer	
6:00pm - 7:00pm			