

NEURAL, HORMONAL AND RENAL INTERACTIONS IN LONG-TERM BLOOD PRESSURE CONTROL

**December 9 - 12, 2008
Mahabalipuram, India**

PROGRAM AND ABSTRACTS

We thank the following sponsors for supporting this meeting

**Data Sciences International
Telemetry Research
Wiley Blackwell**

ORGANISING COMMITTEE:

**Clive May (Chair)
Peter Bie
Roger Evans
Greg Fink
Simon Malpas
John Osborn (Chair Program committee)
Andreas Patzak**

Please note: Welcome and farewell dinners at 19.00

12.10 - 12.30	Role of the MnPO in the chronic hypertensive effects of Angiotensin II. <u>J. Collister</u>	7
12.30 - 12.50	Do cytokines in the brain play a role in neurogenic hypertension? <u>M. Raizada</u>	8
12.50 - 13.00	Discussion	
13.00 - 14.00	Lunch	

Session 3: WHAT IS THE LINK BETWEEN SODIUM HOMEOSTASIS AND LONG-TERM CONTROL OF ARTERIAL PRESSURE?

Chair: Michael McKinley
Discussant: Greg Fink

14.00 - 14.40	Plenary 4: Total body sodium: internal signaling and output control. <u>P. Bie</u>	9
14.40 - 15.00	Salt sensitivity at normal blood pressure: How, what and whom? <u>M. Damkjaer</u>	10
15.00 - 15.20	Role of the renin-angiotensin-aldosterone system for control of arterial blood pressure during reduced total body sodium – balance studies in freely moving dogs. <u>E. Seeliger</u>	11
15.20 - 15.40	Afternoon Tea	
15.40 -16.40	Guided Poster Session 1 (Abstracts 12-20)	
16.40 -17.00	Sodium-Lithium Countertransport Activity as a Determinant Salt Sensitive Hypertension in the Baboon. <u>J. R. Haywood</u>	21
17.00 - 17.20	How do elevations in brain sodium concentration increase blood pressure? <u>C.N. May</u>	22
17.20 - 17.40	Brain benzamil-blockable sodium channels contribute to AngII-salt hypertension in conscious rats. <u>J. Osborn</u>	23

THURSDAY DECEMBER 11

Session 4: ROLE OF DEVELOPMENTAL FACTORS AND ADAPTATION IN CARDIOVASCULAR DISEASES

Chair: Marellyn Wintour-Coghlan
Discussant: Andreas Patzak

8.30 - 9.00	Plenary 5: Hypothesis: The combination of high salt intake and maternal malnutrition is a risk factor for hypertension in disadvantaged populations. <u>A.G. Thrift</u>	24
9.00 - 9.30	Plenary 6: Clinical salt studies – Mouse high salt treatment leading to hypertension the young adult. <u>E. Persson</u>	25
9.30 - 9.50	“Glomeruli and Blood Pressure. Less of one, More the Other?” Time to question the Brenner Hypothesis. <u>M. Kett</u>	26
9.50 - 10.10	Development of Salt-Sensitive Hypertension in Hydronephrosis. <u>M. Carlström</u>	27
10.10 - 10.30	Developmental origins of cardiovascular disease in adulthood. <u>H.C. Parkington</u>	28
10.30 - 10.40	Morning Tea	
10.40 - 11.40	Guided Poster Session 2 (Abstracts 29-38)	

Session 5: THE SYMPATHETIC NERVOUS SYSTEM AND CARDIOVASCULAR DISEASES: WHERE’S THE EVIDENCE?

Chair: Geoff Head
Discussant: John Osborn

11.40 - 12.10	Plenary 7: Mechanisms and Significance of Baroreflex Activation in Hypertension. <u>T. Lohmeier</u>	39
12.10 - 12.40	Plenary 8: Sympathetic activation in cardiovascular disease; does it really occur? <u>S. Malpas</u>	40
12.40 - 13.00	Does the sympathetic nervous system contribute to cardiovascular disease? <u>M. Kneupfer</u>	41
13.00 - 13.20	Sympathetic Nervous System in the Development of Mild DOCA-salt Hypertension. <u>S. Kandlikar</u>	42
13.20 - 14.20	Lunch	

Free Afternoon

FRIDAY DECEMBER 12

Session 6: RENAL DISEASE AND ARTERIAL PRESSURE REGULATION

Chair: Tom Lohmeier
Discussant: Clive May

8.30 - 9.00	Plenary 9: Could hypertension possibly be adaptive? <u>E.S. Prakash</u>	43
9.00 - 9.20	Renal sympathetic neuroeffector function in obesity. <u>R. Evans</u>	44
9.20 - 9.40	Determining the mechanism of increased sympathetic nerve activity in animal models of renal disease. It's not RAAS: it's the renal afferents – but how do we prove it? <u>J. Phillips</u>	45
9.40 - 10.00	Cardiovascular disease in a novel model of polycystic kidney disease is associated with autonomic dysfunction. J. <u>Harrison</u>	46
10.00 - 10.20	The initiating role of tubuloglomerular feedback in the development of hypertension. <u>R. Brown</u>	47
10.20 - 10.40	Angiotensin II-adenosine-interaction in the juxtaglomerular apparatus and its modification in hydronephrotic and NOX2 deficient mice. <u>A. Patzak</u>	48
10.40 - 11.10	Morning Tea	

Session 7: CAUSES, MECHANISMS AND TREATMENTS OF HEART FAILURE

Chair: John Collister
Discussant: Kim Johnson

11.10 - 11.30	Plenary 10: Sympathetic activation in heart failure, a normal reflex response or amplification by pathological mechanisms? <u>C.N. May</u>	49
11.30 - 11.50	Gene-targeting of guanylyl cyclase/natriuretic peptide receptor-A enhances ACE and AT1a receptor gene expression leading to cardiac hypertrophy: Dissociation from the effect of high blood pressure. <u>K.N. Pandey</u>	50
11.50 - 12.10	The fractalkine receptor cx3cr1 is up-regulated in the brain of heart failure rats. <u>P.J. Ruchaya</u>	51
12.10 - 12.30	Differential control of sympathetic burst amplitude to the kidney and the heart during volume expansion. <u>R. Ramchandra</u>	52
12.30 - 12.50	Central Infusion of losartan reduces the elevated cardiac sympathetic nerve activity in heart failure. <u>S. Hood</u>	53
12.50 - 13.10	Sympathoinhibitory actions of the urocortins suggest therapeutic potential in acute cardiac injury. <u>C. Charles</u>	54
13.10 - 14.00	Lunch	

Session 8: EMERGING IDEAS FROM INDIA II

14.00 - 15.30

Chairs: Bie P, Haywood JR, Johnson A, Lohmeier T, Osborn J, Persson E.

Chairs to lead a discussion of the important points that have emerged from the meeting

Open discussion

Plans for follow up meeting

15.30 - 16.00 Afternoon Tea

19.00 Farewell Dinner