

PROGRAMME

7th UK NO Forum

18th December 2006

University of Hertfordshire
College Lane, Hatfield
AL10 9AB

- 9:00-10:00 Registration & poster set-up (Lindop Building, College Lane Campus) with tea, coffee and Danish pastries
- 09:50 Welcome by Professor Wendy Purcell, Deputy Vice-Chancellor, UH
- 10:00-12:00 **Session I** (Chair: Anwar Baydoun)
- 10:00 **David J Rowlands** (*London*)
Rapid activation of eNOS/Hsp90 association by dietary isoflavones involving ERK1/2 and PI(3)-Kinase/AKT.
- 10:20 **Roisin Kelly** (*Cape Town*)
Characteristics of the response of the iliac artery to wall shear stress in the anaesthetised pig.
- 10:40 **Khalid Naseem** (*Bradford*)
Thrombospondin-1 modulates platelet sensitivity to nitric oxide.
- 11:00 **Vilma Borutaite** (*Cambridge*)
Mitochondria in NO-induced cardioprotection against ischaemic damage.
- 11:20 **Nathan Davies** (*London*)
Decreased systemic arginine/ADMA ratio in a porcine model of acute liver failure: implications for NO production and regional vascular control.
- 11:40 **Gary Loake** (*Edinburgh*)
Uncovering the functions of S-nitrosothiols in plant disease resistance.
- 12:00-13:00 **Buffet lunch and poster session**
- 13:00-14:00 **Guest Lecture: Salvador Moncada (London)**
Mitochondria: The new frontier in nitric oxide research
(Chair: Richard Knowles)
- 14:00-15:00 **Session II** (Chair: Nicholas Warrick)
- 14:00 **Guy Brown** (*Cambridge*)
Nitric oxide from neuronal nitric oxide synthase sensitises neurons to hypoxia-induced death via competitive inhibition of cytochrome oxidase.
- 14:20 **Peter Nicholls** (*Essex*)
Inhibition of cytochrome c oxidase by nitric oxide.
- 14:40 **Sarah Fox** (*Edinburgh*)
NO-loaded zinc ion exchanged zeolites as potential anti-bacterial agents
- 15:00-15:30 **Break: Coffee and continued poster viewing**

- 15:30-17:00 **Session III** (Chair: Giovanni Mann)
- 15:30 **Shori Thakur** (*Hatfield*)
y⁺LAT-1 and CAT-2B respectively transport GW274150 in control and activated J774 macrophages.
- 15:45 **Nicholas Warrick** (*Oxford*)
Relationships between tetrahydrobiopterin (BH₄) and endothelial nitric oxide synthase (eNOS): Insights from novel tetracycline (TET)-regulatable cell lines.
- 16:05 **Andrew Welland** (*Edinburgh*)
The acute sensitivity of nNOS to changes in the domain-domain interface.
- 16:25 **Nick Watmough** (*Norwich*)
Bacterial nitric oxide reductase: Cellular saviour and environmental bandit.
- 16:45 **Bhavik A Patel** (*London*)
Detection of nitric oxide release from single neurons in the pond snail, *Lymnaea Stagnalis*.
- 17:00 Closing comments (Alan Wallace)
- 17:10-18:00 Drinks reception.

Poster Communications

Title and Authors

P.1 The chemistry of S-nitrosothiols and nitrosation

Butler, A.

P.2 γ^+ LAT-1 and CAT-2B respectively transport GW274150 in control and activate J774 macrophages.

Thakur, S., Vyas, A., Knowles, R.G. and Baydoun, A.R.

P.3 Inhibition of induced L-arginine transport in Rat cultured aortic smooth muscle cells by dominant negative IKB- α but not by dexamethasone

Thakur, S., Cui, Z. and Baydoun, A.R.

P.4 SP600125 differentially regulate the inducible L-arginine nitric oxide pathway in J774 macrophages but not in rat aortic smooth muscle cells.

Thakur, S and Baydoun, A.R.

P.5 Differential regulation of induced nitric oxide synthesis and L-arginine transport in vascular smooth muscle cells by a JAK family member other than JAK-2

Sanz, A.S. and Baydoun, A.R.

P.6 Regulation of L-arginine transport and nitric oxide synthesis by phosphatases

Sun, L. and Baydoun, A.R.

P.7 Rapid activation of eNOS/Hsp90 association by dietary isoflavones involving ERK1/2 and PI(3)-Kinase/AKT

Rowlands, D.J., Siow, R.C.M. and Mann, G.E.

P.8 Hyperglycaemia: effect on NO synthase and iron transport in the endothelium

Rylah, O., Low, S.Y., Bruckdorfer, K.R., Kaila, S. and Srail, S.

P.9 Characteristics of the response of the iliac artery to wall shear stress in the Anaesthetised pig

Kelly, R.F. and Snow, H.M.

P.10 Thrombospondin-1 modulates platelet sensitivity to nitric oxide

Roberts, W., Riba, R. and Naseem, K.M.

P.11 Inhibition of collagen-induced platelet adhesion by nitric oxide: evidence for targeting of TxA₂ signalling.

Roberts, W., Riba, R. and Naseem, K.M.

P.12 Mitochondria in NO-induced cardioprotection against ischaemic damage

Borutaite, V. and Brown, G.

P.13 Decreased systemic arginine/ADMA ratio in a porcine model of acute liver failure: implications for NO production and regional vascular control

Davies, N.A., Sen, S., Hodges, S.J., Ytrebo, L.M., Mookerjee, R.P. Zou1, Z., Williams, R., Dalton, R.N., Turner, C., Revhaug, A. and Jalan, R.

- P.14 Dimethylarginine (NOS inhibitor) levels predict in-patient mortality in alcoholic hepatitis**
Mookerjee, R.P., Sen, S., Davies, N.A., Hodges, S.J., Turner, C., Dalton, R.N., Williams, R. and Jalan, R.
- P.15 Characterisation of the DDAH 1 haploinsufficient mouse: A causal role of elevated ADMA in the pathogenesis of cardiovascular disease.**
Torondel, B., Nandi, M., Stidwill, R., Rudiger, A. and Leiper, J.
- P.16 Potential therapeutic benefit of novel DDAH inhibitors for the treatment of endotoxemia**
Nandi, M., Rossiter, S., Torondel, B., Maliki, M., Smith, C., Gill, H. Stidwill, R., Leiper, J. and Vallance, P.
- P.17 Uncovering the functions of S-nitrosothiols in plant disease resistance**
Feechan, A., Kwon, E-J., Yun, B.Y., Wang, Y., Pallas, J.A. and Loake, G.J.
- P.18 Inhibition of cytochrome c oxidase by nitric oxide**
Nicholls, P., Mason, M.G., Cooper, C.E. and Wilson, M.T.
- P.19 Nitric oxide inhibition of terminal oxidase in *Escherichia coli***
Mason, M.G., Nicholls, P., Wilson, M.T. Poole, R.K. and Cooper, C.E.
- P.20 NO-loaded zinc ion exchanged zeolites as potential anti-bacterial agents**
Fox, S., Wilkinson, T.S., Wheatley, P.S., Xiao, B., Morris, R.E., Butler, A.R., Megson, I.L. and Rossi, A.G.
- P.21 Novel N-hydroxyguanidines and related compounds as NO-donors**
Kulczynska, A., Zhang, Q., Botting, N.P., Milliken, P., Mitchell, R., Megson, I and Webb, D.J.
- P.22 Relationships between tetrahydrobiopterin (BH4) and endothelial nitric oxide synthase (eNOS): Insights from novel tetracycline (TET)-regulatable cell lines**
Warrick, N., Antoniadou, C., Tatham, A.T., Crabtree, M., Cai, S., McDonald, D., Paterson, D.J. and Channon, K.M.
- P.23 The acute sensitivity of nNOS to changes in the domain-domain interface**
Welland, A.D., Miles, C.S., and Daff, S.
- P.24 A Stabilised Intermediate Observed During Oxygen Activation by nNOS**
Papale, D., Miles, C.S. and Daff, S.
- P.25 Modulation of local nitric oxide effects on medium spiny neurons in the nucleus accumbens**
Hartung, H., Tynan, P.W. and French, S.J.
- P.26 Bacterial nitric oxide reductase: Cellular saviour and environmental bandit**
Field, S.J., Thorndycroft, F.H., Matorin, A., Richardson, D.J. and Watmough, N.J.
- P.27 Detection of nitric oxide release from single neurons in the pond snail, *Lymnaea Stagnalis*.**
Bhavik A Patel