

## ORAL COMMUNICATIONS

*In oral communications with more than one author, the first author is the one who intended to present the work*

- 1P **Konstantinidis M, Hart S, Han J, Marber M, Pearson J & Baydoun AR**  
Regulation of inducible nitric oxide synthase and cationic amino acid transport by p38 $\alpha$  and p38 $\beta$  MAP kinases in rat cultured aortic smooth muscle cells
- 2P **Cui Z, Tuladhar R, Hart S, Marber M, Pearson J & Baydoun AR**  
Inducible nitric oxide synthase alone does not enhance transport of L-arginine in HEK293 cells
- 3P **Thakur S, Cui Z, Brzeski H & Baydoun A**  
Requirement of NF $\kappa$ B for the induction of L-arginine transport in rat cultured aortic smooth muscle cells
- 4P **Seatter MJ, Drummond RM, Macfarlane SR, Kanke T & Plevin R**  
The role of the C-terminus in protease-activated receptor-2-mediated intracellular Ca<sup>2+</sup> signalling, PYK-2 activation and mitogen-activated protein kinase activity
- 5P **Baker JG, Hall IP & Hill SJ**  
Response-dependent agonist and inverse agonist properties of propranolol at the human  $\beta_2$ -adrenoceptor expressed in CHO-K1 cells
- 6P **Bridson SJ, Cordeaux Y, Middleton RJ, Kellam B & Hill SJ**  
Visualisation of adenosine-A<sub>1</sub> receptors using the novel fluorescent ligand, xanthine amine cogen-bodipy630/650
- 7P **Yang D, Félétou M, Levens N, Zhang JN & Vanhoutte PM**  
A diffusible substance mediates endothelium-dependent contractions in the aorta of spontaneously hypertensive rats
- 8P **Katz LM, Marr CM & Elliott J**  
Characterisation of the relaxant responses of equine digital blood vessels to substance P
- 9P **Summers A, Parsons ME & Whelan CJ**  
Characterisation of nicotine receptors in the human lymphocytic cell line Jurkat
- 10P **Klee S, Bramhall J, Vecchione A, Sykes A, Parsons ME & Whelan CJ**  
Characterisation of the nicotine receptor mediating inhibition of TNF $\alpha$  release from THP-1 cells *in vitro*
- 11P **Coutts A & Anavi-Goffer S**  
Vanilloid receptor type 1-immunoreactivity and calcium binding proteins in the guinea-pig myenteric plexus
- 12P **Ross RA, Ellington HC, Cotter MA & Cameron NE**  
The effect of cannabinoids on capsaicin-evoked calcitonin gene-related peptide (CGRP) release from the isolated hindpaw skin of diabetic and non-diabetic rats
- 13P **Duncan M, Kendall DA & Ralevic V**  
The endocannabinoid noladin ether attenuates sensory neurotransmission in the rat isolated mesenteric arterial bed
- 14P **Ihenetu K, Salmon DM, Molleman A, Parsons M & Whelan CJ**  
Cannabinoids decrease intracellular Ca<sup>++</sup> and inhibit ligand-induced rises in [Ca<sup>2+</sup>]<sub>i</sub> in an epithelial cell line (HT29)
- 15P **Kelly S & Chapman V**  
The effect of a selective cannabinoid CB<sub>1</sub> receptor agonist on mechanical punctate evoked responses of spinal neurons in anaesthetised rats
- 16P **Brooks JW, Rice ASC, Thompson SWN & Malcangio M**  
(S)-AMPA inhibits electrically evoked calcitonin gene-related peptide (CGRP) release from the rat dorsal horn: reversal by cannabinoid antagonist SR141716A
- 17P **Nicholson JR, Akil H & Watson SJ**  
The involvement of Nociceptin/Orphanin FQ in the physiological mediation of feeding behaviour in rats.
- 18P **Murray C, Dass N, Emmanuel A & Sanger G.J**  
Facilitation by ghrelin and metoclopramide of nerve-mediated excitatory responses in mouse gastric fundus circular muscle
- 19P **Beveridge TJR & Elliott JM**  
Down-regulation of the 5-HT<sub>2A</sub> receptor by mianserin in rat brain is associated with a change in expression of the immediate early gene Arc
- 20P **Al-Damluji S & Ganellin CR**  
Structural properties of Group B ligands for transport-P
- 21P **Dayan L & Finberg JPM**  
L-DOPA increases intraneuronal release of noradrenaline in rat frontal cortex
- 22P **de Ceballos ML, Brera B & Fernández-Tomé MP**  
 $\beta$ -Amyloid<sub>25-35</sub> inhibits glutamate uptake in cultured neurons and astrocytes: modulation of uptake as a survival mechanism
- 23P **Johnston T & Duty S**  
Baclofen alleviates akinesia following intranigral and intraventricular injection in the reserpine-treated rat but fails to inhibit glutamate release from rat nigral slices

24P **Lees P, Arifah A K & Landoni M F**  
Pharmacodynamics, chiral pharmacokinetics and PK-PD modelling of ketoprofen in the goat

25P **Lees P & Shojaee AliAbadi F**  
Pharmacokinetics, pharmacodynamics and PK-PD integration of danofloxacin in sheep biological fluids

## POSTER COMMUNICATIONS

26P **Greenwood IA, Ohya S & Horowitz B**  
Characterization of murine ERG1a channels expressed in HEK cells

27P **Bailey SR, Berhane Y & Elliott J**  
Effects of tryptamine on the equine isolated perfused digit preparation

28P **Wiley KE, Stoneman VEA, Bennett MR & Davenport AP**  
Increased vasoconstriction to endothelin-1 in aorta from apolipoprotein E knockout mice devoid of atherosclerotic lesions

29P **Turner RR & Brown MJ**  
Identification of a novel variant in exon 19 of the endothelial nitric oxide synthase gene

30P **Brahmadevara N, Shaw AM & MacDonald A**  
Effects of endothelium and pre-constriction on  $\beta$ -adrenoceptor-mediated relaxation in rat isolated aorta

31P **Kang KB, van der Zyppe A, Rajanayagam MAS & Majewski H**  
Effects of aging on cyclooxygenase expression and the  $\alpha_1$ -adrenoceptor signalling pathway in rat aortae

32P **Gassem F, Brzeski H, Foxwell N & Baydoun AR**  
Characteristics of L-arginine transport and nitric oxide synthesis in the p53 mutated CAPAN-1 human pancreatic tumour cell line

33P **Baydoun AR, Dawson J, Thakur S & Knowles RG**  
Transport mechanisms for GW274150, a potent and selective inhibitor of inducible nitric oxide synthase

34P **Greenaway EC, Goode NT & Cunningham FM**  
Role of protein kinase C in equine eosinophil superoxide production and adherence

35P **Andrews M, Waterworth T, Rickards K & Cunningham F**  
Effect of phosphodiesterase inhibitors on equine platelet aggregation

36P **Young JJ, Smith E & Hoffman R**  
Detection of multiple forms of vascular endothelial growth factor (VEGF) and endostatin in leg ulcer fluid.

37P **Nevin BJ & Broadley KJ**  
Effects of selective inducible nitric oxide synthase (iNOS) inhibition on allergen-induced airway responses in conscious guinea-pigs

38P **Clark JH, Martin TJ, Yates L, Kidd EJ, Nicholson RI & Broadley KJ**  
Characterisation of transfected human adenosine A<sub>3</sub> receptors

39P **Andersson H, Summers A, Ihenetu K & Whelan CJ**  
Induction of apoptosis in the epithelial cell line HT29 by nicotine and tobacco smoke condensate

40P **Pantasri P, Rapley R, Hoffman R, Walker JM, Lord PG, Skehel MJ, Kramer K & Doyle KM**  
Protein expression in rat liver: response to short term treatment with phenobarbital using two-dimensional gel electrophoresis

41P **Patel JD & Ebenezer IS**  
Previous exposure to cholecystokinin sensitises the guinea pig isolated ileum to the contractile effects of acetylcholine

42P **Talubmook C, Forrest AS & Parsons ME**  
Alterations in basal and evoked contractile responses of intestinal tissue from streptozotocin-induced diabetic rats

43P **Borman RA, Coleman RA & Clark KL**  
Investigation of the excitatory effects of 5-HT on contractile responses of human colon smooth muscle

44P **Cochrane S, Quinn T, O'Donoghue DP, Baird AW & Brayden DJ**  
The effect of myosin light chain kinase inhibition on pharmacologically induced changes in paracellular intestinal epithelial permeability

45P **Forrest AS, Quinn T, Keenan AK, Usher C, Parsons ME, Baird AW & Brayden DJ**  
Megacolon in the streptozotocin-treated diabetic rat

46P **Quinn T, Molloy M, Smith A & Baird AW**  
Capacitative calcium entry in guinea-pig gallbladder smooth muscle

47P **Valentine SM & Lummis SCR**  
The role of non-conserved proline residues in the extracellular domain of the mouse 5-HT<sub>3A</sub> receptor

48P **Cumberbatch N, Calvert G, Thompson KSJ, Cheetham SC, Watts JP & Cockcroft V**  
Identification of the critical residues in melanin concentrating hormone (MCH) involved in human MCH<sub>1</sub> (SLC-1) receptor activation

49P **Liddle R, Aitken J, Oldfield K, Watts JP, Cockcroft V & Cheetham SC**  
Residues in melanin concentrating hormone (MCH) involved in high affinity binding to MCH<sub>1</sub> (SLC-1) receptors

- 50P **Liddle R, Aitken J, Oldfield K, Brownhill V & Cheetham S**  
Characterisation of [<sup>3</sup>H]Phe<sup>13</sup>, Tyr<sup>19</sup>-MCH binding to human MCH<sub>1</sub> (SLC-1) receptors
- 51P **Baker JG, Hall IP & Hill SJ**  
Antagonism of isoprenaline- and salbutamol-stimulated cyclic AMP accumulation by β<sub>2</sub>-antagonists in CHO-K1 cells expressing the human β<sub>2</sub>-adrenoceptor
- 52P **Overbury AL, Kendall DA & Marsden CA**  
The effect of 5-HT depletion on central cannabinoid receptor function
- 53P **Craib SJ, Thomas A, Ross RA & Pertwee RG**  
Cannabidiol attenuates responses of the mouse isolated vas deferens to WIN55212-2 and noradrenaline
- 54P **Chari R, Iannazzo L & Majewski H**  
The conventional isoforms of protein kinase C are targeted in the endogenous facilitation of noradrenaline release in the rat brain cortex
- 55P **Rousseau S, Wonnacott S & Pullar I**  
Activation of presynaptic nicotinic acetylcholine receptors modulates the depolarisation dependent release of [<sup>3</sup>H]D-aspartate from rat frontal cortex synaptosomes
- 56P **Lever IJ, Cunningham JR, Pezet S & Malcangio M**  
BDNF facilitates potassium stimulated GABA release from the isolated rat dorsal horn
- 57P **Khundakar AA, Mazumdar A & Zetterstrom TSC**  
Gene expression for brain derived neurotrophic factor in rat hippocampus is reduced by baclofen, tranlycypromine and paroxetine but not flunitrazepam
- 58P **Lee JJ & Croucher MJ**  
Differential roles of Group I and Group II mGlu receptors in the regulation of 5-HT release in the rat frontal cortex *in vivo*
- 59P **Messenger MJ, Dawson L & Duty S**  
Changes in Group I, II and III metabotropic glutamate (mGlu) receptor gene expression in the basal ganglia and thalamus of rats with a nigrostriatal tract lesion
- 60P **De Sarro G, Ferreri G, Russo E, Gitto R, Barreca ML & Chimirri A**  
Anticonvulsant activity of tetrahydroisoquinoline derivatives as potential new AMPA receptor antagonists
- 61P **Lightbown ID, Miner WD & Gale JD**  
The anti-emetic activity of S(-)-eticlopride against morphine- and ipecacuanha-induced emesis in the conscious ferret
- 62P **MacDonald E, Lähdesmäki J, Sallinen J & Scheinin M**  
The α<sub>2A</sub>-adrenoceptor is activated after amphetamine administration and protects hippocampal noradrenergic nerves in mice from transmitter depletion
- 63P **Quate L, McBean DE, Ritchie IM, Olverman HJ & Kelly PAT**  
Acute methylenedioxymethamphetamine administration: effects on local cerebral blood flow and glucose utilisation in the rat
- 64P **Murphy JEJ, McBean GJ, Guiry PJ, McCormack P, Baird AW & Keenan AK**  
*In vitro* effects of (±)-4-methylthioamphetamine, (±)-4-methylthiomethamphetamine and (±)-MDMA on vascular responses to noradrenaline and phenylephrine
- 65P **Aston JC & Elliott JM**  
Paroxetine modulates the expression of the immediate early gene arc induced by MDMA in rat brain
- 66P **Garlton J, Ashmeade T, Duxon M, Hagan JJ & Jones DNC**  
C-fos induction following central administration of urotensin-II
- 67P **More JCA, Troop HM & Jane DE**  
N<sup>3</sup>-tetrazolylalkylwillardiine analogues are AMPA and kainate receptor antagonists
- 68P **Tel BC, Rose S & Jenner P**  
Ropinirole, bromocriptine and L-DOPA have a differential effect on striatal dopamine D2 and D3 but not D1 receptor mRNA expression in MPTP-treated marmosets
- 69P **Jenkins S, Tucker L & Clarke RW**  
Evidence that excitatory spinal actions of a triptan are mediated through 5-HT<sub>7</sub> receptors
- 70P **Arkle MJM, Arkle S & Ebenezer IS**  
Investigation of the mechanism of tolerance to the anorexigenic effects of 8-hydroxy-2-(di-N-propylamino)-tetralin (8-OH-DPAT) in food-deprived rats
- 71P **Ebenezer IS**  
Pretreatment with the CCK<sub>1</sub> receptor antagonist attenuates the suppressant effect of the 5-HT<sub>1A</sub> receptor agonist gepirone on food intake in hungry rats
- 72P **Patel SM & Ebenezer IS**  
Effects of chronic administration of the GABA<sub>B</sub> agonist baclofen on food intake in rats

## DEMONSTRATION

- 73P **Dewhurst DG, Collins GGS & Cromar S**  
A computer simulation of the sciatic nerve-tibialis anterior muscle preparation of the cat *in vivo* to teach neuromuscular pharmacology to undergraduate students

## ABSTRACTS FROM SYMPOSIA PRESENTED AT THE MEETING

*Abstracts from symposia have not been subjected to the refereeing process undergone by the other communications presented at the meeting*

### **PATHOLOGIES OF THE NERVOUS SYSTEM: UNDERLYING MECHANISMS AND NEW TREATMENTS**

*Thursday 11<sup>th</sup> April 2002*

- |   |   |
|---|---|
| 74P <b>Tomlinson DR, Purves T &amp; Fernyhough P</b><br>Diabetic neuropathies | 76P <b>Milla P</b><br>The enteric nervous system and its contribution to gastrointestinal disorders |
| 75P <b>Hill RG</b><br>Pain and its treatment                                  | 77P <b>Jenner P</b><br>Mechanisms of neurodegeneration in CNS disorders such as Parkinson's disease |

### **PRESYNAPTIC RECEPTORS IN THE BRAIN AND PERIPHERY**

*Thursday 11<sup>th</sup> April 2002*

- |   |   |
|---|---|
| 78P <b>Langer SZ</b><br>An overview of presynaptic receptors              | 80P <b>McKnight AT</b><br>Presynaptic opioid receptors    |
| 79P <b>Bowery NG</b><br>Mammalian presynaptic GABA <sub>B</sub> receptors | 81P <b>Pertwee R</b><br>Presynaptic cannabinoid receptors |

### **TOPICS AND ISSUES IN VETERINARY AND BASIC PHARMACOLOGY**

*Friday 12<sup>th</sup> April 2002*

- |  |   |
|--|---|
| 82P <b>Lees P</b><br>Large animal models in studies of the pharmacology of anti-inflammatory drugs                 | 84P <b>Dickenson A</b><br>Recent advances in mechanisms of pain   |
| 83P <b>McKellar Q</b><br>Antimicrobial resistance: designing dosage schedules on basic pharmacological principles. | 85p <b>Nolan A</b><br>Use of large animal models in pain research |