ORAL COMMUNICATIONS

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

1P **Clark A, Watson WP & Little HJ** Effects of nicotine infusion on operant self-administration of ethanol

2P **Kelly S, Uney JB & McCulloch J** Effect of intense metabolic stress upon heat shock protein 70i transgenic mice: a [^{14}C]-2-deoxyglucose autoradiography study

3P **Callado LF & Stamford JA** The α_2 adrenoceptor controlling noradrenaline release in the rat locus coeruleus is of the α_{2A} subtype: voltammetric evidence

4P **Maratos E, Jackson MJ, Pearce RKB, Jenner P & Marsden CD** Comparison of repeated treatment with L-DOPA, pergolide and apomorphine on dyskinesia induction in MPTP-treated common marmosets

5P **Nicholson JR & McKnight AT** The effect of the agonist Ac-RYYRWKNH_2 and the antagonist [Phe^{1}y(CH_2-NH)Gly^2]nociceptin(1-13)NH_2 at the ORL1 receptor of central and peripheral sites

6P **Hughes ZA & Sharp T** Evidence that pindolol lacks the ability to enhance the effect of SSRIs on presynaptic 5-HT function

7P **Tattersall JEH, Smith AP, Waters K, Mistry R, & Weeden D** Therapeutic action of HI-6 against soman poisoning *in vitro*: an interspecies comparison

8P **Knowles ID & Ramage AG** Activation of central 5-HT_{2B} receptors causes renal sympathoexcitation in anaesthetized rats

9P **Andersson DA, Zygmunt PM & Högestatt ED** Pharmacological evidence for the involvement of IK_{Ca} and SK_{Ca} in EDHF-mediated relaxation of the rat hepatic artery

10P **Patel HJ, Halfpenny J, Venkatesan P, Barnes PJ, Yacoub MH, Fox A & Belvisi MG** Modulation of acetylcholine release from cholinergic nerves innervating human and guinea-pig trachea by endomorphin –1 and –2

11P **Lal H, Williams KI & Woodward B** Normoxic perfusion of chronically-hypoxic (CH) rat isolated lungs leads to pulmonary vasoconstriction mediated by endogenous endothelins via the activation of ET_B receptors

12P **Hawthorn MH, Chapple CR & Chess-Williams R** Inhibitory effects of the mucosa on the contractile responses of the pig detrusor muscle

13P **Davis BJ, Chapple CR & Chess-Williams R** α_1-adrenoceptor subtypes in human penile tissue

14P **Teixeira CE, Antunes E & de Nucci G** The effects of α- and β-adrenoceptor antagonists on the rabbit corpus cavernosum relaxation mediated by *Tityus serrulatus* scorpion venom

15P **Harris D, Kendall DA & Randall MD** Effects of AM 404, a cannabinoid reuptake inhibitor, on EDHF-mediated relaxations in the rat isolated mesentery

16P **McIntyre CA, Andrews RC, Elliot A, Gray GA, Williams BC, McKnight JA, Walker BR & Hadoke PWF** Endothelium-derived hyperpolarizing factor mediates to a large extent acetylcholine-induced relaxation of human subcutaneous resistance arteries

17P **MacKenzie A & Martin W** A superoxide dismutase mimetic impairs basal nitric oxide activity in rat aorta

18P **Brawley L, MacDonald A & Shaw AM** Role of endothelium in classical and atypical β-adrenoceptor-mediated vasorelaxation in rat isolated aorta

19P **Emsley AM, Wyatt MC, Jeremy JY, Sorenson JRJ & Plane F** Inhibition of endothelium-dependent relaxation of rat isolated aortic rings by a low molecular mass complex of copper

20P **Stanford SJ, Pepper JR & Mitchell JA** GM-CSF release from human vascular smooth muscle cells is suppressed by co-induced COX-2

21P **Morris SA, Correa V, Cardy TJA & Taylor CW** Interactions between inositol trisphosphate receptors and fluorescent Ca^{2+} indicators

22P **Cardy TJA & Taylor CW** Ca^{2+}-independent inhibition of type 1 inositol trisphosphate receptors by calmodulin

23P **Davis RJ, Challiss RAJ & Nahorski SR** Antagonism of receptor-mediated Ins(1,4,5)P_3-induced Ca^{2+} signalling by the partial agonist 3F-Ins(1)P,(4,5)PS_2

24P **Akam EC, Nahorski SR & Challiss RAJ** Analysis of M_1, M_2, M_3, M_4 – muscarinic cholinoceptor – G protein coupling using [^{35}S]-GTPγS and Gα-specific immunoprecipitation.

25P **Wylie PG, Challiss RAJ & Blank JL** Comparative study of extracellular signal regulated protein kinase (ERK) and c-Jun NH_2-terminal kinase (JNK) in CHO cells expressing M_2- and M_3-muscarinic receptors

26P **Halliwell RF, Thomas P, Smart TG, Martinez-Torres A & Miledi R** Subunit selective modulation of $GABA_A$ receptors by the NSAID mefenamic acid.

27P **Alexander SPH** Binding of the antagonist radioligand [^{3}H]-ZM241385 to A_{2A} adenosine receptors in rat brain homogenates

28P **Smart D, Langmead C & McKnight AT** Inhibition by PD165929, a BB_1 antagonist of desensitisation at the human BB_1 receptor

29P **Burke-Gaffney A & Hellewell PG** Extracellular matrix proteins associated with human bronchial epithelial cells mediate eosinophil adhesion

30P **Conran N, Ferreira HHA, Antunes E & de Nucci G** Inhibition of FMLP-stimulated eosinophil *in vitro* chemotaxis by N$^\omega$-nitro-L-arginine methyl ester

31P **Blease K, Chen Y, Hellewell PG & Burke-Gaffney A** Interactions between lipoteichoic acid and lipopolysaccharide on human lung microvascular endothelial cell adhesion molecule expression and interleukin-8 release

32P **Coward WR & Church MK** The modulation of NK-κB and subsequent cytokine production in human purified mast cells: a role for protein kinase A

33P **Lever R & Page CP** Effect of heparin upon adhesion of polymorphonuclear leucocytes to stimulated human umbilical vein endothelial cells and adhesion molecule expression *in vitro*

34P **Coogan AN & O'Connor JJ** Interleukin-1β inhibits a tetraethylammonium-induced synaptic potentiation in the rat dentate gyrus *in vitro*

35P **Giuliano F & Warner TD** *Ex vivo* assay to determine the cyclooxygenase selectivity of non-steroidal anti-inflammatory drugs

36P **Zacharowski K, Olbrich A & Thiemermann C** Agonists of the prostanoid EP_3-receptor reduce myocardial infarct size in a rat model of myocardial ischaemia and reperfusion

37P **McDonald MC, Bowes J & Thiemermann C** The stable nitroxide radical Tempol reduces infarct size caused by regional ischaemia and reperfusion in the isolated, perfused heart of the rat

POSTER COMMUNICATIONS

38P **Cahir M, Konkel MJ, Durkin MM, Wetzel JM, Branchek TA & Craig DA** Autoradiographic distribution of the α_{1D} adrenoceptor in the rat CNS

39P **Gardiner JC, Gupta P, Butler P, Pryke JG & Roffey SJ** The sodium channel modulators lamotrigine and 4030W92 block ectopic discharge originating in rat sciatic neuromas

40P **Sokal DM, Parker TL & Mason R** Differential effect of thapsigargin on bicuculline- and gabazine-induced epileptiform excitability in dissociated rat hippocampal neurones

41P **Yeung SY, Millar JA, Boyd DF, Jones G, Gittos MW & Mathie A** Block of neuronal K_v potassium currents by fluoxetine and iprindole

42P **Thomas P, Halliwell R, James CH & Smart TG** Modulation of $GABA_A$ receptors by mefenamic acid: Involvement of asparagine 290 in the second transmembrane domain of the β2 subunit

43P **Chadha A & Duty S** Alterations in $GABA_A$ α_1, β_2 and γ_2 receptor subunit gene expression in the globus pallidus in the 6-hydroxydopamine (6-OHDA) lesioned rat model of Parkinson's disease

44P **Iravani MM, Babwah R, Rose S & Jenner P** Dopamine cell loss and expression of inducible nitric oxide synthase immunoreactivity following intranigral injection of lipopolysaccharide

45P **Thomas LS, Jane DE & Croucher MJ** Glutamate autoreceptors of the $mGlu_5$ sub-type enhance neuronal glutamate release in the rat forebrain *in vitro*

46P **Attwell PJE, Singh Kent N, Jane DE, Croucher MJ & Bradford MH** The group II metabotropic glutamate receptor agonist DCG-IV increases generalized seizure thresholds in the amygdala kindling model of epilepsy.

47P **Bell MI, Richardson PJ, Pinnock RD & Lee K** APCD depolarises rat cholinergic interneurones through activation of group I metabotropic glutamate receptors

48P **Kaiser S & Wonnacott S** Nicotinic acetylcholine receptors on glutamatergic nerve terminals can enhance dopamine release in rat striatum

49P **Bulmer DCE, Hoskin KL, Lasalandra M & Goadsby PJ** L-NAME reduces Fos expression in trigemino-cervical complex after superior sagittal sinus stimulation in the anaesthetized cat

50P **Reeve AJ, Fox A, Walker MJK & Urban L** The spinal effects of interleukin-1β and an interleukin-1 converting enzyme inhibitor, SDZ-224-015 on the responses of dorsal horn neurones in the anaesthetized rat

51P **Trew EA, Xie XM & Trezise DJ** Modulation of synaptic transmission in the rat spinal cord *in vitro* by 4030W92, a novel antihyperalgesic agent

52P **Purbrick S, Meecham K, Hughes J & Williams RG** Influence of gabapentin on c-*fos* expression in rat spinal cord following intraplantar formalin injection.

53P **Blyth KL, Meecham K, Hughes J & Williams RG** Gabapentin binding in the rat spinal cord: effect of rhizotomy and capsaicin.

54P **Hopwood SE & Stamford JA** Differing effects of paroxetine and fluoxetine on 5-HT release and reuptake in the rat dorsal raphé nucleus.

55P **Stowe RL & Barnes NM** Co-localisation of $5\text{-}HT_7$ receptor mRNA with GAD_{67}-like immunoreactivity in rat brain neurones.

56P **Barton CL, Jay MT & Hutson PH** $5\text{-}HT_{1A}$ receptor binding *in vivo* using [^{3}H]-MPPF, a selective $5\text{-}HT_{1A}$ receptor ligand.

57P **Roberts C, Boyd DF, Price GW, Middlemiss DN & Routledge C** $5HT_{1A}$ receptor antagonism or uptake inhibition enhance the effects of $5\text{-}HT_{1B/1D}$ auto-receptor blockade on extracellular 5-HT in guinea-pig forebrain

58P **Price GW, Ho M, Scott C, Selkirk JV & Brown AM** 5-HT receptor agonist-antagonist binding affinity ratios as a measure of intrinsic activity, using [^{3}H]8-OH-DPAT and [^{3}H]MPPF as radioligands

59P **Hawcock AB, Bictash M, Lightbown I, Trevethick M & Gale J** Is Kojic amine a $GABA_B$ receptor agonist in the rat isolated anococcygeus?

60P **Javid FA & Naylor RJ** Characterisation of the 5-HT receptor mediating the contraction response to DOI in the proximal region of the *Suncus murinus* intestine

61P **Rhodes KF, Steiner T & Buckingham JC** Inhibitory effects of sumatriptan and zolmitriptan in the rat electrically stimulated vas deferens.

62P **German EJ, Wood D & Hurst MA** Comparison of muscarinic receptor subtypes in the sheep ciliary muscle and iris sphincter using a radioligand binding approach.

63P **Smith M & Ebenezer IS** The effects of chronic administration of the $5HT_{1A}$ agonist gepirone on food intake in food-deprived rats.

64P **Ebenezer IS, Vellucci SV & Parrott RF** Effects of the histamine-3 (H-3) receptor agonist GT2016 on food intake and cortisol secretion in pigs

65P **Reavill C, Kettle A, Holland V, Riley G & Blackburn TP** $5\text{-}HT_{2C}$ receptor antagonists, but not a $5\text{-}HT_{2A}$ or $5\text{-}HT_{2B}$ receptor antagonist, attenuate haloperidol-induced catalepsy in rat

66P **Hansard MJ, Smith LA, Jackson MJ, Cheetham SC & Jenner P** The antiparkinsonian ability of bupropion in MPTP-treated common marmoset

67P **Cheer JF, Kendall DA & Marsden CA** *In vivo* evidence for oleamide as a potential endo-cannabinoid ligand

68P **Melotto S, Poffe A, Gerrard PA, Reggiani A, Trist D & Ratti E** Use of telemetric recording of EEG, EMG and EOG to assess sleep parameters in the common marmoset

69P **Wetherell JR, Hall TL, Pinhorn V & Mumford H** The effect of cholinergic drugs on a range of parameters in the guinea-pig

70P **Robinson ESJ, Nutt DJ, Jackson HC & Hudson AL** Time course of spontaneous behavioural effects of antisense oligonucleotides targeting the α_{2D}-adrenoceptor in the rat

71P **Koubanakis M, Leake LD & Dupourqué B** The use of the leech (*Hirudo medicinalis*) Retzius cell as a model for studying the action of convulsants and anticonvulsants

72P **Thompson SA, Arden SA, Wingrove PB, Whiting PJ & Wafford KA** The selectivity of furosemide for α6-containing $GABA_A$ receptors is determined in part by Ile228

73P **Payne SL & Strange PG** Mechanisms of ligand binding and agonist efficacy at the human D_{2short} dopamine receptor

74P **Cucchi P, Patacchini R, Renzetti AR & Maggi CA** MEN 11420 is a potent antagonist at the naive and transfected human tachykinin NK_2 receptor

75P **Teh M-T & Sugden D** GR128107 is a partial melatonin receptor agonist on *Xenopus laevis* melanophores

76P **Parker CA, Nutt DJ & Hudson AL** [^{3}H]clonidine binding sites in rat kidney: a model for putative central imidazoline-1 sites

77P **Teschemacher A, Hancox LC, Seward E & Witchel E** Imipramine at clinically relevant concentrations blocks heterologously expressed HERG, a K^+ channel responsible for "Long QT Syndrome"

78P **Ridley DL & Wonnacott S** Modulation of α7-containing nicotinic receptor expression in SH-SY5Y cells and primary hippocampal cultures

79P **Sharples CGV & Wonnacott S** Protein synthesis dependence of nicotine mediated upregulation of nicotinic acetylcholine receptors in the M10 cell line

80P **Hayhurst GP, Ellis SW, Lennard MS & Tucker GT** Evidence that phenylalanine 481 is a substrate-contact residue in the active site of cytochrome P450 2D6

81P **O'Connor N, Page D, Martin F, Rogers M & O'Boyle KM** Actions of dopamine and A68930 on BHK cells co-transfected with D_1 and D_2 receptors

82P **Bridgland-Taylor MH, Dale IL, Alexander PD, Tucker E, Midha A, Randall VA, Sullivan E & Pollard CE** Validation of a high throughput screen to detect potential modulators of Ca^{2+}-release-activated Ca^{2+} channels in Jurkat T-cells

83P **Arkle S, Hanahoe A & Shum CMC** Effects of KN-62, Ro-31-8220, Mn^{2+}, Ni^{2+} and Co^{2+} on ATP^{4-}-stimulated responses in rat parotid salivary glands *in vitro*

84P **Dimova NG & Dryden WF** Protein kinase activities in rat brain following exposure to antidepressant drugs of different classes

85P **Presland JP, Davidson J, McDonnell JA & Hill SJ** Insulin-induced modulation of agonist action at the human adenosine A_1 receptor in CHO cells expressing both insulin and human adenosine A_1 receptors

86P **Hubbard PD & Lummis SCR** Zn^{2+} modulation of the 5-HT_3 receptor

87P[**Zaini Asmawi M, Gardner NM & Broadley KJ** Effects of PDE inhibition on *in vitro* desensitization of tracheal β-adrenoceptor function

88P **Walker SD, Edwards G & Weston AH.** Functional significance of $I_{K(N)}$ in rat pulmonary artery.

89P **Birrell M, Haddad E-B, McCluskie K, Hele D, Phipps S, Webber SE, Foster M & Belvisi MG** Effect of the P38 kinase inhibitor, SB 203580, in a model of airway inflammation

90P **Lal H, Williams KI & Woodward B** Cardiac reactivity to endothelin-1 (ET-1) and U46619 is differentially altered in isolated perfused hearts from chronically-hypoxic (CH) rats

91P **Gardiner SM, Kemp PA, March JE & Bennett T** Recombinant human, but not murine, leptin causes hindquarters vasoconstriction in conscious rats.

92P **Gardiner SM, Kemp PA, March JE & Bennett T** Effects of recombinant human insulin-like growth factor-1 (rhIGF-1) on regional haemodynamics in conscious rats

93P **Ishak S, Bennett T & Gardiner SM** No role for angiotensin II (AII) or endothelin (ET) in the pressor response induced by nitric oxide synthase (NOS) inhibition in vasopressin-deficient, hypertensive (DI/H) rats

94P **Stanford SJ & Mitchell JA** ATP-induced vasodilatation in the rat isolated mesenteric bed exhibits two apparent phases

95P **Darker IT, Millns PJ, Selbie L, Randall MD, S-Baxter G & Kendall DA** Cannabinoid (CB_1) receptor expression is associated with mesenteric resistance vessels but not thoracic aorta in the rat

96P **Harris D, Kendall DA & Randall MD** Characterization of cannabinoid receptors mediating EDHF responses in the rat isolated mesentery

97P **Grieve DJ, Avella MA, Botham KM & Elliott J** Evidence that endothelium-derived nitric oxide production is increased following oral propyl-thiouracil treatment in the rat

98P **Duckworth N, Marshall K, Senior J & Clayton JK** A preliminary study of the TP-receptor population along the length of the human isolated umbilical artery

99P **Hinton JM, Plane F & Garland CJ** Detection of mRNA for 5-HT_{1B} and 5-HT_{1D} receptors in porcine coronary arteries by *in situ* RT-PCR

100P **Bunton D, MacDonald A, Brown T & Shaw AM** Receptor subtypes for 5-HT in bovine pulmonary conventional and supernumerary arteries

101P **Freeman N, Emsley AM, Birkett S, Johnson JL & Jeremy JY** Thapsigargin inhibits microangiogenesis in rat isolated aorta, *in vitro*

102P **Islam MZ, Williams BC, Madhavan KK, Hayes PC & Hadoke PWF** V_1-receptors mediate the contractile response to arginine vasopressin in hepatic arteries from patients with and without cirrhosis

103P **Hamilton LC, Jimenez C & Warner TD** Heme oxygenase-1 induction has no significant effect on the vascular reactivity of rat aortic rings

104P **Hughes P, Richardson AG & Smith JW** The effect of external acidosis on the action of calcium entry blockers in rat aorta

105P **Chambers CJ, Emsley AM, Taberner PV & Plane F** Interaction of hypoglycaemic imidazolines with K_{ATP}-channel-mediated relaxation in rat aorta

106P **Edwards G, Gardener MJ, Walker SD & Weston AH** Comparison of effects of 1-EBIO and NS1619 on K^+ currents in vascular smooth muscle and endothelial cells

107P **Hadoke PWF, Kotelevtsev Y, Williams BC, Mullins JJ & Walker BR** Selective attenuation of adrenoceptor-mediated contraction by endothelium-derived nitric oxide in isolated mouse aortae

108P **Wyatt MC, Emsley AM, Jeremy JY, Sorenson JRJ & Plane F** Low molecular mass complexes of transition metals inhibit vasoconstriction in rat isolated aortic rings

109P **Oliveira L & Crankshaw DJ** Excitatory effects of isoprostanes in the human umbilical artery *in vitro*

110P **Oliveira L, Stallwood N & Crankshaw DJ** An investigation into the downturn in response to 8-isoprostaglandin E_2 in human umbilical artery *in vitro*

111P **Sampson LJ, Plane F, Campbell WB & Garland CJ** Pathways for arachidonic acid-evoked relaxation in the rabbit isolated femoral artery

112P **Cuzzocrea S, De Sarro GB, Costantino G, De Sarro A & Caputi AP** Interleukin-6 knock out mice exhibit a resistance to splanchnic artery occlusion shock

113P **Chatterjee PK & Thiemermann C** The poly(ADP-ribose) synthetase inhibitor 3-aminobenzamide protects rat renal proximal tubular cells against oxidant stress-mediated cellular injury and death

114P **Laight DW, Desai KM, Gopaul NK, Änggård EE & Carrier MJ** Dietary vitamin E reduces oxidant stress amd improves insulin action in the obese Zucker rat *in vivo.*

115P **Kengatharan M, Foll F, Pettersson K, Andrews TJ, Wågberg M, Änggård EE & Carrier MJ** Reduction in plasma levels of 8-epi-prostaglandin F2α and reversal of endothelial dysfunction by vitamin E in the Watenabe heritable hyperlipidaemic rabbit

116P **Andrews TG, Laight DW, Änggård EE & Carrier MJ** Evidence for enhanced endothelial function in the obese Zucker rat which is reversible by dietary antioxidants

117P **Andrews TG, Laight DW, Änggård EE & Carrier MJ** Pharmacological action of insulin to inhibit endothelium-dependent vasodilation in the obese Zucker rat perfused hindlimb *in situ*

118P **Kaw AV, Gunnarsson PT, Laight DW, Änggård EE & Carrier MJ** Endothelial dysfunction following experimental oxidant stress in the rat *in vivo.*

119P **Gunnarsson PT, Laight DW, Änggård EE & Carrier MJ** Elevated plasma total antioxidant status in the obese Zucker rat assessed by a physiological microassay.

120P **Bertelsen M, Andersson MB, Änggård EE & Carrier MJ** Role of reactive oxygen species on trans-endothelial insulin transport

121P **de Souza PM, Flower RJ & Goulding NJ** Characterisation of glucocorticoid-induced p155 expression by human monocytes

122P **Panesar MS, Gentry CT, Urban L, Walker K & Fox A** A model of persistent, inflammation-induced mechanical hyperalgesia in the mouse

123P **Jones H, Paul W & Page CP** Poly-L-lysine (PLL)-induced neutrophil (PMN) accumulation and plasma exudation (PE) in rabbit skin: role of sulphation in inhibitory action of heparin

124P **McLoughlin CM & Moore PK** Effect of 7-nitroindazole and related indazoles on inducible nitric oxide synthase *in vitro* and *in vivo*

125P **Ferreira HHA, de Luca IMS, Costa E, Medeiros MV, Zanardo RCO, Martins AR, Antunes E & de Nucci G** The effect of N^{ω}-nitro-L-arginine methyl ester on the number of bone marrow eosinophils and expression of NO synthase isoforms in rat bone marrow eosinophils

126P **McEuen AR, Buckley MG, Compton SJ & Walls AF** Detection and preliminary characterisation of a unique protein constituent of basophil secretory granules.

127P **Harding DP, Collier PA, Huckle RM, Gristwood R& Spridgen E** Cardiotoxic effects of levobupivacaine, bupivacaine and ropivacaine: an *in vitro* study in guinea-pig and human cardiac muscle

128P **Fraser S, Gillard NP & Sheridan RD** Effects of the antileukemic agent, amsacrine, on the cardiac action potential recorded in sheep isolated Purkinje fibres

129P **Edmunds NJ & Woodward B** Actions of ceramide on insulin-stimulated glycogen synthesis in the isolated perfused rat heart

130P **Olbrich A, Zacharowski K & Thiemermann C** The EP_3-receptor agonists M&B 28767 and GR 63799X reduce the cell injury and death caused by hydrogen peroxide in rat cardiomyoblasts

131P **Bowes J, Perrett D & Thiemermann C** The effect of PARS inhibitors on changes in NAD and high energy phosphates caused by myocardial ischaemia and reperfusion in the rabbit

132P **Bowes J, Ruetten H, Martorana PA, Stockhausen H & Thiemermann C** The PARS inhibitor 3-amino-benzamide reduces infarct size in a pig model of myocardial ischaemia and reperfusion

133P **Zacharowski K, McDonald MC, Bowes J, Olbrich A & Thiemermann C** The stable nitroxide radical Tempol reduces the infarct size caused by regional myocardial ischaemia and reperfusion in the anaesthetised rat

134P **Leach M, Olbrich A & Thiemermann C** The stable nitroxide radical Tempol attenuates the multiple organ dysfunction caused by endotoxin in the rat