

## ORAL COMMUNICATIONS

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

- 1P Schwabe K, Ebert U & Löscher W Effect of micro-injections of vigabatrin in the central piriform cortex on the development of amygdala kindling in rats
- 2P Gernert M, Febrowitz M, Rehders JH, Richter A & Löscher W Effect of locally-applied pentylene-tetrazole on nigral single unit activity in a rodent model of paroxysmal dystonia
- 3P Sutch RJ & Bowery NG Measurement of [<sup>3</sup>H]GABA release from slices reveals altered GABA<sub>B</sub> receptor function in Genetic Absence Epilepsy Rats from Strasbourg
- 4P Sampaio Maia MB & Soares-da-Silva P Control of luminal uptake of L-DOPA at the blood-brain barrier by Ca<sup>2+</sup>/calmodulin mediated pathways
- 5P Wicke K, Bailey P, Freeman AS, Greger G, Groß G, Teschendorf H-J & Weddige FK Effects of belapirone in acute and chronic electrophysiological models: comparison to rat catalepsy and phase II clinical motor side-effect data
- 6P Barton CL, Jay M, Bristow LJ & Hutson PH Phen-cyclidine-induced increase of nucleus accumbens dopamine efflux and locomotor activity is enhanced by the 5-HT<sub>2C/2B</sub> receptor antagonist SB221284
- 7P Day NC, Page KJ, Mitchell JN, Baxter GS & Brown AM Visualisation and characterisation of functional 5-HT receptors in the human hippocampus by [<sup>35</sup>S]GTPγS autoradiography
- 8P Bellerby N, Bodley J, Copas D, Dowling S, Furby J, Husband M, Townsend A, Wood TJB, Bennett GW, Fone KCF, Kendall DA, Marsden CA & Parker TL Long-term change in social interaction without accompanying serotonergic neurotoxicity following MDMA treatment of young adult rats
- 9P Brandt C, Ebert U & Löscher W The antiapoptotic effect of the NMDA-receptor antagonist MK-801 in the kainate model of temporal lobe epilepsy
- 10P Urenjak J & Obrenovitch TP Effects of kynurenine-3-hydroxylase inhibition on extracellular kynurenic acid and N-methyl-D-aspartate-induced depolarisation in the rat brain
- 11P Boehm S Characterisation of pre- and post-synaptic α-adrenoceptor subtypes in rat hippocampal neurons
- 12P Brand A, Eschke D & Nieber K Activation of both the adenosine A1 and A3 receptors inhibits synaptic transmission in rat cortical pyramidal cells
- 13P Ross RA, Coutts AA, McFarlane SM, Irving AG, Pertwee RG, MacEwan DJ & Scott RH Evidence for cannabinoid receptor-mediated inhibition of voltage-activated Ca<sup>2+</sup> currents in neonatal rat cultured DAG neurones
- 14P Drew L & Chapman V Spinal administration of HU210, a cannabinoid agonist, attenuates nociceptive transmission in the carrageenan model of inflammation
- 15P Braun H, Schäfer K & Höllt V Experimental brain injury in rats: time course of hippocampal cell damage and activation of microglia
- 16P Brooks AC, Gustafsson E, Whelan CJ & Molleman A Reactive oxygen species generation by non-immunological mast cell activation: modulation by the synthetic cannabinoid CP55,940
- 17P Klasen S, Hammerman R, Beck KF, Pfeilschifter J & Racké K Increase of arginase in rat alveolar macrophages by lipopolysaccharides occurs independent of the concomitant iNOS induction
- 18P Hammerman R, Messeri MD, Mössner J, Göthert M & Racké K Evidence for a lipopolysaccharide (LPS) inducible L-arginine selective cationic amino acid transporter in rat alveolar macrophages (AMφ) linked to iNOS
- 19P Breese EJ, Warner TD, Patchett SE & Mitchell JA The prostacyclin analogue, cicaprost, reverses the increase in GM-CSF production caused by NSAID treatment of human gastric biopsies
- 20P El-Dakhakhny M & Aly SM Study on the protective role of *Nigella sativa* oil on steroid-induced osteoporosis in rats
- 21P Lim LHK, Perretti M, Flower RJ & Das AM Glucocorticoid hormones reduce integrin expression on murine eosinophils
- 22P Carollo M, Christie M & Perretti M CC chemokine expression in a murine model of chronic granuloma
- 23P Peskar BM & Peskar BA Salicylate antagonizes the effects of selective cyclooxygenase-2 inhibitors on gastric mucosal integrity in rats
- 24P Munday MK, Jonas M, Scholefield JH & Wilson VG Pharmacological examination of neurogenic responses of the sheep isolated internal anal sphincter
- 25P Hoyle CHV, Raja MAK, Tjiang ET, Lincoln J & Boulos P Acetylcholinesterase activity is elevated in diverticular disease
- 26P Davis BJ, Weiner M, Chapple CR & Chess-Williams R The α<sub>1L</sub>-adrenoceptor mediates contraction in human vas deferens
- 27P Bowen WP, Carey JE, Miah A, McMurray HF, Munday PW, James RS, Brown AM & Coleman RA Determination of cytochrome P450 3A4 induction in primary human hepatocytes using quantitative real-time PCR
- 28P Holliday ND & Cox HM Mutation of the potential palmitoylation site of the rat neuropeptide Y Y<sub>1</sub> receptor suppresses its functional desensitisation
- 29P Paul A, Torrie LJ, Kennedy C & Plevin R P2Y receptor-mediated inhibition of stress-activated protein kinases in the human endothelial cell hybrid EAH926
- 30P Blaylock NA, Malone KE, Ward DK, Ledger R & Wilson VG α<sub>2</sub>-adrenoceptors in porcine cerebral cortex slices do not affect [<sup>3</sup>H]-cyclic AMP accumulation
- 31P Wong MP-M & Young JM Ca<sup>2+</sup> entry associated with histamine inhibition of drug-induced cyclic AMP accumulation in human U373 MG astrocytoma cells
- 32P Selkirk JV, Challiss RAJ, Price GW & Nahorski SR Differential coupling to endogenous G protein subpopulations in CHO and BHK cell lines recombinantly expressing mGlu1α receptors

- 33P **Choppin A, Louri DN, Watson N, Hegde SS & Eglén RM** S-secoverine: a defining ligand in muscarinic M<sub>5</sub> receptor characterization
- 34P **Hoyle CHV, Sundaralingham P & Darling S** Antagonism of muscarinic cholinergic receptors by eserine in the ileum of the NMRI mouse and myelencephalic blebs mouse mutant
- 35P **Smith JA, Selbie LA & Hill SJ** Stimulated adenosine A<sub>1</sub>-receptor expression in response to hypoxia
- 36P **Selbie LA, King NV, Wilson J & Hill SJ** Use of recombinant aequorin to investigate the augmentation by adenosine A<sub>1</sub>-receptors of calcium responses to ATP in CHO-K1 cells
- 37P **Scheele JS, Bruner E, Kharitonov VG, Martasek P, Toman LJ, Masters BSS & Magde D** Kinetics of NO ligation with nitric oxide synthase by flash photolysis and stopped-flow spectrophotometry
- 38P **Jones CA, Chessell IP, Simon J, Barnard EA, Michel AD & Humphrey PPA** Operational properties of mouse P2X<sub>4</sub> receptors: a species comparison
- 39P **Benton DCH, Dunn PM, Chen JQ, Galanakis D, Ganellin CR, Malik-Hall M, Shah M, Haylett DG & Jenkinson DH** UCL 1848: a novel bis-quinolinium cyclophane which blocks apamin-sensitive K<sup>+</sup> channels with nanomolar affinity
- 40P **Debank PA, Kendall DA & Alexander SPH** A simple assay for fatty acid hydrolyase activity
- 41P **Gitlin JM, Evans TW, Pepper JR & Mitchell JA** Regulation of cyclo-oxygenase activity by activators of soluble guanylyl cyclase in human vascular smooth muscle cells
- 42P **Harris D, Kendall DA & Randall MD** Endothelium-dependent relaxation to K<sup>+</sup> in the rat isolated mesenteric arterial bed
- 43P **Ishak S, Gardiner SM & Dunn WR** Enhanced NO-mediated vasodilator responses in pressurized mesenteric resistance arteries isolated from hypertensive, transgenic (mRen-2)27 rats
- 44P **Kenny LC, Baker PN, Randall MD, Kendall DA & Dunn WR** Differences in endothelial function in pregnancy and pre-eclampsia
- 45P **Johnström P & Davenport AP** *In vitro* characterisation of [<sup>18</sup>F]-BQ3020, the first positron emitting ligand synthesised for the endothelin ET<sub>B</sub> receptor
- 46P **Barker S, Khan N, Wood EG & Corder R** Comparison of endothelin-1 gene expression with expression of isoforms of endothelin-converting enzyme-1 in bovine endothelial and vascular smooth muscle cells
- 47P **Randall MD** Involvement of gap junctional communication in cardiac preconditioning in rat isolated heart
- 48P **Ralevic V** A<sub>1</sub> adenosine receptors, but not P2 purine receptors, inhibit prejunctionally sympathetic neurotransmission in the hamster isolated mesenteric arterial bed

## POSTER COMMUNICATIONS

- 49P **Dhein S, Salameh A, Olbrich A & Kabat A** Effects of chronic vitamin E treatment on hyperglycaemia-induced endothelial dysfunction in porcine aortic endothelial cells
- 50P **Kabat A & Dhein S** Chronic treatment with acetylsalicylic acid attenuates endothelial dysfunction induced by high D-glucose concentrations in porcine aortic endothelial cells
- 51P **Glusa E, Storey RF, Sanderson HM & Heptinstall S** Influence of the ADP antagonists AR-C67085 and A2P5P on ADP-induced responses of platelets and isolated arteries
- 52P **Goulter AB, Avella MA, Botham KM & Elliott J** The effects of oxidised chylomicron remnant-like particles on endothelial cell function in freshly isolated porcine coronary artery
- 53P **Buckley C, Hadoke PWF, Henry E & O'Brien C** Functional responses of subcutaneous resistance arteries isolated from patients with normal pressure glaucoma
- 54P **Bischoff A, Meyer zu Heringdorf D, Jakobs KH & Michel MC** Glucopsychosine enhances urine flow rate and sodium excretion in anaesthetized rats
- 55P **Almotrefi AA, Dzimiri N & Premkumar LS** Evaluation of the antifibrillatory drug interactions between lidocaine and propranolol in perfused rabbit hearts
- 56P **Gilani AH, Shaheen F, Hussain H & Saeed SA** Isolation and calcium antagonist activity of 3,4-dimethoxy benzaldehyde from *Daucus carota*
- 57P **Saeed SA, Rasheed H, Rana S, Saeed O, Lashari I & Shah BH** Synergistic interaction of histamine and adrenaline in platelet aggregation involves activation of phospholipase C and MAP kinase pathways
- 58P **Pönicke K, Heinroth-Hoffmann I & Brodde O-E** Propranolol increases noradrenaline-induced protein synthesis in ventricular cardiomyocytes of the adult rat
- 59P **Grapow M, Seyfarth T, Dhein S & Brodde O-E** Comparison of the effects of endothelin 1 on force of contraction in right and left ventricles of the rat heart
- 60P **Maguire JJ & Davenport AP** *In vitro* vasoconstrictor activity of novel peptide endothelin-1(1-31) is due to conversion to endothelin-1(1-21) in human internal mammary artery by an enzyme other than endothelin converting enzyme
- 61P **Khan N, Barker S, Wood EG, Lees DM & Corder R** Tamoxifen and 5-nitro-2-(3-phenylpropylamino)-benzoic acid (NPBB) reduce basal and stimulated endothelin-1 secretion from bovine aortic endothelial cells
- 62P **Wallis SJ & Martin W** Suppression of myogenic and vasoconstrictor tone in porcine cerebral artery by basal nitric oxide
- 63P **Carr CMR, Lawson K** Effect of the L-arginine analogue NG-nitro-L-arginine methyl ester on vasorelaxations to ATP-sensitive potassium channel openers in rat isolated aorta
- 64P **Kengatharan M, Habens F, Barnes SE, Carrier MJ, Ånggård E & Weinberg PD** Characteristics of the pulse waveform during altered nitric oxide synthesis in the New Zealand white rabbit
- 65P **Jackson VM, Trout SJ & Cunnane TC** Regional variation in responses of rabbit isolated pulmonary artery to nerve stimulation

- 66P Kilpatrick IC, Traut M & Heal DJ Monoamine oxidase inhibition determined in rat brain is unlikely to account for cardiovascular risks associated with fenfluramine and phentermine
- 67P Ting KN, Randall MD & Wilson VG Effects of melatonin and trolox on ischaemia-reperfusion injury in the Langendorff rat isolated heart
- 68P Roberts RE, Kendall DA & Wilson VG The effect of removal of the endothelium on  $\alpha_2$ -adrenoceptor-mediated vasoconstriction in porcine isolated ear arteries
- 69P Herrlitz B, Güttler K & Klaus W On the antioxidant activity of dihydropyridine-calcium antagonists
- 70P Lal H, Williams KI & Woodward B  $ET_B$  receptor-mediated bronchoconstriction is potentiated in lungs from chronically hypoxic rats
- 71P Smith JA, Draper LM & Hill SJ Increased 5-HT-stimulated inositol phosphate generation in response to hypoxia: studies with cultured human umbilical artery smooth muscle cells
- 72P Islam MZ, Buckley CH, Madhavan KK, Hayes PC & Hadoke PWF Presence of vasoconstrictor 5-HT $_1$ -like receptors in human hepatic artery
- 73P Poucher SM, Keddle JR & Briscoe MG A comparison of the *in vivo* pharmacology of clenbuterol enantiomers upon skeletal muscle tone, vascular muscle and cardiac chronotropic responses
- 74P Worrall V, Wilbraham J, Waddell ID & Poucher SM The relative anabolic potency of ( $\pm$ ) clenbuterol, (-) clenbuterol and (+) clenbuterol in slow twitch-oxidative and fast twitch-glycolytic muscles of rats
- 75P Worrall V, Wilbraham J, Waddell ID & Poucher SM Comparison of the anabolic effects of ( $\pm$ ) clenbuterol, (-) clenbuterol and (+) clenbuterol in denervated rat hind-limb muscle
- 76P Vongvatcharanon U, Parker KG & Parker TL Increased apoptosis and reduced cardiac ventricular wall volume in the postnatal transgenic m(Ren-2)27 rat
- 77P Gardiner SM, Kemp PA, March JE, Ball HA, Foster JJ & Bennett T Early involvement of vasopressin in the cardiovascular sequelae of endotoxaemia in conscious rats
- 78P Gardiner SM, Kemp PA, March JE & Bennett T Carotid haemodynamic responses to angiotensin II in conscious, hypertensive, transgenic rats
- 79P Gardiner SM, Auton TR, Downham MR, Spencer DC, Sharp HL, Rosul A, Rushton A, Kemp PA, March JE, Bennett T & Glover JF Active immunisation with two different carrier proteins conjugated with an angiotensin 1 (A1) analogue in conscious rats: pressor effects of A1 and anti-A1 antibody response
- 80P Ralevic V & Gardiner SM Attenuated constriction to methoxamine perfusion and augmented responses to vasorelaxants in isolated perfused mesenteric arterial beds from endotoxaemic rats
- 81P Gardiner SM, Kemp PA, March JE & Bennett T Regional haemodynamic effects of the cannabinoid agonist, WIN 55212-2, in conscious rats
- 82P Ralevic V & Kendall DA Effects of cannabinoid receptor ligands on sympathetic neurogenic contraction of rat isolated perfused mesenteric arterial bed
- 83P Ralevic V & Kendall DA SR1417161, a cannabinoid receptor antagonist, augments vasorelaxation mediated by capsaicin-sensitive primary afferents of rat isolated mesenteric arterial beds
- 84P Ho M, Watson A, Corbett AD & McKnight AT Characterisation of the ORL $_1$  receptor on adrenergic nerves in the anococcygeus
- 85P Doggrell SA & Chen Y-Y  $\beta$ -adrenoceptors in the maturation of aortae from normotensive and prehypertensive rats
- 86P Kaehler ST, Kovelas D, Sinner C, Philippu A & Singewald N Peripheral chemoreceptor stimulation activates 5-HT neurons in the locus coeruleus of conscious rats
- 87P Hein P, Cotecchia S, Goepel M & Michel MC Comparison of [ $^3$ H]prazosin and [ $^3$ H]tamsulosin labelling of wild-type and constitutively active  $\alpha_{1B}$  receptors
- 88P Clark GS, Strong PN, de Allie FA, Joseph JS, Kini M, Gopalkrishnakone P, Jeyaseelan K & Owen DG A novel peptide toxin from the Indian red scorpion blocks the voltage-gated cloned potassium channel, hKv1.6
- 89P Piotrowski W, Brice S, Dall'aglio M, Delacourt S & Nannan B Effect of electrode material on the inhibition of non-adrenergic, non-cholinergic responses of isolated guinea-pig taenia caeci by N $^G$ -nitro-L-arginine (NOARG)
- 90P Choppin A, Smith S, Hegde SS & Eglen RM Role of pigmentation in the atypical behaviour of darifenacin in dog ciliary smooth muscle
- 91P Deighan C, Slattery DFA, Mackenzie JF, Cotecchia S & McGrath JC The characterisation of  $\alpha_1$ -adrenoceptors in murine liver using radioligand binding and transgenic mice
- 92P Mang C & Kilbinger H Modulation by nitric oxide (NO) of acetylcholine (ACh) release from guinea-pig trachea
- 93P Munday M, Mason R & Wilson VG A study of the effect of ibogaine against neurogenic contractions of the rat vas deferens and guinea-pig isolated detrusor muscle
- 94P Brockie HC, Pertwee RG & Ross RA Inhibition of nitric oxide release in RAW 264.7 cells by cannabinoids
- 95P Dobson RRH, Dean E, Kent C, Clothier RH, Garle MJ & Kendall DA Modulation of rhodamine-123 uptake in cannabinoid-treated RAW264 cells
- 96P Harper D, Coward S & Jackson D Effect of propranolol on ovalbumin-induced contraction of lung from sensitised guinea-pigs
- 97P Harper D & Jackson D A new *in vitro* model to study the response to allergen in dog nasal epithelium
- 98P Gray PA, Breese EJ, Del Soldato P, Warner RD & Mitchell JA Comparison of NSAIDs and NO-NSAIDs on PGE $_2$  and GM-CSF production by human synoviocytes
- 99P Tegeder I, Neupert W, Gühring H, Brune K & Geisslinger G Effects of the selective cyclooxygenase-2 inhibitor NS398 on prostanoid release from the stomach and other rat organs: comparison with non-selective COX-inhibitors
- 100P Hemedah M, Coupar IM & Mitchelson FJ Absence of histamine H $_3$  receptors in rat ileum and human colon

- 101P **Banner KH, Bracey J, Trevethick MA & Gale JD** Time course of TNBS-induced colitis in the mouse
- 102P **Cox HM, Pollock EL & Tough IR** Responses to Y receptor agonists are insensitive to haloperidol pre-treatment in human and mouse colonic mucosae *in vitro*
- 103P **Martin RS, Long LA, Welsh NJ, Eglen RM, Martin GR & MacLennan SJ** Cannabinoid CB<sub>1</sub> receptors mediate inhibition of neuronally-evoked contractions of isolated urinary bladder from the rat and mouse, but not human, pig, dog or monkey
- 104P **Yamanishi T, Hawthorn MH, Chapple CR & Chess-Williams R** The role of M2-muscarinic receptors in contraction of the pig urinary bladder
- 105P **Grady A, Abbas F, Clayton J, Woodward DF, Marshall K & Senior J** FP-receptor heterogeneity in the isolated myometrium from pregnant and non-pregnant donors
- 106P **Duckworth NJ, Clayton JK, Marshall K & Senior J** The effect of the EP<sub>2</sub> agonist, butaprost, on the contractile response to oxytocin on isolated human myometrium from pregnant donors
- 107P **Brunn C, Schloos J, Lemansky P, Sewing S & Mest H-J** Insulin as a feedback regulator of glucagon-like peptide-1 (GLP-1) release?
- 108P **Scheele J** A comparison on the concentrations of certain pesticides and polychlorinated hydrocarbons in bone marrow and fat tissue
- 109P **Hammond AH & Fry JR** Differences in toxicity of two structural isomers of dichloropropanol can be partially explained by differential metabolism
- 110P **Elton RC, Garle MJ & Fry JR** Use of a glutathione depletion assay for the detection of neoantigen-forming and redox-cycling compounds
- 111P **Tigani B, Hannon JP, Mazzoni L & Fozard JR** Effects of wortmannin on antigen-induced airway inflammation and bronchoconstrictor responsiveness in actively sensitised Brown Norway rats
- 112P **Fong CY, Pang LH, Holland E & Knox AJ** Transforming growth factor  $\beta$ 1 stimulated IL-8 release, cyclooxygenase-2 expression and prosta-glandin E<sub>2</sub> release in human airway smooth muscle cells
- 113P **Pang LH, Holland E & Knox AJ** Involvement of protein kinase A and protein kinase C in bradykinin-stimulated cyclooxygenase-2 induction in human airway smooth muscle cells
- 114P **Hamad AM, Johnson SR & Knox AJ** Antiproliferative effects of nitric oxide and atrial natriuretic peptide in human cultured airway smooth muscle cells
- 115P **Laight DW, Desai KM, Gopaul NK, Änggård E & Carrier MJ** A pro-oxidant challenge *in vivo* is pro-diabetic in the insulin-resistant obese Zucker rat
- 116P **Pickavance LC, Widdowson PS, Foster JR, Ishii S, Tanaka H & Williams G** The thiazolidinedione, MCC-555, prevents nitric oxide synthase induction in the pancreas of ZDF rats
- 117P **Ashmeade T, Hatcher JP, Hatcher P, Jones DNC & Routledge C** The effect of orexin-A and orexin-B on the modulation of neuroendocrine markers
- 118P **Zhang L, Parratt JR, Beastall GH & Furman BL** Involvement of hypothyroidism in the reduction in ischaemia-reperfusion arrhythmias in hearts from streptozotocin diabetic rats
- 119P **Harrold JA, Widdowson PS & Williams G** Leptin release following high-energy diet feeding and prior to increased adiposity predicts the final degree of obesity in rats
- 120P **Kroslak T, Kroch T & Hüllt V** The human 23kDa phosphatidyl ethanolamine binding protein: a novel modulator of  $\mu$ -opioid receptor coupling and desensitisation
- 121P **Fenech AG, Ebejer MJ, Felice AE, Ellul-Mcallef R & Hall IP** Mutation screening of the human muscarinic M<sub>2</sub> receptor gene in Maltese asthmatic patients
- 122P **Wheatley AP & Hall IP** Expression of homologues of the transient receptor potential (TRP) gene in primary cultured human airway smooth muscle cells
- 123P **Scott MGH, Swan C & Hall IP** Differential expression of human  $\beta_2$ -adrenoceptor promoter constructs in COS-7, BEAS-2B and cultured human airway smooth muscle cells
- 124P **Stevens EB, Pinnock RD & Lee K** Inhibition of K<sub>ATP</sub> channel activity by ketoconazole in CRI-G1 insulin-secreting cells
- 125P **Krautheim A, Brechlin P, Becker K, Winkler M & Steinfelder HJ** Functional characterisation of okadaic acid resistance in HIT cells
- 126P **Preston Z, Lee K, Richardson PJ & Pinnock RD** Neurokinin-3 receptors are expressed on GABAergic interneurons and evoke GABA release in the mouse striatum
- 127P **Jackson SM, Alexander SPH & Hill SJ** Intracellular calcium mobilization following activation of an endogenous muscarinic receptor in human embryonic kidney (HEK 293) cells
- 128P **Shah B, Lee K, Pinnock RD & Dixon AK** Distribution of voltage-gated sodium channel subunits in the rat CNS: a comparative study
- 129P **Parsons SJW, Beresford IJM, Browning C, Cartwright KA, McDonagh AN & Giles H** A comparison of the abilities of chemokine ligands to compete for [I<sup>125</sup>] MIP-1 $\alpha$  and [I<sup>125</sup>]RANTES binding to the chemokine receptor CCR1
- 130P **Teo J, Meller R & Sharp T** Effect of mGluR activation on the release of endogenous glutamate from cultured C6 glioma cells
- 131P **Lamb H, Benwell KR, Revell DF, Read S, Sheardown MJ & Porter RHP** Pharmacological characterisation of human A<sub>1</sub> and A<sub>2A</sub> receptors co-expressed with G<sub>o16</sub> in CHO-K1 cells using a fluorimetric imaging plate reader (FLIPR)
- 132P **Eschke D, Brand A, Scheibler P, Hess S, Eger K, Allgaier C, Nieber K** Characterization of a newly synthesized pyrimido[4,5-*b*]indole (PPPIA) as an adenosine A1 receptor agonist
- 133P **Scheele J, Martasek P, Bruner EP, Kharitonov VG, Roman LJ, Sharma VS, Masters BSS & Magde D** Kinetics of CO ligation with a mutant lacking the calmodulin binding domain of endothelial nitric oxide synthase by flash photolysis and stopped-flow spectrophotometry
- 134P **Scheele J, Martasek P, Bruner EP, Kharitonov VG, Roman LJ, Sharma VS, Masters BSS & Magde D** Kinetics of CO ligation with a Cys331Ala mutant of neuronal nitric oxide synthase by flash photolysis and stopped-flow spectrophotometry

- 135P Scheele J, Kharitonov VG, Martasek P, Bruner EP, Roman LJ, Sharma VS, Masters BSS & Magde D Kinetics of CO ligation with nitric oxide synthase by flash photolysis and stopped-flow spectrophotometry
- 136P Soares-da-Silva P & Serrão P Apical uptake of L-DOPA by L-type amino acid transporter in porcine kidney LLC-PK<sub>1</sub> cells
- 137P Soares-da-Silva P & Serrão P Ca<sup>2+</sup>/calmodulin mediated pathways and the control of apical uptake of L-DOPA in porcine kidney LLC-PK<sub>1</sub> cells
- 138P Diener A, Böckmann S & Paegelow I Influence of bradykinin potentiating peptide<sub>9α</sub> (BPP<sub>9α</sub>) on bradykinin (BK)-evoked effects in different targets
- 139P Hopkinson HE, Latif ML & Hill SJ Constitutive activity of endogenously expressed β<sub>2</sub>-adrenoceptors in BC3H1 cells
- 140P Begg M, Nelemans SA & Molleman A CB<sub>1</sub> cannabinoid receptor-mediated activation of K<sup>+</sup> current in DDT<sub>1</sub> MF-2 cells is entirely dependent on the presence of extracellular Ca<sup>2+</sup>
- 141P Wilson J, Javitch JA & Strange PG Effect of a point mutation in the human D<sub>2short</sub> dopamine receptor on agonism and inverse agonism
- 142P Lummis SCR & Spier AD Identification of a tryptophan residue as a determinant of agonist binding in the 5-HT<sub>3</sub> receptor
- 143P Millns PJ, McCulloch A, Randall MD & Kendall DA Catecholamine-stimulated [<sup>35</sup>S]GTP γ-S binding in rat heart
- 144P Alexandrov A, Keffel S, Neumann T, Goepel M, Schulz R, Heusch G & Michel MC Inhibition and enhancement of apoptosis by α<sub>1</sub>-adrenoceptor stimulation
- 145P Ghadessy R, Middlemiss DN & Coldwell MC Pharmacology of human dopamine D2 receptor coupling to changes in cytoplasmic Ca<sup>++</sup> through the chimeric G-protein, Gq15, determined by FLIPR fluorimetry
- 146P Liu L, Paul A & Plevin R The effect of NF-κB inhibitors on IRF-1 expression in raw 264.7 macrophages
- 147P Lynch OT, Giembycz MA, Barnes PJ, Hellewell PG & Lindsay MA "Outside-in" signalling mechanisms underlying CD11b/CD18-mediated NADPH oxidase activation in human adherent blood eosinophils
- 148P Murkin KL, Nasir S, Roxbee-Cox L & Wood MD Pharmacological profile of the human CCR2b receptor expressed in rat basophilic leukaemia cells: evidence for partial agonist activity of MCP-3 and MCP-4
- 149P Williams TJ, Tassa S, Calixto JJ, Stepan GJ, Oglesby IB, MacLennan SJ, Martin GR, Ford APDW & Daniels DV Endogenous 5-HT and the effect of growth media on expression and function of human recombinant 5-HT<sub>4</sub> and 5-HT<sub>7</sub> receptors in HEK-293 cells
- 150P Anderson MC & Burleigh DE Evidence for an indirect mode of action of thapsigargin on intestinal epithelial cells
- 151P Robinson AJ & Dickenson JM Adenosine A<sub>1</sub> receptor-mediated activation of the MAP kinase signalling pathway in DDT<sub>1</sub>MF-2 cells
- 152P Millns P & Alexander SPH Autoradiographic analysis of the binding of the antagonist radioligand [<sup>3</sup>H]-ZM241385 to A<sub>2A</sub> adenosine receptors in rat striatum
- 153P Franke H, Krügel U & Illes P P2Y- and P2X-receptor-mediated mitogenic effects on astrocytes *in vitro*
- 154P Scheibler P, Müller D, Illes P & Allgaier C Developmental changes in NMDA receptor function and subunit expression in cultured mesencephalic neurones
- 155P Kotzian E, Barnes NM & Fone KCF Immunohistochemical localisation of the 5-HT<sub>4(a)</sub> receptor in the rat brain
- 156P Roberts JC, Hirst WD, Reavill C, Patel S, Routledge C & Leslie RA Autoradiographic localisation of the 5-HT<sub>6</sub> receptor in the CNS of the rat using [<sup>125</sup>I]SB-258585
- 157P Minton JAL, Hirst WD, Bromidge SM, Routledge C, Middlemiss DN & Price GW Characterisation of [<sup>125</sup>I]SB-258585 binding to 5-HT<sub>6</sub> receptors in native tissues
- 158P Saithna A & Keen M The effect of stimulators of differentiation on 5-HT<sub>3</sub> and muscarinic receptor expression in NG108-15 cells
- 159P Ireland MD, Cilia J, Jones DNC, Routledge C & Leslie RA C-Fos expression patterns induced in the rat brain by clozapine, haloperidol and the selective 5-HT<sub>6</sub> receptor antagonist SB-271046
- 160P Park S-Y, Harrold JA, Widdowson PS & Williams G Food restriction down-regulates the density of the 5-HT<sub>1B</sub> and 5-HT<sub>2A</sub> receptor in the ventromedial hypothalamic nucleus
- 161P Skupek HD, Lau WAK & Taylor DA Comparison of dopamine D2 receptor sites labelled by [<sup>3</sup>H]-spiperone in the striatum and nucleus accumbens with regard to morphine preference in the rat
- 162P Callado LF, Hopwood SE, Hancock PJ & Stamford JA Effects of dizocilpine on noradrenaline, serotonin and dopamine efflux and uptake: an *in vitro* voltammetric study in rat brain slices
- 163P Scholze P, Sitte H, Piffl Ch, Cattinger A, Blakely R & Singer EA A superfusion study on carrier-mediated release in cells stably expressing the human cloned 5-HT transporter
- 164P Maneuf YP & McKnight AT Study of the ORL<sub>1</sub> receptor modulating K<sup>+</sup>-evoked [<sup>3</sup>H]5-HT release from rat cortical slices
- 165P Castro ME, Pei Q & Sharp T Effect of a selective serotonin reuptake inhibitor (SSRI) given in combination with a 5-HT<sub>1A</sub> antagonist on forebrain expression of the immediate early gene ARC
- 166P Teschendorf HJ, Needham P & Gross G Belaperidone: antidopaminergic and antiserotonic effects *in vivo*
- 167P Unger L, Bialojan S, Gross G & Traut M Belaperidone: comparison of its receptor profile with clozapine
- 168P Cramp JAV, Bennett GW & Routledge C Change in 5-HIAA/5-HT ratio in the hippocampus following intravenous but not intracerebroventricular injection of DHEAS
- 169P Needham PL, Gross G & Wicke K Atypical antipsychotic profile of BTS 79 018 may be mediated by central 5-HT<sub>1A</sub> agonist activity
- 170P Ward RE & Clarke RW Involvement of 5-HT<sub>1A</sub> receptors in opioid-induced descending inhibition of a spinal reflex in the decerebrated rabbit

- 171P **Munton RP, Hemmati P, Ashmeade T, Routledge C, Atkins A, Jones DNC, Hatcher J, Hatcher P & Taylor SG** Orexin A and B induce different effects on dopamine and 5-HT turnover in various rat brain areas
- 172P **Ainsworth K, Smith SE & Sharp T** Effect of the SSRI sertraline on extracellular dopamine and dopamine receptor expression in the nucleus accumbens of the rat
- 173P **Krügel U, Kittner H & Illes P** Studies on the relationships between extracellular dopamine in the rat nucleus accumbens and quantitative EEG
- 174P **King P, Widdowson PS, Doods H & Williams G** *In vitro* effect of cytokines on neuropeptide Y release from hypothalamic slices
- 175P **Liu XH & Morris R** An inhibitory action of neuropeptide Y (NPY) on neurones in the rat spinal cord superficial dorsal horn (laminae I-IV) *in vitro*
- 176P **Hashimoto Y & Lambert DG** Studies on the desensitisation of recombinant human nociceptin receptors expressed in Chinese hamster ovary cells
- 177P **Tanira MOM, Ali BH, Bashir AK & Dhanasekaran S** The effect of *Rhazya stricta* strongly basic alkaloidal fraction on rat brain catecholamines
- 178P **Joyce PI, Rowbotham DJ, Blakeley RD & Lambert DG** Effects of local anaesthetic agents on [<sup>3</sup>H]-nisoxetine binding to recombinant human nor-epinephrine transporters
- 179P **Sokal DM, Parker TL, Randall MD & Mason R** The role of intercellular gap-junction communication on bicuculline-induced epileptiform excitability in dissociated rat hippocampal neurones *in vitro*: effects of carbenoxolone
- 180P **Pilcher CWT, Bitar MS & Thomas ML** Paradoxical effects of the non-opioid peptide nociceptin (orphanin FQ) on nociceptin in rats
- 181P **Reeve AJ, Walker MJK & Urban L** Galanin facilitates the responses of dorsal horn wide-dynamic neurones in the anaesthetized rat
- 182P **Alexander SPH, Hamilton EL, Pollock A & Tarrant RJ** Characterisation of the binding of the antagonist radioligand [<sup>3</sup>H]-ZM241385 to A<sub>2A</sub>adenosine receptors in particulate and slice preparations from porcine striatum
- 183P **Nelson RM, Sprague J, Green AR, Lambert DG & Hainsworth AH** Glutamate release from rat brain slices in response to hypoxia/aglycaemia: inhibition by clomethiazole
- 184P **Hepworth MB & Pinnock RD** Inhibition of the bradykinin-induced sensitization of heat activated currents in dorsal root ganglion cells by the anti-hyperalgesic compound Gabapentin
- 185P **Mechan AO, Elliott JM, Colado MI & Green AR** Altered thermoregulatory response to high ambient temperature (30 °C) in MDMA-pretreated rats
- 186P **Spencer JPE, Vinge-Roth N, Steventon GB & Duty S** Oxidative stress and loss of [<sup>3</sup>H]paroxetine binding in rat cortex following chronic 3,4-methylenedioxy-metamphetamine (MDMA) administration
- 187P **Messner K & Reynolds GP** An *in vitro* model of inflammatory neurodegeneration and its neuroprotection by antioxidants
- 188P **Ferger B, Teismann P, Ealer CD, Sautter J, Kuschinsky K & Oertel WH** Protective effects of cyclooxygenase inhibition against MPTP toxicity
- 189P **Gibson TM, Stevenson LA, Ross RA, Saha B, Razdan RK & Pertwee RG** Partial agonist-inverse agonist behaviour of 6'-azidohept-2'-yne-D<sup>8</sup>-tetrahydrocannabinol at cannabinoid CB and CB<sub>2</sub> receptors
- 190P **Coutts AA, Anavi-Goffer S, Mackie K, Pertwee RG & Irving AJ** Agonist-induced inhibition of cell surface cannabinoid receptor expression in cultured hippocampal neurones
- 191P **Cheer JF, Kendall DA, Marsden CA & Mason R** Lack of response suppression follows repeated cannabinoid application in rat ventral tegmentum
- 192P **Beckett SRG, Roe C & Kendall DA** The effect of oleamide on the pattern of C-Fos immunoreactivity in the rat
- 193P **Beckett SRG, Millns PJ, Kendall DA** The effect of cannabinoid ligands on [<sup>35</sup>S]GTPγS binding in the rat brain
- 194P **Parker CA, Hudson AL, Nutt DJ, Dillon MP, Eglen RM & Crosby J** Reverse phase-HPLC analysis of clonidine-displacing substance present in NG108-15 cells
- 195P **Costanza RM & Terry P** Cocaine-induced hypophagia and locomotor hyperactivity: a comparison of the effects of dopamine 'D1-like' and 'D2-like' receptor subtype blockade
- 196P **Smith AG, Costall B & Neill JC** Failure of selective dopamine<sub>2</sub> receptor antagonists to attenuate 7-OH-DPAT-induced inhibition of progressive ratio responding in the common marmoset *Callithrix jacchus*
- 197P **Kaehler ST, Sinner C, Kouvelas D & Philippu A** Inescapable electric shock and conditioned fear influence the release of amino acids in the locus coeruleus
- 198P **Chiang T-J, Mobini S, Al-Ruwaitea ASA, Ho M-Y, Bradsahw CM & Szabadi E** The effect of *d*-amphetamine on the behaviour of rats in an operant timing schedule
- 199P **Holt JDS, Little HJ** Effect of the dihydropyridine calcium channel antagonist, nimodipine, on ethanol consumption after long term access to alcohol
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- 201P **Lapiz MDS, Parker TL & Marsden CA** Changes in phencyclidine-induced behaviour following isolation rearing in the rat
- 202P **Cai XJ, Buckingham R, Tadayyon M, Widdowson PS & Williams G** Stimulation of leptin by 2-deoxy-D-glucose independence from adiposity and involvement of feeding
- 203P **Muchimapura S, Marsden CA & Mason R** Effect of social isolation on hippocampal 5-HT<sub>1A</sub> receptor activity in the Lister hooded rat
- 204P **Jones NC & Taylor DA** Investigation into the clozapine-induced hypothermia in mice
- 205P **Taylor DA & Jamshidi N** The effect of D<sup>9</sup>-tetrahydrocannabinoid and SR 141716 on the appetite of rats

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- 206P Jagger E, Sokal DM, Parker TL, Mason R, Kirillov A & Wiggins H Multichannel extracellular recordings from a hippocampal neuronal network culture: a demonstration
- 207P Dewhurst DG & Broadhurst J A computer simulation of the cat nictitating membrane preparation for undergraduate pharmacology students

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- 208P Pertwee RG Pharmacology of cannabinoid receptors and their ligands
- 209P Ehrenreich H Cognitive alteration following cannabis use in humans
- 210P Randall MD The cardiovascular actions of cannabinoids: more questions than answers
- 211P Zygmunt PM, Julius D & Hogestatt ED Anandamide – an endogenous modulator of vanilloid receptors?
- 212P Gorter R A whole-plant cannabis extract for anorexia/cachexia in cancer patients

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- 213P Philippu A Cardiovascular regulation: importance of the locus coeruleus
- 214P Sharp T Regulatory functions of amines in the CNS: mood and depression
- 215P Fink H, Voits M, Bader M & Voigt J-P Serotonergic mechanisms and feeding behaviours
- 216P Marsden CA, Fone KCF, Beckett SRG, Fulford A, Graham M, Neophytou S & Aspley S Brain amines and aversion
- 217P Kuschinsky K, Alvarez Fischer D & Ferger B Reward mechanisms: conditioning and sensitisation
- 218P McGaughy J, Dalley JW, Everitt BJ & Robbins TW Behavioural and neurochemical evidence for a role of cortical acetylcholine in visual attention

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## ABSTRACTS FROM A SYMPOSIUM ON 'CELL SIGNALLING: A BASIS FOR NOVEL THERAPEUTIC STRATEGIES'

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- 221P O'Rahilly S Molecular defects in the regulation of human body mass
- 222P Issad T, Gerhardt CC, Gros J & Strosberg AD New signalling pathways modulated in the  $\beta_3$ -adrenergic receptor
- 223P Gohla A, Klages B, Wettschureck N, Brandt U, Schultz G & Offermans S Regulation of Rho-dependent processes through  $G_{12}$  and  $G_{13}$
- 224P Blanpain C, Libert F, Lee B, Vakili J, Migeotte I, Govaerts C, Maho A, Samson M, Doranz B, Rucker J, Detheux M, Vassart G, Doms RW & Parmentier M The role of CCR5 and other chemokine receptors in HIV entry