ORAL COMMUNICATIONS

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

- 1P Gardner BR & Strange PG On the quantification of receptor function and the molecular mechanisms of agonist action at G-protein linked receptors
- 2P Murphy CT & Westwick J Modulation of Ins(1,4,5)P₃-induced Ca²⁺ release from permeabilised platelets by cGMP-dependent kinase activity
- 3P **Patel S, Harris A & Taylor CW** Ca²⁺-regulated calmodulin binding to purified inositol 1,4,5-trisphosphate (Ins*P*₃) receptors
- 4P Connors SC, Mamas MA & Terrar DA Actions of phorbol dibutyrate on spontaneous electrical activity in guinea-pig isolated ventricular myocytes
- 5P Turner SJ, Ward SG, Smith G, Raport CJ, Schweickart V & Westwick J Disparate signalling pathways utilised by HEK 293 cells transfected with MCP-1 type A or type B receptors
- 6P Lambert DG, Hirst RA, Smart D & Grandy DK Characterisation of CHO cells expressing the cloned rat μ opioid receptor
- 7P Sanderson EM, Iredale PA & Hill SJ Role of Ca²⁺ ions in the stimulation of cAMP accumulation by histamine in CHO-K1 cells transfected with the bovine H₁ receptor
- 8P Schindler M, Humphrey PPA & Emson PC Immunohistochemical localisation of the somatostatin sst₂ receptor in the rat brain and spinal cord
- 9P Thurlow RJ, Sellers L, Coote JE, Feniuk W & Humphrey PPA Human recombinant sst₅ receptors expressed in CHO-K1 cells mediate increases in extracellular acidification by pertussis toxin-sensitive and -insensitive pathways
- 10P Williams AJ, Michel AD, Coote JE, Sellers L, Feniuk W & HumphreyPPA Characterisation of the human recombinant sst₅ receptor in CHO-K1 cells by quantification of guanosine-5'-O-(3-[35S]thio)triphosphate binding
- 11P Connor MA, Jones A & Henderson G
 Somatostatin and neuropeptide Y elevate
 intracellular calcium in SH-SY5Y cells when
 applied in the presence of carbachol
- 12P D'Amico M, Dashwood MR & Warner TD Endothelin-1 and rat periaqueductal gray area: an autoradiographic and functional pharmacological study

- 13P Caulfield MP, Haley JE, Abogadie FC, Vallis Y & Buckley NJ Antisense constructs directed agains G_{0q/11} attenuate G protein and reduce muscarinic M-current inhibition following intranuclear injection in rat sympathetic neurones
- 14P Abogadie FC, Haley JE, Vallis Y, Caulfield MP & Buckley NJ Use of antisense constructs directed against G_{α} subunits to attenuate G-protein expression
- 15P Tanay VAM-I, Baker GB, Greenshaw AJ & Bateson AN Differential effects of chronic treatment with phenelzine, imipramine or buspirone on GABA_A receptor subunit gene expression in rat brain
- 16P Kennett GA, Bright F, D'Arcy S & Blackburn TP The 5-HT_{2C/2B} receptor antagonist, SB 206553, has anxiolytic-like properties in two rat models
- 17P **Beckett SRG, Aspley S & Marsden CA** The effect of mCPP and yohimbine on 20 kHz ultrasound-induced defence behaviour
- 18P Fone KCF, Austin RH & Punhani T Changes in behaviour, corticosterone release and 5-HT_{2C} receptor levels following chronic m-CPP infusion in the rat
- 19P Andrews JS, de Boer Th & Nicholson CD
 Antidepressant drug effects on differential reinforcement of low rate responding 72 secs
 (DRL) and learning assessed by autoshaping
 (AUTO) using Long Evans rats
- 20P Murray TK & Cross AJ The effect of dizocilpine and selective hippocampal lesions in the elevated plus-maze
- 21P Silva MT, Rose S, Hindmarsh JG, Jenner P & Marsden CD Altered striatal dopamine efflux produced by high concentrations of L-arginine is not dependent on nitric oxide formation
- 22P MacKenzie GM, Jackson MJ, Jenner P & Marsden CD L-Name does not protect against MPTP toxicity in the common marmoset
- 23P Kunikowska GM, Toffa S, Zeng B-Y, Jenner P & Marsden CD The effect of chronic GSH depletion induced by L-buthionine-(S,R)-sulphoximine (BSO) on the nigrostriatal pathway in rats
- 24P Banerji T, Pearce RKB, Jackson MJ, Jenner P & Marsden CD Cholinergic manipulation of L-DOPA-induced dyskinesias in the MPTP-treated common marmoset (Callithrix jacchus)

- 25P Shaw PJ & Salt TE The effects of the nitric oxide-donors sodium nitroprusside (SNP) and S-nitrosoglutathione (GSNO) on rat ventrobasal thalamus neurones *in vivo*
- 26P Obrenovitch TP, Hardy AM & Zilkha E Effects of L-701,324, a novel antagonist at the glycine site of the N-methyl-D-aspartate (NMDA) receptor, on the electroencephalogram and NMDA-evoked responses in the rat striatum
- 27P Moss SH, Bennett GW & Marsden CA Characterisation of the developmental changes in neurotensin metabolism in the rat telencephalon
- 28P Wilson J, Watson WP & Little HJ A CCK_B antagonist reduces signs of anxiety-related behaviour in the elevated plus-maze during withdrawal from chronic ethanol treatment
- 29P Bailey CP, Molleman A & Little HJ The antiepileptic, gabapentin, and the CCK_B antagonist, C1988, decrease hyperexcitability in hippocampal slices during ethanol withdrawal
- 30P Manley SJ & Little HJ Prolonged changes in effects of cocaine after chronic ethanol treatment
- 31P Ruetten H, Thiemermann C & Vane JR Endothelin-1 enhances the synthesis of tumournecrosis factor-α in cultured macrophages and in the anaesthetised rat
- 32P Plumpton C, Ferro CJ, Haynes WG, Webb DJ & Davenport AP The endothelin antagonist TAK-044 increases human plasma immunoreactive endothelin but not big endothelin-1 or C-terminal fragment of big endothelin-1
- 33P **Pierre LN & Davenport AP** Investigation of endothelin receptor subtypes in human isolated middle meningeal artery
- 34P Lauder H, Fan T-PD & Hiley CR Action of endothelin ET_B receptor antagonists on endothelin-3-induced proliferation of wounded endothelial cells
- 35P Maguire JJ, Kuc RE, Doherty AM & Davenport AP Affinity of the ET_A selective nonpeptide antagonist PD156707 for endothelin receptors in human renal and cardiovascular tissues
- 36P Russell FD & Davenport AP Binding characteristics of ET_B selective compounds in human and rat heart
- 37P Sargent CA, Birrell M, McCormick J, Brown TJ & Roach AG Characterisation of endothelin receptors in porcine pulmonary tissue
- 38P Mistry SK, Chatterjee PK, Weerackody RP, McKay NG, Knott RM, Hawksworth GM & McLay JS Growth-induced natriuretic peptide receptor subtype switching and natriuretic peptide expression in primary cultures of rat proximal tubular cells

- 39P Weerackody RP, Chatterjee PK, Mistry SK, Hawksworth GM & McLay JS Aldosterone stimulates DNA, RNA and protein synthesis in primary cultures of rat proximal tubular cells
- 40P Chatterjee PK, Weerackody RP, Mistry SK, Hawksworth GM & McLay JS Angiotensin II-stimulated DNA, RNA and protein synthesis in human proximal tubular cells is inhibited by the AT₁ receptor antagonist DuP753
- 41P Wilkie N, Ng LL & Boarder MR Angiotensin II stimulation of MAP kinases in cultured vascular smooth muscle cells from hypertensive rats: protein kinase C-dependent and -independent mechanisms
- 42P Weerackody RP, Chatterjee PK, Mistry SK, Hawksworth GM & McLay JS Angiotensin IV stimulates protein synthesis in primary cultures of rat proximal tubular cells
- 43P **Forster C & Le Tran Y** Angiotensin-(1-7): Vasodilator or antagonist?
- 44P **Poyner DR, Howitt S & Harkin S** Calcitonin gene-related peptide increases glucose uptake in L6 skeletal myocytes by cyclic AMP
- 45P Villalón CM, Sánchez-López A & Centurión D 5-HT receptors mediating the increases in external carotid blood flow in vago-sympathectomized dogs pretreated with GR127935
- 46P Wang Y, Ramage AG & Jordan D 5-HT₃ receptors mediate an excitatory action of 5-HT on dorsal vagal preganglionic neurones in anaesthetized rats: an *in vivo* ionophoretic study
- 47P McCall RB & Clement ME The role of 5-HT and GABA in the regulation of the 10-Hz rhythm in sympathetic nerve discharge
- 48P **Dando SB, Jordan D & Ramage AG** Central 5-HT_{1A} and 5-HT_{1D} receptors have opposing roles in the reflex activation of cardiac vagal motoneurones by upper airway stimulation in anaesthetized rabbits
- 49P Gardiner SM, Kemp PA, March JE & Bennett T Influence of dexamethasone on the regional haemodynamic responses to lipopolysaccharide in conscious rats: effects of the non-selective endothelin antagonist, SB 209670
- 50P Alexander B, Browse DJ, Mathie RT & Benjamin IS The role of adenosine in hepatic arterial vasodilatation induced by portal venous injections of ATP in the isolated dual-perfused rabbit liver
- 51P Liu YJ, Jackson DM & Blackham A Effects of BW A868C on exogenous PGD₂-induced nasal congestion in anaesthetised dogs

- 52P Bernareggi M, Mitchell JA, Barnes PJ & Belvisi MG Dual action of nitric oxide on airway inflammation: differential effects at different airway levels
- 53P Kengatharan M, De Kimpe SJ, Thiemermann C & Vane JR Effect of aminoguanidine on the circulatory failure and organ injury elicited by staphylococcal lipoteichoic acid and peptidoglycan in the anaesthetised rat
- 54P Aitchison KA & Coker SJ Effects of SIN-1 and iloprost, alone and in combination, on myocardial infarct size in anaesthetized rabbits
- 55P **Dewhurst M, Omawari N & Tomlinson DR**Endoneurial nitric oxide deficiency in diabetic rats: effects of aminoguanidine treatment
- 56P Riaz SS & Tomlinson DR Clenbuterol stimulates nerve growth factor expression in control and diabetic rats: effects on neuropeptides
- 57P Zhang IJ, Loro JF, Li Q, Pfaffendorf M & van Zwieten PA Positive chronotropic effect of bradykinin in pithed rats and in isolated rat atria
- 58P Bhagat K, Collier J & Vallance P Endothelial dysfunction following a brief exposure to endotoxin
- 59P Huang C & Johns EH Effect of nitrendipine on pressure-natriuresis curves in anaesthetised 2K1C Goldblatt and DOCA-salt hypertensive rats
- 60P Summers RJ, Roberts SJ, Papaioannou M & Evans BA Functional and molecular evidence for β3-adrenoceptors in human and rat gastrointestinal tissues
- 61P Grimwood S, Le Bourdellès B, Cockett W, Atack J, Hutson PH & Whiting PJ Homomeric and heteromeric NMDA receptor subunit assemblies can coexist within the same stable cell line
- 62P Göthert M & Finck K Differential ethanol sensitivity of native NMDA receptors stimulating neurostransmitter release: probable relationship to subunit composition
- 63P **Perkinton MS & Sihra TA** ω-Conotoxin MVIIC reversibly inhibits high-K+- and 4-aminopyridine-evoked gluatamate release from isolated nerve terminals (synaptosomes)
- 64P **Salt TE & Turner JP** Antagonism of the presynaptic action of L-AP4 on GABAergic inhibitory transmission by (±)-α-methyl-4-phosphonophenylglycine (MPPG) in the rat ventrobasal thalamus

- 65P Mathie A, Amos BJ & Richards CD Pharmacological characterisation of metabotropic glutamate receptor-induced increases in intracellular [Ca²⁺] in cultured rat cortical neurones and glial cells
- 66P **Boddeke HWGM** Pharmacological and kinetic properties of calcium transients induced by mGluR agonists in various regions of rat hippocampus *in vitro*
- 67P Urenjak J, Zilkha E & Obrenovitch TP
 Origin of depolarizations evoked in the rat
 striatum by competitive inhibition of glutamate uptake with L-trans-pyrrolidine-2,4dicarboxylate (L-trans-PDC)
- 68P Chazot PL, Cik & Stephenson FA Evidence for at least two NR1 subunits per NMDA receptor as deduced from the radioligand binding properties of wild-type and mutant NR1.NR2a receptors
- 69P Lodge D, Bond A, Goldsworthy J, Baker SR, Schoepp DD & Monn JA Potentiation of AMPA-induced excitation by selective metabotropic glutamate receptor agonists on rat spinal neurones in vivo
- 70P Thomas NK, Jane DE, Tse H-W & Watkins JC (S)-α-ethyl-glutamic acid and (RS)-α-cyclopropyl-4-phosphonophenylglycine as antagonists of L-AP4- and (1S,3S)-ACPD-induced depression of monosynaptic excitation of neonatal rat motoneurones
- 71P Seabrook GR, Dawson G & Bowery BJ Modulation of long-term potentiation in CA1 region of hippocampal brain slices by benzodiazepines
- 72P Keen M & Krane A The effect of K+-depleted medium on iloprost- and forskolin-mediated down-regulation of IP prostanoid receptors in NG108-15 cells
- 73P **Teixeira MM & Hellewell PG** Differential effects of protein kinase C inhibition on PAF-and C5a-induced eosinophil activation
- 74P **Pabla R & Curtis MJ** Effect of L-NAME and L-arginine on cardiac stunning (recovery of systolic and diastolic contractile function during reperfusion following normothermic global ischaemia) in rat isolated heart
- 75P **Burke-Gaffney AC & Hellewell PG** Nitric oxide synthase inhibitors potentiate cytokine-induced damage of murine lung epithelial cells
- 76P MacAllister RJ, Whitley GStJ, Parry H, Kimoto M, Ogala T, Hodson H, Moncada S & Vallance P Regulation of NO synthesis by dimethylarginine dimethylaminohydrolase

- 77P Plane F, Najibi S, Cohen RA & Garland CJ Role of nitric oxide in repolarization and relaxation to acetylcholine in the rabbit isolated carotid artery
- 78P Bishop-Bailey D, Larkin SW, Pepper JR Yacoub M, Warner TJ & Mitchell JA Comparison of the ability of human, rat and rabbit vessels to produce nitric oxide and prostanoids in response to LPS
- 79P Bishop-Bailey D, Larkin SW, Williams TJ & Mitchell JA Inducible isoforms of NOS and COX contribute to the sustained release of NO and PGE₂ by segments of rat aorta exposed to LPS in organ culture
- 80P Saunders MA, Belvisi MG, Barnes PJ, Williams TJ, Mitchell JA Comparison of the effects of nonsteroidal anti-inflammatory drugs as inhibitors of COX-2 metabolites derived from endogenous versus exogenous arachidonic acid
- 81P Dahlén S-E, Bäck M, Rosenqvist U, Wikström-Jonson E Observations on functional receptors for cysteinyl-leukotrienes in selected smooth muscles
- 82P Saunders MA, Mitchell JA, Hirst SJ, Williams TJ, Yacoub MH, Barnes PJ & Belvisi MG Characterisation of cyclo-oxygenase-2 induction in human airway smooth muscle cells
- 83P Carver JE & Robinson C Dexamethasone attenuates gelatinase activity in stimulated human lung fibroblasts and epithelial cells
- 84P Naseem KM & Bruckdorfer KR The influence of organic peroxides on platelet aggregation and sensitivity to nitric oxide
- 85P Gates SC, Bruckdorfer KR, Mitchell J, Bishop-Bailey D & Jacobs M Nitrite production in the endotoxin-treated isolated aorta from the Watanabe hereditary hyperlipidaemic rabbit
- 86P Rupin A, Behr D & Verbeuren TJ Expression of functional brain and macrophagic NO-synthases in the atherosclerotic rabbit aorta
- 87P Kolios G, Murphy CT, Robertson DAF & Westwick J Modulation of inducible nitric oxide synthase (iNOS) activity in the human colon epithelial cell line HT-29: dual effect of interleukin-13 (IL-13)
- 88P Geppetti P, Figini M, Emanueli C, Javdan P & Bertrand C Tachykinins relax the guineapig trachea by stimulating an epithelial 'septide-insensitive' NK₁ receptor which releases NO: evidence for NK₁ receptor subtypes?
- 89P Griesbacher T, Rainer I & Griengl S Contribution of 5-hydroxytryptamine release from mast cells to rat paw oedema induced by wasp venom and synthetic kinins

- 90P Kelly DC, Asghar AUR, McQueen DS Perkins MN Effects of bradykinin and desArg9-bradykinin on afferent neural discharge in interleukin-1β-treated rat knee joints
- 91P Burns NJ, Brett L, Kelly PAT, Lawrence JA
 Olverman HK & Williams BC Specific localisation of the 5-HT transporter in the rat adrenal medulla
- 92P **Assié MB & Koek W** 8-OH-DPAT may have 5-HT uptake blocking properties in rat hippocampus
- 93P Hirst WD, Rattray M, Price GW & Wilkin GP Astrocytes in vitro express functional 5-HT₇ receptors
- 94P Lovick TA, Schenburg LC 5-HT_{1A} receptors are involved in inhibition of the midbrain-evoked cardiovascular defence response by nucleus raphe obscurus
- 95P Iravani MM & Kruk ZL Effects of NMDA receptor antagonists on 5-HT release in rat substantia nigra
- 96P Steward LJ, Boess FG, Steele JA & Martin IL Agonist/antagonist recognition properties of the 5-HT₃ receptor: importance of glutamate 106
- 97P Neil KE, Alexander SPH & Kendall DA Binding of the β-adrenoceptor antagonist radioligand [125]-iodocyanopindolol to particulate preparations from the guinea-pig cerebral cortex and cerebellum
- 98P **Bufton HR, Lodge D & Kilpatrick IC** Evidence for a preferential blockade of inhibitory synaptic transmission by ω-agatoxin vA in the *in vitro* spinal cord of the neonatal rat
- 99P Croning MDR & Newberry NR Effect of dantrolene on the perturbations in ionic homeostasis induced by combined oxygen and glucose deprivation in the rat hippocampus in vitro
- 100P Ward PS, Boden T, Woodger R, Porter J, Leonard J, Bodmer M & Foulkes R Steroid sulphatase inhibition ameliorates collagen-II arthritis in mice
- 101P Rupniak NMJ, Carlson E, Boyce S, Webb JK & Hill RG Enantioselective inhibition of the formalin paw late phase by the NK₁ receptor antagonist L-773,060 in gerbils
- 102P Ahluwalia A & Vallance PJ Sensory nerve activation of rat small mesenteric veins
- 103P **Trezise DJ & Humphrey PPA** Activation of peripheral sensory neurones in the neonatal rat tail by ATP

- 104P Westfall TD, McIntyre CA, Obeid S, Kennedy C & Sneddon P Characterisation of P_{2x}-purinoceptors in guinea-pig isolated vas deferens using agonists, antagonists and the ecto-ATP-ase inhibitor ARL 67156
- 105P Charlton S, Brown C & Boarder MR Transfected P_{2U}- and P_{2Y}-purinoceptors: differential sensitivity to suramin
- 106P Grahames CBA, Michel AD & Humphrey PPA ATP-stimulated ⁴⁵Ca uptake as a means of measuring P_{2X} purinoceptor activation in PC12 cells
- 107P Newgreen DT & Naylor AM Comparison of the functional muscarinic receptor selectivity of darifenacin with tolterodine and oxybutinin
- 108P Eglen RM, Peelle B, Pulido-Rios MT & Leung E Muscarinic M2 receptors modulate relaxant responses to 5-HT $_4$ receptor and β_3 -adrenoceptor agonism in isolated oesophageal muscularis mucosae of rat
- 109P Chess-Williams R, Noble AJ, Couldwell C Rosario DJ & Chapple CR The α_1 -adrenoceptor antagonist SB216469 (REC 15/2739) discriminates between α_{1A} -adrenoceptors and the α_1 -adrenoceptors of the human prostate
- 110P Marshall I, Green M, Hussain MB & Burt RP Differences in affinity for the antagonist RS 17053 at α_{1A} -adrenoceptors between rat tissues
- 111P Hadoke PWF, Dillon JF, Walker SW, Williams BC, John TG & Hayes PC Hyporesponsiveness to α-adrenoceptor agonists in cirrhotic patients is not evident when human hepatic and mesenteric arteries are studied *in vitro*
- 112P **Haynes JM & Hill SJ** α-Adrenoceptor-mediated responses in the cauda epididymis of the guinea-pig
- 113P Jordan NJ, Watson ML, Williams RJ, Roach AG, Yoshimura T & Westwick J Chemokine production by human vascular smooth muscle cells: modulation by IL-13
- 114P Teixeira MM, Giembycz MA & Hellewell PG Mechanisms involved in the activation of eosinophil aggregation by arachidonic acid
- 115P de Silva HA, Carver JG & Aronson JK Stimulation of potassium (% rubidium) efflux from human platelets by external potassium and its inhibition by bumetanide: evidence for Na/K/Cl co-transport
- 116P Hardingham N & Randall AD Biophysical analysis of the interaction of Ro 405967-15 with K+ channels in the rat NG108 cell-line
- 117P Petersson J, Zygmunt PM & Högestätt ED Charybdotoxin and apamin inhibit relaxations mediated by EDHF in the guinea-pig basilar artery

- 118P Högestätt ED & Zygmunt PM Role of potassium channels in endothelium-dependent relaxation resistant to nitroarginine in the rat hepatic artery
- 119P Razzaque Z, Baker R, Beer MS, Hill RG, Matassa VG, Stagg AT, Sternfeld F, Street L & Longmore J In vitro pharmacological effects of two novel 5-HT_{1D}-receptor agonists L-741,519 and L-741,604: comparison with sumatriptan and BW311C
- 120P Zygmunt PG, Högestätt ED, Edwards G Ortiz de Montellano PR & Weston AH Effects of cytochrome P450 inhibitors on endotheliumdependent and levcromakalim-induced responses in rat blood vessels
- 121P Stassen FRM, Fazzi GE, Willemsen MJJMF Janssen GMJ & De Mey JGR Progressive reduction of maximal active wall stress in rat mesenteric resistance arteries following myocardial infarction
- 122P Soares-da-Silva P, Serrão MP & Marques C Kinetics of L-DOPA uptake in LLC-PK₁ cells in culture
- 123P Soares-da-Silva P, Serrão MP & Pestana M Effects of short- and long-term exposure of LLC-PK₁ cells to cyclosporine A on the formation and outflow of dopamine
- 124P Aherne AM, Vaughan CJ & Murphy MB & O'Connell DP Co-localisation of dopamine D_{1A} receptor protein and mRNA in rat colon
- 125P Vaughan CJ, Aherne AM & Murphy MB & O'Connell DP Immunohistochemical mapping of a novel dopamine D_{1B} receptor in rat kidney
- 126P Wardle KA, Bingham S, Ellis ES, Gaster LM, Rushant B, Smith MI, Brown AM, Young TJ & Sanger GJ SB 207266: The first potent and selective 5-HT₄ receptor antagonist amide with oral activity
- 127P Coleman T, Ellis SW, Martin IJ, Lennard MS & Tucker GT MPTP is N-demethylated by CYPs 2D6, 1A2 and 3A4: implications for susceptibility to Parkinson's disease
- 128P **O'Shea D, Kim RB & Wilkinson GR** Modulation of CYP2E1 activity by isoniazid in fast and slow N-acetylators
- 129P Pilowsky LS, Busatto GF, Taylor M, Costa DC, Sharma T, Sigmundsson T, Ell PJ, Nohria V & Kerwin RW Striatal dopamine D₂ receptor binding estimated in vivo in olanzapine-treated schizophrenic patients by ¹²³I IBZM single photon emission tomography (SPET)

POSTER COMMUNICATIONS

- 130P Nunn PA, Greengrass PM, Newgreen DT, Naylor AM & Wallis RM The binding profile of the novel muscarinic receptor antagonist darifenacin against the five cloned human muscarinic receptors expressed in CHO cells
- 131P Yang M, Taguchi K, Erdbrügger W & Michel MC Is protein kinase C involved in agonistinduced down-regulation of MDCK cell α₁adrenoceptors?
- 132P Boyland PS, Eastwood S, Ellis C, Bergsma D, Jones BJ, Gloger IS, Upton N & Middlemiss DN High specific activity [3H]5-CT binding: correlation of guinea-pig cortex with human cloned 5-HT, receptors
- 133P Gager TL, Holland V, Thomas DR, Blackburn TP & Wood MD The novel 5-HT_{2C/2B} receptor antagonist SB206553 is a potent and surmountable antagonist at cloned human receptors
- 134P Viggers JA, Cheetham SC, Ruck A & Heal DJ Effect of antidepressant drugs on 5-HT2_A receptors in cultured rat glioma C₆ cells
- 135P **Patten D, Martin KF & Halliwell RF** A study of the effect of propofol on neuronal GABA_A, 5-HT₂, P₂, and nACh receptors
- 136P **Borman RA& Burleigh DE** Characterisation of the receptors mediating 5-HT-induced fluid secretion in human colonic mucosa
- 137P Thomas DR, Baxter GS, Carey JE, Gager TL, Gale DG, Holland V, Muir A, Wilson S & Wood MD SB 204741 is a selective antagonist at the cloned human 5-HT_{2B} receptor stably expressed in HEK 293 cells
- 138P Schoeffter P, Bobirnac I, Ullmer C, Gabbiani G & Lübbert H Functional, endogenously expressed 5-HT, receptors in human vascular smooth muscle cells
- 139P Boyfield I, Gager TL & Coldwell MC Functional potencies of novel human 5-HT_{2C/2B} receptor antagonists determined in the Cytosensor Microphysiometer
- 140P Needham PL, Atkinson J, Cheetham SC, Dinnis D, Slater NA, O'Brien EC & Heal DJ Binding of zotepine, clozapine and haloperidol to 5-HT receptor subtypes
- 141P Hirst WD, Rattray M, Price GW & Wilkin GP Regional differences in functional 5-HT₇ receptor expression by cultured astrocytes
- 142P Gallacher M & Ramage AG Evidence which indicates that the activation of central 5-HT_{1Dα} receptors can cause hypotension in anaesthetized rats

- 143P Willars GB, Challiss RAJ & Nahorski SR Effects of phorbol ester versus agonist-mediated protein kinase C activation on muscarinic receptor-stimulated phosphoinositide turnover in SH-SY5Y cells
- 144P Wise H & Chow BS The lack of effect of nitric oxide on rat peritoneal neutrophil aggregation
- 145P Ruetten H, Southan GJ, Abate A & Thiemermann C Effects of 1-amino-2-hydroxyguanidine, a potent inhibitor of inducible nitric oxide synthase, on multiple organ dysfunction caused by endotoxin
- 146P Zhang C, Schmidt M & Jakobs KH Inhibition by toxin B of G protein-coupled and tyrosine kinase receptor-mediated phospholipase C stimulation
- 147P Grix SP, Gardiner PJ, Westwick J & Poll CT Investigation of signal transduction processes involved in agonist-induced leukotriene C₄ generation in human eosinophils
- 148P Cross KML, Jane SD, Wild AE, Foreman RC & Chad JE Non-depolarizing muscle relaxants differentiate between mouse muscle nicotinic acetylcholine receptors expressed in Xenopus oocytes and quail fibroblasts
- 149P Garland CM, Foreman RC, Holden-Dye L & Walker RJ The effect of pancuronium bromide on muscle and neuronal nicotinic acetylcholine receptors (nAChRs) expressed in *Xenopus* oocytes
- 150P Ahmad M, Ahmadi M, Smith HJ & Nicholls PJ Species comparison of the *in vitro* hepatic metabolism of retinoic acid
- 151P Ahmad M, Ahmadi M, Smith HJ & Nicholls PJ *In vitro* metabolism of retinoic acid by various rat tissues: implications for inhibitors
- 152P **Heath BM & Terrar DA** Block of min K current by propofol and thiopentone in *Xenopus* oocytes
- 153P Bright F, Cilia J, Piper D, Blackburn TP & Kennett G Effects of SB 206553, a 5-HT_{2C/2B} receptor antagonist, in a marmoset conflict model of anxiety
- 154P Attwell PJE, Kaura S, Sigala G, Bradford HF, Croucher MJ, Jane DH & Watkins JC Blockade of both glutamate release and seizure activity by the presynaptic glutamate receptor agonist (1S,3S)-ACPD
- 155P McBean DE, Redfern WS, Winters V, Williams A & Oswald CB Further studies on the link between the loss of neuroprotective effect of lifarizine at a high dose and its hypotensive effects, using rats implanted with telemetry transducers

- 156P Campbell CA, King PD, Price WJ, Barone FC, Feuerstein GZ, Hamilton TC & Hunter AJ Neuroprotective and cardiovascular effects of SB 206284A in rats
- 157P Al-Zahrani SSA, Ho M-Y, Velazquez-Martinez DN, Lopez Cabrera M, Bradshaw CM & Szabadi E Effect of lesions of the 5-hydroxy-tryptaminergic pathways on performance in an operant timing task
- 158P Smith JK, Neill JC & Costall B The effect of dopamine receptor antagonists on responding for a conditioned reinforcer in the rat
- 159P Wilson AW, Neill JC & Costall B A comparison of acquisition and expression of the ethanol discriminative cue in female rats of Sprague Dawley and Lister-Hooded strain
- 160P Samson NA, Olufsen KF, Hamilton TC & Hunter AJ The effect of renzapride and its enantiomers on learning in the common marmoset
- 161P Patel S & Hutson PH Inhibition by galanin of 5-HT₂ receptor-mediated PI hydrolysis and head twitch behaviour
- 162P **Meoni P & Bowery NG** Mutual interaction between dextromethorphan and paroxetine in rat brain
- 163P Snape MF, Anderson SMP, Misra A, Paccagnini PJ, Murray TK, Cross AJ & Green AR A comparison of the cholinesterase inhibitors tacrine and E-2020
- 164P Srinivasan J, Richens A & Davies JA
 Losigamone reduces glutamate and aspartate
 release from mouse cortex
- 165P Bourson A, Wanner D & Petit N Metabotropic glutamate receptors (mGluRs) Group 1 agonists induce catalepsy in mice
- 166P Lorez HP, Fischer G & Bourson A Neuroprotective properties of the NMDA receptor open channel blocker Ro 24-6173 in rats
- 167P Stricker-Krongrad A, Souquet A-M, Jackson HC & Burlet C Effect of various monoamine receptor antagonists on the decrease in food intake induced by sibutramine in the rat
- 168P Jackson HC, Bearham MC, Mazurkiewicz SE, Heal DJ & Buckett WR Investigation of the mechanisms underlying the hypophagic effects of the 5-HT and NA reuptake inhibitor sibutramine in the rat
- 169P Gosden J, Buckett WR & Heal DJ d-Amphetamine-cued drug discrimination in rats: predictive value for detecting stimulant drugs of abuse
- 170P Connoley IP, Frost I, Heal DJ & Stock MJ Role of β -adrenoceptors in mediating the thermogenic effects of sibutramine

- 171P Bayley PJ, Bentley G & Dawson GR Behavioural evaluation of SX-3228, a potent anticonvulsant
- 172P Young L & Bristow LJ The glycine/NMDA receptor antagonist, L-701,324, reverses isolation rearing-induced hyperlocomotion in the rat
- 173P Saywell KL, Cook GP & Bristow LJ The glycine/NMDA receptor antagonist, L-701,324, attenuates the deficit in prepulse inhibition of acoustic startle responding induced by amphetamine in the rat
- 174P Ballard TM, Hunter AJ & Bennett GW The TRH analogue, RX77368, improves a working memory deficit in AMPA-induced septal-hip-pocampal lesioned rats
- 175P Getova D, Bowery NG & Blackburn TP Effects of 5-HT₃ antagonists BRL 46470A and ondansetron on learning and memory in mice
- 176P Giustino A, Cuomo V, Beckett S & Marsden CA Reduced novel object exploration in rats perinatally exposed to cocaine
- 177P Mirza NR, Jackson HC, Dickinson SL & Nutt DJ Effect of the I₂-ligand 2-BFI on passive avoidance performance in the rat
- 178P Ainsworth K, Trail B, Blackburn TP, Baxter GS & Kennett GA Is BW 723C86-induced hyperphagia an *in vivo* model of rat central 5-HT₂₈ receptor function?
- 179P Griebel G, Perrault G & Sanger GJ Further evidence for behavioural differences between selective BZ-1 (ω 1) and non-selective BZ (ω) receptor ligands in rats
- 180P Ward JL, Lightowler S, Kennett GA & Blackburn TP Effect of the selective 5-HT_{2B/2C} receptor antagonist, SB 206553, on mCPP- and environmental stress-induced increase in plasma adrenocorticotropic hormone in rats
- 181P Smith SL, Mason K, Stanford SC, Prow MR & Heal DJ DSP-4 neurotoxicity in rat brain: effect on heat-shock protein expression and *in vivo* noradrenaline efflux
- 182P Smythe JW, Murphy D, Timothy C & Costall B Exogenous corticosterone administration increases anxiety in rats
- 183P Widdowson PS, Gyte A, Upton R, Wyatt I, Foster JR & Lock EA L-2-Chloropropionic acid-induced cerebellar necrosis is not the result of lipid peroxidation or DNA damage
- 184P McAllister KHM & Pratt JA Effect of ondansetron on apomorphine-induced conditioned taste aversions in rats

- 185P Jelic P & Taberner PV Effects of isradipine on hormone-sensitive lipase activity of brown adipose tissue in mice during withdrawal from chronic ethanol treatment
- 186P Riedl AG, Watts PM, Couek DC, Edwards RJ, Boobis AR & Jenner P CYP2E1 is expressed in dopaminergic neurones in the rat substantia nigra
- 187P Warren DL, Jenner P & Halliwell B In vitro antioxidant actions of antiparkinsonian agents
- 188P Stefferl A, Storch M, Lassmann H, Holsboer F, Wekerle H & Linington C Myelin oligodendrocyte glycoprotein (MOG) induces chronic relapsing experimental allergic encephalomyelitis (CR-EAE) in the DA rat
- 189P **Staton P & Bristow DR** Mechanisms of β-methylamino-L-alanine (BMAA)- and β-oxalylamino-L-alanine (BOAA)-induced death in rat cerebellar granule cells
- 190P Lydford SJ, Li SW & McKechnie KCW Comparison of prostanoid DP-receptors in the rabbit isolated saphenous vein and human neutrophil
- 191P Westfall TD, Obeid S, McIntyre CA, Kennedy C & Sneddon P Characterisation of P_{2X} purinoceptors in guinea-pig isolated urinary bladder strips using agonists, antagonists and the ecto-ATPase inhibitor ARL 67156
- 192P de Graeff BD & Reinders JH Endothelin-1mediated A7r5 smooth muscle cell activation: separation of dual effect by verapamil and 8BrcGMP
- 193P Green ME, Edwards G & Weston AH Pharmacological characterisation of the inwardly-rectifying current in the smooth muscle cells of rat bladder
- 194P Astolfi M, Mak JCW, Barnes PJ, Evangelista S & Manzini S Tracheobronchial distribution and density of tachykinin NK₁ and NK₂ receptors in normal and multiple antigen-challenged guinea-pigs
- 195P Hills DM, Gerskowitch VP, Roberts SP, Welsh NJ, Shankley NP & Black JW Pharmacological analysis of the CCK_B/gastrin receptors involved in pentagastrin-stimulated gastric acid secretion in the isolated immature rat stomach
- 196P Asonganyi B, Borkowski J, Hess JF, Shaw D, Hill RG & Longmore J Induction of B₁receptor-mediated functional responses in mouse urinary bladder: effects of genetic depletion of the B₂-receptor gene
- 197P Freitag A, Wessler I & Racké K Adrenoceptormediated modulation of 5-HT release from neuroepithelial cells of trachea of newborn rabbits

- 198P Goepel M, Erdbrügger W, Wittmann A & Michel MC Atypical affinities of ICI 118,551 at porcine β₂-adrenoceptors
- 199P Yeung CK, McCurrie JR & Wood D Inhibitory effects of rubidium on the actions of potassium channel modulators in mouse ileum are apparent at a physiological potassium concentration
- 200P Martin SW, Radley SC, Chess-Williams R, Chapple CR & Korstanje C Relaxant effects of levcromakalim and YM 934 in human isolated detrusor strips from stable and unstable bladders
- 201P **Bushfield M, Kenny BA & Parker N** Facilitation by 5-HT of ATP-mediated electrically-stimulated contractions in the pig urinary bladder
- 202P Davies CL, Gold MG, Merner PA & Rankin AJ In vivo bladder selectivity of the novel muscarinic antagonist, darifenacin, in the conscious minipig
- 203P Medhurst AD, Hay DWP & Parsons AA Evidence for NK₃ receptor subtypes in rabbit isolated iris sphincter muscle using the NK₃ receptor antagonists SR 142801 and SR 48968
- 204P Ellis ES, Tilford NS, Baxter GS & Sanger GJ A comparison of N-type calcium channels in human and rat isolated vas deferens by rank order of ω-conotoxin activity
- 205P **Yianni NC & Williams RG** L-NAME has no effect on the length-tension relationship of rat detrusor muscle *in vitro*
- 206P Hilton JEBP & Williams RG Characterisation of the receptors that mediate the adrenergic component of non-nicotinic vagally-evoked relaxation of the rat stomach *in vitro*
- 207P Danahay H & Broadley KJ Effects of Ro 20-1724, a selective inhibitor of phosphodiesterase IV, on the development of acute antigen-induced bronchial hyperreactivity and airway leukocyte infiltration in sensitised guinea-pigs
- 208P Handy RLC, Whitehead KJ & Moore PK Inhibition of nitric oxide synthase isoforms by 1-(2-trifluoromethylphenyl) imidazole (TRIM) and related phenylimidazoles
- 209P **Pocock TM & Small RC** Studies of the effects of SCA40 in relaxing bovine trachealis muscle and in inhibiting isoenzymes of cyclic nucleotide phosphodiesterase
- 210P McArdle S, Isaac LM & Small RC Effects of iberiotoxin on the mechanical and electrical activity of guinea-pig trachealis muscle
- 211P **Hemati AA & Hicks RR** Chromate-induced fibrogenesis associated with the development of contractile myofibroblasts

- 212P Patacchini R & Maggi CA Effect of cyclopiazonic acid on contractions produced by tachykinin NK₁ and NK₂ receptor agonists in the circular muscle of guinea-pig colon
- 213P Jones EH, Bungay PJ, Greengrass PM & Smith CM Comparison of the effects of various methods of cell culture on the activation of the transfected human NK₂ receptor
- 214P Smith J & Little HJ The calcium channel antagonist, nimodipine, given before practice in a test of ataxia, increases the development of tolerance to ethanol
- 215P Lilley EA & Gibson A Protection of nitric oxide from hydroquinone by some physiological antioxidants
- 216P Williams SH & Parsons ME Nitric oxide mediates relaxations of the frog oesophagus to transmural electrical stimulation
- 217P Slee S-J, Heys C & Wilson C ET receptors involved in the blood pressure response to endothelins in the rat
- 218P Li Q, Zhang J, Pfaffendorf M & van Zwieten PA Direct positive chronotropic effect of angiotensin III in pithed rats and isolated rat atria
- 219P Dubois EA, Somsen GA, Janssen AFM, van de Bos JC, Batink HD, Pfaffendorf M, van Royen EA & van Zwieten PA Affinity and biodistribution of an iodinated derivative CGP 12177 developed for the imaging of cardiac β-adrenoceptors *in vivo*
- 220P Somsen GA, Dubois EA, Brandsma K, de Jong J, van der Wouw PA, Batink HD, van Royen EA, Pfaffendorf PA, Lie KI & van Zwieten PA Cardiac sympathetic neuronal activity and function in the early phase of left ventricular volume and pressure overload
- 221P Flynn DA, Birrell MA, Brazdil R, McCormick J, Layland K, Handscombe C, Brown TJ, Roach AG & Sargent CA Comparison of the ETA receptor potency of selective and non-selective ET antagonists in vivo and in vitro
- 222P Birrell MA, Wong ML, Handscombe C, Flynn DA, Sargent CA, Brazdil R, Brown TJ & Roach AG A bioassay for measurement of levels of ET receptor antagonists in plasma and correlation with *in vivo* potency
- 223P Key BJ & Hashmi MP The influence of nitric oxide in the rostral ventrolateral medulla of the anaesthetised rat during temperature regulation
- 224P Hamon G & Jouquey S Effects of subchronic administration of niravoline, a novel aquaretic compound, on water and electrolyte renal excretion in cirrhotic rats

- 225P Vayssettes-Courchay C, Lacoste J-M, Cordi AA, Laubie M & Verbeuren TJ *In vivo* cardio-vascular effects of the α-adrenoceptor agonist S 18149 in the anaesthetized dog
- 226P Varró A, Papp JGy, Németh M, Krassói I, Mester L & Hála O Direct and long-term electrophysiological effects of amiodarone in dog cardiac Purkinje and ventricular muscle fibres
- 227P March JE, Gardiner SM, Kemp PA & Bennett T Regional haemodynamic responses to vasodilators in conscious, transgenic [(mRen-2)27], hypertensive rats
- 228P Bennett T, Kemp PA, March JE & Gardiner SM Haemodynamic effects of lipopolysaccharide (LPS) infusion in conscious, vassopressindeficient Brattleboro rats
- 229P McCulloch AI & Randall MD Characterisation of endothelium-dependent relaxations in the isolated perfused rat superior mesenteric arterial bed: the involvement of EDHF
- 230P Marsh KA, Draper LM, Rubin PC & Hill SJ Characteristics of human umbilical artery endothelial cells maintained in a low oxygen environment
- 231P Emerson M, Page CP & Paul W In vivo effect of dopamine on platelet aggregation in the rabbit
- 232P Brownlie RP, Brownrigg NJ, Butcher HM, Garcia R, Jessup R, Lee VJ, Tunstall S & Wayne MG ZD2486: a potent and selective antagonist of platelet fibrinogen receptors (glycoprotein IIb/IIIa)
- 233P Brownlie RP, Brownrigg NJ, Butcher HM, Garcia R, Jessup R, Lee VJ, Moors JA & Wayne MG ZD9583: a dual acting thromboxane A₂ synthase inhibitor/receptor antagonist suppresses neointimal hyperplasia in the rat
- 234P Van der Graaf PH, Shankley NP & Black JW
 Analysis of antagonism of phenylephrinemediated contraction of the rat small mesenteric artery
- 235P **Hannon JP & Fozard JR** Selective suppression of adenosine A₁ receptor-mediated hypotensive responses in the rat by dexamethasone
- 236P Smith SE, Man CM, Yip PK, Tang E, Chapman AG & Meldrum BS The nitric oxide synthase product, L-citrulline and the nitric oxide donor, SIN-1 are convulsant, whilst L-arginine is anticonvulsant in rodents with inbred reflex epilepsy
- 237P Hunter JC, Lewis R, Eglen RM & Fontana DJ The role of α and β adrenoceptors in a rodent model of neuropathic pain

- 238P Pleass RD, Moore UM, Roach AG & Williams RJ Quantification of chemokine-induced changes in extracellular acidification rate of THP-1 cells using a microphysiometer
- 239P Abate A, Kengatharan M, Ruetten H, Hirschelmann R, Thiemermann C & Vane JR Induction of cyclooxygenase-2 by lipoteichoic acid in bovine endothelial cells involves the activation factor NF-xB
- 240P Ridger VC & Brain SD The effect of L-N6-(1-iminoethyl)lysine on zymosan-induced oedema in rat dorsal skin
- 241P **Fletcher S & Barnes NM** Autoradiographic localisation of [³H]-(S)-zacopride labelled 5-HT₃ receptor sites in the pig forebrain
- 242P Mason GS, Tattersall FD, Hill RG & Hargreaves RJ Effect of the NK₁ receptor antagonists, L-733,060 and CP-99,994, and morphine in the rabbit spinal reflex preparation
- 243P Patel Shil, Freedman SB & Patel Smita [3H]Epibatidine: a novel high affinity ligand at neuronal nicotinic acetylcholine receptors
- 244P Pilcher CWT & Bitar MS Attenuation of α₂ adrenoceptor-mediated nociception in diabetic rats
- 245P Boyce S, Rupniak NMJ, Carlson EJ, Webb JK, Borkowski JA, Hess JF, Strader CD & Hill RG Nociception and inflammatory hyperalgesia in B, bradykinin receptor knockout mice
- 246P West KJ & Campbell EA 4-Methylcatechol induces mechanical hyperalgesia in naïve adult rats by a nerve growth factor-dependent mechanism
- 247P Gentry CT, Patel S, Winter J & Campbell EA 4-Methylcatechol, an inducer of endogenous nerve growth factor (NGF) synthesis, has analgesic actions in a model of neuropathic pain
- 248P Patel S, Gentry CT & Campbell EA A model for the *in vivo* evaluation of tachykinin NK1 receptor antagonists using carrageenan-induced hyperalgesia in the guinea-pig paw
- 249P Winkler Prins EA, Zwaveling J, Pfaffendorf M & van Zwieten PA The effect of hyperthyroidism on β-adrenoceptors in rat isolated thoracic aortae
- 250P Smith RR, Maxwell MP & Martin GR Further investigation into amplifying interactions between 5-HT_{1D} and angiotensin AT₁ receptors in vascular smooth muscle
- 251P Pfaffendorf M, Beenen OEM, Mathy M-J & van Zwieten PA Vascular reactivity of renal arteries from spontaneously hypertensive rats with streptozotocin-induced diabetes mellitus

- 252P Beenen OHM, Pfaffendorf M & van Zwieten PA Blunted inhibitory effects of cholinergic agents in isolated hearts from hypertensive-diabetic rats
- 253P Zwaveling J, Batink HD, Winkler Prins EA, Pfaffendorf M & van Zwieten PA The influence of hyperthyroidism on the number of β-adrenoceptors in left ventricle and kidney is transient and time-dependent
- 254P Hüsken BCP, van der Wal AC, Teeling P, Mathy M-J, Pijl AJ, Pfaffendorf M & van Zwieten PA Influence of the hypertensive state on the pharmacological and morphological characteristics of rat isolated coronary arteries and aortae
- 255P Côrtes SF, Andriantsitohaina R & Stoclet JC Implication of endothelial and nonendothelial cyclooxygenase products in responses to angiotensin II of resistance arteries from spontaneously hypertensive rats
- 256P Lagaud GJL, Stoclet JC & Andriantsitohaina R Characterization of calcium stores and influx mechanisms involved in the contraction induced by noradrenaline in rat resistance arteries
- 257P De Mey JGR, Zidek W, Struijker Boudier HAJ, Raat H & Spiering W Diadenosine-pentaphosphate contracts and relaxes rat resistance arterial smooth muscle through P_{2x}-purinoceptors
- 258P Welsh NJ, Ngambi GLO, Shankley NP & Black JW Potentiating interactions between noradrenaline and angiotensin II in rabbit femoral artery are dependent on order of agonist incubation and assay conditions
- 259P Green M, Burt RP & Marshall I α_{1A} -Adrenoceptor subtype mediates tonic contractions to phenylephrine in rat hepatic portal vein
- 260P Marshall I, Morrison JJ, Perera D & Rodeck CH The effects of GTN, GSNO, SNAP, SIN-1 and L-arginine on contractility of isolated human pregnant myometrium
- 261P Sooch S & Marshall I Evidence for atypical β -adrenoceptors in the rat vasculature
- 262P Wisskirchen F & Marshall I Calcitonin generelated peptide (CGRP) receptors in rat vas deferens, pulmonary artery, internal anal sphincter and thoracic aorta
- 263P Criddle DN, Soares de Moura R, Domingos LR & de Lima Maia E Vasorelaxant effects of SR 47063 in human saphenous vein and rat aorta
- 264P Ellwood A & Curtis MJ Sumatriptan evokes 5-HT_{1D}-like receptor-mediated coronary vasoconstriction and mesulergine-sensitive, NOdependent, coronary vasodilatation in guineapig isolated heart

- 265P Ruiz E, Cawley T & Docherty JR Effects of nitric oxide synthase inhibition and methylene blue on vasoconstrictor responses in the rat
- 266P Zeegers A, Leeuwin RS & van Wilgenburg H
 PK 11195 modifies responses of isolated hearts
 to both centrally and peripherally acting
 benzodiazepines
- 267P Burns NJ, Sephton C, Brett L, Olverman HJ & Williams BC Role of L-aromatic amino acid decarboxylase in the regulation of aldosterone secretion by 5-HT
- 268P Shepheard SL, Williamson DJ, Cook D, Hill RG & Hargreaves RJ Studies on the sympatholytic effects of some 5-HT_{1D} receptor agonists in pithed rats and guinea-pigs
- 269P Bailey S & Elliott J Characterisation of 5-HT receptors mediating vasoconstriction of isolated equine digital arteries
- 270P **Peter MG & Davenport AP** Upregulation of the endothelin ET_A receptors in left ventricle from failing human hearts demonstrated using competition binding studies with FR139317
- 271P Williamson DJ, Hargreaves RJ, Hill RG & Shepheard SL Direct measurement of dural blood vessel diameter in the rat using intravital microscopy
- 272P Kumar A, McAulay JA & Sneddon JM Effect of neomycin or streptomycin on enzyme activities in a human renal cell line
- 273P Morton C, Ng LL & Boarder MR Evidence that the mitogenic response to angiotensin II in vascular smooth muscle cells from the hypertensive rat involves a tyrosine kinase dependent stimulation of phospholipase D activity
- 274P Rahal MK, Irving G, Patterson LH & Brown JE Comparison of the cardiotoxicity of new anthraquinone antitumour agents and their Noxides prodrugs with doxorubicin and epirubicin using isolated rat cardiac myocytes
- 275P Gardner N & Broadley KJ Comparison of antagonism of adenosine receptor mediated responses by 8-(p-sulfophenyl) theophylline in four guinea-pig isolated cardiac preparations
- 276P Vaughan TJ, Williams AJ, Pritchard K, Glover DR & Johnson KS Accelerating drug discovery: high affinity human monoclonal antibodies on filamentous bacteriophage
- 277P Verbeuren TJ, Vayssettes-Courchay C, Descombes J-J, Simonet S, Lacoste J-M, Cordi A & Laubie M S 18149 is a partial agonist at α-adrenoceptors: studies in pithed rats and isolated canine and human blood vessels

- 278P Parsons SJW, Sumner M & Garland CJ Apamin-sensitive responses to acetylcholine in rabbit isolated mesenteric arteries
- 279P Monopoli A, Casati C, Forlani A, Marzanetti M & Ongini E The in vivo cardiovascular pharmacology of the selective A_{2A} adenosine antagonist SCH 58261 in the rat and rabbit
- 280P Harb HL, Handy RLC, Whitehead KJ & Moore PK Lack of effect of 1-(2-trifluoromethylphenyl) imidazole (TRIM) on endothelium-dependent vasodilatation in rabbit aorta and perfused rat mesentery
- 281P Van der Graaf PH, Shankley NP & Black JW
 Effect of dopamine D₁ receptor blockade on
 noradrenaline-mediated contraction of the rat
 small mesenteric artery
- 282P Hall DA & Strange PG Inverse agonism of the neuroleptic drug (+)-butaclamol at the short isoform of the human D₂-dopamine receptor heterologously expressed in CHO cells
- 283P Coley C, Woodward R, Naylor LH & Strange PG The role of conserved serine residues in the binding of antagonists to the D₂ dopamine receptor
- 284P Selvarajah J, Hodgkiss JP & Kelly JS The effect of an adenosine A₁ receptor agonist and antagonist on long-term depression (LTD) in the rat hippocampus
- 285P Whitaker LA, Murphy MB, McDermott K & O'Connell DP Accelerated apoptosis in mesencephalic neurons: a role in Parkinson's disease?
- 286P Harper EA, Shankley NP & Black JW Characterisation of the binding of a novel radioligand to CCK_B/gastrin receptors in rat cerebral cortical membranes
- 287P Harper EA, Griffin E, Sykes DA, Shankley NP & Black JW Characterisation of the binding of a novel CCK_B/gastrin receptor antagonist (JB93182) in mouse and rat cerebral cortex and guinea-pig pancreas
- 288P Bundey RA, Iredale PA, Duman RS & Kendall DA Dexamethasone modulation of second messenger responses in a locus coeruleus-like cell line
- 289P Neil KE, Hernández F, Kendall DA & Alexander SPH The effects of the isoenzymeselective phosphodiesterase inhibitors, rolipram and zaprinast, on cyclic nucleotide levels in the guinea-pig cerebellum
- 290P Hajós M & Sharp T 5-HT neuronal lesion dramatically reduces the incidence of burst-firing dorsal raphe neurones in the rat

- 291P Meller R, Elliott JM, Harrison PJ & Sharp T Investigation of the turnover rate of 5-HT_{2A} receptors in C6 rat glioma cells using phenoxybenzamine
- 292P **Hirota K & Lambert DG** Comparison of the binding of [3H]PN200-110 to rat brain, SH-SY5Y and NK108-15 membranes
- 293P Nicol B, Rowbotham DJ & Lambert DG Morphine inhibits glutamate release from rat cerebrocortical slices
- 294P **Bruton RK, Ge J & Barnes NM** Elevation of *in vivo* striatal dopamine release in the rat via activation of metabotropic glutamate receptors
- 295P Stratton SC, Beresford IM & Hagan RM Autoradiographic localization of tachykinin NK₂ receptors in adult rat brain using [3H]SR48968
- 296P Stratton SC, Beresford IM, Hagan RM & Marsden CA GR159897, a non-peptide tachykinin NK₂ receptor antagonist, decreases 5-hydroxytryptaminergic cell firing in the dorsal raphe nucleus of the rat
- 297P Lione L, Nutt DJ & Hudson AH Affinity and selectivity of BU224 and BU239 for rat and guinea-pig brain I₂ imidazoline sites
- 298P Gillard NP, Linton CJ, Milligan G, Carr IC, Patmore L & Brown CM [3H]RS-79948-147: a potent and selective α₂-adrenoceptor radioligand
- 299P Thomas P, Sundaram H, Krishek BJ, Latham CJ, Bevan P, Stephenson FA & Smart TG Xenovulene A, a novel compound active at GABA_A receptors: functional studies on expressed recombinant and mammalian neuronal GABA_A receptors
- 300P Sundaram H, Thomas P, Chazot PL, Latham CJ, Bevan P, Smart TG & Stephenson FA Xenovulene A, a novel compound active at GABA_A receptors: characterisation by radioligand binding
- 301P Biggs CS, Pearce BR, Fowler IJ & Whitton PS
 Prolonged treatment with sodium valproate
 results in changes of amino acids and
 monoamines in rat hippocampal dialysates
- 302P Ahmad S, Fowler LJ, Leach MJ & Whitton PS
 The effects of lamotrigine and sodium valproate
 (VPA) co-administration on veratridineevoked glutamate and GABA release in the rat
 ventral hippocampus in vivo
- 303P Rowley HL, Martin KF & Marsden CA Repeated generalised seizures in the rat potentiate changes in hippocampal glutamate but not GABA release
- 304P Parry KP, Drinkenburg WHIM & Bowery NG Lack of alteration of GABA_B receptor binding in the absence epileptic WAG/Rij strain of rat

- 305P **Bon C** Electrophysiological characterisation of GABA_B agonists and antagonists in rat dorso-lateral septal neurones *in vitro*
- 306P Misra A, Snape MF, Murray TK, Cross AJ & Green AR The interaction of loreclezole with the GABA_A receptor complex, an *in vivo* and *in vitro* study
- 307P **Zhong Y & Simmonds MA** Interactions between loreclezole, chlormethiazole and pentobarbitone at GABA_A receptors in rat cuneate nucleus *in vitro*
- 308P Stevenson A, Wingrove PB, Whiting PJ & Wafford β -Carbolines modulate GABA receptors via the loreclezole site as well as the benzodiazepine site
- 309P Wingrove PB & Whiting PJ Identification of a single amino acid on the γ subunit of the GABA-A receptor required for high affinity binding of [3H]Ro15-1788
- 310P Thompson SA, Wingrove PB, Whiting PJ & Wafford Cloning of cDNA encoding the α4 subunit of the human γ-aminobutyric acid type A receptor and characterisation of the pharmacology of α4-containing receptors
- 311P Williams M, Patel J, Wieczorek WJ, Iravani MM & Kruk ZL Effect of striatal Fluoro-Gold injection in the rat neonate on dopamine release and autoreceptor function
- 312P Dosanjh SS, Wieczorek WJ, Patel J, Iravani MM & Kruk ZL Fluorogold and dopaminergic function in the rat caudate putamen
- 313P Hargreaves AC, Taylor SW & Lummis SCR Modulation of 5-HT₃ receptor-evoked currents by L-type Ca²⁺ channel antagonists
- 314P Huang EY-K, Bagust J, Sharma RP & Walker RJ Naloxone and desaminoYFLFQPQRamide block potentiation by FLFQPQRFamide (NPFF) of the rat isolated spinal cord monosynaptic reflex (MSR)
- 315P Burley JR & Dolphin AC Inhibition of wholecell calcium channel currents in rat cerebellar granule neurones by nicardipine and the Conus peptide ω-conotoxin-MVIIC
- 316P Cadogan AK, Latif ML, Alexander SPH & Kendall DA Evidence that cannabinoids have no effect on acetylcholine release in the rat cerebral cortex
- 317P Hamid S, Daw G, Gray JA & Stephenson JD Nicotine-induced long-lasting potentiation in the rat dentate gyrus
- 318P Saigusa T, Takada K, Baker S, Kumar R & Stephenson JD Modulation by oestrogen and progesterone of the response to stimulation of dopamine receptors in the entorhinal cortex on dopamine efflux in the nucleus accumbens of OVX rats

- 319P Trezise DJ, Black MD, Grahames CBA & Humphrey PPA Novel pharmacological characteristics of P₂ purinoceptors mediating increases in firing rate of rat locus coeruleus neurones *in vitro*
- 320P Holloway S, Feniuk W, Kidd EJ & Humphrey PPA Autoradiographical studies with the somatostatin sst₂-receptor-selective novel radioligand [125I]BIM-23027 in rat brain
- 321P Hepworth MB & Henderson G Possible involvement of a G-protein receptor kinase in the rapid desensitization of somatostatin receptors in NG108-15 cells
- 322P Chessell IP, Black MD, Feniuk W & Humphrey PPA Operational characteristics of somatostatin receptors mediating inhibition of spontaneous firing of rat locus coeruleus neurones
- 323P Jackson HC, Hutchins LJ, Mazurkiewicz SE, Heal DJ & Buckett WR Comparison of the effects of sibutramine and other monoamine reuptake inhibitors on food intake in the rat
- 324P Liu Y-L, Kashani SMZ, Heal DJ & Stock MJ Effect of sibutramine on tissue glucose utilisation in the rat
- 325P Heal DJ, Prow MR, Hearson M & Buckett WR Efflux of [3H]dopamine from superfused rat striatal slices: predictive value for detecting stimulant drugs of abuse
- 326P Taylor SG & Routledge C Lack of effect of systemically administered 5-HT₄ agonists on dopamine levels measured from the nucleus accumbens and striatum: an *in vivo* microdialysis study in freely-moving rats
- 327P Waterfall AH, Singh G, Fry JR & Marsden CA
 Aromatic hydroxylation of phenylalanine to
 measure oxidative stress in rat brain *in vivo*
- 328P Barton CL & Hutson PH L-701,324, a selective antagonist at the glycine/NMDA site, attenuates stress-induced activation of mesocortical dopamine neurones
- 329P Love RM, Hutchins LJ, Jackson HC, Heal DJ & Cheetham SC Evidence that dizocilpine (MK-801) does not down-regulate either β_1 -adrenoceptors or 5-HT_{2A} receptors in rat brain
- 330P Boxall SJ, Thompson SWN, Dray A, Dickenson AH & Urban L Metabotropic glutamate receptor activation contributes to the nociceptive reflex response in the neonatal rat spinal cord *in vitro*
- 331P Thompson GA, Jane DE & Watkins JC Depolarising effects of certain analogues of (S)-willardiine upon neonatal rat dorsal roots in vitro

- 332P Hawkins LM, Jane DE & Roberts PJ The effect of a 6-aza substitution on the affinity of willardiine analogues for the AMPA receptor
- 333P Bedingfield JS, Roberts PJ & Watkins JC Potentiation of 4-aminopyridine-stimulated [3H]glutamate release from rat cerebrocortical synaptosomes by (RS)-3,5-dihydroxyphenylglycine in the absence of arachidonic acid
- 334P Kemp MC, Jane DE, Tse H-W & Roberts PJ α-methyl-3-phosphonophenylalanine and α-cyclopropyl-4-phosphonophenylglycine are potent antagonists at mGluRs negatively coupled to adenylyl cyclase
- 335P Macmillan S, Hope P, Patmore L & Sheridan RD State-dependent block of neuronal sodium channels by (+)- and (-)-MK-801
- 336P Mugnaini M, van Amsterdam FTh, Ratti E, Trist DG & Bowery NG Regionally different N-methyl-D-aspartate receptor distinguished by *in vitro* binding and quantitative autoradiography of [3H]CGP 39653 in rat brain
- 337P Priestley T, Ochu E & Macaulay AJ NMDA receptor subtypes expressed by rat cultured cortical neurones change with time *in vitro*
- 338P Phillips I, Thompson KSJ, Martin KF & Heal DJ Phenytoin inhibits non-NMDA glutamate receptor agonist-induced depolarisation in rat cortical wedges
- 339P Dionisotti S, Zocchi C, Ferrara S & Ongini E Binding of [3H]SCH 58261, a new A_{2A} receptor antagonist, in rat striatum
- 340P **MacDonald E** Both isomers of medetomidine inhibit synaptosomal noradrenaline uptake *in vitro* but not at therapeutically relevant concentrations *in vivo*
- 341P Lalies MD, Husband C, Dalley JW, Nutt DJ & Hudson AL An investigation of the effect of imidazoline₂-site selective compounds 2BFI and BU224 on [³H]noradrenaline uptake in rat brain slices
- 342P Marshall DL, Redfern PH & Wonnacott S
 Differences in the nature of nicotine-stimulated dopamine (DA) release from the terminal regions of three ascending dopaminergic pathways
- 343P Wyatt I, Gyte A, Widdowson PS & Lock EA Characterisation of cystine accumulation into rat cerebellar slices and inhibitory characteristics of 2-S-L-cysteinyl propionic acid

DEMONSTRATIONS

- 344P **Dewhurst DG, Hughes IE & Williams AD** A computer simulation to demonstrate the effects of pharmacological agents or procedures on blood pressure and heart rate of the anaesthetized rat *in vivo*
- 345P **Dewhurst DG & Dawson O** A computer-based interactive tutorial program to teach the physiology of the circulatory vessels, blood flow and blood pressure to undergraduate students