

# **British Journal of Pharmacology**

## **Proceedings Supplement**

Proceedings of the British Pharmacological Society Meeting

8–10 January 2003

**Brighton Metropole**  
hosted by **William Harvey Research Institute**

The cover picture has kindly been provided by Marcelo Ortells and Georgina Barrantes (Buenos Aires, Argentina) and is Carbamazepine docked in the  $\alpha$ 4- $\beta$ 2 neuronal nicotinic receptor channel. (See *Br. J. Pharmacol.*, (2002) 136, 883–895)

The *British Journal of Pharmacology* is published by Nature Publishing Group, a division of Macmillan Publishers Ltd. It is the official publication of the British Pharmacological Society.

**Scope** The *British Journal of Pharmacology* publishes 3 volumes of 8 issues per year and is published twice a month. It welcomes contributions in all fields of experimental pharmacology including neuroscience, biochemical, cellular and molecular pharmacology. The Board of Editors represents a wide range of expertise and ensures that well-presented work is published as promptly as possible, consistent with maintaining the overall quality of the journal.

This journal is covered by Current Contents, EMBASE/Excerpta Medica, BIOSIS, Elsevier Biobase/Current Awareness in Biological Sciences, CINAHL and Index Medicus.

**Editorial** Manuscripts should be submitted online at <http://www.bjpharmacol.org>; authors unable to submit online should send one copy of their manuscript, plus a copy on disk, together with a covering letter to: The Editorial Office, British Journal of Pharmacology, BPS Office, 16 Angel Gate, 326 City Road, London EC1V 2SG, UK. Tel: +44 20 7417 0432. Fax: +44 20 7417 0430; [aam@bps.ac.uk](mailto:aam@bps.ac.uk).

**Publisher** All business correspondence and enquiries about supplement publication and sponsorship opportunities should be addressed to *British Journal of Pharmacology*, Nature Publishing Group, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. Tel: +44 1256 329242; Fax: +44 1256 810526. Publishing Manager: Jason Wilde. Production Controller: Jane Torr.

The *British Journal of Pharmacology* is online at: [www.bjpharmacol.org](http://www.bjpharmacol.org)

Visit the journal's home pages for details of the aims and scope, readership, instructions to authors and how to contact the Editors and publishing staff. Use the website to order a subscription, reprints or a sample copy.

**Free to all readers:** tables of contents for all articles published since 1965, abstracts for all articles since 1975 and the complete text of the January 2001 issue. Register to receive the table of contents by e-mail as each issue is published.

Subscribers to the 2003 online version of the journal have access to PDF files of all articles since 1997. The full text of all articles in HTML format is also available from 2002.

#### **Subscriptions – 2003 subscription rates**

##### **INSTITUTIONAL SUBSCRIPTIONS**

**Combined (online plus print):** EU £1298/2142, Rest of World £1298/US\$1947

**Online only:** £1180/1947; Rest of World £1180/US\$1770

Prices for airmail delivery on application.

**Site licences and institutional online access** – for information on multi-user or multi-site access to Nature Publishing Group products please contact [institutions@nature.com](mailto:institutions@nature.com) or telephone +44 20 7843 6426. For other enquiries please contact [sjsupport@nature.com](mailto:sjsupport@nature.com) or telephone +44 20 7843 4759.

##### **PERSONAL SUBSCRIPTIONS (USA only)**

**Combined (online plus print):** US\$357

**Online only:** US\$325

#### **Subscriptions – Outside the USA**

Orders must be accompanied by remittance. Cheques should be made payable to Nature Publishing Group and sent to: The Subscription Department, Nature Publishing Group, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. E-mail: [subscriptions@nature.com](mailto:subscriptions@nature.com). Where appropriate, subscribers may make payments into UK Post Office Giro Account No: 519 2455. Full details must accompany the payment.

#### **Subscriptions – USA**

USA subscribers can call toll free: 1 800 747 3187. Please send check/money order/credit card details to: The Subscription Department, Nature Publishing Group, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. E-mail: [subscriptions@nature.com](mailto:subscriptions@nature.com).

Prices are set in UK Sterling. Dollar prices are converted from UK Sterling at the current exchange rate. Accordingly, your credit card charge may vary slightly from the Dollar rate shown. To obtain the exact Dollar rate shown, please remit by check. All prices, specifications and details are subject to change without prior notification.

*British Journal of Pharmacology* (ISSN 0007–1188) is published twice a month by Nature Publishing Group, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001, USA. Subscription price for institutions is \$1688 per annum. Periodicals postage is paid at Rahway NJ. Postmaster: send address corrections to *British Journal of Pharmacology*, Nature Publishing Group, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001.

**Advertisements** Enquiries concerning advertisements should be addressed to: Robert Sloan, Advertisement Manager, 84 Arnos Grove, Southgate, London N14 7AR, UK. Tel: +44 20 8882 7199; Fax: +44 20 8882 7299; E-mail: [r.sloan@nature.com](mailto:r.sloan@nature.com)

**Reprints and permissions** For reprints of any article in this journal or reproduction rights, please contact Tracé Noel ([t.noel@nature.com](mailto:t.noel@nature.com)) at the Publisher's address (above).

**Copyright** © 2003 Nature Publishing Group

ISSN 0007–1188

All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in this journal in all countries of the world.

All material published in this journal is protected by copyright, which covers exclusive rights to reproduce and distribute the material. No material published in this journal may be reproduced or stored on microfilm or in electronic, optical or magnetic form without the written authorisation of the Publisher.

Authorisation to photocopy items for internal or personal use of specific clients, is granted by Nature Publishing Group for libraries and other users registered with the Copyright Clearance Center (CCC) Transaction Reporting Service, provided that the base fee of \$25.00 per copy is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923, USA. 0007–1188/03 \$25.00 + \$0.00.

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patent Act 1988, this publication may be reproduced, stored or transmitted, in any form or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency.

# INDEX TO PROCEEDINGS SUPPLEMENT

8th–10th January 2003

Brighton Metropole

Hosted by William Harvey Research Institute

## Author Index

- Abdul Aziz CB, Chapman V & Mason R Inhibitory effects of morphine on mechanical punctate evoked responses of posterior thalamic neurons in the anaesthetised rat, 216P
- Achan V, Broadhead M, Malaki M, Whitley GSJ, Leiper J, MacAllister R & Vallance P Haemodynamic effects and fate of asymmetric dimethyl-arginine in humans; insights into pathophysiology of the ADMA/DDAH pathway, 64P
- Ahluwalia A *see* Vo PA, 156P
- Ahluwalia A *see* Webb A, 20P
- Ahmed FP *see* McLaughlin DP, 170P
- Akhtar R *see* Marshall D, 88P
- Al-Barghouthy G *see* Iravani MM, 199P
- Alexander SPH *see* Harper LK, 109P
- Alexandrou A, Claringbold A, Harris J, McAllister K, Pullen S & Gupta P Darifenacin has a low affinity for muscarinic M<sub>1</sub> receptors in dog saphenous vein confirming its M<sub>1</sub> selectivity, 124P
- Ali M *see* Davis RJ, 153P
- Allen JC *see* Goulter AB, 148P
- Allen SJ *see* Tyler SJ, 205P
- Allers KA *see* Boothman LJ, 3P
- Almási R *see* Pethő G, 217P
- Almotrefi AA, Dzimir N & Premkumar LS Investigation of the antifibrillatory drug interactions between propranolol and bretylium in perfused rabbit hearts, 143P
- Altmann C, Fetscher C, Büyükbas D & Michel MC Effects of sphingosine-1-phosphate, sphingosylphosphorylcholine and ceramide on mesenteric artery contraction and relaxation in spontaneously hypertensive rats, 157P
- Altmann C *see* Leineweber K, 155P
- Amantea D, Tessari M & Bowery NG Reduced G-protein coupling to the GABA<sub>A</sub> receptor in the nucleus accumbens and the medial prefrontal cortex of the rat after chronic treatment with nicotine, 193P
- Amantea D *see* Bowery NG, 1P
- Ancliff R *see* Wilson RJ, 84P
- Andersen CU, Mulvany M & Simonsen U Sildenafil and 3-morpholinonylnonimine (SIN-1) relax rat pulmonary arteries, 138P
- Andrews TJ, Kengatharan M & Carrier MJ Measurement of endothelial function in the rat ear artery *in vivo*, 147P
- Andrews TJ & Carrier MJ Endothelial hyperreactivity in the perfused obese Zucker rat hindquarter is abolished by pro-oxidant treatment, 149P
- Angelini GD *see* Muzaffar S, 47P
- Angelini GD *see* Muzaffar S, 48P
- Argent CCH, Rainger GE & Wheatley M Cell surface expression of oxytocin receptors on both contractile and secretory phenotypes of primary human umbilical and aortic vascular smooth muscle cells, 55P
- Arhima MH & Sharma SC Fluoride causes release of renal lysosomal N-acetyl-β-D glucosaminidase isozymes with biphasic effect on MDA levels *in vitro*, 96P
- Arrigoni F, Vallance P, Haworth SG & Leiper J Metabolism of asymmetric dimethylarginines is regulated in the lung developmentally and with pulmonary hypertension induced by hypobaric hypoxia, 52P
- Aston JC & Elliott JM PCPA modulates the expression of the immediate early gene Arc induced by MDMA in rat brain, 6P
- Atack JR *see* Fish LR, 185P
- Ayman G, Jones RSG & Woodhall G Modulation of excitatory synaptic transmission at central synapses by group II metabotropic glutamate receptors, 191P
- Ayman S *see* Gibson A, 117P
- Ayoub SS, Botting RM, Colville-Nash PR, Willoughby DA The analgesic effect of paracetamol in mice is explained by the inhibition of cyclooxygenase activity in the central nervous system, 225P
- Babbs A *see* Misra A, 210P
- Bagetta G *see* Iannone M, 206P
- Bagetta G *see* Morrone LA, 211P
- Bailey CP, Couch D, Kelly E & Henderson G Do low concentrations of high efficacy μ-opioid agonists reveal desensitisation and internalisation of μ-opioid receptors by morphine?, 184P
- Bailey SR *see* Berhane Y, 146P
- Baker JG, Hall IP & Hill SJ Effect of MEK1/2 inhibitors on CRE-mediated gene transcription in CHO cells, 128P

- Baker JG, Hall IP & Hill SJ Time course of agonist-stimulated CRE-mediated reporter gene transcription in CHO cells, 127P
- Baker KE & Broadley KJ Vascular actions of ecstasy: roles of adrenergic neurones, endothelin, thromboxane, 5-HT, angiotensin and  $\alpha_1$ -receptors, 166P
- Bakhit D, Yeoman MS, Gard PR & Dzimiri N Effects of blood pressure variation on angiotensin receptor expression in spontaneously hypertensive and normotensive rats, 162P
- Bakhle YS, Costello C & Bell C Does anandamide increase microvascular permeability in rat paws by releasing endogenous Substance P?, 8P
- Balt JC *see* Nap A, 58P
- Bamford M *see* Wilson RJ, 84P
- Bánvölgyi A *see* Helyes Z, 218P
- Barker LD, Bictash M, Russell RJ & Van der Graaf PH Evidence for a heterogeneous receptor population mediating contractile responses to oxytocin in rat uterus, 97P
- Barnes NM *see* Dover TJ, 5P
- Barnes PJ *see* Patel HJ, 74P
- Barnes TA *see* Kitayama M, 223P
- Barnes TA *see* McDonald J, 26P
- Barret O *see* Johnström P, 57P
- Bastlund JF, Helboe L & Watson WP Effect of levetiracetam on the decreased [ $^{14}$ C]-2-deoxyglucose uptake that is seen in pentylenetetrazole kindled mice, 107P
- Batenburg WW, Schuijt MP, Saxena PR & Danser AHJ AT $_1$  receptor-mediated vasodilation in human and rat coronary arteries. Role of nitric oxide, 227P
- Baur F *see* Fozard JR, 129P
- Baxter GF *see* D'Souza SP, 21P
- Baxter GF *see* Rautureau Y, 161P
- Beadnell G *see* Edge G, 56P
- Beckett S, Jhaveri M, Mathews L, Bowden J, Finn D, Fone K, Chapman V & Marsden C Blockade of N-type calcium channels in the central nucleus of the amygdala attenuates conditioned but not unconditioned aversive behaviour in the rat, 108P
- Beckett SR *see* Harper LK, 109P
- Beckett SRG *see* Finn DP, 213P
- Belcher E, Evans TW, Sriskanda S & Mitchell JA *Escherichia coli* induces nitric oxide release in cardiovascular tissue via a Toll-like receptor 4-independent pathway, 32P
- Belcher E, Evans TW, Sriskanda S & Mitchell JA *Staphylococcus aureus* induces nitric oxide release in cardiovascular tissue via a Toll-like receptor 2-independent pathway, 31P
- Bell C *see* Bakhle YS, 8P
- Bell JK, Rees JL, Peoples C & McQueen DS Imetit induces scratching which is antagonised by thioperamide in BalbC mice, 103P
- Belvisi MG *see* Birrell MA, 75P
- Belvisi MG *see* Patel HJ, 74P
- Benjamin N *see* Webb A, 20P
- Bennett T *see* Gardiner SM, 68P
- Berhane Y, Bailey SR & Elliott J Characterisation of endothelium-dependent vasodilatory responses in the equine isolated perfused digital vascular bed, 146P
- Bermudez I *see* Maskell PD, 209P
- Bertorelli R *see* Gavioli EC, 25P
- Bexis S, Vandeputte C & Docherty JR Effects of chronic treatment with MDMA on pre- and postjunctional responsiveness in the rat, 195P
- Bhattacharya B & Roberts RE Endothelin-1 and vasopressin enhance  $\alpha_2$ -adrenoceptor-mediated vasoconstriction in the isolated porcine ear artery through different mechanisms, 159P
- Bianchi M *see* Heidbreder C, 208P
- Bickerdike M *see* Misra A, 210P
- Bictash MN *see* Barker LD, 97P
- Birrell MA, Patel HJ, McCluskie K, Wong S, Leonard T, Yacoub MH & Belvisi MG Peroxisome proliferator-activated receptor gamma (PPAR $\gamma$ ) agonists: a possible therapy for chronic obstructive pulmonary disease (COPD), 75P
- Birrell MA *see* Patel HJ, 74P
- Bishop-Bailey D, Walsh D & Warner TD Farnesoid X receptor (FXR) as a novel target in vascular smooth muscle cells, 60P
- Bishop-Bailey D *see* Thomas MA, 168P
- Bishop-Bailey D *see* Walters MJ, 132P
- Bishop-Bailey D *see* Wray J, 169P
- Blatchford KL, McLaughlin DP & Stamford JA Blunted pharmacological modulation of 5-HT release from rat mesencephalic nuclei after prior tissue 'radiolabelling' indicates non-physiological amine accumulation, 171P
- Blatchford KL *see* McLaughlin DP, 170P
- Boarder MR *see* Dixon CJ, 111P
- Boarder MR *see* White PJ, 116P
- Bölcskei K *see* Helyes Z, 218P
- Bölcskei K *see* Pethő G, 217P
- Bolton S, Goadsby P, Parsons A & O'Shaughnessy C Differences may exist in nociceptive processing in the trigeminal and spinal systems illustrated by the response to wind-up stimulation assessed in the anaesthetised rat, 27P
- Bond SM *see* McQueen DS, 167P
- Bonneau O, Ferreti S, Dubois G, Jones C & Trifilieff A IL-17, produced by lymphocytes and neutrophils, is necessary for lipopolysaccharide-induced airway neutrophilia, 79P
- Boothman LJ, Allers KA, Rasmussen K & Sharp T Evidence that 5-HT $_2$  receptor agonist-induced inhibition of 5-HT cell firing is mediated by central and not peripheral 5-HT $_2$  receptors, 3P
- Botting RM *see* Ayoub SS, 225P
- Bountra C *see* Clayton NM, 28P
- Bountra C *see* Collins SD, 29P
- Bowden J *see* Beckett S, 108P
- Bowen IM, Marr CM, Chester AH & Elliott J Characterisation of the contractile properties of an equine aortic valve preparation, 145P
- Bowery BJ *see* Bowery NG, 1P
- Bowery NG, Whitehead KJ, Pangalos MN, Price GW, Amantea D, Princivale A, Richards DA, Bowery BJ & Pearce SM Inhibition of absence seizures in the genetic absence epilepsy rat from Strasbourg (GAERS) by thalamic administration of a GABA $_B$  antisense ligand, 1P
- Bowery NG *see* Amantea D, 192P
- Bowery NG *see* Manning J-PA, 2P
- Bowery NG *see* Whitehead KJ, 100P
- Böyükbas D *see* Altmann C, 157P
- Brahmadevara N, Hillier C, Shaw AM & MacDonald A  $\beta_1$ -Adrenoceptors mediate endothelium independent relaxation in rat femoral resistance arteries, 154P
- Brain SD *see* Chu DQ, 85P
- Brain SD *see* Costa SKP, 9P
- Brain SD *see* Costa SKP, 87P
- Brain SD *see* Keeble J, 10P
- Brain SD *see* Tam CW, 86P
- Bridson SJ, Middleton RJ, Kellam B & Hill SJ Characterisation of a novel fluorescent agonist for the human A $_1$ -adenosine receptor, 126P
- Bright J *see* Osborne RH, 54P
- Brink C *see* Norel X, 63P
- Broadhead M *see* Achan V, 64P
- Broadley KJ *see* Baker KE, 166P
- Broadley KJ *see* Clark JH, 130P
- Broadley KJ *see* Nevin BJ, 133P
- Broadley KJ *see* Parija SC, 142P

- Broadley KJ *see* Yates L, 141P  
 Brodde O-E *see* Leineweber K, 155P  
 Brown MJ *see* Lewis CJ, 17P  
 Brown PAJ *see* Chatterjee PK, 38P  
 Brown PAJ *see* Sivarajah A, 94P  
 Brown TA *see* Fish LR, 185P  
 Brunelleschi S, Lavagno L, Spina S, Colangelo D & Viano I Anti-inflammatory drugs and rheumatoid arthritis: a role for TNF- $\alpha$  and NF- $\kappa$ B, 11P  
 Buckingham JC *see* Yona S, 13P  
 Buckland KF, Williams TJ & Conroy DM Histamine induces shape change and actin polymerisation in human eosinophils via the novel H<sub>4</sub> receptor, 43P  
 Bult H *see* Crauwels HM, 30P  
 Bult H *see* Jans DM, 42P
- Calo G *see* Gavioli EC, 25P  
 Calo G *see* Ibba M, 222P  
 Calo G *see* Kitayama M, 223P  
 Calo G *see* McDonald J, 26P  
 Calo G *see* Vergura R, 160P  
 Camarda V *see* Vergura R, 160P  
 Cameron JD *see* Marshall D, 88P  
 Camm AJ *see* Redfern WS, 22P  
 Canevari L *see* Nandi M, 65P  
 Caputi AP *see* Cuzzocrea S, 15P  
 Caputi AP *see* Cuzzocrea S, 39P  
 Caputi AP *see* Dugo L, 40P  
 Carlsson L *see* Redfern WS, 22P  
 Carrier MJ *see* Andrews TJ, 147P  
 Carrier MJ *see* Andrews TJ, 149P  
 Cartwright K *see* Wilson RJ, 84P  
 Centuri n D, M rquez-Conde JA & Villal n CM Pharmacological profile of the sympatho-inhibitory effects of moxonidine and rilmenidine: possible involvement of prejunctional imidazoline I<sub>1</sub> receptors, 172P  
 Channer KS *see* Jones RD, 150P  
 Channer KS *see* Rowell KO, 151P  
 Chapman V *see* Abdul Aziz CB, 216P  
 Chapman V *see* Beckett S, 108P  
 Chapman V *see* Elmes SJR, 219P  
 Chapman V *see* Finn DP, 213P  
 Chapman V *see* Kelly S, 215P  
 Chapple CR *see* Sellers DJ, 24P  
 Chapple CR *see* Stevens LA, 98P  
 Chapple CR *see* Templeman L, 23P  
 Chatterjee PK, Sivarajah A, Todorovic Z, Mota-Filipe H, Brown PAJ, Stewart KN & Thiemermann C PPAR- $\gamma$  agonists (rosiglitazone and ciglitazone) reduce renal dysfunction and injury caused by ischaemia/reperfusion of the rat kidney, 38P  
 Chatterjee PK *see* Sivarajah A, 94P  
 Chauhan SD *see* Vo PA, 156P  
 Cheetham S *see* Lane EL, 200P  
 Chen Y-J *see* Quilley J, 67P  
 Chess-Williams R *see* Kay LJ, 135P  
 Chess-Williams R *see* Sellers DJ, 24P  
 Chess-Williams R *see* Stevens LA, 98P  
 Chess-Williams R *see* Templeman L, 23P  
 Chess-Williams R *see* Wanstall JC, 163P  
 Chessell IP *see* Clayton NM, 28P  
 Chester AH *see* Bowen IM, 145P  
 Chiappetta O *see* Iannone M, 206P  
 Chong LK *see* Kay LJ, 135P  
 Chong LK *see* Scola A, 136P  
 Choudhury HI, Peterson D, Rosahl T, McAllister G, Seabrook GR & Maubach K 5-HT<sub>4</sub> receptors increase firing activity in the CA3 region of mouse hippocampus, 177P  
 Chowienczyk PJ *see* de Saram K, 36P  
 Christian HC *see* Getting SJ, 12P  
 Chu DQ, Costa SKP, Cox HM & Brain SD Effect of neuropeptide Y, Y1 and Y2 agonists on cutaneous microvascular responses, 85P  
 Chumbley JR, Ranatunga KM & Mathie A Inhibition of the human two-pore domain K<sup>+</sup> channel TREK-1 (hTREK-1) by fluoxetine, 183P  
 Claringbold A *see* Alexandrou A, 124P  
 Clark JC *see* Johnstr m P, 57P  
 Clark JH, Broadley KJ, Hutcheson IR, Nicholson RI & Kidd EJ Expression of adenosine receptors in MCF-7 human breast cancer cells, 130P  
 Clark KL *see* Davis RJ, 153P  
 Clark KL *see* Goulter AB, 148P  
 Clarke NP, Smith K, Napier C & Gupta P Characterisation of muscarinic receptor expression in dog submandibular gland, 123P  
 Clarke ZL, Moat SJ, Randall MD, Miller AL, Lewis MJ & Lang D Endothelial dysfunction in a murine model of mild hyperhomocysteinaemia: a role for EDHF?, 37P  
 Clayton NM, Collins SD, Pass M, Chessell IP & Bountra C Anti-hyperalgesic and anti-inflammatory activity of a potent and selective adenosine A1 receptor agonist 5'-deoxy-5'-fluoro-N-(tetrahydro-pyran-4-yl)-adenosine, 28P  
 Clayton NM *see* Collins SD, 29P  
 Colado MI *see* Green AR, 196P  
 Colangelo D *see* Brunelleschi S, 11P  
 Coleman RA *see* Davis RJ, 153P  
 Collins L *see* Misra A, 210P  
 Collins SD, Clayton NM, Sheehan MJ, Spalding DJ & Bountra C The effect of transdermal application of a highly selective adenosine A1 receptor agonist in the carrageenan model of acute inflammatory hyperalgesia, 29P  
 Collins SD *see* Clayton NM, 28P  
 Coltman C, Prince RI, Purcell WM & Osborne RH Contractile effects of the tachykinins ranakinin and ranatachykinin A on the rat isolated ileum preparation, 89P  
 Colville-Nash PR *see* Ayoub SS, 225P  
 Comer M *see* Jones MG, 178P  
 Connor H *see* Fotheringham S, 78P  
 Conroy DM *see* Buckland KF, 43P  
 Constanti A *see* Postlethwaite M, 190P  
 Constanti A *see* Russo E, 188P  
 Constanti A *see* Whalley B, 189P  
 Cook SM *see* Fish LR, 185P  
 Corasaniti MT *see* Iannone M, 206P  
 Corsi M *see* Perdoni E, 224P  
 Costa SKP, Docherty RJ, Hyslop S & Brain SD Mechanisms involved in *Phoneutria nigriventer* spider venom-induced inflammatory responses in mouse skin: effect of a 5-HT<sub>4</sub> receptor antagonist, 87P  
 Costa SKP & Brain SD A role for NK<sub>1</sub> receptors in TNF $\alpha$ -induced neutrophil accumulation in mouse skin, 9P  
 Costa SKP *see* Chu DQ, 85P  
 Costello C *see* Bakhle YS, 8P  
 Couch D *see* Bailey CP, 184P  
 Couch D *see* Johnson EA, 113P  
 Cowen PJ *see* Le Masurier M, 182P  
 Cox HM *see* Chu DQ, 85P  
 Cox HM *see* Hyland NP, 90P  
 Cox HM *see* Tough IR, 91P  
 Crauwels HM, Van Hove CE, Holvoet P, Herman AG & Bult H Plaque-related impairment of nitric oxide-induced relaxations in apolipoprotein E-deficient mice on a regular diet, 30P  
 Crespi F *see* Heidbreder C, 208P  
 Crispino N *see* Patel HJ, 74P  
 Cromar S *see* Dewhurst DG, 70P  
 Croucher MJ *see* Lee JJ, 207P  
 Cunningham FM *see* Sepulveda MF, 77P  
 Cuzzocrea S, Dugo L, Di Paola R, Serraino I, Genovese T, Caputi AP & Thiemermann C Role of PPAR- $\gamma$  ligand rosiglitazone on the development of carrageenan-induced lung, 39P  
 Cuzzocrea S, Dugo L, Serraino I, Genovese T, Di Paola R & Caputi AP Role of interleukin-10 in acute and

- chronic inflammation, 15P  
Cuzzocrea S *see* Dugo L, 40P
- D'Amico M *see* Getting SJ, 144P  
Danahay H *see* Mesher J, 115P  
Danhaive P *see* FitzGibbon H, 73P  
Danser AHJ *see* Batenburg WW, 227P  
Danser AHJ *see* Schuijt MP, 228P  
Danser AHJ *see* Tom B, 33P  
Dardenne B *see* FitzGibbon H, 73P  
Davenport A *see* Maguire J, 164P  
Davenport AP *see* Johnström P, 57P  
Davenport AP *see* Kuc RE, 165P  
Davenport AP *see* Wiley KE, 16P  
Davies IC *see* Kuc RE, 165P  
Davis AS *see* Redfern WS, 22P  
Davis E *see* Jarrott B, 69P  
Davis RJ, Ali M, Sheldrick RLG, Clark KL & Coleman RA EP<sub>4</sub> prostanoid receptors mediate relaxation of human cerebral artery, 153P  
Dawbarn D *see* Tyler SJ, 205P  
de Boer P *see* McQueen DS, 167P  
de Groot AA, Peters SL, Mathy MJ & van Zwieten PA The role of serotonergic and  $\beta$ -adrenergic receptors in nebivolol-induced vasorelaxation, 61P  
de Groot AA, Peters SL & van Zwieten PA Impairment of endothelial function in the rat aorta after exposure to reactive oxygen species: protective effect of the  $\beta$ -blocker nebivolol, 62P  
De Lima TC *see* Gavioli EC, 25P  
De Meyer GRY *see* Jans DM, 42P  
de Saram K, Dunster C, Kelly FJ, McNeill KL, Ritter JM & Chowienczyk PJ Vitamin C may modulate endothelium-dependent relaxation of rabbit aortic rings via direct intracellular interaction with nitric oxide, 36P  
de Vries R *see* Schuijt MP, 228P  
Del Soldato P *see* Paul-Clark MJ, 76P  
Delitheos A *see* Vovou I, 72P  
Dewhurst DG & Overfield J & Cromar S An interactive cal program to teach the principles of the laboratory determination of red blood cell indices and their use in the diagnosis of anaemias, 70P  
Di Filippo C *see* Getting SJ, 144P  
Di Paola R *see* Cuzzocrea S, 15P  
Di Paola R *see* Cuzzocrea S, 39P  
Diógenes MJ, Sebastião AM & Ribeiro JM Brain derived neurotrophic factor facilitation of synaptic transmission in rat hippocampus is dependent on A<sub>2A</sub>-adenosine receptor activation, 187P
- Dixon CJ, Hall JF & Boarder MR Evidence suggesting a role for P2Y<sub>13</sub> receptors in the regulation of rat hepatocyte cyclic AMP levels, 111P  
Docherty JR *see* Bexis S, 195P  
Docherty RJ *see* Costa SKP, 87P  
Dourish CT *see* Wyatt A, 104P  
Dover TJ, Monk SA, Barnes NM & Hope AG Phosphorylation of the human 5-HT<sub>7(b)</sub> receptor, 5P  
Dowman J, Rose S & Jenner P Effect of the mitochondrial complex I inhibitor MPP<sup>+</sup> and the proteasomal inhibitor lactacystin on SH-SY5Y cells, 203P  
D'Souza SP, Yellon DM & Baxter GF Cardioprotective action of type-B natriuretic peptide is NO-dependent, 21P  
Dubois G *see* Bonneau O, 79P  
Dugo L, Pisano B, Wayman N, Ianaro A, Mazzon E, Caputi AP, Thierner-mann C & Cuzzocrea S PPAR- $\gamma$  ligands attenuate the development of intestinal ischemia/reperfusion, 40P  
Dugo L *see* Cuzzocrea S, 15P  
Dugo L *see* Cuzzocrea S, 39P  
Duncan M, Kendall DA & Ralevic V *d*-Tetrahydrocannabinol attenuates sensory neurotransmission in the rat isolated mesenteric arterial bed, 214P  
Dunster C *see* de Saram K, 36P  
Dzimiri N *see* Almotrefi AA, 143P  
Dzimiri N *see* Bakhit D, 162P
- Easton N, O'Shea E, Kingston S, Fry JR & Marsden CA Formation of glutathione adduct metabolites of MDA in human liver microsomes is related to CYP2D6 activity, 194P  
Edge G, Kelso EJ, Hennessy M, Siah WE, Beadnell G, McDermott BJ & Spiers JP Matrix metalloproteinase activity (MMP) in aorta from spontaneously hypertensive heart failed rats: effect of chronic endothelin receptor antagonism, 56P  
Elkharaz JI & Sharma SC The effect of ascorbic acid on arsenic induced release of *N*-acetyl- $\beta$ -D-glucosaminidase from rat kidney lysosomes *in vitro*, 95P  
Elliott J *see* Berhane Y, 146P  
Elliott J *see* Bowen IM, 145P  
Elliott JM *see* Aston JC, 6P  
Elliott JM *see* Green AR, 196P  
Ellis K, Mazzoni L & Fozard JR Role of endogenous adenosine in the early and late response to allergen challenge in actively sensitised Brown Norway rats, 134P
- Elmes SJR, Smart D, Kendall D & Chapman V Effect of vanilloid receptor antagonist iodo-resiniferatoxin on spinal nociceptive transmission in anaesthetised rats, 219P  
Emery CJ *see* Sisodiya A, 139P  
English KM *see* Jones RD, 150P  
Eskandari N, Wickramasinghe T & Peachell PT Effects of phosphodiesterase inhibitors on IL-4 and IL-13 generation from human basophils, 80P  
Evans TW *see* Belcher E, 31P  
Evans TW *see* Belcher E, 32P  
Evans TW *see* Stanford SJ, 51P
- Ferreti S *see* Bonneau O, 79P  
Fetscher C *see* Altmann C, 157P  
Field MC *see* Valentin F, 71P  
Finn D *see* Beckett S, 108P  
Finn DP, Beckett SRG, Samanta S, Manders T, Jhaveri MD, Fone KCF, Marsden CA & Chapman V Blockade of N-type Ca<sup>2+</sup> channels in the central nucleus of the amygdala modulates nociceptive behaviour in the formalin test in rats, 213P  
Fish LR, Philipps E, Smith AD, Cook SM, Brown TA, Wafford K & Atack JR Modulation of [<sup>35</sup>S]-TBPS binding in mouse brain, 185P  
Fitzgibbon H, Pye J, Peck MJ, Danhaive P, Dardenne B & Tilmant K The use of nebulised cadmium chloride to develop animal models of chronic obstructive pulmonary disease (COPD), 73P  
Flower RJ *see* Gavins FNE, 18P  
Flower RJ *see* Getting SJ, 12P  
Flower RJ *see* Getting SJ, 144P  
Flower RJ *see* Goulding NJ, 121P  
Flower RJ *see* Paul-Clark MJ, 76P  
Flower RJ *see* Yona S, 13P  
Fone K *see* Beckett S, 108P  
Fone KCF *see* Finn DP, 213P  
Foord S *see* Wilson RJ, 84P  
Forbes IT *see* Thomas DR, 180P  
Fotheringham S, Connor H & Hall D The effect of a number of inflammatory mediators on the human eosinophil shape change response, 78P  
Foulkes R *see* Marshall D, 88P  
Fozard JR, Baur F & Wolber C Antagonist pharmacology of adenosine A<sub>2B</sub> receptors from rat, guinea pig and dog, 129P  
Fozard JR *see* Ellis K, 134P

- Fozard JR *see* Wolber C, 46P
- Fragata IR, Sebastião AM & Ribeiro JA GABA<sub>A</sub> receptor blockade potentiates the inhibitory neuromodulation by adenosine in the hippocampus, 186P
- Fry JR *see* Easton N, 194P
- Frye S *see* Wilson RJ, 84P
- Fryer TD *see* Johnström P, 57P
- Fujitani Y *see* Trifilieff A, 45P
- Gambino A *see* Wanstall JC, 163P
- Gao JL *see* Gavins FNE, 18P
- Gao JL *see* Yona S, 13P
- Gard PR *see* Bakhit D, 162P
- Gardiner SM, Kemp PA, March JE & Bennett T Effects of the cannabinoid (CB<sub>1</sub>) receptor antagonist, AM 251, on the regional haemodynamic responses to lipopolysaccharide infusion in conscious Sprague-Dawley rats, 68P
- Garnier MJ *see* Perdona E, 224P
- Gauthier C *see* Rautureau Y, 161P
- Gavins FNE, Gao JL, Murphy PM, Flower RJ & Perretti M An annexin 1 peptide reduces myocardial ischaemia reperfusion in the mouse, 18P
- Gavins FNE *see* Getting SJ, 12P
- Gavioli EC, Marzola G, Bertorelli R, Zucchini S, De Lima TC, Rae GA, Guerrini R, Salvadori S, Regoli D & Calo G Blockade of nociceptin/orphanin FQ-NOP receptor signalling produces antidepressant-like effects: pharmacological and genetic evidence in the mouse forced swimming test, 25P
- Genovese T *see* Cuzzocrea S, 15P
- Genovese T *see* Cuzzocrea S, 39P
- Getting SJ, Di Filippo C, Lam CW, Rossi F, Flower RJ, D'Amico M & Perretti M Protective role of melanocortin type 3 receptor in myocardial ischaemia-reperfusion injury in mice, 144P
- Getting SJ, Lam CW, Christian HC, Gavins FNE, Flower RJ, Schiöth HB & Perretti M Melanocortin agonists possess anti-inflammatory effects in mice with a non-functional MC1-R (recessive yellow *e/e*), 12P
- Getting SJ *see* Paul-Clark MJ, 76P
- Giannoulaki V *see* Tiligada E, 82P
- Giblin G *see* Wilson RJ, 84P
- Gibson A, Ayman S, Wallace P & McFadzean I The myosin phosphatase inhibitor calyculin-A abolishes nitrergic relaxation of the mouse anococcygeus, 117P
- Gilbert MB *see* Goulter AB, 148P
- Goadsby PJ *see* Bolton S, 27P
- Gomes P & Soares-da-Silva P Dopamine D<sub>2</sub>-like receptor-mediated opening of K<sup>+</sup> channels in opossum kidney cells, 120P
- Gomes P & Soares-da-Silva P Dopamine-mediated inhibition of renal Na<sup>+</sup>/H<sup>+</sup> exchanger isoform 3: involvement of protein kinase A and C pathways, 118P
- Goode NT *see* Sepulveda MF, 77P
- Goulding NJ, Rickford AKB, Sherratt KM, Paul-Clark MJ, Flower RJ & Perretti M Characterisation of a novel glucocorticoid receptor in human platelets, 121P
- Goulter AB, Allen JC, Gilbert MB & Clark KL Thrombin increases the expression of adipocyte fatty-acid binding protein aP2 mRNA in human vascular endothelial cells, 148P
- Gozzard N *see* Marshall D, 88P
- Grant AD *see* Tam CW, 86P
- Grasby P *see* Hirani E, 181P
- Gray JJ, Jessop K & Taberner PV Effect of acute and chronic nicotine on lipogenesis in mouse adipose tissue, 7P
- Green AR, Elliott JM & Colado MI Effect of ambient temperature and 3,4-methylenedioxymethamphetamine (MDMA) pretreatment on the hyperthermic response of rats to a low dose of MDMA, 196P
- Green R *see* Wilson RJ, 84P
- Gribble AD *see* Thomas DR, 180P
- Griesbacher T, Rainer I, Heinemann Á & Groisman D Changes in blood flow in the rat pancreas during exocrine stimulation at submaximal and supra-maximal levels, 66P
- Groisman D *see* Griesbacher T, 66P
- Guerrini R *see* Gavioli EC, 25P
- Guerrini R *see* Ibba M, 222P
- Guerrini R *see* Kitayama M, 223P
- Guerrini R *see* Vergura R, 160P
- Gupta P *see* Alexandrou A, 124P
- Gupta P *see* Clarke NP, 123P
- Gupta P *see* Napier CM, 125P
- Haddon CO *see* Iravani MM, 202P
- Hall D *see* Fotheringham S, 78P
- Hall IP *see* Baker JG, 127P
- Hall IP *see* Baker JG, 128P
- Hall JF *see* Dixon CJ, 111P
- Hammond TG *see* Redfern WS, 22P
- Hannon R *see* Mancini L, 122P
- Hannon R *see* Yona S, 13P
- Harding SE *see* Lewis CJ, 17P
- Harmar A *see* Jennings K, 176P
- Harms P *see* Leineweber K, 155P
- Harper LK, Beckett SR, Marsden CA & Alexander SPH The adenosine receptor antagonist CGS15943 elicits place preference in the lister hooded rat, 109P
- Harris J *see* Alexandrou A, 124P
- Harrison J *see* Whiteside G, 212P
- Haworth G *see* Nandi M, 65P
- Haworth SG *see* Arrigoni F, 52P
- Haworth SG *see* Stanford SJ, 49P
- Haworth SG *see* Stanford SJ, 50P
- Haworth SG *see* Stanford SJ, 51P
- Hay D *see* Templeman L, 23P
- Hay DWP *see* Sellers DJ, 24P
- Heales S *see* Nandi M, 65P
- Heidbreder C, Bianchi M, Lacroix L & Crespi F *In vivo* evidence that the metabotropic glutamate receptor antagonist 2-methyl-6-(phenylethynyl)-pyridine (MPEP) acts as an inhibitor of the norepinephrine transporter, 208P
- Heinemann Á *see* Griesbacher T, 66P
- Helboe L *see* Bastlund JF, 107P
- Hele DJ *see* Patel HJ, 74P
- Hellmann K, Williamson C & Sargent J Effect of dexrazoxane on the cell cycle and intracellular ATP levels in K562 cells, 53P
- Helyes Z, Bölcskei K, Pintér E, Pethő G, Németh J, Bánvölgyi A & Szolcsányi J Analgesic effect of TT-232, a heptapeptide somatostatin analogue, in acute and chronic pain models in the rat, 218P
- Henderson G *see* Bailey CP, 184P
- Henderson G *see* Johnson EA, 113P
- Henderson G *see* Samways DSK, 114P
- Hennessy M *see* Edge G, 56P
- Herman AG *see* Crauwels HM, 30P
- Herman AG *see* Jans DM, 42P
- Higenbottam TW *see* Sisodiya A, 139P
- Hill SJ *see* Baker JG, 127P
- Hill SJ *see* Baker JG, 128P
- Hill SJ *see* Briddon SJ, 126P
- Hillier C *see* Brahmadevara N, 154P
- Hillier C *see* Zacharia J, 158P
- Hirani E, Sharp T, Sprakes M, Grasby P & Hume S Effect of endogenous 5-HT on [<sup>11</sup>C]-MDL 100907 binding investigated in rat brain using PET, 181P
- Hislop AA *see* Stanford SJ, 49P
- Hislop AA *see* Stanford SJ, 50P
- Hislop AA *see* Stanford SJ, 51P
- Hobbs A *see* Madhani M, 34P
- Holvoet P *see* Crauwels HM, 30P
- Hope AG *see* Dover TJ, 5P

- Houston G *see* Le Masurier M, 182P  
Hudson AL *see* Jackson G, 175P  
Hudson AL *see* Kimura A, 173P  
Hume S *see* Hirani E, 181P  
Hume S *see* Le Masurier M, 182P  
Hutcheson IR *see* Clark JH, 130P  
Hyland NP & Cox HM Differential role of Y<sub>1</sub> and Y<sub>2</sub> receptors mediating neuropeptide Y's contribution to veratridine-induced ion transport across mouse colon, 90P  
Hyslop S *see* Costa SKP, 87P
- Ianaro A *see* Dugo L, 40P  
Iannone M, Chiappetta O, Rotiroti D, Nappi G, Bagetta G & Corasaniti MT Evidence that 17 $\beta$ -estradiol reduces cytochrome C translocation and minimizes hippocampal damage caused by transient global brain ischemia in rat, 206P  
Ibba M, Calo G, Guerrini R, Toth G & Lambert DG Pharmacological characterization of [<sup>3</sup>H]-UFP-101, a novel radioligand selective for the nociceptin/orphanin FQ receptor, 222P  
Iczkiewicz J, Rose S & Jenner P Osteopontin and tyrosine hydroxylase expression following intranigral injection of lipopolysaccharide, 201P  
Idris NF, Large CH & Neill JC The anticonvulsant lamotrigine improves the selective impairment in reversal learning induced by PCP (phen-cyclidine) in the rat, 106P  
Iravani MM, Jackson MJ, Al-Barghouthy G, Kuoppamäki M & Jenner P Ecstasy (3,4-methylenedioxymethamphetamine) inhibits dyskinesia expression and normalises locomotor activity in Parkinsonian primates, 199P  
Iravani MM, Leung CCM, Haddon CO, Rose S & Jenner P Immunohistochemical and behavioural effects of unilateral supranigral lipopolysaccharide administration in rats, 202P
- Jackson G, Raj ABM, Lallies MDM & Hudson AL Identification of Dopamine D<sub>2</sub> autoreceptors on striatal neurones of broiler chickens, 175P  
Jackson MJ *see* Iravani MM, 199P  
Jane DE *see* Lee JJ, 207P  
Jans DM, Martinet W, Kockx MM, Bult H, Herman AG & De Meyer GRY Effect of non-steroidal anti-inflammatory drugs on macrophage activation following platelet phagocytosis, 42P  
Jarrott B & Davis E Student exercises that research social issues of pharmacological relevance, 69P  
Javid FA & Naylor RJ To investigate the effect of 8-OHDPAT (5-HT<sub>1A/7</sub>-receptor agonist) on the proximal region of the *Suncus murinus* intestine, 92P  
Jenner P *see* Dowman J, 203P  
Jenner P *see* Iczkiewicz J, 201P  
Jenner P *see* Iravani MM, 199P  
Jenner P *see* Iravani MM, 202P  
Jenner P *see* Johnston LC, 198P  
Jenner P *see* Lane EL, 200P  
Jennings K, Sheward J, Harmar T & Sharp T Mice over-expressing the 5-HT transporter show evidence of increased central 5-HT<sub>2A</sub> function, 176P  
Jeremy JY *see* Muzaffar S, 47P  
Jeremy JY *see* Muzaffar S, 48P  
Jessop K *see* Gray JJ, 7P  
Jhaveri M *see* Beckett S, 108P  
Jhaveri MD *see* Finn DP, 213P  
Jiang H *see* Quilley J, 67P  
Johnson EA, DSK Samways, Couch D, Kelly E & Henderson G  $\mu$ -Opioid receptor mediated Ca<sup>2+</sup> signalling in transfected HEK 293 cells requires concomitant M<sub>3</sub> muscarinic receptor activation, 113P  
Johnson EE, Nicol B & Lambert DG Functional coupling of the nociceptin receptor natively expressed in dog brain membranes, 221P  
Johnston LC, Rose S, McCreary AC & Jenner P Fluvoxamine reduces levodopa induced dyskinesias in the MPTP-treated common marmosets, 198P  
Johnström P, Richards HK, Fryer TD, Barret O, Clark JC, Pickard JD & Davenport AD *In vivo* imaging of enzyme conversion of [<sup>18</sup>F]-Big ET-1 to [<sup>18</sup>F]-ET-1 and inhibition of enzyme activity using phosphoramidon – a positron emission tomography study, 57P  
Jones C *see* Bonneau O, 79P  
Jones H *see* Wilson RJ, 84P  
Jones MG, Newberry NR, McMahon SB, Comer M & Kennett G Frovatriptan prevents GTN-induced increases in firing rate of neurones in nucleus trigeminalis caudalis, 178P  
Jones RD, Roberts SA, Ruban LN, Pugh PJ, English KM, Jones TH & Channer KS Testosterone does not increase the intracellular concentration of cGMP in A7r5 aortic smooth muscle cells, 150P  
Jones RD *see* Rowell KO, 151P  
Jones RSG *see* Ayman G, 191P  
Jones RSG *see* Thompson SE, 192P  
Jones TH *see* Jones RD, 150P  
Jones TH *see* Rowell KO, 151P  
Jourdon P *see* Rautureau Y, 161P
- Kay LJ, Chong LK, Chess-Williams R, Rostami-Hodjegan A & Peachell PT Influence of polymorphisms in the  $\beta_2$ -adrenoceptor gene on the expression of  $\beta$ -adrenoceptors in human lung tissue, 135P  
Keeble J & Brain SD The contribution of plasma extravasation in a model of murine joint inflammation, 10P  
Kellam B *see* Briddon SJ, 126P  
Kelland EE & Toms NJ Pyruvate rescues oligodendrocyte progenitor cells from zinc toxic insults, 204P  
Kelly E *see* Bailey CP, 184P  
Kelly E *see* Johnson EA, 113P  
Kelly FJ *see* de Saram K, 36P  
Kelly PAT *see* Quate L, 197P  
Kelly S & Chapman V Effect of selective activation of spinal CB<sub>1</sub> receptors on mechanical evoked responses of spinal neurons in rats with spinal nerve ligation and sham rats, 215P  
Kelso EJ *see* Edge G, 56P  
Kemp PA *see* Gardiner SM, 68P  
Kendall D *see* Elmes SJR, 219P  
Kendall DA *see* Duncan M, 214P  
Kendall DA *see* Tep-areenan P, 152P  
Kengatharan M *see* Andrews TJ, 147P  
Kennett G *see* Jones MG, 178P  
Kennett GA *see* Webster LJ, 105P  
Kennett GA *see* Wyatt A, 104P  
Kidd EJ *see* Clark JH, 130P  
Kilpatrick IC *see* Sisodiya A, 139P  
King BF *see* Knowles ID, 99P  
Kingston S *see* Easton N, 194P  
Kirk SL *see* Meckin RJ, 179P  
Kitayama M, Barnes TA, McDonald J, Calo G, Guerrini R, Smith G, Rowbotham DJ & Lambert DG Pharmacological profile of the cyclic nociceptin/orphanin FQ analogues c[Cys<sup>10,14</sup>]N/OFQ(1–14)NH<sub>2</sub> and c[Nphe<sup>1</sup>,Cys<sup>10,14</sup>]N/OFQ(1–14)NH<sub>2</sub>, 223P  
Knight A *see* Misra A, 210P  
Knowles ID, King BK & Ramage AG Investigation of the effects of Phenol



- Red a P2X<sub>1</sub> and P2X<sub>3</sub> receptor antagonist on the micturition reflex in anaesthetized female rats, 99P
- Koch WJ *see* Lewis CJ, 17P
- Kockx MM *see* Jans DM, 42P
- Kuc RE, Davies IC & Davenport AP  
Motilin receptors in the human cardiovascular system, 165P
- Kuoppamäki M *see* Iravani MM, 199P
- Lacroix L *see* Heidbreder C, 208P
- Lähdesmäki J *see* MacDonald E, 174P
- Lalies MDM *see* Jackson G, 175P
- Lam CW *see* Getting SJ, 12P
- Lam CW *see* Getting SJ, 144P
- Lam PMW, Smart D & Lambert DG  
Differences in the affinity of capsaizepine at recombinant rat and human VR1 receptors, 220P
- Lambert DG *see* Gavioli EC, 25P
- Lambert DG *see* Ibba M, 222P
- Lambert DG *see* Johnson EE, 221P
- Lambert DG *see* Kitayama M, 223P
- Lambert DG *see* Lam PMW, 220P
- Lambert DG *see* McDonald J, 26P
- Lambert DG *see* Vergura R, 160P
- Lane EL, Rose S, Cheetham S & Jenner  
Chronic administration of BTS 74 398 does not induce abnormal movements in 6-OHDA lesioned rats, 200P
- Lang D *see* Clarke ZL, 37P
- Large CH *see* Idris NF, 106P
- Laskey P *see* Napier CM, 125P
- Laursen BE *see* Lopez-Valverde V, 137P
- Lavagno L *see* Brunelleschi S, 11P
- Lawrence A *see* Misra A, 210P
- Le Masurier M, Sharp T, Cowen PJ, Houston G & Hume S A tyrosine-free amino acid mixture attenuates amphetamine-induced displacement of [<sup>11</sup>C]-raclopride in striatum: a rat PET study, 182P
- Lee JJ, Jane DE & Croucher MJ Actions of (RS)-3,4-dicarboxyphenylglycine and its (R)- and (S)-enantiomers on [<sup>3</sup>H]-D-aspartate release in the rat cerebral cortex *in vitro*, 207P
- Leineweber K, Altmann C, Harms P & Brodde O-E Does simvastatin influence the agonist-induced desensitisation of  $\beta$ -adrenoceptors?, 155P
- Leiper J *see* Achan V, 64P
- Leiper J *see* Arrigoni F, 52P
- Leonard T *see* Birrell MA, 75P
- Leung CCM *see* Iravani MM, 202P
- Lewell X *see* Wilson RJ, 84P
- Lewis CJ, Koch WJ, Brown MJ & Harding SE Adenovirally overexpressed  $\beta_1$ - and  $\beta_2$ -adrenoceptors enhance the contractile response to CGP 12177a in adult rat cardiomyocytes, 17P
- Lewis MJ *see* Clarke ZL, 37P
- Li SW *see* Bahra P, 112P
- Li SW *see* Mesher J, 115P
- Lindemann D *see* Racké K, 41P
- Lobo C *see* Muzaffar S, 47P
- López-Valverde V, Elmedal Laursen B, Mulvany MJ & Simonsen U Role of endothelin-1 and ATP-sensitive K<sup>+</sup> channels in hypoxic response of rat intrapulmonary arteries, 137P
- Lynch WG *see* Redfern WS, 22P
- McAllister G *see* Choudhury HI, 177P
- McAllister K *see* Alexandrou A, 124P
- MacAllister R *see* Achan V, 64P
- MacAllister R *see* Madhani M, 34P
- McBean DE *see* Quate L, 197P
- McCluskie K *see* Birrell MA, 75P
- McCreary AC *see* Johnston LC, 198P
- McDermott BJ *see* Edge G, 56P
- MacDonald A *see* Brahmadevara N, 154P
- MacDonald A *see* Zacharia J, 158P
- MacDonald E, Lähdesmäki J, Sallinen J & Scheinin M Some residual  $\alpha_2$ -adrenoceptor mediated inhibition of serotonin turnover in striatum of  $\alpha_{2A}$ -knockout mice, 174P
- McDonald J, Barnes TA, Williams J, Calo G, Rowbotham DJ & Lambert DG Studies of [PHE'y(CH<sub>2</sub>-NH)GLY<sup>2</sup>]N/OFQ(1-13)NH<sub>2</sub> at the recombinant human nociceptin receptor using the ecdysone inducible expression system, 26P
- McDonald J *see* Kitayama M, 223P
- McEniery C *see* Maguire J, 164P
- McFadzean I *see* Gibson A, 117P
- MacInnes N & Duty S Intraventricular and intrapallidial injections of the Group III metabotropic glutamate receptor agonist L-serine-O-phosphate (L-SOP) alleviate reserpine-induced akinesia in the rat, 226P
- MacIntyre I *see* Mancini L, 122P
- MacKenzie I *see* Redfern WS, 22P
- McLaughlin DP, Ahmed FP, Blatchford KL, Sales KM & Stamford JA Differential responsiveness to noradrenaline in the distal colon of Maudsley reactive and non-reactive inbred rat strains, 170P
- McLaughlin DP *see* Blatchford KL, 171P
- McLean P *see* Webb A, 20P
- McMahon SB *see* Jones MG, 178P
- McNeill KL *see* de Saram K, 36P
- McQueen DS, Bond SM, de Boer P & Webb DJ RWJ-662733, a histamine H<sub>3</sub> receptor antagonist, does not affect sympathetic neurotransmission in the pithed rat, 167P
- McQueen DS *see* Bell JK, 103P
- Madhani M, MacAllister RJ & Hobbs AJ Vascular natriuretic peptide receptors modulated by NO-cyclic gmp signalling, 34P
- Maguire J, Wilkinson I, McEniery C & Davenport A Vasoconstrictor responses to the elastin peptide VGVAPG in ageing human arteries *in vitro*, 164P
- Malaki M *see* Achan V, 64P
- Mancini L, Paul-Clark MJ, Hannon R, McIntyre I & Perretti M Glucocorticoid modulation of RANKL and osteoprotegerin in osteoblast cell lines, 122P
- Manders T *see* Finn DP, 213P
- Manning J-PA, Richards DA, Bowery NG Ethosuximide has a powerful anti-absence action when bilaterally infused directly into the somatosensory cortex (S1) of the genetic absence epilepsy rat from Strasbourg (GAERS), 2P
- March JE *see* Gardiner SM, 68P
- Márquez-Conde JA *see* Centurión D, 172P
- Marr CM *see* Bowen IM, 145P
- Marsden C *see* Beckett S, 108P
- Marsden CA *see* Easton N, 194P
- Marsden CA *see* Finn DP, 213P
- Marsden CA *see* Harper LK, 109P
- Marsden CA *see* Patil PR, 110P
- Marshall D, Akhtar R, Cameron JD, Moore AR, Gozzard N & Foulkes R Antibodies to the leukocyte integrin molecules  $\alpha_4$  and LFA-1 inhibit DSS-induced colitis in rats, 88P
- Marshall K *see* Meckin RJ, 179P
- Marshall M & Moore PK Effect of nitro-paracetamol on IL-1 $\beta$  and TNF- $\alpha$  production in lipopolysaccharide challenged human blood, 81P
- Martinet W *see* Jans DM, 42P
- Marzola G *see* Gavioli EC, 25P
- Maskell PD, Speder P, Newberry NR & Bermudez I The effects of the NMDA receptor antagonists cerestat and memantine on the human nicotinic  $\alpha_7$  receptor expressed in *Xenopus* oocytes, 209P
- Mason A *see* Wilson RJ, 84P
- Mason R *see* Abdul Aziz CB, 216P

- Massagrande M *see* Thomas DR, 180P  
 Mathews L *see* Beckett S, 108P  
 Mathie A *see* Chumbley JR, 183P  
 Mathy MJ *see* de Groot AA, 61P  
 Maubach K *see* Choudhury HI, 177P  
 Mazzon E *see* Dugo L, 40P  
 Mazzoni L *see* Ellis K, 134P  
 Meckin RJ, Kirk SL, Neill JC, Marshall K & Reynolds GP The 5-HT<sub>1A</sub> partial agonist antipsychotic drugs ziprasidone and clozapine down-regulate post-synaptic 5-HT<sub>1A</sub> receptors in rat brain, 179P  
 Meckin RJ *see* Reynolds GP, 101P  
 Melotto S *see* Thomas DR, 180P  
 Mesher J, Li SW, Poll CT & Danahay H Preliminary pharmacological characterisation of UTP-induced Ca<sup>2+</sup> influx in well-differentiated human bronchial epithelial cells, 115P  
 Michel MC *see* Altmann C, 157P  
 Middleton RJ *see* Briddon SJ, 126P  
 Miller A *see* Nandi M, 65P  
 Miller AL *see* Clarke ZL, 37P  
 Miller N *see* Wilson RJ, 84P  
 Minchin MCW *see* Kimura A, 173P  
 Misra A, Collins L, Quirk K, Lawrence A, Palmer A, Babbs A, Bickerdike M & Knight A Inhibition of [<sup>3</sup>H]-MK-801 binding by NMDA channel blockers in the presence of allosteric modulators, 210P  
 Mitchell JA *see* Belcher E, 31P  
 Mitchell JA *see* Belcher E, 32P  
 Mitchell JA *see* Stanford SJ, 49P  
 Mitchell JA *see* Stanford SJ, 50P  
 Mitchell JA *see* Stanford SJ, 51P  
 Mitchell JA *see* Walters MJ, 44P  
 Mitchell JA *see* Walters MJ, 132P  
 Moat SJ *see* Clarke ZL, 37P  
 Monk SA *see* Dover TJ, 5P  
 Moore AR *see* Marshall D, 88P  
 Moore PK *see* Marshall M, 81P  
 Morrone LA, Rombolà L, Nisticò R, Richards DA & Bagetta G Systemic administration of bergamot essential oil causes Ca<sup>2+</sup>-dependent elevation of hippocampal amino acids neurotransmitters in rat, 211P  
 Mota-Filipe H *see* Chatterjee PK, 38P  
 Mota-Filipe H *see* Sivarajah A, 94P  
 Müller H *see* Nedvetsky PI, 35P  
 Mulvany M *see* Andersen CU, 138P  
 Mulvany MJ *see* Lopez-Valverde V, 137P  
 Murphy PM *see* Gavins FNE, 18P  
 Murphy PM *see* Yona S, 13P  
 Muzaffar S, Lobo C, Shukla N, Angelini GD & Jeremy JY Iloprost inhibits U46619-induced superoxide formation and NADPH oxidase expression in cultured porcine pulmonary artery vascular smooth muscle cells, 47P  
 Muzaffar S, Shukla N, Angelini GD & Jeremy JY Nitroaspirins and SIN-1, but not aspirin, inhibit the expression of endotoxin- and cytokine-induced NADPH oxidase in vascular smooth muscle cells from pig pulmonary arteries, 48P  
 Nabel EG *see* Stanford SJ, 50P  
 Nandi M, Miller A, Canevari L, Haworth G, Heales S & Vallance P Tetrahydrobiopterin deficient mouse (HPH-1) displays pulmonary hypertensive phenotype, 65P  
 Nap A, Balt JC, Mathy MJ, Pfaffendorf M & van Zwieten PA Pre- and post-junctional inhibitory actions of the AT<sub>1</sub>-receptor antagonists eprosartan and candesartan in the isolated rabbit thoracic aorta, 58P  
 Napier C, Laskey P & Gupta P Interaction of darifenacin at the human recombinant M<sub>3</sub> receptor is competitive and reversible, 125P  
 Napier C *see* Clarke NP, 123P  
 Nappi G *see* Iannone M, 206P  
 Naylor RJ *see* Javid FA, 92P  
 Nedvetsky PI, Müller H & Schmidt HHHW Hsp90 is required to stabilize the NO receptor soluble guanylyl cyclase, 35P  
 Neill JC *see* Idris NF, 106P  
 Neill JC *see* Meckin RJ, 179P  
 Németh J *see* Helyes Z, 218P  
 Nevin BJ & Broadley KJ Effects of L-arginine on neutrophil influx and airway hyperreactivity 1 h after lipopolysaccharide challenge, 133P  
 Newberry NR *see* Jones MG, 178P  
 Newberry NR *see* Maskell PD, 209P  
 Nicholson RI *see* Clark JH, 130P  
 Nicol B *see* Johnson EE, 221P  
 Nistico R *see* Morrone LA, 211P  
 Norel X, Walch L & Brink C Arachidonic acid induced contractions in human pulmonary veins, 63P  
 Nutt DJ *see* Kimura A, 173P  
 Olverman HJ *see* Quate L, 197P  
 Osborne RH, Bright J, Prince RI & Purcell WM Acetylcholine-induced contraction of the rat isolated ileum involves activation of L-type calcium channels and inositol trisphosphate receptors, 54P  
 Osborne RH *see* Coltman C, 89P  
 O'Shaughnessy CT *see* Bolton S, 27P  
 O'Shea E *see* Easton N, 194P  
 Overfield J *see* Dewhurst DG, 70P  
 Pahra P, Poll CT, Westwick J & Li SW Comparison of lanthanide sensitivity of receptor-activated calcium influx in the human promyelocytic leukaemic cell line HL60 and human neutrophils, 112P  
 Palethorpe S *see* Redfern WS, 22P  
 Palmer A *see* Misra A, 210P  
 Pangalos MN *see* Bowery NG, 1P  
 Pangalos MN *see* Whitehead KJ, 100P  
 Pantos C *see* Tiligada E, 82P  
 Parija SC & Broadley KJ 8sPT-resistant component of A<sub>1</sub>-mediated negative inotropic response in presence of 4-AP is pertussis toxin sensitive, 142P  
 Parsons A *see* Bolton S, 27P  
 Pass M *see* Clayton NM, 28P  
 Patel HJ, Birrell MA, Crispino N, Hele DJ, Yacoub MH, Venkatesan P, Barnes PJ & Belvisi MG The effect of a cannabinoid CB<sub>2</sub> agonist on activation of airway sensory nerves *in vitro* and the cough reflex, 74P  
 Patel HJ *see* Birrell MA, 75P  
 Patil PR & Marsden CA Chronic paroxetine treatment to young rats increases a conditioned emotional response, 110P  
 Paul-Clark MJ, Getting SJ, Roviezzo F, Del Soldato P, Flower RJ & Perretti M Effects of a novel NO-releasing glucocorticoid (NCX-1015) in a rat model of gout, 76P  
 Paul-Clark MJ *see* Goulding NJ, 121P  
 Paul-Clark MJ *see* Mancini L, 122P  
 Peachell PT *see* Eskandari N, 80P  
 Peachell PT *see* Kay LJ, 135P  
 Peachell PT *see* Scola A, 136P  
 Pearce SM *see* Bowery NG, 1P  
 Peck MJ *see* FitzGibbon H, 73P  
 Pedrosa R & Soares-da-Silva P D<sub>1</sub>-mediated inhibition of renal Na<sup>+</sup>/H<sup>+</sup> exchanger through a signalling cascade involving protein G<sub>s</sub>α, adenylyl cyclase (AC) and protein kinase A (PKA), 119P  
 Peoples C *see* Bell JK, 103P  
 Perdona E, Remelli R, Pinnola V, Corsi M & Garnier MJ Modulation of human serotonin transporter activity by human NK<sub>1</sub> receptor: evidence for an intracellular cross-talk mechanism, 224P  
 Perretti M *see* Brunelleschi S, 11P

- Perretti M *see* Gavins FNE, 18P  
 Perretti M *see* Getting SJ, 12P  
 Perretti M *see* Getting SJ, 144P  
 Perretti M *see* Goulding NJ, 121P  
 Perretti M *see* Mancini L, 122P  
 Perretti M *see* Paul-Clark MJ, 76P  
 Perretti M *see* Solito E, 14P  
 Perretti M *see* Yona S, 13P  
 Pestana M *see* Sampaio-Maia B, 93P  
 Peters SL *see* de Groot AA, 61P  
 Peters SL *see* de Groot AA, 62P  
 Peters SLM *see* Sand C, 19P  
 Peterson D *see* Choudhury HI, 177P  
 Pethő G, Almási R, Bölcskei K & Szolcsányi J Measurement of the noxious heat threshold: a novel approach to study heat hyperalgesia and the antinociceptive effects of drugs, 217P  
 Pethő G *see* Helyes Z, 218P  
 Pfaffendorf M *see* Nap A, 58P  
 Pfaffendorf M *see* Sand C, 19P  
 Pfaffendorf M *see* Streefkerk JO, 59P  
 Philipps E *see* Fish LR, 185P  
 Pickard JD *see* Johnström P, 57P  
 Pinnola V *see* Perdona E, 224P  
 Pintér E *see* Helyes Z, 218P  
 Pisano B *see* Dugo L, 40P  
 Poll CT *see* Bahra P, 112P  
 Poll CT *see* Mesher J, 115P  
 Postlethwaite M & Constanti A Muscarinic induction of the post-stimulus after-depolarizing tail current ( $I_{ADP}$ ) in rat olfactory cortical neurones *in vitro* requires G-protein activation, 190P  
 Premkumar LS *see* Almotrefi AA, 143P  
 Price GW *see* Bowery NG, 1P  
 Price GW *see* Whitehead KJ, 100P  
 Prince RI *see* Coltman C, 89P  
 Prince RI *see* Osborne RH, 54P  
 Princivalle A *see* Bowery NG, 1P  
 Pugh PJ *see* Jones RD, 150P  
 Pugh PJ *see* Rowell KO, 151P  
 Pullen S *see* Alexandrou A, 124P  
 Purcell WM *see* Coltman C, 89P  
 Purcell WM *see* Osborne RH, 54P  
 Pype J *see* FitzGibbon H, 73P
- Quate L, McBean DE, Ritchie IM, Olverman HJ & Kelly PAT Cerebrovascular effects of acute methylenedioxymethamphetamine in rats previously exposed to the drug, 197P  
 Quilley J, Jiang H & Chen Y-J Role of cyclooxygenase (COX)-2 in the enhanced renal vasoconstrictor effect of arachidonic acid (AA) in the diabetic rat, 67P
- Quirk K *see* Misra A, 210P
- Racké K, Lindemann D & Wenzel F Role of oxidative stress in the regulation of iNOS and arginase in rat alveolar macrophages, 41P  
 Racké K, Wenzel F & Stichnote C Lyso-phospholipids stimulate proliferation of rat primary airway fibroblasts, 131P  
 Rae GA *see* Gavioli EC, 25P  
 Rainer I *see* Griesbacher T, 66P  
 Rainger GE *see* Argent CCH, 55P  
 Raj ABM *see* Jackson G, 175P  
 Ralevic V *see* Duncan M, 214P  
 Ramage AG *see* Knowles ID, 99P  
 Ramage AG *see* Read KE, 4P  
 Ranatunga KM *see* Chumbley JR, 183P  
 Randall MD *see* Clarke ZL, 37P  
 Randall MD *see* Templeton-Ward OJ, 140P  
 Randall MD *see* Tep-areenan P, 152P  
 Rasmussen K *see* Boothman LJ, 3P  
 Rasmussen S *see* Wilson RJ, 84P  
 Rautureau Y, Jourdon P & Gauthier C Influence of  $\beta_3$ -adrenergic stimulation on intracellular  $Ca^{2+}$  concentration in freshly isolated rat aortic endothelial cells, 161P  
 Read KE, Sanger GJ & Ramage AG Evidence that central 5-HT<sub>1</sub> receptors are involved in the control of micturition in urethane anaesthetized rats, 4P  
 Redfern WS, Carlsson L, Davis AS, Lynch WG, MacKenzie I, Palethorpe S, Siegl PKS, Strang I, Sullivan AT, Wallis R, Camm AJ & Hammond TG Relationships between preclinical cardiac electrophysiology data and torsadogenic risk for 50 drugs: evidence for a provisional safety margin in drug development, 22P  
 Rees JL *see* Bell JK, 103P  
 Regoli D *see* Gavioli EC, 25P  
 Regoli D *see* Vergura R, 160P  
 Remelli R *see* Perdona E, 224P  
 Reynolds GP, Meckin RJ & Zhang X The functional -759C/T polymorphism of the 5-HT<sub>2C</sub> receptor gene is unrelated to [<sup>3</sup>H]-mesulergine binding in human brain, 101P  
 Reynolds GP *see* Meckin RJ, 179P  
 Rhodes S *see* Wilson RJ, 84P  
 Ribeiro JA *see* Diógenes MJ, 187P  
 Ribeiro JA *see* Fragata IR, 186P  
 Richards DA *see* Bowery NG, 1P  
 Richards DA *see* Manning J-PA, 2P  
 Richards DA *see* Morrone LA, 211P
- Richards HK *see* Johnström P, 57P  
 Rickford AKB *see* Goulding NJ, 121P  
 Ritchie IM *see* Quate L, 197P  
 Ritter JM *see* de Saram K, 36P  
 Rizzi A *see* Vergura R, 160P  
 Roberts N *see* Wilson RJ, 84P  
 Roberts RE *see* Bhattacharya B, 159P  
 Roberts SA *see* Jones RD, 150P  
 Rombolà L *see* Morrone LA, 211P  
 Roomans S *see* Wilson RJ, 84P  
 Rosahl T *see* Choudhury HI, 177P  
 Rose S *see* Dowman J, 203P  
 Rose S *see* Iczkiewicz J, 201P  
 Rose S *see* Irvani MM, 202P  
 Rose S *see* Johnston LC, 198P  
 Rose S *see* Lane EL, 200P  
 Rossi F *see* Getting SJ, 144P  
 Rostami-Hodjegan A *see* Kay LJ, 135P  
 Rotiroti D *see* Iannone M, 206P  
 Roviezzo F *see* Paul-Clark MJ, 76P  
 Rowbotham DJ *see* Kitayama M, 223P  
 Rowbotham DJ *see* McDonald J, 26P  
 Rowell KO, Jones RD, Pugh PJ, Jones TH & Channer KS Comparison of the vasodilatory action of testosterone in isolated human pulmonary and mesenteric arteries and veins, 151P  
 Ruban LN *see* Jones RD, 150P  
 Russell RJ *see* Barker LD, 97P  
 Russo E, Whalley B & Constanti A Topiramate modulates L-type calcium currents in rat olfactory cortical neurones *in vitro*, 188P
- Saez V *see* Wilson RJ, 84P  
 Sales KM *see* McLaughlin DP, 170P  
 Sallinen J *see* MacDonald E, 174P  
 Salvadori S *see* Gavioli EC, 25P  
 Salvadori S *see* Vergura R, 160P  
 Samanta S *see* Finn DP, 213P  
 Sampaio-Maia B, Serrão P, Vieira-Coelho MA & Pestana M Renal dopaminergic system activity in chronic renal failure, 93P  
 Samways DSK & Henderson G Rate of decay of the  $\mu$ -opioid receptor mediated elevation of [ $Ca^{2+}$ ]<sub>i</sub> in SH-SY5Y neuroblastoma cells, 114P  
 Samways DSK *see* Johnson EA, 113P  
 San H *see* Stanford SJ, 50P  
 Sand C, Peters SL, Pfaffendorf M & van Zwieten PA The influence of endogenously produced reactive oxygen species on the inotropic and chronotropic effects of adrenoceptor- and ET<sub>A</sub>-receptor stimulation, 19P  
 Sanger GJ *see* Read KE, 4P  
 Sargent JM *see* Hellmann K, 53P  
 Saxena PR *see* Batenburg WW, 227P

- Saxena PR *see* Schuijt MP, 228P  
 Saxena PR *see* Tom B, 33P  
 Scheinin M *see* MacDonald E, 174P  
 Schiöth HB *see* Getting SJ, 12P  
 Schmidt HHHW *see* Nedvetsky PI, 35P  
 Schuijt MP, Tom B, de Vries R, Sluiter W, Saxena PR & Danser AHJ Super-oxide: a direct or an indirect vasoconstrictor?, 228P  
 Schuijt MP *see* Batenburg WW, 227P  
 Schuijt MP *see* Tom B, 33P  
 Scola A, Chong LK & Peachell PT Desensitisation of  $\beta_2$ -adrenoceptor-mediated responses by salbutamol and salmeterol in human lung mast cells, 136P  
 Seabrook GR *see* Choudhury HI, 177P  
 Sebastiao AM *see* Diógenes MJ, 187P  
 Sebastiao AM *see* Fragata IR, 186P  
 Sellers DJ, Chapple CR, Hey D & Chess-Williams R Investigation of NKA responses in detrusor muscle from normal and neurogenic bladders, 24P  
 Sepulveda MF, Goode NT & Cunningham FM Effects of protein kinase C inhibitors on equine eosinophil adherence and superoxide production, 77P  
 Serraino I *see* Cuzzocrea S, 15P  
 Serraino I *see* Cuzzocrea S, 39P  
 Serrao P *see* Sampaio-Maia B, 93P  
 Shanahan S *see* Wilson RJ, 84P  
 Sharma SC *see* Arhima MH, 96P  
 Sharma SC *see* Elkharaz JI, 95P  
 Sharp T *see* Boothman LJ, 3P  
 Sharp T *see* Hirani E, 181P  
 Sharp T *see* Jennings K, 176P  
 Sharp T *see* Le Masurier M, 182P  
 Shaw AM *see* Brahmadevara N, 154P  
 Sheehan MJ *see* Collins SD, 29P  
 Sheldrick RLG *see* Davis RJ, 153P  
 Sherratt KM *see* Goulding NJ, 121P  
 Sheward J *see* Jennings K, 176P  
 Shukla N *see* Muzaffar S, 47P  
 Shukla N *see* Muzaffar S, 48P  
 Siah WE *see* Edge G, 56P  
 Siegl PKS *see* Redfern WS, 22P  
 Simonsen U *see* Andersen CU, 138P  
 Simonsen U *see* Lopez-Valverde V, 137P  
 Sisodiya A, Kilpatrick IC, Higenbottam TW & Emery CJ The selective reduction of 5HT-linked pulmonary vasoconstriction by dexfenfluramine is prevented by pre-treatment with citalopram in the wistar rat lung, 139P  
 Sivarajah A, Chatterjee PK, Todorovic Z, Mota-Filipe H, Brown PAJ, Stewart KN & Thiernemann C Agonists of peroxisome proliferator activated receptor- $\alpha$  (clofibrate and WY14643) reduce ischaemia/reperfusion injury of the rat kidney, 94P  
 Sivarajah A *see* Chatterjee PK, 38P  
 Sluiter W *see* Schuijt MP, 228P  
 Smart D *see* Elmes SJR, 219P  
 Smart D *see* Lam PMW, 220P  
 Smith AD *see* Fish LR, 185P  
 Smith G *see* Kitayama M, 223P  
 Smith K *see* Clarke NP, 123P  
 Smith L *see* Wilson RJ, 84P  
 Soares-da-Silva P *see* Gomes P, 118P  
 Soares-da-Silva P *see* Gomes P, 120P  
 Soares-da-Silva P *see* Pedrosa R, 119P  
 Solito E & Perretti M Exogenous annexin 1 promotes human neutrophil apoptosis, 14P  
 Spalding D *see* Collins SD, 29P  
 Spalding D *see* Wilson RJ, 84P  
 Speder P *see* Maskell PD, 209P  
 Spiers JP *see* Edge G, 56P  
 Spina S *see* Brunelleschi S, 11P  
 Sprakes M *see* Hirani E, 181P  
 Sriskandan S *see* Belcher E, 31P  
 Sriskandan S *see* Belcher E, 32P  
 Stamford JA *see* Blatchford KL, 171P  
 Stamford JA *see* McLaughlin DP, 170P  
 Stanford SJ, Hislop AA, Haworth SG & Mitchell JA Induction of heme oxygenase-1 in the porcine lung after birth, 49P  
 Stanford SJ, San H, Nabel EG, Hislop AA, Haworth SG & Mitchell JA Heme oxygenase-1 deficient mice do not appear to have pulmonary hypertension, 50P  
 Stanford SJ, Walters MJ, Hislop AA, Haworth SG, Evans TW & Mitchell JA Heme oxygenase is expressed in human pulmonary artery smooth muscle where carbon monoxide has an anti-proliferative role, 51P  
 Stean TO *see* Thomas DR, 180P  
 Stevens LA, Chapple C, Chess-Williams R The role of ATP and adenosine in the inhibitory effects of the urothelium on detrusor muscle of the pig, 98P  
 Stewart KN *see* Chatterjee PK, 38P  
 Stewart KN *see* Sivarajah A, 94P  
 Stichnote C *see* Racké K, 131P  
 Strang I *see* Redfern WS, 22P  
 Streeterker JO, Pfaffendorf M & van Zwieten PA Vasopressin-induced facilitation of adrenergic responses in the rat mesenteric artery is  $V_1$ -receptor dependent, 59P  
 Sullivan AT *see* Redfern WS, 22P  
 Swarbrick M *see* Wilson RJ, 84P  
 Szolcsányi J *see* Helyes Z, 218P  
 Szolcsányi J *see* Pethő G, 217P  
 Taberner PV *see* Gray JJ, 7P  
 Tam CW, Grant AD & Brain SD The comparison of the microvascular activity of calcitonin gene-related peptide (CGRP) and other vasodilators in mouse skin, 86P  
 Templeman L, Chapple CR, Hey D & Chess-Williams R Neurokinin-mediated potentiation of purinergic responses in the bladder of the pig, 23P  
 Templeton-Ward OJ & Randall MD The vasorelaxant effects of simvastatin in the rat aorta, 140P  
 Tep-areenan P, Kendall DA & Randall MD Mechanisms of  $17\beta$ -oestradiol-induced vasorelaxation in the rat aorta, 152P  
 Tessari M *see* Amantea D, 192P  
 Thiernemann C *see* Chatterjee PK, 38P  
 Thiernemann C *see* Cuzzocrea S, 39P  
 Thiernemann C *see* Dugo L, 40P  
 Thiernemann C *see* Sivarajah A, 94P  
 Thomas DR, Melotto S, Massagrande M, Stean TO, Gribble AD & Forbes IT SB-656104-A, a novel 5-HT<sub>7</sub> receptor antagonist, inhibits REM sleep in rats, 180P  
 Thomas MA, Bishop-Bailey D & Warner TD The novel CO releasing compound tricarbonyldichlororuthenium (II) dimer confers protection from free radical mediated cytotoxicity in WKY 3M-22 cell line and primary rat aortic smooth muscle cells, 168P  
 Thompson SE, Woodhall G & Jones RSG Pharmacological evidence for subtypes of presynaptic GABA<sub>A</sub> receptors controlling glutamate and GABA release in the rat entorhinal cortex, 192P  
 Tiligada E, Giannoulaki V & Pantos C Hyperthyroidism induces conjunctival mast cell disruption without simultaneous modification of the early phase response to the histamine-releaser C48/80, 82P  
 Tiligada E *see* Vovou I, 72P  
 Tilmant K *see* FitzGibbon H, 73P  
 Tippins JR *see* Valentin F, 71P  
 Todorovic Z *see* Chatterjee PK, 38P  
 Todorovic Z *see* Sivarajah A, 94P  
 Tom B, Schuijt MP, Saxena PR &

- Danser AHJ No role for oxygen-derived free radicals in angiotensin II-mediated vasoconstriction of human coronary arteries, 33P
- Tom B *see* Schuijt MP, 228P
- Tomlinson JAP *see* Vo PA, 156P
- Toms NJ *see* Kelland EE, 204P
- Toth G *see* Ibba M, 222P
- Tough IR & Cox HM Mucosal cholera toxin responses are partially and differentially mediated by 5-HT<sub>4</sub> and Y<sub>4</sub> receptors in the mouse descending colon, 91P
- Trifilieff A & Fujitani Y *In vivo* effects of SAR 943, a rapamycin analogue, in a murine model of airway inflammation and remodeling, 45P
- Trifilieff A *see* Bonneau O, 79P
- Turner L *see* Williamson IJR, 102P
- Tyacke RJ, Minchin MCW, Nutt DJ & Hudson AL Identification of a putative imidazoline-2 binding protein, 173P
- Tyacke RJ *see* Kimura A, 173P
- Tyler SJ, Dawbarn D, Wilcock GK & Allen SJ Changes in  $\alpha$ - and  $\beta$ -secretase in Alzheimer's disease, 205P
- Valentin F, Tippins JR & Field MC Oxidative stress induces intracellular relocation of the thromboxane receptor in COS-7 cells, 71P
- Vallance P *see* Achan V, 64P
- Vallance P *see* Arrigoni F, 52P
- Vallance P *see* Nandi M, 65P
- Van der Graaf PH *see* Barker LD, 97P
- Van Der Graaf PH *see* Williamson IJR, 102P
- Van Hove CE *see* Crauwels HM, 30P
- van Zwieten PA *see* de Groot AA, 61P
- van Zwieten PA *see* de Groot AA, 62P
- van Zwieten PA *see* Nap A, 58P
- van Zwieten PA *see* Sand C, 19P
- van Zwieten PA *see* Streefkerk JO, 59P
- Vandeputte C *see* Bexis S, 195P
- Venkatesan P *see* Patel HJ, 74P
- Vergura R, Rizzi A, Camarda V, Calo G, Guerrini R, Salvadori S & Regoli D Urotensin II stimulates plasma extravasation in mice via UT receptor activation, 160P
- Viano I *see* Brunelleschi S, 11P
- Vickers SP *see* Webster LJ, 105P
- Vickers SP *see* Wyatt A, 104P
- Vieira-Coelho MA *see* Sampaio-Maia B, 93P
- Villalón CM *see* Centurión D, 172P
- Vo PA, Tomlinson JAP, Chauhan SD & Ahluwalia A The role of the endothelium and constitutive NO in LPS-induced vasorelaxation, 156P
- Volppe F *see* Wilson RJ, 83P
- Vovou I, Delitheos A & Tiligada E Does ion trafficking contribute to survival under severe stress in the eukaryotic cell?, 72P
- Wafford K *see* Fish LR, 185P
- Walch L *see* Norel X, 63P
- Walker A *see* Wilson RJ, 84P
- Walker K *see* Whiteside G, 212P
- Wallace P *see* Gibson A, 117P
- Wallis R *see* Redfern WS, 22P
- Walsh DT *see* Bishop-Bailey D, 60P
- Walters MJ, Warner TD, Bishop-Bailey D & Mitchell JA The ppar- $\gamma$  ligand 15-deoxy- $\Delta^{12,14}$ -prostaglandin J<sub>2</sub> (15D-PGJ<sub>2</sub>) inhibits proliferation and cytokine release from human pulmonary artery smooth muscle, 132P
- Walters MJ & Mitchell JA Cigarette smoke extract (CSE) stimulates human THP-1 monocytes directly and synergises with IL-1b to release IL-8, 44P
- Walters MJ *see* Stanford SJ, 51P
- Wanstall JC, Gambino A & Chess-Williams R Influence of 5-hydroxytryptamine (5-HT) uptake on 5-HT potency in rat pulmonary and mesenteric arteries: effects of exposure of rats to hypoxia, 163P
- Warner TD *see* Bishop-Bailey D, 60P
- Warner TD *see* Thomas MA, 168P
- Warner TD *see* Walters MJ, 132P
- Warner TD *see* Wray J, 169P
- Watson WP *see* Bastlund JF, 107P
- Wayman CP *see* Williamson IJR, 102P
- Wayman N *see* Dugo L, 40P
- Webb A, McLean P, Ahluwalia A & Benjamin N Inorganic nitrite: protector against ischaemia reperfusion injury in the heart?, 20P
- Webb DJ *see* McQueen DS, 167P
- Webster LJ, Kennett GA & Vickers SP Effect of the CB<sub>1</sub> receptor antagonist SR 141716 on food intake, body weight gain and the behavioural satiety sequence in obese (fa/fa) Zucker rats, 105P
- Webster LJ *see* Wyatt A, 104P
- Wenzel F *see* Racké K, 41P
- Wenzel F *see* Racké K, 131P
- Westwick J *see* Bahra P, 112P
- Whalley B & Constanti A Muscarinic modulation of GABA<sub>A</sub> receptor-mediated IPSPs in adult and immature rat olfactory cortex *in vitro*, 189P
- Whalley B *see* Russo E, 188P
- Wheatley M *see* Argent CCH, 55P
- White PJ & Boarder MR Characterisation of an agonist specific Ca<sup>2+</sup> response to both UTP and ATP P2Y<sub>11</sub> receptors: an example of agonist dependent selection of signalling pathways, 116P
- Whitehead KJ, Pangalos MN, Price GW & Bowery NG Comparison of diffusion of an 18-MER antisense molecule across three hollow fibre dialysis membrane types *in vitro*, 100P
- Whitehead KJ *see* Bowery NG, 1P
- Whiteside G, Harrison J & Walker K Indomethacin, naproxen and celecoxib reverse mechanical hyperalgesia in a rat model of post-surgical pain, 212P
- Whitley GS *see* Achan V, 64P
- Wickramasinghe T *see* Eskandari N, 80P
- Wilcock GK *see* Tyler SJ, 205P
- Wiley KE & Davenport AP Detection of CRF<sub>2</sub> receptors in the human heart using [<sup>125</sup>I]-antisauvagine 30, 16P
- Wilkinson I *see* Maguire J, 164P
- Williams J *see* McDonald J, 26P
- Williams TJ *see* Buckland KF, 43P
- Williamson CJ *see* Hellmann K, 53P
- Williamson IJR, Turner L, Woods K, Wayman CP & Van Der Graaf P-H The 5-HT<sub>1A</sub> receptor antagonist robalzotan enhances SSRI-induced ejaculation delay in the rat, 102P
- Willoughby DA *see* Ayoub SS, 225P
- Wilson RJ, Giblin G, Foord S, Swarbrick M, Walker A, Bamford M, Roomans S, Mason A, Miller N, Jones H, Shanahan S, Rasmussen S, Smith L, Spalding D, Ancliff R, Saez V, Frye S, Lewell X, Cartwright K, Rhodes S, Roberts N & Green R GW627368X: A novel, potent and selective EP4 prostanoid receptor antagonist, 84P
- Wilson RJ & Volppe F Agonist fingerprint of the recombinant human CRTH2 prostanoid receptor expressed in HEK293(T) cells, 83P
- Wolber C & Fozard JR Further definition of the mechanism of the contractile response to adenosine on lung parenchymal strips from actively sensitised, allergen challenged, Brown Norway rats, 46P
- Wolber C *see* Fozard JR, 129P
- Wolfson DS *see* MacInnes N, 226P

- Wong S *see* Birrell MA, 75P  
 Woodhall GL *see* Ayman G, 191P  
 Woodhall GL *see* Thompson SE, 192P  
 Woods K *see* Williamson IJR, 102P  
 Wray J, Zeldin D, Warner TD & Bishop-Bailey D Cytochrome P450 2J2 over-expression activates peroxisome proliferator-activated receptor- $\alpha$ , 169P  
 Wyatt A, Webster LJ, Dourish CT, Kennett GA & Vickers SP Sub-chronic administration of the CB<sub>1</sub> receptor antagonist, SR 141716, preferentially decreases body weight in obese (*fafa*) compared to lean Zucker rats, 104P  
 Yacoub MH *see* Birrell MA, 75P  
 Yacoub MH *see* Patel HJ, 74P  
 Yates L & Broadley KJ The effect of adenosine A<sub>3</sub> receptor activation on the recovery from simulated ischaemia of guinea pig left atria, 141P  
 Yellon DM *see* D'Souza SP, 21P  
 Yeoman MS *see* Bakhit D, 162P  
 Yona S, Hannon R, Gao JL, Murphy PM, Buckingham JC, Flower RJ & Perretti M Alterations in the annexin 1 pathway are associated with modified neutrophil activation, 13P  
 Zacharia J, Hillier C & MacDonald A Effect of cocaine on the  $\alpha_1$ -adrenoceptor subtypes involved in neurally-evoked contractions of rat femoral resistance arteries, 158P  
 Zeldin D *see* Wray J, 169P  
 Zhang X *see* Reynolds GP, 101P  
 Zucchini S *see* Gavioli EC, 25P

## Keyword Index

- Absence epilepsy, 1P, 2P  
 Acetylcholine, 54P  
 Actively sensitised rats, 134P  
 Adenosine, 126P, 141P, 142P, 186P, 187P  
 Adenosine receptors, 109P, 130P  
 Adenosine A<sub>1</sub> agonists, 28P, 29P  
 Adenosine A<sub>2A</sub> receptors, 187P  
 Adenosine A<sub>2B</sub> receptors, 129P  
 Adenosine bronchoconstriction, 46P  
 Adenosine deaminase, 134P  
 ADMA, 64P  
 $\alpha_1$ -Adrenoceptors, 158P  
 $\alpha_2$ -Adrenoceptors, 159P  
 $\alpha_{2A}$ -Adrenoceptors, 174P  
 $\beta$ -Adrenoceptors, 61P, 127P, 135P, 154P, 155P  
 $\beta_2$ -Adrenoceptors, 136P  
 $\beta_3$ -Adrenoceptors, 161P  
 $\beta_4$ -Adrenoceptors, 17P  
 Agonist trafficking, 116P  
 Airways, 131P  
 Airways epithelium, 115P  
 Allergen challenge, 46P, 134P  
 Alveolar macrophages, 41P  
 Alzheimer's disease, 205P  
 Amantadine, 210P  
 Amino acid neurotransmitters, 211P  
 Amygdala, 108P, 213P  
 Analgesic effects, 218P  
 Anandamide, 8P  
 Angiotensin, 162P  
 Angiotensin AT<sub>1</sub>-receptor subtypes, 58P  
 Angiotensin II, 33P, 58P, 227P, 228P  
 Antagonists, 84P  
 Antagonist pharmacology, 129P  
 Antihypersensitivity, 28P, 29P  
 Anti-inflammatory drugs, 12P  
 Antiretroviral drugs, 69P  
 Antiarrhythmic drugs, 143P  
 Anticonvulsant drugs, 207P  
 Antidepressant-like effects, 25P  
 Antipsychotic drugs, 179P  
 [<sup>125</sup>I]-Antisauvagine 30, 16P  
 Antisense, 1P, 100P  
 Anxiety, 110P  
 Aorta, rat, 156P  
 Aortic valve, equine, 145P  
 aP2, 148P  
 Apolipoprotein E, 205P  
 Apoptosis, 14P, 168P  
 Arachidonic acid, 63P, 67P  
 Arc immediate early gene, 6P  
 ARDS, 47P, 48P  
 Arginase, 41P  
 Arsenic, 95P  
 Arteries, cerebral, 153P  
 Arteries, coronary, human, 33P  
 Arteries, pulmonary, 49P, 51P, 138P, 163P  
 Arteries, resistance, 154P, 158P  
 Arteries, smooth muscle, 51P  
 Artery smooth muscle cells, pulmonary, 132P  
 Arthritis, 10P, 76P  
 Ascorbic acid, 95P  
 Asthma, 45P  
 Atherosclerosis, 30P, 148P  
 ATP, 53P, 98P  
 Atria, 142P  
 Aversion, 108P  
 Basophils, 80P  
 BDNF, 187P  
 Behavioural satiety sequence, 105P  
 Bergamot essential oil, 211P  
 Bladder, 4P, 23P, 98P, 99P  
 Blood flow, 66P  
 Blood physiology, 70P  
 Blood pressure, 3P  
 Blood pressure, rat, 195P  
 Body temperature, 196P  
 Bosentan, 56P  
 Brain, human, 101P  
 Brain derived neurotrophic factor, 187P  
 Brain ischemia, 206P  
 BTS 74398, 200P  
 CA3, 177P  
 CAL, 70P  
 Calcium, 54P, 113P, 114P, 161P, 220P  
 Calcium channels, 152P, 213P  
 Calcium influx, 112P  
 Calcium signalling, 116P  
 Calyculin-A, 117P  
 cAMP, 26P, 120P  
 Cannabinoids, 68P, 74P, 214P  
 Cannabinoid agonists, 215P  
 Capsaicin, 220P  
 Capsaicin-sensitive nerves, 218P  
 Carbon monoxide, 49P, 51P, 168P  
 Cardiomyocytes, 155P  
 Cardiovascular pathology, 71P  
 Cardiovascular system, 85P, 166P  
 Cardiovascular system, human, 165P  
 CD11b, 13P  
 CDK1, 53P  
 Celecoxib, 212P  
 C2-ceramide, 157P  
 c-fos expression, 176P  
 CGMP, 150P  
 CGP 12177A, 17P  
 Chemotaxis, 13P  
 Chicken, 175P  
 Cholecystokinin receptors, 66P  
 Cholera-toxin-mediated ion secretion, 91P  
 Cigarette smoke extract, 44P  
 Circling, 200P  
 Citalopram, 139P  
 CNS, 181P, 182P  
 Cocaine, 158P  
 Cognitive dysfunction, 106P  
 Colitis, 88P  
 Computer-assisted learning, 70P  
 Confocal microscopy, 126P  
 Conotoxins, 108P  
 Contractions, 54P, 89P  
 Convulsions, 107P  
 COPD, 73P, 75P  
 Cough, 74P  
 Creatine kinase, 173P  
 CRF2 receptors, 16P  
 Cross-talk, 113P, 114P, 224P  
 CRTH2, 83P  
 Cyclic AMP, 111P  
 Cyclic peptide, 223P  
 Cyclo-oxygenase, 225P  
 Cyp2D6, 194P  
 Cystathionine- $\beta$  synthase, 37P  
 Cytochrome C, 206P  
 Cytokines, 81P

Darifenacin, 123P, 124P, 125P  
DCPG, 207P  
DDAH, 52P, 64P  
Desensitisation, 136P, 184P  
Dexfenfluramine, 139P  
Dexmedetomidine, 174P  
Dextrazoxane, 53P  
Diclofenac, 225P  
Dimerization, 17P  
Dimethylarginine dimethylamino-  
hydrolase, 52P, 64P  
Distal colon, 170P  
Dog, 221P  
L-Dopa, 198P, 200P  
Dopamine, 93P, 118P, 119P, 175P,  
182P  
Dopamine D<sub>1</sub>-like receptors, 119P  
Dopamine D<sub>2</sub>-like receptors, 120P  
Down-regulation, 179P  
Dyskinesia, 199P

Ecstasy, 166P, 194P, 199P  
EDHF, 37P, 146P  
Eicosanoids, 47P  
Ejaculation, 102P  
Elastin, 164P  
Electrophysiology, 27P, 178P, 216P  
Electrophysiology *in vivo*, 3P  
Emphysema, 73P  
Endothelial cells, 148P, 161P  
Endothelial function, 30P, 36P, 62P  
Endothelins, 57P  
Endothelin-1, 137P  
Endothelium, 137P, 147P, 149P, 154P,  
156P  
Endotoxaemia, 68P  
Enteric nervous system, 90P  
Entorhinal cortex, 191P, 192P  
Eosinophils, 43P, 78P  
EP4, 153P  
Epilepsy, 107P  
Epoxygenase, 169P  
Equine eosinophils, 77P  
Equine laminitis, 146P  
ERK-MAP kinase, 159P  
17- $\beta$ -Estradiol, 206P  
Ethosuximide, 2P

Fat, 7P  
Feeding, 105P  
Fibroblasts, 131P  
Flow cytometry, 14P  
Flowmetry, 147P  
Fluoride, 96P  
Fluoxetine, 183P  
Fluvoxamine, 198P  
Forced swimming test, 25P  
Free radicals, 96P

Freezing, 110P  
Frovatriptan, 178P

GABA, 186P  
GABA<sub>A</sub>, 185P  
GABA<sub>B</sub>, 1P  
GABA<sub>B</sub> receptors, 192P, 193P  
GABA<sub>B</sub>R1, 192P  
GABA<sub>B</sub>R2, 192P  
GAERS, 2P  
Gene transcription, 127P, 128P  
Glucocorticoids, 76P, 122P  
Glucocorticoid receptors, 121P  
Glutamate, 207P  
G-proteins, 221P  
G-proteins, muscarinic, 190P  
Group II metabotropic glutamate  
receptors, 191P  
GTP $\gamma$ S, 26P, 193P  
Guanylate cyclase V, 34P

H3, 103P  
H4, 43P  
Haemodynamics, 68P  
Heart, 19P, 31P, 32P  
Heart, human, 16P  
Heart failure, 56P, 151P  
Heat hyperalgesia, 217P  
Heat shock, 72P  
Heat shock protein 90, 35P  
Heme oxygenase, 49P, 50P, 51P, 168P  
Hepatocytes, 111P  
HERG, 22P  
Heterogeneous receptors, 97P  
Hippocampus, 177P, 186P, 191P  
Histamine, 43P, 82P  
Histamine H<sub>3</sub> receptors, 167P  
Histology, 107P  
HMG-CoA reductase inhibitors, 140P  
5-HT, 3P, 6P, 139P, 163P, 171P, 177P,  
181P  
5-HT transporters, 176P  
5-HT<sub>1A</sub> receptors, 179P  
5-HT<sub>2C</sub> receptors, 101P  
5-HT<sub>4</sub> receptors, 87P, 91P  
5-HT<sub>7</sub>, 180P  
5-HT<sub>7</sub> receptors, 4P  
Hyperalgesia, 212P  
Hyperhomocysteinaemia, 37P  
Hypertension, 93P, 162P  
Hypoxia, 137P, 163P

I<sub>ADP</sub> tail currents, 190P  
Idazoxan, 173P  
Ileum, rat, 89P  
Imidazoline, 173P  
Imidazoline receptors, 172P

*In vitro* binding, 171P, 185P  
Inbred rats, 170P  
Incontinence, 123P, 124P, 125P  
Indomethacin, 212P  
Infarct size, 21P  
Inflammation, 15P, 45P, 73P, 78P, 85P,  
88P, 202P  
Inflammatory hyperalgesia, 28P, 29P  
Integrin, 88P  
Interleukins, 80P  
Interleukin IL-8, 44P  
Interleukin IL-10, 15P  
Interleukin IL-17, 79P  
Internalisation, 184P  
Intestine, 92P  
Intravital microscopy, 18P  
Ion channels, 72P, 115P  
IPSPs, 189P  
Ischaemia, 38P, 94P, 141P, 144P  
Ischaemia-reperfusion, 20P, 21P, 40P  
Itch, 103P

Kainate, 204P  
Kidney, 38P, 67P, 93P, 94P, 95P, 96P  
Knockout mice, 174P

Lamotrigine, 106P  
Lanthanides, 112P  
Lanthanum, 115P  
Leukocyte extravasation, 18P  
Ligands, 40P  
Ligand binding, 55P  
Lipid signalling, 169P  
Lipogenesis, 7P  
Lipopolysaccharides, 133P, 201P, 202P  
Local cerebral blood flow, 197P  
Local cerebral glucose utilisation, 197P  
Locus coeruleus, 184P  
LSOP, 226P  
L-type calcium currents, 188P  
Lungs, 79P  
Lung, human, 135P  
Lung parenchymal strips, 46P  
Lysophospholipids, 131P

MAP kinases, 19P, 128P  
Mast cells, 82P, 136P  
Matrix metalloproteinases, 56P  
MCF-7 cells, 130P  
MDMA, 6P, 195P, 196P  
MEK inhibitors, 128P  
Melanocortin, 12P, 144P  
Mesenteric bed, rat, 214P  
Metabotropic glutamate receptors, 226P  
Methylenedioxymethamphetamines,  
197P  
Mice, 103P



Microdialysis, 100P, 211P  
 Microsomes, 194P  
 Microvasculature, 86P  
 Micturition, 99P  
 Migraine, 27P, 178P  
 Monoamine transporters, 224P  
 Monocytes, 44P  
 Morphine, 216P  
 3-Morpholinosydnonimine, 138P  
 Motilin, 165P  
 Mouse, 86P  
 Moxonidine, 172P  
 MPEP, 208P  
 MPP<sup>+</sup>, 203P  
 MPTP, 198P  
 Muscarinic modulation, 189P  
 Myocardial infarction, 166P  
 Myosin phosphatase, 117P  
  
 NADH/NADPH oxidase, 228P  
 Natriuretic peptide, 21P  
 Nebivolol, 61P, 62P  
 Neurogenic inflammation, 87P  
 Neurokinins, 23P  
 Neurokinin A, 24P  
 Neurokinin NK<sub>1</sub> receptors, 9P  
 Neuropeptide Y, 85P, 90P  
 Neuropeptide Y, receptors, 91P  
 Neurotoxicity, 196P  
 Neutrophil migration, 12P  
 Neutrophilia, 9P, 13P, 14P, 18P, 75P, 76P, 79P, 112P, 133P  
 NF- $\kappa$ B, 11P  
 NHE3, 118P, 119P  
 Nicotine, 7P, 193P  
 Nicotinic receptors, 209P  
 Nitrgic transmission, 117P  
 Nitric oxide, 20P, 30P, 31P, 32P, 34P, 35P, 36P, 42P, 52P, 64P, 65P, 133P, 140P, 146P, 156P, 227P, 228P  
 Nitrites, inorganic, 20P  
 Nitro-aspirin, 48P  
 Nitroparacetamol, 81P  
 NMDA, 210P  
 NMDA antagonists, 209P  
 Nociceptin, 26P, 221P, 222P, 223P  
 Nociception, 219P  
 Non-genomic actions, 121P  
 Non-invasive measurements, 147P  
 NOP receptors, 25P  
 Noradrenaline, 170P, 208P  
 Novel radioligands, 57P  
 Noxious heat threshold, 217P  
 NSAIDs, 42P  
 Nuclear receptors, 60P  
  
 Obesity, 104P  
 Oedema, 8P  
  
 Oestrogens, 152P  
 8-OHDPAT, 92P  
 Olfactory cortex, 188P, 190P  
 Oligodendrocytes, 204P  
 Oligodeoxynucleotides, 100P  
 OPG/RANKL, 122P  
 Opioids, 113P, 114P  
 Orphan receptors, 165P  
 Osteopontin, 201P  
 Osteoporosis, 122P  
 Overactive bladder, 123P, 124P, 125P  
 Oxidative stress, 41P, 62P, 71P  
 Oxytocin, 97P  
 Oxytocin receptors, 55P  
  
 Pain, 27P, 213P  
 Pancreas, 66P  
 Paracetamol, 81P, 225P  
 Parkinson's disease, 199P, 201P, 202P, 203P, 226P  
 PCP, 106P  
 Peptide antagonists, 222P  
 Pertussis toxins, 142P  
 PET, 181P, 182P  
 Pharmacology teaching, 69P  
*Phoneutria nigriventer* venom, 87P  
 Phosphodiesterase, 80P  
 Phosphorylation, 4P  
 Piriform cortex, 189P  
 Pithed rat, 167P  
 Place preference, 109P  
 Plasma extravasation, 10P, 160P  
 Platelets, 42P, 121P  
 Pleurisy, 15P, 39P  
 Polymorphisms, 101P, 135P  
 Positron emission tomography, 57P  
 Posterior thalamus, 216P  
 Potassium channels, 120P, 152P, 183P  
 PPAR, 38P, 39P, 94P, 169P  
 PPAR ligands, 132P  
 PPAR- $\gamma$ , 40P, 75P  
 Presynaptic GABA<sub>B</sub> receptors, 192P  
 Pro-oxidants, 149P  
 Proliferation, 60P  
 Propranolol, 143P  
 Prostanoids, 63P, 83P, 84P, 153P  
 Proteasome, 203P  
 Protein kinase, 118P  
 Protein kinase A, 5P  
 Protein kinase C, 77P  
 Pulmonary hypertension, 50P, 52P, 65P, 132P  
 Purinergic responses, 23P  
 Purinoceptor P<sub>2X</sub> subtypes, 99P  
 Purinoceptor P<sub>2Y</sub> subtypes, 111P, 116P  
  
 QT, 22P  
 Quinpirole, 175P  
  
 Rabbit, 58P  
 Radial arteries, human, 164P  
 Radiolabelling, 171P  
 Radioligand binding, 130P, 222P  
 Rats, 109P, 180P  
 Reactive oxygen species, 19P  
 Receptor mediated contractions, 145P  
 Receptors, 83P, 84P, 126P  
 REM sleep, 180P  
 Remodelling, 45P, 50P  
 Renal insufficiency, 93P  
 Reperfusion, 144P  
 Reporter genes, 127P  
 Robalzotan, 102P  
 Rofecoxib, 11P  
 Rosiglitazone, 39P, 40P  
 RWJ-662733, 167P  
  
 SB-269970, 4P  
 Secretase, 205P  
 Sensory nerves, 74P, 214P  
 Shape change, 78P  
 Signal transduction, 223P  
 Sildenafil, 138P  
 Simvastatin, 140P, 155P  
 Smooth muscle, 24P  
 Soluble guanylate cyclase, 35P  
 Soluble guanylyl cyclase, 35P  
 Somatostatin analogues, 218P  
 Species selectivity, 129P  
 Sphingosine-1-phosphate, 157P  
 Sphingosylphosphorylcholine, 157P  
 Spinal cord, 215P, 219P  
 Spinal nerve ligation, 215P  
 Spontaneously hypertensive rats, 162P  
 SR 141716, 104P, 105P  
 SSRIs, 102P, 110P  
 Stress response, 72P  
 Stunning, 141P  
 Substance P, 8P  
 Substance P antagonists, 224P  
*Suncus murinus*, 92P  
 Superoxide, 33P, 47P, 48P, 77P  
 Swelling, 10P  
 Sympathetic nervous system, 59P  
  
 Tachykinins, 89P  
 [<sup>35</sup>S]-TBPS, 185P  
 Teaching pharmacology, 69P  
 Testosterone, 150P, 151P  
 Tetrahydrobiopterin, 65P  
 Thromboxane receptors, 71P  
 Thyroxine, 82P  
 TLR2, 31P  
 TLR4, 32P  
 TNF- $\alpha$ , 9P, 11P  
 Topiramate, 188P  
 Torsade de pointes, 22P

Transgenic mice, 176P	Vas deferens, 195P	Vitamin C, 36P
TREK-1, 183P	Vascular smooth muscle, 60P	Voltammetry and electrophysiology <i>in vivo</i> , 208P
	Vascular sympathetic outflow, 172P	VSMC, human, 55P
	Vasoconstriction, 159P	
Undergraduate teaching, 70P	Vasodilatation, 34P, 149P, 150P, 151P, 227P	Web searching, 69P
Urinary bladder, 24P	Vasodilators, 86P	
Urotensin II, 160P	Vasopressin, 59P	<i>Xenopus</i> oocytes, 209P
Urothelium, 98P	Vasopressin V <sub>1</sub> -receptors, 59P	
Uterus, 97P	Vasorelaxation, 61P	Zinc, 204P
	Ventricular fibrillation, 143P	Zucker rats, 104P
Vanilloid receptors, 220P	Veratridine, 90P	
Vanilloid TRPV1 receptors, 217P, 219P	Vessels, pulmonary, 63P	
	VGAPG, 164P	