

The *British Journal of Pharmacology* is published by Stockton Press, a division of Macmillan Press Ltd. It is the official publication of the British Pharmacological Society.

**Scope** The *British Journal of Pharmacology* 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, Excerpta Medica, BIOSIS, CABS, CINAHL and Index Medicus.

**Editorial** Manuscripts (plus two copies) and all editorial correspondence should be sent to: The Editorial Office, *British Journal of Pharmacology*, St George's Hospital Medical School, Cranmer Terrace, London SW17 0RE, UK. Tel: +44 (0)181 767 6765; Fax: +44 (0)181 767 5645.

**Advertisements** Enquiries concerning advertisements should be addressed to: Michael Rowley, Hasler House, High Street, Great Dunmow, Essex CM6 1AP, UK. Tel: +44 (0)1371 874613; Fax: +44 (0)1371 872273.

**Publisher** All business correspondence, supplement enquiries and reprint requests should be addressed to *British Journal of Pharmacology*, Stockton Press, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. Tel: +44 (0)1256 29242; Fax: +44 (0)1256 810526. Publisher: Marija Vukovojac. Production Controller: Nicci Crawley. Supplement Production Controller: Simone Larché

**Subscriptions – EU/Rest of World** Subscription price per annum (3 volumes, 24 issues) £655, rest of world £735 (Surface mail) £880 (Airmail), or equivalent in any other currency. Orders must be accompanied by remittance. Cheques should be made payable to *Macmillan Magazines* and sent to: The Subscription Department, Macmillan Press Ltd, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. Where appropriate, subscribers may make payments into UK Post Office Giro Account No. 519 2455. Full details must accompany the payment. Subscribers from EC territories should add sales tax at the local rate.

**Subscriptions – USA** USA subscribers call toll free 1-800-221-2123 or send check/money order/credit card details to: Stockton Press, 345 Park Avenue South, 10th Floor, New York, NY 10010-1707; Tel: +1 212 689 9200, Fax: +1 212 689 9711. USA annual subscription rates (institutional/corporate): \$1170 (surface) \$1400 (airmail). Individual making personal payment: \$240.

*British Journal of Pharmacology* (ISSN 0007-1188) is published twice a month by Macmillan Press Ltd, c/o Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel, NJ 07001, USA. Subscription price for institutions is \$1170 per annum (surface). 2nd class postage is paid at Rahway NJ. Postmaster: send address corrections to Macmillan Press Ltd, c/o Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel NJ 07001.

**Reprints** of any article in this journal are available from Stockton Press, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. Tel: +44 (0)1256 29242; Fax: +44 (0)1256 810526.

**Copyright** © 1996 Stockton Press  
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 Stockton Press for libraries and other users registered with the Copyright Clearance Center (CCC) Transaction Reporting Service, provided that the base fee of \$12.00 per copy is paid directly to CCC, 21 Congress St., Salem, MA 01970, USA. 0007-1188/96 \$12.00 + \$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.

# **British Journal of Pharmacology**

## **Proceedings Supplement**

Proceedings of the British Pharmacological Society Meeting

University of Leicester

17th – 19th April 1996

# INDEX TO PROCEEDINGS SUPPLEMENT

## University of Leicester

### 17th–19th April, 1996

#### Author Index

- Adams D & Garland CJ 5-hydroxy-tryptamine-stimulated phospholipase D activity in the rabbit isolated mesenteric artery, 122P
- Ahluwalia P *see* Pinkney JM, 50P
- Al-Ruwaitea ASA *see* Al-Zahrani SSA, 74P
- Al-Zahrani SSA, Ho M-Y, Al-Ruwaitea ASA, Bradshaw CM & Szabadi E Effect of DSP4 on acquisition of temporal discrimination and memory for duration, 74P
- Albert J, Gubby S, Boyle J & Boarder MR Studies on P<sub>2</sub> purinoceptors, histamine receptors and endothelin receptors on primary and passaged rat brain endothelial cells, 132P
- Albertini P *see* Crespi F, 80P
- Aleixandre MA, López-Miranda V, Puerro M & Ortega A Evidence that the central nervous system plays a role in L-NAME-induced hypertension, 82P
- Aleixandre MA *see* López-Miranda V, 100P
- Aleixandre MA *see* Puerro M, 84P
- Alfieri AB, Gardner CJ & Twissell DJ Dexamethasone enhances GR205171 inhibition of cytotoxic-induced plasma protein extravasation in ferrets, 151P
- Ali I & Kelly ME Haloperidol blocks the acquisition, but not the expression, of cocaine-induced place preference in the mouse, 69P
- Allcock GH & Warner TD Endothelin-A receptor activation is partially responsible for the acute increase in haematocrit induced by LPS, 95P
- Amin Z, Clayton JK, Marshall K & Senior J Comparison of the effects of prostaglandin FP-receptor mimics PG F<sub>2α</sub>, fluprostanol and laranoprost on the human isolated umbilical artery, 88P
- Anastasopoulos F *see* Summers RJ, 125P
- Anderson SMP, Misra A, De Souza RJ, John VH & Cross AJ Blockade of neuronal hypoxia-induced [<sup>45</sup>Ca] uptake by Ca<sup>2+</sup> channel antagonists, 59P
- Andrews GC *see* Stewart M, 104P
- Änggård EE *see* De Kimpe SJ, 3P
- Änggård EE *see* Dwivedi A, 110P
- Änggård EE *see* Quine L, 109P
- Aronson JK *see* de Silva HA, 102P
- Babaei H, Evans AT, Irving G & McCurrie JR Comparison of relaxant properties of oestrogens and bis-indolylmaleimide, a selective inhibitor of protein kinase C, in isolated rat aorta, 135P
- Bailey CP, Molleman A & Little HJ Is there a correlation between the effects of calcium channel antagonists on ethanol withdrawal hyperexcitability *in vivo* and *in vitro*?, 65P
- Ballard SA, Turner LA & Naylor AM Sildenafil, a potent selective inhibitor of type 5 phosphodiesterase, enhances nitric oxide-dependent relaxation of rabbit corpus cavernosum, 153P
- Ballard SA *see* Tang K, 154P
- Banerji T, Pearce RKB, Desai NB, Jackson MJ, Jenner P & Marsden CD Effects of acute nicotine administration on parkinsonian disability and dyskinesia in MPTP-treated common marmosets, 38P
- Banerji T *see* Pearce RKB, 37P
- Barclay PL *see* Long CJ, 149P
- Barnes CS, Faint RW, Dwyer MC, Critchley DJP, Templeton D, Folkes AJ, Charlton PA & Bevan P Effects of XR5118 on PAI-1 and tPA activity and arterial thrombus formation in the anaesthetized rat, 97P
- Barnes NM *see* Bruton RK, 73P
- Barnes NM *see* Fletcher S, 30P
- Becker K & Brodde O-E Endothelin- and U 46619-induced inositol phosphate formation is reduced in the kidney of spontaneously hypertensive rats, 12P
- Beedham C *see* Jordan CGM, 111P
- Bennett T *see* Kemp PA, 93P
- Benovic JL *see* Kelly E, 142P
- Berger J *see* Eglen RM, 120P
- Bernareggi A *see* Formento ML, 140P
- Bevan P *see* Barnes CS, 97P
- Bishop-Bailey D *see* Stanford SJ, 83P
- Boachie-Ansah G *see* Gundkalli P, 11P
- Boarder MR, Brown C & Patel V Requirements for both protein kinase C and mitogen-activated protein kinase activities for P<sub>2</sub>-purinergic stimulation of endothelial prostacyclin production, 20P
- Boarder MR *see* Albert J 132P
- Boarder MR *see* Patel V, 133P
- Boarder MR *see* Wilkie N, 23P
- Boden P *see* Ibbotson T, 44P
- Bonhaus DW *see* Eglen RM, 120P
- Bordi F *see* Crespi F, 80P
- Bottrill FE *see* Hiley CR, 13P
- Bowery NG *see* Malcangio M, 48P
- Bowmer CJ *see* Morton MJ, 147P
- Bowmer CJ *see* Parkinson L, 10P
- Boyd JG *see* Stewart M, 104P
- Boyle J *see* Albert J, 132P
- Boyle JP *see* Holland M, 106P
- Boyle JP *see* Richmond K, 54P
- Bradshaw CM *see* Al-Zahrani SSA, 74P
- Brain SD *see* Dewhurst DG, 155P
- Bretherton N, Richardson AR, Smith JW & Wilson KA The effect of eicosapentaenoic acid upon contractures of isolated aortic rings and inositol phosphate production in cultured

- aortic cells from the rat, 89P  
 Briaud S *see* Hegde SS, 145P  
 Brice S *see* Piotrowski W, 150P  
 Briddon SJ, Leslie RA & Elliott JM A comparison of 5-HT-stimulated inositol 1,4,5-trisphosphate production mediated by human 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub> receptors expressed in SH-SY5Y cells, 31P  
 Broadley KJ *see* Maddock HL, 96P  
 Brodde O-E *see* Becker K, 12P  
 Brown C *see* Boarder MR, 20P  
 Brown JE *see* Jordan CGM, 111P  
 Brown JE *see* Sadeghi-Aliabadi H, 112P  
 Bruton RK, Ge J & Barnes NM The Group 1 metabotropic glutamate receptor agonist DHPG elevates striatal dopamine release in the rat *in vivo*, 73P  
 Bryant CM *see* Paul A, 6P  
 Bryant CM *see* Paul A, 7P  
 Buell G *see* Miller KJ, 18P  
 Bungay PJ *see* George SE, 141P
- Callingham BA *see* Ivanova AA, 116P  
 Campbell DJ, Rowbotham DJ & Lambert DG Does halothane affect fentanyl inhibition of adenylyl cyclase in SH-SY5Y cells?, 108P  
 Carpenter E, Gent JP & Peers C Inhibition of high-voltage activated Ca<sup>2+</sup> channel currents in NG108-15 cells by the  $\kappa$  agonist U50488H does not involve opioid receptor activation, 53P  
 Carrier MJ *see* De Kimpe SJ, 3P  
 Carrier MJ *see* Dwivedi A, 110P  
 Carrier MJ *see* Quine L, 109P  
 Carroll MA, Huang D-D, McGiff JC, Nguyen X & Quilley J Dexamethasone induces renal cytochrome P450-dependent nitric oxide and eicosanoid formation in the rabbit, 139P  
 Carruthers AM, Challiss RAJ & Nahorski SR Constitutive activity of recombinant type 1 $\alpha$  metabotropic glutamate receptors and inverse agonist activity of phenylglycine analogues, 34P  
 Carruthers AM, Mistry R, Nahorski SR & Challiss RAJ Pertussis toxin enhances phosphoinositide signalling in baby hamster kidney (BHK) cells expressing recombinant type 1 $\alpha$  metabotropic glutamate receptors, 137P  
 Carsrud NDV *see* Morrison KJ, 127P  
 Carter DS *see* Eglen RM, 120P  
 Carver JG *see* de Silva HA, 102P  
 Castro-Lopes JM *see* Harris NC, 119P  
 Ceserani R *see* Formento ML, 140P  
 Challiss RAJ *see* Carruthers AM, 34P  
 Challiss RAJ *see* Carruthers AM, 137P  
 Challiss RAJ *see* Willars GB, 32P
- Challiss RAJ *see* Willingale HL, 49P  
 Chang DJ *see* Ford APDW, 29P  
 Charlton PA *see* Barnes CS, 97P  
 Chilvers ER *see* Mecklenburgh KI, 129P  
 Chilvers ER *see* Murray J, 8P  
 Chilvers ER *see* Paul A, 6P  
 Clark RD *see* Eglen RM, 120P  
 Clarke DE *see* Ford APDW, 29P  
 Clarke DE *see* Hegde SS, 145P  
 Clarke SE *see* Jordan CGM, 111P  
 Clayton JK *see* Amin Z, 88P  
 Cohen P *see* Paul A, 7P  
 Coimbra A *see* Harris NC, 119P  
 Colado MI *see* Murray TK, 123P  
 Cole JC *see* Watson WP, 66P  
 Collis MG *see* Long CJ, 149P  
 Constantin-Teodosiu D *see* Randall MD, 101P  
 Cooper DA, Piper DC, Upton N & Leslie RA The effect of lithium on the hypermotility response to the central administration of ouabain in the rat, 62P  
 Costall B *see* Murphy D, 63P  
 Costall B *see* Smith AG, 70P  
 Costall B *see* Smith AG, 75P  
 Costall B *see* Smith JK, 68P  
 Costall B *see* Smythe JW, 60P  
 Costall B *see* Timothy C, 61P  
 Coste H *see* Le Monnier de Gouville AC, 14P  
 Court EN *see* Warhurst DA, 146P  
 Cousin JM, Haslett C & Rossi AG Divergent effects of agents that increase intracellular Ca<sup>2+</sup> on human eosinophil and neutrophil apoptosis, 128P  
 Crespi F, Albertini P, Pietra C & Bordi F Is ascorbic acid a biochemical index of early ischaemia? An *in vivo* electrophysiological and voltametric study, 80P  
 Critchley DJP *see* Barnes CS, 97P  
 Cross AJ *see* Anderson SMP, 59P  
 Cuenda A *see* Paul A, 7P  
 Curtis MJ *see* Ellwood AJ, 81P  
 Curzen NP *see* Jourdan KB, 85P  
 Czudek C *see* Davis B, 72P
- Dacquet C, Lahaye C, Renouard A, Lepagnol J & Spedding M Muscarinic receptor coupling in the hippocampus of old rats, 36P  
 Daniels DV *see* Ford APDW, 29P  
 Davis B, Czudek C & Reynolds GP Chronic administration of anti-psychotics potentiates dopamine release induced by NMDA receptor blockade in rat frontal cortex *in vivo*, 72P  
 De Kimpe SJ, Carrier MJ & Ånggård EE Expression of low density lipoprotein scavenger receptors in differentiated THP-1 macrophages, 3P
- De Kimpe SJ *see* Kengatharan M, 2P  
 De Kimpe SJ *see* Kengatharan M, 5P  
 de Silva HA, Carver JG & Aronson JK Calcium-activated and ATP-dependent potassium channels in human platelets, 102P  
 De-Allie FA *see* Owen DG, 103P  
 Delgado SG *see* Sangameswaran L, 134P  
 Delpón E *see* Valenzuela C, 105P  
 Delpy E *see* Le Monnier de Gouville AC, 14P  
 Delpy E *see* Le Monnier de Gouville AC, 157P  
 Desai NB *see* Banerji T, 38P  
 DeSouza RJ *see* Anderson SMP, 59P  
 Devi LA *see* Hirst RA, 27P  
 Devi LA *see* Smart D, 28P  
 Dewhurst DG, Brain SD, Freeman P & Ulliyott RG The pathophysiology and pharmacology of inflammation: an interactive, computer-based tutorial program for undergraduate students, 155P  
 Dewhurst DG & Johnson M A computer-based, interactive tutorial to introduce the clinical aspects of pain to undergraduate students, 156P  
 Rhein S *see* Hide E, 90P  
 Di Blasi P *see* Formento ML, 140P  
 Diaz MR *see* Ford APDW, 29P  
 Dickey BF *see* Morrison KJ, 127P  
 Domeney AM *see* Woodall KL, 67P  
 Duce IR *see* Warburton SPM, 130P  
 Dwivedi A, Carrier MJ & Ånggård E Reactive oxygen species in TNF $\alpha$ -mediated expression of adhesion molecules in EA.hy 926 cells, 110P  
 Dwyer MC *see* Barnes CS, 97P
- Edwards CM, Heptinstall S & Lowe KC Effects of the co-polymer, Pluronic F-68, on the response to platelet aggregation agonists in human whole blood *in vitro*, 98P  
 Edwards CM, Lowe KC, Röhlke W, Reuter P, Geister U & Meinert H Dose-dependent inhibition of human blood neutrophils by a perfluorochemical emulsion respiratory gas carrier, 99P  
 Edwardson JM *see* Koenig JA, 26P  
 Eglen RM, Carter DS, Berger J, Clark RD, Bonhaus DW, Leung E & Flippin LA RS 16566: a novel, high affinity ligand for the (R) zacopride binding site, 120P  
 Eglen RM, Pulido-Rios M, Webber AP, Leung E & Hegde SS Characterization of the interaction of darifenacin at muscarinic receptor subtypes *in vitro*, 35P  
 Eglen RM *see* Hegde SS, 145P  
 Eglen RM *see* Sangameswaran L, 134P

- Elliott JM *see* Briddon SJ, 31P  
 Elliott P, Foster GA, Stringer BMJ & Wallis DI Glutamatergic and glycinergic postsynaptic potentials in primary cultures of rat motoneurons, 138P  
 Ellwood AJ & Curtis MJ The mesulergine-sensitive increase in coronary blood flow evoked by sumatriptan in GR 127935-treated guinea-pig isolate hearts is caused by NO released from coronary endothelium, 81P  
 Evans AT *see* Babaei H, 135P  
 Evans BA *see* Summers RJ, 125P  
 Evans SM & Whittle BJR Role of bacteria and endotoxin in nitric oxide synthase induction and rat intestinal injury provoked by non-steroid anti-inflammatory agents, 1P  
 Evans TW *see* Jourdan KB, 85P
- Faint RW *see* Barnes CS, 97P  
 Feltz P *see* Nalivaiko E, 51P  
 Feniuk W *see* Wilkinson GF, 25P  
 Finn PW *see* Stewart M, 104P  
 Fish LM *see* Sangameswaran L, 134P  
 Flanigan TP *see* Newberry NR, 124P  
 Fletcher S & Barnes NM Purification and characterisation of central porcine 5-HT<sub>3</sub> receptors, 30P  
 Flippin LA *see* Eglen RM, 120P  
 Folkes AJ *see* Barnes CS, 97P  
 Ford APDW, Daniels DV, Chang DJ, Diaz MR, Gever JR, Jasper JR, Lesnick JD & Clarke DE The putative  $\alpha_{1L}$  receptor (AR): a distinct pharmacological state of the  $\alpha_{1A}$ -adrenoceptor?, 29P  
 Formento ML, Sala V, Di Blasi P, Bernareggi A & Ceserani R Possible biochemical mechanisms involved in cardiotoxicity: a comparison between BBR 2778, a novel non-cardiotoxic compound, mitoxantrone and doxorubicin, 140P  
 Foster GA *see* Elliott P, 138P  
 Franqueza L *see* Valenzuela C, 105P  
 Freeman P *see* Dewhurst DG, 155P
- Garcha R *see* Pickkers P, 16P  
 Gardiner SM *see* Kemp PA, 93P  
 Gardner CJ, Twissell DJ & Ward P The broad spectrum anti-emetic activity of the novel non-peptide tachykinin NK<sub>1</sub> receptor antagonist, GR205171, 78P  
 Gardner CJ *see* Alfieri AB, 151P  
 Garland CJ *see* Adams D, 122P  
 Garland CJ *see* Plane F, 15P  
 Garrett NE *see* Malcangio M, 48P  
 Gay P *see* Valenzuela C, 105P  
 Ge J *see* Bruton RK, 73P
- Geister U *see* Edwards CM, 99P  
 Gent JP *see* Carpenter E, 53P  
 George SE, Bungay PJ & Naylor LH Characterisation of a cAMP-responsive reporter CHO cell line using endogenous receptors, 141P  
 Gever JR *see* Ford APDW, 29P  
 Gibson A *see* Wayman CP, 55P  
 Gibson WJ *see* Young KW, 33P  
 Gotoh M *see* Urenjak J, 45P  
 Gottwald E *see* Hide E, 90P  
 Gould GW *see* Paul A, 7P  
 Gould GW *see* Plevin R, 22P  
 Gould GW *see* Robinson CMJ, 21P  
 Gould J *see* Morton MJ, 147P  
 Grayson B *see* Smith AG, 70P  
 Green AR *see* Murray TK, 123P  
 Greenhaff PL *see* Randall MD, 101P  
 Greening A *see* Mecklenburgh KI, 129P  
 Grubb BD *see* Willingale HL, 49P  
 Gubby S *see* Albert J, 132P  
 Gundkalli P, Markham A & Boachie-Ansah G The antiarrhythmic effects of ischaemic myocardial preconditioning: a role for protein kinase C?, 11P
- Hagan JJ *see* Reavill C, 71P  
 Hamilton LC & Warner TD Endothelin-1 is degraded by an enzyme released from non-endothelial cells, 94P  
 Harris NC, Castro-Lopes JM & Coimbra A Depression of the rat hamstring flexor reflex by ( $\pm$ )-baclofen and muscimol, 119P  
 Haslett C *see* Cousin JM, 128P  
 Hatcher JP *see* Reavill C, 71P  
 Heal D *see* Mason K, 76P  
 Heal DJ *see* Sudan HL, 136P  
 Hegde SS, Briaud S, Loeb M, Moy TB, Clarke DE & Eglen RM Role of M<sub>2</sub> and M<sub>3</sub> muscarinic receptors in mediating reflex bladder contractions in the anaesthetised rat, 145P  
 Hegde SS *see* Eglen RM, 35P  
 Heneka M, Ruetten H, Thiemermann C & Vane JR Effects of ibuprofen on haemodynamics, organ injury and dysfunction caused by endotoxin in the rat, 91P  
 Heptinstall S *see* Edwards CM, 98P  
 Herman RC *see* Sangameswaran L, 134P  
 Hicks R *see* Babaei H, 135P  
 Hide E, Dhein S, Piper J, Gottwald E, Ney P & Thiemermann C Prostaglandin E<sub>1</sub> protects against reperfusion injury and attenuates endothelial P-selectin expression in a rabbit model of myocardial ischaemia and reperfusion, 90P  
 Hiley CR, Bottrill FE, Otley CE & Richardson PJ A<sub>1</sub> and A<sub>2</sub> adenosine receptor-mediated vasodilatation in the guinea-pig coronary arterial bed, 13P
- Hill DR *see* Pow E, 118P  
 Hirota K & Lambert DG Studies on the binding of [<sup>14</sup>C]-thiopentone to rat cerebrocortical membranes, 117P  
 Hirst RA, Devi LA & Lambert DG Is the C-terminus of the recombinant  $\delta$ -opioid receptor important for adenylyl cyclase coupling?, 27P  
 Ho M-Y *see* Al-Zahrani SSA, 74P  
 Holland M, Standen NM & Boyle JP Nitric oxide activates large conductance potassium channels in rat cerebral artery smooth muscle, 106P  
 Holmes K *see* Long CJ, 149P  
 Howell AE *see* Woodall KL, 67P  
 Huang D-D *see* Carroll MA, 139P  
 Hughes AD *see* Pickkers P, 16P  
 Hughes AD *see* Wijetunge S, 158P  
 Hughes ZA & Stanford SC A microdialysis study of the effects of the selective serotonin reuptake inhibitor, fluoxetine, on noradrenaline efflux in rat frontal cortex, 77P  
 Humphrey PPA *see* Koenig JA, 26P  
 Humphrey PPA *see* Michel AD, 19P  
 Humphrey PPA *see* Miller KJ, 18P  
 Humphrey PPA *see* Wilkinson GF, 25P  
 Hunter AJ *see* Read SJ, 79P  
 Hunter JC *see* Sangameswaran L, 134P  
 Hussain A *see* Saunders R, 58P  
 Hutson PH *see* Sardar AM, 46P
- Ibbotson T & Boden P Metabotropic glutamate receptors in rat CA1 neurones: receptor subtype and intracellular mediators, 44P  
 Irving G *see* Babaei H, 135P  
 Ivanova AA & Milenov KT Modulation of neurotransmission in the guinea-pig vas deferens by somatostatin and neurotensin, 116P
- Jackson MJ *see* Banerji T, 38P  
 Jakeman LB *see* Sangameswaran L, 134P  
 Jane DE *see* Pinkney JM, 50P  
 Jasper JR *see* Ford APDW, 29P  
 Jelic P *see* Shih M-F, 39P  
 Jenner P *see* Banerji T, 38P  
 Jenner P *see* Kunikowska GM, 114P  
 Jenner P *see* Pearce RKB, 37P  
 John VH *see* Anderson SMP, 59P  
 Johnson M *see* Dewhurst DG, 156P  
 Jones CA, Reeves JJ, Sheehan MJ & Whelan CJ Adenosine A<sub>3</sub> receptors mediate a mast cell-dependent plasma protein extravasation in rat skin, 152P  
 Jordan CGM, Rashidi MR, Laljee H, Clarke SE, Brown JE & Beedham C Formation of 7-hydroxymethotrexate from methotrexate with human and

- guinea-pig aldehyde oxidase, 111P  
 Jourdan KB, Curzen NP, Evans TW & Mitchell JA Nitric oxide compromises the constrictor effects of the non-cyclooxygenase-derived prostanoid, 8-iso prostaglandin F<sub>2α</sub>, 85P
- Kaur R *see* Koenig JA, 26P  
 Keen M *see* Matthews JS, 9P  
 Kelly E *see* Mundell SJ, 17P  
 Kelly ME & Benovic JL Stable expression of G-protein coupled receptor kinase 2 dominant negative mutant (GRK2 DNM) in NG108-15 cells, 142P  
 Kelly ME *see* Ali I, 69P  
 Kelly ME *see* Jordan CGM, 111P  
 Kelly ME *see* Sadeghi-Aliabadi H, 112P  
 Kelly ME *see* Smith AG, 70P  
 Kelly ME *see* Woodall KL, 67P  
 Kelso EJ, McDermott BJ, Silke B & Spiers JP Contractile effects of endothelin-1 and endothelin-3, mediated by ET<sub>A</sub> and ET<sub>B</sub> receptor subtypes, in ventricular cardiomyocytes isolated from rabbit myocardium, 131P  
 Kelso EJ, Spiers JP, McDermott BJ, Scholfield CN & Silke B Effects of endothelin (ET) receptor selective and non-selective antagonists on ET-1-inhibited L-type Ca<sup>2+</sup> currents in ventricular cardiomyocytes isolated from rabbit myocardium, 56P  
 Kemp PA, Gardiner SM, Bennett T & Rubin PC Influence of MgSO<sub>4</sub> on the cerebrovascular effects of endothelin-1 in conscious rats, 93P  
 Kengatharan M, De Kimpe SJ, Thiernemann C & Vane JR A peptidoglycan fragment synergises with lipoteichoic acid to induce nitrite formation in macrophages, 5P  
 Kengatharan M, De Kimpe SJ & Thiernemann C Pretreatment with dexamethasone or delayed treatment with aminoguanidine ameliorates the circulatory failure and organ injury in a rat model of Gram-positive shock, 2P  
 Kenny BA *see* Ballard SA, 153P  
 Kenny BA *see* Tang K, 154P  
 Key BJ *see* Matthews JS, 9P  
 Kitchen E *see* Murray J, 8P  
 Knoll BJ *see* Morrison KJ, 127P  
 Koch BD *see* Sangameswaran L, 134P  
 Koenig JA, Kaur R, Edwardson JM & Humphrey PPA Somatostatin receptors in Neuro2A neuroblastoma cells: pharmacological characterisation and internalisation of [<sup>125</sup>I]-BIM-23027, a somatostatin analogue, 26P  
 Kromer BM & Tippins JR 8-Epi prostaglandin F<sub>2α</sub> is a vasoconstrictor in the rat isolated heart after low flow ischaemia, 86P  
 Kromer BM & Tippins JR Actions of 8-epi prostaglandin F<sub>2α</sub> in porcine coronary artery are inhibited by thromboxane receptor antagonists, 87P  
 Kunikowska GM, Jenner P & Marsden CD The relative distribution of Cu/Zn and Mn superoxide dismutase in adult rat brain, 114P
- Lacey MG *see* Wigmore MA, 43P  
 Lahaye C *see* Dacquet C, 36P  
 Laljee H *see* Jordan CGM, 111P  
 Lambert DG *see* Campbell DJ, 108P  
 Lambert DG *see* Hirota K, 117P  
 Lambert DG *see* Hirst RA, 27P  
 Lambert DG *see* Smart D, 28P  
 Larkin SW *see* Stanford SJ, 83P  
 Lawson MF *see* Paul A, 6P  
 Le Fur G *see* Nalivaiko E, 51P  
 Le Monnier de Gouville AC, Coste H & Delpy E cGMP-elevating agents potentiate isoproterenol effects in rat aortic smooth muscle: role of PDE 3, 14P  
 Le Monnier de Gouville AC & Delpy E Cardiovascular profile of a new potent and selective PDE 5 inhibitor: DMPPO, 157P  
 Lees G *see* Warburton SPM, 130P  
 Lennard MS *see* Weston MC, 115P  
 Lepagnol J *see* Dacquet C, 36P  
 Leslie RA *see* Briddon SJ, 31P  
 Leslie RA *see* Cooper DA, 62P  
 Lesnick JD *see* Ford APDW, 29P  
 Leung E *see* Eglen RM, 35P  
 Leung E *see* Eglen RM, 120P  
 Lewis VA *see* Reavill C, 71P  
 Lin W *see* Stewart M, 104P  
 Little HJ *see* Bailey CP, 65P  
 Little HJ *see* Molleman A, 41P  
 Little HJ *see* Smith JW, 40P  
 Little HJ *see* Smith JW, 64P  
 Little HJ *see* Watson WP, 66P  
 Loeb M *see* Hegde SS, 145P  
 Long CJ, Salmon GP, Holmes K, Barclay PL & Collis MG Inhibition of interstitial collagenase and gelatinase does not affect intimal thickening in the balloon catheter-injured rat carotid artery, 149P  
 López-Miranda V, Ortega A, Puerro M & Aleixandre MA Arterial blood pressure and growth patterns in Sprague-Dawley and spontaneously hypertensive rats fed on calcium-deficient diets, 100P  
 López-Miranda V *see* Aleixandre MA, 82P  
 López-Miranda V *see* Puerro M, 84P  
 Lowe KC *see* Edwards CM, 98P  
 Lowe KC *see* Edwards CM, 99P
- Lundstrom K *see* Miller KJ, 18P
- McCurrie JR *see* Babaei H, 135P  
 McCurrie JR *see* Yeung CK, 107P  
 McDermott BJ *see* Kelso EJ, 56P  
 McDermott BJ *see* Kelso EJ, 131P  
 McDonald RL *see* Vaughan PFT, 52P  
 McFadzean I *see* Wayman CP, 55P  
 McGiff JC *see* Carroll MA, 139P  
 McKay S *see* Reavill C, 71P  
 McLees A *see* Plevin R, 22P  
 McLees A *see* Robinson CMJ, 21P  
 McMartin L & Summers RJ Impaired cyclic AMP signalling in hearts from rats chronically infused with isoprenaline, 126P  
 McRitchie B *see* Sawyer PJT, 144P  
 Maddock HL & Broadley KJ Responses of guinea-pig isolated aorta and pulmonary artery to adenosine receptor agonists in normoxia and hypoxia, 96P  
 Malcangio M, Garrett NE, Bowery NG & Tomlinson DR Effect of 14-day treatment with nerve growth factor (NGF) on the release of substance P-like immunoreactivity from rat isolated spinal cord, 48P  
 Manuel NA & Wallis DI Further characterization of the 5-HT receptor mediating spinal monosynaptic reflex depression in the neonate rat, 47P  
 Markham A *see* Gundkalli P, 11P  
 Marsden CD *see* Banerji T, 38P  
 Marsden CD *see* Kunikowska GM, 114P  
 Marsden CD *see* Pearce RKB, 37P  
 Marshall K *see* Amin Z, 88P  
 Mason K, Heal D & Stanford SC A microdialysis study of the effect of flurazepam on noradrenaline efflux in the frontal cortex of freely-moving rats after treatment with yohimbine, 76P  
 Matthew AM *see* Sadeghi-Aliabadi H, 112P  
 Matthews JS, Key BJ & Keen M The effect of exposure to SIN-1 on cyclooxygenase activity and expression in bovine aortic endothelial cells, 9P  
 Mecklenburgh KI, Greening A & Chilvers ER Inhibition of human neutrophil apoptosis by hypoxia is mediated by a ferro-protein sensor, 129P  
 Meinert H *see* Edwards CM, 99P  
 Merner PA *see* Sawyer PJT, 144P  
 Michaud JC *see* Nalivaiko E, 51P  
 Michel AD, Miller KJ & Humphrey PPA Evidence for allosteric effects of antagonists at the P2X<sub>4</sub> purinoceptor labelled using [<sup>35</sup>S]ATPγS, 19P  
 Michel AD *see* Miller KJ, 18P  
 Milenov KT *see* Ivanova AA, 116P

- Miller KJ, Michel AD, Buell G, Lündstrom K & Humphrey PPA Direct labelling of P2X<sub>3</sub> and P2X<sub>4</sub> purinoceptors using [<sup>35</sup>S]ATPγS, 18P
- Miller KJ *see* Michel AD, 19P
- Millman E *see* Morrison KJ, 127P
- Misra A *see* Anderson SMP, 59P
- Misra A *see* Murray TK, 123P
- Mistry R *see* Carruthers AM, 137P
- Mitchell JA *see* Jourdan KB, 85P
- Mitchell JA *see* Stanford SJ, 83P
- Molleman A & Little HJ Comparison of the effects of calcium channel antagonists on hippocampal calcium currents with their actions on ethanol withdrawal hyperexcitability, 41P
- Molleman A *see* Bailey CP, 65P
- Moore RH *see* Morrison KJ, 127P
- Morrison KJ, Moore RH, Carsrud NDV, Tiral J, Millman E, Dickey BF & Knoll BJ Kinetic analyses of internalization and recycling of the human β<sub>2</sub>-adrenoceptor, 127P
- Morton MJ, Gould J, Sivaprasadarao A, Bowmer CJ & Yates MS Renal A<sub>1</sub> adenosine receptor mRNA levels during the development of acute renal failure, 147P
- Moy TM *see* Hegde SS, 145P
- Muir AW *see* Pow E, 118P
- Mundell SJ, Smith S & Kelly E Evidence for coexistence and desensitisation of A<sub>2</sub> adenosine receptor subtypes in NG108-15 cells, 17P
- Murphy D, Costall B & Smythe JW Yohimbine's anxiogenic effect in the black-white box can be reduced by chlordiazepoxide: confirmation of test validity for rats, 63P
- Murphy D *see* Smythe JW, 60P
- Murray J, Kitchen E & Chilvers ER The pro-apoptotic effect of TNFα in human neutrophils is mediated via the TNF CD120b (p75) receptor, 8P
- Murray TK, Misra A, Williams JL, Colado MI & Green AR Effect of the spin trap reagent PBN on degeneration of 5-HT neurones induced by *p*-chloroamphetamine or fenfluramine administration, 123P
- Mustafa S, Pilcher CWT & Williams KI The effect of cooling on ovine tracheal and bronchiolar smooth muscle, 148P
- Nahorski SR *see* Carruthers AM, 34P
- Nahorski SR *see* Carruthers AM, 137P
- Nahorski SR *see* Saunders R, 58P
- Nahorski SR *see* Stuart JA, 24P
- Nahorski SR *see* Waugh MG, 121P
- Nahorski SR *see* Wilcox RA, 57P
- Nahorski SR *see* Willars GB, 32P
- Nalivaiko E, Michaud JC, Soubrié P, Le Fur G & Feltz P Tachykinin responses in different types of neurones of guinea-pig substantia nigra pars compacta *in vitro*, 51P
- Naylor AM *see* Ballard SA, 153P
- Naylor AM *see* Tang K, 154P
- Naylor I *see* Pipelzadeh MH, 143P
- Naylor LH *see* George SE, 141P
- Needham PL *see* Sudan HL, 136P
- Neill JC *see* Smith AG, 75P
- Neill JC *see* Smith JK, 68P
- Newberry NR, Watkins CJ, Volenec A & Flanigan TP 5-HT<sub>2B</sub> receptor mRNA in guinea-pig superior cervical ganglion, 124P
- Ney P *see* Hide E, 90P
- Ng LL *see* Wilkie N, 23P
- Nguyen X *see* Carroll MA, 139P
- Obrenovitch TP, Urenjak J & Zilkha E High extracellular concentrations of glutamate and seizure activity, 42P
- Obrenovitch TP *see* Urenjak J, 45P
- Ortega A *see* Aleixandre MA, 82P
- Ortega A *see* López-Miranda V, 100P
- Ortega A *see* Puerro M, 84P
- Otley CE *see* Hiley CR, 13P
- Owen DG, De-Allie FA & Strong PN Pharmacological characterisation of <sup>86</sup>Rb<sup>+</sup> fluxes in CHO cells transfected with the mouse brain voltage-activated K<sup>+</sup> channel gene, mK<sub>v</sub>1.1 (MK1), 103P
- Parkinson L, Symonds HW & Bowmer CJ *In vitro* binding of [<sup>14</sup>C]-sulphamethazine to chicken liver microsomes, 10P
- Parsons AA *see* Read SJ, 79P
- Patel V, Wilkie N & Boarder MR Endothelial P<sub>2Y</sub>- and P<sub>2U</sub>-purinoceptors phosphorylate and activate mitogen-activated protein kinases: studies with a novel kinase assay and immunoblot, 133P
- Patel V *see* Boarder MR, 20P
- Paul A, Bryant CM, Lawson MF, Chilvers ER & Plevin R LPS inhibits DNA synthesis in macrophages and vascular smooth muscle cells by a mechanism independent of NOS induction, 6P
- Paul A, Cuenda A, Bryant CM, Gould GW, Cohen P & Plevin R Dissociation of LPS-stimulated MAP kinase activation and nitric oxide synthase induction in RAW 264.7 macrophages, 7P
- Peachell PT *see* Weston MC, 115P
- Pearce RKB, Banerji T, Jenner P & Marsden CD Effects of repeated treatment with L-DOPA, bromocriptine and ropinirole in drug naive MPTP-treated common marmosets, 37P
- Pearce RKB *see* Banerji T, 38P
- Peers C *see* Carpenter E, 53P
- Peers C *see* Vaughan PFT, 52P
- Pérez-Vizcaino F *see* López-Miranda V, 100P
- Petros AJ *see* Stanford SJ, 83P
- Pickkers P, Garcha R, Schachter M & Hughes AD Action of thiazides and inhibitors of carbonic anhydrase on tone of guinea-pig isolated small mesenteric arteries, 16P
- Pietra C *see* Crespi F, 80P
- Pilcher CWT *see* Mustafa S, 148P
- Pinkney JM, Ahluwalia P, Pook PC-K, Jane DE & Watkins JC An electrophysiological study of 6-azawillardiine derivatives on mammalian spinal neurones, 50P
- Pinnock RD *see* Young, KW, 33P
- Piotrowski W & Brice S (S)-N<sup>5</sup>-(1-Iminoethyl)ornithine and aminoguanidine effects on electrical field-induced non-adrenergic, non-cholinergic responses of guinea-pig isolated taenia caeci, 150P
- Pipelzadeh MH & Naylor I The response of intact and damaged fasciae to potassium and calcium ions, 143P
- Piper DC *see* Cooper DA, 62P
- Piper J *see* Hide E, 90P
- Plane F & Garland CJ Mechanisms for endothelium-dependent relaxation in rat isolated mesenteric artery: variation with contractile agonist, 15P
- Plevin R, Scott PH, McLees A & Gould GW The MAP kinase kinase inhibitor PD098059 prevents PDGF-stimulated DNA synthesis in rat aortic smooth muscle cells, 22P
- Plevin R *see* Paul A, 6P
- Plevin R *see* Paul A, 7P
- Plevin R *see* Robinson CMJ, 21P
- Pook PC-K *see* Pinkney JM, 50P
- Pow E, Muir AW, Sleight T & Hill DR A muscle-type nicotinic receptor ligand, using whole TE 671 cells, for rapid screening of neuromuscular blocking agents, 118P
- Pryke JG *see* Stewart M, 104P
- Puerro M, López-Miranda V, Ortega A & Aleixandre MA Possible pre-synaptic action of nitric oxide on vascular sympathetic nerves, 84P
- Puerro M *see* Aleixandre MA, 82P
- Puerro M *see* López-Miranda V, 100P
- Pulido-Rios MT *see* Eglen RM, 35P
- Quilley J *see* Carroll MA, 139P
- Quine L, Carrier MJ & Ånggård E Modulation of inducible nitric oxide synthase by anti-oxidants in the macrophage cell line J774, 109P

- Randall MD, Greenhaff PL & Constantin-Teodosiu D Dichloroacetate increases the threshold for cardiac preconditioning in the rat isolated perfused heart, 101P
- Rashidi MR *see* Jordan CGM, 111P
- Read SJ, Smith MI, Hunter AJ & Parsons AA Measurement of nitric oxide release using a selective micro-electrode following repeated waves of cortical spreading depression, 79P
- Reavill C, Hatcher JP, Zetterström TSC, Lewis VA, Sanger GJ, Hagan JJ & McKay S 5-HT<sub>4</sub> receptor antagonism does not affect dopamine-mediated behavioural effects in the rat, 71P
- Reeves JJ *see* Jones CA, 152P
- Renouard A *see* Dacquet C, 36P
- Reuter P *see* Edwards CM, 99P
- Reynolds GP *see* Davis B, 72P
- Reynolds GP *see* Sardar AM, 46P
- Richardson AR *see* Bretherton N, 89P
- Richardson PJ *see* Hiley CR, 13P
- Richmond K & Boyle JP Cyclic AMP and cyclic GMP modulate methacholine-induced calcium influx in bovine tracheal smooth muscle, 54P
- Ripley TL *see* Watson WP, 66P
- Robinson CMJ, McLees A, Gould GW & Plevin R MAP kinase antisense phosphorothioate deoxyoligonucleotides inhibit PDGF-stimulated DNA synthesis in rat aortic smooth muscle, 21P
- Röhlke W *see* Edwards CM, 99P
- Rossi AG *see* Cousin JM, 128P
- Rowbotham DJ *see* Campbell DJ, 108P
- Rubin PC *see* Kemp PA, 93P
- Ruetten H & Thiemermann C Inhibition by interleukin-13 of the expression of inducible nitric oxide synthase in macrophages and vascular smooth muscle, 4P
- Ruetten H, Thiemermann C & Vane JR Effects of selective inhibitors of ETA- and ETB-receptors on haemodynamics and organ injury caused by endotoxin in the rat, 92P
- Ruetten H *see* Heneka M, 91P
- Sadeghi-Aliabadi H, Matthew AM & Brown JE Studies on the chemosensitivity of human cultured MCF-7, MCF-7 ADR and MT-1 breast tumours and K562 leukaemia cell lines to novel steroidal antitumour prodrugs, 112P
- Sala V *see* Formento ML, 140P
- Salmon GP *see* Long CJ, 149P
- Sangameswaran L, Delgado SG, Fish LM, Koch BD, Jakeman LB, Steward GR, Sze P, Hunter JC, Eglen RM & Herman RC Structure and function of a novel voltage-gated, tetrodotoxin-resistant sodium channel specific to sensory neurons, 134P
- Sanger GJ *see* Reavill C, 71P
- Sardar AM, Huston PH & Reynolds GP Glutamatergic deficits in the frontal cortex in AIDS, 46P
- Saunders R, Hussain A, Nahorski SR & Willars GB Intracellular Ca<sup>2+</sup> responses to bradykinin, methacholine or K<sup>+</sup> depolarization are graded according to stimulus strength in single SH-SY5Y human neuroblastoma cells, 58P
- Sawyer PJT, McRitchie B, Merner PA, Slowe SJ & Wallis RM *In vivo* gut selectivity of the novel muscarinic antagonist, darifenacin, in the conscious dog, 144P
- Schachter M *see* Pickkers P, 16P
- Scholfield CN *see* Kelso EJ, 56P
- Scott PH *see* Plevin R, 22P
- Senior J *see* Amin Z, 88P
- Sheehan MJ *see* Jones CA, 152P
- Shih M-F, Jelic P & Taberner PV Circadian variation in ethanol consumption and plasma ethanol levels in mice during chronic treatment, 39P
- Silke B *see* Kelso EJ, 56P
- Silke B *see* Kelso EJ, 131P
- Singleton DH *see* Stewart M, 104P
- Sivaprasadarao A *see* Morton MJ, 147P
- Sleigh T *see* Pow E, 118P
- Slowe SJ *see* Sawyer PJT, 144P
- Smart DA, Devi LA & Lambert DG Is the C-terminus of the recombinant  $\delta$ -opioid receptor important for phospholipase C coupling?, 28P
- Smith AG, Grayson B, Kelly ME & Costall B Intra-accumbens dopamine infusion combined with haloperidol induces behavioural sensitivity, 70P
- Smith AG, Neill JC & Costall B 7-OH-DPAT induces reversal learning impairments in the common marmoset, 75P
- Smith JK, Neill JC & Costall B The effect of social isolation on the behavioural effects of cocaine, 68P
- Smith JW, Willner P & Little HJ Chronic mild stress induces a decrease in voluntary intake of 10% ethanol in a four bottle choice paradigm, 64P
- Smith JW, Wilson J & Little HJ Co-administration of the calcium channel antagonist, nimodipine, decreases environmental-independent (context non-specific) tolerance to ethanol, 40P
- Smith JW *see* Bretherton N, 89P
- Smith MI *see* Read SJ, 79P
- Smith S *see* Mundell SJ, 17P
- Smythe JW, Murphy D, Timothy C & Costall B Hippocampal muscarinic receptors modulate anxiety-like behaviour (ALB) in rats tested in the black-white box, 60P
- Smythe JW *see* Murphy D, 63P
- Smythe JW *see* Timothy C, 61P
- Snyders DJ *see* Valenzuela C, 105P
- Soubrié P *see* Nalivaiko E, 51P
- Spedding M *see* Dacquet C, 36P
- Spiers JP *see* Kelso EJ, 56P
- Spiers JP *see* Kelso EJ, 131P
- Standen NB *see* Holland M, 106P
- Stanford SC *see* Hughes ZA, 77P
- Stanford SC *see* Mason K, 76P
- Stanford SJ, Mitchell JA, Bishop-Bailey D, Williams TJ, Williams FM, Petros AJ & Larkin SW The dilator response to sensory nerve stimulation in the mesenteric circulation of the rat is modulated prejunctionally by nitric oxide, 83P
- Stewart GR *see* Sangameswaran L, 134P
- Stewart M, Pryke JG, Finn PW, Boyd JG, Lin W, Singleton DH, Andrews GC & Treherne JM The binding of kalitoxin and margatoxin variants to voltage-gated potassium channels in rat brain, 104P
- Strange PG *see* George SE, 141P
- Stringer BMJ *see* Elliott P, 138P
- Strong PN *see* Owen DG, 103P
- Stuart JA & Nahorski SR Agonist-stimulated diacylglycerol accumulation and protein kinase C isoform translocation in CHO cells expressing recombinant muscarinic receptors, 24P
- Sudan, HL, Needham PL & Heal DJ Effects of haloperidol on excitatory and inhibitory amino acid receptors expressed in *Xenopus* oocytes injected with rat brain RNA, 136P
- Summers RJ, Evans BA & Anastasopoulos F  $\beta_3$ -Adrenoceptors in adipose tissue and gut of genetically obese C57BL/6J (ob/ob) and lean C57BL/6J (+/+) mice, 125P
- Summers RJ *see* McMartin L, 126P
- Symonds HW *see* Parkinson L, 10P
- Szabadi E *see* Al-Zahrani SSA, 74P
- Sze P *see* Sangameswaran L, 134P
- Szekeres PG & Traynor JR Further characterisation of the mouse  $\delta$ -opioid receptor in NG108-15 cells, 113P
- Taberner PV *see* Shih M-F, 39P
- Tamargo J *see* Aleixandre MA, 82P
- Tamargo J *see* Puerro M, 84P
- Tamargo J *see* Valenzuela C, 105P
- Tang K, Turner LA, Ballard SA & Naylor AM Effects of the novel phosphodiesterase type 5 inhibitor, sildenafil, on methacholine-induced relaxation of rabbit isolated corpus cavernosum, 154P

- Templeton D *see* Barnes CS, 97P  
 Thiernemann C *see* Heneka M, 91P  
 Thiernemann C *see* Hide E, 90P  
 Thiernemann C *see* Kengatharan M, 2P  
 Thiernemann C *see* Kengatharan M, 5P  
 Thiernemann C *see* Ruetten H, 4P  
 Thiernemann C *see* Ruetten H, 92P  
 Timothy C, Costall B & Smythe JW  
 Repeated exposure to the black-white box decreases sensitivity to scopolamine-induced anxiety-like behaviour (ALB), 61P  
 Timothy C *see* Smythe JW, 60P  
 Tippins JR *see* Kromer BM, 86P  
 Tippins JR *see* Kromer BM, 87P  
 Tobin AB *see* Waugh MG, 121P  
 Tomlinson DR *see* Malcangio M, 48P  
 Traynor JR *see* Szekeres PG, 113P  
 Treherne JM *see* Stewart M, 104P  
 Trial J *see* Morrison KJ, 127P  
 Tucker JF *see* Wayman CP, 55P  
 Turner LA *see* Ballard SA, 153P  
 Turner LA *see* Tang K, 154P  
 Twissell DJ *see* Alfieri AB, 151P  
 Twissell DJ *see* Gardner CJ, 78P
- Ulliyott RT *see* Dewhurst DG, 155P  
 Upton N *see* Cooper DA, 62P  
 Urenjak J, Zilkha E, Gotoh M & Obrenovitch TP Effect of extracellular acidosis on *N*-methyl-D-aspartate (NMDA)-evoked responses *in vivo*, 45P  
 Urenjak J *see* Obrenovitch TP, 42P
- Valenzuela C, Delpón E, Franquesa L, Gay P, Snyder D & Tamargo J  
 Comparative effects of a non-sedating histamine H<sub>1</sub>-receptor antagonist on human Kv1.5 channels, 105P  
 Vane JR *see* Heneka M, 91P  
 Vane JR *see* Kengatharan M, 5P  
 Vane JR *see* Ruetten H, 92P  
 Vaughan PFT, McDonald RL & Peers C  
 Inhibition of K<sup>+</sup>-evoked [<sup>3</sup>H]nor-adrenaline release and Ca<sup>2+</sup> currents by angiotensin II in SH-SY5Y cells transfected with the rat angiotensin (AT<sub>1A</sub>) receptor, 52P  
 Volenec A *see* Newberry NR, 124P
- Wallis DI *see* Elliott P, 138P  
 Wallis DI *see* Manuel NA, 47P  
 Wallis RM *see* Sawyer PJT, 144P  
 Warburton SPM, Duce IR & Lees G A  
 single voltage sensitive calcium channel type underlies the inward current in the skeletal muscle fibres of pre-pupal housefly larvae, 130P  
 Ward P *see* Gardner CJ, 78P  
 Warhurst DA & Court EN The effect of platelet activating factor (PAF) on the responsiveness of rat and guinea-pig isolated tracheal strips to acetylcholine and prostaglandin F<sub>2α</sub>, 146P  
 Warner TD *see* Allcock GH, 95P  
 Warner TD *see* Hamilton LC, 94P  
 Watkins CJ *see* Newberry NR, 124P  
 Watkins JC *see* Pinkney JM, 50P  
 Watson WP, Cole JC, Ripley TL & Little HJ Acamprosate has actions in the murine elevated plus maze, 66P  
 Waugh MG, Nahorski SR & Tobin AB  
 Agonist-dependent desensitisation of m1-muscarinic receptor-mediated inositol polyphosphate responses in Chinese hamster ovary cells, 121P  
 Wayman CP, McFadzean I, Gibson A & Tucker JF Sodium nitroprusside inhibits the non-selective cation current activated by intracellular calcium store depletion in mouse anococcygeus cells, 55P  
 Webber AP *see* Eglen RM, 35P  
 Weston MC & Peachell PT Effects of phosphodiesterase inhibitors on human lung mast cell and basophil function, 115P  
 Whelan CJ *see* Jones CA, 152P  
 Whittle BJR *see* Evans SM, 1P  
 Wigmore MA & Lacey MG Depression of glutamate input to midbrain dopamine neurones in rat brain slices by metabotropic glutamate receptor agonists, 43P  
 Wijetunge S & Hughes AD Action of pp60<sup>c-src</sup> on voltage-operated calcium channel currents in voltage-clamped isolated arterial smooth muscle cells, 158P  
 Wilcox RA & Nahorski SR Inositol 1,4,5-trisphosphate perfusion produces quantal calcium uptake and release in SH-SY5Y neuroblastoma cells, 57P
- Wilkie N, Ng LL & Boarder MR  
 Angiotensin II-stimulated phosphorylation of mitogen-activated protein kinases in SHR- and WKY-derived vascular smooth muscle cells, 23P  
 Wilkie N *see* Patel V, 133P  
 Wilkinson GF, Feniuk W & Humphrey PPA Desensitisation of somatostatin-induced intracellular calcium increases following human recombinant sst<sub>5</sub> receptor activation, 25P  
 Willars GB, Nahorski SR & Challiss RAJ Regulation of polyphosphoinositide availability for muscarinic cholinergic signalling in SH-SY5Y neuroblastoma cells, 32P  
 Willars GB *see* Saunders R, 58P  
 Williams FM *see* Stanford SJ, 83P  
 Williams JL *see* Murray TK, 123P  
 Williams KI *see* Mustafa S, 148P  
 Williams TJ *see* Stanford SJ, 83P  
 Willingale HL & Grubb BD Evidence that prostaglandins may modulate wind-up in a spinal nociceptive reflex in anaesthetised rats, 49P  
 Willner P *see* Smith JW, 64P  
 Wilson J *see* Smith JW, 40P  
 Wilson KA *see* Bretherton N, 89P  
 Wood D *see* Yeung CK, 107P  
 Woodall KL, Domeney AM, Howell AE & Kelly ME The effect of fluoxetine on social competition and drinking behaviour in the rat, 67P
- Yates MS *see* Morton MJ, 147P  
 Yeung CK, McCurrie JR & Wood D  
 Rubidium antagonises the relaxant effect of the potassium channel opener SDZ PCO400 in the mouse ileum, 107P  
 Young JM *see* Young KW, 33P  
 Young KW, Gibson WJ, Pinnock RD & Young JM Histamine and substance P decrease intracellular calcium in thapsigargin-treated human U373 MG astrocytoma cells, 33P
- Zetterström TSC *see* Reavill C, 71P  
 Zilkha E *see* Obrenovitch TP, 42P  
 Zilkha E *see* Urenjak J, 45P

## Keyword Index

- Acamprosate 66P  
 Acidosis 45P  
 Adenosine analogues 96P  
 Adenosine receptors 13P, 17P  
 Adenosine A<sub>1</sub> receptors 147P  
 Adenosine A<sub>3</sub> receptors 152P  
 Adenylyl cyclase 17P, 27P  
 Adipose tissue 125P  
 Adrenergic pathways 116P  
 $\alpha_1$ -Adrenoceptors 29P  
 $\beta$ -Adrenoceptor desensitisation 126P  
 $\beta_2$ -Adrenoceptors 127P  
 $\beta_3$ -Adrenoceptors 125P  
 Aggregation agonists 98P  
 AIDS 46P  
 Airways muscle, ovine 148P  
 Aldehyde oxidase 111P  
 Allosteric effects 19P  
 AMPA/kainate receptors 50P  
 Anaesthetics, volatile 108P  
 Anaesthetic agents 117P  
 Angiotensin II 52P  
 Angiotensin II receptors 23P  
 Antagonists 35P  
 Anti-inflammatories 1P  
 Antihistaminics 105P  
 Antioxidants 109P, 110P  
 Antipsychotics 72P  
 Antisense oligonucleotides 21P  
 Anxiety 60P, 61P, 66P, 67P  
 Aorta 96P  
 Aorta, rat 14P, 89P  
 Aortic cells, cultured 89P  
 Apoptosis 8P, 128P  
 Arrhythmias 11P  
 Arteries, basilar 106P  
 Arteries, pulmonary 85P, 96P  
 Arteries, umbilical 88P  
 Ascorbate 80P  
 [<sup>35</sup>S]-ATP $\gamma$ S 18P, 19P  
 Azaanthracenedione 140P  
 6-Azawillardiines 50P  
  
 Barbiturate binding 117P  
 Basophils 115P  
 Behaviour 68P  
 Behavioural sensitivity 70P  
 Biochemical mechanisms 140P  
 Black-white box 60P, 61P, 63P  
 Blood pressure 82P, 100P  
 Blood-brain barrier 132P  
  
 Brain, pig 30P  
 Brain, rat 120P  
 Breat cancer tumour cell lines 112P  
 [<sup>125</sup>I] $\alpha$ -Bungarotoxin binding assay 118P  
  
 Calcium 25P, 52P, 59P, 128P  
 Calcium, dietary 100P  
 Calcium, extracellular 148P  
 Calcium, intracellular 33P  
 Calcium channels 41P, 53P, 130P, 158P  
 Calcium channel antagonists 40P, 65P  
 Calcium currents 56P  
 Calcium entry, store regulated 55P  
 Calcium influx 54P  
 Calcium mobilisation 57P  
 Calcium signalling 58P  
 cAMP 126P  
 cAMP response 141P  
 Carbonic anhydrase 16P  
 Cardiac preconditioning 101P  
 Cardiomyocytes 56P, 131P  
 Cardiotoxicity 140P  
 Catecholamine release 84P  
 Cations 143P  
 Cell signalling 32P, 34P, 137P  
 Central nervous system 82P  
 Cerebral blood flow 79P, 93P  
*p*-Chloroamphetamine 123P  
 CHO cells 27P, 28P, 103P  
 Circadian variation 39P  
 Clozapine 70P  
 Cocaine 68P, 69P  
 Cognition 75P  
 Computer-assisted learning (CAL) 155P, 156P  
 Conditioned place preference 69P  
 Conscious dog 144P  
 Contractility 131P  
 Cooling 148P  
 Coronary arteries 86P, 87P  
 Coronary endothelium 81P  
 Corpus cavernosum 153P, 154P  
 Cortical membrane, rat 117P  
 Cortical spreading depression 79P  
 Covalent binding 10P  
 Cyclic nucleotides 54P  
 Cyclo-oxygenase 9P, 91P  
 Cytokines 4P  
  
 Darifenacin 35P, 144P  
  
 Dementia 46P  
 Desensitisation 17P, 25P, 31P, 121P, 142P  
 Dexamethasone 151P  
 Diacylglycerol 24P  
 Dichloroacetate 101P  
 DMPPO 14P, 157P  
 DNA synthesis 6P, 21P, 22P  
 L-DOPA 38P  
 Dopamine 71P, 72P  
 Dopamine D<sub>2</sub> receptors 37P  
 Dopamine D<sub>3</sub> receptors 75P  
 Dopamine infusion 70P  
 Dopamine neurones 43P  
 Dopamine release 73P  
 Doxorubicin-steroidal prodrugs 112P  
 DSP4 74P  
 Dyskinesia 37P  
  
 EDRF 15P  
 Eicosanoids 139P  
 Eicosapentaenoic acid 89P  
 Electrophysiology 51P  
 Emesis 78P, 151P  
 Endocytosis 127P  
 Endothelial cells, brain 132P  
 Endothelin 12P, 56P, 92P, 93P, 94P, 95P, 130P  
 Endothelin receptors 95P  
 Endotoxin 1P, 4P, 91P, 92P  
 Epilepsy 42P  
 Ethanol 40P, 39P, 41P, 64P, 65P  
 Excitatory amino acids 137P  
 Excitotoxicity 42P, 46P  
  
 Fenfluramine 123P  
 Ferro-protein sensor 129P  
 Fibrinolysis 97P  
 Fluoxetine 67P, 77P  
 Flurazepam 76P  
 Frontal cortex 72P  
 Frontal cortex, human 46P  
  
 G-protein coupled receptors 141P  
 GABA receptors 136P  
 GABA<sub>B</sub> receptors 119P  
 Ganglion, sympathetic 124P  
 Gastrointestinal motility 144P  
 Glutamate 42P, 44P, 46P, 72P

Glutamate receptors 136P  
 Gram-positive shock 2P  
 Granulation tissue 143P  
 Granulocytes 128P  
 Growth 100P  
 [<sup>35</sup>S]-GTPγS 113P  
 Gut 150P

Haematocrit 95P  
 Haloperidol 69P, 136P  
 Heart 126P  
 Heart, isolated perfused 13P  
 Hippocampus 36P, 41P, 44P, 60P  
 Histamine 33P  
 5-HT 47P, 122P  
 5-HT degeneration 123P  
 5-HT receptors 124P  
 5-HT<sub>2</sub> 31P  
 5-HT<sub>3</sub> receptors 30P  
 5-HT<sub>4</sub> receptors 71P  
 Hybridisation *in situ* 114P  
 Hyper-responsiveness 146P  
 Hypoxia 59P, 96P, 129P

Ileum, mouse 107P  
 Inflammation pharmacology 155P  
 Inositol-1,4,5-trisphosphate 25P, 31P, 57P  
 Internalisation 26P  
 Inverse agonism 34P  
 Ischaemia 45P, 80P, 86P  
 Ischaemic myocardial preconditioning 11P  
 Isolated heart 101P  
 Isoprostane 85P, 86P, 87P

Learning 74P, 75P  
 Lipopolysaccharides 6P, 7P, 85P  
 Lithium 62P  
 Liver, human 111P

Macrophages 5P, 109P  
 Magnesium sulphate 93P  
 Mania 62P  
 MAP kinase 7P, 20P, 21P, 22P, 23P, 133P  
 MAP kinase kinase 22P  
 Mast cells 115P, 152P  
 Memory dysfunction 36P  
 Metabotropic glutamate receptors 34P, 43P, 73P, 137P  
 Metalloproteinases 149P  
 Methotrexate metabolism 111P  
 Microdialysis 77P  
 Microsomes, chicken liver 10P  
 Micturition 145P  
 Motoneurons 138P  
 MPTP 37P, 38P  
 mRNA 147P  
 Muscarinic cholinergic receptors 32P  
 Muscarinic receptors 145P

Muscarinic receptors, recombinant 24P  
 Muscarinic receptor subtypes 35P  
 Muscarinic receptor coupling 36P  
 Muscarinic M<sub>1</sub> receptors 121P  
 Muscle fibres 130P  
 Myocardial ischaemia 90P  
 Myocardial reperfusion 90P  
 Myofibroblasts 143P

L-NAME 13P  
 NANC 150P  
 Nerve growth factor 48P  
 Neuroblastoma NG108-15 53P  
 Neurokinin receptors 51P  
 Neuromodulation 83P  
 Neurones 59P  
 Neurotensin 116P  
 Neutrophils 8P  
 Neutrophil apoptosis 129P  
 Neutrophil function 99P  
 NG108-15 cells 113P  
 Nicotine 38P  
 Nicotinic receptor antagonists 118P  
 Nitric oxide 2P, 4P, 5P, 9P, 15P, 79P, 81P, 82P, 83P, 84P, 106P, 139P  
 Nitric oxide synthase 1P, 6P, 7P, 150P  
 Nitric oxide synthase, inducible 109P  
 Nitrovasodilators 55P  
 NMDA 66P  
 NMDA receptors 45P  
 Nociception 49P, 119P  
 Noradrenaline 29P, 74P, 77P  
 Noradrenaline efflux 76P  
 Normoxia 96P

Obese mice 125P  
 Oestrogens 135P  
 Oestrogen receptors 112P  
 Opioids 53P  
 μ-Opioids 108P  
 Opioid receptors 27P, 28P  
 σ-Opioid receptors 113P  
 Ouabain 62P  
 Oxygen radicals 3P, 110P

P<sub>2</sub> purinoceptors 20P, 132P, 133P  
 P<sub>2X</sub> purinoceptors 18P, 19P  
 Pain 156P  
 Parkinson's disease 37P, 114P  
 Patch clamp 105P  
 PBN 123P  
 Peptidoglycan 5P  
 Perfluorochemical emulsion 99P  
 Peripheral sodium channels 134P  
 Phosphodiesterase 14P  
 Phosphodiesterase inhibitors 115P, 153P, 154P  
 Phosphoinositidase C 32P, 58P  
 Phospholipase C 28P  
 Phospholipase D 122P  
 Plasma ethanol 39P  
 Plasma protein extravasation 152P

Plasminogen activator inhibitor type 1 97P  
 Platelets 102P  
 Platelet activating factor 146P  
 Platelet aggregation 98P  
 Pluronic F-68 98P  
 Potassium channels 102P, 104P, 105P  
 Potassium channels, cloned 103P  
 Potassium channels, large-conductance calcium-activated 106P  
 Potassium channel openers 107P  
 Primary cultures 138P  
 Primates 38P  
 Prostacyclin 9P, 20P  
 Prostaglandins 49P  
 Prostaglandin E<sub>1</sub> 90P  
 Prostaglandin F<sub>2α</sub> 88P  
 Protein kinase C 11P  
 Protein kinase C inhibition 135P  
 Protein kinase C translocation 24P  
 P-selectin 90P  
 Purification 30P

Radioligand binding 104P  
 Rat models 2P  
 Rate constants 127P  
 Receptor binding 18P, 19P  
 Receptor blockade 71P  
 Receptor kinase 142P  
 Receptor pharmacology 29P  
 Receptor reserve 121P  
 Reflex depression 47P  
 Relaxation, vascular 135P  
 Renal failure, acute 147P  
 Reporter gene assay 141P  
 Restenosis 149P  
 RS 16566 120P  
 RS 33800 120P  
 Rubidium 103P, 107P

Scavenger receptors 3P  
 Scopolamine 61P  
 Sensory nerves 83P  
 Sensory neurons 134P  
 SH-SY5Y cells 57P, 108P  
 SH-SY5Y neuroblastoma 52P  
 Shock 91P, 92P  
 Sildenafil 153P, 154P  
 Single cell responses 58P  
 Smooth muscle 15P  
 Smooth muscle, non-vascular 55P  
 Smooth muscle cells, vascular 23P, 16P, 122P  
 Smooth muscle cell migration 149P  
 Social competition 67P  
 Social isolation 68P  
 Sodium channels, tetrodotoxin resistant 134P  
 Somatostatin 25P, 26P  
 Spinal cord 47P  
 Spinal cord, rat 48P  
 Spinal motoneurons 50P  
 Spinal reflex 49P, 119P

Spontaneously hypertensive rats 12P  
Stable transfection 142P  
Stress 64P  
Striatum, rat 73P  
Substance P 33P, 48P  
Substantia nigra 51P  
Sulphamethazine 10P  
Sumatriptan 81P  
*Suncus* sp. 78P  
Superoxide dismutase 114P  
Surfactants 99P  
Synaptic potentials 138P  
Synaptic transmission 43P  
  
Tachykinins 78P, 151P  
TE 671 cells 118P  
Tetrodotoxin-resistant sodium channel  
134P

Thiazides 16P  
Thromboxane 88P  
Thromboxane receptors 87P  
Tissue plasminogen activators 97P  
TNF 110P  
TNF $\alpha$  8P  
Tolerance 40P  
Toxins 104P  
Trachea 146P  
Tracheal smooth muscle 54P  
Tyrosine kinase 3P  
  
U 46619 12P  
Undergraduate teaching 155P, 156P  
Urinary bladder 145P  
  
Validation 63P

Vas deferens, guinea-pig 116P  
Vascular relaxation 14P  
Vascular sympathetic nerves 84P  
Vasculature 94P  
Vasoactive peptides 94P  
Vasoactivity 139P  
Voltage clamp 44P  
  
Withdrawal 65P  
  
*Xenopus* oocytes 136P  
  
Yohimbine 76P  
  
(*R*)-Zacopride 120P