

# INDEX TO VOLUME 73

## AUTHOR INDEX

### A

- ABBS, E.T. & JOSEPH, D.N. The effects of atropine and oxotremorine on acetylcholine release in rat phrenic nerve-diaphragm preparations, 481
- ADAMS, P.R., BROWN, D.A. & CONSTANTIN, A. An explanation for the cholinomimetic action of  $Ba^{2+}$  on sympathetic neurones, 201P
- AITON, J.F., LAMB, J.F. & OGDEN, P. Down-regulation of the sodium pump following chronic exposure of HeLa cells and chick heart cells to ouabain, 333
- AKAGI, HIROKO, GREEN, A.R. & HEAL, D.J. Repeated electroconvulsive shock attenuates clonidine-induced hyperactivity in both mice and rats, 230P
- AKAIKE, N., NISHI, K. & OYAMA, Y. Inhibitory effects of propranolol on the calcium current of *Helix* neurones, 431
- ALLEN, J.D., HARRON, D.W.G., SHANKS, R.G. & WILSON, R. Effects of alinidine (N-allyl clonidine ST567) on experimental cardiac arrhythmias, 199P
- ALMOTREFI, A.A. & BAKER, J.B.E. Antifibrillatory efficacy of encainide, lorcainide and ORG 6001 compared with lignocaine in isolated hearts of rabbits and guinea-pigs, 373
- ALTURA, BURTON M. & CHAND, NARESH. Differential effects on canine intrapulmonary arteries and veins, 819
- ALTURA, BURTON M. & GEBREWOLD, ASEFA. Failure of acetaldehyde or acetate to mimic the splanchnic arteriolar or venular dilator actions of ethanol: direct *in situ* studies on the microcirculation, 578
- ALTURA, BURTON M. & LASSOFF, SAMUEL. Perivascular action of the local anaesthetic, lidocaine, on pial terminal arterioles: direct observations on the microcirculation, 575
- AMIRRASOOLI, H., MAC NEIL, S. & TOMLINSON, S. Inhibition of prostaglandin  $E_1$ -responsive platelet adenylate cyclase by heparin: a study of the mechanism of inhibition and its relevance to platelet aggregation, 639
- ANDREASEN, F., CHRISTENSEN, J.H. & JANSEN, J.A. The influence of age and sex on the pharmacokinetics of thiopentone, 175P
- ANGEL, A. *see* MINCHIN, M.C. W., 234P
- ANGERIO, ALLAN D., FITZPATRICK, THOMAS A., KOT, PETER A., RAMWELL, PETER W. & ROSE, JOHN C. Effect of verapamil on the pulmonary vasoconstrictor action of prostaglandin  $F_{2\alpha}$  and a synthetic  $PGH_2$  analogue, 101
- ARBUTHNOTT, G.W., ECCLESTON, D., LASZLO, I.

- & NICOLAOU, N. Uptake of 5-hydroxytryptamine in the catecholamine containing areas of the hypothalamus of the rat after treatment with phenelzine and tryptophan, 143
- ARMSTRONG, J.M., CAVERO, I. & FÉNARD, SIMONE. The contribution of sympathetic and parasympathetic nerve mechanisms to the control of heart rate in conscious dogs at rest and during exercise as assessed by using betaxolol and methylatropine, 288P
- ASHTON, L., DICKINSON, K.E.J. & NAHORSKI, S.R.,  $\beta_1$  and  $\beta_2$ -adrenoceptors in developing rat lung, 277P

### B

- BAKER, J.B.E. *see* ALMOTREFI, A.A., 373
- BAKER, J.B.E. *see* WELLER, M.P.I., 298P
- BAKHLE, Y.S. Effects of sulphasalazine on prostaglandin inactivation and synthesis in isolated lungs of guinea-pig, rat and man, 217P
- BANERJEE, A.K., CHRISTMAS, A.J., CROSHAW, K., HEAZELL, M.A., INVERS-READ, GILLIAN C., SAUNDERS, L.C. & WYATT, D. M & B 28,767 a potent anti-ulcer and anti-secretory analogue of 11-deoxy-prostaglandin  $E_1$ , 225P
- BAR-ON, H., BERRY, E.M., ELDOR, A., KIDRON, M., LICHTENBERG, D. & ZIV, E. Enteral administration of insulin in the rat, 21
- BARBER, H.E., KITTERINGHAM, N.R. & PETRIE, J.C. The effect of imipramine and SKF 525 A on the first pass elimination of propranolol in the rat, 178P
- BARLOW, R.B., CAULFIELD, M.P., KITCHEN, R., ROBERTS, P.M., & STUBLEY, J.K. The affinities of pirenzepine and atropine for functional muscarinic receptors in guinea-pig atria and ileum, 183P
- BARTHOLEYNS, J., FOZARD, J.R. & PRAKASH, N.J. Blockade of the anti-inflammatory action of dexamethasone by DL- $\alpha$ -difluoromethylornithine; comparison with actinomycin D and cycloheximide, 212P
- BATES, R.F.L., BUCKLEY, G.A., EGLIN, R.M. & STRETTLE, R.J. Interaction of calcium ions and salmon calcitonin in the production of analgesia in the mouse, 302P
- BELL, CATHERINE & WALI, F.A. (introduced by EL-LIOTT, R.C.) Methohexitone-tetraethylammonium interactions in chick biventer cervicis muscle, moving fluid electrode technique and denervation studies, 311P
- BEN HARARI, R.R., LANIR, A. & YODIM, M.B.H. Effect of hyperoxia on uptake and metabolism of 5-

- hydroxytryptamine and  $\beta$ -phenylethylamine in rat lung: a sex difference, 461
- BENNETT, P.N., NOTARIANNI, LIDIA J. & SUPRADIST, S. Alteration of liver blood flow and metabolism on lignocaine and tocainide kinetics; observed changes and predictions of pharmacokinetic models, 273P
- BENTLEY, G.A., NEWTON, S.H. & STARR, JENNIFER. Evidence for and action of morphine and enkephalins on sensory nerve endings in the mouse peritoneum, 325
- BERDE, B. *see* HOF, R.P., 196P
- BERRIDGE, MICHAEL J. & HESLOP, JOHN P. Separate 5-hydroxytryptamine receptors on the salivary gland of the blowfly are linked to the generation of either cyclic adenosine 3',5'-monophosphate or calcium signals, 729
- BERRY, E.M. *see* BAR-ON, H., 21
- BERTHELOT, A., HAMILTON, C.A. & REID, J.L. Alpha-adrenoceptors in two models of experimental hypertension in the rabbit, 193P
- BHATTACHERJEE, P., EAKINS, K.E. & HAMMOND, B. Chemotactic activity of arachidonic acid lipoxygenase products in the rabbit eye, 254P
- BLABER, L.C. The presynaptic effect of cholinergic and adrenoceptor agonists and antagonists *in vivo* in rat heart, 192P
- BLAIR, IAN A., CRESP, TERRY M. & MACDERMOT, JOHN. Divalent cations increase [ $^3$ H]-prostacyclin binding to membranes of neuronal somatic hybrid cells, 691
- BOGUES, K., DIXON, G.T., FOWLER, P., MACONCHIE, J.G., MARTIN, L.E. & WILLOUGHBY, B.A. Pharmacokinetic and bioavailability of ranitidine in humans, 275P
- BOMBARDIERI, S., CATTANI, P. CIABATTONI, G., DI MUNNO, O., PASERO, G., PATRONO, C., PINCA, E. & PUGLIESE, F. The synovial prostaglandin system in chronic inflammatory arthritis: differential effects of steroidal and nonsteroidal anti-inflammatory drugs, 893
- BOREHAM, D.R., CHEESEMAN, K., PALMER, R.F., SLATER, T.F. & VOSE, C.W. (introduced by CALDWELL, J.). Metabolism of canrenone *in vitro*: evidence for formation of a glutathione conjugate via epoxidation, 181P
- BOURA, A.L.A., HUI, S.-C.G. & WALTERS, W.A.W. Cigarette smoke inhalation specifically inhibits depressor responses to prostacyclin in the rat, 3
- BOWMER, C.J. & YATES, M.S. The effect of acute renal failure on the pharmacokinetics of indocyanine green in the rat, 276P
- BROADLEY, K.J. & HAWTHORN, M.H. Reserpine-induced supersensitivity to the  $\beta$ -adrenoceptor-mediated responses of cardiac, respiratory and uterine tissues of the guinea-pig, 202P
- BROCCARDO, M., ERSPAMER, V., FALCONIERI ERSPAMER, G., IMPROMATA, G., LINARI, G., MELCHIORRI, P. & MONTECUCCHI, P.C. Pharmacological data on dermorphins, a new class of opioid peptides from amphibian skin, 625
- BROOKS, I., FLYNN, SHEILA B. & UNDERWOOD, A.H. Effects of L-3,3',5'-triiodothyronine on rat cardiac function, 198P
- BROOKS, I., FLYNN, SHEILA B. & UNDERWOOD, A.H. Time-course of the cardiac effects of a single dose of L-3,3',5'-triiodothyronine in thyroidectomized rats, 285P
- BROWN, C.L. & HANLEY, M.R. The effects of substance P and related peptides on  $\alpha$ -amylase release from rat parotid gland slices, 517
- BROWN, CHRISTINE M. & BURNSTOCK, G. Evidence in support of the  $P_1/P_2$  purinoceptor hypothesis in the guinea-pig taenia coli, 617
- BROWN, D.A. *see* ADAMS, P.R., 201P
- BROWN, R.A. & O'CONNOR, S.E. Stereoselective antagonism of pre-junctional dopamine receptors in the rabbit ear artery by sulpiride, 189P
- BRADLEY, P.B. & GLADMAN, J.R.F. Microiontophoretic study of the interaction between  $\beta$ -adrenoceptor antagonists and 5-hydroxytryptamine in the rat brain stem, 245P
- BRADSHAW, C.M., PUN, R.Y.K., SLATER, N.T., STOKER, M.J. & SZABADI, E. Comparison of the effect of haloperidol on excitatory responses of cortical neurones to dopamine, noradrenaline and phenylephrine, 243P
- BRADSHAW, C.M., PUN, R.Y.K. SLATER, N.T. & SZABADI, E. Comparison of the effects of methoxamine with those of noradrenaline and phenylephrine on single cerebral cortical neurones, 47
- BRAILOWSKY, SIMÓN, GUERRERO-MUÑOZ, FEDERICO, LUJÁN, MIGUEL & SHKUROVICH, MARIO. Morphine-theophylline interactions; antagonism or facilitation? 887
- BRASWELL, L.M., MILLER, K.W. & SAUTER, J.F. Differential effects on non-specific perturbors on the acetylcholine receptor from *Torpedo*, and its ionophore, 187P
- BRAY, M.A., CUNNINGHAM, F.M., DAVIDSON, E.M., FORD-HUTCHINSON, A.W. & SMITH, M.J.H. Differing biological potencies of isomers of leukotriene  $B_4$ , 210P
- BRAY, M.A., CUNNINGHAM, F.M., FORD-HUTCHINSON, A.W. & SMITH, M.J.H. Leukotriene  $B_4$ : a mediator of vascular permeability, 258P
- BRAY, M.A., FORD-HUTCHINSON, A.W. & SMITH, M.J.H. Leukotriene  $B_4$  and leucocyte movement, 259P
- BRITAIN, R.T. *see* GEISOW, H.P., 219P
- BRITAIN, R.T. *see* WILLOUGHBY, B.A., 274P
- BRITAIN, R.T., DREW, G.M. & LEVY, G.P., The  $\alpha$ - and  $\beta$ -adrenoceptor blocking potencies of labetalol and its individual stereoisomers, 282P
- BRINK, CHARLES. Tolerance of guinea-pig airway muscle preparations to relaxant agonists induced by chronic exposure to isoprenaline *in vivo*, 13
- BUCKINGHAM, JULIA C. Hypothalamic-pituitary-adrenocorticotrophic activity in the pentobarbitone and morphine-treated rat, 246P
- BUCKINGHAM, JULIA C. & HODGES, J.R. A cytochemical bioassay method for the determination of luteinizing hormone in biological fluids and tissues, 111
- BUCKLEY, G.A. *see* BATES, R.F.L., 302P
- BULL, D.R. & TYERS, M.B. Lack of effect of  $\mu$  and  $\kappa$  opiate receptor agonists on  $K^+$ -stimulated release of Met-enkephalin from guinea-pig striatal slices, 264P
- BUNCE, K.T., DALY, M.J., MCCARTHY, J.J. &

- SPRAGGS, C.F. Do prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) and prostacyclin (PGI<sub>2</sub>) affect disruption of the gastric mucosal barrier induced by bile salt? 257P
- BUNCE, K.T., GREWAL, M. & PARSONS, M.E. The effect of cimetidine on basal and stimulated pepsin secretion in the isolated whole stomach of the rat, 41
- BURGESS, G.M. COCKS, T.M. & JENKINSON, D.H. The use of K-sensitive electrodes to study drug-induced release of K from suspensions of isolated hepatocytes, 317P
- BURNSTOCK, G. *see* BROWN, CHRISTINE M., 617
- BURNSTOCK, GEOFFREY & MEGHJI, PARVIZ. Distribution of P<sub>1</sub>- and P<sub>2</sub>-purinoceptors in guinea-pig and frog heart, 879
- BUTCHER, R.A., DODDS, M.G. & TWISSELL, D.J. An isolated programmable stimulator for the determination of ventricular fibrillation threshold, 316P
- BUTLER, K.D. & SMITH, J.R. Mechanisms of Forssman-induced bronchospasm and their inhibition, 25
- C
- CALDWELL, J. *see* BOREHAM, D.R., 181P
- CALDWELL, J., HUTT, A.J., SMITH, R.L. & ZANGOURAS, A. Dose dependent formation of 1'-hydroxyestragole from estragole in the mouse, 180P
- CARPENTER, F.G. Atropine and micturition responses by rats with intact and partially innervated bladder, 837
- CARPENTER, SANDRA, E. & LYNN, BRUCE. Vascular and sensory responses of human skin to mild injury after topical treatment with capsaicin, 755
- CARR, S.C., HIGGS, G.A., SALMON, J.A. & SPAYNE, J.A. The effects of arachidonate lipoxygenase products on leukocyte migration in rabbit skin, 253P
- CATTANI, P. *see* BOMBARDIERI, S., 893
- CAULFIELD, M.P. *see* BARLOW, R.B., 183P
- CAVERO, I. *see* ARMSTRONG, J.M., 288P
- CAVERO, I. & LEFÈVRE-BORG, FRANÇOISE. Prazosin changes the time-course profile of the pressor responses elicited by noradrenaline in the perfused forelimb of spinal dogs, 294P
- CAVERO, I., LEFÈVRE-BORG, FRANÇOISE & SCATTON, B. Functional and biochemical evidence for the lack of cardiac presynaptic  $\alpha$ -adrenoceptor agonist properties in cirazoline (LD3098), 289P
- CHANG, C.C. & SU, M.J. A study on the interaction of crotapotin with crotoxin phospholipase A<sub>2</sub>, notexin and other presynaptic neurotoxins, 495.
- CHAPEL, JEANNIE & LOUBATIERES-MARIANI, MARIE-MADELEINE. Effects of phosphate-modified adenine nucleotide analogues on insulin secretion from perfused rat pancreas, 105
- CHAPLEO, C.B., DOXEY, J.C., MYERS, P.L., ROACH, A.G. & SMITH, SUSAN E. Clonidine-influence of aromatic substitution on  $\alpha$ -adrenoceptor selectivity, 280P
- CHAND, NARESH. Reactivity of isolated trachea, bronchus and lung strip of cats to carbachol, 5-hydroxytryptamine and histamine: evidence for the existence of methysergide-sensitive receptors, 853
- CHAND, NARESH *see* ALTURA, BURTON M., 819
- CHEESEMAN, K. *see* BOREHAM, D.R., 181P
- CHREVILLARD, C., SAIAG, B. & WORCEL, M. Interactions between hydralazine, propildazine and purines on arterial smooth muscle, 811
- CHRISTENSEN, J.H. *see* ANDREASEN, F., 175P
- CHRISTMAS, A.J. *see* BANERJEE, A.K., 225P
- CIABATTONI, G. *see* BOMBARDIERI, S., 893
- CLAPHAM, J.C. & HAMILTON, T.C. Inhibition of stimulation-evoked pressor responses in the pithed rat by dopamine agonists through activation of presynaptic dopamine receptors, 278P
- CLOUGH, D.P. & HATTON, R. Hypotensive and sedative effects of  $\alpha$ -adrenoceptor agonists: relationship to  $\alpha_1$  and  $\alpha_2$ -adrenoceptor potency, 595
- CLOUGH, D.P., HATTON, R. & MATTHEWMAN, SUSAN C. Effect of angiotensin converting enzyme inhibitor on neurogenic vasoconstriction in the pithed rat, 296P
- CLOW, A., JENNER, P., MARSDEN, C.D., MURUGAUH, K. & THEODOROU, A. Drug holidays do not prevent the development of cerebral dopamine receptor supersensitivity during chronic neuroleptic administration, 242P
- COCKS, T.M. *see* BURGESS, G.M., 317P
- COLEMAN, R.A., HUMPHREY, P.P.A., KENNEDY, I., LEVY, G.P. & LUMLEY, P. Comparison of the actions of U-46619, a prostaglandin H<sub>2</sub> analogue, with those of prostaglandin H<sub>2</sub> and thromboxane A<sub>2</sub> on some isolated smooth muscle preparations, 773
- COLEMAN, R.A., HUMPHREY, P.P.A., KENNEDY, I., LEVY, G.P. & LUMLEY, P. Further evidence that AH 19437 is a specific thromboxane receptor blocking drug, 258P
- COLEMAN, R.A., KENNEDY, I., WHALLEY, E.T. & WHITE, SUSAN K. Comparison of the effects of thromboxane A<sub>2</sub> on uterine smooth muscle of rat and guinea-pig *in vitro*, 222P
- COLLIER, B., PADJEN, A.L., QUIK, M. & SMITH, P.A. Convulsant and possible anticholinergic actions of dendrotoxin in the amphibian spinal cord, 525
- COLLIER, HARRY O.J., CUTHBERT, NIGEL J. & FRANCIS, DAVID. L. Clonidine dependence in guinea-pig isolated ileum, 443
- COLLIER, H.O.J., CUTHBERT, N.J. & FRANCIS, D.L. Effect of temperature on the induction of opiate dependence in guinea-pig isolated ileum, 300P
- COLLIER, HARRY O.J., CUTHBERT, NIGEL J. & FRANCIS, DAVID L. Model of opiate dependence in guinea-pig isolated ileum, 921
- COLLINGRIDGE, G.L. KILPATRICK, I.C. & STARR, M.S. Pharmacological manipulations of tectal GABA systems affect posture and locomotion in the rat, 271P
- COLQUHOUN, D., OGDEN, D.C. & SIEGELBAUM, S.A. Currents recorded from single acetylcholine-activated ion channels in skeletal muscle membrane, 317P
- CONSTANTI, A. *see* ADAMS, P.R., 201P
- COOKS, T.M. *see* BURGESS, G.M., 317P
- COSTALL, B., NAYLOR, R.J. & SAHYOUN, H.A. Modification by domperidone of catecholamine effects on circular smooth muscle of the lower oesophageal and pyloric sphincters, 312P
- COWEN, P., GREEN, A.R. & NUTT, D.J. Drug-induced

- alterations of the post-ictal seizure threshold increase, 265P
- CRANSTON, W.I., GOURINE, V.N. & TOWNSEND, Y. The effect of intracerebroventricular cycloheximide on protein synthesis and fever in rabbits, 6
- CREESE, R. & HEAD, S.D. Channel opening time by external and internal recording in rat diaphragm, 186P
- CRESP, TERRY M. *see* BLAIR, IAN A., 691
- CROSHAW, K. *see* BANERJEE, A.K., 225P
- CUNNINGHAM, F.M. *see* BRAY, M.A., 210P
- CUNNINGHAM, F.M. *see* BRAY, M.A., 258P
- CUNNINGHAM, JO & NEAL, M.J. On the mechanism by which veratridine causes a calcium independent release of  $\gamma$ -aminobutyric acid from brain slices, 655
- CURWAIN, B.P. & TURNER, N.C. Comparison of the agonist activity of impromidine (SK&F92767) in anaesthetized rabbits and on the rabbit isolated fundic mucosa, 917
- CURZON, G., KANTAMANENI, B.D. & TRICKLEBANK, M.D. A comparison of an improved  $\alpha$ -phthalaldehyde fluorometric method and high pressure liquid chromatography in the determination of brain 5-hydroxyindoles of rats treated with L-tryptophan and *p*-chlorophenylalanine, 555
- CUSACK, N.J. & HOURANI, S.M.O. Effects of  $R_p$  and  $S_p$  diastereoisomers of adenosine 5'-O-(1-thiodiphosphate) on human platelets, 409
- CUSACK, N.J. & HOURANI, S.M.O. Partial agonist behaviour of adenosine 5'-O-(2-thiodiphosphate) on human platelets, 405
- CUTHBERT, NIGEL J. *see* COLLIER, HARRY O.J., 300P
- CUTHBERT, NIGEL J. *see* COLLIER, HARRY O.J., 443
- CUTHBERT, NIGEL J. *see* COLLIER, HARRY O.J., 921
- D**
- DALY, M.J. *see* BUNCE, K.T., 257P
- DALY, M.J., REEVES, J.J. & STABLES, R. Inhibition of vagally-induced gastric acid secretion by atropine and  $H_2$ -receptor antagonists in the rat, 313P
- DASCOMBE, M.J. Hypothermia in rabbits after intrahypothalamic injection of  $N^6$ -2'-O-dibutyryl adenosine 3',5'-monophosphate, 314P
- DASCOMBE, M.J. & FOOTE, G.G. Intrastriatal injection of apomorphine and climbing behaviour in chronically cannulated mice, 236P
- DAVIDSON, E.M. *see* BRAY, M.A., 210P
- DAWBARN, D., LONG, S.K. & PYCOCK, C.J. Differential dopamine receptor supersensitivity after chronic phenothiazine treatment in rats, 240P
- DAWSON, D., LONG, S.K. & PYCOCK, C.J. Increased central 5-hydroxytryptamine receptor mechanisms in rats after chronic neuroleptic treatment, 149
- DAWSON, W. *see* MOORE, N.A., 269P
- DEARNALEY, D.P., MARSON, L., OSBORNE, R.H. & WHITE, E. Effects of dock leaf extracts on 5-hydroxytryptamine induced contraction of the rat fundic strip, 306P
- DEDEK, J., SCATTON, B. & ZIVKOVIC, B. (introduced by WORMS, P.) Yohimbine blocks dopaminergic transmission in rat striatum, 239P
- DETTMAR, P.W., FORTUNE, D., LYNN, A.G., METCALF, G., MORGAN, B.A. & TULLOCH, I.F. Neuropharmacological evaluation of TRH analogues with modified proline residues, 262P
- DIMUNNO, O. *see* BOMBARDIERI, S., 893
- DICKINSON, K.E.J. *see* ASHTON, L., 277P
- DICKINSON, K.E.J. & NAHORSKI, S.R. Solubilization of  $\beta_1$  and  $\beta_2$  adrenoreceptors from rat and rabbit lung, 202P
- DIXON, G.T. *see* BOGUES, K., 275P
- DODDS, M.G. *see* BUTCHER, R.A., 316P
- DOGGRELL, SHEILA A. Effect of antimuscarinic agents on the contractile responses to cholinomimetics in the rat anococcygeus muscle, 829
- DOHERTY, NIAL S. Inhibition of arachidonic acid release as the mechanism by which glucocorticoids inhibit endotoxin-induced diarrhoea, 549
- DOLLERY, C.T., HOULT, J.R.S. & ROBINSON, C. Prostaglandin inactivation in the perfused rat lung: active transport or facilitated diffusion? 214P
- DOWNING, O.A., WILSON, K.A. & WILSON, V.G. Competitive and non-competitive blockade of  $\alpha$ -adrenoceptors of rat aorta by prazosin, 290P
- DOWNS, D.D., GARLAND, L.G. & SHIELDS, P.A. A possible role for lipoxygenase products in airway hyper-reactivity *in vivo*, 252P
- DOXEY, J.C. *see* CHAPLEO, C.B., 280P
- DOXEY, J.C. *see* WILSON, A.N.A., 294P
- DOXEY, J.C., ROACH, A.G. & VIRDEE, NARINDER. Effects of prazosin, phenolamine and yohimbine on the vasoconstrictor responses to noradrenaline and sympathetic nerve stimulation in the rat mesentery, 291P
- DREW, G.M. *see* BRITTAIN, R.T., 282P
- DREW, G.M. & HILDITCH, A. Effects of agonists and antagonists at vascular dopamine receptors in the rabbit isolated splenic artery and mesenteric vascular bed of the anaesthetized dog, 287P
- DRING, L.G. *see* DURAND, A., 183P
- DRYDEN, W.F. & MARSHALL, R.J. Relationship between 'staircase' phenomena and response to cardiac glycosides in rat, guinea-pig and ground squirrel papillary muscles, 196P
- DUMONT, Y., LAROSE, L., MORISSET, J. & POIRIER, G.G. Parallel maturation of the pancreatic secretory response to cholinergic stimulation on the muscarinic receptor population, 347
- DUNSTAN, R., LLOYD, K.G. & KIVKOVIC, B. Inhibition by apomorphine of the amphetamine-induced changes in dopaminergic system, 237P
- DURAND, A., DRING, L.G. & MORSELLI, P.L. A comparison of the kinetics of ifenprodil in the rat and dog, 183P
- E**
- EAKINS, K.E. *see* BHATTACHERJEE, P., 254P
- EAKING, K.E. *see* PALMER, R.M.J., 260P
- ECCLESTON, D. *see* ARBUTHNOTT, G.W., 143

- EGLEN, R.N. *see* BATES, R.F.L., 302P
- EL TAHIR, K.E.H. & WILLIAMS, K.I. Trapped blood elements within the decidua of the rat pregnant uterus generate a lipoxygenase product(s) which inhibits myometrial prostacyclin synthesis, 695
- ELDOR, A. *see* BAR-ON, H., 21
- ELLIOTT, J.M. & GRAHAME-SMITH, D.G. Effects of monovalent and divalent cations and purine nucleotides on the  $\alpha$ -adrenoceptor of human intact platelets, 204P
- ELLIOTT, P.N.C., FOSTER, R.L. & WILEMAN, T.E. Covalent attachment to dextran to the anti-leukemic enzyme L-asparaginase reduces the type III hypersensitivity to the antigen, 303P
- ELLIOTT, R.C. The interaction between tetraethylammonium and methohexitone in chick biventer cervicis muscle preparation: experiments with caffeine and xylocaine, 185P
- EMMERSON, JANE & MACKAY, DENNIS. A test of the null equation for functional antagonism, 135
- EMMS, HELEN & LEWIS, G.P. The anatomical distribution of ADPase activity in the rabbit aorta, 309P
- EMMS, HELEN, LEWIS, G.P. & WATTS, I.S. Imidazole derivations as inhibitors of thromboxane formation, 221P
- ENDO, MASAO & YAMASHITA, SHUJI. Differential responses to carbachol, sodium nitroprusside and 8-bromo-guanosine 3',5'-monophosphate of canine atrial and ventricular muscle, 393
- ERSPAMER, V. *see* BROCCARDO, M., 625
- EVANGELISTA, S., MAGGI, C.A. & MELI, A. The role of the local anaesthetic properties of  $\beta$ -adrenoceptor blocking agents in antagonizing  $\text{CaCl}_2$ -induced arrhythmias in the rat, 725

## F

- FALCONIERI ERSPAMER, G. *see* BROCCARDO, M., 625
- FELLOWS, I., JENNER, W.N., MARTIN, L.E. & WILLOUGHBY, B.A. (introduced by BRITTAIN, R.T.) The development of a radioimmunoassay for ranitidine in biological fluids, 274P
- FÉNARD, SIMONE *see* ARMSTRONG, J.M., 288P
- FENIUK, W., HUMPHREY, P.P.A. & WATTS, A.D. Further characterization of pre- and post-junctional receptors of 5-hydroxytryptamine in isolated vasculature, 191P
- FENN, C.G. & LITTLETON, J.M. Inhibition of platelet aggregation by ethanol: the role of plasma and platelet membrane lipids, 205P
- FEUERSTEIN, NILI & RAMWELL, PETER W. *In vivo* and *in vitro* effects of endotoxin on prostaglandin release from rat lung, 511
- FILE, SANDRA E., MABBUTT, P.S. & PEARCE, JACALYN B. How do benzodiazepines reduce formation of gastric stress ulcers, 228P
- FILLENZ, M. & STANFORD, S.C., Vesicular noradrenaline stores in peripheral nerves of the rat and their modification by tranlycypromine, 401
- FINBERG, J.P.M., TENNE, M. & YODIM, M.B.H.

- Tyramine antagonistic properties of AGN 1135, an irreversible inhibitor of monamine oxidase type B, 65
- FITZPATRICK, THOMAS M. *see* ANGERIO, ALLAN D., 101
- FLASKOS, J. & GEORGE, A.J. The effect of flupenthixol isomers on [ $^3\text{H}$ ]-5-hydroxytryptamine uptake into blood platelets, 249P
- FLAVAHAN, N.A. & McGRATH, J.C.  $\alpha_1$ -Adrenoceptors can mediate chronotropic responses in the rat heart, 584
- FLORENCE, VERENA M., HUME, W.R. & MATSUNAGA, MARSHA L. Choline acetyltransferase activity in the sympathetic nerves of the rabbit ear artery, 721
- FLYNN, SHEILA B. *see* BROOKS, I., 198P
- FLYNN, SHEILA B. *see* BROOKS, I., 285P
- FOOTE, G.G. *see* DASCOMBE, M.J., 236P
- FORD-HUTCHINSON, A.W. *see* BRAY, M.A., 210P
- FORD-HUTCHINSON, A.W. *see* BRAY, M.A., 258P
- FORD-HUTCHINSON, A.W. *see* BRAY, M.A., 259P
- FORD-HUTCHINSON, A.W. *see* RAINSFORD, K.D., 226P
- FOREMAN, J.C. & JORDAN, C.C. Comparison of the activities of some peptides in human skin and as histamine releasing agents, 207P
- FORREST, M.J., JOSE, P.J., PECK, M.J. & WILLIAMS, T.J. C5a generation in blood plasma of man, pig, guinea-pig, rabbit and rat: a link between complement activation and inflammatory oedema, 211P
- FORSTER, R.L. *see* ELLIOTT, P.N.C., 303P
- FORTUNE, D. *see* DETTMAR, P.M., 262P
- FOSTER, G.A., ROBERTS, P.J., ROWLANDS, GETHIN J. & SHARIF, N.A. Ontogeny of neurochemical markers for glutamatergic neurones in cerebellum: implications for development of kainate neurotoxicity, 235P
- FOZARD, J.R., *see* BARTHOLEYNS, J., 212P
- FOWLER, P. *see* BOGUES, K., 275P
- FOY, J.M. & PURVIS, J.R. A comparative study of the effect of sulphonylureas on regional blood flow determined by a radioactive microsphere technique in experimentally-induced diabetes in the rat, 286P
- FRANCIS, DAVID L. *see* COLLIER, HARRY O.J., 300P
- FRANCIS, DAVID L. *see* COLLIER, HARRY O.J., 443
- FRANCIS, DAVID L. *see* COLLIER, HARRY O.J., 921
- FRENCH, A.M. & SCOTT, N.C. A comparison of the effects of nifedipine and verapamil on rat vas deferens, 321
- FROSSARD, N., LANDRY, Y., PAULI, G. & RUCK-STUHL, M. Effects of cyclic AMP- and cyclic GMP-phosphodiesterase inhibitors on immunological release of histamine and on lung contraction, 933

## G

- GAMBLE, S.J. & WADDINGTON, J.L. (introduced by JOSEPH, M.H.) Six months phenothiazine treatment differentially influences distinct dopamine-mediated behaviours, 240P

- GARLAND, L.G. *see* DOWNS, D.D., 252P  
 GEISOW, H.P., HORNBY, E.J. & McCABE, P.J. (introduced by BRITTAIN, R.T.) Inhibition of platelet aggregation by AH 19437; a thromboxane receptor blocking drug, 219P  
 GEIGER, R. & WHALLEY, E.T. Effect of various prostaglandins on the *in vitro* activation of kallikrein in rat plasma, 224P  
 GEORGE, A.J. *see* FLASKOS, J., 249P  
 GEBREWOLD, ASEFA *see* ALTURA, BURTON M., 578  
 GIBSON, A. Contractile responses of the mouse anoccygeus muscle to some  $\alpha$ -adrenoceptor agonists, 284P  
 GLADMAN, J.R.F. *see* BRADLEY, P.B., 245P  
 GODFRAND, T. & MILLER, R.C. Prostaglandin  $F_{2\alpha}$  ( $PGF_{2\alpha}$ ) mediated contraction and [ $^{45}$ Ca]-influx into rat mesenteric arteries: inhibition by flunarizine a calcium entry blocker, 252P  
 GOURINE, V.N. *see* CRANSTON, W.I., 6  
 GRAHAME-SMITH, D.G. *see* ELLIOTT, J.M., 204P  
 GRAZIANO, JOSEPH, JONES, BRIAN & PISCOTTO, PATRICIA. The effect of heavy metal chelators on the renal accumulation of platinum after *cis*-dichlorodiammineplatinum II administration to the rat, 649  
 GREEN, A.R. *see* COWEN, P., 265P  
 GREEN, A.R. *see* AKAGI, HIROKO, 230P  
 GREEN, A.R., HALL, J.E. & REES, A.R. A behavioural and biochemical study in rats of 5-hydroxytryptamine receptor agonists and antagonists, with observations on structure-activity requirements for the agonists, 703  
 GREWAL, M. *see* BUNCE, K.T., 41  
 GRIMMER, A.J. & LEATHARD, HELEN L. 5-Hydroxytryptamine and noradrenaline on human mesenteric blood vessels, 190P  
 GUERRERO-MUÑOZ, FEDERICO *see* BRAILOWSKY, SIMÓN, 887  
 GUICHENEY, PASCALE & MEYER, PHILIPPE. Binding of [ $^3$ H]-prazosin and [ $^3$ H]-dihydroergocryptine to rat cardiac  $\alpha$ -adrenoceptors, 33  
 GURNEY, A. & RANG, H.P. Voltage clamp recording from rat submandibular ganglion cells, 318P
- ## H
- HALL, J.E. *see* GREEN, A.R., 703  
 HAMILTON, C.A. *see* BERTHELOT, A., 193P  
 HAMILTON, T.C. *see* CLAPHAM, J.C., 278P  
 HAMMOND, B. *see* BHATTACHERJEE, P., 245P  
 HANLEY, M.R. *see* BROWN, C.L., 517  
 HARMAN, R.J. & SHAW, G.G. The spontaneous and evoked release of spermine from rat brain *in vitro*, 165  
 HARRIS, J.B. & MARTIN, C.A. The effects of the subcutaneous injection of the crude venom of the Australian common brown snake, *Pseudonaja textilis* on the skeletal neuromuscular system, 157  
 HARRON, D.W.G. *see* ALLEN, J.D., 198P  
 HARTLEY, J.E., MILLER, A.A. & WEBSTER, R.A. Behavioural and biochemical changes following withdrawal of chronic dexamphetamine or bupropion administration in rats, 268P  
 HATTON, R. *see* CLOUGH, D.P., 296P  
 HATTON, R. *see* CLOUGH, D.P., 595  
 HAWTHORN, M.H. *see* BROADLEY, K.J., 202P  
 HEAD, S.D. *see* CREESE, R., 186P  
 HEAL, D.J. *see* AKAGI, HIROKO, 230P  
 HEAZELL, M.A. *see* BANERJEE, A.K., 225P  
 HEMSWORTH, BRIAN A. & STREET, JAMES A. Characteristics of ( $\pm$ )-[ $^{14}$ C]-oxprenolol and ( $\pm$ )-[ $^{14}$ C]-propranolol incorporation by rat lung slices, 119  
 HESLOP, JOHN P. *see* BERRIDGE, MICHAEL J., 729  
 HICKS, P.E. & NAHORSKI, S.R. Is there a change in post-synaptic  $\alpha$ -receptors in hypertension? *In vitro* and *in vivo* studies, 194P  
 HICKS, P.E., WARBURTON, G.R. & WESTON, A.H. No evidence for an inhibitory pre-junctional effect of hydralazine *in vivo*, 188P  
 HICKS, R. & SAHYOUN, H.A. Differences in the time-course of tuberculin skin reactions in primary and secondary hypersensitive phases and influence of vinylidene chloride, 310P  
 HIGGS, G.A. *see* CARR, S.C., 253P  
 HILDITCH, A. *see* DREW, G.M., 287P  
 HILL, M.W. & MANN, S.P. (introduced by SHARMAN, D.F.) Tyrosine hydroxylase activation: a possible mechanism, 247P  
 HILLIER, K., MASON, P. & SMITH, C.L. Ulcerative colitis: prostaglandin metabolism and the effect of sulphasalazine, 5 amino salicylic acid and indomethacin in human colonic mucosa, 217P  
 HODGES, J.R. *see* BUCKINGHAM, JULIA, C., 111  
 HOF, R.P., MÜLLER-SWEINITZER, E. & NEUMANN, P. (introduced by BERDE, B.) *In vitro* and *in vivo* effects of a new powerful calcium antagonist, 196P  
 HOLZBAUER, MARGARETHE, HOLZER, P. & SHARMAN, D.F. Release of endogenous dopamine from the neuro-intermediate lobe of the rat hypophysis *in vitro*, 265P  
 HOLZER, P. *see* HOLZBAUER, MARGARETHE, 265P  
 HOLZER, P. & SHARMAN, D.F. Substance P in the developing pig, 248P  
 HORNBY, E.J. *see* GEISOW, H.P., 219P  
 HOULT, J.R.S. *see* DOLLERY, C.T., 214P  
 HOULT, J.R.S. & MOORE, P.K. Sulphinpyrazone in rats releases prostaglandin 'reciprocal coupling factor': possible mode of action of anti-thrombotic action? 250P  
 HOULT, J.R.S., LOFTS, F.J. & MOORE, P.K. Stability of prostacyclin in plasma and its transformation by platelets to a stable spasmogenic product, 218P  
 HOURANI, S.M.O. *see* CUSACK, N.J., 405  
 HOURANI, S.M.O. *see* CUSACK, N.J., 409  
 HOWE, G.M., HOWE, S.J., TULLOCH, I.F. & WALTER, D.S. (introduced by METCALF, G.) Relation between plasma concentration of valproic acid and its anti-convulsant and behavioural effects in rats, 231P  
 HOWE, S.J. *see* HOWE, G.M., 231P  
 HUI, S.-C.G. *see* BOURA, A.L.A., 3  
 HUME, W.R. *see* FLORENCE, VERENA M., 721  
 HUMPHREY, P.P.A. *see* COLEMAN, R.A., 258P  
 HUMPHREY, P.P.A. *see* COLEMAN, R.A., 773  
 HUMPHREY, P.P.A. *see* FENIUK, W., 191P  
 HUTT, A.J. *see* CALDWELL, J., 180P

## I

- IDLE, J.R. & SAMIRA I. ISLAM. Polymorphism of phenformin 4-hydroxylation in Saudi females, 177P
- IHALAINEN, E., MacDONALD, E. & PISPA, J.P. Effect of 3,5-dimethylpyrazole on mouse brain catecholamine levels, 263P
- IMPROTA, A. *see* BROCCARDO, M., 625
- ITO, YUSHI & TAJIMA, KIKUO. Spontaneous activity in the trachea of dogs treated with indomethacin: an experimental model for aspirin-related asthma, 563
- IVERS-READ, C. *see* BANERJEE, A.K., 225P

## J

- JANSEN, J.A. *see* ANDREASEN, F., 175P
- JÄRBE, TORBJÖRN U.C. Cocaine cue in pigeons: time course studies and generalization to structurally related compounds (norcocaine, WIN 35,428 and 35,065-2) and (+)-amphetamine, 843
- JENKINSON, D.H. *see* BURGESS, G.M., 317P
- JENNER, D.J., LEWIS, D.A., PITT, EVA & OFFORD, R.A. The effect of the intravenous administration of corticosteroids encapsulated in intact erythrocytes on adjuvant arthritis in the rat, 212P
- JENNER, P. *see* CLOW, A., 242P
- JENNER, W.N. *see* BOGUES, K., 275P
- JENNER, W.N. *see* FELLOWS, I., 274P
- JENSEN, MOGENS H. Theophylline inhibition of renal and cerebral nucleoside formation, 467
- JOHANSEN, T. (introduced by MONGAR, J.L.) Dependence of anaphylactic histamine release from rat mast cells on cellular energy metabolism, 208P
- JOHNS, EDWARD J. An investigation into the type of  $\beta$ -adrenoceptor mediating sympathetically activated renin release in the cat, 749
- JOHNSTON, BELINDA J. & McISAAC, R.L. The effect of some anti-ulcer agents on basal gastric mucosal blood flow and transmucosal flux of hydrogen and sodium ions in the conscious dog, 308P
- JONES, BRIAN *see* GRAZIANO, JOSEPH, 649
- JONES, J.L. & WILSON, N.H. Thromboxane receptor antagonism shown by a prostanoid with a *bicyclo* [2,2,1] heptane ring, 220P
- JONES, R.L., SUTHERLAND, A. & WILSON, N.H. Binding of tritium-labelled 9,11-epoxymethano PGH<sub>2</sub> to human platelets, 304P
- JONES, R.S.G. *In vivo* pharmacological studies on the interactions between tryptamine and 5-hydroxytryptamine, 485
- JORDAN, C.C. *see* FOREMAN, J.C., 204P
- JOSE, P.J. *see* FORREST, M.J., 211P
- JOSEPH, D.N. *see* ABBS, E.T., 481
- JOSEPH, M.H. *see* GAMBLE, S.J., 240
- JOSEPH, M.H. & KENNETT, G.A. Brain tryptophan and 5-hydroxytryptamine function in stress, 267P

## K

- KALIR, A., SABBAGH, A. & YODIM, M.B.H. Selective acetylenic 'suicide' and reversible inhibitors of

- monoamine oxidase types A and B, 55
- KALSNER, STANLEY. The role of calcium in the effects of noradrenaline and phenoxybenzamine on adrenergic transmitter release from atria: no support for negative feedback of release, 363
- KANTAMANENI, B.D. *see* CURZON, G., 555
- KARANIAN, J.W., RAMEY, E.R. & RAMWELL, P.W. Effect of gender on development and diurnal rhythm of prostaglandin receptors in rat aorta, 903
- KARASHIMA, TSUYOSHI. Isoprenaline- and noradrenaline-induced hyperpolarization of guinea-pig liver cells, 867
- KELLY, P.D. & TRAYNOR, J.R. Effect of narcotic analgesics on lipase activity *in vitro*, 301P
- KENNEDY, I. *see* COLEMAN, R.A., 222P
- KENNEDY, I. *see* COLEMAN, R.A., 258P
- KENNEDY, I. *see* COLEMAN, R.A., 773
- KENNETT, G.A. *see* JOSEPH, M.H., 267P
- KENT, A.P. & WEBSTER, R.A. Pharmacological analysis of leptazol induced epileptogenic activity in the anaesthetized rat, 318P
- KERRY, P.J. *see* LEAVER, H. ANNE, 223P
- KIDRON, M. *see* BAR-OM, H., 21
- KILPATRICK, I.C. *see* COLLINGBRIDGE, G.L., 271P
- KING, B.F. & MUIR, T.C. The response of the rabbit rectococcygeus muscle to stimulation of extrinsic inhibitory nerves and to sympathomimetic drugs, 87
- KING, K.T. & RYALL, R.W. A re-evaluation of acetylcholine receptors on feline Renshaw cells, 455
- KITCHEN, R. *see* BARLOW, R.B., 183P
- KITTERINGHAM, N.R. *see* BARBER, H.E., 178P
- KOBAYASHI, JUN'ICHI, NAKAMURA, HIDESHI & OHIZUMI, YASUSHI. Biphasic mechanical responses of guinea-pig isolated ileum to the venom of the marine snail *Conus striatus*, 581
- KORCZYN, AMOS D. & ROCK, MEIR. Antagonism of opiate mydriasis in mice, 807
- KOSTERLITZ, H.W. & MAGNAN, J. Pharmacological analysis of opiate receptors in rat vas deferens, 205P
- KOSTERLITZ, H.W. & PATERSON, S.J. Tyr-D-Ala-Gly-MePhe-NH (CH<sub>2</sub>)<sub>2</sub>OH is a selective ligand for the  $\mu$ -opiate binding site, 299P
- KOSTERLITZ, H.W., PATERSON, S.J. & ROBSON, L.E. Characterization of the  $\kappa$ -subtype of the opiate receptor in the guinea-pig brain, 939
- KOT, PETER A. *see* ANGERIO, ALLAN D., 101

## L

- LANDRY, Y. *see* FROSSARD, N., 933
- LANGER, S.Z., MASSINGHAM, R. & SHEPPERSON, N.B. Preferential, long-lasting blockade of neuronally released but not exogenously administered noradrenaline *in vitro*; further evidence that the  $\alpha_1$ -adrenoceptor subtype predominates intrasynaptically, 281P
- LANIR, A. *see* BEN HARARI, R.R., 461
- LAMB, J.F. *see* AITON, J.F., 333
- LAROSE, L. *see* DUMONT, Y., 347
- LASSOFF, SAMUEL *see* ALTURA, BURTON M., 575
- LASZLO, I. *see* ARBUTHNOTT, G.W., 143

- LATHAM, A., ROTHWELL, NANCY J., STOCK, M.J., WHITE, A.C. & WYLIE, M.G.  $\text{Na}^+$ ,  $\text{K}^+$ -ATPase activity in brown adipose tissue: its relationship to resting metabolic rate and the effect of ciclesonide, 182P
- LAWRENCE, D. & LIVINGSTON, A. Opiate-like analgesic activity in general anaesthetics, 435
- LEATHARD, HELEN L. *see* GRIMMER, A.J., 190P
- LEAVER, H. ANNE, NING, ANGELA C.W.S. (introduced by KERRY, P.J.) Endometrial uptake and esterification of arachidonic acid during the oestrous cycle of guinea-pig, 223P
- LEDERBALLE PEDERSEN, OLE *see* MIKKELSEN, ERICH, 799
- LEE, W.M., TSANG, A.Y.F. & WONG, P.Y.D. Effects of divalent and lanthanide ions on motility initiation in rat caudal epididymal spermatozoa, 633
- LEES, G.M. & PERCY, W.H. Antibiotic-associated colitis: an *in vitro* investigation of the effects of antibiotics on intestinal motility, 535
- LEFÈVRE-BORG, FRANÇOISE *see* CAVERO, I., 289P
- LEFÈVRE-BORG, FRANÇOISE *see* CAVERO, I., 294P
- LEVY, G.P. *see* BRITAIN, R.T., 282P
- LEVY, G.P. *see* COLEMAN, R.A., 258P
- LEVY, G.P. *see* COLEMAN, R.A., 773
- LEWIS, D.A. *see* JENNER, D.J., 212P
- LEWIS, G.P. *see* EMMS, HELEN, 309P
- LEWIS, G.P. *see* EMMS, HELEN, 221P
- LICHTENBERG, D. *see* BAR-ON, H., 21
- LINARI, G. *see* BROCCARDO, M., 625
- LINDSTROM, PER. Further studies on 5-hydroxytryptamine transport in pancreatic islets and isolated  $\beta$ -cells, 385
- LITTLETON, J.M. *see* FENN, C.G., 305P
- LIVINGSTON, A. *see* LAWRENCE, D., 435
- LLOYD, K.G. *see* DUNSTAN, R., 237P
- LLOYD, K.G. & WORMS, P. The broad anticonvulsant spectrum of GABA-mimetic drugs: relevance to antiepileptic drug research, 232P
- LOFTS, F.J. *see* HOULT, J.R.S., 218P
- LONG, S.K. *see* DAWBARN, D., 149
- LONG, S.K. *see* DAWBARN, D., 240P
- LONG, W.F. & WILLIAMSON, F.B. Effect of sulphated polysaccharides on the  $\alpha_1$ -antitrypsin inhibition of amidolysis catalysed by coagulation cascade proteinases, 505
- LOUBATIERES-MARIANI, MARIE-MADELEINE *see* CHAPAL, JEANNIE, 105
- LUJÁN, MIGUEL *see* BRAILOWSKY, SIMÓN, 887
- LUJÁN, MIGUEL & RODRÍGUEZ, RODOLFO. Pharmacological characterization of opiate physical dependence in the isolated ileum of the guinea-pig, 859
- LUMLEY, P. *see* COLEMAN, R.A., 258P
- LUMLEY, P. *see* COLEMAN, R.A., 773
- LYNN, A.G. *see* DETTMAR, P.M., 262P
- LYNN, BRUCE *see* CARPENTER, SANDRA E., 955
- MACDERMOT, JOHN *see* BLAIRM, IAN A., 691
- McGRATH, J.C. Apoyohimbine; a pattern for  $\alpha$ -adrenoceptor antagonists or a template for the  $\alpha$ -adrenoceptors? 283P
- McGRATH, J.C. *see* FLAVAHAN, N.A., 584
- MACHONOCHE, J.G. *see* BOGUES, K., 275P
- McISAAC, R.L. *see* JOHNSTON, BELINDA J., 308P
- MACKAY, DENNIS. An analysis of functional antagonism and synergism, 127
- MACKAY, DENNIS *see* EMMERSON, JANE, 135
- MACNEIL, S. *see* AMIRRASOOLI, H., 639
- MABBUTT, P.S. *see* FILE, SANDRA E., 228P
- MAGGI, C.A. *see* EVANGELISTA, S., 725
- MAGNAN, J. *see* KOSTERLITZ, H.W., 205P
- MAJEWSKI, H., RAND, M.J. & TUNG, L.-H. Activation of prejunctional  $\beta$ -adrenoceptors in rat atria by adrenalectomy applied exogenously or release as a co-transmitter, 669
- MALTA, E., RAPER, C. & TAWA, PAULINE E. Pre- and post-junctional effects of clonidine- and oxymetazoline-like compounds in guinea-pig ileal preparations, 355
- MALTIN, C.A. *see* HARRIS, J.B., 157
- MANN, S.P. *see* HILL, M.W., 247P
- MARSDEN, C.D. *see* CLOW, A., 242P
- MARSHALL, R.J. *see* DRYDEN, W.F., 196P
- MARSHALL, R.J. & MUIR, A.W. The beneficial actions of bepridil in acute myocardial infarction in anaesthetized dogs, 471
- MARSHALL, R.J., MUIR, A.W. & WINSLOW, EILEEN. A comparison of the intensity and duration of antidysrhythmic effects of mexiletine and Org 6001 in anaesthetized rats, 199P
- MARSHALL, R.J., MUIR, A.W. & WINSLOW, E. Development of a severe model of early artery ligation-induced dysrhythmias in the anaesthetized rat, 951
- MARSON, L. *see* DEARNALEY, D.P., 306P
- MARTIN, L.E. *see* BOGUES, K., 275P
- MARTIN, L.E. *see* FELLOWS, I., 274P
- MARUYAMA, M., SATOH, K. & TAIRA, N. Effects of gluceryltrinitrate and SIN-1A on musculature and vasculature of the dog trachea *in situ*, 9
- MASON, P. *see* HILLIER, K., 217P
- MASSINGHAM, R. *see* LANGER, S.Z., 281P
- MATSUNAGA, MARSH L. *see* FLORENCE, VERENA M., 721
- MATTHEWMAN, SUSAN C. *see* CLOUGH, D.P., 296P
- MEGHJI, PARVIZ *see* BURNSTOCK, GEOFFREY, 879
- MELCHIORRI, P. *see* BROCCARDO, M., 625
- MELDGAARD, L., STEINNESS, E. & WALDORF, S. Time course of ouabain uptake in isolated myocardial cells: dependence on extra-cellular potassium and calcium concentration, 341
- MELI, A. *see* EVANGELISTA, S., 725
- METCALF, G. *see* DETTMAR, P.M., 262P
- METCALF, G. *see* HOWE, G.M., 231P
- MEYER, PHILIPPE *see* GUINCHENEY, PASCALE, 33
- MIGNOT, G. & SAVINI, E.C. Apocodeine as a dopamine antagonist in the rabbit, 238P
- MIGNOT, G. & SAVINI, E.C. Dopaminergic stereotyped and turning behaviour in the rabbit, 270P
- MIKKELSEN, ERICH & LEDERBALLE PEDERSEN,

McCABE, P.J. *see* GEISOW, H.P., 219P

McCARTHY, J.J. *see* BUNCE, K.T., 257P

MACDONALD, E. *see* IHALAINEN, E., 263P



- OLE. Comparative studies on the effects of tolmesoxide (Rx71107), a tolmesoxide metabolite (Rx71112) and nifedipine in isolated blood vessels, 799
- MILLER, A.A. *see* HARTLEY, J.E., 268P
- MILLER, A.A., O'DONNELL, R. & WEBSTER, R.A. Studies on folic acid induced epileptogenic kindling in the rat, 318P
- MILLER, K.W. *see* BRASWELL, L.M., 187P
- MILLER, R.C. *see* GODFRAIND, T., 252P
- MINCHIN, M.C.W. The effect of anaesthetics on the uptake and release of  $\gamma$ -aminobutyrate and D-aspartate in rat brain slices, 681
- MINCHIN, M.C.W. (introduced by ANGEL, A.) The effect of catechol on amino acid transmitter release from thalamic slices, 234P
- MONGAR, J.L. *see* JOHANSEN, T., 208P
- MONGAR, J.L. & MOODLEY, I. Dextran and histamine secretion from rat mast cells: effect of glucose and low molecular weight glucose polymers, 206P
- MONTECUCCHI, P.C. *see* BROCCARDO, M., 625
- MOODLEY, I. *see* MONGAR, J.L., 206P
- MOORE, N.A., PULLAR, I.A. & TYE, N.C. (introduced by DAWSON, W.) Selective enhancement of dopamine (induced behaviours) following chronic neuroleptic treatment, 269P
- MOORE, P.K. *see* HOULT, J.R.S., 218P
- MOORE, P.K. *see* HOULT, J.R.S., 250P
- MORGAN, B.A. *see* DETTMAR, P.M., 262P
- MORISSET, J. *see* DUMONT, Y., 347
- MORSELLI, P.L. *see* DURAND, A., 183P
- MUIR, A.W. *see* MARSHALL, R.J., 199P
- MUIR, A.W. *see* MARSHALL, R.J., 471
- MUIR, A.W. *see* MARSHALL, R.J., 951
- MUIR, T.C. *see* KING, B.F., 87
- MÜLLER-SWEINITZER, E. *see* HOF, R.P., 196P
- MURNAGHAN, MAURICE F. Effect of fatty acids on the ventricular arrhythmia threshold in the isolated heart of the rabbit, 909
- MURUGAIAH, K. *see* CLOW, A., 242P
- MYERS, P.L. *see* CHAPLEO, C.B., 280P
- N**
- NAHORSKI, S.R. *see* ASHTON, L., 277P
- NAHORSKI, S.R. *see* DICKINSON, K.E.J., 202P
- NAHORSKI, S.R. *see* HICKS, P.E., 194P
- NAKAMURA, HIDEO & SHIMIZU, MASANAO. Site of analgesic action of a non-steroidal, anti-inflammatory drug, tolmetin sodium, in rats, 779
- NAKAMURA, HIDESHI *see* KOBAYASHI, JUN'ICHI, 581
- NASH, H.L. & WALLIS, D.I. Effects of divalent cations on responses of a sympathetic ganglion to 5-hydroxytryptamine and 1,1-dimethyl-4-phenyl piperazinium, 759
- NATHANSON, JAMES A. Effects of a potent and specific  $\beta_2$ adrenoceptor antagonist on intraocular pressure, 97
- NAYLOR, R.J. *see* COSTALL, B., 312P
- NEAL, M.J. *see* CUNNINGHAM, JO., 655
- NEUMANN, P. *see* HOF, R.P., 196P
- NEWTON, S.H. *see* BENTLEY, G.A., 325

- NICHOLAOU, N. *see* ARBUTHNOTT, G.W., 143
- NICHOLSON, A.N. & WRIGHT, CATHERINE M., 6( $\pm$ )-Fluorotryptophan: sleep and wakefulness in the rat, 244P
- NING, ANGELA C.W.S. *see* LEAVER, H. ANNE, 223P
- NISHI, K. *see* AKAIKE, N., 431
- NOTATIANNI, LIDIA J. *see* BENNETT, P.N., 273P
- NUNN, BARBARA. Arachidonate metabolism plays only a minor role in collagen-induced aggregation in mouse citrated platelet-rich plasma, 251P
- NUTT, D.J. *see* COWEN, P., 265P

## O

- O'CONNOR, S.E. *see* BROWN, R.A., 189P
- O'DONNELL, R. *see* MILLER, A.A., 318P
- OFFARD, R.A. *see* JENNER, D.J., 212P
- OGDEN, D.C. *see* COLQUHOUN, D., 317P
- OGDEN, P. *see* AITON, J.F., 333
- OHIZUMI, YASUSHI *see* KOBAYASHI, JUN'ICHI, 581
- OSBORNE, R.H. *see* DEARNALEY, D.P., 306P
- OYAMA, Y. *see* AKAIKE, N., 431

## P

- PADJEN, A.L. *see* COLLIER, B., 525
- PALMER, M.A., PIPER, PRISCILLA J., SAMHOUN, MARWA N. & TIPPINS, J.R. Some actions of natural and synthetic slow-reacting substances on isolated preparations, 213P
- PALMER, R.F. *see* BOREHAM, D.R., 181P
- PALMER, R.M.J. & YEATS, DARYL A. (introduced by EAKINS, K.E.) Leukotriene B: a potent chemotactic agent and stimulus for lysosomal enzyme secretion for human neutrophils (PMN), 260P
- PARSONS, M.E. *see* BUNCE, K.T., 41
- PARSONS, M.E., PIPKIN, G. & PRICE, C.A. The effect of histamine antagonists on gastric mucosal haemorrhage in the rat, 227P
- PASERO, G. *see* BOMBARDIERI, S., 893
- PATERSON, S.J. *see* KOSTERLITZ, H.W., 299P
- PATERSON, S.J. *see* KOSTERLITZ, H.W., 939
- PATRONO, C. *see* BOMBARDIERI, S., 893
- PAULI, G. *see* FROSSARD, N., 933
- PEARCE, JACALYN B. *see* FILE, SANDRA E., 228P
- PECK, M.J. *see* FORREST, M.J., 211P
- PERCY, W.H. *see* LEES, G.M., 535
- PETRIE, J.C. *see* BARBER, H.E., 178P
- PHILLIPS, CHRISTINE A. & POYSER, N.L. Prostaglandins, thromboxanes and the pregnant rat uterus at term, 75
- PINCA, E. *see* BOMBARDIERI, S., 893
- PIPER, PRISCILLA J. *see* PALMER, M.A., 213P
- PIPSA, J.P. *see* IHALAINED, E., 263P
- PIPILI, E. (introduced by POYSER, N.L.) The effect of prazosin upon the release of prostaglandin  $I_2$  and  $E_2$  from the perfused mesenteric arterial bed of the rabbit following stimulation of the adrenergic nerves, 215P
- PIPKIN, G. *see* PARSONS, M.E., 227P

- PISCIOOTTO, PATRICIA *see* GRAZIANO, JOSEPH, 649  
 PITT, EVA *see* JENNER, D.J., 212P  
 POIRIER, G.G. *see* DUMONT, Y., 347  
 POYSER, N.L. *see* PHILLIPS, CHRISTINE A., 75  
 POYSER, N.L. *see* PIPILI, E., 215P  
 POYSER, N.L. & SWAN, CAROL G. The effect of prostaglandins on the rabbit and rat vas deferens, 216P  
 PRAKASH, N.J. *see* BARTHOLEYN, J., 212P  
 PRICE, C.A. *see* PARSONS, M.E., 227P  
 PUGLIESE, F. *see* BOMBARDIERI, S., 893  
 PULLAR, I.A. *see* MOORE, N.A., 269P  
 PUN, R.Y.K. *see* BRADSHAW, C.M., 47  
 PUN, R.Y.K. *see* BRADSHAW, C.M., 243P  
 PURVIS, J.R. *see* FOY, J.M., 286P  
 PYCOCK, C.J. *see* DAWBARN, D., 149  
 PYCOCK, C.J. *see* DAWBARN, D., 240P

## Q

- QUIK, M. *see* COLLIER, B., 525

## R

- RAINSFORD, K.D. (introduced by FORD-HUTCHINSON, A.W.) Comparison of the gastric ulcerogenic activity of new non-steroid anti-inflammatory drugs in stressed rats, 226P  
 RAMEY, E.R. *see* KARANIAN, J.W., 903  
 RAMWELL, P.W. *see* KARANIAN, J.W., 903  
 RAMWELL, PETER W. *see* ANGERIO, ALLAN D., 101  
 RAMWELL, PETER W. *see* FEUERSTEIN, NILI, 511  
 RAND, M.J. *see* MAJEWSKI, H., 669  
 RANG, H.P. *see* GURNEY, A., 318P  
 RAPER, C. *see* MALTA, E., 355  
 REES, A.R. *see* GREEN, A.R., 703  
 REEVES, J.J. *see* DALY, M.J., 313P  
 REID, J.L. *see* BERTHELOT, A., 193P  
 RHEE, H.M. Accumulation of [ $^3$ H]-ouabain in functionally different canine tissues: differential Rb $^+$  uptake, 81  
 ROACH, A.G. *see* CHAPLEO, C.B., 280P  
 ROACH, A.G. *see* DOXEY, J.C., 291P  
 ROBERTS, C. JANE & WALKER, R.J. The actions of L-glutamate and related compounds on the central neurones of the Horse-shoe crab, *Limulus polyphemus*, 261P  
 ROBERTS, M.H.T. & WRIGHT, D.M. The effects of chronic section of dorsal roots on the responsiveness of motoneurons to 5-hydroxytryptamine and a substance P analogue, 587  
 ROBERTS, P.J. *see* FOSTER, G.A., 235P  
 ROBERTS, P.M. *see* BARLOW, R.B., 183P  
 ROBINSON, C. *see* DOLLERY, C.T., 214P  
 ROBSON, L.E. *see* KOSTERLITZ, H.W., 939  
 ROCK, MEIR *see* KORCZYN, AMOS, 807  
 RODGER, I.W. & SHARID, M. Effects of increased pH on contractile force of rabbit isolated papillary muscles, 295P  
 RODRÍGUEZ, RODOLFO *see* LUJÁN, MIGUEL, 859  
 ROSE, JOHN C. *see* ANGERIO, ALLAN D., 101

- ROTHWELL, NANCY J. *see* LATHAM, A., 182P  
 ROWLANDS, GETHIN J. *see* FOSTER, G.A., 235P  
 RUCKSTUHL, M. *see* FROSSARD, N., 933  
 RYALL, R.W. *see* KING, K.T., 455

## S

- SABBAGH, A. *see* KALIR, A., 55  
 SAIAG, B. *see* CHEVILLARD, C., 811  
 SALMON, J.A. *see* CARR, S.C., 253P  
 SALVATI, PATRICIA & WHITTLE, B.J.R. The vasoactive effects of some arachidonate lipoxygenase and cyclo-oxygenase products on the isolated perfused stomach of rabbit and rat, 256P  
 SAHYOUN, H.A. *see* COSTALL, B., 312P  
 SAHYOUN, H.A. *see* HICKS, R., 311P  
 SAMHOUN, MARWA N. *see* PALMER, M.A., 213P  
 SATOH, K. *see* MARUYAMA, M., 9  
 SAUNDERS, L.C. *see* BANERJEE, A.K., 225P  
 SAUTER, J.F. *see* BRASWELL, L.M., 187P  
 SAVINI, E.C. *see* MIGNOT, G., 270P  
 SCATTON, B. *see* CAVERO, I., 289P  
 SCATTON, B. *see* DEDEK, J., 239P  
 SCOTT, EVELYN M. The effects of atenolol on spontaneous and reflex activity of the sympathetic nerves in the anaesthetized cat, 605  
 SCOTT, M.G. & TEMPLE, D.J. (introduced by SWANTON, J.G.) Investigations into the suitability of the male rat as a source of hepatocytes for studies of drug interactions which may involve induction of acetylation, 272P  
 SCOTT, N.C. *see* FRENCH, A.M., 321  
 SHANKS, R.G. *see* ALLEN, J.D., 198P  
 SHARID, M. *see* RODGER, I.W., 295P  
 SHARIF, N.A. *see* FOSTER, G.A., 235P  
 SHAW, G.G. *see* HARMAN, R.J., 165  
 SHARMAN, D.F. *see* HILL, M.W., 247P  
 SHARMAN, D.F. *see* HOLZBAUER, MARGARETHE, 265P  
 SHARMAN, D.F. *see* HOLZER, P., 248P  
 SHEPPERSON, N.B. *see* LANGER, S.Z., 281P  
 SHIELDS, P.A. *see* DOWNS, L.G., 252P  
 SHIMIZU, MASANAO *see* NAKAMURA, HIDEO, 779  
 SHKUROVICH, MARIO *see* BRAILOWSKY, SIMÓN, 887  
 SIEGELBAUM, S.A. *see* COLQUHOUN, D., 317P  
 SILINSKY, E.M. On the calcium receptor that mediates depolarization-secretion coupling at cholinergic motor nerve terminals, 413  
 SIMMONDS, M.A. Distinction between the effects of barbiturates, benzodiazepines and phenytoin on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin, 739  
 SIMMONDS, M.A. Pentobarbitone and phenobarbitone interact differently with the  $\gamma$ -aminobutyric acid antagonists bicuculline and picrotoxin, 229P  
 SIMMONS, N.L. Identification of a purine (P $_2$ ) receptor linked to ion transport in a cultured renal (MDCK) epithelium, 379  
 SLATER, N.T. *see* BRADSHAW, C.M., 47  
 SLATER, N.T. *see* BRADSHAW, C.M., 243P  
 SLATER, T.F. *see* BOREHAM, D.R., 181P

- SLUSARCZYK, HELEN & TURNER, P. Studies on benfluorex and its metabolites on glucose uptake into rat isolated hemidiaphragm, 272P
- SPAYNE, J.A. *see* CARR, S.C., 253P
- SPEDDING, M. Antagonism of the inhibitory effects of clonidine and dopamine in the guinea-pig ileum by metoclopramide, sultopride and sulpiride, 279P
- SPRAGGS, C.F. *see* BUNCE, K.T., 257P
- SMALL, R.C. & YARKER, YVONNE E.  $\beta$ -Bungarotoxin in studies of neuroeffector transmission in the guinea-pig, 184P
- SMITH, C.L. *see* HILLIER, K., 217P
- SMITH, J.R. *see* BUTLER, K.D., 25
- SMITH, J.R. & WHITE, A.M. Fibrin, red cell and platelet interactions in an experimental model of thrombosis, 219P
- SMITH, M.J.H. *see* BRAY, M.A., 210P
- SMITH, M.J.H. *see* BRAY, M.A., 258P
- SMITH, M.J.H. *see* M.A., 259P
- SMITH, R.L. *see* CALDWELL, J., 180P
- SMITH, P.A. *see* COLLIER, B., 525
- SMITH, SUSAN E. *see* CHAPLEO, C.B., 280P
- STABLES, R. *see* DALY, M.J., 313P
- STANFORD, S.C. *see* FILLENZ, M., 401
- STARR, JENNIFER *see* BENTLEY, G.A., 325
- STARR, M.S. *see* COLLINGBRIDGE, G.L., 271P
- STEINESS, E. *see* MELDGAARD, L., 341P
- STOCK, M.J. *see* LATHAM, A., 182P
- STOKER, M.J. *see* BRADSHAW, C.M., 243P
- STONE, T.W. The effects of 4-aminopyridine on the isolated vas deferens and its effects on the inhibitory properties of adenosine, morphine, noradrenaline and  $\gamma$ -aminobutyric acid, 791
- STONE, T.W. Theophylline does not affect morphine inhibition of the isolated vas deferens, 787
- STRACHAN, LESLEY, J. & WATSON, M.L. (introduced by UNGAR, A.) The effect of captopril on the renal and systemic haemodynamic action of PGI<sub>2</sub> in anaesthetized dogs, 297P
- STREET, JAMES A. *see* HEMSWORTH, BRIAN A., 119
- STRETTLE, R.J. *see* BATES, R.F.L., 302P
- STUBLEY, J.K. *see* BARLOW, R.B., 183P
- SU, M.J. *see* CHANG, C.C., 495
- SUPRADIST, S. *see* BENNETT, P.N., 273P
- SUGIO, KAZUO & TSURUFUJI, SUSUMU. Mechanism of anti-inflammatory action of glucocorticoids: re-evaluation of vascular constriction hypothesis, 605
- SUGRUE, M.F. Effect of chronic antidepressant administration on rat brain  $\alpha_2$ -adrenoceptor sensitivity, 241P
- SUGRUE, M.F. Fenfluramine-induced hyperthermia in rats: antagonism by some, but not all selective inhibitors of 5-hydroxytryptamine uptake, 307P
- SUTHERLAND, A. *see* JONES, R.L., 304P
- SWAN, CAROL G. *see* POYSER, N.L., 216P
- SZABADI, E. *see* BRADSHAW, C.M., 47
- SZABADI, E. *see* BRADSHAW, C.M., 243P

## T

- TAIRA, N. *see* MARUYAMA, M., 9
- TAJIMA, KIKUO *see* ITO, YUSHI, 563

- TAWA, PAULINE E. *see* MALTA, E., 355
- TENNE, M. *see* FINBERG, J.P.M., 65
- THEODOROU, A. *see* CLOW, A., 242P
- THOOLEN, M.J.M.C., TIMMERMANS, P.B.M.W.M. & VAN ZWIETEN, P.A. Withdrawal syndrome after continuous infusion of clonidine in the spontaneously hypertensive and normotensive rat, 195P
- TIMMERMANS, P.B.M.W.M. *see* THOOLEN, M.J.M.C., 195P
- TIPPINS, J.R. *see* PALMER, M.A., 213P
- TOMLINSON, S. *see* AMIRRASOOLI, H., 639
- TOWNSEND, Y. *see* CRANSTON, W.I., 6
- TRAYNOR, J.R. *see* KELLY, P.D., 301P
- TRICKLEBANK, M.D. *see* CURZON, G., 555
- TSANG, A.Y.F. *see* LEE, W.M., 633
- TSURUFUJI, SUSUMU *see* SUGIO, KAZUO, 605
- TULLOCH, I.F. *see* DETTMAR, P.M., 262P
- TULLOCH, I.F. *see* HOWE, G.M., 231P
- TUNG, L.-H. *see* MAJEWSKI, H., 669
- TURNER, N.C. *see* CURWAIN, B.P., 917
- TURNER, P. *see* SLUSARCZYK, HELEN, 272P
- TWISSELL, D.J. *see* BUTCHER, R.A., 316P
- TYE, N.C. *see* MOORE, N.A., 269P
- TYERS, M.B. *see* BULL, D.R., 264P

## U

- UNDERWOOD, A.H. *see* BROOKS, I., 198P
- UNDERWOOD, A.H. *see* BROOKS, I., 285P
- UNGAR, A. *see* STRACHAN, LESLEY, J., 297P

## V

- VAN ZWIETEN, P.A. *see* THOOLEN, M.J.M.C., 195P
- VASKO, M.R. & VOGT, M. Site of interaction between morphine and 5-hydroxytryptamine-containing neurones in the rat brain, 245P
- VELLUCCI, SANDRA & WEBSTER, R.A. GABA and benzodiazepine modification of [<sup>14</sup>C]-glutamate release from rat spinal cord slices, 318P
- VIRDEE, NARINDER *see* DOXEY, J.C., 291P
- VOGT, M. *see* VASKO, M.R., 245P
- VOSE, C.W. *see* BOREHAM, D.R., 181P

## W

- WADDINGTON, J.L. *see* GAMBLE, S.J., 240P
- WALDORF, S. *see* MELGAARD, L., 341P
- WALI, F.A. *see* BELL, CATHERINE, 311P
- WALKER, R.J. *see* ROBERTS, C. JANE, 261P
- WALLIS, D.I. *see* NASH, H.L., 759
- WALTER, D.S. *see* HOWE, G.M., 231P
- WALTER, D.S. *see* HOWE, G.M., 231P
- WALTER, W.A.W. *see* BOURA, A.L.A., 3
- WARBUBURTON, G.R. *see* HICKS, P.E., 188P
- WATSON, M.L. *see* STRACHAN, LESLEY J., 297P
- WATTS, A.D. *see* FENIUK, W., 191P
- WATTS, I.S. *see* EMMS, HELEN, 221P

- WEBSTER, R.A. *see* HARTLEY, J.E., 268P  
 WEDMORE, C.V. & WILLIAMS, T.J. Evidence for two types of vascular permeability-increasing mediators: the direct action of histamine and bradykinin; the polymorph-dependent action of C5a, leukotriene B<sub>4</sub> and formyl tripeptide, 209P  
 WEBSTER, R.A. *see* KENT, A.P., 318P  
 WEBSTER, R.A. *see* MILLER, A.A., 318P  
 WEBSTER, R.A. *see* VELLUCCI, SANDRA, 318P  
 WELLER, M.P.I. & WRIGHT, D.J.M. (introduced by BAKER, J.B.E.) Inhibition by laevoproprianolol and naloxone of solbutamol-induced depression of white cell and platelet counts in mice, 299P  
 WESTON, A.H. *see* HICKS, P.E., 188P  
 WHALLEY, E.T. *see* COLEMAN, R.A., 222P  
 WHALLEY, E.T. *see* GEIGER, R., 224P  
 WHITE, A.C. *see* LATHAM, A., 182P  
 WHITE, A.M. *see* SMITH, J.R., 219P  
 WHITE, E. *see* DEARNALEY, D.P., 306P  
 WHITE, SUSAN K. *see* COLEMAN, R.A., 222P  
 WHITTLE, B.J.R. *see* SALVATI, PATRICIA, 256P  
 WILEMAN, T.E. *see* ELLIOTT, P.N.C., 303P  
 WILLIAMS, K.I. *see* TAHIR, K.E.H., 695  
 WILLIAMS, T.J. *see* FORREST, M.J., 211P  
 WILLIAMS, T.J. *see* WEDMORE, C.V., 209P  
 WILLIAMSON, F.B. *see* LONG, W.F., 505  
 WILLOUGHBY, B.A. *see* BOGUES, K., 275P  
 WILLOUGHBY, B.A. *see* FELLOWS, I., 274P  
 WILSON, A.N.A. (introduced by DOXEY, J.C.) The release of an unidentified substance from the guinea-pig isolated atria and the inhibitory action of opiates, 294P  
 WILSON, K.A. *see* DOWNING, O.A., 290P  
 WILSON, N.H. *see* JONES, R.L., 220P  
 WILSON, N.H. *see* JONES, R.L., 304P  
 WILSON, R. *see* ALLEN, J.D., 198P  
 WILSON, V.G. *see* DOWNING, O.A., 290P  
 WINSLOW, EILEEN *see* MARSHALL, R.J., 199P  
 WINSLOW, E. *see* MARSHALL, R.J., 951  
 WONG, P.Y.D. *see* LEE, W.M., 633  
 WORCEL, M. *see* CHEVILLARD, C., 811  
 WORMS, P. *see* LLOYD, K.G., 232P  
 WRIGHT, CATHERINE M. *see* NICHOLSON, A.N., 244P  
 WRIGHT, D.J.M. *see* WELLER, M.P.I., 298P  
 WRIGHT, D.M. *see* ROBERTS, M.H.T., 587  
 WYATT, D. *see* BANERJEE, A.K., 225P  
 WYLLIE, M.G. *see* LATHAM, A., 182P

## Y

- YARKER, YVONNE E. *see* SMALL, R.C., 184P  
 YATES, M.S. *see* BOWMER, C.J., 276P  
 YEATS, DARYL A. *see* PALMER, R.M.J., 260P  
 YODIM, M.B.H. *see* BEN HARRI, R.R., 461  
 YODIM, M.B.H. *see* FINBERG, J.P.M., 65  
 YODIM, M.B.H. *see* KALIR, A., 55

## Z

- ZANGOURAS, A. *see* CALDWELL, J., 180P  
 ZIV, E. *see* BAR-ON, H., 21  
 ZIVKOVIC, B. *see* DEDEK, J., 239P  
 ZIVKOVIC, B. *see* DUNSTAN, R., 237P

# SUBJECT INDEX

## A

- A23187**, stimulation of short circuit current and effect on adenosine triphosphate effects on short circuit current in cultured renal (MDCK) epithelium, 379
- Abdominal constriction test**, for studying the antinociceptive effect of morphine and related drugs, in mouse, 325
- Acetaldehyde**, failure to mimic splanchnic arteriolar or venular dilator actions of ethanol in rats, 578
- Acetyl- $\beta$ -methylcholine**, responses of Renshaw cells to, effect of atropine, methylatropine and lachesine in anaesthetized cats, 455
- N-acetyl- $\beta$ -glucosaminidase**, urinary excretion, effect of *cis*-dichlorodiammineplatinum II followed by 2,3-dimercaptosuccinic acid treatment in rats, 649
- Acetylation**, induction by drug interactions, study in isolated hepatocytes in male rats, 272P
- Acetylcholine**, activation of ion channels, recording of currents, in skeletal muscle membrane, 317P
- , contractile responses of rat anococcygeus muscle to, effect of antimuscarinic agents, 829
  - , effect of atropine and oxotremorine on release in rat phrenic nerve-diaphragm preparations, 481
  - , effect on single cerebral cortical neurones in rat, 47
  - , production of contractions in rabbit rectococcygeus muscle, effect of stimulation of extrinsic inhibitory nerves and of sympathomimetic drugs, 87
  - , responses of guinea-pig ileum to, effect of antibiotics, 535
  - , responses of Renshaw cells to, effect of atropine, methylatropine and lachesine in anaesthetized cats, 455
  - , role of prostaglandins in feed-back inhibitory mechanisms for release in dog, 563
  - , synchronous evoked secretion, effect of calcium and strontium cations on mediating receptors in frog nerve-muscle preparations, 413
- [<sup>14</sup>C]-**acetylcholine**, veratridine-evoked release from spinal cord, effect of external concentration of calcium in rats, 655
- Acetylcholine receptors**, re-evaluation in feline Renshaw cells, 455
- , *Torpedo californica*, effect of non-specific perturbors, 187P
- Acetylcholine stimulation**, effect of clonidine- and oxymetazoline-like compounds on responses to, in reserpine-treated guinea-pigs, 355
- Acetylenic compounds**, inhibitory potency on monamine oxidase types A and B in rat brain mitochondria, 55

- Action potentials**, tetrodotoxin-resistant, induction in muscles of rats treated with venom of Australian common brown snake, 157
- Active tension**, in human isolated crural veins and rat thoracic aorta, effect of tolmesoxide, Rx71112 and nifedipine, 799
- Adenosine**, effect on responses to hydralazine and propildazine in rat isolated tail artery, 811
- , effects in guinea-pig and frog heart, 879
  - , induction of relaxation of carbachol contracted taenia coli of guinea-pig, 617
  - , inhibition of electrically-evoked twitch of the isolated superfused mouse vas deferens, 787, 791
- 2-Cl-adenosine**, effect on responses to hydralazine and propildazine in rat isolated tail artery, 811
- Adenosine diphosphatase**, anatomical distribution of activity in rabbit aorta, 309P
- Adenosine diphosphate**, aggregation of human platelets, inhibition by  $R_p$  and  $S_p$  diastereoisomers of adenosine 5'-O-(1-thiodiphosphate), 409
- Adenosine 5'-diphosphate**, induction of relaxation of carbachol-contracted taenia coli of guinea-pig, 617
- Adenosine 5'- $\alpha$ ,  $\beta$ -methylene diphosphonate**, effect on secretion of insulin in isolated perfused rat pancreas, 105
- Adenosine 5'- $\alpha$ ,  $\beta$ -methylene triphosphate**, effect on secretion of insulin in isolated perfused rat pancreas, 105
- Adenosine 3',5'-monophosphate**, cyclic, levels in canine atrial and ventricular muscle, effect of carbachol, sodium nitroprusside and 8-bromo-guanosine 3',5'-monophosphate, 393
- , cyclic, response to prostaglandin  $E_1$ , in platelets, effect of heparin *in vivo* and *in vitro*, 639
  - , N<sup>6</sup>-2'-O-dibutyl, effect on rectal temperature in the restrained rabbit, 314P
  - , raised by activation of adenylate cyclase, stimulation by 5-hydroxytryptamine in salivary gland of the blowfly, 729
- Adenosine 3',5'-monophosphate phosphodiesterase**, cyclic, inhibition by ZK 62711, M & B 22948, theophylline and papaverine in rats, 933
- Adenosine 5'-monophosphate**, effects in guinea-pig and frog heart, 879
- , induction of relaxation of carbachol-contracted taenia coli of guinea-pig, 617
  - , inhibition of formation by theophylline in rat brain and kidney, 467
- (R)-Adenosine 5'-O-(1-thiodiphosphate)**, effect on human platelets, 409
- (S)-Adenosine 5'-O-(1-thiodiphosphate)**, effect on human platelets, 409

- Adenosine 5'-O-(2-thiodiphosphate)**, effect on human platelets, 405
- Adenosine triphosphatase**, sodium, potassium-dependent, activity in brown adipose tissue in relation to resting metabolic rate and the effects of cicalindol in rat, 182P
- Adenosine triphosphate**, inhibition of platelet aggregation by  $R_p$  and  $S_p$  diastereoisomers of adenosine 5'-O-(1-thiodiphosphate), 409
- , stimulation of short circuit current in cultured renal (MDCK) epithelium, 379
- Adenosine 5'-triphosphate**, effect on responses to hydralazine and propildazine in rat tail artery, 811
- , effects in guinea-pig and frog heart, 879
  - , induction of relaxation of carbachol-contracted taenia coli of guinea-pigs, 617
  - , inhibition of electrically-evoked contractions of isolated superfused mouse vas deferens, 791
- Adenylate cyclase**, noradrenaline- and dopamine-stimulated, effect of withdrawal from chronic administration of dexamphetamine and bupropion in rats, 268P
- , prostaglandin  $E_1$ -stimulated, inhibition by adenosine 5'-O-(2-thiodiphosphate) in human platelets, 405
  - , prostaglandin  $E_1$ -stimulated, lack of inhibition by  $R_p$  and  $S_p$  diastereoisomers of adenosine 5'-O-(1-thiodiphosphate) in human platelets, 409
  - , stimulation by prostaglandin  $E_1$ , inhibition by heparin, 639
- 5'-Adenylmethylenediphosphonate**, effect on secretion of insulin in isolated perfused rat pancreas, 105
- Adjuvant arthritis**, effect of corticosteroids encapsulated in intact erythrocytes administered intravenously, 212P
- Adrenaline**, activation of prejunctional  $\beta$ -adrenoceptors in rat atria by exogenous application or released as a co-transmitter, 669
- , effect on calcium chloride-induced arrhythmias in the rat, 725
  - , uptake and release in rat atria by field stimulation, after preincubation with adrenaline and incubation with noradrenaline, 669
- (-)-**Adrenaline**, inhibition of [ $^3H$ ]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- Adrenergic nerves**, stimulation, induction of release of prostaglandins  $I_2$  and  $E_2$ , effect of prazosin in rabbit, 215P
- Adrenergic transmitters**, effect of noradrenaline and phenoxybenzamine on release from guinea-pig atria, role of calcium, 363
- Adrenoceptor agonists**, presynaptic effects *in vivo* in cat heart, 192P
- $\alpha$ -**Adrenoceptor agonists**, contractile responses of anococcygeus muscle in mouse, 284P
- , hypotensive and sedative effects in rats: relationship to  $\alpha_1$  and  $\alpha_2$ -adrenoceptor potency, 595
- $\alpha_1$ -**Adrenoceptor agonists**, potency in relation to hypotensive and sedative effects in rats, 595
- Adrenoceptor antagonists**, presynaptic effects *in vivo* in cat heart, 192P
- $\beta$ -**Adrenoceptor antagonists**, interaction with 5-hydroxytryptamine in rat brain stem, microiontophoretic study, 245P
- , role of local anaesthetic properties in antagonizing calcium chloride-induced arrhythmias in rats, 725
  - , uptake and loss in rat lung slices, 119
- $\beta_1$ -**Adrenoceptor antagonists**, effect on renin release and on isoprenaline-induced tachycardia and hypotension in the cat, 749
- $\beta_2$ -**Adrenoceptor antagonists**, effect on intraocular pressure in rabbit eye, 97
- , effect on renin release and on isoprenaline-induced tachycardia and hypotension in the cat, 749
- $\alpha$ -**Adrenoceptors**, action of methoxamine, noradrenaline, and phenylephrine in single cerebral cortical neurones in rat, 47
- , blocking potencies of labetalol and its individual stereoisomers, 282P
  - , cardiac presynaptic, lack of stimulation by cirazoline in dogs and rats, 289P
  - , effect of monovalent and divalent cations and purine nucleotides in the human intact platelet, 204P
  - , effects of adrenoceptor agonists and antagonists in guinea-pig atria, 363
  - , effects on rat aorta, competitive and non-competitive blockade by prazosin, 290P
  - , mediation of effects of clonidine- and oxymetazoline-like compounds in guinea-pig ileal preparations, 355
  - , post-synaptic changes in hypertension, *in vitro* and *in vivo* in rats, 194P
  - , rat cardiac membranes, binding of [ $^3H$ ]-prazosin and [ $^3H$ ]-dihydroergocryptine, 33
  - , responses in two models of experimental hypertension in rabbit, 193P
  - , selectivity, clonidine-influence of aromatic substitution in rat, 280P
  - , structural requirements for blockade of different types, 283P
- $\alpha_1$ -**Adrenoceptors**, mediation of chronotropic responses in the rat heart, 584
- , location predominantly intrasynaptically in vascular smooth muscle neuroeffector junctions, 281P
  - , rat cardiac membranes, binding of [ $^3H$ ]-prazosin and [ $^3H$ ]-dihydroergocryptine, 33
- $\alpha_2$ -**Adrenoceptors**, effect of chronic antidepressant administration on sensitivity in rat brain, 241P
- $\beta$ -**Adrenoceptors**, blocking potencies of labetalol and its individual stereoisomers, 282P
- , from rat and rabbit lung, solubilization, 202P
  - , in developing rat lung, 277P
  - , mediation of responses of cardiac, respiratory and uterine tissues of the guinea-pig, reserpine-induced supersensitivity to, 202P
  - , mediation of sympathetically activated renin release in the cat, 749
  - , prejunctional, activation in rat atria by adrenaline applied exogenously or released as a co-transmitter, 669
- Adrenocorticotrophic hormone**, activity in pentobarbitone and morphine treated rats, 246P
- Age**, effect on appearance of pancreatic muscarinic receptors and development of pancreatic secretory response to cholinergic stimulation in rats, 347
- , effect on the pharmacokinetics of thiopentone in humans, 175P
- AGN 1133**, effects on responses to tyramine and noradrenaline, and [ $^3H$ ]-metaraminol uptake in isolated rat vas deferens, 65
- , inhibition of brain mitochondrial monoamine oxidase in rats, 55
- AGN 1135, 1142, 1278, 2009, 2253**, inhibition of brain mitochondrial monoamine oxidase in rats, 55

- AH 19437**, inhibition of aggregation of human platelets, 219P
- , specific thromboxane receptor blocking drug, 258P
- Airways**, guinea-pig role of lipoxygenase products in hyper-reactivity, 252P
- $\beta$ -Alanine**, responses of ventral and dorsal roots to, effect of dendrotoxin in frog spinal cord, 525
- Alinidine**, effect on experimental cardiac arrhythmias in dogs, 199P
- Alphaxline/alphadolone**, effect on the transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- Alprenolol**, effect on the calcium-chloride-induced arrhythmias in the rat, 725
- Althesin**, displacement of [ $^3$ H]-dihydroxymorphine binding *in vitro* and effect of naloxone on analgesic activity *in vitro* and *in vivo* in rats, 435
- Amidephrine**, production of chronotropic response in rat heart, 584
- Amino acid transmitter**, effect of catechol on release from thalamic slices in rats, 234P
- $\gamma$ -Aminobutyric acid**, inhibition of electrically-evoked contractions of isolated superfused mouse vas deferens, 791
- , radiolabelled, effect of anaesthetics on transport in rat brain slices, 681
- , responses of ventral and dorsal roots to, effect of dendrotoxin in frog spinal cord, 525
- [ $^3$ H]- **$\gamma$ -aminobutyric acid**, calcium-independent release from rat brain slices, increase by veratridine, 655
- $\gamma$ -Aminobutyric acid-mimetic drugs**, relevance to anti-epileptic drug research, 232P
- $\gamma$ -Aminobutyric acid receptors**, effects of barbiturates, benzodiazepines and picrotoxin on activation and antagonism by bicuculline and picrotoxin in rat cuneate slices, 739
- $\gamma$ -Aminobutyric acid systems**, effect of pharmacological manipulations on posture and locomotion in the rat, 271P
- 4-Aminopyridine**, effects on isolated mouse vas deferens and on the inhibitory properties of adenosine, morphine, noradrenaline and  $\gamma$ -aminobutyric acid, 791
- , effect on synaptic responses in frog spinal cord, 525
- 5-Aminosalicylic acid**, treatment of ulcerative colitis, involvement of prostaglandin metabolism, 217P
- Amphetamine**, effect on uptake of oxprenolol by rat lung slices, 119
- , induction of changes in a dopaminergic system, inhibition by apomorphine in rats and mice, 237P
- , induction of stereotyped and turning behaviour in rabbits, 270P
- (+)-**Amphetamine**, control of responses learned to cocaine cue in pigeons, 843
- Ampicillin**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Amyl nitrate**, inhibition of electrically-evoked contractions of isolated superfused mouse vas deferens, 791
- $\alpha$ -Amylase**, release from rat parotid gland slices, effect of substance P and related peptides, 517
- Anaerobic conditions**, effect on uptake of labelled oxprenolol and propranolol by rat lung slices, 119
- Anaesthetics**, effect on uptake and release of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- , general, opiate-like activity, 435
- , local, action on rat cerebral arteriolar tone, 575
- Anaphylactic histamine release**, from rat mast cells, dependence on cellular energy metabolism, 208P
- Analgesia**, production after interaction between calcium ions and salmon calcitonin in the mouse, 302P
- , production by dermorphins in rats and mice, 625
- Analgesic activity**, opiate-like, in general anaesthetics, 435
- Angina pectoris**, possible use of bepridil in treatment, 471
- Angiotensin**, effect on  $\alpha$ -amylase release in rat parotid slices, 517
- , pressor doses confer protection against development of dysrhythmias in anaesthetized rats, 951
- Angiotensin converting enzyme inhibitor**, effect on neurogenic vasoconstriction in the pithed rat, 296P
- Anococcygeus muscle**, mouse, contractile responses to some  $\alpha$ -adrenoceptor agonists, 284P
- , rat, effect of antimuscarinic agents on the contractile responses to cholinomimetics, 829
- Anti-arrhythmic drugs**, potential antifibrillatory activity in isolated rabbit and guinea-pig heart, 373
- Anti-inflammatory drugs**, non-steroid, comparison of the gastric ulcerogenic activity in stressed rats, 226P
- , steroidal and non-steroidal, effect on synovial prostaglandin arthritis, 893
- Anti-ulcer agents**, effect on basal gastric mucosal blood flow and transmucosal flux of hydrogen and sodium ions in the conscious dog, 308P
- Anti-writhing activity**, site of action of tolmetin sodium in rats, 779
- Antidepressant drugs**, effect of chronic administration on rat brain  $\alpha_2$ -adrenoceptor sensitivity, 241P
- Antinociceptive activity**, of morphine and related compounds in mouse peritoneum, 325
- Antithrombin III**, inhibition of thrombin, potentiation by sulphated polysaccharides, 505
- $\alpha_1$ -Antitrypsin**, effect on thrombin and activated coagulation factor X activity, 505
- Aorta**, dog, accumulation of [ $^3$ H]-ouabain in relation to rubidium uptake, 81
- , rabbit, anatomical distribution of adenosine diphosphatase, 310P
- , rabbit isolated, characterization of pre- and post-junctional receptors for 5-hydroxytryptamine, 191P
- , rat, competitive and non-competitive blockade of  $\alpha$ -adrenoceptors by prazosin, 290P
- , rat, effect of gender on development and diurnal rhythm of prostaglandin receptors, 903
- Apamin**, effect on relaxations induced by adenosine 5'-triphosphate, adenosine 5'-diphosphate, adenosine 5'-monophosphate and adenosine in carbachol-contracted taenia coli, 617
- Apocodeine**, as a dopamine antagonist in rabbit, 238P
- Apomorphine**, effect of intrastriatal injection on climbing behaviour in chronically cannulated mice, 236P
- , effect on responses learned to the cocaine cue in pigeons, 843
- , induction of locomotor activity, effect of methiothepin in rats, 703
- , induction of stereotyped and turning behaviour in rabbit, 270P
- , inhibition of amphetamine-induced changes in a dopaminergic system in rats and mice, 237P
- Apoyohimbine**, pattern for  $\alpha$ -adrenoceptor antagonists or a

- template for the  $\alpha$ -adrenoceptors? 283P
- Arachidonate**, role of metabolism in collagen-induced aggregation in mouse citrated platelet-rich plasma, 251P
- Arachidonate lipoxygenase products**, effect on leucocyte migration in rabbit skin, 253P
- , vasoactive effects on the isolated perfused stomach of rabbit and rat, 256P
- Arachidonic acid**, cardiovascular responses to, effect of inhalation of cigarette smoke in anaesthetized rats, 3
- , effect on myometrial prostacyclin synthesis in pregnant rat uterus, 695
  - , endometrial uptake and esterification during oestrous cycle of guinea-pig, 223P
  - , induction of diarrhoea, effect of dexamethasone, indomethacin and codeine in mice, 549
  - , pressor response to, effect of verapamil in canine isolated lung lobe, 101
- Arachidonic acid lipoxygenase products**, chemotactic activity in rabbit eye, 254P
- Arachidonic acid metabolites**, levels in synovial fluid of patients with inflammatory arthritis, effect of  $6\alpha$ -methyl-prednisolone or indoprofen, 893
- Aromatic substitution**, influence on  $\alpha$ -adrenoceptor selectivity in rats, 280P
- Arrhythmia threshold**, ventricular, effect of fatty acids in the isolated rabbit heart, 909
- Arrhythmias**, calcium chloride-induced, role of local anaesthetic properties in antagonism by  $\beta$ -adrenoceptor blocking agents, 725
- Arterioles**, rat mesenteric terminal, effects of local administration of acetaldehyde and sodium acetate in intact rats, 578
- , rat pial, perivascular action of lidocaine in rats, 575
- Artery**, intrapulmonary dog, differential effects of prostaglandins, 819
- , rabbit ear, choline acetyltransferase activity in sympathetic nerves, 721
  - , rabbit ear, stereoselective antagonism of prejunctional dopamine receptors by sulpiride, 189P
  - , rat tail, interactions between hydralazine, propildazine and purines, 811
- Arthritis**, adjuvant-induced, effect of corticosteroids encapsulated in intact erythrocytes administered intravenously, 212P
- , chronic inflammatory, effect of steroidal and non-steroidal anti-inflammatory drugs on synovial prostaglandin system, 893
- L-Asparaginase**, reduction of type III hypersensitivity to the antigen, effect of covalent attachment to dextran, 303P
- Aspartate**, responses of ventral and dorsal roots to, effect of dendrotoxin in frog spinal cord, 525
- D-Aspartate**, radiolabelled, effect of anaesthetics on transport in rat brain slices, 681
- Aspirin**, effect on phase I and II bronchospasm in guinea-pig, 25
- , time course of anti-writhing activity in rats, 779
- Aspirin-related asthma**, an experimental model, 563
- Asthma**, aspirin-related, an experimental model, 563
- Atenolol**, effect on calcium chloride-induced arrhythmias in rat, 725
- , effect on renin release and on isoprenaline-induced tachycardia and hypotension in the cat, 749
  - , effect on spontaneous and reflex activity of sympathetic nerves in the anaesthetized cat, 609
- Atrial muscle**, dog, responses to carbachol, sodium nitroprusside and 8-bromoguanosine 3',5'-monophosphate, 393
- Atrio-ventricular node**, dog heart, accumulation of [ $^3$ H]-ouabain in relation to rubidium uptake, 81
- Atrium**, dog heart, accumulation of [ $^3$ H]-ouabain in relation to rubidium uptake, 81
- , guinea-pig, affinities of pirenzepine for muscarinic receptors, 183P
  - , guinea-pig, functional antagonism of (–)-isoprenaline by muscarinic agonists, test for null equation, 135
  - , guinea-pig, release of an unidentified substance and the inhibitory action of opiates, 294P
  - , guinea-pig, role of calcium in the effects of noradrenaline and phenoxybenzamine on adrenergic transmitter release, no support for negative feedback regulation of release, 363
  - , rat, activation of prejunctional  $\beta$ -adrenoceptors by adrenaline applied exogenously or released as a co-transmitter, 669
- Atropine**, affinity for muscarinic receptors in guinea-pig ileum and atrium, 183P
- , blockade of carbachol-induced contractions in cat isolated trachea, bronchus and lung strips, 853
  - , effect on acetylcholine release in rat phrenic nerve-diaphragm preparations, 481
  - , effect on basal and stimulated secretion of pepsin in isolated whole rat stomach, 41
  - , effect on biphasic mechanical responses of the guinea-pig ileum to venom of *Conus striatus*, 583
  - , effect on dose-dependent vasoconstrictor actions of acetaldehyde and sodium acetate in rats, 578
  - , effect on micturition responses by rats with intact and partially innervated bladder, 837
  - , effect on responses of Renshaw cells to acetylcholine, acetyl- $\beta$ -methylcholine, nicotine and DL-muscarine in anaesthetized cats, 455
  - , effect on spontaneous activities in dog trachea, 563
  - , effect on the contractile responses to cholinomimetics in the rat anococcygeus muscle, 829
  - , increased mortality from ventricular fibrilloflutter and abolished the protective effects of phenylephrine in anaesthetized rats, 951
  - , inhibition of vagally-induced gastric acid secretion in the rat, 313P
- Australian common brown snake**, effect of subcutaneous injection of venom on rat skeletal neuromuscular system, 157
- Azapetine**, antagonism of effects to methoxamine and phenylephrine on carbachol-induced tone in rabbit rectococcygeus muscle, 87

## B

- Backward walking**, 5-hydroxytryptophan-induced, effect of chronic neuroleptic treatment in rats, 149
- Barbiturates**, effects on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin in rat cuneate nucleus, 739



- Barium**, net influx in noradrenaline-induced contractions, effect of tolmesoxide and nifedipine in rat thoracic aorta, 799
- Barium ions**, cholinomimetic action on sympathetic neurones in frog, 201P
- , effect on binding of [ $^3\text{H}$ ]-prostacyclin to membranes of neuronal somatic hybrid cells, 691
- Basophils**, human, involvement in inhibitory effect of cyclic adenosine 3',5'-monophosphate on histamine release, 933
- Behavioural responses**, dopamine-mediated, influence of chronic phenothiazine treatment in rat, 240P
- , 5-hydroxytryptamine dependent, of 5-hydroxytryptophan, quipazine, fenfluramine and femoxetine after chronic neuroleptic treatment, 149
- Benfluorex**, effect on glucose uptake into rat isolated hemidiaphragm, 272P
- Benzodiazepines**, effects on gastric stress ulcers in rats, 228P
- , effects on responses to  $\gamma$ -aminobutyric acid receptor activation and activation by bicuculline and picrotoxin in rat cuneate nucleus slices, 739
- Bepidil**, actions on acute myocardial infarction in anaesthetized dogs, 471
- Betaxolol**, assessment of contribution of sympathetic and parasympathetic nerve mechanisms to the control of heart rate in conscious dogs at rest and during exercise, 288P
- Bicuculline**, antagonism of responses to muscimol in rat cuneate nucleus slices, effects of barbiturates, benzodiazepines and phenytoin, 739
- , interactions with pentobarbitone and phenobarbitone in rat, 229P
- Bile salt**, induction of disruption of gastric mucosal barrier, effect of prostaglandin  $\text{E}_2$  and prostacyclin in rats, 257P
- Biventer cervicis muscle**, chick, effects of interactions between crotaipotin and presynaptic neurotoxins, 495
- , chick, tetraethylammonium-methohexitone interactions, moving fluid electrode technique and denervation studies, 311P
- , interaction between tetraethylammonium and methoxitone, effects of caffeine and xylocaine, 185P
- Bladder**, rat intact and partially innervated, effect of atropine on micturition responses, 837
- Blood flow**, effect of glyceryl trinitrate, SIN-1A and isoprenaline in dog trachea *in situ*, 9
- , gastric mucosal, effect of anti-ulcer agents in conscious dogs, 308P
- , hepatic, effect on lignocaine and tocainide kinetics in rats, 273P
- , regional, effect of sulphonylureas in experimentally-induced diabetes in rats, 286P
- , regional, effect of theophylline in rat, 467
- , renal, effect of captopril on prostacyclin-induced increase in anaesthetized dogs, 297P
- Blood pressure**, arterial, effect of catecholamine and angiotensin treatment and of coronary artery ligation in anaesthetized rats, 951
- , decrease after isoprenaline, effect of  $\beta$ -adrenoceptor antagonists in the cat, 749
- , effect of atenolol in anaesthetized cats, 605
- , systemic, effect of captopril on prostacyclin-induced decrease in anaesthetized dogs, 297P
- , systolic and diastolic, effect of inhalation of cigarette smoke in anaesthetized rats, 3
- Body writhing**, 5-hydroxytryptophan-induced, effect of chronic neuroleptic treatment in rats, 149
- Bombesin**, effect on  $\alpha$ -amylase release from rat parotid slices, 517
- Bradykinin**, direct mediator for increasing vascular permeability in rabbit dorsal skin, 209P
- , effect on  $\alpha$ -amylase release in rat parotid slices, 517
- Brain**, guinea-pig, characterization of  $\kappa$ -subtype of the opiate receptor, 939
- , mouse, effect of 3,5-dimethylpyrazole on catecholamine levels, 263P
- , rat, inhibition of purine nucleoside formation by theophylline, 467
- , rat, site of interaction of morphine with 5-hydroxytryptamine-containing neurones, 245P
- Brain slices**, rat, effect of anaesthetics on transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate from rat brain slices, 681
- , rat, mechanism by which veratridine causes a calcium-independent release, 655
- Brain stem**, rat, microiontophoretic study of interactions between  $\beta$ -adrenoceptor antagonists and 5-hydroxytryptamine, 245P
- Bretylium**, effect on biphasic mechanical responses of the guinea-pig ileum to venom of *Conus striatus*, 583
- 8-Bromo-guanosine 3',5'-monophosphate**, effect on canine atrial and ventricular muscle, 393
- Bronchospasm**, induction by injection of Forssman serum in guinea-pig, 25
- Bronchus**, cat isolated, reactivity to carbachol, 5-hydroxytryptamine and histamine, evidence for the existence of methysergide-sensitive receptors, 853
- Brown adipose tissue**, activity of sodium, potassium dependent adenosine triphosphatase in rat, 182P
- $\beta$ -Bungarotoxin**, effect on neuroeffector-transmission in guinea-pig, 184P
- , interactions with crotaipotin in mouse diaphragm and chick biventer cervicis muscle, 495
- Bupropion**, withdrawal from chronic administration, biochemical and behavioural changes in rats, 268P
- (*t*-Butyl-amino-3-ol-2-propyl) oximino-9-fluorene hydrochloride** *see* IPS 339

## C

- C<sub>4</sub>**, effect of deficiency on pulmonary resistance to intravenous histamine, 5-hydroxytryptamine and Forssman antiserum in guinea-pigs, 25
- C5a**, polymorph-dependent mediator for increasing vascular permeability in rabbit dorsal skin, 209P
- , production in plasma of man, pig, guinea-pig, rabbit and rat, a link between complement activation and inflammatory oedema, 211P
- Caffeine**, effect on the interaction between tetraethylammonium and methohexitone in chick biventer cervicis muscle, 185P
- Calcitonin**, interaction with calcium ions in the productions of analgesia in the mouse, 302P

- Calcium**, effect of external concentration on veratridine and potassium-evoked [ $^3\text{H}$ ]- $\gamma$ -aminobutyric acid release from rat brain slices, 655
- , external concentrations, effect on noradrenaline-induced hyperpolarization of guinea-pig liver cells, 867
  - , extracellular concentrations, effect on substance P-stimulated  $\alpha$ -amylase release from rat parotid gland slices, 517
  - , extracellular concentrations, effect on time course of ouabain uptake into isolated rat myocardial cells, 341
  - , increase of free and release of bound, by noradrenaline and isoprenaline in guinea-pig liver cells, 867
  - , net influx in noradrenaline-induced contractions, effect of tolmesoxide and nifedipine in rat thoracic aorta, 799
  - , role in the effects of noradrenaline and phenoxybenzamine on adrenergic transmitter release from guinea-pig atrium, 363
  - , relationship between binding and acetylcholine secretion in frog nerve-muscle preparations, 413
  - , synaptosomal uptake, effect of theophylline-morphine interactions, 887
- <sup>45</sup>**Calcium**, prostaglandin  $\text{F}_{2\alpha}$ -mediated influx in rat mesenteric arteries, inhibition by flunarizine, 252P
- Calcium antagonist**, *in vitro* and *in vivo* effects in canine coronary artery, 196P
- Calcium chloride**, induction of arrhythmias, role of local anaesthetic properties in antagonism by  $\beta$ -adrenoceptor blocking agents, 725
- Calcium current**, effect of propranolol in *Helix aspersa* neurones, 431
- Calcium-disodium ethylenediaminetetraacetic acid**, effect on platinum accumulation in kidney after *cis*-dichlorodiammineplatinum II in rat, 649
- Calcium-free medium**, effect on veratrine-induced release of spermine from rat brain *in vitro*, 165
- Calcium ions**, effect on binding of [ $^3\text{H}$ ]-prostacyclin to membranes of neuronal somatic hybrid cells, 691
- , effect on initiation of sperm motility in rat caudal epididymal spermatazoa, 633
  - , effect on responses of rabbit sympathetic ganglion to 5-hydroxytryptamine and 1,1-dimethyl-4-phenyl piperazinium, 759
  - , external concentrations, effect on the actions of anaesthetics on transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
  - , influx into vascular smooth muscle cells, effect on pulmonary pressor effect of prostaglandin  $\text{F}_{2\alpha}$  and U-46619, 773
  - , interaction with salmon calcitonin in the production of analgesia in the mouse, 302P
- Calcium permeability**, associated with hydrolysis of phosphatidylinositol, stimulation by 5-hydroxytryptamine in salivary gland of blowfly, 729
- Calcium receptor**, mediation of depolarization-secretion coupling at cholinergic motor nerve terminals, 413
- Canrenone**, metabolism *in vitro*: evidence for the formation of a glutathione conjugate via epoxidation, 181P
- Capsaicin**, effect on vascular and sensory responses of human skin to mild injury, 755
- Captopril**, effect on the renal and systemic haemodynamic action of prostacyclin in anaesthetized dogs, 297P
- Carbachol**, effect on  $\alpha$ -amylase release from rat parotid gland slices, 517
- , effect on canine atrial and ventricular muscle, 393
  - , effect on muscles removed from rats treated with venom from Australian common brown snake, 157
  - , production of concentration-dependent contractions of cat isolated trachea, bronchus and lung strips, 853
  - , responses of ventral and dorsal roots to, effect of dendrotoxin in frog spinal cord, 525
- Carbachol-induced tone**, effect of sympathetic and non-adrenergic non-cholinergic stimulation, noradrenaline and isoprenaline in rabbit rectococcygeus muscle, 87
- Cardiac arrhythmias**, effect of alinidine in experimental dogs, 198P
- Cardioaccelerator nerve**, stimulation, production of chronotropic response in rat heart, 584
- Carrageenin**, induction of granulomatous inflammation, anti-inflammatory action of glucocorticoids, 605
- Castor oil**, induction of diarrhoea, effect on indomethacin and dexamethasone in mice, 549
- Catalepsy**, production by dermorphins in rats and mice, 625
- Catechol**, effect on amino acid transmitter release from thalamic slices in rats, 234P
- Catecholamines**, effect of 3,5-dimethylpyrazole on mouse brain levels, 263P
- , effects on circular smooth muscle of lower oesophageal and pyloric sphincter, effect of domperidone in guinea-pigs, 312P
  - , uptake and release in rat atria by field stimulation, after preincubation with adrenaline and incubation with noradrenaline, 669
- Catecholamine neurones**, uptake of 5-hydroxytryptamine in rat hypothalamus after treatment with phenelzine and tryptophan, 143
- Cellular energy metabolism**, effect on anaphylactic histamine release from rat mast cells, 208P
- $\beta$ -Cells**, transport of 5-hydroxytryptamine in pancreas of ob/ob mice, 385
- Central nervous system**, *Limulus polyphemus*, effect of L-glutamate and related compounds on central neurones, 261P
- Cerebral cortex**, rat, comparison of effects of methoxamine, noradrenaline and phenylephrine on single neurones, 47
- Cetomacrogol 1000**, effect on the absorption of insulin across the rectal mucosa in rat, 21
- Channel opening times**, by external and internal recording in rat diaphragm, 186P
- Chemotactic activity**, of arachidonic acid lipoxygenase products in rabbit eye, 254P
- , of leukotriene B for human neutrophils, 260P
- $\alpha$ -Chloralose**, effect on transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- Chloride ions**, effect of external concentrations on veratridine and potassium-evoked [ $^3\text{H}$ ]- $\gamma$ -aminobutyric acid release from rat brain slices, 655
- 2-Chloroadenosine**, antagonism of effects of extracellular calcium on evoked acetylcholine release in frog nerve-muscle preparations, 413
- p-Chloroamphetamine**, induction of swallowing, effect of tryptamine in rats, 485
- p-Chlorophenylalanine**, effect on behavioural responses to

- 5-methoxy-*N*, *N*-dimethyltryptamine and quipazine in rats, 703
- , effect on brain 5-hydroxyindoles, determination by *o*-phthalaldehyde fluorometric method and by high pressure liquid chromatography in rats, 555
- Chlorpromazine**, effect on uptake of oxprenolol by rat lung slices, 119
- Cholecystokinin-8**, effect on  $\alpha$ -amylase release in rat parotid slices, 517
- Choline acetyltransferase**, activity in the sympathetic nerves of the rabbit ear artery, 721
- Cholinergic motor neurones**, in myenteric plexus, opiate-induced dependence, 921
- , induction of dependence by clonidine in myenteric plexus of isolated guinea-pig ileum, 443
- Cholinergic nerves**, excitation, production of contraction in guinea-pig ileum by venom of *Conus Striatus*, 583
- Cholinergic stimulation**, development of pancreatic secretory response to, parallels development of muscarinic receptor population in rat, 347
- Cholinoceptor agonists**, development of pancreatic secretory response to, parallels development of muscarinic receptor population in rats, 347
- , presynaptic effects *in vivo* in cat heart, 192P
- Cholinoceptor antagonists**, preynaptic effects *in vivo* in cat heart, 192P
- Chronotropic responses**, of rat heart, mediation by  $\alpha_1$ -adrenoceptors, 584
- Ciclazindol**, effect on sodium, potassium dependent adenosine triphosphates activity in brown adipose tissue in rats, 182P
- Cigarette smoke**, effect of inhalation on cardiovascular responses of anaesthetized rat to arachidonic acid, prostaglandin E<sub>2</sub>, prostaglandin F<sub>2 $\alpha$</sub>  and prostacyclin, 3
- Cimetidine**, effect on basal and stimulated secretion of pepsin in isolated whole rat stomach, 41
- , effect on gastric mucosal haemorrhage in the rat, 227P
- Cinanserin**, effect on behavioural responses to tranlycypromine plus L-tryptophan and putative 5-hydroxytryptamine receptor agonists in rats, 703
- , effect on stimulatory effect of 5-hydroxytryptamine on cyclic adenosine 3',5'-monophosphate formation, 729
- Cirazoline**, functional and biochemical evidence for the lack of cardiac pre-synaptic  $\alpha$ -adrenoceptor agonist properties, 289P
- Circling**, induction by stimulation of dopaminergic system in rabbit, 270P
- Climbing behaviour**, effect of apomorphine in chronically cannulated mice, 236P
- Clindamycin**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Clonidine**,  $\alpha$ -adrenoceptor selectivity in rats, 280P
- , concentration in incubation fluid, effect on magnitude of contracture induced by phentolamine in guinea-pig ileum, 443
  - , hypotensive and sedative potency in rats, 595
  - , induction of dependence in cholinergic motor neurones of myenteric plexus of isolated guinea-pig ileum, 443
  - , induction of hypoactivity, attenuation by repeated electroconvulsive shock in rats and mice, 230P
  - , inhibition of [<sup>3</sup>H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
  - , inhibitory effects, antagonism by metoclopramide, sul-
- topride and sulpiride in guinea-pig ileum, 279P
  - , withdrawal syndrome after continuous infusion in spontaneously hypertensive and normotensive rat, 195P
- Clonidine-like compounds**, pre- and post-junctional effects in guinea-pig ileal preparations, 355
- Clorgyline**, inhibition of brain mitochondrial monoamine oxidase in rats, 55
- Coagulation factor X**, inhibition by  $\alpha_1$ -antitrypsin, effect of sulphated polysaccharides, 505
- Cocaine**, effect on number of abdominal constrictions in mice, 325
- Cocaine cue**, in pigeons, time course studies and generalization to structurally related compounds and (+)-amphetamine, 843
- Codeine**, effect on diarrhoea induced by endotoxin, arachidonic acid and prostaglandin E<sub>2</sub> in mice, 549
- , effect on number of abdominal constrictions in mice, 325
- Colitis**, antibiotic associated, in guinea-pig ileum and rabbit colon, 535
- Collagen**, induction of platelet aggregation, role of arachidonate in mouse citrated platelet-rich plasma, 251P
- Colon**, rabbit, effect of antibiotics on intestinal motility, 535
- Colonic mucosa**, human, prostaglandin metabolism and the effect of sulphasalazine, 5-amino salicylic acid and indomethacin in treatment of ulcerative colitis, 217P
- Complement system**, activation and inflammatory oedema, role of C5a in plasma, of man, pig, guinea-pig, rabbit and rat 211P
- Contractile force**, effect of pH in rabbit isolated papillary muscles, 295P
- Contractile responses**, of mouse anococcygeus muscle to  $\alpha$ -adrenoceptor agonists, 284P
- Contractions**, carbachol-induced in rat lung strip, inhibition by ZK 62711 and M & B 22948, 933
- , electrically stimulated, depressive action of dermorphin in guinea-pig ileum and mouse vas deferens preparations, 625
  - , elicited by transmural stimulation, effect of general anaesthetics in guinea-pig ileum, 435
  - , 5-hydroxytryptamine-induced in rat fundic strip, effect of dock leaf extracts, 306P
  - , in canine atrial and ventricular muscle, effects of carbachol, sodium nitroprusside and 8-bromo-guanosine 3',5'-monophosphate, 393
  - , in response to cholinomimetics or noradrenaline, effect of antimuscarinic agents in rat anococcygeus muscle, 829
  - , induction by carbachol, 5-hydroxytryptamine and histamine in cat isolated trachea, bronchus and lung strip, 853
  - , induction in canine intrapulmonary veins by prostaglandins and 5-hydroxytryptamine, 819
  - , naloxone-induced in electrically stimulated and opiate dependent isolated guinea-pig ileum, effect of morphine-theophylline interactions, 887
  - , naloxone-induced in guinea-pig ileum, effect of opiates, 859
  - , produced by acetylcholine or pelvic nerve stimulation, effect of sympathetic and non-adrenergic non-cholinergic stimulation, noradrenaline and iso-

- prenaline in rabbit rectococcygeus muscle, 87
- , prostaglandin F<sub>2α</sub> mediated in rat mesenteric arteries, inhibition by flunarizine, 252P
  - , uterine, potency of effect of prostaglandins and thromboxanes in rat, 75
- Conus striatus venom**, effect on guinea-pig ileum, 583
- Convulsions**, induction by dendrotoxin in amphibian spinal cord, 525
- Coronary artery ligation**, induction of dysrhythmias in anaesthetized rats, effect of catecholamines, 951
- Corpus luteum**, in rat ovarian sections, effect of luteinizing hormone, 111
- Cortical neurones**, excitatory responses to dopamine, noradrenaline and phenylephrine, effect of haloperidol, 243P
- Corticosteroids**, encapsulated in intact erythrocytes, effect on adjuvant arthritis in rat, 212P
- Cortisol**, effect on blood content in granuloma tissue of rats, 605
- Creatinine**, serum concentration, effect of *cis*-dichlorodiammineplatinum II followed by 2,3-dimercaptosuccinic acid treatment in rats, 649
- Crotapotin**, interaction with crotoxin phospholipase A<sub>2</sub>, notexin and presynaptic neurotoxins in mouse diaphragm and chick biventer cervicis muscles, 495
- Crotoxin**, interactions with crotapotin in mouse diaphragm and chick biventer cervicis muscle, 495
- Crural veins**, human isolated, effect of tolmesoxide, Rx71112 and nifedipine on active tension, 799
- Cuneate nucleus**, rat, effects of barbiturates, benzodiazepines and phenytoin on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin, 739
- Current flow**, recorded from single acetylcholine activated channels in skeletal muscle membrane, 317P
- Cyclic nucleotides**, effects of morphine and theophylline on, and role of calcium in these actions, 887
- Cyclo-oxygenase products**, vasoactive effects on isolated perfused stomach of rabbit and rat, 256P
- Cycloheximide**, effect on inhibitory action of dexamethasone on endotoxin-induced diarrhoea in mice, 549
- , effect on recovery of sodium pump site numbers after exposure of HeLa cells and chick embryo heart cells to ouabain, 333
  - , effect on thermoregulation and protein synthesis in rabbits, 6
- 4-(3-Cyclopentyloxy-4-methoxyphenyl)-2-pyrrolidone** *see* ZK 62711
- Cyproheptadine**, effect on behavioural responses to tranylcypromine plus L-tryptophan and putative 5-hydroxytryptamine receptor agonists in rats, 703
- D**
- Decidual tissue**, rat pregnant uterus, effect on myometrial production of prostacyclin, 695
- Deferoxamine**, effect on platinum accumulation in kidney after *cis*-dichlorodiammine-platinum II in rat, 649
- Dependence**, clonidine-induced in isolated guinea-pig ileum, 443
- , physical, production in guinea-pig ileum by exposure to different opiates, 859
- Depolarization-secretion coupling**, mediation by calcium receptor at cholinergic motor nerve terminals, in frog nerve-muscle preparations, 413
- (-)-Deprenyl**, effects on responses to tyramine and noradrenaline, and on [<sup>3</sup>H]-metaraminol in isolated rat vas deferens, 65
- Depression**, behavioural, 5-hydroxytryptamine or noradrenaline-induced, effect of tryptamine in chicks, 485
- , possible therapeutic use of AGN-1133 and AGN-1135, 55
- Dendrotoxin**, convulsant and possible anticholinergic actions in the amphibian spinal cord, 525
- Denervation**, effect on methohexitone-tetraethylammonium interactions in the chick biventer cervicis muscle, 311P
- , of rat bladder, effect of atropine on micturition responses, 837
- Dermorphin**, pharmacological data on a new class of potent opioid peptides from amphibian skin, 625
- Desmethylinipramine**, effect on uptake of amines in rat and mouse vas deferens, 65
- Desmethylpargyline**, inhibition of brain mitochondrial monoamine oxidase in rats, 55
- Dexamethasone**, blockade of the anti-inflammatory action by DL- $\alpha$ -difluoromethylornithine, 212P
- , effect on blood content of granuloma tissue in rats, 605
  - , effect on diarrhoea induced by endotoxin, arachidonic acid and prostaglandin E<sub>2</sub> in mice, 549
  - , withdrawal from chronic administration, biochemical and behavioural changes in rats, 268P
- Dextran**, covalent attachment to antileukemic enzyme L-asparaginase, reduction of type III hypersensitivity to the antigen, 304P
- , release of histamine from rat mast cells: effect of glucose and low molecular weight glucose polymers, 206P
- Dextrorphan**, effect on number of abdominal constrictions in mice, 325
- Diabetes**, experimentally-induced, effect of sulphonylureas on regional blood flow in rats, 286P
- L-2,4, Diaminobutyric acid**, in medium, effect on veratridine-evoked [<sup>3</sup>H]- $\gamma$ -aminobutyric acid release from rat brain slices, 655
- Diaphragm**, mouse, effect of interactions between crotapotin and presynaptic neurotoxins, 495
- , rat, internal and external recording of channel opening times, 186P
- Diarrhoea**, induced by endotoxin, arachidonic acid and prostaglandin E<sub>2</sub>, effect of dexamethasone, indomethacin and codeine in mice, 549
- Diethylether**, effect of naloxone on analgesic activity *in vivo* and *in vitro* in rats, 435
- DL- $\alpha$ -Difluoromethylornithine**, blockade of anti-inflammatory action of dexamethasone, 212P
- Dihydroergocryptine**, inhibition of [<sup>3</sup>H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- [<sup>3</sup>H]-dihydroergocryptine**, binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- [<sup>3</sup>H]-dihydromorphine**, binding, displacement by naloxone, Met-enkephalin, morphine, xylazine, ketamine

- and Althesin, 435
- 2,3-Dimercaptopropanol**, effect on platinum accumulation in kidney after *cis*-dichlorodiammineplatinum II in rat, 649
- 2,3-Dimercaptosuccinic acid**, effect on platinum accumulation in kidney after *cis*-dichlorodiammineplatinum II in rat, 649
- 4,5-dimethoxy-2-methyl phenyl sulphone**, see **Rx71112**
- 2-N([2',6'-dimethoxy-phenoxyethyl] aminoethyl) 1,4-benzodioxane hydrochloride** see **WB 4101**
- 1,1-Dimethyl-4-phenyl piperazinium**, responses of rabbit sympathetic ganglion to, effect of divalent cations, 759
- 3,5-Dimethylpyrazole**, effect on mouse brain catecholamine levels, 263P
- 2,4-Dinitrophenol**, effect on uptake of labelled oxprenolol and propranolol by rat lung slices, 119
- Diphenhydramine**, effect on dose-dependent vasoconstrictor actions of acetaldehyde and sodium acetate in rats, 578
- Diphenylhydantoin**, inhibition of calcium-dependent, potassium-stimulated release of spermine from rat brain *in vitro*, 165
- Dipyridamole**, potentiation of inhibitory effects of adenylyl compounds in guinea-pig atria, 879
- Discontinuous neuroleptic therapy**, no prevention of development of cerebral dopamine receptor supersensitivity, 242P
- Disopyramide**, antidysrhythmic potency in anaesthetized rats, 951
- Diurnal rhythm**, effect on contractile responses of rat aorta to U-46619, 903
- Divalent cations**, effect on  $\alpha$ -adrenoceptor of human intact platelets, 204P
- Dock leaf extracts**, effect on 5-hydroxytryptamine induced contraction of the rat fundic strip, 306P
- Domperidone**, effect on catecholamine effects on circular smooth muscle of the lower oesophageal and pyloric sphincters, 312P
- Dopamine**, antagonism by apocodeine in rabbit, 238P
- , endogenous, release from the neuro-intermediate lobe of the rat hypophysis *in vitro*, 265P
  - , excitatory responses of cortical neurones, effect of haloperidol, 243P
  - , inhibition of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
  - , inhibitory effects, antagonism by metoclopramide, sulpiride and sulpiride in guinea-pig ileum, 279P
  - , mediation of behaviours, influence of chronic phenothiazine treatment in rats, 240P
  - , responses to, selective enhancement following chronic neuroleptic treatment, 269P
- Dopamine agonists**, effect at vascular dopamine receptors in rabbit isolated splenic artery and the mesenteric bed of the anaesthetized dog, 287P
- , inhibition of stimulation-evoked pressor responses in the pithed rat, 278P
- Dopamine antagonists**, effect at vascular dopamine receptors in rabbit isolated splenic artery and the mesenteric bed of the anaesthetized dog, 287P
- Dopamine receptors**, cerebral, development of supersensitivity during chronic neuroleptic administration, no prevention by drug holidays, 242P
- , differential dopamine supersensitivity after chronic

- phenothiazine treatment in rats, 240P
  - , effect of agonists and antagonists in the rabbit isolated splenic artery and mesenteric vascular bed of anaesthetized dog, 287P
  - , presynaptic, activation by dopamine agonists, 278P
  - , stereoselective antagonism by sulpiride in rabbit ear artery, 189P
- Dopaminergic system**, amphetamine-induced changes, inhibition by apomorphine in rats and mice, 237P
- , stimulation, induction of stereotyped and turning behaviour in the rabbit, 270P
- Dopaminergic transmission**, blockade by yohimbine in rat striatum, 239P
- Dorsal roots**, effect of chronic section on the responsiveness of motoneurons to 5-hydroxytryptamine and a substance P analogue in rat, 587
- Doxycycline**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Drug holidays**, no prevention by, of development of cerebral dopamine receptor supersensitivity during chronic neuroleptic administration, 242P
- Dysrhythmias**, coronary artery ligation-induced in anaesthetized rats, effect of catecholamines, 951

## E

- 5,8,11,14-Eicosatetraenoic acid**, suppression of decidual inhibition of myometrial prostacyclin synthesis, in pregnant rat uterus, 695
- Electrical stimulation**, induction of pressor responses, inhibition by dopamine agonists in pithed rats, 279P
- , responses of guinea-pig ileum to, effect of antibiotics, 535
- Electrical stimulation threshold**, effect of encaine, lorcainide, ORG 6001 and lignocaine in isolated rabbit and guinea-pig hearts, 476
- Electroconvulsive shock**, increase in seizure thresholds, drug induced alterations, 265P
- , repeated, attenuation of clonidine-induced hypoactivity in both mice and rats, 230P
- Electrodes**, potassium sensitive, study of drug-induced potassium release from suspensions of isolated hepatocytes, 317P
- Eleldoisin**, effect on  $\alpha$ -amylase release from rat parotid gland slices, 517
- Eleldoisin-related peptide**, effect of iontophoretic application on motoneurone field potentials in rats with chronic sectioned dorsal roots, 587
- Encainide**, effect on electrical stimulation threshold and ventricular fibrillation threshold in Langendorff-perfused rabbit and guinea-pig hearts, 373
- ( $\pm$ ) **5-endo (6'-carboxyhex-2'-Z-enyl)-6-exo [N-(phenylcaramoyl) hydrazonomethyl]-bicyclo [2,2,1] heptane** see **EP 045**
- $\beta$ -Endorphin**, effect on guinea-pig ileum and mouse vas deferens, 625
- , porcine, low affinity for  $\kappa$ -binding site in guinea-pig brain, 939
- Endotoxin**, *E. coli*, *in vivo* and *in vitro* effects on prostaglandin release from rat lung, 511
- , induction of diarrhoea, effect of dexamethasone, in-

- domethacin and codeine in mice, 549
- Endplate potential**, effect of subcutaneous injection of venom of Australian common brown snake in isolated rat soleus muscle, 157
- Enkephalin, Leu-** effect on guinea-pig ileum and mouse vas deferens, 625
- , Leu-, effect on number of abdominal constriction in mice, 325
- , Leu-, low affinity for  $\kappa$ -binding site in guinea-pig brain, 939
- , D-Leu-, [ $^3$ H]-D-Ala $_2$ -, binding, displacement by ketamine, xylazine, morphine and Met-enkephalin *in vitro* in rats, 435
- , Met-, displacement of [ $^3$ H]-dihydroxymorphine and [ $^3$ H]-D-Ala $_2$ -Leu-enkephalin binding *in vitro* in rats, 435
- , Met-, effect on guinea-pig ileum and mouse vas deferens, 625
- , Met-, effect on number of abdominal constrictions in mice, 325P
- , Met-, low affinity for  $\kappa$ -binding site in guinea-pig brain, 939
- , Met-, potassium ion-stimulated release from guinea-pig striatal slices, lack of effect of  $\mu$ - and  $\kappa$ - opiate receptor agonists, 264P
- , Met-, production of physical dependence in guinea-pig ileum, 859
- EP 045**, antagonism of thromboxane receptors, 220P
- Epilepsy**, relevance of  $\gamma$ -aminobutyric acid-mimetic drugs to antiepileptic drug research, 232P
- Epithelium**, cultured renal (MDCK), identification of purine (P $_2$ ) receptor linked to transport, 379
- Erythro-DL-(7-methylindan-4-yloxy)-3-isoprepylamino-butan-2-ol** *see* ICI 118, 551
- Erythrocytes**, encapsulation of corticosteroids, effect of intravenous administration on adjuvant arthritis, 212P
- Estragole**, dose dependent formation of 1'-hydroxy-estragole in the mouse, 180P
- Ethanol**, effect on acetylcholine receptor from *Torpedo californica* and its ionophore, 187P
- , inhibition of platelet aggregation, the role of plasma and platelet membrane lipids, 305P
- , vasoconstrictor actions in mesenteric arterioles and muscular venules of anaesthetized rats, 578
- [ $^3$ H]-ethylketazocine**, characterization of binding to  $\kappa$ -binding site in guinea-pig brain, 939
- Eubidium ions**, effect on initiation of sperm motility in rat caudal epididymal spermatazoa, 633
- Extrinsic inhibitory nerves**, stimulation of, response of rabbit rectococcygeus muscle, 87
- Eye**, rabbit, chemotactic activity of arachidonic acid lipooxygenase products, 245P
- , rabbit, effect of IPS 339 on intraocular pressure, 97
- F**
- Fatty acids**, effect on the ventricular arrhythmia threshold in the isolated rabbit heart, 909
- Femoxetine**, behavioural responses after chronic neuroleptic treatment in rats, 149
- Fenfluramine**, behavioural responses after chronic neuroleptic treatment in rats, 149
- , induction of hyperthermia in rats, effect of selective inhibitors of 5-hydroxytryptamine uptake, 307P
- Fever**, pyrogen-induced, effect of intracerebroventricular administration of cycloheximide in rabbits, 6
- Fibrillation**, induced by coronary artery ligation, effect of bepridil in anaesthetized dogs, 471
- Fibrin**, interactions with red cells and platelets in experimental thrombosis, 219P
- Field stimulation**, uptake and release of catecholamines in rat atria after preincubation with adrenaline and preincubation with noradrenaline, 669
- First pass elimination**, of propranolol, effect of imipramine and SKF 525 A in the rat, 178P
- Flare reaction**, effect of topical capsaicin treatment to human skin, 755
- Flunarizine**, inhibition of prostaglandin F $_{2\alpha}$ -mediated contraction and  $^{45}$ calcium-influx in rat mesenteric arteries, 252P
- Fluorescence microscopy**, measurement of 5-hydroxytryptamine into catecholamine containing areas of rat hypothalamus, 143
- Fluoride**, effect on platelet adenylate cyclase, 639
- 4-Fluoro- $\alpha$ -methyltryptamine**, effect on cyclic adenosine 3',5'-monophosphate levels, fluid secretion, hydrolysis of phosphatidylinositol and calcium permeability in salivary gland of blowfly, 729
- 5-Fluoro- $\alpha$ -methyltryptamine**, effect on cyclic adenosine 3',5'-monophosphate levels, fluid secretion, hydrolysis of phosphatidylinositol and calcium permeability in salivary gland of blowfly, 729
- 6( $\pm$ )-Fluorotryptophan**, sleep and wakefulness in the rat, 244P
- Fluoxetine**, induction of swallowing, effect of tryptamine in rats, 485
- $\alpha$ -Flupenthixol**, effect on [ $^3$ H]-5-hydroxytryptamine uptake into platelets, 249P
- $\beta$ -Flupenthixol**, effect on [ $^3$ H]-5-hydroxytryptamine uptake into platelets, 249P
- Flurazepam**, effect on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin in rat cuneate slices, 739
- Forelimb**, spinal dog perfused, effect of prazosin on time-course profile of pressor responses elicited by noradrenaline, 293P
- Forepaw treading**, 5-hydroxytryptophan-induced, effect of chronic neuroleptic treatment in rats, 149
- Formyl tripeptide**, polymorph-dependent mediator for increasing vascular permeability in rabbit dorsal skin, 209P
- Forssman serum**, induction of biphasic bronchospasm in guinea-pig, 25
- Functional antagonism**, analysis using null equation, 127
- Functional interaction**, analysis using null equations, 127
- Fundic mucosa**, isolated rabbit, comparison of agonist activity of impromidine *in vivo* and *in vitro*, 917
- Fundus**, rat isolated, effect of dock leaf extracts on 5-hydroxytryptamine induced contraction, 306P
- G**
- Gas chromatography**, with radioimmunoassay and mass spectrometry, measurement of prostaglandins and

- thromboxanes in pregnant rat uterus at term, 75
- Gastric acid**, effect on stimulation of pepsin secretion in isolated whole rat stomach, 41
- , effects of impromidine and histamine on secretion *in vivo* and *in vitro* in rabbits, 917
  - , inhibition of secretion by M & B 28,767 in rats, 225P
  - , inhibition of vagally-induced secretion by atropine and H<sub>2</sub>-receptor antagonists in the rat, 313P
- Gastric inhibitory polypeptide**, effect on release of  $\alpha$ -amylase in rat parotid gland, 517
- Gastric mucosa**, effect of anti-ulcer agents on blood flow and transmucosal flux of hydrogen and sodium ions in the conscious dog, 308P
- , effect of prostaglandin E<sub>2</sub> and prostacyclin on changes in integrity induced by topical bile salts, in rats, 257P
- Gastric mucosal haemorrhage**, effect of histamine antagonists in rat, 227P
- Gastric ulcers**, effects of benzodiazepines in rats, 228P
- , inhibition by M & B 28,767 in rats, 225P
  - , production by non-steroid anti-inflammatory drugs in stressed rats, 226P
- Gender differences**, effect on development and diurnal rhythm of prostaglandin receptors in rat aorta, 903
- , effect on the effect of hyperoxia on uptake and metabolism of 5-hydroxytryptamine and  $\beta$ -phenylethylamine in rat lung, 461
  - , effect on the pharmacokinetics of thiopentone in humans, 175P
- Gentamicin**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Glucagon**, effect of pretreatment on isoprenaline and noradrenaline-induced hyperpolarization of guinea-pig liver cells, 867
- Glucocorticoids**, effect on endotoxin-induced diarrhoea in mice, 549
- , mechanism of anti-inflammatory action: re-evaluation of vascular constriction hypothesis in rats, 605
- Glucose**, effect of benfluorex and its metabolites on uptake into rat isolated hemidiaphragm, 272P
- , effect on the release of histamine from rat mast cells by dextran, 206P
- Glucose polymers**, low molecular weight, effect on release of histamine from rat mast cells by dextran, 206P
- Glutamate**, responses of ventral and dorsal roots to, effect of dendrotoxin in frog spinal cord, 525
- L-Glutamate**, effect on central neurones of the Horse-shoe crab, *Limulus polyphemus*, 261P
- Glutamatergic neurones**, ontogeny of neurochemical markers in cerebellum: implications for development of kainate neurotoxicity, 235P
- Glutathione**, formation of a conjugate with canrenone via epoxidation in rat, 181P
- Glycerol trinitrate**, effect on musculature and vasculature in dog trachea *in situ*, 9
- Glycine**, responses of ventral and dorsal roots to, effect of dendrotoxin in frog spinal cord, 525
- [<sup>14</sup>C]-glycine, veratridine-evoked release from spinal cord, effect of external concentration of calcium in rats, 655
- Glycosides**, cardiac, relationship with 'staircase' phenomena in rat, guinea-pig and ground squirrel papillary muscles, 196P
- Granulomatous inflammation**, carageenin-induced, anti-inflammatory action of glucocorticoids in rats, 605
- Guanethidine**, effect on biphasic mechanical responses of the guinea-pig ileum to venom of *Conus striatus*, 581
- Guanosine 3',5'-monophosphate**, cyclic, levels in canine atrial and ventricular muscle, effect of carbachol, sodium nitroprusside and 8-bromoguanosine 3',5'-monophosphate, 393
- Guanosine 5'-monophosphate**, inhibition of formation by theophylline in rat brain and kidney, 467
- Guanosine 3',5'-monophosphate phosphodiesterase**, cyclic, inhibition by ZK 62711, M & B 22948, theophylline and papaverine in rats, 933

## H

- Haloperidol**, comparison of effect on excitatory responses of cortical neurones with dopamine, noradrenaline and phenylephrine, 243P
- Halothane**, effect of naloxone on analgesic activity *in vivo* and *in vitro* in rats, 435
- Head bobbing**, 5-hydroxytryptophan-induced, effect of neuroleptic treatment in rats, 149
- Head twitch**, 5-hydroxytryptophan-induced, effect of tryptamine alone or with 5-hydroxytryptophan in mice, 485
- Head weaving**, 5-hydroxytryptophan-induced, effect of neuroleptic treatment in rats, 149
- Heart**, cat, presynaptic effects of cholinceptor and adrenoceptor agonists and antagonists *in vivo*, 192P
- , dog, effect of alinidine on experimental arrhythmias, 198P
  - , dog, specialized tissues, accumulation of [<sup>3</sup>H]-ouabain: differential rubidium uptake, 81
  - , dog and rat, lack of stimulation of presynaptic  $\alpha$ -adrenoceptors by cirazoline, 289P
  - , frog and guinea-pig, effects of adenylyl compounds in relation to P<sub>1</sub>/P<sub>2</sub> purinoceptor hypothesis, 879
  - , guinea-pig, reserpine-induced supersensitivity to  $\beta$ -adrenoceptor-mediated responses of, 202P
  - , perfused rabbit and guinea-pig, effect of antiarrhythmic drugs on electrical stimulation threshold and ventricular fibrillation threshold, 373
  - , rabbit, effect of fatty acids on ventricular arrhythmia threshold, 909
  - , rat, comparison of antidysrhythmic effects of mexiletine and Org 6001, 199P
  - , rat, effect of L-3,3',5'-triiodothyronine, 198P
  - , rat, responses to arachidonic acid, and prostaglandins, effect of inhalation of cigarette smoke, 3
  - , rat, vesicular storage of noradrenaline, 401
  - , thyroidectomized rats, time-course of effect of a single dose L-3,3',5'-triiodothyronine, 285P
- Heart cells**, chick embryo, effect of chronic exposure to ouabain on sodium pump, 333
- Heart rate**, contribution of sympathetic and parasympathetic nerve mechanisms to control, in conscious dogs at rest and during exercise, assessment by use of betaxolol and methylatropine, 288P
- , effect of atenolol in anaesthetized cats, 605
  - , effect of catecholamine and angiotensin treatment and of coronary artery ligation in anaesthetized rats, 951
  - , effect of inhalation of cigarette smoke on responses to prostaglandins and arachidonic acid, 3
  - , effect of intravenous bepridil given before acute coro-

- nary ligation in anaesthetized dogs, 471
- , increase after isoprenaline effect of  $\beta$ -adrenoceptor antagonists in the cat, 749
- Heat pain thresholds**, effect of topical capsaicin treatment to human skin, 755
- HeLa cells**, chick, effect of chronic exposure to ouabain on sodium pump, 333
- Hemidiaphragm**, rat isolated, effect of benfluorex and its metabolites on uptake into rat isolated hemidiaphragm, 272P
- Heparin**, effect on crotoxin phospholipase  $A_2$  in mouse diaphragm and chick biventer cervicis muscle, 495
- , effect on prostaglandin  $E_1$ -stimulated adenylate cyclase activity in intact and broken platelets, 639
- Hepatocytes**, isolated, study of drug-induced potassium release from, with potassium-sensitive electrodes, 317P
- , rat isolated, suitability for investigation of drug interactions which may involve acetylation, 272P
- High pressure liquid chromatography**, determination of brain 5-hydroxyindoles, comparison with  $\alpha$ -phthalaldehyde fluorometric method in rats, 555
- Hindlimb**, rat, effect of subcutaneous injection of crude venom of the Australian common brown snake on skeletal neuromuscular system, 157
- Histamine**, actions *in vivo* and *in vitro* on gastric acid secretion in rabbit, 917
- , antigen released from human basophils, inhibition by ZK 62711, 933
  - , comparison of some peptides as releasing agents, 207P
  - , direct mediator for increasing vascular permeability in rabbit dorsal skin, 209P
  - , effect on cat isolated trachea, bronchus and lung strips, 853
  - , release from rat mast cells, dependence on cellular energy metabolism, 208P
  - , release from rat mast cells, inhibition by ZK 62711, 933
  - , release from rat mast cells by dextran, effect of glucose and low molecular weight glucose polymers, 206P
  - , responses of guinea-pig ileum to, effect of antibiotics, 535
  - , responsiveness of guinea-pig airway muscle preparations to, effect of chronic treatment with isoprenaline *in vivo*, 13
  - , stimulation of pepsin secretion in isolated whole rat stomach, 41
- Histamine  $H_2$ -receptor antagonists**, inhibition of vagally-induced gastric acid secretion in the rat, 313P
- Histamine receptors**, methysergide-sensitive, in tracheo-bronchial smooth muscles and lung strips, 853
- Histamine  $H_1$ -receptors**, mepyramine-sensitive, in isolated cat parenchymal strips, 853
- Homatropine**, effect on the contractile responses to cholinomimetics in the rat anococcygeus muscle, 829
- Horse-shoe crab**, *Limulus polyphemus*, effect on central neurones of L-glutamate and related compounds, 261P
- Hydralazine**, interactions with purine compounds in the rat isolated tail artery, 811
- , post-synaptic inhibitory action in rats, 188P
- Hydrocortisone**, effect on endotoxin-induced diarrhoea in mice, 549
- 15-Hydroperoxy arachidonic acid**, effect on prostaglandin release and production of spasm in pregnant rat uterus at term, 75
- (15S)-hydroxy-11 $\alpha$ , 9 $\alpha$ -(epoxymethano)-prosta-5Z, 13E-dienoic acid** *see* U-46619
- 4-Hydroxy-phenformin**, in urine of Saudi females after taking phenformin, 177P
- p-Hydroxyamphetamine**, no generalization to cocaine in pigeons, 843
- Hydroxydione**, effect on transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- 1'-Hydroxyestradiol**, dose dependent formation from estradiol in the mouse, 180P
- 5-Hydroxyindoleacetic acid**, decreased concentration in spinal cord after methergoline and methiothepin in rats, 703
- , determination by  $\alpha$ -phthalaldehyde fluorometric method and by high pressure liquid chromatography in rats treated with L-tryptophan and p-chlorophenylalanine, 555
- 5-Hydroxytryptamine**, central systems, interaction with tryptamine, *in vivo* pharmacological studies, 485
- , decrease of rate of synthesis by methergoline and methiothepin in rat brain, 703
  - , determination by  $\alpha$ -phthalaldehyde fluorometric method and by high pressure liquid chromatography in rats treated with L-tryptophan and p-chlorophenylalanine, 555
  - , effect of hyperoxia on uptake and metabolism in rat lung, gender differences, 461
  - , effect of iontophoretic application on motoneurone field potentials in rats with chronic sectioned dorsal roots, 587
  - , effect on canine intrapulmonary arteries and veins, 819
  - , effect on human isolated mesenteric blood vessels, 190P
  - , high affinity uptake into brain slices of rats chronically treated with trifluoperazine, 149
  - , inclusion with morphine, prevention of induction of tolerance to morphine in isolated guinea-pig ileum, 921
  - , induction of behavioural depression, effect of tryptamine in chicks, 485
  - , induction of contraction in rat fundic strip, effect of dock leaf extracts, 306P
  - , interaction with  $\beta$ -adrenoceptor antagonists in rat brain stem, microiontophoretic study, 245P
  - , metabolic and functional response to stress, effect of blocking tryptophan increase, in rat brain, 267P
  - , production of concentration-dependent contractions of cat isolated trachea, bronchus, and lung strips, 853
  - , responses of sympathetic ganglion to, effect of divalent cations in rabbit, 759
  - , stimulation of formation of two separate second messengers in salivary gland of the blowfly, 729
  - , transport in pancreatic islets and isolated  $\beta$ -cells of ob/ob mice, 385
  - , uptake into catecholamine containing areas of rat hypothalamus after phenelzine and tryptophan, 143
- [ $^3H$ ]-5-hydroxytryptamine**, effect of flupenthixol isomers on uptake into platelets, 249P
- 5-Hydroxytryptamine-containing neurones**, site of interaction with morphine in rat brain, site of action, 245P
- 5-Hydroxytryptamine receptor agonists**, behavioural responses to, effect of 5-hydroxytryptamine receptor



- antagonists, 703
- 5-Hydroxytryptamine receptor antagonists**, effect on the behavioural responses to tranlycypromine plus L-tryptophan and to 5-hydroxytryptamine receptor agonists in rats, 703
- 5-Hydroxytryptamine receptors**, increased central mechanisms after chronic neuroleptic treatment, 149
- , one acting through calcium and one acting through cyclic adenosine 3',5'-monophosphate in salivary gland of blowfly, 729
  - , pre- and post-junctional receptors in isolated vasculature, 191P
- 5-Hydroxytryptamine uptake inhibitors**, effect on fenfluramine-induced hyperthermia, 307P
- 5-Hydroxytryptophan**, behavioural responses after chronic neuroleptic treatment in rats, 149
- , induction of diarrhoea, effect of indomethacin and dexamethasone in mice, 549
  - , induction of swallowing effect of tryptamine in rats, 485
- Hydrogen ions**, transmucosal flux in the conscious dog, 308P
- Hyoscine**, effect on phentolamine elicited contracture in guinea-pig ileum, 443
- , restoration of tension of withdrawal contracture to resting level, after naloxone challenge, 921
- Hypotension**, effectiveness of  $\alpha$ -adrenoceptor agonists in relation to  $\alpha_1$  and  $\alpha_2$  potency in rats, 595
- Hyp<sup>6</sup>-dermorphin**, pharmacological data on a new class of potent opioid peptides from amphibian skin, 625
- Hyperoxia**, effect on uptake and metabolism of 5-hydroxytryptamine and  $\beta$ -phenylethylamine in rat lung, gender differences, 461
- Hyperpolarization**, induction by isoprenaline and norendrenaline in guinea-pig liver cells, 867
- Hypertension**, changes in post-synaptic  $\alpha$ -adrenoceptors in rats, 194P
- , experimental model responses of  $\alpha$ -adrenoceptors in rabbit, 193P
  - , withdrawal syndrome after continuous infusion of clonidine in spontaneously hypertensive and normotensive rats, 195P
- Hyperthermia**, fenfluramine-induced, effect of inhibitors of 5-hydroxytryptamine uptake, 307P
- Hypoactivity**, clonidine-induced, attenuation by repeated electroconvulsive shock in rats and mice, 230P
- Hypophysis**, rat, release of endogenous dopamine from the neuro-intermediate lobe, 265P
- Hypothalamus**, rat, uptake of 5-hydroxytryptamine into catecholamine containing areas of rat hypothalamus after treatment with phenelzine and tryptophan, 143
- Hypothalamo-pituitary-adrenocortical system**, activity in pentobarbitone and morphine treated rat, 246P
- Hypothermia**, effect of intrahypothalamic injection of N<sup>6</sup>-2'-O-dibutyl adenosine 3',5'-monophosphate in rabbit, 314P
- Hypoxia**, effect of fatty acids in isolated rabbit heart, 909
- I**
- ICI 101187, 106270, 109683, 110802**, hypotensive and sedative potency in rats, 595
- ICI 118551**, effect on renin release and on isoprenaline-induced tachycardia and hypotension in the cat, 749
- Ifenprodil**, comparison of the kinetics in rat and dog, 183P
- Ileum**, guinea-pig, affinities of pirenzepine for muscarinic receptors, 183P
- , guinea-pig, antagonism of the inhibitory effects of clonidine and dopamine by metoclopramide, sultopride and sulpiride, 279P
  - , guinea-pig, effect of antibiotics on intestinal motility, 535
  - , guinea-pig, effect of general anaesthetics on contractions elicited by transmural stimulation, 435
  - , guinea-pig, electrically-stimulated, effect of morphine-theophylline interactions on naloxone-induced contractions, 887
  - , guinea-pig, pre- and post-junctional effects of clonidine- and oxymetazoline-like compounds, *in vitro*, 355
  - , guinea-pig, pharmacological characterization of opiate physical dependence, 859
  - , guinea-pig, isolated, clonidine dependence, 443
  - , guinea-pig isolated, effect of temperature on the induction of opiate dependence, 300P
  - , guinea-pig isolated, mechanical responses to venom of marine snail *Conus striatus*, 583
  - , guinea-pig isolated, model for opiate dependence, 921
- Imidazole derivations**, inhibition of thromboxane formation, 221P
- Imidazolidines**, effect on response to transmural stimulation and exogenous acetylcholine in ileal preparations from reserpine-treated guinea-pigs, 355
- Imipramine**, effect on first pass elimination of propranolol in the rat, 178P
- , effect on transport of 5-hydroxytryptamine in pancreatic islets and  $\beta$ -cells of ob/ob mice, 385
  - , effect on uptake of oxprenolol by rat lung slices, 119
- Impromidine**, actions *in vivo* and *in vitro* on gastric acid secretion in rabbit, 917
- Indocyanine green**, effect of acute renal failure on pharmacokinetics in the rat, 276P
- Indomethacin**, effect on decidual inhibition of myometrial prostacyclin synthesis in pregnant rat uterus, 695
- , effect on diarrhoea induced by endotoxin, arachidonic acid and prostaglandin E<sub>2</sub> in mice, 549
  - , effect on dose-dependent vasoconstrictor actions of acetaldehyde and sodium acetate in rats, 578
  - , effect on electrical and mechanical properties of smooth muscle cells and of neuro-effector transmission in dog trachea, 563
  - , effect on isoprenaline desensitization induced by chronic treatment with isoprenaline *in vivo*, 13
  - , effect on phase I and II bronchospasm in guinea-pig, 25
  - , inhibition of effect of adenosine triphosphate in cultured renal (MDCK) epithelium, 379
  - , prevention of spontaneous activity of term pregnant rat uterus, 75
  - , treatment of ulcerative colitis, involvement of prostaglandin metabolism, 217P
- Indoprofen**, effect on synovial prostaglandin system in chronic inflammatory arthritis, 893
- Indoramin**, inhibition of [<sup>3</sup>H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- Inflammatory oedema**, and activation of complement system, role of plasma C5a in man, pig, guinea-pig, rabbit, rat, 211P

**Inosine**, effect on responses to hydralazine and propildazine in rat tail artery, 811

**Inosine 5'-monophosphate**, inhibition of formation by theophylline in rat brain and kidney, 467

**Intestinal motility**, *in vitro* investigation with antibiotics in guinea-pig ileum and rabbit colon, 535

**Intraluminal pressure**, effect of glyceryl trinitrate, SIN-1A and isoprenaline in dog trachea *in situ*, 9

**Intraocular pressure**, effect of IPS 339 in rabbit eye, 97

**Intrapulmonary arteries and veins**, dog, comparison of sensitivity to relaxant action of prostaglandins, after partial contraction by 5-hydroxytryptamine, 819

**Insulin**, absorption across the rectal mucosa, effect of surfactant Cetomacrogol 1000 in the rat, 21

—, secretion from isolated perfused rat pancreas, effect of phosphate-modified adenine nucleotide analogues, 105

—, stimulation of secretion by glucose, effect on transport of 5-hydroxytryptamine in pancreatic islets and  $\beta$ -cells of ob/ob mice, 385

**Ion channels**, acetylcholine-activated, recording of currents in skeletal muscle membrane, 317P

**IPS 339**, effects on intraocular pressure in rabbits, 97

**Isoprenaline**, effect of pretreatment on isoprenaline and noradrenaline-induced hyperpolarization of guinea-pig liver cells, 867

—, effect on carbachol-induced tone and on contractions produced by acetylcholine or by pelvic nerve stimulation in rabbit rectococcygeus muscle, 87

—, effect on musculature and vasculature in dog trachea *in situ*, 9

—, effect on spontaneous activity in the dog trachea, 563

—, increased mortality from ventricular fibrilloflutter in anaesthetized rats, 951

—, induction of tolerance to relaxant agonists in guinea-pig tracheal spiral preparations *in vivo*, 13

—, inhibition of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33

—, sensitivity of guinea-pig airway muscle to, effect of chronic treatment with isoprenaline *in vivo*, 13

( $\pm$ )-**Isoprenaline**, effect on calcium chloride-induced arrhythmias in the rat, 725

(-)-**Isoprenaline**, functional antagonism by muscarinic agonists on isolated guinea-pig atria, test for null equation, 135

## J

**Jumps**, naloxone-induced, effect of morphine interactions with theophylline in mouse, 887

## K

**K 502, K 511, K 622**, inhibition of brain mitochondrial monoamine oxidase in rats, 55

**K-Y 1314, 1315, 1243, 1249, 1349**, inhibition of brain mitochondrial monoamine oxidase in rats, 55

**Ka, Kb, Kc, Kd**, inhibition of brain mitochondrial monoamine oxidase in rats, 55

**Kainate**, development of neurotoxicity, implications of ontogeny of neurochemical markers for glutamatergic neurones in cerebellum, 235P

**Kallikrein**, *in vitro* activation in rat plasma, effect of various prostaglandins, 224P

**Kanamycin**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535

**Kassinin**, effect on  $\alpha$ -amylase release from rat parotid gland slices, 517

**Ketamine**, displacement of [ $^3$ H]-dihydroxymorphine and [ $^3$ H]-D-Ala<sub>2</sub>-Leu-enkephalin binding *in vitro* in rats, 435

—, effect on the transport of radio-labelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681

—, effect of naloxone on analgesic activity *in vivo* and *in vitro* in rats, 435

(+)-**Ketamine**, effect on acetylcholine receptor from *Torpedo californica* and its ionophore, 187P

(-)-**Ketamine**, effect on acetylcholine receptor from *Torpedo californica* and its ionophore, 187P

**Ketocyclazocine**, effect on number of abdominal constrictions in mice, 325

**Kidney**, anaesthetized dog, effect of captopril on prostacyclin-induced increases in blood flow, 297P

—, rat, accumulation of platinum after *cis*-dichlorodiammineplatinum II, effect of heavy metal chelators in rat, 649

—, rat, acute failure, effect on the pharmacokinetics of indocyanine green in the rat, 276P

—, rat, inhibition of purine nucleoside formation by theophylline, 467

## L

**Labetalol**,  $\alpha$ - and  $\beta$ -adrenoceptor blocking potency, 282P

**Lachesine**, effect on responses of Renshaw cells to acetylcholine, acetyl- $\beta$ -methylcholine, nicotine and DL-muscarnine in anaesthetized cats, 455

**Lactate production**, effect of bepridil administered after coronary artery ligation in anaesthetized dogs, 471

**Lanthanide ions**, effect on initiation of sperm motility in rat caudal epididymal spermatazoa, 633

**Lanthanum ions**, antagonism of effects of extracellular calcium on evoked acetylcholine release in frog nerve-muscle preparations, 413

**LD<sub>50</sub>**, morphine, effect of theophylline in mouse, 887

**Left ventricle**, dog heart, accumulation of [ $^3$ H]-ouabain, correlation with rubidium uptake, 81

**Leucocyte pyrogen**, induction of fever, effect of intracerebroventricular administration of cycloheximide in rabbits, 6

**Leucocytes**, effect of arachidonate lipoxygenase products on migration in rabbit skin, 253P

—, effect of arachidonic acid lipoxygenase products on total number in aqueous humour of rabbit eye, 245P

—, effect of leukotriene B<sub>4</sub> on movement, 259P

**Leukotriene B**, a potent chemotactic agent and stimulus for lysosomal enzyme secretion for human neutrophils, 260P

**Leukotriene B<sub>4</sub>**, and leucocyte movement, 259P

- , isomers, differing biological potencies, 210P
- , mediation of vascular permeability, 258P
- , polymorph-dependent mediator for increasing vascular permeability in rabbit dorsal skin, 209P
- Leukotriene C**, some actions on isolated preparations, 213P
- Leukotriene D**, some actions on isolated preparations, 213P
- Levallorphan**, effect on morphine-induced mydriasis in mice, 807
- Levorphan**, production of physical dependence in guinea-pig ileum, 859
- Levorphanol**, effect on number of abdominal constrictions in mice, 325
- Lidocaine**, perivascular action on plial terminal arterioles of rats, 575
- Lignocaine**, effect of alteration of liver blood flow and metabolism on kinetics, 273P
- , effect on electrical stimulation threshold and ventricular fibrillation threshold in Langendorf-perfused rabbit and guinea-pig hearts, 373
- , effect on number of abdominal constrictions in mice, 325
- Lipase**, effects of narcotic analgesics on activity *in vitro*, 301P
- Lipids**, plasma and membrane, role in ethanol inhibition of platelet aggregation in humans, 305P
- $\beta$ -Lipotropin**, effect on  $\alpha$ -amylase release in rat parotid gland, 517
- Lipoxygenase enzyme**, production by trapped blood elements within the decidua of the rat pregnant uterus, inhibition of myometrial prostacyclin synthesis, 695
- Lipoxygenase products**, role in airway hyper reactivity *in vivo*, 252P
- Lithium**, in medium, effect on veratridine-evoked [ $^3\text{H}$ ]- $\gamma$ -aminobutyric acid release from rat brain slices, 655
- Liver blood flow**, effect on lignocaine and tocainide kinetics in rats, 273P
- Locomotor activity**, apomorphine-induced, effect of methiothepin in rats, 703
- , effect of pharmacological manipulations of tectal  $\gamma$ -aminobutyric acid systems in the rat, 271P
- , effect of withdrawal from chronic administration of dexamphetamine or bupropion in rats, 268P
- Lorazepam**, effect on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin in rat cuneate slices, 739
- Lorcainide**, effect on electrical stimulation threshold and ventricular fibrillation threshold in Langendorf-perfused rabbit and guinea-pig hearts, 373
- Lung**, dog isolated, effect of verapamil on pulmonary vasoconstrictor action of prostaglandin  $\text{F}_{2\alpha}$  and U-46619, 101
- , isolated perfused rat, inactivation of prostaglandins, 214P
- , guinea-pig, rat and man, effect of sulphasalazine on prostaglandin inactivation and synthesis, 217P
- , rat,  $\beta_1$  and  $\beta_2$ -adrenoceptors, 277P
- , rat, effect of endotoxin on prostaglandin release *in vivo* and *in vitro*, 511
- , rat, effect of hyperoxia on uptake and metabolism of 5-hydroxytryptamine and  $\beta$ -phenylethylamine, gender differences, 461
- , rat, uptake and loss of ( $\pm$ )-[ $^{14}\text{C}$ ]-oxyphenolol and ( $\pm$ )-

[ $^{14}\text{C}$ ]-propranolol *in vitro*, 119

- Lung strips**, cat, reactivity to carbachol, 5-hydroxytryptamine and histamine, evidence for the existence of methysergide-sensitive receptors, 853
- , rat, effect of ZK 62711 and M & B 22948 on contractions induced by carbachol, 933
- Luteinizing hormone**, cytochemical bioassay method for determination in biological fluids and tissues, 111
- Luteinizing hormone-releasing hormone**, effect on  $\alpha$ -amylase release in rat parotid gland, 517
- LY 51641**, inhibition of brain mitochondrial monoamine oxidase in rats, 55
- Lysergic acid diethylamide**, control of responses learned to cocaine cue in pigeons, 843
- Lysosomal enzymes**, stimulation of secretion from human neutrophils by leukotriene B, 260P

## M

- M & B 9303**, inhibition of brain mitochondrial monoamine oxidase in rats, 55
- M & B 22948**, relaxation of rat lung strips contracted by carbachol and inhibition of histamine release from rat mast cells, 933
- M & B 28,767**, potent anti-ulcer and anti-secretory analogue of 11-deoxy-prostaglandin  $\text{E}_1$ , 225P
- Magnesium ions**, effect on binding of [ $^3\text{H}$ ]-prostacyclin to membranes of neuronal somatic hybrid cells, 691
- , effect on initiation of sperm motility in rat caudal epididymal spermatazoa, 633
- , effect on responses of rabbit sympathetic ganglion to 5-hydroxytryptamine and 1,1-dimethyl-4-phenyl piperazinium, 759
- Mass spectrometry**, with radioimmunoassay and gas chromatography, measurement of prostaglandins and thromboxanes in pregnant rat uterus at term, 75
- Mast cells**, rat, dextran and histamine secretion, effect of glucose and low molecular weight glucose polymers, 206P
- , rat, involvement in the inhibitory effect of cyclic guanosine 3',5'-monophosphate on histamine release, 933
- Mechanical responses**, biphasic, of guinea-pig ileum to venom of marine snail *Conus striatus*, 583
- Mecillinam**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Mecylamine**, effect on biphasic mechanical responses of the guinea-pig ileum to venom of *Conus striatus*, 583
- Mepyramine**, blockade of histamine-induced contractions in isolated lung strips, 853
- , effect on gastric mucosal haemorrhage in the rat, 227P
- , plus histamine, actions *in vivo* and *in vitro* on gastric acid secretion in rabbit, 917
- Mesenteric artery**, rabbit, effect of prazosin on the release of prostaglandins  $\text{I}_2$  and  $\text{E}_2$  following stimulation of the adrenergic nerves, 215P
- , flunarizine inhibition of prostaglandin  $\text{F}_{2\alpha}$ -mediated contraction and  $^{45}\text{Ca}^{2+}$ -influx, 252P
- Mesenteric blood vessels**, human, effect of 5-hydroxytryptamine and noradrenaline, 190P
- Mesenteric vascular bed**, effects of agonists and antagonists

- at vascular dopamine receptors in the anaesthetized dog, 287P
- Mesentery**, rat, effect of prazosin, phentolamine, and yohimbine on the vasoconstrictor responses to noradrenaline and sympathetic nerve stimulation, 291P
- Metabolic rate**, resting, in relation to sodium, potassium dependent adenosine triphosphatase in brown adipose tissue in rats, 182P
- [<sup>3</sup>H]-metaraminol**, uptake into rat vas deferens, effect of irreversible monoamine oxidase inhibitors, 65
- Methacholine**, contractile responses of rat anococcygeus muscle to, effect of antimuscarinic agents, 829
- Methamphetamine**, induction of stereotyped and turning behaviour in rabbits, 270P
- Methergoline**, effect on behavioural responses to tranlycypromine plus L-tryptophan and putative 5-hydroxytryptamine receptor agonists in rats, 703
- Methiothepin**, effect on behavioural responses to tranlycypromine plus L-tryptophan and putative 5-hydroxytryptamine receptor agonists in rats, 703
- Methohexitone**, effect on transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- , interaction with tetraethylammonium in chick biventer cervicis muscle, effects of caffeine and xylocaine, 185P
- , interaction with tetraethylammonium in the chick biventer cervicis muscle, moving fluid electrode technique and denervation studies, 311P
- Methoxamine**, effect on carbachol-induced tone in rabbit rectococcygeus muscle, 87
- , effect on single cerebral cortical neurones in rat, 47
- 5-Methoxy-N, N-dimethyltryptamine**, behavioural responses to, effect of 5-hydroxytryptamine receptor antagonists in rats, 703
- 6  $\alpha$ -Methyl-prednisolone**, effect on synovial prostaglandin system in chronic inflammatory arthritis, 893
- Methylatropine**, assessment of contribution of sympathetic and parasympathetic nerve mechanisms to the control of heart rate in conscious dogs at rest and during exercise, 288P
- , effect on responses of Renshaw cells to acetylcholine, acetyl- $\beta$ -methylcholine, nicotine and DL-muscarine in anaesthetized cats, 455
- $\alpha$ ,  $\beta$ -**Methylene adenosine diphosphate**, effect on secretion of insulin in isolated perfused rat pancreas, 105
- $\alpha$ ,  $\beta$ -**Methylene adenosine triphosphate**, effect on secretion of insulin in isolated perfused rat pancreas, 105
- $\beta$ ,  $\alpha$ -**Methylene adenosine triphosphate**, effect on secretion of insulin in isolated perfused rat pancreas, 105
- $\beta$ ,  $\alpha$ -**Methylene adenosine 5'-monophosphate**, effects in guinea-pig and frog heart, 879
- $\alpha$ ,  $\beta$ -**Methylene adenosine 5'-triphosphate**, effects in guinea-pig and frog hearts, 879
- Methylfurmethide**, functional antagonism against (–)-isoprenaline on isolated guinea-pig atria, test for null equation, 135
- ( $\pm$ ) $\alpha$ -**Methylnoradrenaline**, inhibition of [<sup>3</sup>H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- Methysergide**, blockade of 5-hydroxytryptamine-induced contractions in cat isolated trachea, bronchus and lung strips, 853
- , effect on behavioural responses to tranlycypromine plus L-tryptophan and 5-hydroxytryptamine receptor agonists in rats, 703
- , effect on dose-dependent vasoconstrictor actions of acetaldehyde and sodium acetate in rats, 578
- , effect on hydrolysis of phosphatidylinositol in salivary gland of blowfly, 729
- , effect on phase I and II bronchospasm in guinea-pig, 25
- Metoclopramide**, effect on inhibitory effects of clonidine and dopamine in guinea-pig ileum, 279P
- Metoprolol**, abolition of adrenaline effect on stimulation-induced efflux of radioactivity from rat atria, 669
- , effect on calcium chloride-induced arrhythmias in rat, 725
- Metronidazole**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Mexiletine**, comparison of antidysrhythmic effects with Org 6001 in anaesthetized rats, 199P
- Mianserin**, effect on behavioural responses to tranlycypromine plus L-tryptophan and putative 5-hydroxytryptamine receptor agonists in rats, 703
- Microcirculation**, direct observation of actions of acetylaldehyde or acetate on mesenteric arterioles and muscular venules in intact rats, 578
- , direct observation of perivascular action of lidocaine on pial terminal arterioles in rat, 575
- Microiontophoresis**, study of interactions between  $\beta$ -adrenoceptor antagonists and 5-hydroxytryptamine in rat brain stem, 245P
- Microspectrofluorimetry**, measurement of 5-hydroxytryptamine into catecholamine containing areas of rat hypothalamus, 143
- Micturition**, responses of rats with intact and partially innervated bladder, effect of atropine, 837
- Miniature endplate potentials**, effect of subcutaneous injection of venom of Australian common brown snake in isolated rat soleus muscle, 157
- Mitochondria**, rat brain, effect of selective acetylenic 'suicide' and reversible inhibitors of monoamine oxidase types A and B, 55
- Molecular models**, of quipazine and structurally similar compounds to show binding sites, 703
- Monoamine oxidase**, effect of hyperoxia on activity toward  $\beta$ -phylethylamine in rat lung, 461
- Monoamine oxidase inhibitors**, effect on responses to tyramine and noradrenaline and to uptake of [<sup>3</sup>H]-metaraminol in rat and mouse vas deferens, 65
- Monoamine oxidase types A and B**, inhibitory potency of aromatic-N-propargyl (acetylenic) compounds in rats, 55
- Monovalent cations**, effect on  $\alpha$ -adrenoceptor of human intact platelets, 204P
- Moprolol**, effect on calcium chloride-induced arrhythmias in rat, 725
- Morphine**, anti-writhing activity in rats, 779
- , control of responses learned to the cocaine cue in pigeons, 843
- , displacement of [<sup>3</sup>H]-dihydromorphine binding and [<sup>3</sup>H]-D-Ala<sup>2</sup>-enkephalin binding *in vitro* in rats, 435
- , effect of naloxone on analgesic activity *in vivo* and *in vitro* in rats, 435
- , effect on guinea-pig ileum and mouse vas deferens, 625
- , effect on hypothalamo-pituitary-adrenocorticotrophic activity in rat, 246P
- , effect on number of abdominal constrictions in mice,

- 325
- , induction of mydriasis, effect of nalorphine, levallorphan and naloxone in mice, 807
  - , inhibition of electrically-evoked twitch of the isolated superfused mouse vas deferens, 787
  - , inhibition of electrically-evoked contractions of isolated superfused mouse vas deferens, 791
  - , interactions with 5-hydroxytryptamine-containing neurones in rat brain, site of action, 245P
  - , interactions with theophylline in acute and narcotic-dependent preparations, *in vitro* and *in vivo*, 887
  - , production of physical dependence in guinea-pig ileum, 859
- Motoneurons**, effect of iontophoretically applied 5-hydroxytryptamine and substance P analogue on field potentials, 587
- Motor nerve endings**, presence of spare calcium receptors in frog nerve-muscle preparations, 413
- Moving fluid electrode technique**, study of methohexitone-tetraethylammonium interactions in chick biventer cervicis muscle, 311P
- DL-Muscarrine**, responses of Renshaw cells to, effect of atropine, methylatropine and lachesine in anaesthetized cats, 455
- Muscarrinic receptors**, affinities of pirenzepine and atropine for, in guinea-pig atrium and ileum, 183P
- , in rat pancreas, parallel maturation with pancreatic secretory response to cholinergic stimulation, 347
  - , presynaptic, modulation of release of acetylcholine in rat phrenic nerves, 481
  - , selective activation by agonists and antagonists in anaesthetized cats, 455
  - , stimulation, relation between effects and intracellular cyclic nucleotide metabolism in canine cardiac muscles, 393
- Muscimol**, depolarizing responses to, in rat cuneate nucleus slices, effect of barbiturates, benzodiazepines and phenytoin, 739
- Muscle fibres**, effect of injection of venom of Australian common brown snake in rats, 157
- Musculature**, tracheal, effect of glyceryl trinitrate, SIN-1A and isoprenaline in dogs, *in situ*, 9
- Mydriasis**, morphine-induced, antagonism by nalorphine, levallorphan and naloxone in mice, 807
- Myenteric plexus**, opiate-induced dependence in final cholinergic motor neurones, 921
- Myocardial cells**, rat, time course of uptake of ouabain into, dependence on extracellular potassium and calcium concentration, 341
- Myocardial infarction**, acute, effects of bepridil in anaesthetized dogs, 471
- Myocardial oxygen consumption and extraction**, effect of intravenous bepridil given before acute coronary ligation in anaesthetized dogs, 471
- N**
- Nalorphine**, effect on morphine-induced mydriasis in mice, 807
- , production of physical dependence in guinea-pig ileum, 859
  - , antagonism of effects of dermorphins, 625
  - , displacement of [ $^3$ H]-dihydroxymorphine binding *in vitro* in rats, 435
  - , effect on antinociceptive effects of morphine and related compounds and Met- and Leu-enkephalin in mouse peritoneum, 325
  - , effect on guinea-pig ileal segments incubated with clonidine or normorphine, 443
  - , effect on morphine-induced mydriasis in mice, 807
  - , enhanced responsiveness of guinea-pig ileum exposed to opiates, 859
  - , induction of contraction in guinea-pig ileum, which has been incubated with normorphine and hexamethonium, 921
  - , inhibition of salbutamol-induced depression of white cell and platelet counts in mice, 298P
- Naloxone**, interactions with anaesthetics *in vivo* and *in vitro*, 435
- , responses to, effect of morphine-theophylline interactions *in vivo* and *in vitro*, 887
- Narcotic analgesics**, effects on lipase activity *in vitro*, 301P
- Negative feedback**, regulation of release of adrenergic transmitters from guinea-pig atrium, 363
- Neostigmine**, effect on the contractile responses to cholinomimetics in the rat anococcygeus muscle, 829
- , elevation of tracheal tone in dog, 9
- Nerve-muscle preparations**, effect of venom from Australian common brown snake in rat, 157
- Neurochemical markers**, ontogeny, for glutamatergic neurones in cerebellum: implications for development of kainate neurotoxicity, 235P
- Neuroeffector-transmission**, effect of  $\beta$ -bungarotoxin in guinea-pig, 184P
- , electrical and mechanical properties, effect of indomethacin treatment in dog trachea, 563
- Neurogenic vasoconstriction**, effect of angiotensin converting enzyme inhibitor in the pithed rat, 296P
- Neuroleptic drugs**, development of cerebral dopamine receptor supersensitivity, no prevention by drug holidays, 242P
- , effect on post-synaptic 5-hydroxytryptamine mechanisms in rat, 149
  - , selective enhancement of dopamine-induced behaviours following chronic treatment, 269P
- Neuromuscular blockade**, by crotoxin phospholipase A<sub>2</sub> and other presynaptic neurotoxins, effect of crotoxin in mouse diaphragm, 495
- Neuromuscular system**, effect of venom from Australian common brown snake in rats, 157
- Neurotensin**, effect on  $\alpha$ -amylase release in rat parotid slices, 517
- Neurotoxins**, presynaptic, effects of interactions with crotoxin in mouse diaphragm and chick biventer cervicis muscle, 495
- Neutrophils**, human, stimulation of lysosomal enzyme release by leukotriene B, 260P
- Nicotine**, responses of Renshaw cells to, effect of atropine, methylatropine and lachesine in anaesthetized cats, 455
- Nicotinic receptors**, non-selective activation by agonists and antagonists in anaesthetized cats, 455
- Nifedipine**, effect on active tension in human isolated crural veins and in rat thoracic aorta, 799

- , effect on rat vas deferens, 321
- N-nitroso-N-morpholinoamino-acetonitrile** *see* **SIN-1A**
- Nitrous oxide**, effect of naloxone on analgesic activity *in vivo* and *in vitro* in rats, 435
- Non-adrenergic inhibitory nerves**, mediation of relaxation of guinea-pig ileum, 581
- Non-adrenergic inhibitory transmitter**, effect of  $\beta$ -bungarotoxin release on, in guinea-pigs, 184P
- Non-adrenergic non-cholinergic nerves**, effect of stimulation on carbachol-induced tone and contractions produced by pelvic nerve stimulation or acetylcholine in rabbit rectococcygeus muscle, 87
- Noradrenaline**, blockade of neuronal release, evidence that  $\alpha_1$ -adrenoceptor subtype predominates intrasynaptically, 281P
- , contractile responses of superfused rat aorta preparation, effect of gender on diurnal rhythm and development, 903
- , effect of iontophoretic application on motoneurone field potentials in rats with chronic sectioned dorsal roots, 587
- , effect of irreversible monoamine oxidase inhibitors on responses of rat vas deferens to, 65
- , effect of pretreatment on isoprenaline-induced and noradrenaline-induced hyperpolarization of guinea-pig liver cells, 867
- , effect on adrenaline effects on stimulation-induced efflux of radioactivity from rat atria, 669
- , effect on adrenergic transmitter release from guinea-pig atria, role of calcium, 363
- , effect on  $\alpha$ -amylase release from rat parotid gland slices, 517
- , effect on carbachol-induced tone and on contractions produced by acetylcholine or by pelvic nerve stimulation in rabbit rectococcygeus muscle, 87
- , effect on human isolated mesenteric blood vessels, 190P
- , effect on plasma protein exudation into granuloma tissue in rats, 605
- , effect on responses to transmural stimulation and exogenous acetylcholine in ileal preparations from reserpine-treated guinea-pigs, 355
- , effect on single cerebral cortical neurones in rat, 47
- , effect on uptake of oxprenolol by rat lung slices, 119
- , excitatory responses of cortical neurones, effect of haloperidol, 243P
- , induction of behavioural depression, effect of tryptamine in chicks, 485
- , inhibition of electrically-evoked contractions of isolated superfused mouse vas deferens, 791
- , levels and release in isolated rat tail artery after loading with noradrenaline, 811
- , pressor doses confer protection against development of dysrhythmias in anaesthetized rats, 951
- , pressor responses to, alteration by prazosin of time-course profile in perfused forelimb of spinal dog, 293P
- , storage in vesicles in peripheral nerves of rat and their modification by tranlycypromine, 401
- , uptake and release in rat atria by field stimulation, after preincubation with adrenaline and incubation with noradrenaline, 669
- , vasoconstrictor responses to, effect of prazosin, phenolamine and yohimbine in rat mesentery, 291P

- [ $^3$ H]-noradrenaline**, veratridine-evoked release from spinal cord, effect of external concentration of calcium in rats, 655
- (-)-Noradrenaline**, contractile responses of rat anococcygeus muscle to, effect of antimuscarinic agents, 829
- , inhibition of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- Norcocaine**, generalization to cocaine in pigeons, 843
- Normorphine**, effect on number of abdominal constrictions in mice, 325
- Notechis-5**, interactions with crotafotol in mouse diaphragm and chick biventer cervicis muscle, 495
- Notexin**, interactions with crotafotol in mouse diaphragm and chick biventer cervicis muscle, 495
- Null equations**, analysis of functional antagonism and synergism, 127
- , test using data from the functional antagonism of (-)-isoprenaline by muscarinic agonists on guinea-pig isolated atria, 135

## O

- Octanol**, effect on acetylcholine receptor from *Torpedo californica* and its ionophore, 187P
- [ $^3$ H]-octopamine**, effect of irreversible monoamine oxidase inhibitors on uptake into mouse vas deferens, 65
- Oesophageal sphincter**, modification by domperidone of catecholamine effects on circular smooth muscle in guinea-pig, 312P
- Oestradiol**, effect on endotoxin-induced diarrhoea in mice, 549
- Oestrous cycle**, guinea-pig, endometrial uptake and esterification of arachidonic acid, 223P
- $\mu$ -Opiate binding site**, specific binding by RX 783006, 299P
- Opiate dependence**, induction, effect of temperature in guinea-pig isolated ileum, 300P
- , model in guinea-pig isolated ileum, 921
- , production in guinea-pig ileum by exposure to different opiates, 859
- Opiate receptor**, characterization of  $\kappa$ -subtype in the guinea-pig brain, 939
- $\kappa$ -Opiate receptor agonists**, displacement of high affinity binding of [ $^3$ H]-ethylketazocine in guinea-pig brain, 939
- , lack of effect on potassium ion stimulated release of Met-enkephalin from guinea-pig striatal slices, 264P
- $\mu$ -Opiate receptor agonists**, lack of effect on potassium ion-stimulated release of Met-enkephalin from guinea-pig striatal slices, 264P
- Opiate receptors**, in rat vas deferens, pharmacological analysis, 205P
- Opiates**, inhibitory action on unidentified substance release from guinea-pig atria, 294P
- ORG 6001**, comparison of antidysrhythmic effects with mexiletine in anaesthetized rats, 199P
- , effect on electrical stimulation threshold and ventricular fibrillation threshold in Langendorf-perfused rabbit and guinea-pig hearts, 373
- Ouabain**, effect of chronic exposure on sodium pump of HeLa cells and chick embryo heart cells to ouabain, 333

- , effect on uptake of labelled oxprenolol and propranolol by rat lung slices, 119
- , increase of calcium independent-efflux of [ $^3\text{H}$ ]-spermine from rat brain *in vitro*, 165
- , induction of ventricular fibrillation, effect of anti-arrhythmic drugs in guinea-pig hearts, 373
- , time course of uptake in isolated myocardial cells: dependence on extracellular potassium and calcium concentration, 341
- [ $^3\text{H}$ ]-ouabain**, accumulation in functionally different canine cardiac tissues: differential rubidium uptake, 81
- Oxotremorine**, effect on acetylcholine release in rat phrenic nerve-preparations, 481
- , functional antagonism against (–)-isoprenaline on isolated guinea-pig atria, test for null equation, 135
- Oxprenolol**, effect on the calcium chloride-induced arrhythmias in the rat, 725
- ( $\pm$ )-[ $^{14}\text{C}$ ]**oxprenolol**, uptake and loss by rat lung slices, 119
- Oxymetazoline-like compounds**, pre- and post-junctional effects in guinea-pig ileal preparations, 355
- Oxymorphone**, effect on number of abdominal constrictions in mice, 325

## P

- Pain threshold**, effect of topical capsaicin treatment to human skin, 755
- Pancreas**, isolated perfused rat, effect of phosphate-modified adenine nucleotide analogues on secretion of insulin, 105
- , rat, parallel maturation of secretory response to cholinergic stimulation and muscarinic population, 347
- Pancreatic islets**, transport of 5-hydroxytryptamine in ob/ob mice, 385
- Papillary muscle**, dog heart, accumulation of [ $^3\text{H}$ ]-ouabain, correlation with rubidium uptake, 81
- , rabbit isolated, effect of increased pH on contractile force, 295P
- , rat, guinea-pig and ground squirrel, relationship between 'staircase' phenomena and response to cardiac glycosides, 196P
- Parasympathetic nerve mechanisms**, contribution to the control of heart rate in conscious dogs at rest and during exercise, 289P
- Pargyline**, inhibition of brain mitochondrial monoamine oxidase in rats, 55
- Parkinson's disease**, possible therapeutic use of AGN-1133 and AGN-1135, 55
- Parotid gland**, rat, effect of substance P and related peptides on  $\alpha$ -amylase release, 517
- Pelvic nerve stimulation**, production of contractions in rabbit rectococcygeus muscle, effect of stimulation of extrinsic inhibitory nerves and of sympathomimetic drugs, 87
- Pentazocine**, effect on number of abdominal constrictions in mice, 325
- , production of physical dependence in guinea-pig ileum, 859
- Pentobarbitone**, effect of naloxone on analgesic activity *in vivo* and *in vitro* in rats, 435
- , effect on hypothalamopituitary-adrenocorticotrophic activity in rat, 246P
- , effect on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin in rat cuneate slices, 739
- , effect on transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- , interactions with bicuculline and picrotoxin in rat, 229P
- Pentyltrimethylammonium**, functional antagonism against (–)-isoprenaline on isolated guinea-pig atria, test for null equation, 135
- Pepsin**, effect of cimetidine on basal and stimulated secretion of, in isolated whole rat stomach, 41
- Peptides**, activities in human skin and as histamine releasing agents, 207P
- , effects on  $\alpha$ -amylase release from rat parotid gland slices, 517
- Peripheral nerves**, vesicular storage of noradrenaline and their modification by tranlylcypromine, 401
- Peristaltic reflex**, guinea-pig, effect of antibiotics, 535
- Peritoneum**, mouse, evidence for an action of morphine and the enkephalins on sensory nerve endings, 325
- Peritoneum**, rat, site of anti-writhing action of tolmetin sodium, 779
- Perturbors**, effect on acetylcholine receptor from *Torpedo californica* and its ionophore, 187P
- pH**, effect of increase on the contractile force of rabbit isolated papillary muscles, 295P
- Phenelzine**, effect on uptake of 5-hydroxytryptamine into the catecholamine containing areas of rat hypothalamus, 143
- Phenformin**, polymorphic metabolism in Saudi females, 177P
- Phenobarbitone**, effect on acetylcholine receptor from *Torpedo californica* and its ionophore, 187P
- , effect on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin in rat cuneate slices, 739
- , interactions with bicuculline and picrotoxin in rat, 229P
- Phenothiazine**, effect of chronic treatment on dopamine receptor supersensitivity in rats, 240P
- Phenothiazine**, six month treatment differentially influences distinct dopamine-mediated behaviours, 240P
- Phenoxybenzamine**, effect on adrenergic transmitter release from guinea-pig atria, role of calcium, 363
- , effect on responses of single cerebral cortical neurones to methoxamine, noradrenaline and phenylephrine in rat, 47
- , enhancement of adrenaline effect on stimulation-induced efflux of radioactivity from rat atria, 669
- Phentolamine**, antagonism of responses of rabbit rectococcygeus muscle to methoxamine and phenylephrine, 87
- , effect on biphasic mechanical responses of the guinea-pig ileum to venom of *Conus striatus*, 581
- , effect on dose dependent vasoconstrictor actions of acetaldehyde and sodium acetate in rats, 578
- , effect on guinea-pig ileal segments incubated with normorphine, 443
- , effect on inhibitory effects of nerve stimulation, isoprenaline and noradrenaline in rabbit rectococcygeus muscle, 87

- , effect on vasoconstrictor response to noradrenaline and sympathetic nerve stimulation in the rat mesentery, 291P
- , induction of contracture in guinea-pig ileum, effect of clonidine concentration in incubation fluid, 443
- , inhibition of electrically-evoked contractions of isolated superfused mouse vas deferens, 791
- Phenylephrine**, effect on carbachol-induced tone and contractile response to pelvic nerve stimulation of rabbit rectococcygeus muscle, 87
- , effect on single cerebral cortical neurones in rat, 47
- , excitatory responses of cortical neurones, effect of haloperidol, 243P
- , inotropic action on canine cardiac muscle, lack of effect of sodium nitroprusside or 8-bromo-guanosine 3',5'-monophosphate, 393
- , inhibition of [ $^3\text{H}$ ]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- , pressor doses confer protection against development of dysrhythmias in anaesthetized rats, 951
- $\beta$ -Phenylethylamine**, effect of hyperoxia on uptake and metabolism in rat lung, gender differences, 461
- Phenytol**, effect on responses to  $\gamma$ -aminobutyric acid receptor activation and antagonism by bicuculline and picrotoxin in rat cuneate slices, 739
- , effect on acetylcholine receptor from *Torpedo californica* and its ionophore, 187P
- Phosphatidylinositol**, hydrolysis in association with increased calcium permeability, stimulation by 5-hydroxytryptamine in salivary gland of the blowfly, 729
- Phrenic nerve-diaphragm**, rat, effect of atropine and oxotremorine on release of acetylcholine, 481
- o*-Phthalaldehyde fluorometric method**, determination of brain 5-hydroxyindoles in rats, comparison with high pressure liquid chromatography, 555
- Physalamin**, effect on  $\alpha$ -amylase release from rat parotid gland, 517
- Picrotoxin**, antagonism of responses to muscimol in rat cuneate nucleus slices, effects of barbiturates, benzodiazepines and phenytoin, 739
- , interactions with pentobarbitone and phenobarbitone in rat, 229P
- Piperoxan**, induction of contracture in guinea-pig ileum, effect of clonidine concentration in incubation fluid, 443
- , inhibition of [ $^3\text{H}$ ]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- Pirenzepine**, affinity for muscarinic receptors in guinea-pig ileum and atrium, 183P
- Pivmecillinam**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Plasma**, human, pharmacokinetics and bioavailability of ranitidine, 275P
- , human, pig, guinea-pig, rabbit and rat, production of C5a, a link between complement activation and inflammatory oedema, 211P
- , human, transformation of plasma prostacyclin into stable spasmogenic product by platelets, 218P
- , rat, effect of various prostaglandins on *in vitro* activation of kallikrein, 224P
- , rat, levels of insulin after rectal administration of microneemata containing Cetomacrogol 1000 and insulin, 21
- , levels of tolmetin sodium after intraperitoneal and intravenous administration in rats, 779
- , rat, relationship between concentrations of valproic acid and its anti-convulsant and behavioural effects in rats, 231P
- , rat, sulphinpyrazone release of prostaglandin reciprocal coupling factor, 250P
- Platelets**, aggregation by heparin *in vivo* and *in vitro*, 639
- , human, binding of [ $^3\text{H}$ ]-9, 11-epoxymethano prostaglandin  $\text{H}_2$ , 304P
- , human, effect of flupenthixol isomers on [ $^3\text{H}$ ]-5-hydroxytryptamine uptake, 249P
- , human, effect of  $\text{R}_\text{P}$  and  $\text{S}_\text{P}$  diastereoisomers of adenosine 5',O-(1-thiodiphosphate), 409
- , human, induction of aggregation by adenosine 5',O-(2-thiodiphosphate), 405
- , human, inhibition of aggregation by AH 19437, 219P
- , human, inhibition of aggregation by ethanol, role of plasma and platelet membrane lipids, 305P
- , human intact, effect of monovalent and divalent cations and purine nucleotides on the  $\alpha$ -adrenoceptor, 204P
- , interactions with red cells and fibrin in experimental thrombosis, 219P
- , mouse, role of arachidonate in collagen-induced aggregation in citrated platelet-rich plasma, 251P
- , salbutamol-induced depression of counts in mice, inhibition by (–)-propranolol and naloxone, 298P
- , transformation of plasma prostacyclin into a stable spasmogenic product, 218P
- Platinum**, accumulation in kidney after *cis*-dichlorodiammineplatinum II, effect of heavy metal chelators in rat, 649
- Polymorphism**, of phenformin 4-hydroxylation in Saudi females, 177P
- Polysaccharides**, sulphated, effect on  $\alpha_1$ -antitrypsin inhibition of thrombin and activated coagulation factor X activity, 505
- Post ganglionic axons**, responses to 5-hydroxytryptamine in rabbit, 759
- Posture**, effect of pharmacological manipulations of tectal  $\gamma$ -aminobutyric acid systems in the rat, 271P
- Potassium**, decreased intracellular concentration after exposure of HeLa cells and chick embryo heart cells to ouabain, 333
- , drug-induced release from suspensions of isolated hepatocytes, study with potassium sensitive electrodes, 317P
- , effect on release of spermine from rat brain *in vitro*, 165
- , external concentrations, effect on veratridine-evoked [ $^3\text{H}$ ]- $\gamma$ -aminobutyric acid release from rat brain slices, 655
- , extracellular concentration, effect on time course of ouabain uptake into isolated rat myocardial cells, 341
- , stimulation of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate release from rat brain slices, 681
- , chloride-induced tone, in rabbit rectococcygeus muscle, effect of isoprenaline and noradrenaline, 87
- Potassium current**, effect of propranolol in *Helix aspersa* neurones, 431
- Potassium cyanide**, effect on uptake of labelled oxprenolol by rat lung slices, 119
- Potassium ions**, stimulation of Met-enkephalin from



- guinea-pig striatal slices, lack of effect of  $\mu$ - and  $\kappa$ -opiate receptors, 264P
- Practolol**, antidysrhythmic potency in anaesthetized rats, 951
- , effect on calcium chloride-induced arrhythmias in rat, 725
- Prazosin**, alteration of time-course profile of pressor responses elicited by noradrenaline in perfused forelimb of spinal dogs, 293P
- , antagonism of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- , competitive and non-competitive blockade of  $\alpha$ -adrenoceptors on rat aorta, 290P
- , effect on chronotropic response evoked by amidephrine or cardioaccelerator nerve stimulation in rat heart, 584
- , effect on the release of prostaglandins  $I_2$  and  $E_2$  from the perfused mesenteric arterial bed of rabbit following stimulation of the adrenergic nerves, 215P
- , effect on vasoconstrictor response to noradrenaline and sympathetic nerve stimulation in the rat mesentery, 291P
- [ $^3$ H]-prazosin, binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- Prednisolone**, effect on endotoxin-induced diarrhoea in mice, 549
- Pressor responses**, stimulation-evoked, inhibition by dopamine agonists in pithed rats, 278P
- , to noradrenaline, alteration by prazosin of time-course profile in perfused forelimb of spinal dog, 293P
- , to tyramine and noradrenaline, effect of irreversible monamine oxidase inhibitors in rats and cats, 65
- Procaine**, control of responses learned to cocaine cue in pigeons, 843
- Progesterone**, effect on endotoxin-induced diarrhoea in mice, 549
- Propildazine**, interactions with purine compounds in the rat isolated tail artery, 811
- 2-O-Propoxyphenyl-8-azapurin-6-one** see M & B 22948
- Propranolol**, antagonism of effects of isoprenaline and noradrenaline on potassium chloride-induced tone in rabbit rectococcygeus muscle, 87
- , blockade of renin release after stimulation of renal nerves in the cat, 749
- , effect on chronotropic response evoked by amidephrine or stimulation of cardioaccelerator nerve in rat heart, 584
- , effect on inhibitory effects of nerve stimulation, isoprenaline and noradrenaline in rabbit rectococcygeus muscle, 87
- , effect on responses of isolated rat tail artery to hydralazine, 811
- , effect on the calcium chloride-induced arrhythmias in the rat, 725
- , effect on the calcium current of *Helix aspersa* neurones, 431
- , effect on uptake of oxprenolol by rat lung slices, 119
- , first pass elimination, effect of imipramine and SKF 525 A, 178P
- , inhibition of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- ( $\pm$ )-[ $^{14}$ C]-propranolol, uptake and loss by rat lung slices, 119
- (-)-Propranolol, effect on behavioural responses to tranyl-
- cypromine plus L-tryptophan and putative 5-hydroxytryptamine receptor agonists in rats, 703
- , inhibition of salbutamol-induced depression of white cell and platelet counts in mice, 298P
- Propylbenzylcholine mustard**, use for estimation of affinity constants, of muscarinic agonists for their receptors, 135
- Prostacyclin**, cardiovascular responses to, effect of inhalation of cigarette smoke in anaesthetized rats, 3
- , effect of endotoxin on release from rat lung *in vivo* and *in vitro*, 511
- , effect of prazosin on release from the perfused mesenteric arterial bed of rabbit following stimulation of the adrenergic nerves, 215P
- , effect on changes in gastric mucosal integrity induced by topical bile salt, in rats, 257P
- , production by myometrial tissue, effect of trapped blood elements within the decidua of rat pregnant uterus, 695
- , release from pregnant rat uterus at term, 75
- , renal and systemic haemodynamic action of prostacyclin in anaesthetized dogs, 297P
- , restoration of spontaneous activity of term pregnant rat uterus prevented by indomethacin, 75
- , stability in plasma and its transformation by platelets to a stable spasmogenic product, 218P
- [ $^3$ H]-prostacyclin, effect of divalent cations on binding to membranes of neuronal somatic hybrid cells, 691
- Prostaglandin A<sub>1</sub>, A<sub>2</sub>, B<sub>1</sub>, B<sub>2</sub>**, effect on canine intrapulmonary arteries and veins, 819
- Prostaglandin D<sub>2</sub>**, effect on canine intrapulmonary arteries and veins, 819
- , inactivation by perfused rat lung, 214P
- , release from pregnant rat uterus at term, 75
- , restoration of spontaneous activity of term pregnant rat uterus prevented by indomethacin, 75
- Prostaglandin E<sub>1</sub>**, effect on canine intrapulmonary arteries and veins, 819
- , effect on plasma protein exudation into granuloma tissue in rats, 605
- , inactivation by perfused rat lung, 214P
- , stimulation of adenylate cyclase, inhibition by adenosine 5'-O-(2-thiodiphosphate) in human platelets, 405
- , stimulation of adenylate cyclase, lack of inhibition by  $R_p$  and  $S_p$  diastereoisomers of adenosine 5'-O-(1-thiodiphosphate) in human platelets, 409
- , stimulation of adenylate cyclase in platelets, inhibition by heparin, 639
- , stimulation of short circuit current and effect on adenosine triphosphate effects on short circuit current in cultured renal (MDCK) epithelium, 379
- Prostaglandin E<sub>1</sub>, 6-keto-**, conversion from prostacyclin by platelets in human plasma, 218P
- Prostaglandin E<sub>2</sub>**, action on smooth muscle preparations from guinea-pig, cat, dog, rabbit and rat, 773
- , cardiovascular responses to, effect of inhalation of cigarette smoke in anaesthetized rats, 3
- , effect of endotoxin on release *in vivo* and *in vitro* in rat lung, 511
- , effect of prazosin on release from the perfused mesenteric arterial bed of rabbit following stimulation of the adrenergic nerves, 215P

- , effect on canine intrapulmonary arteries and veins, 819
- , effect on changes in gastric mucosal integrity induced by topical bile salt, in rats, 257P
- , effect on spontaneous activity in the dog trachea, 563
- , levels in synovial fluid of patients with inflammatory arthritis, effect of 6 $\alpha$ -methyl-prednisolone or indoprofen, 893
- , restoration of spontaneous activity of term pregnant rat uterus prevented by indomethacin, 75
- Prostaglandin F<sub>1 $\alpha$</sub>** , effect on canine intrapulmonary arteries and veins, 819
- Prostaglandin F<sub>1 $\alpha$</sub> , 6-keto**, levels in synovial fluid of patients with inflammatory arthritis, effect of 6 $\alpha$ -methyl-prednisolone or indoprofen, 893
- Prostaglandin F<sub>1 $\alpha$</sub> , 6-oxo**, restoration of spontaneous activity of term pregnant rat uterus prevented by indomethacin, 75
- Prostaglandin F<sub>2 $\alpha$</sub>** , action on smooth muscle preparations from guinea-pig, cat, dog, rabbit and rat, 773
- , effect on canine intrapulmonary arteries and veins, 819
- , effect of endotoxin on release from rat lung *in vivo* and *in vitro*, 511
- , cardiovascular responses to, effect of inhalation of cigarette smoke in anaesthetized rats, 3
- , inactivation by perfused rat lung, 214P
- , mediation of contraction and <sup>45</sup>Ca influx into rat mesenteric arteries: inhibition of flunarizine, 252P
- , levels in synovial fluid of patients with inflammatory arthritis, effect of 6 $\alpha$ -methyl-prednisolone or indoprofen, 893
- , restoration of spontaneous activity of term pregnant rat uterus prevented by indomethacin, 75
- , vasopressor response in canine isolated lung lobe, effect of verapamil, 101
- Prostaglandin H<sub>2</sub>**, action on isolated smooth muscle preparations from guinea-pig, cat, dog, rabbit and rat, 773
- Prostaglandin H<sub>2</sub>, 11 $\alpha$ , 9 $\alpha$ -epoxymethano-**, aggregation of human platelets, lack of inhibition by R<sub>p</sub> and S<sub>p</sub> diastereoisomers of adenosine 5'-O-(1-thiodiphosphate), 409
- , induction of aggregation, lack of effect of adenosine 5'-O-(2-thiodiphosphate) in human platelets, 405
- Prostaglandin H<sub>2</sub>, [<sup>3</sup>H]-9, 11-epoxymethano-**, binding to human platelets, 304P
- Prostaglandin I<sub>2</sub> see Prostacyclin**
- Prostaglandin receptors**, effect of gender on development and diurnal rhythm of, in rat aorta, 903
- Prostaglandin 'reciprocal coupling factor'**, release from rat plasma by sulphinyprazole, possible mode of antithrombotic action, 250P
- Prostaglandins**, effect on canine intrapulmonary arteries and veins, 819
- , effect on rabbit and rat vas deferens, 216P
- , effect on the *in vitro* activation of kallikrein in rat plasma, 224P
- , inactivation by the perfused rat lung, 214P
- , inactivation and synthesis, effect of sulphasalazine in isolated lungs of guinea-pig, rat and man, 217P
- , role of metabolism in action of sulphasalazine, 5-amino salicylic acid and indomethacin in treatment of ulcerative colitis, 217P
- Protamine sulphate**, effect on heparin inhibition of prostaglandin E<sub>1</sub>-stimulated adenylate cyclase in platelets,

639

- Protein synthesis**, effect of intracerebroventricular administration of cycloheximide in rabbits, 6
- Proteinases**, interactions with polysaccharides, involvement in sulphated polysaccharide-modulated inhibition of thrombin by antithrombin III, 505
- Purine nucleosides**, inhibition of formation by theophylline in rat brain and kidney, 467
- Purine nucleotides**, effect on  $\alpha$ -adrenoceptor of human platelets, 204P
- P<sub>1</sub>-purinoceptors**, evidence in support of, in guinea-pig taenia coli, 617
- , location in guinea-pig atria and frog atria, 879
- P<sub>2</sub>-purinoceptors**, evidence in support of, in guinea-pig taenia coli, 617
- , identification, linked to ion transport in a cultured renal (MDCK) epithelium, 379
- , location in frog atria and ventricles, 879
- Purkinje fibre**, dog heart, accumulation of [<sup>3</sup>H]-ouabain in relation to rubidium uptake, 81
- Pseudonaja textilis**, effect of subcutaneous injection of venom on rat skeletal neuromuscular system, 157
- PY 108-068**, *in vitro* and *in vivo* effects in canine coronary artery, 196P
- Pyloric sphincter**, modification by domperidone of catecholamine effects on circular smooth muscle in guinea-pig, 312P

## Q

- Quinidine**, effects on isolated mouse vas deferens and on the inhibitory properties of adenosine, morphine, noradrenaline and  $\gamma$ -aminobutyric acid, 791
- [<sup>3</sup>H]-quinuclidinyl benzylate**, binding to specific binding sites on pancreatic mucarinic receptors, 347
- Quipazine**, behavioural responses to, after chronic neuroleptic treatment in rats, 149
- , behavioural responses to, effect of 5-hydroxytryptamine receptor antagonists in rats, 703

## R

- Radioactive microsphere**, study of effect of sulphonylureas on regional blood flow in experimentally-induced diabetics in the rat, 286P
- Radioactivity**, stimulation-induced, from rat atria, effect of adrenaline, 669
- Radioimmunoassay**, with gas chromatography and mass spectrometry, measurement of prostaglandins and thromboxanes in pregnant rat uterus at term, 75
- Ranitidine**, pharmacodynamics and bioavailability in humans, 275P
- , radioimmunoassay in biological fluids, 274P
- Rauwolfscine**, effect on amidephrine-evoked chronotropic response in rat heart, 586
- Rectal temperature**, effect of intracerebroventricular administration of cycloheximide in rabbits, 6
- Rectococcygeus muscle**, rabbit, response to stimulation of extrinsic inhibitory nerves and to sympathomimetic

- drugs, 87
- Red blood cells**, interactions with fibrin and platelets in experimental thrombosis, 219P
- Reflex activity**, of sympathetic nerves, effects of atenolol in anaesthetized cats, 605
- Relaxations**, induction in intrapulmonary arteries, partially contracted by 5-hydroxytryptamine, by prostaglandins, 819
- Renal blood flow**, effect of catpopril on prostacyclin-induced increases in anaesthetized dogs, 297P
- Renal failure**, acute, effect on the pharmacokinetics of indocyanine green in the rat, 276P
- Renal histology**, effect of *cis*-dichlorodiammineplatinum II followed by 2,3-dimercaptosuccinic acid treatment in rats, 649
- Renal nerves**, stimulation, cause of release of renin, blockade by propranolol in the cat, 749
- Renin**, release after stimulation of renal nerves in the cat, 749
- Reserpine**, effect on calcium chloride-induced arrhythmias in the rat, 725
- , effect on transport of 5-hydroxytryptamine in pancreatic islets and  $\beta$ -cells of ob/ob mice, 285
- , induction of supersensitivity to the  $\beta$ -adrenoceptor-mediated responses of cardiac, respiratory and uterine tissues of the guinea-pig, 202P
- Respiratory tissues**, guinea-pig, reserpine-induced supersensitivity to  $\beta$ -adrenoceptor-mediated responses of, 202P
- Resting membrane potential**, effect of subcutaneous injection of venom of Australian common brown snake in isolated rat soleus muscle, 157
- Resting tone**, guinea-pig airway preparations, effect of chronic treatment with isoprenaline *in vivo*, 13
- Rhythmic activity**, spontaneous and stimulus-coupled, effect of dendrotoxin in amphibian spinal cord, 525
- Rubidium**, correlation of uptake with [ $^3$ H]-ouabain accumulation in functionally different canine cardiac tissues, 81
- Ruthenium red**, effect on veratridine and potassium-evoked release of [ $^3$ H]- $\gamma$ -aminobutyric acid from rat brain slices in normal and calcium free medium, 655
- , inhibition of calcium-dependent, potassium-stimulated release of spermine from rat brain *in vitro*, 165
- RX71107** *see* Tolmesoxide
- RX71112**, effect on active tension in human isolated crural veins and in rat thoracic aorta, 799
- RX74355**, neuropharmacological evaluation, 262P
- RX77368**, neuropharmacological evaluation, 262P
- RX783006**, selective ligand for the  $\mu$ -opiate binding site, 299P
- S**
- S 3341**, inhibition of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33
- Salbutamol**, induction of fall in white cell and platelet counts in mice, inhibition by (–)-propranolol and naloxone, 298P
- Salivary gland**, blowfly, separate 5-hydroxytryptamine receptors linked to the generation of either cyclic adenosine 3'5'-monophosphate or calcium signals, 729
- , vesicular storage of noradrenaline, 401
- Salivation**, effect of substance P and related peptides in rat, 517
- Salmon calcitonin**, interaction with calcium ions in the production of analgesia in the mouse, 302P
- Salicylic acid**, anti-writhing activity in rats, 779
- Saphenous vein**, dog isolated, characterization of pre- and post-junctional receptors for 5-hydroxytryptamine, 191P
- Sedation**, effectiveness of  $\alpha$ -adrenoceptor agonists in relation to  $\alpha_1$  and  $\alpha_2$  potency in rats, 595
- Seizure threshold**, post-ictal increase, drug-induced alterations, 265P
- Sensory nerve endings**, evidence for an action of morphine and the enkephalins in mouse peritoneum, 325
- Short circuit current**, stimulation by adenosine triphosphate in cultured renal (MDCK) epithelium, 379
- SIN-1A**, effect on musculature and vasculature in dog trachea *in situ*, 9
- Sino-atrial node**, dog heart, accumulation of [ $^3$ H]-ouabain in relation to rubidium uptake, 81
- SK & F92676** *see* Impromidine
- Skeletal muscle membrane**, currents recorded from single acetylcholine-activated ion channels, 317P
- Skeletal neuromuscular system**, effect of subcutaneous injection of crude venom of the Australian common brown snake in rat, 157
- SKF 525A**, effect on first pass elimination of propranolol in the rat, 178P
- Skin**, differences in the time-course of tuberculin reactions in primary and secondary hypersensitive phases and the influence of vinylidene chloride in guinea-pig, 310P
- , human, comparison of activities of some peptides, 207P
- , human, vascular and sensory responses to mild injury after topical treatment with capsaicin, 755
- , rabbit, effect of arachidonate lipoxygenase products on leucocyte migration, 253P
- Sleep**, effect of 6( $\pm$ )-flourotryptophan in the rat, 244P
- Slow-reacting substances of anaphylaxis**, some actions on isolated preparations, 213P
- Smooth muscle**, arterial, interactions between hydralazine, propildazine and purines in rats, 811
- , from oesophageal and pyloric sphincter, modification of catecholamine effects in guinea-pigs, 312P
- , rat and guinea-pig uterus, effect of thromboxane  $A_2$  *in vitro*, 222P
- Smooth muscle cells**, electrical and mechanical properties, effect of indomethacin treatment in dog trachea, 563
- Smooth muscle preparations**, guinea-pig, cat, dog, rabbit and rat, comparison of actions of U-46619, prostaglandin  $H_2$  and thromboxane  $A_2$ , 773
- Sodium**, effect of external concentration on veratridine and potassium-evoked [ $^3$ H]- $\gamma$ -aminobutyric acid release from rat brain slices, 655
- , external concentrations, effect on noradrenaline-induced hyperpolarization of guinea-pig liver cells, 867
- , increased intracellular concentration after exposure of HeLa cells and chick embryo heart cells to ouabain, 333
- , low concentrations in medium, effect on biphasic

- mechanical responses of the guinea-pig ileum to venom of *Conus striatus*, 581
- Sodium acetate**, failure to mimic splanchnic arteriolar or venular dilator actions of ethanol in rats, 578
- Sodium-free medium**, effect on calcium-dependent, potassium-stimulated- and veratrine-induced-release of spermine from rat brain *in vitro*, 165
- Sodium ions**, effect on accumulation of 5-hydroxytryptamine in pancreatic islets and  $\beta$ -cells of ob/ob mice, 385
- , effect on initiation of sperm motility in rat caudal epididymal spermatazoa, 633
- , effect on uptake of labelled oxprenolol and propranolol by rat lung slices, 119
- , transmucosal flux in the conscious dog, 308P
- Sodium nitroprusside**, effect on canine atrial and ventricular muscle, 393
- Sodium pump**, effect of chronic exposure of HeLa and chick embryo heart cells to ouabain, 333
- Sodium salicylate**, prevention of inhibitory action of sulphinyprazone in reducing phase II bronchospasm in guinea-pig, 25
- Somatic hybrid cells**, divalent cations increase [ $^3\text{H}$ ]-prostacyclin binding to membranes, 691
- Somatostatin**, effect on  $\alpha$ -amylase release in rat parotid slices, 517
- Sotalol**, effect on calcium chloride-induced arrhythmias in the rat, 725
- Soya bean lipoxidase**, effect on myometrial prostacyclin synthesis in rat pregnant uterus, 695
- Spermatazoa**, rat caudal epididymal, effect of divalent and lanthanide ions on initiation of sperm motility, 633
- Spermine**, spontaneous and evoked release from rat brain *in vitro*, 165
- Spinal cord**, frog, convulsant and possible anticholinergic actions of dendrotoxin, 525
- Splenic artery**, rabbit isolated, effect of agonists and antagonists at vascular dopamine receptors in the anaesthetized dog, 287P
- Spontaneous activity**, of sympathetic nerves, effects of atenolol in anaesthetized cats, 605
- Spontaneous hypertensive rats**, withdrawal syndrome after continuous infusion of clonidine, 195P
- ST-segment elevation**, effect of bepridil administered after coronary artery ligation in anaesthetized dogs, 471
- 'Staircase' phenomena**, relationship with response to cardiac glycosides in rat, guinea-pig and ground squirrel papillary muscles, 196P
- Stereotyped behaviour**, induction by stimulation of dopaminergic system in rabbit, 270P
- Stimulator**, programmable, determination of ventricular fibrillation threshold, 316P
- Stomach**, effect on basal and stimulated secretion of pepsin in isolated whole rat stomach, 41
- , isolated perfused rabbit and rat, vasoactive effects of some arachidonate lipoxygenase and cyclo-oxygenase products, 256P
- Stress**, interaction with non-steroid anti-inflammatory drugs to produce gastric ulcers, 226P
- , metabolic and functional response of 5-hydroxytryptamine to, effect of blocking increase of tryptophan in rat brain, 267P
- Striatal slices**, guinea-pig, potassium stimulation of Met-enkephalin from, lack of effect of  $\mu$ - and  $\kappa$ -opiate receptor agonists, 264P
- Strontium ions**, effect on binding of [ $^3\text{H}$ ]-prostacyclin to membranes of neuronal somatic hybrid cells, 691
- , effect on initiation of sperm motility in rat caudal epididymal spermatazoa, 633
- Substance P**, and related peptides, effects on  $\alpha$ -amylase release from rat parotid gland slices, 517
- , in the developing pig, 248P
- , possible depletion of nerve terminals by capsaicin in humans, 755
- Substance P analogue**, effect of iontophoretic application on motoneurone field potentials in rats with chronic sectioned dorsal roots, 587
- Suicide inhibitors of monoamine oxidase**, inhibitory potency in rats, 55
- Sulphasalazine**, effect on prostaglandin inactivation and synthesis in isolated lungs of guinea-pig, rat and man, 217P
- , treatment of ulcerative colitis, role of prostaglandin metabolism, 217P
- Sulphinpyrazone**, effect on phase I and II bronchospasm in guinea-pig, 25
- , release of prostaglandin 'reciprocal coupling factor' from rat plasma, possible mode of thrombotic action, 250P
- Sulphonylureas**, effect on regional blood flow in experimentally-induced diabetes in rat, 286P
- Sulpiride**, effect on inhibitory effects of clonidine and dopamine in guinea-pig ileum, 279P
- , stereoselective antagonism of pre-junctional dopamine receptors in the rabbit ear artery, 189P
- Sultopride**, effect on inhibitory effects of clonidine and dopamine in guinea-pig ileum, 279P
- Superior colliculus**,  $\gamma$ -aminobutyric acid systems, effect of pharmacological manipulations on posture and locomotion in the rat, 271P
- Swallowing**, fluoxetine and *p*-chloroamphetamine-induced, effect of tryptamine in rats, 485
- , 5-hydroxytryptophan-induced, effect of tryptamine alone or with 5-hydroxytryptophan, with or without tranlylcypromine pretreatment in rats, 485
- Sympathetic efferent discharge**, effect of atenolol in anaesthetized cats, 605
- Sympathetic ganglion**, rabbit, effect of divalent cations on responses to 5-hydroxytryptamine and 1,1-dimethyl-4-phenyl piperazinium, 759
- Sympathetic nerve mechanisms**, contribution to the control of heart rate in conscious dogs at rest and during exercise, 288P
- Sympathetic nerve stimulation**, vasoconstrictor responses to, effect of prazosin, phentolamine and yohimbine in rat mesentery, 291P
- Sympathetic nerves**, effect of atenolol on reflex responses in anaesthetized cats, 605
- , effect of stimulation on carbachol-induced tone and contractions produced by pelvic nerve stimulation or acetylcholine in rabbit rectococcygeus muscle, 87
- , rabbit ear artery, choline acetyltransferase activity, 721
- Sympathetic neurones**, cholinomimetic actions of barium ions in frog, 201P
- Sympathomimetic drugs**, response of rabbit rectococcygeus muscle, 87

- Synapse**, location for  $\alpha_1$ -adrenoceptors in vascular smooth muscle neuroeffector junctions, 281P
- Synergism**, analysis using null equations, 127
- Synovial fluid**, characterization of arachidonic acid metabolites present in patients with inflammatory arthritis, effect of 6 $\alpha$ -methyl-prednisolone or indoprofen, 893

## T

- Taenia coli**, guinea-pig, evidence in support of P<sub>1</sub>/P<sub>2</sub> purinoceptor hypothesis, 617
- Temperature**, effect on induction of opiate dependence in guinea-pig ileum, 300P
- , effect on uptake of labelled oxprenolol and propranolol by rat lung slices, 119
  - , rectal, effect of intrahypothalamic injection of N<sup>6</sup>-2'-O-dibutyl adenosine 3',5'-monophosphate in rabbit, 314P
- Testosterone**, effect on endotoxin-induced diarrhoea in mice, 549
- Tetraethylammonium**, effect on noradrenaline-induced hyperpolarization of guinea-pig liver cells, 867
- , effects on isolated mouse vas deferens and on the inhibitory properties of adenosine, morphine, noradrenaline and  $\gamma$ -aminobutyric acid, 791
  - , interaction with methohexitone in chick biventer cervicis muscle, effects of caffeine and xylocaine, 185P
  - , interaction with methohexitone in the chick biventer cervicis muscle, moving fluid electrode technique and denervation studies, 311P
- $\Delta^9$ -**Tetrahydrocannabinol**, control of responses learned to the cocaine cue in pigeons, 843
- Tetrodotoxin**, effect of external concentration on veratridine and potassium-evoked [<sup>3</sup>H]- $\gamma$ -aminobutyric acid release from rat brain slices, 655
- , effect on biphasic mechanical responses of the guinea-pig ileum to venom of *Conus striatus*, 581
  - , effect on phenolamine elicited contracture in guinea-pig ileum, 443
  - , effect on spontaneous activity in dog trachea, 563
  - , prevention of naloxone-induction of a withdrawal contracture in guinea-pig isolated ileum, 921
- Tetrodotoxin-resistant action potentials**, induction in muscles of rats treated with venom of Australian common brown snake, 157
- Thalamus**, rat, effect of catechol on amino acid transmitter release, 234P
- Theophylline**, antagonism of inhibitory effects of adenylyl compounds in guinea-pig atria, 879
- , effect on adenosine and morphine inhibition of electrically-evoked twitch of the isolated superfused mouse vas deferens, 787
  - , effect on adenosine triphosphate mediated increment in short circuit current in renal cultured (MDCK) epithelium, 379
  - , effect on relaxations induced by adenosine 5'-triphosphate, adenosine 5'-diphosphate, adenosine 5'-monophosphate and adenosine in carbachol-contracted taenia coli, 617
  - , effect on responses of isolated rat tail artery to hydralazine, 811
  - , inhibition of renal and cerebral purine nucleoside formation in rats, 467
  - , interactions with morphine in acute and narcotic-dependent preparations, *in vitro* and *in vivo*, 887
  - , sensitivity of guinea-pig airway muscle to, effect of chronic treatment with isoprenaline *in vivo*, 13
- Thermoregulation**, effect of cycloheximide in rabbits, 6
- Thiopentone**, effect of sex and age on pharmacokinetics in humans, 175P
- , effect on radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- Thoracic aorta**, rat, effect of tolmesoxide, RX71112 and nifedipine on active tension, 799
- Thrombin**, inhibition by  $\alpha_1$ -antitrypsin, effect of sulphated polysaccharides, 505
- Thrombosis**, experimental model, interactions between fibrin, red cell and platelets, 219P
- Thromboxane A<sub>2</sub>**, action on isolated smooth muscle preparations from guinea-pig, cat, dog, rabbit and rat, 773
- , effect of endotoxin on release from rat lung *in vivo* and *in vitro*, 511
  - , effect on uterine smooth muscle of rat and guinea-pig *in vitro*, 222P
  - , release from pregnant rat uterus at term, 75
- Thromboxane B<sub>2</sub>**, levels in synovial fluid of patients with inflammatory arthritis, effect of 6 $\alpha$ -methyl-prednisolone or indoprofen, 893
- , restoration of spontaneous activity of term pregnant rat uterus prevented by indomethacin, 75
- Thromboxane receptors**, antagonism by EP 045, 220P
- , blockade by AH 19437, 258P
  - , blockade by AH 19437 in human platelets, 219P
- Thromboxanes**, inhibition of formation by imidazole derivations, 221P
- Thyroidectomy**, effect on time-course of cardiac effects of a single dose of L-3,3',5-triiodothyronine in rats, 285P
- Thyrotropin releasing hormone**, neuropharmacological evaluation of analogues with modified proline residues, 262P
- Timolol**, effect on intraocular pressure in rabbit eye, 97
- Tocainide**, effect of alteration of liver blood flow and metabolism on kinetics, 273P
- Tolerance**, development in dermorphin treated rats, 625
- Tolmesoxide**, effect on active tension in human isolated crural veins and in rat thoracic aorta, 799
- Tolmetin sodium**, site of analgesic action in rats, 779
- Trachea**, cat isolated, reactivity to carbachol, 5-hydroxytryptamine and histamine, evidence for the existence of methysergide-sensitive receptors, 853
- , dog, effect of glyceryl trinitrate, SIN-1A and isoprenaline on musculature and vasculature, 9
  - , dog, spontaneous activity after indomethacin treatment, model for aspirin-related asthma, 563
- Tracheal spiral preparations**, guinea-pig, induction of tolerance to relaxant agonists by chronic exposure to isoprenaline, 13
- Trapped blood elements**, from decidua of rat pregnant uterus, effect on production of prostacyclin, 695
- Transmural stimulation**, effect of clonidine- and oxymetazoline-like compounds on responses to, in reserpine treated guinea-pigs, 355

- , guinea-pig ileum, effect of general anaesthetics on contractions *in vitro*, 435
- Tranlycypromine**, effect on prostaglandin release and production of spasm in pregnant rat uterus at term, 75
- , effect on vesicular noradrenaline stores in peripheral nerves of the rat, 401
- , plus 5-methoxy-*N*, *N*-dimethyltryptamine, behavioural responses to, effect of 5-hydroxytryptamine receptor antagonists in rats, 703
- , plus L-tryptophan, behavioural responses to, effect of 5-hydroxytryptamine receptor antagonists in rats, 703
- Tremor**, 5-hydroxytryptophan-induced, effect of chronic neuroleptic treatment in rats, 149
- Trifluoperazine**, effect on behavioural responses of drugs known to act through central 5-hydroxytryptamine mechanisms, 149
- L-3,3'-Triiodothyronine**, effect on rat cardiac function, 198P
- , time-course of cardiac effects of a single dose in thyroidectomized rats, 285P
- Trimethoprim**, effect on intestinal motility in guinea-pig ileum and rabbit colon, 535
- Tritium**, relationship between overflow and calcium concentration of medium, effect of noradrenaline and phenoxybenzamine in guinea-pig atrium, 363
- Tryptamine**, interaction with central 5-hydroxytryptamine systems, *in vivo* pharmacological studies, 485
- Tryptophan**, blockade of brain increase, effect on metabolic and functional response of 5-hydroxytryptamine to stress, 267P
- , effect on uptake of 5-hydroxytryptamine into the catecholamine containing areas of rat hypothalamus, 143
- L-Tryptophan**, effect on brain 5-hydroxyindoles, determination by  $\alpha$ -phthalaldehyde fluorometric method and by high pressure liquid chromatography in rats, 555
- , plus tranlycypromine, behavioural responses to, effect of 5-hydroxytryptamine receptor antagonists in rats, 703
- Tuberculin skin reactions**, differences in time-course in primary and secondary hypersensitive phases and the influence of vinylidine chloride, 310P
- Tyr-D-Ala-Gly-MePhe-NH (CH<sub>2</sub>)<sub>2</sub>OH** *see* **RX783006**
- Tyramine**, effect of irreversible monoamine oxidase inhibitors on responses of rat vas deferens to, 65
- Tyrosine hydroxylase**, mechanism for activation, 247P

## U

- U-46619**, action on isolated smooth muscle preparations from guinea-pig, cat, dog, rabbit and rat, 773
- , isotonic contractile response of superfused rat aorta preparation, effect of gender, on diurnal rhythm and development, 903
- , vasopressor response in canine isolated lung lobe, effect of verapamil, 101
- Ulcerative colitis**, effect of sulphasalazine, 5-amino salicylic acid and indomethacin in human colonic mucosa, role of prostaglandin metabolism, 217P
- Ulcers**, gastric stress, effects of benzodiazepines in rats, 228P

- , inhibition by M&B 28, 767 in rats, 225P
- , production by non-steroid anti-inflammatory drugs in stressed rats, 226P
- Urethane**, effect on the transport of radiolabelled  $\gamma$ -aminobutyric acid and D-aspartate in rat brain slices, 681
- Uterus**, guinea-pig, reserpine-induced supersensitivity to  $\beta$ -adrenoceptor-mediated responses of, 202P
- , guinea-pig and rat, effect of thromboxane A<sub>2</sub> on smooth muscle *in vitro*, 222P
- , pregnant rat, effect of trapped blood elements within the decidua on myometrial production of prostacyclin, 695
- , pregnant rat, measurement of prostaglandins and thromboxanes at term, 75

## V

- Vagal stimulation**, induction of gastric acid secretion, inhibition by atropine and H<sub>2</sub>-receptor antagonists in the rat, 313P
- Valproic acid**, relationship between plasma concentration and anti-convulsant and behavioural effects in rats, 231P
- Vas deferens**, isolated mouse, effects of 4-aminopyridine on, and on the inhibitory properties of adenosine, morphine, noradrenaline and  $\gamma$ -aminobutyric acid, 791
- , isolated superfused mouse, effect of theophylline on adenosine and morphine inhibition of electrically evoked twitch, 787
- , mouse, comparison of effects of irreversible monoamine oxidase inhibitors on [<sup>3</sup>H]-metaraminol and [<sup>3</sup>H]-octopamine uptake, 65
- , rabbit and rat, effect of prostaglandins, 216P
- , rat, effect of irreversible monoamine oxidase inhibitors on tyramine and noradrenaline response and uptake of [<sup>3</sup>H]-metaraminol, 65
- , rat, effect of nifedipine and verapamil, 321
- , rat, pharmacological analysis of opiate receptors, 205P
- , rat, vesicular storage of noradrenaline, 401
- Vascular constriction**, role in anti-inflammatory action of glucocorticoids in rats, 605
- Vascular permeability**, increase evidence for two types of mediator, 209P
- , mediation by leukotriene B<sub>4</sub>, 258P
- Vascular resistance**, coronary and systemic, effect of intravenous bepridil given before acute coronary ligation in anaesthetized dogs, 471
- Vasculature**, tracheal, effect of glyceryl trinitrate, SIN-1A and isoprenaline in dogs, *in situ*, 9
- Vasoconstriction**, neurogenic, effect of angiotensin converting enzyme inhibitor in the pithed rat, 296P
- Vasopressin**, effect on  $\alpha$ -amylase release in rat parotid slices, 517
- Veins**, intrapulmonary dog, differential effects of prostaglandins, 819
- Venom**, Australian common brown snake, *Pseudonaja textilis*, effect of subcutaneous injection on mammalian skeletal neuromuscular system, 157
- Venom extract**, *Conus striatus*, effect on guinea-pig isolated ileum, 581

**Ventral root-dorsal root potential**, cholinergically mediated, effect of dendrotoxin in amphibian spinal cord, 525

**Ventricular arrhythmia threshold**, effect of fatty acids in the isolated rabbit heart, 909

**Ventricular fibrillation threshold**, determination by an isolated programmable stimulator, 316P

—, effect of encainide, lorcanide, ORG 6001 and lignocaine in isolated rabbit and guinea-pig hearts, 373

**Ventricular fibrilloflutter**, increased incidence after atropine and isoprenaline in anaesthetized rats, 951

**Ventricular muscle**, dog, responses to carbachol, sodium nitroprusside and 8-bromo-guanosine 3',5'-monophosphate, 393

**Venules**, rat muscular, effects of local administration of acetaldehyde and sodium acetate in intact rats, 578

**Verapamil**, effect on rat vas deferens, 321

—, effect on the pulmonary vasoconstrictor action of prostaglandin  $F_{2a}$  and U-46619 in canine isolated lung lobe, 101

**Veratrine**, induction of spermine release from rat brain *in vitro*, 165

**Veratridine**, mechanism by which the calcium-independent release of  $\gamma$ -aminobutyric acid from rat brain slices is increased, 655

**Vesicles**, noradrenaline stores in peripheral nerves of the rat and their modification by tranlycypromine, 401

**Vinylidine chloride**, influence on differences in the time-course of tuberculin skin reactions in primary and secondary hypersensitive phases in guinea-pigs, 310P

**Volvatoxin A<sub>2</sub>**, effect on crotoxin phospholipase A<sub>2</sub> in mouse diaphragm and chick biventer cervicis muscle, 495

## W

**Wakefulness**, effect of 6( $\pm$ )-fluorotryptophan in the rat, 244P

**WB4101**, antagonism of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33

—, effect on chronotropic response of rat heart to cardioaccelerator nerve stimulation, 584

**Weight loss**, effect of *cis*-dichlorodiammineplatinum II followed by 2,3-dimercaptosuccinic acid treatment in

rats, 649

**'Wet-dog' shakes**, 5-hydroxytryptophan-induced, effect of chronic neuroleptic treatment in rats, 149

**White cells**, salbutamol-induced depression of counts in mice, inhibition by (–)-propranolol and naloxone, 298P

**WIN 35,065-2**, generalization to cocaine in pigeons, 843

**WIN 35,428**, generalization to cocaine in pigeons, 843

**Withdrawal symptoms**, after treatment with naloxone to dermorphin treated rats, 625

**Withdrawal syndrome**, after continuous infusion of clonidine in spontaneously hypertensive and normotensive rats, 195P

## X

**Xylazine**, displacement of [ $^3$ H]-dihydroxymorphine and [ $^3$ H]-D-Ala<sub>2</sub>-Leu-enkephalin binding *in vitro* in rats, 435

**Xylocaine**, effect on interaction between tetraethylammonium and methohexitone in chick biventer cervicis muscle, 185P

## Y

**Yohimbine**, blockade of dopaminergic transmission in rat striatum, 239P

—, effect on vasoconstrictor responses to noradrenaline and sympathetic nerve stimulation in the rat mesentery, 291P

—, induction of contracture in guinea-pig ileum, effect of clonidine concentration in incubation fluid, 443

—, inhibition of [ $^3$ H]-prazosin binding to rat cardiac  $\alpha$ -adrenoceptors, 33

## Z

**ZK 62711**, relaxation of rat lung strips contracted by carbachol and inhibition of antigen-induced histamine release from human basophils, 933