

Edited for the British Pharmacological Society by

A.W. Cuthbert (*Chairman*) H.M. Adam (*Secretary*)
Margaret Day (*Press Editor*)
J.D. Stephenson (*Assistant Press Editor*)

A.M. Barrett	J.S. Kelly
W.G. Bisset	G.M. Lees
T.B. Bolton	G.P. Lewis
D.A. Brown	I.H.M. Main
B.A. Callingham	E.K. Matthews
T.J. Crow	J.F. Mitchell
F. de Matteis	P.A. Nasmyth
C.T. Dollery	M.W. Parkes
V. Eisen	M. Sandler
E.W. Gill	A.P. Silverman
A.F. Green	M.A. Simmonds
D.F. Hawkins	F.M. Sullivan
Margarethe Holzbauer	A. Ungar
D.B. Hope	R.A. Webster

Papers will be considered for publication on all aspects of drug action, including chemotherapy.

Manuscripts (two copies) should be sent to Dr H.M. Adam, Department of Pharmacology, University of Edinburgh Medical School, 1 George Square, Edinburgh EH8 9JZ. Authors should consult the instructions inside the back cover.

The British Journal of Pharmacology is published monthly by Macmillan Journals Ltd, 4 Little Essex Street, London WC2R 3LF. Telephone: 01-836 6633. ISSN 0007-1188.

Annual subscription £36.00 (\$90 USA and Canada). (Orders must be accompanied by remittance. Prices applicable only to orders received before 31st December 1976.)

Cheques should be made payable to Macmillan Journals Limited: Subscription Department, Brunel Road, Basingstoke, Hampshire RG21 2XS, England.

Enquiries concerning advertising space and rates should be addressed to: Advertisement Department, Macmillan Journals Limited, 4 Little Essex Street, London WC2R 3LF. Telephone: 01-836 6633.

Copyright © 1976 by the *British Journal of Pharmacology*. All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in this journal in all countries of the world.

Second class postage paid at New York, N.Y.
US Mailing Agent, Expeditors of the Printed Word, Ltd,
527 Madison Avenue, New York, NY 10022.

INDEX TO VOLUME 56

AUTHOR INDEX

A

- ABAITEY, A.K. & PARRATT, J.R. Cardiovascular effects of diethylcarbamazine citrate, 219
- ABU-MURAD, C., GRIFFITHS, P.J. & LITTLETON, J.M. (introduced by BROWNLEE, G.) Catecholamine metabolism and liver dysfunction during induction of ethanol dependence, 377P
- ADAMS, M.D., CHAIT, L.D. & EARNHARDT, J.T. Tolerance to the cardiovascular effects of Δ^9 -tetrahydrocannabinol in the rat, 43
- ADEBANJO, A.O., AMBACHE, N. & VERNEY, J. The inhibitory transmission to the internal anal sphincter, 392P
- ALPS, B.J., DEVOY, P.W. & WATERFALL, J.F. The evaluation of the novel pressor activity of γ -piperidinobutyramide (WY 20051, DF480), 179
- AMADUCCI, L., MANTOVANI, P. & PEPEU, G. Effect of some phospholipids on acetylcholine output from the cerebral cortex in the rat, 379P
- AMBACHE, N. & KILLICK, S.W. Species variation in motor transmission to the retractor penis muscle, 351P
- AMBACHE, N. *see* ADEBANJO, A.O., 392P
- ANDERSON, A.A. & LEES, G.M. Investigation of occurrence of tolerance to bronchodilator drugs in chronically pretreated guinea-pigs, 331
- ANLEZARK, G.M., HORTON, R.W., MELDRUM, B.S., SAWAYA, M.C.B. & STEPHENSON, J.D. γ -Aminobutyric acid metabolism and the anticonvulsant action of ethanolamine-o-sulphate and di-n-propylacetate, 383P
- ANLEZARK, G.M., MARSDEN, C.D. & MELDRUM, B.S. A primate model of acute dystonic reaction to neuroleptics, 381P
- ASHFORD, J. & JONES, B.J. The effects of intra-amygdaloid injections of 6-hydroxydopamine on avoidance responding in rats, 255
- ASSEM, E.S.K. Inhibition by antigen and by histamine antagonists of the uptake of histamine by isolated human leucocytes, 347P
- BAKER, DOROTHEA J., TRIST, D.G. & WEATHERALL, M. Inhibition of phagocytosis by mepacrine, 346P
- BAKER, J.B.E. The episcope for large screen projection of tracings on opaque media during their recording for demonstrations, 396P
- BAKHLE, Y.S. The nature of the bradykinin inactivating system in isolated lungs, 349P
- BAKHLE, Y.S. & YODIM, M.B.H. Metabolism of phenylethylamine in rat isolated perfused lung: evidence for monoamine oxidase type B in lung, 125
- BARASI, S., PARRY, O. & ROBERTS, M.H.T. The interpretation of responses of motoneurone field potentials to 5-hydroxytryptamine, 366P
- BARBER, H.E., CALVEY, T.N., MUIR, K.T. & TAYLOR, K. Effect of edrophonium on erythrocyte acetylcholinesterase and neuromuscular function in the rat, 93
- BERDE, B. *see* RICHARDSON, B.P., 356P
- BILSKI, A. & WALE, J. (introduced by DAWES, P.M.) Two types of intrinsic sympathomimetic activity with β -adrenoceptor blocking drugs, 362P
- BLACK, J.W. *see* WAN, BEATRICE, Y.C., 357P
- BLACKWELL, C.J. & FLOWER, R.J. Effects of steroid hormones on tissue levels of prostaglandin 15-hydroxy-dehydrogenase in the rat, 343P
- BLAKELEY, A.G.H. & SUMMERS, R.J. The effects of AH 5158 on the overflow of transmitter and the uptake of [3 H]-(-)-noradrenaline in the cat spleen, 364P
- BOSIN, T.R., HIXSON, E. JANE & MAICKEL, R.P. Pressor effects of tryptamine analogues, 25
- BOWERY, N.G. & JONES, G.P. A comparison of γ -aminobutyric acid and the semi-rigid analogues 4-aminotetroic acid, 4-aminocrotonic acid and imidazole-4-acetic acid on the isolated superior cervical ganglion of the rat, 323
- BRADLEY, N.J. & POULTER, L.W. (introduced by LEWIS, G.P.) *In vitro* methods of assessing the physiological activation of macrophages *in vivo*, 387P
- BRANDTZAEG, P., GAUTVIK, K.M., NUSTAD, K. & PIERCE, J.V. Rat submandibular gland kalikreins: purification and cellular localization, 155
- BROWN, D.A. & KWIATKOWSKI, D. A note on effect of dithiothreitol on depolarization of isolated sympathetic ganglia by carbachol and bromo-acetylcholine, 128
- BROWN, D.A. *see* GARTHWAITE, J., 353P
- BROWNLEE, G. *see* ABU-MURAD, C., 377P
- BROWNLEE, G. *see* LITTLETON, J.M., 370P
- BUCKINGHAM, J.C. & HODGES, J.R. Hypothalamo-pituitary adrenocortical function in the rat after treatment with betamethasone, 235
- BUCKINGHAM, R.E., HAMILTON, T.C. & MOORE, R.A. Prolonged effects of *p*-chlorophenylalanine on blood pressure of conscious normotensive and DOCA/saline hypertensive rats, 69
- BUNTING, S., MONCADA, S., NEEDLEMAN, P. & VANE, J.R. Formation of prostaglandin endoperoxides and rabbit aorta contracting substance (RCS) by coupling two enzyme systems, 344P
- BUSHMAN, J.A., ENDERBY, D.H., FOWLER, K.T. & PAYNE, J.P. The use of a mass spectrometer for the analysis and measurement of trace concentrations of anaesthetic vapours, 389P
- BUTTAR, H.S. Impairment in the hepatic clearance of [35 S]-bromosulphophthalein in paracetamol-intoxicated rats, 145

B

C

- CALVEY, T.N. *see* BARBER, H.E., 93
- CANDY, J.M. & KEY, B.J. Blockade of the electrocortical changes induced by perfusion of amphetamine in the brain stem reticular formation, 374P
- CARRIER, O., JR. & HESTER, R.K. The relationship between calcium and increased sensitivity of rabbit aortae four hours after reserpine, 449
- CARRUBA, M.O., GROPPETTI, A., MANTEGAZZA, P., VICENTINI, L. & ZAMBOTTI, F. Effects of mazindol, a non-phenylethylamine anorexigenic agent on biogenic amine levels and turnover rate, 431
- CHAH, LORIS A. & LADD, R.J. The effects of prostaglandins E_1 , E_2 and $F_{2\alpha}$ on the cutaneous vasculature of the rat, 317
- CHAIT, L.D. *see* ADAMS, M.D., 43
- CHANG, J., LEWIS, G.P. & PIPER, PRISCILLA J. The effects of anti-inflammatory steroids on levels of prostaglandin in adipose tissue *in vitro*, 324P
- CHAPPLE, D.J., ENDERBY, D.H., HUGHES, R. & PAYNE, J.P. Neuromuscular and cardiovascular studies with dimethyl tubocurarine in anaesthetized cats, rhesus monkeys and man, 354P
- CHIPMAN, P. & GLOVER, W.E. Histamine H_2 -receptors in the human peripheral circulation, 494
- CLARKE, D.E. & ROMANYSHYN, W.M. Blood pressure responses to adrenal field stimulation as a measure of adrenal catecholamine release, 271
- COLLIER, H.O.J. & FRANCIS, D.L. Stereospecific suppression by opiates of the quasi-morphine abstinence syndrome elicited by 3-isobutyl-1-methylxanthine (IBMX), 382P
- COLLIER, P.S. & SHANKS, R.G. Alterations to vasodilator effects of isoprenaline in the dog following intra-arterial infusions with isoprenaline, salbutamol and orciprenaline, 363P
- CURTIS, D.R., GAME, C.J.A. & LODGE, D. Benzodiazepines and central glycine receptors, 307
- CURZON, G. & MARSDEN, C.A. Effect of LSD on rat brain 5-hydroxytryptamine metabolism at elevated environmental temperature, 368P
- CUTHBERT, N.J., DINNEEN, L.C., FRANCIS, D.L. & SCHNEIDER, C. A rapid *in vivo* test for dependence potential of analgesic drugs, 386P

D

- DANILOV, A.F., IVANOV, YU.J. & MICHELSON, M.J. Influence of motor nerve tetanization on effect of organophosphorus cholinesterase inhibitors on neuromuscular transmission, 115
- DARGIE, H.J., FRANKLIN, S.S. & REID, J.L. The sympathetic nervous system and renovascular hypertension in the rat, 365P
- DAWES, P.M. *see* BILSKI, A., 362P
- DEVOY, P.W. *see* ALPS, B.J., 179
- DICK, W.C., GRENNAN, D.M. & ZEITLIN, I.J. Studies on the relative effects of prostaglandins, bradykinin, 5-hydroxytryptamine and histamine on the synovial microcirculation in dogs, 313
- DINNEEN, L.C. *see* CUTHBERT, N.J., 386P
- DOLPHIN, A.C., ELLIOTT, P.N.C. & JENNER, P. Reduction of locomotor activity in mice by dopamine- β -

- hydroxylase inhibitors—evidence against the involvement of non-specific irritation, 395P
- DONALDSON, I.M., JENNER, P., MARSDEN, C.D., MILLER, R. & PERINGER, E. Is metoclopramide a directly acting dopamine receptor antagonist? 373P
- DORRIS, R.L. & SHORE, P.A. On the mechanism of action of clozapine on the adrenergic neurone, 279
- DOW, R.C. & LASZLO, I. Uptake of 5-hydroxytryptamine in different parts of the brain of the rabbit after intraventricular injection, 443
- DRUMMOND, A.H. & GORDON, J.L. Uptake of 5-hydroxytryptamine by rat blood platelets and its inhibition by adenosine 5'-phosphate, 417
- DUNCAN, A.J. & WILSON, W.S. Some preservatives in eyedrop preparations hasten the formation of dryspots in the rabbit cornea, 359P
- DUTTA, S., MARKS, B.H. & STEPHEN, P.M. The uptake and subcellular distribution of radio-labelled metabolites of digitoxin in the guinea-pig isolated perfused heart, 437

E

- EARNHARDT, J.T. *see* ADAMS, M.D., 43
- EDWARDS, J.H., EVANS, ELIZABETH, EVANS, P.H., NICHOLLS, P.J. & RAJAN, K.T. Effect of a purified cotton dust extract on human lung in culture, 394P
- ENDERBY, D.H., HUGHES, R., PAYNE, J.P. & WORSLEY, R. Assessment of neuromuscular blockade in man by use of tetanic and single twitch contractions of the adductor pollicis muscle, 390P
- ENDERBY, D.H. *see* BUSHMAN, J.A., 389P
- ENDERBY, D.H. *see* CHAPPLE, D.J., 354P
- ELLIOTT, P.N.C. *see* DOLPHIN, A.C., 395P
- EVANS, ELIZABETH, *see* EDWARDS, J.H., 394P
- EVANS, JANE P.M., GRAHAME-SMITH, D.G., GREEN, A.R. & TORDOFF, ANN F.C. Electroconvulsive shock increases the behavioural responses of rats to brain 5-hydroxytryptamine accumulation and central nervous system stimulant drugs, 193
- EVANS, P.H. *see* EDWARDS, J.H., 394P

F

- FARRINGTON, HELEN E. & OWEN, D.A.A. Measurement of vascular changes in acute inflammatory responses, 388P
- FELTZ, ANNE & LARGE, W.A. Effect of atropine on decay of miniature end-plate potentials at frog neuromuscular junction, 111
- FERREIRA, S.H., HERMAN, A.G. & VANE, J.R. Prostaglandin production by rabbit isolated jejunum and its relationship to the inherent tone of the preparation, 469
- FILE, SANDRA E. (introduced by NEAL, M.J.) Are central cholinergic pathways involved in the habituation of exploration and distraction? 378P
- FINCH, L. & HERSOM, A. Studies on the centrally mediated cardiovascular effects of apomorphine in the anaesthetized rat, 366P
- FLOWER, R.J., HARVEY, E.A. & KINGSTON, W.P. Inflammatory effects of prostaglandin D_2 in rat and human skin, 229
- FLOWER, R.J. *see* BLACKWELL, C.J., 343P

- FORD-HUTCHINSON, A.W., SMITH, M.J.H. & WALKER, J.R. Chemotactic activity of solutions of prostaglandin E_1 , 345P
- FOWLER, K.T. *see* BUSHMAN, J.A., 389P
- FRANCIS, D.L. *see* COLLIER, H.O.J., 382P
- FRANCIS, D.L. *see* CUTHBERT, N.J., 386P
- FRANKLIN, S.S. *see* DARGIE, H.J., 365P
- FRY, J.P., SHARMAN, D.F. & STEPHENS, D.B. The ontogenesis of cerebral dopamine metabolism in the pig, 372P
- FRY, J.P., SHARMAN, D.F. & STEPHENS, D.B. The effect of apomorphine on oral behaviour in piglets, 388P

G

- GAME, C.J.A. *see* CURTIS, D.R., 307
- GANGULY, D.K. Antioxotremorine action of propranolol, 21
- GARTHWAITE, J. (introduced by BROWN, D.A.) The uptake of weak acids and bases into isolated rat superior cervical ganglia in relation to intracellular pH, 353P
- GAUTVIK, K.M. *see* BRANDTZAEG, P., 155
- GILBERT, J.C. & WYLLIE, M.G. Effects of anticonvulsant and convulsant drugs on the ATPase activities of synaptosomes and their components, 49
- GLOVER, W.E. *see* CHIPMAN, P., 494
- GOODLET, I., MIREYLEES, S.E. & SUGRUE, M.F. The selective inhibition of 5-hydroxytryptamine re-uptake by Org 6582, 367P
- GORDON, J.L. *see* DRUMMOND, A.H., 417
- GRAHAME-SMITH, D.G. *see* EVANS, JANE P.M., 193
- GRANT, L. & POWIS, G. The effect of inhibitors of alcohol metabolism on the changes in the hepatic microsomal metabolism of foreign compounds produced by a single dose of ethanol in the rat, 376P
- GRAY, J.A., LÜLLMANN, H., MITCHELSON, F. & REIL, G. - H. Stereoselective binding in cardiac tissue of the enantiomers of benzetimide, an antimuscarinic drug, 485
- GREEN, A.R. *see* EVANS, JANE P.M., 193
- GRENNAN, D.M. *see* DICK, W.C., 313
- GRIFFITHS, P.J. *see* ABU-MURAD, C., 377P
- GROPETTI, A. *see* CARRUBA, M.O., 431
- GRYGLEWSKI, R.J. & KORBUT, R. Bioassay of histamine in the presence of prostaglandins, 39
- GUTMAN, Y. & MAZUR-RUDER, M. Rat uterus renin-like activity: effect of stimuli and hormones, 285

H

- HAEUSLER, G. & LEWIS, P.J. Sympathetic nerve recording in the conscious rabbit, 386P
- HAMILTON, T.C. *see* BUCKINGHAM, R.E., 69
- HARVEY, E.A. *see* FLOWER, R.J., 229
- HERMAN, A.G. *see* FERREIRA, S.H., 469
- HERSOM, A. *see* FINCH, L., 366P
- HESTER, R.K. *see* CARRIER, O., JR., 449
- HILL, R.G., SIMMONDS, M.A. & STRAUGHAN, D.W. Antagonism of γ -aminobutyric acid and glycine by convulsants in the cuneate nucleus of cat, 9
- HILLIDGE, C.J. & LEES, P. Influence of etorphine, acepromazine and diprenorphine on cardiovascular function in ponies, 375P

- HIMORI, N. & TAIRA, N. A method for recording smooth muscle and vascular responses of the blood-perfused dog trachea *in situ*, 293
- HIROM, P.C., MILLBURN, P. & PARKER, R.J. (introduced by WILLIAMS, R.T.) The enterohepatic circulation of [3 H]-phenolphthalein in the rat, 355P
- HIXSON, E. JANE *see* BOSIN, T.R., 25
- HODGES, J.R. *see* BUCKINGHAM, J.C., 235
- HOLMES, S.W. & SUGDEN, D. The effect of melatonin on pinealectomy-induced hypertension in the rat, 360P
- HOLZBAUER, MARGARETHE. Physiological aspects of the hypnotic properties of steroid hormones, 382P
- HORTON, R.W. *see* ANLEZARK, G.M., 383P
- HUGHES, R. *see* CHAPPLE, D.J., 354P
- HUGHES, R. *see* ENDERBY, D.H., 390P
- HUTCHINGS, R.T., LEWIS, G.P., SABIKOWSKI, Z.T. & WESTWICK, J. Measurement of changes in the microvasculature, 391P

I

- IAVANOV, YU.J. *see* DANILOV, A.F., 115

J

- JATON, A.L., LOEW, D.M. & VIGOURET, J.M. CF 25-397 (9,10-Didehydro-6-methyl-8 β -[2-pyridylthiomethyl]-ergoline), a new central dopamine receptor agonist, 371P
- JENKINSON, D.H. *see* KOLLER, K., 362P
- JENNER, P. *see* DOLPHIN, A.C., 395P
- JENNER, P. *see* DONALDSON, I.M., 373P
- JOHNSON, A.M., LOEW, D.M. & VIGOURET, J.M. Stimulant properties of bromocriptine on central dopamine receptors in comparison to apomorphine, (+)-amphetamine and L-DOPA, 59
- JOHNSON, F.N. Effect of lithium chloride on one-trial passive avoidance learning in rats, 87
- JONES, B.J. *see* ASHFORD, J., 255
- JONES, G.P. *see* BOWERY, N.G., 323
- JONES, R.L. Selectivity of action of some C15-modified prostaglandins D, 339P
- JURKIEWICZ, A. & JURKIEWICZ, N.H. Dural effects of α -adrenoceptor antagonists in rat isolated vas deferens, 169
- JURKIEWICZ, N.H. *see* JURKIEWICZ, A., 169

K

- KAROUM, F., MAJCHROWICZ, E. & WYATT, R. Brain concentrations of biogenic amine metabolites in acutely treated and ethanol-depleted rats, 403
- KEY, B.J. *see* CANDY, J.M., 374P
- KILLICK, S.W. *see* AMBACHE, N., 351P
- KINGSTON, W.P. *see* FLOWER, R.J., 229
- KOLLER, K. (introduced by JENKINSON, D.H.) An interaction between the α and β actions of catecholamines in guinea-pig liver slices, 362P
- KORBUT, R. *see* GRYGLEWSKI, R.J., 39
- KOSS, M.C. & NAKANO, J. Reflex bradycardia and hypotension produced by prostaglandin $F_{2\alpha}$ in the cat, 245

- KUMAR, A., SHARMA, H.L. & SHARMA, V.N. Effect of SAS (a new 10-*N*-acylaminophenothiazine) on gastric secretion and ulceration in rats, 491
 KWIATKOWSKI, D. *see* BROWN, D.A., 128

L

- LADD, R.J. *see* CHAHL, LORIS A., 317
 LARGE, W.A. *see* FELTZ, ANNE, 111
 LASZLO, I. *see* DOW, R.C., 443
 LEES, P. & SERRANO, L. Effects of azaperone on cardiovascular and respiratory functions in the horse, 263
 LEES, G.M. *see* ANDERSON, A.A., 331
 LEES, P. *see* HILLIDGE, C.J., 375P
 LEWIS, A.J. The assessment of systemically and topically administered anti-inflammatory drugs using u.v. erythema production in the rat, 385P
 LEWIS, G.P., PECK, M.J., WILLIAMS, T.J. & YOUNG, BEVERLEY A., Measurements of blood flow in rabbit skin homografts and autografts using a ¹³³Xe-clearance technique, 396P
 LEWIS, G.P. *see* BRADLEY, N.J., 387P
 LEWIS, G.P. *see* CHANG, J., 342P
 LEWIS, G.P. *see* HUTCHINGS, R.T., 391P
 LEWIS, G.P. *see* PECK, M.J., 396P
 LEWIS, G.P. *see* WILLIAMS, T.J., 341P
 LEWIS, P.J. *see* HAEUSLER, G., 386P
 LITTLETON, J.M. & MACLEAN, K.I. (introduced by BROWNEE, G.) Alterations in dopamine uptake in rat corpus striatum induced by combinations of stress and Δ^8 -tetrahydrocannabinol (Δ^8 -THC), 370P
 LITTLETON, J.M. *see* ABU-MURAD, C., 377P
 LODGE, D. *see* CURTIS, D.R., 307
 LOEW, D.M. *see* JATON, A.L., 371P
 LOEW, D.M. *see* JOHNSON, A.M., 59
 LÜLLMAN, H. *see* GRAY, J.A., 485

M

- McCALL, ELAINE & YOUTLEN, L.J.F. Prostaglandin production by rat polymorphonuclear leucocytes, 396P
 McGRATH, J.C. & MacKENZIE, J.E. A pithed rabbit preparation for stimulation of different segments of the autonomic outflow, 395P
 MacKENZIE, J.E. *see* McGRATH, J.C., 395P
 MACLEAN, K.I. *see* LITTLETON, J.M., 370P
 MAGOS, L. The effects of dimercaptosuccinic acid on the excretion and distribution of mercury in rats and mice treated with mercuric chloride and methylmercury chloride, 479
 MAICKEL, R.P. *see* BOSIN, T.R., 25
 MAJCHROWICZ, E. *see* KAROU, F., 403
 MANTEGAZZA, P. *see* CARRUBA, M.O., 431
 MANTOVANI, P. *see* AMADUCCI, L., 379P
 MARCHAND, C. & NADEAU, D. The distribution and kinetics of sulphacetamide in leukaemic mice, 423
 MARKS, B.H. *see* DUTTA, S., 437
 MARLEY, E. & WHELAN, JENNIFER E. Some pharmacological effects of *p*-chlorophenylalanine unrelated to tryptophan hydroxylase inhibition, 133
 MARSDEN, C.A. *see* CURZON, G., 368P
 MARSDEN, C.D. *see* ANLEZARK, G.M., 381P

- MARSDEN, C.D. *see* DONALDSON, I.M., 373P
 MAZUR-RUDER, M. *see* GUTMAN, Y., 285
 MELDRUM, B.S. *see* ANLEZARK, G.M., 381P
 MELDRUM, B.S. *see* ANLEZARK, G.M., 383P
 MELROSE, JOANNE, PALFREYMAN, M.G., POYSER, R. H. & WHITING, R.L. BRL 13776: a novel antihypertensive agent with interesting noradrenaline-depleting properties, 361P
 MICHAL, F. & MOTAMED, MINA Shape change and aggregation of blood platelets: interaction between the effects of adenosine diphosphate, 5-hydroxytryptamine and adrenaline, 209
 MICHELSON, M.J. *see* DANILOV, A.F., 115
 MICHELSON, M.J. & SHELKOVNIKOV, S.A. Isotonic and isometric responses of different tonic muscles to agonists and antagonists, 457
 MILLBURN, P. *see* HIROM, P.C., 355P
 MILLER, R. *see* DONALDSON, I.M., 373P
 MILSON, J.A. & PYCOCK, C.J. Effects of drugs acting on cerebral 5-hydroxytryptamine mechanisms on dopamine-dependent turning behaviour in mice, 77
 MIREYLEES, S.E. *see* GOODLET, I., 367P
 MITCHELSON, F. *see* GRAY, J.A., 485
 MONCADA, S. *see* BUNTING, S., 344P
 MOORE, R.A. *see* BUCKINGHAM, R.E., 69
 MORTON, I.K.M., ROSE, G.E., SAVERYMUTTU, S.H. & WOOD, J.R. Effects of some fatty acids on gallbladder function, 350P
 MOTAMED, MINA *see* MICHAL, F., 209
 MUIR, K.T. *see* BARBER, H.E., 93

N

- NADEAU, D. *see* MARCHAND, C., 423
 NAHORSKI, S.R., PATTON, WENDY & ROGERS, K.J. Developmental changes in the sensitivity of neurohormone-stimulated cyclic AMP formation in chick cerebral hemispheres, 380P
 NAKANO, J. *see* KOSS, M.C., 245
 NEAL, M.J. *see* FILE, SANDRA E., 378P
 NEEDLEMAN, P. *see* BUNTING, S., 344P
 NICHOLLS, P.J. *see* EDWARDS, J.H., 394P
 NIEDERHAUSER, U. & WHITTLE, B.J.R. A simple perfusion system for the study of histamine release from rat peritoneal mast cells, 391P
 NISTRI, A. Effects of morphine on acetylcholine release from the frog spinal cord, 352P
 NUSTAD, K. *see* BRANDTZAEG, P., 155

O

- OSBORNE, N.N. & PENTREATH, V.W. Effects of 5,7-dihydroxytryptamine on an identified 5-hydroxytryptamine-containing neurone in the central system of the snail *Helix pomatia*, 29
 OWEN, D.A.A. *see* FARRINGTON, HELEN E., 388P

P

- PALFREYMAN, M.G. *see* MELROSE, JOANNE, 361P
 PARKER, R.J. *see* HIROM, P.C., 355P

- PARRATT, J.R. *see* ABAITEY, A.K., 219
 PARRY, O. *see* BARASI, S., 366P
 PATTON, WENDY *see* NAHORSKI, S.R., 380P
 PAYNE, J.P. *see* BUSHMAN, J.A., 389P
 PAYNE, J.P. *see* CHAPPLE, D.J., 354P
 PAYNE, J.P. *see* ENDERBY, D.H., 390P
 PECK, M.J. & WILLIAMS, T.J. (introduced by LEWIS, G.P.)
 Measurement of inflammatory exudation and local blood
 flow changes in rabbit skin, using ^{131}I -albumin and ^{133}Xe ,
 396P
 PECK, M.J. *see* LEWIS, G.P., 396P
 PENTREATH, V.W. *see* OSBORNE, N.N., 29
 PEPEU, G. *see* AMADUCCI, L., 379P
 PERINGER, E. *see* DONALDSON, I.M., 373P
 PIERCE, J.V. *see* BRANDTZAEG, P., 155
 PIPER, PRISCILLA J. *see* CHANG, J., 342P
 POULTER, L.W. *see* BRADLEY, N.J., 387P
 POWIS, G. *see* GRANT, L., 376P
 POYSER, R.H. *see* MELROSE, JOANNE, 361P
 PYCOCK, C.J. *see* MILSON, J.A., 77

R

- RAJAN, K.T. *see* EDWARDS, J.H., 394P
 REID, J.L. *see* DARGIE, H.J., 365P
 REIL, G. -H. *see* GRAY, J.A., 485
 RICHARDSON, B.P. (introduced by BERDE, B.) The effects
 of cyproheptadine pretreatment on insulin release from
 isolated pancreatic islets, 356P
 RICHARDSON, P.D.I. The effects of intravenous secretin on
 the small intestinal vasculature of the cat, 358P
 RIVERA-CALIMLIN, LEONOR Impaired absorption of
 chlorpromazine in rats given trihexyphenidyl, 301
 ROBERTS, M.H.T. *see* BARASI, S., 366P
 ROGERS, K.J. *see* NAHORSKI, S.R., 380P
 ROMANYSHYN, W.M. *see* CLARKE, D.E., 271
 ROSE, G.E. *see* MORTON, I.K.M., 350P

S

- SABIKOWSKI, Z.T. *see* HUTCHINGS, R.T., 391P
 SAVERYMUTTU, S.H. *see* MORTON, I.K.M., 350P
 SAWAYA, M.C.B. *see* ANLEZARK, G.M., 383P
 SAXENA, P.N. Sodium and calcium ions in the control of
 temperature set-point in the pigeon, 187
 SCHILD, H.O. Dale and the development of pharmacology,
 3
 SCHNEIDER, C. *see* CUTHBERT, N.J., 386P
 SEIDLER, F.J. & SLOTKIN, T.A. Effects of chronic nicotine
 administration on the denervated rat adrenal medulla,
 201
 SERRANO, L. *see* LEES, P., 263
 SHANKS, R.G. *see* COLLIER, P.S., 363P
 SHARMA, H.L. *see* KUMAR, A., 491
 SHARMA, V.N. *see* KUMAR, A., 491
 SHARMAN, D.F. *see* FRY, J.P., 372P
 SHARMAN, D.F. *see* FRY, J.P., 388P
 SHELKOVNIKOV, S.A. *see* MICHELSON, M.J., 457
 SHORE, P.A. *see* DORRIS, R.L., 279
 SIMMONDS, M.A. *see* HILL, R.G., 9
 SLOTKIN, T.A. *see* SEIDLER, F.J., 201
 SMITH, D.F. Lithium orotate, carbonate and chloride:
 pharmacokinetics, polydipsia and polyuria in rats, 399

- SMITH, M.J.H. *see* FORD-HUTCHINSON, A.W., 345P
 STEPHEN, P.M. *see* DUTTA, S., 437
 STEPHENS, D.B. *see* FRY, J.P., 372P
 STEPHENS, D.B. *see* FRY, J.P., 388P
 STEPHENSON, J.D. *see* ANLEZARK, G.M., 383P
 STONE, T.W. Responses of neurones in cerebral cortex and
 caudate nucleus to amantadine, amphetamine and
 dopamine, 101
 STRAUGHAN, D.W. *see* HILL, R.G., 9
 SUGDEN, D. *see* HOLMES, S.W., 360P
 SUGRUE, M.F. *see* GOODLET, I., 367P
 SUMMERS, R.J. *see* BLAKELEY, A.G.H., 364P

T

- TAIRA, N. *see* HIMORI, N., 293
 TAYLOR, K. *see* BARBER, H.E., 93
 TORDOFF, ANN F. C. *see* EVANS, JANE P.M., 193
 TRIST, D.G. *see* BAKER, DOROTHEA, J., 346P

V

- VANE, J.R. *see* BUNTING, S., 344P
 VANE, J.R. *see* FERREIRA, S.H., 469
 VERNEY, J. *see* ADEBANJO, A.O., 392P
 VICENTINI, L. *see* CARRUBA, M.O., 431
 VIGOURET, J.M. *see* JATON, A.L., 371P
 VIGOURET, J.M. *see* JOHNSON, A.M., 59

W

- WALE, J. *see* BILSKI, A., 362P
 WALKER, J.R. *see* FORD-HUTCHINSON, A.W., 345P
 WAN, BEATRICE Y.C. (introduced by BLACK, J.W.) Effects
 of dibutyryl cyclic AMP and phosphodiesterase
 inhibitors on acid secretion by mouse stomach *in vitro*,
 357P
 WATERFALL, J.F. *see* ALPS, B.J., 179
 WEATHERALL, M. *see* BAKER, DOROTHEA M., 346P
 WESTWICK, J. *see* HUTCHINGS, R.T., 391P
 WHELAN, JENNIFER E. *see* MARLEY, E., 133
 WHITING, R.L. *see* MELROSE, JOANNE, 361P
 WHITTLE, B.J.R. Prostaglandins and changes in the gastric
 mucosal barrier and blood flow during indomethacin-
 and bile salt-induced mucosal damage, 340P
 WHITTLE, B.J.R. *see* NIEDERHAUSER, U., 391P
 WILLIAMS, R.T. *see* HIROM, P.C., 355P
 WILLIAMS, T.J. (introduced by LEWIS, G.P.) The pro-
 inflammatory activity of E-, A-, D-, and F-type pros-
 taglandins and analogues 16,16-dimethyl-PGE₂ and
 (15S)-15-methyl PGE₂ in rabbit skin; the relationship
 between potentiation of plasma exudation and local
 blood flow changes, 341P
 WILLIAMS, T.J. *see* LEWIS, G.P., 396P
 WILLIAMS, T.J. *see* PECK, M.J., 396P
 WILSON, W.S. *see* DUNCAN, A.J., 359P
 WOOD, J.R. *see* MORTON, I.K.M., 350P
 WORSLEY, R. *see* ENDERBY, R., 390P
 WYATT, R. *see* KAROUM, F., 403
 WYLLIE, M.G. *see* GILBERT, J.C., 49

Y

- YODIM, M.B.H. Monoamine oxidase active site; the binding to and titration of monoamine oxidase with [¹⁴C]-selective inhibitors, 375P
 YODIM, M.B.H. *see* BAKHLE, Y.S., 125
 YOUTEN, L.J.F. *see* McCALL, ELAINE, 396P

YOUNG, BEVERLEY A. *see* LEWIS, G.P., 396P

Z

- ZAMBOTTI, F. *see* CARRUBA, M.O., 431
 ZEITLIN, I.J. *see* DICK, W.C., 313

SUBJECT INDEX

A

- Acepromazine**, influence of etorphine with, and antagonistic effects of diprenorphine on cardiovascular function in ponies, 375P
- Acetaldehyde oxime**, effect of, on liver microsomal metabolism of compounds produced by single dose of ethanol in rats, 376P
- Acetylcholine**, causes dose-dependent increases in blood flow rate and tracheal constriction in dog, 293
- , effects of α -adrenoceptor antagonists on responses of rat isolated vas deferens to, 169
 - , effect of, on hepatic microsomal metabolism, 376P
 - , effects of, on isotonic and isometric responses of different muscles, 457
 - , effect of, on transmission to internal anal sphincter, 392P
 - , effect of morphine on release of, from frog spinal cord, 352P
 - , effect of some phospholipids on output of, from cerebral cortex in the rat, 379P
 - , has no effect on prostaglandin release by contracting isolated rabbit jejunum, 469
 - , increased sensitivity to, of rabbit aortic strips following reserpine, 449
 - , spasmolytic effect of SAS in response to, in rats, 491
 - , use of, to detect changes in activity of synaptic cholinesterases in cat muscle, 115
- Acetylcholinesterase**, in rat erythrocytes, effect of edrophonium on, 93
- Acute dystonic reaction**, a primate model of, to neuroleptics, 381P
- ACTH₁₋₂₄**, incubation of adipose tissue with, causes only small amounts of prostaglandins to be released, 342P
- Adductor pollicis muscle**, assessment of neuromuscular blockade in man by use of tetanic and single twitch contractions of, 390P
- Adenosine**, cyclic AMP responsiveness to, in chick cerebral hemispheres, 380P
- Adenosine diphosphate**, interaction of effects of, and 5-HT on blood platelets, 209
- , potentiates histamine- and prostaglandin-induced inflammatory responses in rabbit skin, 341P
 - , shape change and aggregation of blood platelets induced by, enhanced by simultaneous addition of 5-HT, 209
- Adenosine 5'-phosphate**, inhibition of uptake of 5-HT by rat blood platelets, 417
- Adenosine triphosphate**, -ase, effects of anticonvulsant and convulsant drugs on, activities of synaptosomes and their components, 49
- Adenylate cyclase**, activity of, in chick cerebral hemispheres, 380P
- Adipose tissue**, effects of anti-inflammatory steroids on prostaglandin levels in, *in vitro*, 342P
- Adrenalectomy**, effect of, on tissue levels of prostaglandin 15-hydroxydehydrogenase in the rat, 343P
- , has no effect on uterine renin-like activity in the rat, 285
- Adrenaline**, causes vasoconstriction in dog trachea, 293
- , effect of, on blood pressure response of adrenal medulla, 271
 - , has no effect on prostaglandin release by relaxing isolated rabbit jejunum, 469
 - , interaction between effects of ADP, 5-HT and, on shape change and aggregation of blood platelets, 209
 - , isotonic contractile responses of isolated rat vas deferens to different doses of, effects of yohimbine, piperoxan, phentolamine and tolazoline on, 169
 - , pretreatment with, may cause development of tolerance to relaxant effects of, in guinea-pig trachea, 331
 - , relaxes tracheal smooth muscle in dog, 293
- α -Adrenoceptors**, present in dog tracheal musculature and vasculature, 293
- α -Adrenoceptor antagonists**, dual effect of, in rat isolated vas deferens, 169
- α -Adrenoceptor blocker**, acepromazine has some action as an, 375P
- β -Adrenoceptors**, present in dog tracheal musculature and vasculature, 293
- β -Adrenoceptor blockers**, two types of intrinsic sympathomimetic activity with, 362P
- Adrenocorticotrophic hormone**, circulating levels of, following betamethasone treatment in the rat, 235
- AH 5158**, effects of, on the overflow of transmitter and uptake of [³H]-(-)-noradrenaline in cat spleen, 364P
- , 5-(1-Hydroxy-2-((1-methyl-3-phenylpropyl)amino)ethyl)salicylamide, 364P
- Alcohol**, effect of inhibitors of metabolism of, on changes in hepatic microsomal metabolism of foreign compounds produced by single dose of ethanol in the rat, 376P
- Amantadine**, response of cerebral cortex and caudate nucleus neurones to, 101
- Amberlite XAD-2**, column used in bioassay of histamine, 39
- Amidephrine**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P
- 4-Aminocrotonic acid**, effect of, on isolated superior cervical ganglion of the rat, 323
- , reduces ganglionic accumulation of [³H]-GABA, 323
- 2-Amino-6-methyl-5-oxo-4-*n*-propyl-4,5-dihydro-s-triazolo (1,5-*a*)pyrimidine**, see ICI 63197, 375P
- 4-Aminotetrollic acid**, effect of, on isolated superior cervical ganglion of the rat, 323
- , has no effect on ganglionic accumulation of [³H]-GABA, 323
- (+)-Amphetamine**, effect of, on central dopamine receptors, 59
- Amphetamine**, blockade of electrocortical changes induced by perfusion of, in brain stem reticular formation, 374P

- , effect of, on turning behaviour in mice, 77
- , mimics electrocortical changes induced by noradrenaline without secondary sedative effects, 374P
- , responses of neurones in cerebral cortex and caudate nucleus to, 101
- 2-n-Amylthio-AMP**, abolishes ADP-induced inhibition of uptake of 5-HT by rat platelets, 417
- Anaesthetics**, use of mass spectrometer for analysis and measurement of trace concentrations of vapours of, 389P
- Analgesics**, a rapid *in vivo* test for dependence potential of, 386P
- Angiotensin II**, reduces exudation potentiation in histamine- and prostaglandin-induced inflammation in rabbit skin, 341P
- Anterior hypothalamus**, uptake of 5-HT by, following intraventricular injection, 443
- Anticonvulsant drugs**, effects of, on ATPase activities of synaptosomes and their components, 49
- Antigen**, inhibits uptake of histamine by isolated human leucocytes, 347P
- Anti-IgE**, inhibits uptake of histamine by isolated human leucocytes, 347P
- Anti-inflammatory drugs**, assessment of systemically and topically administered, using ultraviolet erythema production in the rat, 385P
- Aortic spiral preparation**, guinea-pig, Wy 20051 contracts isolated, 179
- Apomorphine**, effect of, on central dopamine receptors, 59
 - , effect of, on oral behaviour in piglets, 388P
 - , effect of, on turning behaviour in mice, 77
 - , studies on the centrally mediated cardiovascular effects of, in the anaesthetized rat, 366P
- Arachidonic acid**, effects of, on gallbladder function, 350P
 - , has no effect on prostaglandin release by isolated rabbit jejunum, but contracts the preparation, 469
- Aspirin**, anti-inflammatory efficacy of, administered topically and systemically, 385P
- Asthma**, use of diethylcarbazine citrate in treatment of, 219
- Atropine**, antagonizes acetylcholine-induced muscle and vascular responses in dog trachea, 293
 - , effect of, on amine uptake in rat heart, 279
 - , effect of, on decay of miniature end-plate currents at frog neuromuscular junction, 111
 - , effect of, on motor response of pig retractor penis muscle, 351P
 - , effect of, on responses of cat pulmonary system to PGF_{2α}, 245
 - , pretreatment with, abolishes cardiovascular effects of apomorphine in anaesthetized rat, 366P
- [³H]-Atropine**, uptake of, by isolated rat superior cervical ganglia, 353P
- Atropine sulphate**, effect of, on habituation of exploration and distraction in rats, 378P
- Avoidance responses**, effects of intra-amygdaloid injections of 6-OHDA on, in rats, 255
- Azaperone**, effects of, on cardiovascular and respiratory function in the horse, 263
- Benzalkonium chloride**, hastens formation of dryspots in rabbit corneas, 359P
- Benzetimide**, stereoselective winding in cardiac tissue of enantiomers of, an antimuscarinic drug, 485
- Benzhexol hydrochloride**, effect of, on habituation of exploration and distraction in rats, 378P
- Benzodiazepines**, and central glycine receptors, 307
- Benzotropine**, abolishes dystonic reaction in response to chlorpromazine in baboons, 381P
- Betamethasone**, effect of, on prostaglandin production in adipose tissue, 342P
 - , hypothalamo-pituitary adrenocortical function in rat following treatment with, 235
 - 17-valerate, anti-inflammatory efficacy of, administered topically and systemically, 385P
- Bethanidine**, effect of, on cardiovascular responses of cat to diethylcarbazine citrate, 219
- Bicuculline**, blocks responses to GABA and three of its analogues of isolated superior cervical ganglion of the rat, 323
- (+)-Bicuculline**, methochloride, antagonizes GABA and glycine in cat cuneate nucleus, 9
- Bile salt**, gastric mucosal damage induced by, and effect of prostaglandins on, 340P
- Blood flow**, measurements of changes in, and inflammatory exudation using ¹³¹I-albumin and ¹³³Xe, 396P
 - , measurement of, in rabbit skin homografts and autografts using a ¹³³Xe- clearance technique, 396P
- Blood platelets**, shape change and aggregation of, interaction between effects of ADP, 5-HT and adrenaline, 209
- Blood pressure**, effects of SAS on, in anaesthetized rats, 491
 - , prolonged effects of *p*-chlorophenylalanine on, in conscious normotensive and DOCA/saline hypertensive rats, 69
- Bradykinin**, addition of PGE₁ or PGE₂ to, before intradermal injection potentiates plasma exudation, 341P
 - , has vasodilator effect on dog synovial circulation, 313
 - , increased vascular permeability in rat skin induced by, unaffected by PGD₂, 229
 - , relative effects of prostaglandins, 5-HT and histamine on synovial microcirculation in dogs, 313
 - , the nature of the, -inactivating system in isolated lungs, 349P
- Bretylium**, effect of, on motor response of pig retractor penis muscle, 351P
 - , effect of, on transmission to internal anal sphincter, 392P
- BRL 13776**, a novel antihypertensive agent with interesting noradrenaline-depleting properties, 361P
- Bromo-acetylcholine**, depolarization of isolated sympathetic ganglia by, effect of DTT on, 128
- Bromocriptine**, stimulant properties of, on central dopamine receptors in comparison to apomorphine, (+)-amphetamine and L-DOPA, 59
- [³⁵S]-Bromosulphophthalein**, hepatic clearance of, impaired in paracetamol-intoxicated rats, 145
- Bronchodilators**, investigation of occurrence of tolerance to, in chronically pretreated guinea-pigs, 331
- Butoxamine**, effect of, on transmission to internal anal sphincter, 392P

B

Barium chloride, spasmolytic activity of SAS in response to, in rats, 491

C

Caffeine, comparative effects of, and triazolopyrimidine and theophylline on acid secretion in mouse stomach, 357P

- Calcium**, effect of, in Ringer solution in measuring acetylcholine output from rat cerebral cortex, 379P
 —, has no effect on renin-like activity in rat uterus, 285
 —, ions in the control of temperature set-point in the pigeon, 187
 —, relationship between, and supersensitivity of rabbit aortae following reserpine, 449
 —, uptake but not metabolism of, in isolated pancreatic islets affected by cyproheptadine, 356P
Calcium chloride, contractile response of rabbit aortic strips to, potentiated by reserpine, 449
Carbachol, effects of, isotonic and isometric responses of different muscles, 457
 —, depolarization of isolated sympathetic ganglia by, effect of DTT on, 128
 —, use of, to detect changes in activity of synaptic cholinesterases in cat muscle, 115
Carrageenan-induced oedema, potentiated by PGD₂, 229
Catecholamine, depletion of, in and round amygdalae caused by intra-amygdaloid injections of 6-OHDA, 255
 —, metabolism of, and liver dysfunction during induction of ethanol dependence, 377P
 —, metabolites of, concentrations in brain increased by ethanol treatment, 403
 —, nicotine treatment of intact rat adrenal glands causes reversible depletion of, 201
 —, not decreased in denervated rat adrenal medulla following chronic nicotine administration, 201
 —, renal release of, measured by blood pressure responses to adrenal field stimulation, 271
 —, an interaction between the α and β actions of, in guinea-pig liver slices, 362P
Caudate nucleus, neurones in, responses of, to amantadine, amphetamine, and dopamine, 101
Central cholinergic pathways, are they involved in habituation of exploration and distraction? 378P
Cerebral cortex, neurones in, responses of, to amantadine, amphetamine and dopamine, 101
Cerebrospinal fluid, relative sodium and calcium ion concentrations in, has important function in temperature control in birds, 187
CF 25-397, 9,10-didehydro-6-methyl-8 β [2-pyridylthiomethyl]ergoline, a new central dopamine receptor agonist, 371P
Chlordiazepoxide, effects of, on spinal neurones and antagonism between strychnine and glycine, 307
Chlorhexidine, hastens formation of dryspots in rabbit corneas, 359P
Chlorimipramine, compared with Org 6582 as an inhibitor of re-uptake of 5-HT, 367P
Chlorisondamine, effect of, on amine uptake in rat heart, 279
 —, effect of, on blood pressure response to field stimulation of adrenal gland and intravenous adrenaline, 271
p-Chloroamphetamine, ability of, to lower rat brain 5-HT levels as method for studying blockade of 5-HT re-uptake, 367P
dl-8-Chloro-11-anti-amino-benzo-(b)-bicyclo-[3.3.1]nona-3,6a(10a)diene hydrochloride, see Org 6582, 367P
2-Chloro-10-[4'-(N- β -hydroxyethyl) piperazinyl-1'] acetylphenothiazine, see SAS, 491
p-Chlorophenylalanine, pretreatment with, has no effect on depressor response to apomorphine of anaesthetized rat, 366P
 —, prolonged effects of, on blood pressure of conscious normotensive and DOCA/saline hypertensive rats, 69
 —, some pharmacological effects of, unrelated to tryptophan hydroxylase inhibition, 133
Chlorpromazine, dystonic response to, in baboon, 381P
 —, effect of, on amine uptake in rat heart, 279
 —, effect of, on responses of neurones of cerebral cortex and caudate nucleus to amantadine and dopamine, 101
 —, impaired absorption of, in rats given trihexyphenidyl, 301
 —, metabolism of, by liver homogenates not affected by treatment with trihexyphenidyl, 301
 —, plasma and brain levels of, lowered after oral administration of trihexyphenidyl, 301
Cholinesterase, organophosphorus inhibitors, influence of motor nerve tetanization on effect of, on neuromuscular transmission, 115
Circling behaviour, in mice, effects of drugs acting on 5-HT mechanisms and dopamine-dependent, 77
Clomipramine, effect of, on turning behaviour in mice, 77
Clozapine, effects of, on amine uptake in rat brain, 279
 —, may have incomplete reserpine-like effect on adrenergic neurone facilitating amine release in rat heart, 279
 —, mechanism of action of, on adrenergic neurone, 279
Cocaine, effects of piperoxan and yohimbine on responses of rat isolated vas deferens to, 169
Codeine, suppression of QMAS by, 386P
Compound 48/80, effect of, on prostaglandin-induced changes in rat cutaneous vasculature, 317
Convulsant drugs, effects of, on ATPase activities of synaptosomes and their components, 49
Cornea, rabbit, some preservatives in eyedrop preparations hasten formation of dryspots in, 359P
Cortex, uptake of 5-HT into various areas of, following intraventricular injection, 443
Corticosteroids, have no effect on ACTH-induced stimulation of glycerol levels in adipose tissue, 342P
 —, inhibit release of, but not synthesis of, prostaglandins in adipose tissue, 342P
Corticosterone, levels of, following betamethasone treatment in rat, 235
Cotton dust extract, purified, effect of, on human lung in culture, 394P
Cuneate nucleus, antagonism of GABA and glycine by convulsants in cat, 9
Cyclic AMP, developmental changes in sensitivity of neurohormone-stimulated formation of, in chick cerebral hemispheres, 380P
 —, responses of guinea-pig liver slices to, potentiated by α -adrenoceptor agonists, 362P
Cyproheptadine, effect of, on turning behaviour in mice, 77
 —, effects of pretreatment with, on insulin release from isolated pancreatic islets, 356P

D

- Dale**, Sir Henry, and the development of pharmacology, Centennial Symposium, 3
Deoxycorticosterone acetate, effect of, on prolonged effects of p-chlorophenylalanine on blood pressure in conscious normotensive and DOCA/saline hypertensive rats, 69
 —, administration of, has no effect on uterine renin-like activity in the rat, 285
Desipramine, compared with Org 6582 as an inhibitor of re-uptake of 5-HT, 367P

- , effect of, on blood pressure response to field stimulation of adrenal gland and intravenous adrenaline, 271
- , lowers heart amine concentrations in rat, 279
- Desmethylinipramine**, has no effect on uptake of tritiated Δ^1 -tetrahydrocannabinol by isolated vas deferens, 413
- , inhibits uptake of tritiated noradrenaline in isolated rat vas deferens, 413
- Dexamethasone**, anti-inflammatory efficacy of, administered topically and systemically, 385P
- , effect of, on tissue levels of prostaglandin 15-hydroxy-dehydrogenase in the rat, 343P
- Dexetimide**, antagonistic potency, uptake and washout of, compared with levetimide, in guinea-pig cardiac tissue, 485
- Dextrophan**, has no effect on QMAS, 382P
- Diazepam**, effect of, on ATPase activities of synaptosomes, 49
- , effect of, on potency of strychnine as a convulsant, 307
- , intravenously in cats, effect of, on dorsal root potentials, 307
- Dibutylryl cyclic AMP**, effects of, on acid secretion by mouse stomach *in vitro*, 357P
- , responses of guinea-pig liver slices to, potentiated by α -adrenoceptor agonists, 362P
- Dichlorisoprenaline**, produces dose-dependent tachycardia in rats pretreated with syrosingopine, 362P
- 9,10-Didehydro-6-methyl-8-[2-pyridylthiomethyl]ergoline**, see CF 25-398, 371P
- Diethylcarbamazine citrate**, cardiovascular effects of, 219
- Digitoxigen-bis-digitoxoside**, uptake and inotropic effects of, in the isolated perfused guinea-pig heart, 437
- Digitoxigenin-mono-digitoxoside**, uptake and inotropic effects of, in the isolated perfused guinea-pig heart, 437
- Digitoxigenin**, uptake and inotropic effects of, in the isolated perfused guinea-pig heart, 437
- Digitoxin**, uptake and subcellular distribution of radio-labelled metabolites of, in guinea-pig isolated perfused heart, 437
- 3,4-Dihydroxyphenylacetic acid**, brain concentrations of, increased in rats by ethanol treatment, 403
- , in pig brain during first few weeks of life, 372P
- , levels of, in metoclopramide-treated mice, 373P
- 5,6-Dihydroxytryptamine**, more potent than 5,7-DHT at blocking uptake of 5-HT into snail CNS neurone, 29
- 5,7-Dihydroxytryptamine**, blocks uptake of [3 H]-5-HT into neurone, 29
- , decreases endogenous 5-HT content of snail CNS neurone, 29
- , effects of, on an identified 5-HT-containing neurone in the snail central nervous system, 29
- , neurotoxic for indoleamine-containing neurones, 29
- , produced post-synaptic blockade of transmission by 5-HT blocking, 29
- Dimercaptosuccinic acid**, effects of, on excretion and distribution of mercury in rats and mice treated with mercuric chloride and methylmercury chloride, 479
- , four times more efficient than D-penicillamine in reducing body burden of mercury, 479
- [14 C]-Dimethyl-2,4-oxazolidinedione**, uptake of, by isolated rat superior cervical ganglia, 353P
- Dimethyltubocurarine**, effect of, on contractions of pig retractor penis muscle, 351P
- , neuromuscular and cardiovascular studies with, in anaesthetized cats, rhesus monkeys and man, 354P
- Dinitrophenol**, has no effect on prostaglandin release by relaxing isolated rabbit jejunum, 469
- Diprenorphine**, influence of etorphine acepromazine and, on cardiovascular function in ponies, 375P
- Di-n-propylacetate**, GABA metabolism and anticonvulsant action of, 383P
- Disulphiram**, effect of, on hepatic microsomal metabolism, 376P
- Dithiothreitol**, effect of, on depolarization of isolated sympathetic ganglia by carbachol and bromoacetylcholine, 128
- Dodecamethonium**, effects of, on isotonic and isometric responses of different muscles, 457
- L-DOPA**, effect of, on central dopamine receptors, 59
- , locomotor activity following administration of, enhanced by repeated electroconvulsive shocks, 193
- Dopamine**, alterations in uptake of, in rat corpus striatum induced by combinations of stress and Δ^8 -tetrahydrocannabinol, 370P
- , brain concentrations of, following administration of mazindol, 431
- , brain concentrations of metabolites of, in acutely-treated and ethanol-dependent rats, 403
- , central receptors, stimulant properties of bromocriptine on, in comparison to apomorphine, (+)-amphetamine and L-DOPA, 59
- , CF 25-397, a new central, receptor agonist, 371P
- , -dependent turning behaviour in mice, effects of drugs acting on cerebral 5-HT mechanisms on, 77
- , effect of 6-OHDA on brain concentrations of, 255
- , ontogenesis of cerebral metabolism of, in the pig, 372P
- , rat brain levels of, unaltered by Org 6582, 367P
- , receptor agonist, is metoclopramide one? 373P
- , responses of neurones in cerebral cortex and caudate nucleus to, 101
- , striatal concentrations of, unaffected by intra-amygdaloid injections of 6-OHDA, 255
- , synthesis and release of, following metoclopramide treatment, 373P
- , turnover in brain enhanced by mazindol following blockade by α -methyl-*p*-tyrosine, 431
- Dopamine β -hydroxylase**, increases in both intact and denervated rat adrenal glands during chronic nicotine administration, 201
- Dopamine- β -hydroxylase inhibitors**, reduction of locomotor activity in mice by, as evidence against the involvement of non-specific irritation, 395P
- Dopamine receptor mechanism**, striatal, circling behaviour due to, in mice, 77
- Dopaminergic nerve terminals**, nigrostriatal effects of drugs acting on cerebral 5-HT mechanisms on dopamine-dependent turning behaviour in mice with unilateral destruction of, 77
- Dorsal muscle**, leech, responses of, to different agonists and antagonists, 457

E

- Edrophonium**, effect of, on erythrocyte acetylcholinesterase and neuromuscular function in rat, 93
- Electroconvulsive shock**, increases behavioural responses of rats to brain 5-HT accumulation and CNS stimulant drugs, 193

Electroconvulsive therapy, therapeutic effect of, discussed relative to effects of repeated electroconvulsive shocks on behavioural responses, 193

Episcope, for large screen projection of tracings on opaque media during their recording for demonstrations, 396P

Erythema, long-lasting, dose-related, produced by intradermal injection of PGD₁ and PGD₂ in human forearm, 229

Erythrocytes, rat, acetylcholinesterase in, effect of edrophonium on, 93

Ethanol, catecholamine metabolism and liver dysfunction during induction of dependence on, 377P

—, effects of acute and chronic treatment with, on brain concentrations of biogenic amine metabolites in rats, 403

—, single dose of, effect of inhibitors of alcohol metabolism on changes in hepatic microsomal metabolism of foreign compounds produced by, 376P

Ethanolamine-o-sulphate, GABA metabolism and anticonvulsant action of, 383P

Ethosuximide, effect of, on ATPase activities of synaptosomes, 49

Etorphine, influence of, with acepromazine and antagonistic effects of diprenorphine on cardiovascular function in ponies, 375P

F

933F, 2-Piperidinomethyl-1,4-benzodioxan hydrochloride, effects of, on overflow of transmitter and uptake of noradrenaline in cat spleen, 364P

Flufenamic acid, anti-inflammatory efficacy of, administered topically and systemically, 385P

Fluoxetine, compared with Org 6582 as an inhibitor of re-uptake of 5-HT, 367P

Fluphenazine, pretreatment with, abolishes depressor response to apomorphine in anaesthetized rat, 366P

G

GABA, antagonism of, and glycine by convulsants in cat cuneate nucleus, 9

—, comparison of, and three semi-rigid analogues on isolated superior cervical ganglion of the rat, 323

—, metabolism of, and anticonvulsant action of ethanolamine-o-sulphate and di-n-propylacetate, 383P

Gall bladder, effects of some fatty acids on function of, 350P

Ganglia, isolated sympathetic, depolarization of, by carbachol and bromoacetylcholine, effect of DTT on, 128

Gastric mucosal barrier, changes in, and blood flow during induced mucosal damage, 340P

Glucose, insulin release induced by, abolished by pretreatment with cyproheptadine, in rat pancreatic islets, 356P

β -Glucuronidase, release of, as in indication of the effects of cotton dust on human lung tissue, 394P

Glutamate, effect of, on motoneurone field potentials, 366P

Glycerol, increased levels of, during ACTH stimulation of adipose tissue, 342P

Glycine, antagonism of GABA and, by convulsants in cat cuneate nucleus, 9

—, benzodiazepines and mammalian central receptors for, 307

—, effect of, on motoneurone field potentials, 366P

Guanethidine, effect of, on blood pressure response of adrenal medulla, 271

—, effect of, on motor response of pig retractor penis muscle, 351P

—, effect of, on transmission to the internal anal sphincter, 392P

H

Haloperidol, dystonic response to, in baboon, 381P

—, effect of, on amine uptake in rat heart, 279

—, pretreatment with, abolishes depressor response to apomorphine of anaesthetized rat, 366P

7 HBK, inactivation of, in isolated rat lungs, 349P

8 HBK, inactivation of, in isolated rat lungs, 349P

Helix pomatia, effects of 5,7-dihydroxytryptamine on a 5-HT-containing neurone of, central nervous system, 29

Hepatic triglycerides, accumulation of, during induction of ethanol dependence, 377P

Heptamethonium, effects of, on isotonic and isometric responses of different muscles, 457

Heroin, overcomes QMAS in dose-related way, 382P

Hexamethonium, effect of, on blood pressure response to field stimulation of adrenal gland and intravenous adrenaline, 271

—, effect of, on cardiovascular responses to diethylcarbamazine citrate in cat, 219

—, effect of pretreatment with, on response to intravenous secretin in the cat small intestine, 358P

Histamine, addition of PGE₁ or PGE₂ to, before intradermal injection potentiates plasma exudation, 341P

—, bioassay of, in presence of prostaglandins, 39

—, cyclic AMP responsiveness to, in chick cerebral hemispheres, 380P

—, effect of ICI 63197 on acid secretory responses of mouse stomach to, 357P

—, increased vascular permeability in rat skin induced by, potentiated by PGD₂, 229

—, infused into brachial artery causes increase in forearm blood flow, 494

—, inhibition by antigen and antagonists of, of the uptake of, by isolated human leucocytes, 347P

—, relative effects of prostaglandins, 5-HT, bradykinin and, on synovial microcirculation in dogs, 313

—, simple perfusion system for study of release of, from rat peritoneal mast cells, 391P

—, spasmolytic effect of SAS in response to, in rats, 491

—, has vasodilator effect on dog synovial circulation, 313

Histamine H₂-receptors, in human peripheral circulation, 494

8- β Homo Phe-bradykinin, see 8 HBK, 349P

7- β Homo Pro-bradykinin, see 7 HBK, 349P

Homovanillic acid, brain concentrations of, increased in rats by ethanol treatment, 403

—, in pig brain during first few weeks of life, 372P

—, levels of, in metoclopramide-treated mice, 373P

Hydrocortisone, anti-inflammatory efficacy of, administered topically and systemically, 385P

—, effect of, on prostaglandin production in adipose tissue, 342P

Hydrocortisone succinate, effect of, on tissue levels of prostaglandin 15-hydroxydehydrogenase, 343P

- 5-Hydroxy-5-*p*-chlorophenyl-2,3-dihydro-5H-imidazo-2,1-*a*-isoindole**, see mazindol, 431
- 6-Hydroxydopamine**, effects of intra-amygdaloid injections of, on avoidance response in rats, 255
- , effects of, on amphetamine- or noradrenaline-induced electrocortical changes in cat brain stem reticular formation, 374P
 - , effects of, on blood pressure and plasma noradrenaline in renovascular hypertension in the rat, 365P
 - , lesions, CF 25-397 induces dose-dependent contralateral turning in rats with, 371P
 - , pretreatment with, inhibits uptake of tritiated noradrenaline in isolated rat vas deferens, 413
 - , reduces uptake of tritiated Δ^1 -tetrahydrocannabinol by isolated vas deferens, 413
- 5-Hydroxyindole acetic acid**, levels of, in LSD- and heat-treated rats, 368P
- , pargyline-induced decline of, unmodified by administration of mazindol, 431
 - , rat brain levels of, decreased by Org 6582, 367P
 - , single electroconvulsive shock increases concentration of rat brain, 193
- 4-(2-Hydroxy-3-isopropylaminopropoxy)phenyl-acetamide**, see ICI 66082, 362P
- p*-Hydroxymandelic acid**, brain concentrations of, in rats unaffected by ethanol treatment, 403
- 5-(1-Hydroxy-2-((1-methyl-3-phenylpropyl)amino)ethyl) salicylamide**, see AH 5158, 364P
- p*-Hydroxyphenylacetic acid**, brain concentrations of, in rats unaffected by ethanol treatment, 403
- 11 β -Hydroxy-16 α ,17 α ,21-trimethyl-prena-1,4-diene-3,20-dione**, see Org 6216, 385P
- 5-Hydroxytryptamine**, brain concentrations of following administration of mazindol, 431
- , comparison of effects of, with PCPA on various tissue preparations from different species, 133
 - , effects of drugs acting on cerebral, mechanisms on dopamine-dependent turning behaviour in mice, 77
 - , effect of 6-OHDA on brain concentrations of, 255
 - , effect of single electroconvulsive shock on synthesis of, 193
 - , enhances effects of ADP on blood platelets, 209
 - , effect of LSD on rat brain metabolism of, at elevated environmental temperature, 368P
 - , has vasodilator effect on dog synovial circulation, 313
 - , interaction of effects of, and ADP on blood platelets, 209
 - , interpretation of responses of motoneurone field potentials to, 366P
 - , relative effects of prostaglandins, bradykinin, and histamine on synovial microcirculation in dogs, 313
 - , selective inhibition of re-uptake of, by Org 6582, 367P
 - , single electroconvulsive shock has no effect on rat brain concentrations of, 193
 - , uptake of, by rat blood platelets and its inhibition by adenosine 5'-phosphate, 417
 - , uptake of, in different parts of the rabbit brain after intraventricular injection, 443
- 5-Hydroxytryptophan**, effect of, on cerebral 5-HT mechanisms and dopamine-dependent turning behaviour in mice, 77
- Hyoscine**, abolishes dystonic reaction in response to chlorpromazine in baboons, 381P
- , has no effect on prostaglandin release by relaxing isolated rabbit jejunum, 469
- Hyperalgesia**, potentiated by large doses of PGD₂, 229
- Hypertension**, blood pressure during, prolonged effects of *p*-chlorophenylalanine on, in rats, 69
- , induced by pinealectomy, partly caused by lack of normal melatonin secretion, 360P
- Hypotension**, induced in horses as a result of azaperone injection, 263
- Hypovolaemia**, has no effect on uterine renin-like activity in the rat, 285
- I
- ICI 63197**, 2-Amino-6-methyl-5-oxo-4-*n*-propyl-4,5-dihydro-5-triazolo(1,5-*a*)pyrimidine, 357P
- , effects of, on acid secretory responses to histamine and pentagastrin, 357P
- ICI 66082**, 4-(2-hydroxy-3-isopropylaminopropoxy)phenyl-acetamide, comparison of haemodynamic effects of, in dogs with those of practolol and pindolol, 362P
- Ileum muscles**, guinea-pig, responses of, to different agonists and antagonists, 457
- Imidazole-4-acetic acid**, effect of, on isolated superior cervical ganglion of the rat, 323
- , reduces ganglionic accumulation of [³H]-GABA, 323
- Imipramine**, has no effect on ADP or 5-HT effects on blood platelets, 209
- Indomethacin**, antagonizes effects of arachidonic acid, but has little effect on those of ricinoleic acid, in gallbladder function, 350P
- , anti-inflammatory efficacy of, administered topically and systemically, 385P
 - , decreases prostaglandin production by rabbit isolated jejunum and relaxes the preparation, 469
 - , effect of, on gastric mucosa, 340P
 - , gastric mucosal damage induced by, and effect of prostaglandins on, 340P
 - , has no effect on ACTH-induced stimulation of glycerol levels in adipose tissue, 342P
 - , reduces total amount of prostaglandin formed during lipolysis in adipose tissue, 342P
- Inflammatory exudation**, measurement of, and local blood flow changes in rabbit skin, using ¹³¹I-albumin and ¹³³Xe, 396P
- Inflammatory responses**, measurement of vascular changes in acute, 388P
- Insulin**, release of, from isolated pancreatic islets following pretreatment with cyproheptadine, 356P
- Internal anal sphincter**, inhibitory transmission to, 392P
- 3-Isobutyl-1-methylxanthine**, stereospecific suppression by opiates of the quasi-morphine abstinence syndrome elicited by, 382P
- Isometric response**, of different tonic muscles to agonists and antagonists, 457
- Isoprenaline**, alterations to vasodilator effects of, in the dog following intra-arterial infusions with isoprenaline, salbutamol and orciprenaline, 363P
- , causes vasodilatation in dog trachea, 293
 - , cyclic AMP responsiveness to, in chick cerebral hemispheres, 380P
 - , increased sensitivity to, of rabbit aortic strips following reserpine, 449
 - , injection of, has no effect on uterine renin-like activity in the rat, 285
 - , relaxes tracheal smooth muscle in dog, 293

- , response of guinea-pig liver slices to, potentiated by α -receptor agonists, 362P
- , tolerance to relaxant effects of, not affected by pretreatment with salbutamol, 331
- Isotonic response**, of tonic muscles to different agonists and antagonists, 457

J

- Jejunum**, prostaglandin production by rabbit isolated, and inherent tone of the preparation, 469

K

- Kallikreins**, rat submandibular gland, purification and cellular localization of, 155
- Krebs medium**, incubation of adipose tissue in, causes release of small amount of PGE₂, 342P
- , calcium-free, has no effect on prostaglandin release by relaxing isolated rabbit jejunum, 469
- , containing indomethacin, effect of, on prostaglandin release by isolated rabbit jejunum after storage in, 469

L

- Learning**, one-trial passive avoidance, in rats, effect of lithium chloride on, 87
- Lecture given at Sir Henry Dale Centennial Symposium**, Cambridge, 17–19 September 1975, 3
- Levetimide**, antagonistic potency, uptake and washout of, compared with dextimide, in guinea-pig cardiac tissue, 485
- Levorphanol**, suppresses QMAS, 382P
- Lithium**, comparison of pharmacokinetics of ionic, administered as the orotate, carbonate or chloride, 399
- Lithium carbonate**, pharmacokinetics of, polydipsia and polyuria in rats, 399
- Lithium chloride**, effect of, on one-trial passive avoidance learning in rats, 87
- , pharmacokinetics of, polydipsia and polyuria in rats, 399
- Lithium orotate**, pharmacokinetics of, polydipsia and polyuria in rats, 399
- LSD**, effect of, on rat brain 5-HT metabolism at elevated environmental temperature, 368P
- , effect of, on transmission to internal anal sphincter, 392P
- , effect of, on turning behaviour in mice, 77
- Lung**, rat isolated perfused, metabolism of phenylethylamine in, evidence for MAO type B in lung, 125
- Lymphokine**, effect of, on macrophage activation *in vivo*, 387P

M

- Macrophages**, *in vitro* methods of assessing the physiological activation of, *in vivo*, 387P
- Magnesium**, effect of, instead of calcium, in Ringer solution in measuring acetylcholine output from rat cerebral cortex, 379P

- , ions, effects of, perfused into lateral cerebral ventricle of pigeon, 187
- Mass spectrometer**, use of, for analysis and measurement of trace concentrations of anaesthetic vapours, 389P
- Mast cells**, simple perfusion system for study of histamine release from rat peritoneal, 391P
- Mazindol**, a non-phenylethylamine anorexigenic agent, 431
- , effects of, on biogenic amine levels and turnover rate, 431
- Medulla oblongata**, uptake of 5-HT into, following intraventricular injection, 443
- Melatonin**, effect of, on pinealectomy-induced hypertension in the rat, 360P
- Mepacrine**, inhibition of phagocytosis by, 346P
- Mepyramine**, effect of, on motor response of pig retractor penis muscle, 351P
- , inhibits uptake of histamine by isolated human leucocytes, 347P
- , reduces histamine-induced increase in forearm blood flow, 494
- Mercuric chloride**, effects of dimercaptosuccinic acid on excretion and distribution of mercury in rats and mice treated with, 479
- Mesenteric vasculature preparation**, rat perfused, Wy 20051 evokes constrictor responses in, 179
- Metaraminol**, clozapine lowers heart concentrations of, 279
- (-)-**Metaraminol**, -induced fall in rat heart noradrenaline levels unaffected by Org 6582, 367P
- Methionine**, cell content of, decreased by 5,7-dihydroxytryptamine, 29
- Methoxamine**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P
- , pretreatment with, or adrenaline has no effect on sensitivity to contractor action of methoxamine, in guinea-pig trachea, 331
- 5-Methoxy *N,N*-dimethyltryptamine**, hyperactivity following administration of, enhanced by repeated electroconvulsive shocks, 193
- 3-Methoxy-4-hydroxyphenylglycol**, brain concentrations of, increased in rats by ethanol treatment, 403
- Methylfurmethide**, effects of, on isotonic and isometric responses of different muscles, 457
- Methylmercury chloride**, effects of dimercaptosuccinic acid on excretion and distribution of mercury in rats and mice treated with, 479
- α -**Methyl-*p*-tyrosine**, effect of, on response of neurones of cerebral cortex and caudate nucleus to amantadine, amphetamine and dopamine, 101
- , effect of, on stimulant properties of bromocriptine on central dopamine receptors, 59
- , pretreatment with reserpine and, decreases and delays dystonic response to haloperidol in baboons, 381P
- Methysergide**, effect of, on prostaglandin-induced changes in rat cutaneous vasculature, 317
- , effect of, on turning behaviour in mice, 77
- , inhibits 5-HT effects on ADP-induced shape and aggregation changes of blood platelets, 209
- , prevents PCPA effects on rat fundus and cat adrenal medulla, 133
- Metiamide**, effect of, on effects of dibutyryl cyclic AMP on gastric acid secretion in the mouse, 357P
- , inhibits uptake of histamine by isolated human leucocytes, 347P
- , reduces histamine-induced increases in forearm blood flow, 494

- Metoclopramide**, a directly acting dopamine receptor agonist? 373P
- , pretreatment with, abolishes depressor response to apomorphine in anaesthetized rat, 366P
- Microvasculature changes**, apparatus for measurement for, 391P
- Miniature end-plate currents**, decay of, at frog neuromuscular junction, effect of atropine on, 111
- Monoamine oxidase**, binding to and titration of, with [^{14}C]-selective inhibitors to investigate an active MAO site, 375P
- , type B in lung, evidence for, 125
- Morphine**, effect of, on acetylcholine release from frog spinal cord, 352P
- [^{14}C]-Morphine**, uptake of, by isolated rat superior cervical ganglia, 353P
- Muscarinic receptors**, present in dog tracheal musculature and vasculature, 293

N

- Naloxone**, effects of, on acetylcholine release from frog spinal cord, 352P
- , reverses heroin-induced suppression of QMAS, 382P
- Naphazoline**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P
- Nephrectomy**, bilateral, has no effect on uterine renin-like activity in the rat, 285
- Nerve**, motor, tetanization of, influence of, on effect of organophosphorus cholinesterase inhibitors on neuromuscular transmission, 115
- Neuroleptics**, primate model of acute dystonic reaction to, 381P
- Neuromuscular blockade**, assessment of, in man by use of tetanic and single twitch contractions of adductor pollicis muscle, 390P
- Neuromuscular function**, in rat, effect of edrophonium on, 93
- Neuromuscular junction**, frog, decay of miniature end-plate potentials at, effect of atropine on, 111
- Neuromuscular transmission**, influence of motor nerve tetanization on effect of organophosphorus cholinesterase inhibitors on, 115
- Neurones**, in cerebral cortex and caudate nucleus, responses of, to amantadine, amphetamine and dopamine, 101
- Nicotine**, cardiovascular effects of diethylcarbamazine citrate similar to those induced by, 219
- , effects of chronic administration of, on denervated rat adrenal medulla, 201
 - , effect of, on transmission to internal anal sphincter, 391P
- [^3H]-Nicotine**, uptake of, by isolated rat superior cervical ganglia, 353P
- Nitrogen**, gas bubbled through preparation of rabbit isolated jejunum, decreases prostaglandin release and relaxes preparation, 469
- Noradrenaline**, amphetamine mimics electrocortical changes induced by, 374P
- , as a measure of peripheral sympathetic activity in renovascular hypertension in the rat, 365P
 - , brain concentrations of, following administration of mazindol, 431
 - , brain concentrations of metabolites of, in acutely-treated and ethanol-dependent rats, 403

- , causes hyperpolarization and potentiation in guinea-pig liver slices, 362P
 - , causes vasoconstriction in dog trachea, 293
 - , clozapine lowers heart concentrations of, 279
 - , effect of 6-OHDA on brain concentrations of, 255
 - , effects of, on prostaglandin-induced changes in rat cutaneous vasculature, 317
 - , effect of Org 6582 on re-uptake of, in rat heart, 367P
 - , increased sensitivity to, of rabbit aortic strips following reserpine, 449
 - , inhibits phenoxybenzamine-induced twitching of pig retractor penis muscle, 351P
 - , intravenously, effect of, on cardiovascular effects of Δ^9 -tetrahydrocannabinol, 43
 - , isotonic contractile responses to different doses of, effects of yohimbine, piperoxan, phentolamine and tolazoline on, 169
 - , levels depleted in various peripheral organs by administration of BRL 13776, 361P
 - , pressor response curve of, shifted to right of control following dose of Wy 20051, 179
 - , relaxes tracheal smooth muscle in dog, 293
 - , released by diethylcarbamazine citrate, 219
- [^3H]-(-)Noradrenaline**, effects of AH 5158 on overflow of transmitter and uptake of, in cat spleen, 364P
- [^3H]-Noradrenaline**, uptake of, by isolated rat vas deferens, 413

O

- Octopamine**, brain concentrations of metabolites of, in acutely-treated and ethanol-dependent rats, 403
- Oedema**, rat paw test, not elicited by PGD₂, 229
- Oestradiol-17 β** , effect of, on tissue levels of prostaglandin 15-hydroxydehydrogenase in the rat, 343P
- Orciprenaline**, alterations to vasodilator effects of isoprenaline in the dog following intra-arterial infusions with, 363P
- Org 6216**, 11 β -hydroxy-16 α ,17 α ,21-trimethyl-pregna-1,4-diene-3,20-dione, anti-inflammatory efficacy of, administered topically and systemically, 385P
- Org 6582**, decreases rat brain 5-hydroxyindoleacetic acid levels, 367P
- , selective inhibition of 5-HT re-uptake by, 367P
- Organophosphorus inhibitors**, effect of, on neuromuscular transmission, effect of motor nerve tetanization on, 115
- Ovariectomy**, causes fall in uterine renin-like activity in the rat, 285
- , effect of, on tissue levels of prostaglandin 15-hydroxydehydrogenase in the rat, 343P
- Oxoprenolol**, produces dose-dependent tachycardia in rats pretreated with syrosingopine, 362P
- Oxotremorine**, influence of propranolol on neuromuscular and other effects of, 21
- Oxygen**, gas bubbled through preparation of rabbit isolated jejunum, effect on prostaglandin production and muscle tone, 469
- Oxymetazoline**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P

P

- Papaverine**, has no effect on prostaglandin release by relaxing isolated rabbit jejunum, 469

- Paracetamol**, causes maximal hepatic damage in rats following a time lag after acute administration, 145
- , hepatic uptake, metabolism and excretion of bromosulphophthalein reversibly impaired following liver injury caused by, 145
- Pargyline**, reduces brain concentrations of homovanillic acid and 3,4-dihydroxyphenylacetic acid in control and ethanol acutely-treated rats, 403
- PCPA**, *p*-chlorophenylalanine, 133
- , effects of, on various tissues from rat, cat, guinea-pig, 133
 - , has a 5-HT-like action and can release a prostaglandin-like substance from guinea-pig lungs, 133
- D-Penicillamine**, decrease in body burden of mercury by, compared with that of dimercaptosuccinic acid, 479
- Penicillin**, effect of, on GABA and glycine in cat cuneate nucleus, 9
- Pentagastrin**, effect of ICI 63197 on acid secretory responses of mouse stomach to, 357P
- Pentazocine**, suppression of QMAS by, 386P
- Pentobarbitone**, cardiovascular effects of diethylcarbamazine citrate in cats anaesthetized with, 219
- Pentolinium**, effect of, on transmission to the internal anal sphincter, 392P
- 7-n-Pentyl-4-[1-(2-naphthylmethyl)-1,2,5,6-tetrahydro-4-pyridyl]-2,2-dimethylchroman-5-ol**, see BRL 13776, 361P
- Pethidine**, suppression of QMAS by, 386P
- pH**, Intracellular, in relation to uptake of weak acids and bases into isolated rat superior cervical ganglia, 353P
- Pharmacology**, Dale and the development of, 3
- Pharynx protractor muscle**, holothurian, responses of, to different agonists and antagonists, 457
- [¹⁴C]-Phenobarbitone**, uptake of, by isolated rat superior cervical ganglia, 353P
- [³H]-Phenolphthalein**, enterohepatic circulation of, in the rat, 355P
- Phenoxybenzamine**, abolishes motor response of dog retractor penis muscle, 351P
- , effect of, on heart amine concentrations in the rat, 279
 - , effects of, on prostaglandin-induced changes in rat cutaneous vasculature, 317
 - , has no effect on phentolamine-induced reduction of contraction of pig retractor penis muscle, 351P
 - , effect of, on transmission to internal anal sphincter, 392P
 - , pretreatment with, reduced pressor effect of tryptamine and two of its analogues, 25
- Phentolamine**, abolishes α -mediated responses induced in guinea-pig liver slices, 362P
- , abolishes motor response of dog retractor penis muscle, 351P
 - , blocks vasoconstriction response of dog trachea to adrenaline and noradrenaline, 293
 - , effect of, on adrenaline- and noradrenaline-induced effects on rat isolated vas deferens, 169
 - , effect of, on blood pressure response to field stimulation of adrenal gland and intravenous adrenaline, 271
 - , effect of, on cardiovascular responses of cat to diethylcarbamazine citrate, 219
 - , effect of, on heart amine concentrations in the rat, 279
 - , effect of, on transmission to internal anal sphincter, 392P
 - , slightly reduces motor response of pig retractor penis muscle, 351P
- Phenylbutazone**, anti-inflammatory efficacy of, administered topically and systemically, 385P
- Phenylephrine**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P
- 2-Phenylethanol**, hastens formation of dryspots in rabbit corneas, 359P
- Phenylethylamine**, metabolism of, in rat isolated perfused lung: evidence for monoamine oxidase type B in lung, 125
- Phenylmercuric nitrate**, has no effect on rate of corneal drying in rabbits, 359P
- Phenytoin**, effect of, on ATPase activities of synaptosomes, 49
- Phosphatidylcholine**, effect of, on acetylcholine output from rat cerebral cortex, 379P
- Phosphatidylethanolamine**, effect of, on acetylcholine output from rat cerebral cortex, 379P
- Phosphatidylserine**, effect of, on acetylcholine output from rat cerebral cortex, 379P
- Phosphodiesterase inhibitors**, effects of, on acid secretion by mouse stomach *in vitro*, 357P
- Phospholipids**, effects of, on acetylcholine output from rat cerebral cortex, 379P
- Physostigmine**, has no effect on prostaglandin release by contracting isolated rabbit jejunum, 469
- Picrotoxin**, antagonizes GABA and glycine in cat cuneate nucleus, 9
- Pimozide**, blocks contralateral turning induced by CF 25-397 in dopamine lesioned rats, 371P
- , dystonic response to, in baboon, 381P
 - , effect of, on stimulant properties of bromocriptine on central dopamine receptors, 59
- Pindolol**, produces dose-dependent tachycardia in rats pretreated with syrosingopine, 362P
- γ -Piperidinobutyramide**, see Wy 20051, DF480, 179
- 2-Piperidinomethyl-1,4-benzodioxan hydrochloride**, see 933F, 364P
- Piperoxan**, effect of, on adrenaline- and noradrenaline-induced effects on rat isolated vas deferens, 169
- , pretreatment with, has no effect on cardiovascular response of anaesthetized rat to apomorphine, 366P
- Pithed rabbit preparation**, for stimulation of different segments of the autonomic outflow, 395P
- Polydipsia**, development of, in rats given lithium orotate, carbonate or chloride compared, 399
- Polymorphonuclear leucocytes**, prostaglandin production by rat, 396P
- Polyuria**, development of, in rats given lithium orotate, carbonate or chloride compared, 399
- Potassium**, effect of, on motoneurone field potentials, 366P
- , enhances renin-like activity in rat uterus, 285
 - , entry of, into granulocytes reduced by mepacrine, 346P
 - , increased levels of, in perfusion medium, increased uptake of digitoxin and metabolites in guinea-pig isolated perfused heart, 437
 - , ions, effects of, perfused into lateral cerebral ventricle of pigeon, 187
 - , reserpine decreases relaxation rate following contraction induced by, in rabbit aortic strips, 449
- Potassium ions**, change in ratio of sodium and, allows ADP-induced inhibition of 5-HT uptake by rat platelets, 417
- Practolol**, produces dose-dependent tachycardia in rats pretreated with syrosingopine, 362P
- Pregnancy**, effect of, on renin-like activity of uterus in the rat, 285

- , effect of, on tissue levels of prostaglandin 15-hydroxydehydrogenase in the rat, 343P
 - Pregnanolone**, hypnotic effects of, 382P
 - [¹⁴C]-Procaine**, uptake of, by isolated rat superior cervical ganglia, 353P
 - Proceedings of the British Pharmacological Society**, Royal College of Surgeons, 17th-19th December, 1975, 339P
 - Progesterone**, effect of, on tissue levels of prostaglandin 15-hydroxydehydrogenase in the rat, 343P
 - , effect of, on uterine renin-like activity in the rat, 285
 - d-Propoxyphene**, suppression of QMAS by, 386P
 - Propranolol**, antioxotremorine action of, 21
 - , blocks noradrenaline-induced inhibition of phenoxybenzamine-induced twitching of pig retractor penis muscle, 351P
 - , blocks tracheal relaxation responses to isoprenaline, adrenaline and noradrenaline, 293
 - , blocks vasodilatation induced by isoprenaline in dog trachea, 293
 - , comparison of haemodynamic effects of, in dogs with those of practolol and pindolol, 362P
 - , effect of, on amine uptake in rat heart, 279
 - , effect of, on blood pressure response to field stimulation of adrenal gland and intravenous adrenaline, 271
 - , effect of, on transmission to internal anal sphincter, 392P
 - , effect of, on potentiated response of guinea-pig liver slices to isoprenaline, salbutamol and cyclic AMP, 362P
 - , effect of pretreatment with, on response to intravenous secretin in the cat small intestine, 358P
 - , has no effect on phenolamine-induced reduction of contraction of pig retractor penis muscle, 351P
 - , inhibits neuromuscular blocking of oxotremorine in isolated rat phrenic nerve diaphragm preparation, 21
 - , intensifies paralytic effect of tubocurarine in rat diaphragm, 21
 - , prevents antagonism of tubocurarine paralysis by tetraethylammonium, 21
 - n-Propyl p-hydroxybenzoate**, hastens formation of dryspots in rabbit corneas, 359P
 - Prostaglandins**, and changes in gastric mucosal barrier and blood flow during indomethacin- and bile salt-induced mucosal damage, 340P
 - , bioassay of histamine in presence of, 39
 - , effects of anti-inflammatory steroids on levels of, in adipose tissue, 342P
 - , production of, by rabbit isolated jejunum and relationship to the inherent tone of the preparation, 469
 - , production of, by rat polymorphonuclear leucocytes, 396P
 - , pro-inflammatory activity of, and two analogues of PGE₂ in rabbit skin, 341P
 - , relative effects of, bradykinin, 5-HT and histamine on synovial microcirculation in dogs, 313
 - Prostaglandin endoperoxides**, formation of, and rabbit aorta contracting substance by coupling two enzyme systems, 344P
 - Prostaglandin 15-hydroxydehydrogenase**, effects of steroid hormones on tissue levels of, in the rat, 343P
 - PGA₁**, has less potentiating activity than PGEs in rabbit skin inflammation, 341P
 - PGA₂**, has less potentiating activity than PGEs in rabbit skin inflammation, 341P
 - PGD**, modified, show high pressor activity, 339P
 - , selectivity of action of some C15-modified, 339P
 - PGD₂**, inflammatory effects of, in rat and human skin, 229
 - , only potentiates rabbit skin inflammatory exudates at high doses, 341P
 - PGE**, comparison of effects of, in erythema production with those of PGD, 229
 - PGE₁**, abolishes ADP-induced inhibition of uptake of 5-HT by rat platelets, 417
 - , bioassay of histamine in presence of, 39
 - , chemotactic activity of solutions of, 345P
 - , effects of, on cutaneous vasculature of the rat, 317
 - , has similar potentiating potency in rabbit skin inflammation as PGE₂, 341P
 - , has vasodilator effect in dog synovial circulation, 313
 - , sub-threshold doses of, do not potentiate vasodilator action of bradykinin in dog synovium, 313
 - PGE₂**, administration of 15-methyl analogue of, reduces effects of combined taurocholate and indomethacin administration on gastric mucosa, 340P
 - , bioassay of histamine in presence of, 39
 - , comparison of effects of, and analogues of, with those of PGD₂ and PGF_{2α} analogues, 339P
 - , continuously generated by isolated rabbit jejunum, effect of, on inherent tone of preparation, 469
 - , effects of, on cutaneous vasculature of the rat, 317
 - , had similar potentiating potency in rabbit skin inflammation as PGE₁, 341P
 - , has vasodilator effect on dog synovial circulation, 313
 - PGF_{1α}**, has no vasodilatory effect on dog synovial circulation, 313
 - PGF_{2α}**, bioassay of histamine in the presence of, 39
 - , comparison of effects of analogues of, with those of PGD₂ and PGE₂ analogues, 339P
 - , effects of, on cutaneous vasculature of the rat, 317
 - , has vasodilator effect on dog synovial circulation, 313
 - , intravenously, causes dose-dependent increase in pulmonary arterial pressure, decrease in systemic arterial pressure and delayed bradycardia, 245
 - , only potentiates rabbit skin inflammatory exudates at high doses, 341P
 - , reflex bradycardia and hypotension produced by, in the cat, 245
 - , release of, by rabbit isolated jejunum and inherent tone of the preparation, 469
 - , tracheal pressure effects of, inhibited by diethylcarbazine citrate, 219
 - PGG₂**, conversion of, to thromboxane A₂ in blood, 344P
 - , effects of, on rabbit aorta, 344P
 - PGH₂**, effects of, on rabbit aorta, 344P
 - Pyrazole**, effect of, on liver microsomal metabolism of compounds produced by single dose of ethanol in rats, 376P
- ## Q
- Quasi-morphine abstinence syndrome**, stereospecific suppression by opiates of the, elicited by 3-isobutyl-1-methylxanthine, 382P
 - QMAS**, quasi-morphine abstinence syndrome, 382P
- ## R
- Rabbit aorta contracting substance**, formation of, and prostaglandin endoperoxides by coupling two enzyme systems, 344P

- Rectus abdominus muscle**, frog, responses of, to different agonists and antagonists, 457
- Renin**, kidney, uterine renin-like activity independent of, 285
 —, rat uterus renin-like activity, effect of stimuli and hormones on, 285
 —, uterine renin-like activity is hormone independent, 285
- Renovascular hypertension**, sympathetic nervous system and, in the rat, 365P
- Reserpine**, abolishes tyramine-induced pressor responses in rats, 179
 —, amine release in rat heart induced by, delayed by ganglionic blockade, 279
 —, CF 25-397 inhibits catalepsy induced by, 371P
 —, decreases relaxation rate from a potassium-induced contraction of rabbit aortic strips, 449
 —, effect of, on blood pressure responses of adrenal medulla to adrenaline, 271
 —, effect of, on responses of neurones of cerebral cortex and caudate nucleus to amantadine, amphetamine and dopamine, 101
 —, effect of, on stimulant properties of bromocriptine on central dopamine receptors, 59
 —, increased calcium uptake and $^{45}\text{Ca}^{2+}$ efflux in rabbit aortic strips, 449
 —, potentiates dose-response curve of pressor action of Wy 20051, 179
 —, pretreatment with, abolishes tyramine-induced responses of pig retractor penis muscle, 351P
 —, pretreatment with, and α -methyl-*p*-tyrosine, decreases and delays dystonic response to haloperidol in baboons, 381P
 —, pretreatment with, reduced pressor effect of tryptamine, 25
 —, treatment with, and subsequent relationship between calcium and supersensitivity of rabbit aorta, 449
- Reticular formation**, brain stem, blockade of electrocortical changed induced by perfusion of amphetamine in, 374P
- Retractor dentis muscle**, sea urchin, responses of, to different agonists and antagonists, 457
- Retractor penis muscle**, species variation in motor transmission to, 351P
- Ricinoleic acid**, effects of, on gallbladder function, 350P

S

- Salbutamol**, alterations to vasodilator effects of isoprenaline in the dog following intra-arterial infusions with, 363P
 —, pretreatment with, prevents development of tolerance to relaxant actions of adrenaline, isoprenaline or salbutamol in guinea-pig trachea, 331
 —, response of guinea-pig liver slices to, potentiated by α -receptor agonists, 362P
- SAS**, a new 10-*N*-acylaminophenothiazine, 491
 —, effect of, on gastric secretion and ulceration in rats, 491
- Scopolamine hydrobromide**, effect of, on habituation of exploration and distraction in rats, 378P
- Secretin**, intravenously, effects of, on the small intestinal vasculature of the cat, 358P
- Sodium**, has no effect on renin-like activity in rat uterus, 285
 —, ions in the control of temperature set-point in the pigeon, 187
- Sodium chloride**, effect of, on one-trial passive avoidance learning in rats, 87

- Sodium ions**, change in ratio of potassium and, allows ADP-induced inhibition of 5-HT uptake by rat platelets, 417
- Sodium taurocholate**, effects of, on gastric mucosa, 340P
- [^{14}C]-Sorbitol**, uptake of, by isolated rat vas deferens, 413
- Steroid hormones**, physiological aspects of hypnotic properties of, 382P
- Stilboestrol**, causes significant increase of uterine renin-like activity in the rat, 285
- Stress**, alterations in dopamine uptake in rat corpus striatum induced by combinations of, and Δ^8 -THC, 370P
- Strychnine**, antagonizes GABA and glycine in cat cuneate nucleus, 9
 —, effect of diazepam on potency of, as a convulsant in mice, 307
- Substantia nigra**, uptake of 5-HT by, following intraventricular injection, 443
- Sulphacetamide**, distribution and kinetics of, in leukaemic mice, 423
- Superior cervical ganglia**, uptake of weak acids and bases into isolated rat, in relation to intracellular pH, 353P
- Sympathetic nerve recording**, in the conscious rabbit, 386P
- Synaptosomes**, effects of anticonvulsant and convulsant drugs on ATPase activities of, 49

T

- Tachycardia**, induced in horses as a result of azaperone injection, 263
- Testosterone**, effect of, on uterine renin-like activity in the rat, 285
- Tetanzation**, of motor nerve, influence of on effect of organophosphorus cholinesterase inhibitors on neuromuscular transmission, 115
- Δ^1 -**Tetrahydrocannabinol**, uptake of tritiated, by isolated rat vas deferens, 413
- Δ^8 -**Tetrahydrocannabinol**, alterations in dopamine uptake in rat corpus striatum induced by combinations of stress and, 370P
- Δ^9 -**Tetrahydrocannabinol**, intravenously, produces transient pressor response and then sustained hypotension and bradycardia in rat, 43
 —, peripheral effects of, no tolerance to, 43
 —, tolerance to the cardiovascular effects of, in the rat, 43
- Tetrahydrozoline**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P
- Tetramethylenedisulphotetramine**, blocks responses to GABA and three of its analogues of isolated superior cervical ganglion in the rat, 323
- Tetrodotoxin**, abolishes contractions of retractor penis muscle induced by electrical stimulation, 351P
 —, effect of, on transmission to the internal anal sphincter, 392P
- Theophylline**, comparative effects of, and triazolopyrimidine and caffeine on acid secretion in mouse stomach, 357P
 —, insulin release induced by, unaffected by pretreatment with cyproheptadine in rat pancreatic islets, 356P
- Thiomersal**, has no effect on rate of corneal drying in rabbit, 359P
- Thioridazine**, effect of, on amine uptake in rat heart, 279
- Thromboxane A₂**, conversion of prostaglandin G₂ to, is enzymic, 344P
- Tolazoline**, effect of, on adrenaline- and noradrenaline-induced effects on rat isolated vas deferens, 169

- Tolbutamide**, insulin release induced by, abolished by pretreatment with cyproheptadine, in rat pancreatic islets, 356P
- Trachea**, blood-perfused dog, method for recording smooth muscle and vascular response of, *in situ*, 293
- Tramazoline**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P
- Tranylcypromaine**, locomotor activity following administration of, enhanced by repeated electroconvulsive shocks, 193
- Triazolopyrimidine**, comparative effects of, and theophylline and caffeine on acid secretion in mouse stomach, 357P
- Trihexyphenidyl**, delays gastric emptying in rats as measured by clearance of a marker, 301
- , impairs absorption of chlorpromazine in rats, 301
- [¹⁴C]-Trimethylamine**, uptake of, by isolated rat superior cervical ganglia, 353P
- Tryptamine**, pressor effects of analogues of, 25
- Tryptophan**, cell content of, decreased by 5,7-dihydroxytryptamine, 29
- , effects of, on 5-HT metabolism in LSD- and heat-treated rats, 368P
- , single electroconvulsive shock has no effect on rat brain concentrations of, 193
- L-Tryptophan**, effect of, on cerebral 5-HT mechanisms and on dopamine-dependent turning behaviour in mice, 77
- Tryptophan hydroxylase**, inhibition, some pharmacological effects of *p*-chlorophenylalanine unrelated to, 133
- Tuberculin**, -sensitized leucocytes show increased uptake of histamine, 347P
- Tubocurarine**, paralysis of rat diaphragm by, antagonized by propranolol, 21
- (+)-Tubocurarine**, antagonizes GABA and glycine in cat cuneate nucleus, 9
- , effects of, on isotonic and isometric responses of different muscles, 457
- Turning behaviour**, in mice, effects of drugs acting on cerebral 5-HT mechanisms on dopamine-dependent, 77
- Tyramine**, brain concentrations of metabolites of, in acutely-treated and ethanol-dependent rats, 403
- Tyrosine**, brain levels of, increase steadily during induction of ethanol dependence, 377P
- [³H]-Tyrosine**, conversion index of, into brain noradrenaline decreased by mazindol, 431
- Tyrosine hydroxylase**, induced by chronic nicotine administration in intact and denervated rat adrenal glands, 201

U

- Ultraviolet erythema**, production of, in rats, in assessing systemically and topically administered anti-inflammatory drugs, 385P

V

- Vanilmandelic acid**, brain concentrations of, unaffected by acute ethanol treatment, but increased by chronic treatment, 403
- Vas deferens**, dual effect of α -adrenoceptor antagonists in rat isolated, 169
- Vasodilatation**, in rabbit skin may be responsible for potentiation of inflammatory exudation produced by prostaglandins, 341P

W

- Wy 20051, DF480**, evokes pressor responses with characteristics similar to those of noradrenaline, 179
- , DF480, γ -Piperidinobutyramide, evaluation of novel pressor activity of, 179
- , pressor responses of, not elicited by an α -adrenoceptor mechanism, 179

X

- ¹³³**Xe-clearance**, measurement of blood flow in rabbit skin homografts and autografts using a, technique, 396P
- Xylometazoline**, causes hyperpolarization and potentiation in guinea-pig liver slices, 362P

Y

- Yohimbine**, effect of, on adrenaline- and noradrenaline-induced effects on isolated rat vas deferens, 169

British Journal of Pharmacology

EDITED FOR

THE BRITISH PHARMACOLOGICAL SOCIETY

BY

A. W. Cuthbert (*Chairman*) H. M. Adam (*Secretary*)
Margaret Day (*Press Editor*)
J. D. Stephenson (*Assistant Press Editor*)

A. M. Barrett	J. S. Kelly
W. G. Bisset	G. M. Lees
T. B. Bolton	G. P. Lewis
P. B. Bradley	I. H. M. Main
D. A. Brown	E. K. Matthews
D. A. Callingham	J. F. Mitchell
T. J. Crow	P. A. Nasmyth
F. de Matteis	M. W. Parkes
C. T. Dollery	M. Sandler
V. Eisen	A. P. Silverman
E. W. Gill	M. A. Simmonds
A. F. Green	F. M. Sullivan
D. F. Hawkins	A. Ungar
Margarethe Holzbauer	R. A. Webster
D. B. Hope	

VOLUME 56, 1976

LONDON

MACMILLAN JOURNALS LIMITED
4 LITTLE ESSEX STREET, WC2R 3LF

INSTRUCTIONS TO AUTHORS

Papers will be considered for publication on all aspects of drug action, including chemotherapy. A recent issue of the Journal is a good guide to style.

Manuscripts (two copies) should be sent to Dr H.M. Adam, Department of Pharmacology, University of Edinburgh Medical School, 1 George Square, Edinburgh, EH8 9JZ, from whom copies of the full Instructions to Authors, published in *Br. J. Pharmac.* 50, 3-23, may also be obtained. Specific points to note are:

1. **Manuscript** should be typed in double spacing on one side of paper not larger than A4 (206 x 294 mm). There should be a separate title page giving the names and addresses of the authors in alphabetical order. A short title of not more than 50 letters should also be suggested.
2. **Statement Papers** are accepted only if accompanied by a statement that they have not been and will not be published in whole or in part in any other Journal.
3. **Summary** (2 copies) This should be a short summary of results and conclusions arranged in numbered paragraphs.
4. **Abstract** (2 copies) An abstract of about 100 words suitable for inclusion in an abstracting journal should be typed on a separate sheet, giving the author's name and address and the title of the paper.
5. **Figures** These should not be larger than A4 (206 x 294 mm) and may be in the form of original drawings, recorded tracings or high quality photographic prints made from them. Negative prints of kymograph tracings (black on white) should be provided, and both ordinates and abscissae should be calibrated. Lettering on figures should be inserted in pencil. Symbols which are to appear in figures or legends should be chosen from the following:

○ ● □ ■ ▲ ▼ ▽

Photographs and photomicrographs should be printed on glossy paper and should be larger than the size required for reproduction.

6. **Tables** These should not have more than 85 characters to a line (counting spaces between columns as 4 characters) and certainly not more than 110 characters to a line, unless absolutely unavoidable. **Figure legends** and **tables** should be typed on separate sheets of paper.

7. **References** These should be collected in alphabetical order at the end of the paper. They should include the authors' names, year of publication (in brackets), title of article, title of publication (abbreviated in accordance with the fourth edition of the *World List of Scientific Periodicals*), volume number and first and last page numbers. References to books should in addition, include the names of editors, the edition number, where appropriate, and the town of origin and name of publisher.

Two page proofs will be supplied, one of which may be retained by the authors. The other should be corrected immediately and returned to the Press Editor. Corrections should be kept to a minimum.

Twenty-five reprints will be supplied to the authors free of charge. Additional reprints can be purchased. A reprint order form, which should be returned promptly, will be sent out with the proofs. No reprints of abstracts are supplied.

Short Communications These may be accepted if they merit priority publication and do not require revision. They may contain up to 1,200 words of text and only one figure or table. The summary should be a single paragraph. An abstract and statement should be included.

British Journal of Pharmacology

VOLUME 56 NUMBER 4 APRIL 1976

- 399 SMITH, D.F. Lithium orotate, carbonate and chloride: pharmacokinetics, polydipsia and polyuria in rats.
- 403 KAROUM, F. MAJCHROWICZ, E. & WYATT, R.J. Brain concentrations of biogenic amine metabolites in acutely treated and ethanol-dependent rats.
- 413 EGAN, SANDRA M., GRAHAM, J.D.P. & LEWIS, M.J. The uptake of tritiated Δ^1 -tetrahydrocannabinol by the isolated vas deferens of the rat.
- 417 DRUMMOND, A.H. & GORDON, J.L. Uptake of 5-hydroxytryptamine by rat blood platelets and its inhibition by adenosine 5'-diphosphate.
- 423 MARCHAND, C. & NADEAU, D. The distribution and kinetics of sulphacetamide in leukaemic mice.
- 431 CARRUBA, M.O., GROPPETTI, A., MANTEGAZZA, P., VICENTINI, L. & ZAMBOTTI, F. Effects of mazindol, a non-phenyl-ethylamine anorexigenic agent, on biogenic amine levels and turnover rate.
- 437 DUTTA, S., MARKS, B.H. & STEPHEN, P.M. The uptake and subcellular distribution of radio-labelled metabolites of digitoxin in the guinea-pig isolated perfused heart.
- 443 DOW, R.C. & LASZLO, I. Uptake of 5-hydroxytryptamine in different parts of the brain of the rabbit after intraventricular injection.
- 449 CARRIER, O., JR., & HESTER, R.K. The relationship between calcium and increased sensitivity of rabbit aortae four hours after reserpine.
- 457 MICHELSON, M.J. & SHELKOVNIKOV, S.A. Isotonic and isometric responses of different tonic muscles to agonists and antagonists.
- 469 FERREIRA, S.H., HERMAN, A.G. & VANE, J.R. Prostaglandin production by rabbit isolated jejunum and its relationship to the inherent tone of the preparation.
- 479 MAGOS, L. The effects of dimercaptosuccinic acid on the excretion and distribution of mercury in rats and mice treated with mercuric chloride and methyl-mercury chloride.
- 485 GRAY, J.A., LÜLLMANN, H., MITCHELSON, F. & REIL, G.-H. Stereoselective binding in cardiac tissue of the enantiomers of benzetimide, an anti-muscarinic drug.

SHORT COMMUNICATIONS

- 491 KUMAR, A., SHARMA, H.L. & SHARMA, V.N. Effect of SAS (A new 10-N-acylaminophenothiazine) on gastric secretion and ulceration in rats.
- 494 CHIPMAN, P. & GLOVER, W.E. Histamine H_2 -receptors in the human peripheral circulation.